UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____________ to _____________

Commission file number 1-11840

THE ALLSTATE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**36-3871531**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

2775 Sanders Road, Northbrook, Illinois 60062

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(847) 402-5000**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbols	Name of each exchange on which registered
Common Stock, par value $0.01 per share	ALL	New York Stock Exchange Chicago Stock Exchange
5.100% Fixed-to-Floating Rate Subordinated Debentures due 2053	ALL.PR.B	New York Stock Exchange
Depositary Shares represent 1/1,000th of a share of 5.625% Noncumulative Preferred Stock, Series G	ALL PR G	New York Stock Exchange
Depositary Shares represent 1/1,000th of a share of 5.100% Noncumulative Preferred Stock, Series H	ALL PR H	New York Stock Exchange
Depositary Shares represent 1/1,000th of a share of 4.750% Noncumulative Preferred Stock, Series I	ALL PR I	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ____

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant, computed by reference to the closing price as of the last business day of the registrant's most recently completed second fiscal quarter, June 30, 2019, was approximately $33.04 billion.

As of January 31, 2020, the registrant had 316,913,648 shares of common stock outstanding.

Documents Incorporated By Reference

Portions of the following documents are incorporated herein by reference as follows:

Part III of this Form 10-K incorporates by reference certain information from the registrant's definitive proxy statement for its annual stockholders meeting to be held on May 19, 2020, (the "Proxy Statement") to be filed not later than 120 days after the end of the fiscal year covered by this Form 10-K.

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Part I

Item 1. Business

The Allstate Corporation was incorporated under the laws of the State of Delaware on November 5, 1992, to serve as the holding company for Allstate Insurance Company. Its business is conducted principally through Allstate Insurance Company, Allstate Life Insurance Company and other subsidiaries (collectively, including The Allstate Corporation, "Allstate").

Allstate's purpose is to protect people from life's uncertainties and prepare them for the future so they can realize their hopes and dreams. Allstate is primarily engaged in the property and casualty insurance business in the United States and Canada. Additionally, Allstate provides customers other protection offerings such as life, accident and health insurance and protection plans that cover electronic devices and personal identities.

The Allstate Corporation is one of the largest publicly held personal lines insurers in the United States. Allstate's personal property-liability strategy is to increase market share by providing auto insurance with a competitive value proposition and offering a circle of protection. The Allstate brand is widely known through the "You're In Good Hands With Allstate®" slogan. Allstate is the third largest personal property and casualty insurer in the United States on the basis of 2018 statutory direct premiums written according to A.M. Best.

In addition, Allstate also has strong market positions in other protection products. According to A.M. Best, Allstate is the nation's 20th largest issuer of life insurance business on the basis of 2018 ordinary life insurance in force and 40th largest on the basis of 2018 statutory admitted assets. Allstate Benefits provides accident, health and life insurance through employers and is one of the top five voluntary benefits carriers in the market based on a 2018 voluntary/worksite industry survey. SquareTrade, which sells consumer protection plans using the Allstate Protection Plans name in the U.S., provides protection plans on a wide variety of consumer goods such as cell phones, tablets, computers and appliances, and has a leading position in distribution through major retailers. InfoArmor, which provides identity protection through employers using the Allstate Identity Protection name, has a leading position in this distribution channel. In total, Allstate had 145.9 million policies in force ("PIF") as of December 31, 2019.

In this Annual Report on Form 10-K, we occasionally refer to statutory financial information. All domestic United States insurance companies are required to prepare statutory-basis financial statements. As a result, industry data is available that enables comparisons between insurance companies, including competitors that are not required to prepare financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP"). We frequently use industry publications containing statutory financial information to assess our competitive position.

Strategy and Segment Information

NEW Allstate's strategy has two components: increase personal property-liability market share and expand protection businesses including Service Businesses, Allstate Life and Allstate Benefits. We create shareholder value through customer satisfaction, unit growth, attractive returns on capital, sustainable profitability and a diversified business platform.

Transformative Growth Plan

We have implemented a multi-year Transformative Growth Plan that leverages the Allstate brand, people and technology. The Transformative Growth Plan will enable us to better serve customers in a changing world. The plan will ensure Allstate remains a strong competitor and local agencies continue to provide high value to customers. Winning is our past, our present and our future.

Allstate has thrived for 88 years by adapting to better serve customers. Our Transformative Growth Plan builds on our success by leveraging the Allstate brand, people and technology to improve our long-term competitive position and accelerate growth. The plan has three components:

Expanded customer access — Consumers currently can access Allstate branded property-liability products through Allstate agencies, contact centers and online. Access will be expanded to enable consumers to select a method of interaction. All consumers will have the opportunity to decide if they want access to an Allstate agency, so we will no longer need to use both the Allstate and Esurance brands for direct sales and Esurance will be integrated into the Allstate brand in 2020.

Improved customer value — Property-liability products will be redesigned to be affordable, simple and connected. Insurance pricing will utilize sophisticated rating algorithms, such as telematics, and reflect the service model a customer chooses.

Centralized customer service capabilities are being expanded to improve consistency, reduce costs and enable Allstate agencies to focus on acquiring new customers and developing relationships with existing customers.

We will improve our expense position by focusing on reducing spending while eliminating redundancies. Simplification efforts will continue to eliminate the need for manual work and optimize our operating model.

Increased investments in marketing and technology — Investments in marketing the Allstate brand will be increased by reallocating Esurance spending. New technology ecosystems are being built to support increased connectivity, new products and operational adaptability.

This plan is focused on the customer experience, providing a circle of protection through people and technology along with increased connectivity, combined with distribution, product, and technology enhancements.

We are expanding protection businesses utilizing enterprise capabilities and resources such as distribution, analytics, claims, investment expertise, talent and capital. Using innovative growth platforms (such as telematics and identity protection) and broad distribution including Allstate exclusive agencies, contact centers, online, retailers, workplace benefits brokers, auto dealers, original equipment manufacturers and telecom providers further enhance our customer value proposition.

We evaluate performance and make resource and capital decisions across seven reportable segments.

Reportable segments	
Allstate Protection (1)	Includes the Allstate, Encompass and Esurance brands and Answer Financial. Offers private passenger auto, homeowners, other personal lines and commercial insurance through agencies, contact centers and online. Esurance will be integrated into the Allstate brand in 2020 as we are repositioning the Allstate brand for broader customer access.
Service Businesses	Includes Allstate Protection Plans, Allstate Dealer Services, Allstate Roadside Services, Arity and Allstate Identity Protection, which offer a broad range of products and services that expand and enhance our customer value propositions.
Allstate Life	Offers traditional, interest-sensitive and variable life insurance products primarily through Allstate exclusive agents and exclusive financial specialists.
Allstate Benefits	Offers voluntary benefits products, including life, accident, critical illness, short-term disability and other health insurance products sold through independent agents, benefits brokers and Allstate exclusive agents.
Allstate Annuities	Consists of deferred fixed annuities and immediate fixed annuities (including standard and sub-standard structured settlements) in run-off.
Discontinued Lines and Coverages (1)	Relates to property and casualty insurance policies written during the 1960's through the mid-1980's with exposure to asbestos, environmental and other claims in run-off.
Corporate and Other	Includes holding company activities and certain non-insurance operations.

(1) Allstate Protection and Discontinued Lines and Coverages segments comprise Property-Liability.

Allstate Protection Segment

Our Allstate Protection segment accounted for 90.3% of Allstate's 2019 consolidated insurance premiums and contract charges and 23.1% of Allstate's December 31, 2019 PIF. Private passenger auto, homeowners, other personal lines and commercial insurance products offered through agencies and directly through contact centers and online are included in this segment. Our strategy is to position product offerings, distribution and technology to meet customers' evolving needs and protect them from life's uncertainties.

Strategy

Allstate Protection currently has four market-facing property-liability businesses with products and services that cater to different customer preferences for advice and brand recognition to improve our competitive position and performance. As part of the Transformative Growth Plan, we will enable consumers to select a method of interaction and Esurance will be integrated into the Allstate brand in 2020. Investments in marketing for the Allstate brand will be increased by reallocating Esurance spending.

We currently serve our consumers using differentiated products, analytical expertise, telematics and an integrated digital enterprise that leverages data and technology to redesign our processes with a focus on greater effectiveness and efficiencies and long-term expense savings.

Allstate brand strategy

Our strategy is to grow profitably through exclusive agencies and direct channels, while leveraging best-in-class operational capabilities to gain market share and efficiencies. The Allstate brand differentiates itself by offering comprehensive product options and features with access to agencies that provide local advice and service, including a partnership with exclusive financial specialists to deliver life and retirement solutions.

This strategy focuses on four customer-centric themes to expand anddeliver profitable growth:

Available	Competitive	Simple	Connected
Provide products and services that protect what matters most	**Offer products that make good use of our customers' hard-earned money**	**Easy to interact with**	**Know our customers and proactively interact in value-added ways**
Innovative and integrated distribution system that provides consumers with broad points of presence across all channels and offers a comprehensive product portfolio	Improve price competitiveness through advancing sophistication and reducing our expenses	Provide easy, seamless and unified customer experience with open access across all touchpoints	Digitally connected with customers, enabling continual interactions that deepen relationships and provide value

Available Being available is about making sure customers can find us whenever, wherever and however they choose. And once they do, offer them the protection they need as effectively as possible. In 2020, we are expanding access by allowing customers to choose how they interact with us.

Consumers will have the opportunity to select an Allstate agency to get tailored solutions and support based on their needs from Allstate's 10,800 exclusive agencies or interact directly with Allstate through mobile, online or contact centers. Agencies are established in 10,700 locations, supported by 27,100 licensed sales professionals and 1,000 exclusive financial specialists.

Allstate exclusive agents also offer life and retirement solutions and can partner with exclusive financial specialists who provide expertise with more complex life and retirement solutions and other financial needs of our customers.

Exclusive agencies and financial specialists are supported through marketing assistance, service and business processes, technology, education, offering financing to grow their businesses and other resources to help them enhance the customer experience and to acquire and retain more customers.

Focus areas include improving the effectiveness of the sales and distribution systems through integrated support, tools and technology and reinventing products and services, supported by people and technology.

Affordable Leveraging the Allstate brand, people and technology to improve our long-term competitive position and accelerate growth.

Data, analytics and technology support advances in pricing sophistication for all lines of business. Pricing and underwriting strategies and decisions are designed to generate sustainable profitable growth.

Targeted marketing includes messaging that communicates the value of our Good Hands®, the importance of having proper coverage, product options, and the ease of doing business with Allstate.

Enhanced loss cost management and expense control are priorities. To achieve this, we are continuing to modernize our operating platform (including enhanced digital capabilities) and optimizing vendor relationships. Investments are being made to increase efficiencies and reduce expenses.

Simple The strategy to keep things simple for customers and improve their experience with us across the board, giving them open access to shop, get service or file a claim in whatever channel is convenient.

Focus areas include streamlined quoting and binding processes, intelligent services allowing customers to easily find the optimal channel to address their service needs, expanded customer self-service, and continued claims transformation.

Emerging technologies and predictive analytics are being used to simplify the customer experience and expedite the quoting, underwriting and claims processes.

Connected We are enhancing customer connectivity by broadening and deepening the way we stay connected, providing compelling features to customers that connect to us through our Allstate Mobile application while continually developing solutions to enhance offerings and make Allstate Mobile core to the customer experience.

Current capabilities are being expanded through our partnership with Arity, which uses telematics to offer personalized, engaging programs that empower drivers with insights about their vehicle's health, costs and safety.

Exclusive agent compensation structure The compensation structure for Allstate exclusive agents rewards them for delivering high value to customers and achieving certain business outcomes such as profitable growth and household penetration. Allstate exclusive agent remuneration comprises a base commission, variable compensation and a bonus.

- Agents receive a monthly base commission payment as a percentage of their total eligible written premium.
- Variable compensation rewards agents for acquiring new customers by exceeding a base production goal.
- Bonus compensation is based on a percentage of premiums and can be earned by agents who are meeting certain sales goals and selling additional policies to meet customer needs profitably.

Compensation changes for 2020 shift variable compensation toward new business and eliminates variable compensation for renewing customers. We are aligning agent compensation to emphasize growth while simultaneously improving customer service consistency.

Agents have the ability to earn commissions and additional bonuses on non-proprietary products provided to customers when an Allstate product is not available. In 2019 Ivantage, which provides access to these products, had $1.90 billion non-proprietary premiums under management and is a leading provider of property and casualty brokerage services.

Allstate agents and exclusive financial specialists receive commissions for proprietary and non-proprietary life and retirement sales and are eligible for a quarterly bonus based on the volume of non-proprietary sales.

Allstate independent agent remuneration comprises a base commission and a bonus that can be earned by agents who achieve sales goals and a target loss ratio.

Commercial lines strategy We are actively pursuing profitable expansion of our commercial lines business in the shared economy, including transportation and home-sharing network companies. Profit improvement actions have been implemented for our traditional commercial lines insurance products, emphasizing pricing, claims, governance and operational improvements.

Esurance strategy

Esurance has grown in the direct channel with a focus on making insurance surprisingly painless by innovating to make it simple, transparent and affordable with a seamless online and mobile experience. Esurance is 2.4 times bigger, as measured by premiums written, than when it was acquired eight years ago. Esurance will be integrated into the Allstate brand in 2020.

Encompass strategy

Currently, customers who prefer an independent agent can access products under either the Encompass or Allstate brand. As part of Allstate's multi-year Transformative Growth Plan, independent agent access will be increased as we combine our Allstate and Encompass brand independent agency businesses and go to market exclusively with the Encompass brand. In addition to bringing the organizations together, we will expand the independent agency footprint, provide a superior agency and customer experience, and offer contemporary products with sophisticated pricing.

Over the past several years, Encompass has been executing a profit improvement plan emphasizing pricing, governance and operational improvements at both the state and countrywide levels. These actions have improved underlying profitability but led to a reduction of policies in force compared to prior years for both auto and homeowners. We expect these profit improvement actions to continue as we implement the Transformative Growth Plan.

Answer Financial strategy

Answer Financial is an insurance agency that sells other insurance companies' products directly to customers online. Our strategy as a technology-enabled insurance agency is to provide comparison shopping and related services for businesses, offering customers choice, convenience and ease of use.

Allstate Protection pricing and risk management strategies

Our pricing and underwriting strategies and decisions are designed to generate sustainable profitable growth.

A proprietary database of underwriting and loss experience enables sophisticated pricing algorithms and methodologies to more accurately price risks while also seeking to attract and retain customers in multiple risk segments.

- For auto insurance, risk evaluation factors can include, but are not limited to: vehicle make, model and year; driver age and marital status; territory; years licensed; loss history; years insured with prior carrier; prior liability limits; prior lapse in coverage; and insurance scoring utilizing telematics data and other consumer information.
- For property insurance, risk evaluation factors can include, but are not limited to: the amount of insurance purchased; geographic location of the property; loss history; age, condition and construction characteristics of the property; and characteristics of the insured including insurance scoring utilizing other consumer information.

A combination of underwriting information, pricing and discounts are also used to achieve a more competitive position and growth. The pricing strategy involves local marketplace pricing and underwriting decisions based on risk evaluation factors to the extent permissible by applicable law and an evaluation of competitors.

Pricing of property products is intended to generate risk-adjusted returns that are acceptable over a long-term period. Rate increases are pursued to keep pace with loss trends, including losses from catastrophic events and those that are weather-related (such as wind, hail, lightning and freeze not meeting our criteria to be declared a catastrophe). We also take into consideration potential customer disruption, the impact on our ability to market our products, regulatory limitations, our competitive position and profitability.

In any reporting period, loss experience from catastrophic events and weather-related losses may contribute to negative or positive underwriting performance relative to the expectations incorporated into product pricing.

Property catastrophe exposure is managed with the goal of providing shareholders an acceptable return on the risks assumed in the property business. Catastrophe exposure management includes purchasing reinsurance to provide coverage for known exposure to hurricanes, earthquakes and fires following earthquakes, wildfires and other catastrophes. Our current catastrophe reinsurance program supports our risk tolerance framework that targets less than a 1% likelihood of annual aggregate catastrophe losses from hurricanes and earthquakes, net of reinsurance, exceeding $2 billion.

The use of different assumptions and updates to industry models and to our risk transfer program could materially change the projected loss. Growth strategies include areas where we believe diversification can be enhanced and an appropriate return can be earned for the risk. As a result, our modeled exposure may increase, but in aggregate remain lower than $2 billion as noted above. In addition, we have exposure to other severe weather events and wildfires, which impact catastrophe losses.

We are promoting measures to prevent and mitigate losses and make homes and communities more resilient, including enactment of stronger building codes and effective enforcement of those codes, adoption of sensible land use policies, and development of effective and affordable methods of improving the resilience of existing structures.

Products and distribution

Allstate Protection differentiates itself by offering solutions to meet broad-based household protection needs and a comprehensive range of innovative product options and features across distribution channels that best suit each consumer segment.

Products	
Insurance products (1)	Auto
	Homeowners
	Specialty auto (motorcycle, trailer, motor home and off-road vehicle)
	Other personal lines (renters, condominium, landlord, boat, umbrella, manufactured home and stand-alone scheduled personal property)
	Commercial lines
Answer Financial	Comparison quotes and sales of non-proprietary auto, homeowners and other personal lines (condominium, renters, motorcycle, recreational vehicle and boat)

(1) Insurance products are offered by the Allstate, Esurance and Encompass brands.

Distribution channels	
Allstate brand	In the U.S., we offer products through 10,800 Allstate exclusive agencies operating in 10,700 locations, supported by 27,100 licensed sales professionals, and 1,000 exclusive financial specialists. We also offer products through 3,400 independent agencies, contact centers and online. In Canada, we offer Allstate brand products through 1,000 employee producers.
Esurance brand	Sold to customers online and through contact centers. (Esurance will be integrated into the Allstate brand in 2020.)
Encompass brand	Distributed through 2,800 independent agencies.
Answer Financial	Comparison quotes and sales offered to customers online or through contact centers.

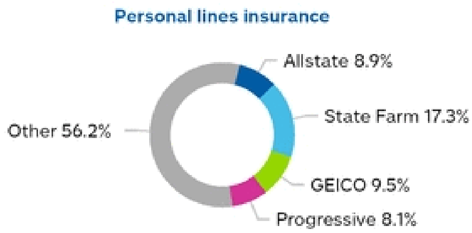
Allstate exclusive agencies also support the Service Businesses, Allstate Life and Allstate Benefits segments through offering roadside assistance, consumer protection plans, identity protection, life insurance and voluntary benefits products.

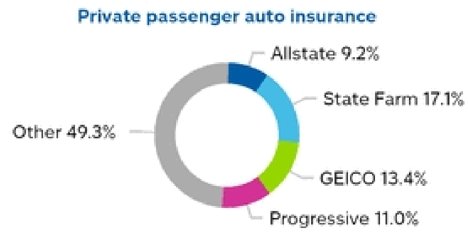
When an Allstate product is not available, we may offer non-proprietary products to consumers through Ivantage and arrangements made with other companies, agencies, and brokers. As of December 31, 2019, Allstate agencies had approximately $1.7 billion of non-proprietary personal insurance premiums under management, primarily related to property business in hurricane exposed areas, and approximately $225 million of non-proprietary commercial insurance premiums under management. Additionally, we offer a homeowners product through our excess and surplus lines carrier, North Light Specialty Insurance Company, in certain areas with higher risk of catastrophes or where customers do not meet the Allstate brand standard underwriting profile.

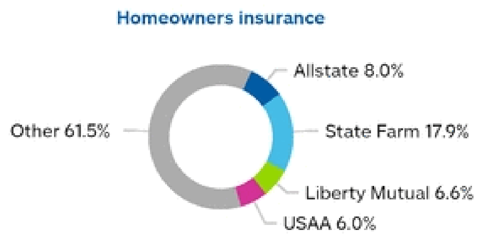
Innovative product offerings and features		
Market-leading solutions		
Allstate brand	Your Choice Auto®	Qualified customers choose from a variety of options, such as Accident Forgiveness, Deductible Rewards®, Safe Driving Bonus® and New Car Replacement.
	Allstate House and Home®	Featured options include Claim RateGuard®, Claim-Free Bonus, Deductible Rewards℠ and flexibility in options and coverages, including graduated roof coverage and pricing based on roof type and age for damage related to wind and hail events.
	Claim Satisfaction Guarantee®	Promised return of premium to standard auto insurance customers dissatisfied with their claims experience.
	Bundling Benefits	Auto customers with a qualifying property policy are provided an auto renewal guarantee and a deductible waiver (when the same event, with the same covered cause of loss, damages both auto and property). Offered in 39 states as of December 31, 2019.
	New Car Replacement Protection	Replaces a qualifying customer's vehicle (two model years old or less) involved in a total loss accident with a vehicle of the same or similar make and model. Offered in 39 states as of December 31, 2019.
Encompass brand	EncompassOne® Policy	Packaged insurance product with one premium, one bill, one policy deductible and one renewal date. Broad coverage options include customizable features such as enhanced accident forgiveness, new-car replacement coverage, walk-away home coverage option should the insured decide not to rebuild, flexible additional living expense coverage, water-sewer backup coverage options and roadside assistance. This product is offered in 36 states and the District of Columbia ("D.C.") as of December 31, 2019.
	Surround Solutions by Encompass®	Offers auto (6-months), homeowner and specialty lines products, pricing, services and support designed to provide flexibility and be customized based on consumer needs. Offered exclusively in four states for Encompass as of December 31, 2019.
Telematics offerings		
Allstate brand	Drivewise®	Telematics-based program, available in 50 states and the District of Columbia as of December 31, 2019, that uses a mobile application or an in-car device to capture driving behaviors and encourage safe driving. It provides customers with information and tools, incentives and driving challenges. For example, in most states, Allstate Rewards® provides reward points for safe driving.
	Milewise®	Usage-based insurance product, available in 14 states as of December 31, 2019, that gives customers flexibility to customize their insurance and pay based on the number of miles they drive.
Esurance brand	DriveSense®	Telematics-based insurance program, available in 37 states as of December 31, 2019, that primarily uses a mobile application to capture driving behaviors and reward customers for safe driving.
Encompass brand	Route Report℠	Telematics application, available in 16 states as of December 31, 2019, used to capture driving behaviors and reward customer participation.
Shared economy solutions		
Allstate brand	Transportation Network Company Commercial Auto	Commercial coverage of transportation networking company independent drivers during various phases of the ride sharing service.
	Allstate Ride for Hire®/ HostAdvantage®	Supplemental personal insurance coverage for those using their vehicle to drive for a transportation network company or their house for peer-to-peer property sharing.

Competition

The personal lines insurance markets, including private passenger auto and homeowners insurance, are highly competitive. The following charts provide Allstate Protection's combined market share compared to our principal U.S. competitors using statutory direct written premium for the year ended December 31, 2018, according to A.M. Best.

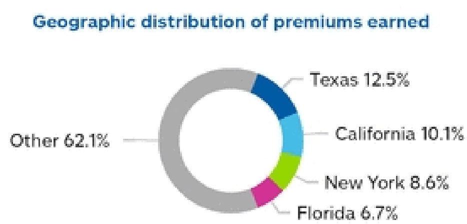






Geographic markets

We primarily operate in the U.S (all 50 states and D.C.) and Canada. Our top geographic markets based on 2019 statutory direct written premiums are reflected below.



Service Businesses Segment

Our Service Businesses segment accounted for 3.7% of Allstate's 2019 consolidated total revenue and 72.6% of Allstate's December 31, 2019 PIF. Service Businesses includes Allstate Protection Plans®, Allstate Dealer Services®, Allstate Roadside Services®, Arity® and Allstate Identity Protection®, which offer a broad range of products and services that expand and enhance customer value propositions.

Strategy - To deliver superior value propositions and build strategic platforms to connect and engage with customers and effectively address their changing needs and preferences.

Allstate℠ Protection Plans	Expand distribution of consumer protection plan and technical support products through new and existing retail and mobile operator accounts while increasing profitability and returns.
Allstate Dealer Services®	Expand distribution of Allstate branded finance and insurance products and services to auto dealerships, while pursuing additional distribution through strategic partnerships.
Allstate Roadside Services®	Modernize the roadside assistance business through technology and enhance capabilities to deliver a superior customer experience while improving efficiency and returns.
Arity®	Leverage analytics and deep understanding of driver risk to create a strategic platform. The platform will be used by those industries affected most by the changing face of transportation, including insurance companies, shared mobility companies and the automotive ecosystem.
Allstate℠ Identity Protection	Create a leading position in the identity protection market, offering full identity protection monitoring with proactive alerts, digital exposure reporting and identity theft reimbursement as well as expanding into other distribution channels.

Products and distribution

Products and services	
Allstate Protection Plans	Provides consumer protection plans and related technical support for mobile phones, consumer electronics and appliances which provide customers protection from mechanical or electrical failure, and in certain cases, accidental damage from handling.
Allstate Dealer Services	Offers finance and insurance products, including vehicle service contracts, guaranteed asset protection waivers, road hazard tire and wheel protection, and paintless dent repair protection.
Allstate Roadside Services	Offers towing, jump-start, lockout, fuel delivery and tire change services to retail customers and customers of our wholesale partners. Good Hands Rescue® is a pay-per-use mobile application service that connects users to a select countrywide network of third-party providers and a proprietary crowdsourced network to assist with emergencies.
Arity	Provides data and analytics solutions with the Arity platform using automotive telematics information. Customers receive value from our solutions either by using web-based software tools, white labeled mobile applications or through embedding our technology in their mobile applications.
Allstate Identity Protection	Provides identity protection services including monitoring, alerts, remediation and a proprietary indicator of identity health.

Distribution channels	
Allstate Protection Plans	Major retailers in the U.S. and mobile operators in Europe.
Allstate Dealer Services	Independent agencies and brokers through auto dealerships in the U.S. in conjunction with the purchase of a new or used vehicle.
Allstate Roadside Services	Allstate exclusive agencies, wholesale partners, affinity groups and a mobile application.
Arity	Sells directly to affiliate and non-affiliate customers and through strategic partners.
Allstate Identity Protection	Primarily through workplace benefit programs.

Geographic markets

The Service Businesses primarily operate in the U.S., with certain businesses offering services in Europe, Canada, and Puerto Rico.

Competition

We compete on a variety of factors, including product offerings, brand recognition, financial strength, price, distribution and the customer experience. The market for these services is highly fragmented and competitive.

Allstate Life Segment

Strategy

Our Allstate Life segment accounted for4.4% of Allstate's 2019 consolidated total revenue and 1.3% of Allstate's December 31, 2019 PIF. Our overall strategy is to broaden Allstate's customer relationships and value proposition. We also distribute non-proprietary retirement products offered by third-party providers. Our target customers are middle market consumers with family and financial protection needs.

Our product positioning provides solutions to help meet customer needs during various phases of life. Term and whole life insurance products offer basic life protection solutions while universal life and retirement products cover more advanced needs. Many Allstate exclusive agencies partner with exclusive financial specialists to deliver life and retirement solutions to their customers. These specialists have expertise with advanced life and retirement cases and other more complex customer needs. Successful partnerships assist agencies with building stronger and deeper customer relationships. Improvements in sales education and technology are being made to ensure agencies have the tools and information needed to help customers meet their needs and build personal relationships.

The operating model is being modernized through investments in data and analytics and technology capabilities, tailoring distribution support, product innovation and enhancing the underwriting process.

Products and distribution

Insurance products	
Term life	Interest-sensitive life
Whole life	
	Variable life

Distribution channel
Allstate exclusive agencies and exclusive financial specialists.

Allstate exclusive agencies and exclusive financial specialists also sell certain non-proprietary products, including mutual funds, fixed and variable annuities, disability insurance, and long-term care insurance to provide a broad suite of protection and retirement products. As of December 31, 2019, Allstate agencies had approximately $16.5 billion of non-proprietary mutual funds and fixed and variable annuity account balances under management. New and additional deposits into these non-proprietary products were $2.4 billion in 2019.

Competition

We compete on a variety of factors, including product offerings, brand recognition, financial strength and ratings, price, distribution and customer service. The market for life insurance continues to be highly fragmented and competitive. As of December 31, 2018, there were approximately 350 groups of life insurance companies in the United States.

Geographic markets

We primarily operate in the U.S. (all 50 states and D.C.). Our top geographic markets based on 2019 statutory direct premiums are reflected below.

Allstate Benefits Segment

Strategy

Our Allstate Benefits segment accounted for2.8% of Allstate's 2019 consolidated total revenue and 2.9% of Allstate's December 31, 2019 PIF. The Allstate Benefits segment provides consumers with financial protection against the risk of accidents, illness and mortality. We are among the industry leaders in the growing voluntary benefits market, offering a broad range of products through workplace enrollment. Our life insurance portfolio includes individual and group permanent life solutions. Target customers are middle market consumers with family and financial protection needs employed by small, medium and large sized firms. Allstate Benefits is well represented in all market segments and is a leader in the large and mega (over 10,000 employees) market segments.

Our products are offered through independent agents, benefits brokers and Allstate exclusive agencies. Allstate Benefits is differentiated through its broad product portfolio, flexible enrollment solutions, strong national accounts team and well-recognized brand.

Our strategy for growth is to deliver substantially more value through innovative products and technology, tailored solutions and exceptional service. Initiatives are focused on expanding into non-traditional products and becoming an integrated digital enterprise through investments in future-state technologies and data and analytics capabilities.

Products and distribution

Voluntary benefits products	
Life	Short-term disability
Accident	Other health
Critical illness	

Distribution channels
4,960 workplace enrolling independent agents and benefits brokers.
Allstate exclusive agencies, focusing on small employers.

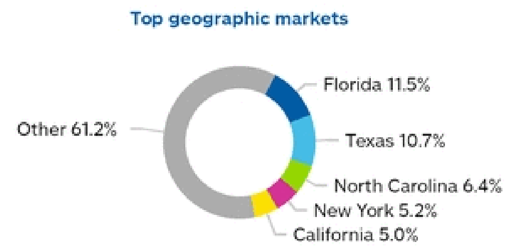
Competition

We compete on a wide variety of factors, including product offerings, brand recognition, financial strength and ratings, price, distribution and customer service.

The market for voluntary benefits is growing as these products help employees fill the increasing gaps associated with continued medical cost inflation and the shifting of costs from employers to employees to cover co-pays and deductibles. Favorable industry and economic trends have increased competitive pressure and attracted new traditional and non-traditional entrants to the voluntary benefits market. Recent entrants, including large group medical, life and disability insurance carriers, are leveraging core benefit capabilities by bundling and discounting to capture voluntary market share.

Geographic markets

We primarily operate in the U.S. (all 50 states and D.C.) and Canada. The top geographic markets based on 2019 statutory direct premiums are



reflected below.

Allstate Annuities Segment

Strategy

Our Allstate Annuities segment accounted for2.9% of Allstate's 2019 consolidated total revenue and 0.1% of Allstate's December 31, 2019 PIF. The Allstate Annuities segment consists primarily of deferred fixed annuities and immediate fixed annuities (including standard and sub-standard structured settlements). The segment is in run-off and is focused on increasing lifetime economic value. Both the deferred and immediate annuity businesses have been adversely impacted by the historically low interest rate environment. Our immediate annuity business has also been impacted by medical advancements that have resulted in annuitants living longer than anticipated when many of these contracts were originated.

Allstate Annuities focuses on the distinct risk and return profiles of the specific products when developing investment and liability management strategies. The level of legacy deferred annuities in force has been significantly reduced and the investment portfolio and crediting rates are proactively managed to improve profitability of the business while providing appropriate levels of liquidity.

The investment portfolio supporting our immediate annuities is managed to ensure the assets match the characteristics of the liabilities and provide the long-term returns needed to support this business. To better match the long-term nature of our immediate annuities, we use performance-based investments (primarily limited partnership investments) in which we have ownership interests and a greater proportion of return is derived from idiosyncratic asset or operating performance.

We continue to review strategic options to reduce exposure and improve returns of the business. As a result, we may take additional operational and financial actions that offer return improvement and risk reduction opportunities.

Products and distribution

We previously offered and continue to have in force deferred fixed annuities and immediate fixed annuities. We discontinued the sale of proprietary annuities over an eight-year period from 2006 to 2014, reflecting our expectations of declining returns. In 2006, we disposed of substantially all of the variable annuity business through reinsurance agreements. For discussion of non-proprietary retirement and investment products sold through our Allstate exclusive agencies and exclusive financial specialists, see Part I, Item 1. Allstate Life Segment of this report.

Other Business Segments

Discontinued Lines and Coverages Segment

The Discontinued Lines and Coverages segment includes results from property and casualty insurance coverage that primarily relates to policies written during the 1960s through the mid-1980s.

Strategy Management of this segment has been assigned to a designated group of professionals with expertise in claims handling, policy coverage interpretation, exposure identification, litigation and reinsurance collection. As part of its responsibilities, this group pursues settlement agreements including policy buybacks on direct excess commercial business when appropriate to improve the certainty of the liabilities. At the end of 2019, 72.2% of the direct excess gross case reserves were attributable to settlement agreements. This group also manages other direct commercial and assumed reinsurance business in runoff and engages in reinsurance ceded and assumed commutations as required or when considered economically advantageous.

Changes in the reserves established for asbestos, environmental and other discontinued lines losses have occurred and may continue. Reserve changes can be caused by new information relating to new and additional claims, new exposures or the impact of resolving unsettled claims based on unanticipated events such as arbitrations, litigation, legislative, judicial or regulatory actions. Environmental losses may also increase as the result of additional funding for environmental site clean-up.

Challenges related to the concentration of insurance and reinsurance claims from companies who specialize in this business continue to be addressed.

Corporate and Other Segment

Our Corporate and Other segment is comprised of holding company activities and certain non-insurance operations.

Regulation

Allstate is subject to extensive regulation, primarily at the state level. The method, extent and substance of such regulation vary by state but generally have their source in statutes that establish standards and requirements for conducting the business of insurance and that also delegate regulatory authority to a state agency. These rules have a substantial effect on our business and relate to a wide variety of matters, including insurer solvency and statutory surplus sufficiency, reserve adequacy, insurance company licensing and examination, agent and adjuster licensing, agent and broker compensation, policy forms, rate setting, the nature and amount of investments, claims practices, participation in shared markets and guaranty funds, transactions with affiliates, the payment of dividends, underwriting standards, statutory accounting methods, trade practices, privacy regulation and data security, corporate governance and risk management. In addition, state legislators and insurance regulators continue to examine the appropriate nature and scope of state insurance regulation. For a discussion of statutory financial information, see Note 16 of the consolidated financial statements.

For a discussion of regulatory contingencies, see Note 14 of the consolidated financial statements. Notes 14 and 16 are incorporated in this Part I, Item 1 by reference.

As part of an effort to strengthen the regulation of the financial services market, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") was enacted in 2010. Dodd-Frank created the Federal Insurance Office ("FIO") within the U.S. Department of the Treasury ("Treasury"). The FIO monitors the insurance industry, provides advice to the Financial Stability Oversight Council ("FSOC"), represents the U.S. on international insurance matters, and studies the current regulatory system.

Additional regulations or new requirements may emerge from the activities of various regulatory entities, including the Federal Reserve Board, FIO, FSOC, the National Association of Insurance Commissioners ("NAIC"), and the International Association of Insurance Supervisors ("IAIS"), that are evaluating solvency and capital standards for insurance company groups. In addition, the NAIC has adopted amendments to its model holding company law that have been adopted by some jurisdictions. The outcome of these actions is uncertain; however, these actions may result in an increase in the level of capital and liquidity required by insurance holding companies.

We cannot predict whether any specific state or federal measures will be adopted to change the nature or scope of the regulation of insurance or what effect any such measures would have on Allstate. We are working for changes in the regulatory environment to make insurance more available and affordable for customers, encourage market innovation, improve driving safety, strengthen cybersecurity, promote better catastrophe preparedness and loss mitigation and advocate for appropriate long-term capital standards to support optimal risk adjusted returns.

Limitations on Dividends by Insurance Subsidiaries. As a holding company with no significant business operations of its own, The Allstate Corporation relies on dividends from Allstate Insurance Company as one of the principal sources of cash to pay dividends and to meet its obligations, including the payment of principal and interest on debt or to fund non-insurance-related businesses. Allstate Insurance Company is regulated as an insurance company in Illinois, and its ability to pay dividends is restricted by Illinois law. The laws of the other jurisdictions that generally govern our other insurance subsidiaries contain similar limitations on the payment of dividends. However, such laws in some jurisdictions may be more restrictive.

For additional information regarding limitations, see Part II, Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations of this report.

In addition, the NAIC has formed a working group for the development of a group capital calculation covering all entities of the insurance company group for use in solvency monitoring activities. The calculation is intended to provide analytical information and we do not expect potential revisions to impact our current dividend plans, any increase in the amount of capital or reserves our insurance subsidiaries are required to hold could reduce the amount of future dividends such subsidiaries are able to distribute to the holding company. Any reduction in the RBC ratios of our insurance subsidiaries could also adversely affect their financial strength ratings as determined by statistical rating agencies.

Insurance Holding Company Regulation – Change of Control. The Allstate Corporation and Allstate Insurance Company are insurance holding companies subject to regulation in the jurisdictions in which their insurance subsidiaries do business. In the U.S., these subsidiaries are organized under the insurance codes of Florida, Illinois, Massachusetts, New Jersey, New York, Texas, and Wisconsin. Additionally, some of these subsidiaries are considered commercially domiciled in California and Florida.

Generally, the insurance codes in these states provide that the acquisition or change of "control" of a domestic or commercially domiciled insurer or of any person that controls such an insurer cannot be consummated without the prior approval of the relevant insurance regulator. In general, a presumption of "control" arises from the ownership, control, possession with the power to vote, or possession of proxies with respect to ten percent or more of the voting securities of an insurer or of a person who controls an insurer. In addition, certain state insurance laws require pre-acquisition notification to state agencies of a change in control with respect to a non-domestic insurance company licensed to do business in that state. While such pre-acquisition notification statutes do not authorize the state agency to disapprove the change of control, such statutes do authorize certain remedies, including the issuance of a cease-and-desist order with respect to the non-domestic insurer if certain conditions exist, such as undue market concentration.

Thus, any transaction involving the acquisition of ten percent or more of The Allstate Corporation's common stock would generally require prior approval by the state insurance departments in California, Florida, Illinois, Massachusetts, New Jersey, New York, Texas and Wisconsin. Moreover, notification would be required in those other states that have adopted pre-acquisition notification provisions and where the insurance subsidiaries are admitted to transact business. Such approval requirements may deter, delay or prevent certain transactions affecting the ownership of The Allstate Corporation's common stock.

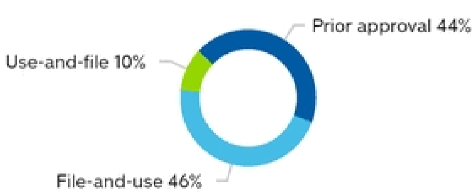
Rate Regulation. Nearly all states have insurance laws requiring personal property and casualty insurers to file rating plans, policy or coverage forms, and other information with the state's regulatory authority. In many cases, such rating plans, policy forms, or both must be approved prior to use.

The speed with which an insurer can change rates in response to competition or increasing costs depends on the state rating laws, which include the following categories:

- Prior approval — Regulators must approve a rate before the insurer may use it
- File-and-use — Insurers do not have to wait for the regulator's approval to use a rate, but the rate must be filed with the regulatory authority prior to being used
- Use-and-file — Requires an insurer to file rates within a certain period of time after the insurer begins using them
- No approval — One state, representing less than 1% of 2019 statutory direct written premiums, does not impose a rate filing requirement

Under these rating laws, the regulator has the authority to disapprove a rate filing. The percentage of 2019 statutory direct written premiums based on state rating laws are reflected below.

Percentage by state rating laws



An insurer's ability to adjust its rates in response to competition or to changing costs is dependent on an insurer's ability to demonstrate to the regulator that its rates or proposed rating plan meets the requirements of the rating laws. In those states that significantly restrict an insurer's discretion in selecting the business that it wants to underwrite, an insurer can manage its risk of loss by charging a rate that reflects the cost and expense of providing the insurance. In those states that significantly restrict an insurer's ability to charge a rate that reflects the cost and expense of providing the insurance, the insurer can manage its risk of loss by being more selective in the type of business it underwrites. When a state significantly restricts both underwriting and pricing, it becomes more difficult for an insurer to maintain its profitability.

From time to time, the personal lines insurance industry comes under pressure from state regulators, legislators, and special-interest groups to reduce, freeze, or set rates at levels that do not correspond with our analysis of underlying costs, catastrophe loss exposure, and expenses. We expect this kind of pressure to persist. Allstate and other insurers are using increasingly sophisticated pricing models and rating plans that are reviewed by regulators and special-interest groups. State regulators may interpret existing law or rely on future legislation or regulations to impose new restrictions that adversely affect profitability or growth. We cannot predict the impact on our business of possible future legislative and regulatory measures regarding insurance rates.

Involuntary Markets. As a condition of maintaining our licenses to write personal property and casualty insurance in various states, we are required to participate in assigned risk plans, reinsurance facilities, and joint underwriting associations that provide various types of insurance coverage to individuals or entities that otherwise are unable to purchase such coverage from private insurers. Underwriting results related to these arrangements, which tend to be adverse, have been immaterial to our results of operations.

For a discussion of these items see Note 14 of the consolidated financial statements. Note 14 is incorporated in this Part I, Item 1 by reference.

Indemnification Programs. We are a participant in state-based industry pools, facilities or associations, mandating participation by insurers offering certain coverage in their state, including the Michigan Catastrophic Claims Association ("MCCA"), the New Jersey Property-Liability Insurance Guaranty Association, the North Carolina Reinsurance Facility and the Florida Hurricane Catastrophe Fund. We also participate in the Federal Government National Flood Insurance Program.

Recent regulatory changes have occurred related to the MCCA. At this time, we are unable to determine whether, or to what extent, these changes will have on our claims and claims expense reserves and corresponding MCCA indemnification recoverables.

- On May 17, 2018, member companies of the MCCA were notified of the ratification of amendments to the MCCA's Plan of Operation. The amendments were designed to clarify the MCCA's preapproval requirements for certain actions and activities involving benefits provided to covered claimants, including the preapproval of any agreement that sets attendant care rates or residential care facility rates and the preapproval of all non-emergency medical flights.

- On May 30, 2019, the Governor of Michigan signed new legislation to reform Michigan's no-fault auto insurance system. The reform includes:
  - Allowing insureds to choose levels of personal injury protection coverage, including the option to opt-out of personal injury protection coverage in certain circumstances.
  - Implementing mandated rate reductions that correspond to the level of personal injury protection coverage chosen by insureds, which go into effect July 2, 2020.
  - Setting fee schedules for personal injury protection claims at 200% of Medicare rates in 2021, declining to 195% in 2022 and 190% in 2023, for any providers other than certain unique categories of providers and applying to treatment on existing and new claims beginning after July 1, 2021.
  - Implementing or creating new processes for reviewing claims, assessing allowable expenses and setting limits on certain allowable expenses.
- Other legislative proposals to change the MCCA operation in the future are put forth periodically.

For a discussion of these items see Note 10 of the consolidated financial statements. Note 10 is incorporated in this Part I, Item 1 by reference.

Guaranty Funds. Under state insurance guaranty fund laws, insurers doing business in a state can be assessed, up to prescribed limits, in order to cover certain obligations of insolvent insurance companies. We do not anticipate any material adverse financial impact on Allstate from these assessments.

Investment Regulation. Our insurance subsidiaries are subject to state regulation that specifies the types of investments that can be made and concentration limits of invested assets. Failure to comply with these rules leads to the treatment of non-conforming investments as non-admitted assets for purposes of measuring statutory surplus. Further, in some instances, these rules require divestiture of non-conforming investments.

Exiting Geographic Markets; Canceling and Non-Renewing Policies. Most states regulate an insurer's ability to exit a market. For example, states may limit, to varying degrees, an insurer's ability to cancel and non-renew policies. Some states restrict or prohibit an insurer from withdrawing one or more types of insurance business from the state, except pursuant to a plan that is approved by the state insurance department. Regulations that limit cancellation and non-renewal and that subject withdrawal plans to prior approval requirements may restrict an insurer's ability to exit unprofitable markets.

Variable Life Insurance and Registered Fixed Annuities. The sale and administration of variable life insurance and registered fixed annuities with market value adjustment features are subject to extensive regulatory oversight at the federal and state level, including regulation and supervision by the Securities and Exchange Commission ("SEC") and the Financial Industry Regulatory Authority ("FINRA").

Broker-Dealers, Investment Advisors and Investment Companies. The Allstate entities that operate as broker-dealers, registered investment advisors, and investment companies are subject to regulation and supervision by the SEC, FINRA and/or, in some cases, state securities administrators. The SEC has adopted a best interest standard that has a compliance effective date of June 30, 2020 and applies to recommendations of securities products to retail customers. Certain other state and federal regulators are considering or have implemented best interest or fiduciary standards. Such standards could impact products provided by Allstate agencies and Allstate's broker-dealers, their sales processes, sales volume, and producer compensation arrangements.

Dodd-Frank: Covered Agreement. The Secretary of the Treasury (operating through FIO) and the Office of the U.S. Trade Representative ("USTR") are jointly authorized, pursuant to the Dodd-Frank, to negotiate Covered Agreements. A Covered Agreement is a bilateral or multilateral agreement that "relates to the recognition of prudential measures with respect to the business of insurance or reinsurance that achieves a level of protection for insurance or reinsurance consumers that is substantially equivalent to the level of protection achieved under State insurance or reinsurance regulation."

On September 22, 2017, the U.S. and European Union ("EU") signed a Covered Agreement. In addition to signing the Covered Agreement, Treasury and the USTR jointly issued a policy statement clarifying how the U.S. views implementation of certain provisions of the Covered Agreement. The policy statement affirms the U.S. system of insurance regulation, including the role of state insurance regulators as the primary supervisors of the business of insurance and addresses several other key provisions of the Covered Agreement for which constituents sought clarity, including prospective application to reinsurance agreements and an affirmation that the Covered Agreement does not require development of a group capital standard or group capital requirement in the U.S.

The U.S. has five years from the date of signingto amend its credit for reinsurance laws and regulations to conform with the requirements of the Covered Agreement or face federal preemption determinations by the FIO. To address the requirements of the Covered Agreement, the NAIC has formally adopted revisions to its existing credit for reinsurance model law and model regulation to conform with the requirements of the Covered Agreement with the expectation that states will adopt and implement the modified model law and regulation by September 2022.

On December 19, 2018, the U.S. and the United Kingdom ("UK") signed a separate Covered Agreement consistent with the U.S.-EU Covered Agreement to coordinate regulation of the insurance industry doing business in the U.S. and UK in the event the UK leaves the EU. Consistent with the U.S.-EU Covered Agreement (the “Agreement”) signed in 2017, Treasury and the USTR also issued a policy statement regarding implementation of the Agreement affirming the role that state insurance regulators play as the primary supervisors of the U.S. insurance industry. The Agreement will become effective once U.S. and UK governments exchange written notifications that they have completed all domestic internal requirements and procedures. This is anticipated to occur when the UK is no longer covered by the Agreement following the UK withdrawal from the EU.

Division Statute. On November 27, 2018, the Illinois General Assembly passed legislation authorizing a statute that makes available a process by which a domestic insurance company may divide into two or more domestic insurance companies. The statute, which became effective January 1, 2019, can be used to divide continuing blocks of insurance business from insurance business no longer marketed, or otherwise has been discontinued, into separate companies with separate capital. The statute can also be used for sale to a third party or to manage risks associated with indemnification programs. Before a plan of division can be effected it must be approved according to the organizational documents of the dividing insurer and submitted for approval by the Illinois Department of Insurance.

Privacy Regulation and Data Security. Federal law and the laws of many states require financial institutions to protect the security and confidentiality of consumer information and to notify consumers about their policies and practices relating to collection, use, and disclosure of consumer information and their policies relating to protecting the security and confidentiality of that information. Federal law and the laws of many states also regulate disclosures and disposal of consumer information. Congress, state legislatures, and regulatory authorities are expected to consider additional regulation relating to privacy and other aspects of consumer information.

For example, the European Commission adopted the General Data Protection Regulation, which greatly increases the jurisdictional reach of its laws and adds a broad array of requirements for handling personal data, such as the public disclosure of significant data breaches, privacy impact assessments, data portability and the appointment of data protection officers. The California Consumer Privacy Act, which took effect in January 2020, adopted similar compliance requirements for businesses that collect personal information on California residents. Additional states are likely to adopt similarly themed privacy requirements in the future. Further, the New York State Department of Financial Services has issued cybersecurity regulations for financial services institutions, including banking and insurance entities, that impose a variety of detailed security measures on covered entities. The NAIC has also adopted the Insurance Data Security Model Law, which, if adopted as state legislation, would establish standards for data security and for the investigation of and notification to insurance commissioners of cybersecurity events. We cannot predict the impact on our business of possible future legislative measures regarding privacy or cybersecurity.

Asbestos. Congress has repeatedly considered legislation to address asbestos claims and litigation in the past. We cannot predict the impact on our business of possible future legislative measures regarding asbestos.

Environmental. Environmental pollution and clean-up of polluted waste sites is the subject of federal and state regulation. The Comprehensive Environmental Response Compensation and Liability Act of 1980 (the “Superfund”) and comparable state statutes (the “mini-Superfunds”) govern the clean-up and restoration of waste sites by Potentially Responsible Parties (“PRPs”). The Superfund and the mini-Superfunds (collectively, the “Environmental Clean-up Laws” or “ECLs”) establish a mechanism to assign liability to PRPs or to fund the clean-up of waste sites if PRPs fail to do so. The extent of liability to be allocated to a PRP depends on a variety of factors. The insurance industry is involved in extensive litigation regarding coverage issues arising out of the clean-up of waste sites by insured PRPs and the insured parties’ alleged liability to third parties responsible for the clean-up. The insurance industry, including Allstate, has disputed and is disputing many such claims. Key coverage issues include whether the Superfund response, investigation, and clean-up costs are considered damages under the policies; whether coverage has been triggered; whether any pollution exclusion applies; whether there has been proper notice of claims; whether administrative liability triggers the duty to defend; whether there is an appropriate allocation of liability among potentially responsible insurers; and whether the liability in question falls within the definition of an “occurrence.” Identical coverage issues exist for clean-up and waste sites not covered under the Superfund. To date, courts have been inconsistent in their rulings on these issues.

Allstate’s exposure to liability with regard to its insureds that have been, or may be, named as PRPs is uncertain. While comprehensive Superfund reform proposals have been introduced in Congress, only modest reform measures have been enacted. In May 2017, the Environmental Protection Agency created a Superfund Task Force that issued proposed reforms in a July 2018 report. These recommendations address expediting clean-up and remediation processes, reducing the financial burden of the clean-up process, encouraging private investment, promoting redevelopment and community revitalization, and building and strengthening partnerships. We cannot predict which, if any, of these reforms will be enacted.

Developments in the insurance and reinsurance industries have fostered a movement to segregate asbestos, environmental and other discontinued lines exposures into separate legal entities with dedicated capital. Regulatory bodies in certain cases have supported these actions. We are unable to determine the impact, if any, that these developments will have on the collectability of reinsurance recoverables in the future.

Website

Our website is allstate.com. The Allstate Corporation's annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports that we file or furnish pursuant to Section 13(a) of the Securities Exchange Act of 1934 are available on the Investor Relations section of our website (www.allstateinvestors.com), free of charge, as soon as reasonably practicable after they are electronically filed or furnished to the SEC. In addition, our Corporate Governance Guidelines, our Global Code of Business Conduct, and the charters of our Audit Committee, Compensation and Succession Committee, Executive Committee, Nominating and Governance Committee, and Risk and Return Committee are available on the Investor Relations section of our website and in print to any stockholder who requests copies by contacting Investor Relations, The Allstate Corporation, 2775 Sanders Road, Northbrook, Illinois 60062-6127, 1-847-402-2800. The information found on our website is not incorporated by reference into this Annual Report on Form 10-K or in any other report or document filed with the SEC.

Other Information About Allstate

- As of December 31, 2019, Allstate had approximately 45,780 full-time employees and 510 part-time employees.
- Allstate's seven reportable segments use shared services, including human resources, investment, finance, information technology and legal services, provided by Allstate Insurance Company and other affiliates.
- Although the insurance business generally is not seasonal, claims and claims expense for the Allstate Protection segment tend to be higher for periods of severe or inclement weather.
- "Allstate®" is a very well-recognized brand name in the United States. We use the "Allstate®," "Esurance®," "Encompass®" and "Answer Financial®" brands extensively in our business. We also provide additional protection products and services through "Allstate℠ Protection Plans", "Allstate Dealer Services®", "Allstate Roadside Services®", "Arity®", "Allstate℠ Identity Protection" and "Allstate Benefits®". These brands, products and services are supported with the related service marks, logos, and slogans. Our rights in the United States to these names, service marks, logos and slogans continue as long as we continue to use them in commerce. Many service marks used by Allstate are the subject of renewable U.S. and/or foreign service mark registrations. We believe that these service marks are important to our business and we intend to maintain our rights to them.

Information about our Executive Officers

The following table sets forth the names of our executive officers, their ages as of February 1,2020, their positions, business experience, and the years of their first election as officers. "AIC" refers to Allstate Insurance Company. Each of the officers named below may be removed from office at any time, with or without cause, by the board of directors of the relevant company.

Name	Age	Position with Allstate and Business Experience	Year First Elected Officer
Thomas J. Wilson	62	Chair of the Board (May 2008 to present), President (June 2005 to January 2015 and February 2018 to present), and Chief Executive Officer (January 2007 to present) of The Allstate Corporation and AIC.	1995
Carolyn D. Blair	51	Executive Vice President and Chief Human Resources Officer of AIC (October 2019 to present); President of Tartan Advisory Group, Inc. (November 2018 to October 2019); Executive Vice President, Chief Human Resources & Communications Officer of Sun Life Financial (April 2014 to June 2018).	2019
Elizabeth A. Brady	55	Executive Vice President and Chief Marketing, Customer and Communications Officer of AIC (January 2020 to present); Executive Vice President and Chief Marketing, Innovation and Corporate Relations Officer of AIC (August 2018 to January 2020); Senior Vice President, Global Brand Management of Kohler Co. (November 2013 to July 2018).	2018
Don Civgin	58	Chief Executive Officer, Protection Products and Services of AIC (January 2020 to present); President, Service Businesses of AIC (January 2018 to January 2020); President, Emerging Businesses of AIC (February 2015 to January 2018); President and Chief Executive Officer, Allstate Financial of AIC (March 2012 to February 2015).	2008
John E. Dugenske	53	President, Investments and Financial Products of AIC (January 2020 to present); Executive Vice President and Chief Investment and Corporate Strategy Officer of AIC (January 2018 to January 2020); Executive Vice President and Chief Investment Officer of AIC (March 2017 to January 2018); Group Managing Director and Global Head of Fixed Income at UBS Global Asset Management (December 2008 to February 2017).	2017
Mary Jane Fortin	55	President, Financial Products of AIC (January 2020 to present); President, Allstate Financial Businesses of AIC (February 2017 to January 2020); President, Allstate Life and Retirement of AIC (October 2015 to February 2017); Executive Vice President and Chief Financial Officer, Global Consumer Insurance of AIG (April 2012 to September 2015).	2015
Suren Gupta	58	Executive Vice President, Chief Information Technology and Enterprise Services Officer of AIC (January 2020 to present); Executive Vice President, Enterprise Technology and Strategic Ventures of AIC (February 2015 to January 2020); Executive Vice President, Allstate Technology and Operations of AIC (April 2011 to February 2015).	2011
Susan L. Lees	62	Executive Vice President, Chief Legal Officer, General Counsel, and Secretary of The Allstate Corporation and AIC (January 2020 to present); Executive Vice President, General Counsel, and Secretary of The Allstate Corporation (May 2013 to January 2020) and of AIC (June 2013 to January 2020); Executive Vice President and General Counsel of The Allstate Corporation (June 2012 to May 2013) and of AIC (June 2012 to June 2013).	2008
Jesse E. Merten	45	Executive Vice President and Chief Risk Officer of AIC (December 2017 to present); Treasurer of The Allstate Corporation (January 2015 to April 2019) and of AIC (February 2015 to May 2019); Senior Vice President and Chief Financial Officer, Allstate Financial of AIC (January 2012 to February 2015).	2012
John C. Pintozzi	54	Senior Vice President, Controller, and Chief Accounting Officer of The Allstate Corporation (August 2019 to present) and of AIC (September 2019 to present); Senior Vice President and Chief Financial Officer, Allstate Investments (May 2012 to August 2019)	2005
Mario Rizzo	53	Executive Vice President and Chief Financial Officer of The Allstate Corporation and AIC (January 2018 to present); Senior Vice President and Chief Financial Officer, Allstate Personal Lines of AIC (February 2015 to January 2018); Senior Vice President and Treasurer of The Allstate Corporation (November 2010 to January 2015) and of AIC (November 2010 to February 2015).	2010
Glenn T. Shapiro	54	President, Personal Property-Liability of AIC (January 2020 to present); President, Allstate Personal Lines of AIC (January 2018 to January 2020); Executive Vice President, Claims of AIC (April 2016 to January 2018); Executive Vice President and Chief Claims Officer of Liberty Mutual Commercial Insurance (May 2011 to March 2016).	2016
Steven E. Shebik	63	Vice Chair of The Allstate Corporation and AIC (January 2018 to present); Executive Vice President and Chief Financial Officer of The Allstate Corporation (February 2012 to January 2018) and of AIC (March 2012 to January 2018).	1999

Forward-Looking Statements

This report contains “forward-looking statements” that anticipate results based on our estimates, assumptions and plans that are subject to uncertainty. These statements are made subject to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements do not relate strictly to historical or current facts and may be identified by their use of words like “plans,” “seeks,” “expects,” “will,” “should,” “anticipates,” “estimates,” “intends,” “believes,” “likely,” “targets” and other words with similar meanings. These statements may address, among other things, our strategy for growth, catastrophe exposure management, product development, investment results, regulatory approvals, market position, expenses, financial results, litigation and reserves. We believe that these statements are based on reasonable estimates, assumptions and plans. Forward-looking statements speak only as of the date on which they are made, and we assume no obligation to update any forward-looking statements as a result of new information or future events or developments. In addition, forward-looking statements are subject to certain risks or uncertainties that could cause actual results to differ materially from those communicated in these forward-looking statements. These risks and uncertainties include, but are not limited to, those described in Part 1, “Item 1A. Risk Factors” and elsewhere in this report and those described from time to time in our other reports filed with the Securities and Exchange Commission.

Item 1A. Risk Factors

Summary Risks are categorized by (1) insurance and financial services, (2) business, strategy and operations and (3) macro, regulatory and risk environment. Many risks may affect more than one category and are included where the impact is most significant. The table below includes examples of risks from each category.

Insurance and financial services	*Business, strategy and operations*	*Macro, regulatory and risk environment*
Risks that are unique to the insurance and financial services industries	*Risks that are unique to Allstate's business and operating model*	*Risks that impact most companies*
• Claim frequency and severity volatility • Catastrophes and severe weather • Loss cost estimates are complex and losses are unknown at the time policies are sold • Investment results are subject to volatility and valuation judgments • Large-scale pandemic events	• Highly competitive industry, impacted by new and changing technologies • Operating model effectiveness in light of changing customer preferences • Ability to maintain catastrophe reinsurance programs and limits • Fluctuations in financial strength and ratings	• Adverse changes in economic and capital market conditions • Cybersecurity controls and privacy • Regulatory and political changes • Loss of key business relationships • Ability to attract, develop and retain talent

Allstate manages these risks through an Enterprise Risk and Return Management framework on an integrated basis following our risk and return principles.

See Management's Discussion and Analysis ("MD&A"), Enterprise Risk and Return Management for further details.

Consider these cautionary statements carefully together with other factors discussed elsewhere in this document, in filings with the Securities and Exchange Commission ("SEC") or in materials incorporated therein by reference.

Insurance and financial services

Unexpected increases in the frequency or severity of property and casualty claims may adversely affect our results of operations and financial condition

A significant increase in claim frequency could adversely affect our results of operations and financial condition. Changes in mix of business, miles driven, weather, distracted driving or other factors can lead to changes in auto claim frequency. We may experience volatility in claim frequency, and short-term trends may not be predictive of future losses over the longer term.

Increases in claim severity can arise from numerous causes that are inherently difficult to predict. The following factors may impact claim severity for auto bodily injury, property damage and homeowners coverages:

- Bodily injury — inflation in medical costs, litigation trends and precedents and regulation
- Vehicle property damage — inflation in repair costs, including parts and labor rates, mix of total losses declared, costs associated with repairing sophisticated newer vehicles, model year and used-car values
- Homeowners — inflation in the construction industry, building materials and home furnishings, changes in the mix of loss type, and other economic and environmental factors, including short-term supply imbalances for services and supplies in areas affected by catastrophes

Catastrophes and severe weather events may subject us to significant losses

Catastrophic events could adversely affect operating results and cause them to vary significantly from one period to the next. Also, our liquidity could be constrained by a catastrophe, or multiple catastrophes, which could result in extraordinary losses, sales of investments or a downgrade of our debt and/or financial strength ratings.

Catastrophic losses are caused by wind and hail, wildfires, tornadoes, hurricanes, tropical storms, earthquakes, volcanic eruptions, terrorism and industrial accidents and other such events.

Our personal property insurance business may incur catastrophe losses greater than:

- Those experienced in prior years
- The average expected level used in pricing
- Current reinsurance coverage limits
- Loss estimates from hurricane and earthquake models at various levels of probability

Property and casualty businesses are subject to claims arising from severe weather events such as winter storms, rain, hail and high winds. The incidence and severity of weather conditions resulting in claims are unpredictable.

The total number of policyholders affected by the event, the severity of the event and the coverage provided contribute to catastrophe and severe weather losses. Increases in the insured values of covered property, geographic concentration and the number of policyholders exposed to certain events could increase the severity of claims from catastrophic and severe weather events.

Limitations in analytical models used to assess and predict the exposure to catastrophe losses may adversely affect our results of operations and financial condition

We use internally developed and third-party vendor models along with our own historical data to assess exposure to catastrophe losses. The models assume various conditions and probability scenarios and may not accurately predict future losses or measure losses currently incurred.

Price competition and changes in underwriting standards in property and casualty businesses may adversely affect our results of operations and financial condition

The personal property-liability market is highly competitive with carriers competing through underwriting, advertising, price, customer service, innovation and distribution. Companies can alter underwriting standards, lower prices and increase advertising, which could result in lower growth or profitability for Allstate. A decline in the growth or profitability of the property and casualty businesses could have a material effect on our results of operations and financial condition.

Property and casualty actual claims costs may exceed current reserves established for claims due to changes in the inflationary, regulatory and litigation environment

- Estimating claim reserves is an inherently uncertain and complex process as expected losses are unknown at the time policies are sold. We continually refine our best estimates of losses after considering known facts and interpretations of the circumstances.
- Our reserving methodology may be impacted by the following:
- Models that rely on the assumption that past loss development patterns will persist into the future
- Internal factors including experience with similar cases, actual claims paid, historical trends involving claim payment patterns, pending levels of unpaid claims, loss management programs, product mix, contractual terms and changes in claim reporting and settlement practices
- External factors such as inflation, court decisions, changes in law or litigation imposing unintended coverage, regulatory requirements and economic conditions
- The ultimate cost of losses may vary materially from recorded reserves and such variance may adversely affect our results of operations and financial condition as the reserves and amounts due from reinsurers are reestimated.

See MD&A, Application of Critical Accounting Estimates for further details.

Our investment portfolios are subject to market risk and declines in quality which may adversely affect investment income and cause realized and unrealized losses

We continually evaluate investment management strategies since we are subject to risk of loss due to adverse changes in interest rates, credit spreads, equity prices, real estate values, currency exchange rates and liquidity. Adverse changes may occur due to changes in monetary and fiscal policy and the economic climate, liquidity of a market or market segment, investor return expectations and/or risk tolerance, insolvency or financial distress of key market makers or participants, or changes in market perceptions of credit worthiness. Adverse changes in market conditions could cause the value of our investments to decrease significantly and impact our results of operations and financial condition.

Our investments are subject to risks associated with economic and capital market conditions and factors that may be unique to our portfolio, including:

- General weakening of the economy, which is typically reflected through higher credit spreads and lower equity valuations
- Declines in credit quality
- Declines in market interest rates, credit spreads or sustained low interest rates could lead to further declines in portfolio yields and investment income
- Increases in market interest rates, credit spreads or a decrease in liquidity could have an adverse effect on the value of our fixed income securities that form a substantial majority of our investment portfolios

securities that form a substantial majority of our investment portfolios

- Weak performance of general partners and underlying investments unrelated to general market or economic conditions could lead to declines in investment income and cause realized losses in our limited partnership interests
- Concentration in any particular issuer, industry, collateral type, group of related industries, geographic sector or risk type

The amount and timing of net investment income, capital contributions and distributions from our performance-based investments, which primarily includes limited partnership interests, can fluctuate significantly due to the underlying investments' performance or changes in market or economic conditions. Additionally, these investments are less liquid than similar, publicly-traded investments and a decline in market liquidity could impact our ability to sell them at their current carrying values.

Declining equity markets and/or increases in interest rates or credit spreads could cause the value of the investments in our pension plans to decrease. Declines in interest rates could cause the funding ratio to decline and the value of the obligations for our pension and postretirement plans to increase. These factors could decrease the funded status of our pension and postretirement plans, increasing the likelihood or magnitude of future benefit expense and contributions.

Determination of the fair value and the amount of realized capital losses recorded for impairments of investments includes subjective judgments and could materially impact our results of operations and financial condition

The valuation of the portfolio is subjective, and the value of assets may differ from the actual amount received upon the sale of an asset. The degree of judgment required in determining fair values increases when:

- Market observable information is less readily available
- The use of different valuation assumptions may have a material effect on the assets' fair values
- Changing market conditions could materially affect the fair value of investments

The determination of the amount of realized capital losses recorded for impairments varies by investment type and is based on ongoing evaluation and assessment of known and inherent risks associated with the respective asset class or investment.

Such evaluations and assessments are highly judgmental and are revised as conditions change and new information becomes available.

We update our evaluations regularly and reflect changes in other-than-temporary impairments in our results of operations. Our conclusions may ultimately prove to be incorrect as assumptions, facts and circumstances change. Historical trends may not be indicative of future impairments and additional impairments may need to be recorded in the future.

Changes in market interest rates or performance-based investment returns may lead to a significant decrease in the profitability of our annuity business

Spread-based products, such as fixed annuities, are dependent upon maintaining profitable spreads between investment returns and interest crediting rates. When market interest rates decrease or remain at low levels, investment income may decline. Lowering interest crediting rates on some products in such an environment can partially offset decreases in investment yield. However, these changes could be limited by regulatory minimum rates or contractual minimum rate guarantees on many contracts and may not match the timing or magnitude of changes in investment yields.

Increases in market interest rates can lead to increased surrenders at a time when fixed income investment asset values are lower due to the increase in interest rates. Liquidating investments to fund surrenders could result in a loss that would adversely impact results of operations.

Changes in reserve estimates and amortization of deferred acquisition costs ("DAC") could materially affect results of operations and financial condition of our life, voluntary benefits and annuity businesses

We use long-term assumptions, including future investment yields, mortality, morbidity, persistency and expenses in pricing and valuation. If experience differs significantly from assumptions, adjustments to reserves and amortization of DAC may be required that could have a material adverse effect on our results of operations and financial condition.

See MD&A, Application of Critical Accounting Estimates and Note 2 of the consolidated financial statements for further details.

Our participation in indemnification programs subjects us to the risk that reimbursement for qualifying claims and claims expenses may not be received

Participation in state-based industry pools, facilities and associations as well as the National Flood Insurance Program may have a material, adverse effect on our results of operations and financial condition. Our largest exposure is associated with the Michigan Catastrophic Claim Association ("MCCA"), a state-mandated indemnification mechanism for qualified personal injury protection losses that exceed a specified level. To the extent the MCCA's current and future assessments are insufficient to reimburse its ultimate obligation on existing claims to member companies, our ability to obtain the 100% indemnification of ultimate loss could be impaired.

For further discussion of these items, see Regulation section, Indemnification Programs and Note 10 of the consolidated financial statements.

We may not be able to mitigate the capital impact associated with statutory reserving and capital requirements

Regulatory capital and reserving requirements affect the amount of capital required to be maintained by our subsidiary insurance companies. Changes to capital or reserving requirements or regulatory interpretations may result in additional capital held in our insurance companies and could require us to increase prices, reduce our sales of certain products, and/or accept a return on equity below original levels assumed in pricing.

A downgrade in financial strength ratings may have an adverse effect on our business

Financial strength ratings are important factors in establishing the competitive position of insurance companies and their access to capital markets. Rating agencies could downgrade or change the outlook on our ratings due to:

- Changes in the financial profile of one of our insurance companies
- Changes in a rating agency's determination of the amount of capital required to maintain a particular rating

- Increases in the perceived risk of our investment portfolio, a reduced confidence in management or our business strategy, as well as other considerations that may or may not be under our control

A downgrade in our ratings could have a material effect on our sales, competitiveness, customer retention, the marketability of our product offerings, liquidity, access to and cost of borrowing, results of operations and financial condition.

Changes in tax laws may adversely affect the sales and profitability of life insurance products

Changes in taxation of life insurance products could reduce sales and result in the surrender of some existing contracts and policies, which may have a material effect on our profitability and financial condition.

Business, strategy and operations

We operate in markets that are highly competitive and may be impacted by new or changing technologies

Markets in which we operate are highly competitive, and we must continually allocate resources to refine and improve products and services to remain competitive. If we are unsuccessful in generating new business, retaining customers or renewing contracts, our ability to maintain or increase premiums written or the ability to sell our products could be adversely impacted.

Determining competitive position is complicated in the auto and homeowners insurance business as companies use different underwriting standards to accept new customers and quotes and close rates can fluctuate across companies and locations. Pricing of products is driven by multiple factors, including expense structure and dissimilar profitability and return targets. Additionally, sophisticated pricing algorithms make it difficult to determine what price potential customers would pay across competitors.

There is also significant competition for producers such as exclusive and independent agents and their licensed sales professionals. Growth and retention may be materially affected if we are unable to attract and retain effective producers or if those producers are unable to attract and retain their licensed sales professionals or customers. Similarly, growth and retention may be impacted if customer preferences change, including customer demand for direct distribution channels or an increase in point-of-sale distribution channels.

Our business could also be affected by technological changes, such as autonomous or partially autonomous vehicles or technologies that facilitate ride, car or home sharing. Such changes could disrupt the demand for products from current customers, create coverage issues, impact the frequency or severity of losses, or reduce the size of the automobile insurance market causing our auto insurance business to decline. Since auto insurance constitutes a significant portion of our overall business, we may be more sensitive than other insurers and more adversely affected by trends that could decrease auto insurance rates or reduce demand for auto insurance over time.

Technological advancements and innovation are occurring in distribution, underwriting, claims and operations at a rapid pace that may continue to accelerate. Innovations must be implemented in compliance with applicable insurance regulations and may require extensive modifications to our systems and processes and extensive coordination with and reliance on the systems of third parties. If we are unable to adapt to or bring such advancements and innovations to market, the quality of our products, our relationships with customers and agents, competitive position and business prospects may be materially affected. Changes in technology related to collection and analysis of data regarding customers could expose us to regulatory or legal actions and may have a material adverse effect on our business, reputation, results of operations and financial condition.

Technological changes may also impact the ways in which we interact and do business with our customers. For example, changing customer preferences for direct distribution channels may drive a need to redesign our products or distribution model and the way we interact with customers. We may not be able to respond effectively to these changes, which could have a material effect on our results of operations and financial condition.

Our ability to adequately and effectively price our products and services is affected by the evolving nature of consumer needs and preferences, market dynamics, broader use of telematics-based rate segmentation and potential reduction in consumer demand.

potential reduction in consumer demand.

Many voluntary benefits contracts are renewed annually. There is a risk that employers may be able to obtain more favorable terms from competitors than they could by renewing coverage with us. These competitive pressures may adversely affect the renewal of these contracts, as well as our ability to sell products.

NEW *Transformative Growth Plan may not be effectively implemented*

Our Transformative Growth Plan is intended to accelerate profitable growth by expanding customer access, improving customer value, increasing marketing and technology investments and reducing operating expenses. This strategy involves several interdependent components. If components are not implemented effectively and/or on a timely basis, our customer and growth objectives could be adversely impacted or there may be unintended adverse impacts on other parts of our business. Lost business opportunities may result due to slower than anticipated speed to market. External forces including competitor actions or regulatory changes may also have an adverse effect on the value generated from the transformation.

Our catastrophe management strategy may adversely affect premium growth

Catastrophe risk management actions have negatively impacted the size of our homeowners business and customer retention, including customers with auto and other personal lines products and may negatively impact future sales if further actions are taken. Adjustments to our business structure, size and underwriting practices in markets with significant severe weather and catastrophe risk exposure could adversely impact premium growth rates and retention.

The ability of our subsidiaries to pay dividends may affect our liquidity and ability to meet our obligations

The Allstate Corporation is a holding company with no significant operations. Its principal assets are the stock of its subsidiaries and its directly held cash and investment portfolios. Its liabilities include debt and pension and other postretirement benefit obligations related to Allstate Insurance Company employees. State insurance regulatory authorities limit the payment of dividends by insurance subsidiaries, as described in Note 16 of the consolidated financial statements. The limitations are based on statutory income and surplus. In addition, competitive pressures generally require the subsidiaries to maintain insurance financial strength ratings. These restrictions and other regulatory requirements may affect the ability of subsidiaries to make dividend payments. Limits on the ability of the subsidiaries to pay dividends could adversely affect holding company liquidity, including the ability to pay dividends to shareholders, service debt or complete share repurchase programs as planned.

Changes in regulatory capital requirements could decrease deployable capital and potentially reduce future dividends paid by our insurance companies.

For a discussion of capital requirements, including a potential change to a group capital calculation, see Regulation section, Limitations on Dividends by Insurance Subsidiaries.

Our ability to pay dividends or repurchase stock is subject to limitations under terms of certain of our securities

The terms of the outstanding subordinated debentures prohibit us from declaring or paying any dividends or distributions on our common or preferred stock or redeeming, purchasing, acquiring or making liquidation payments on our common stock or preferred stock if we have elected to defer interest payments on the subordinated debentures, subject to certain limited exceptions.

We are prohibited from declaring or paying dividends on our Series G preferred stock if we fail to meet specified capital adequacy, net income or shareholders' equity levels. The prohibition is subject to an exception permitting us to declare dividends out of the net proceeds of common stock issued by us during the 90 days before the date of declaration even if we fail to meet such levels.

If the full preferred stock dividends for all preceding dividend periods have not been declared and paid, we generally may not repurchase or pay dividends on common stock during any dividend period while our preferred stock is outstanding.

See Note 12 of the consolidated financial statements.

Reinsurance may be unavailable at current levels and prices, which may limit our ability to write new business

Market conditions beyond our control impact the availability and cost of the reinsurance we purchase. Reinsurance may not remain continuously available to us to the same extent and on the same terms and rates as is currently available. Our ability to economically justify reinsurance to reduce our catastrophe risk in designated areas may depend on our ability to adjust premium rates to fully or partially recover cost. If we cannot maintain our current level of reinsurance or purchase new reinsurance protection in amounts we consider sufficient at acceptable prices, we would have to either accept an increase in our catastrophe exposure, reduce our insurance exposure or seek other alternatives.

Reinsurance subjects us to counterparty risk and may not be adequate to protect us against losses arising from ceded insurance

Collecting from reinsurers is subject to uncertainty arising from factors, including:

- Whether reinsurers, their affiliates or certain indemnitors have the financial capacity and willingness to make payments under the terms of a reinsurance treaty or contract
- Whether insured losses meet the qualifying conditions of the reinsurance contract

Our inability to recover from a reinsurer could have a material effect on our results of operations and financial condition.

Disruption, volatility or uncertainty in the insurance linked securities market may decrease our ability to access such market on favorable terms or at all.

Acquisitions or divestitures of businesses may not produce anticipated benefits, resulting in operating difficulties, unforeseen liabilities or asset impairments

The ability to achieve certain anticipated financial benefits from the acquisition of businesses depends in part on our ability to successfully grow and integrate the businesses consistent with our anticipated acquisition economics. Financial results could be adversely affected by unanticipated performance issues, unforeseen liabilities, transaction-related charges, diversion of management time and resources to acquisition integration challenges or growth strategies, loss of key employees, amortization of expenses related to intangibles, charges for impairment of long-term assets or goodwill and indemnifications.

Acquired businesses may not perform as projected, cost savings anticipated from the acquisition may not materialize, and costs associated with the integration may be greater than anticipated. As a result, if we do not manage these transitions effectively and bring innovations to market with the requisite speed, the quality of our products as well as our relationships with customers and retail partners for our protection plans business may result in the company not achieving returns on its investment at the level projected at acquisition.

We also may divest businesses from time to time. These transactions may result in continued financial involvement in the divested businesses, such as through reinsurance, guarantees or other financial arrangements, following the transaction. If the acquiring companies do not perform under the arrangements, our financial results could be negatively impacted.

We may be subject to the risks and costs associated with intellectual property infringement, misappropriation and third-party claims

We rely on a combination of contractual rights and copyright, trademark, patent and trade secret laws to establish and protect our intellectual property. Third parties may infringe or misappropriate our intellectual property. We may have to litigate to enforce and protect intellectual property and to determine its scope, validity or enforceability, which could divert significant resources and prove unsuccessful. An inability to protect intellectual property or an inability to successfully defend against a claim of intellectual property infringement could have a material effect on our business.

We may be subject to claims by third parties for patent, trademark or copyright infringement or breach of usage rights. Any such claims and any resulting litigation could result in significant expense and liability. If third-party providers or we are found to have infringed a third-party intellectual property right, either of us could be enjoined from providing certain products or services or from utilizing and benefiting from certain methods, processes, copyrights, trademarks, trade secrets or licenses. Alternatively, we could be required to enter into costly licensing arrangements with third parties or implement a costly work-around. Any of these scenarios could have a material effect on our business and results of operations.

Macro, regulatory and risk environment

Conditions in the global economy and capital markets could adversely affect our business and results of operations

Global economic and capital market conditions could adversely impact demand for our products, returns on our investment portfolio and results of operations. The conditions that would have the largest impact on our business include:

- Low or negative economic growth
- Sustained low interest rates
- Rising inflation increasing claims and claims expense
- Substantial increases in delinquencies or defaults on debt
- Significant downturns in the market value or liquidity of our investment portfolio
- Reduced consumer spending and business investment

Stressed conditions, volatility and disruptions in global capital markets or financial asset classes could adversely affect our investment portfolio.

Adverse capital and credit market conditions may significantly affect our ability to meet liquidity needs or obtain credit on acceptable terms

In periods of extreme volatility and disruption in the capital and credit markets, liquidity and credit capacity may be severely restricted. Our access to additional financing depends on a variety of factors such as market conditions, the general availability of credit, the overall availability of credit to our industry, our credit ratings and credit capacity, as well as lenders' perception of our long- or short-term financial prospects. In such circumstances, our ability to obtain capital to fund operating expenses, financing costs, capital expenditures or acquisitions may be limited, and the cost of any such capital may be significant.

A large-scale pandemic, the occurrence of terrorism or military actions may have an adverse effect on our business

A large-scale pandemic, the occurrence of terrorism or military and other actions, may result in loss of life, property damage, and disruptions to commerce and reduced economic activity. Some of the assets in our investment portfolio may be adversely affected by declines in the equity markets, changes in interest rates, reduced liquidity and economic activity caused by a large-scale pandemic. Additionally, a large-scale pandemic or terrorist act could have a material effect on sales, liquidity and operating results.

The failure in cyber or other information security controls, as well as the occurrence of events unanticipated in our disaster recovery processes and business continuity planning, could result in a loss or disclosure of confidential information, damage to our reputation, additional costs and impair our ability to conduct business effectively

We depend heavily on computer systems, mathematical algorithms and data to perform necessary business functions. There are threats that could impact our ability to protect our data and systems; if the threats are successful, they could impact confidentiality, integrity and availability:

- Confidentiality — protecting our data from disclosure to unauthorized parties
- Integrity — ensuring data is not changed accidentally or without authorization and is accurate
- Availability — ensuring our data and systems are accessible to meet our business needs

We collect, use, store or transmit a large amount of confidential, proprietary and other information (including personal information of customers, claimants or employees) in connection with the operation of our business. Systems are subject to increased attempted cyberattacks and unauthorized access, such as physical and electronic break-ins or unauthorized tampering.

We constantly defend against threats to our data and systems, including malware and computer virus attacks, unauthorized access, system failures and disruptions. Events like these could jeopardize the information processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our operations, which could result in damage to our reputation, financial losses, litigation, increased costs, regulatory penalties and/or customer dissatisfaction.

These risks may increase in the future as threats become more sophisticated and we continue to expand internet and mobile strategies, develop additional remote connectivity solutions to serve our employees and customers, develop and expand products and services designed to protect customers' digital footprint, and build and maintain an integrated digital enterprise. Our increased use of third-party services (e.g., cloud technology and software as a service) can make it more difficult to identify and respond to cyberattacks in any of the above situations. Third parties to whom we outsource certain functions are also subject to these risks.

Personal information is subject to an increasing number of federal, state, local and international laws and regulations regarding privacy and data security, as well as contractual commitments. Any failure or perceived failure by us to comply with such obligations may result in governmental enforcement actions and fines, litigation or public statements against us by consumer advocacy groups or others and could cause our employees and customers to lose trust in us, which could have an adverse effect on our reputation and business.

See the Regulation section, Privacy Regulation and Data Security, for additional information.

The occurrence of a disaster, such as a natural catastrophe, pandemic, industrial accident, blackout, terrorist attack, war, cyberattack, computer virus, insider threat, unanticipated problems with our disaster recovery processes, or a support failure from external providers, could have an adverse effect on our ability to conduct business and on our results of operations and financial condition, particularly if those events affect our computer-based data processing, transmission, storage, and retrieval systems or destroy data. If a significant number of employees were unavailable in the event of a disaster, our ability to effectively conduct business could be severely compromised. Our systems are also subject to compromise from internal threats.

Losses from changing climate and weather conditions may adversely affect our financial condition, profitability or cash flows

Climate change may affect the occurrence of certain natural events, such as an increase in the frequency or severity of wind, tornado, hailstorm and thunderstorm events due to increased convection in the atmosphere. There could also be more frequent wildfires in certain geographies, more flooding and the potential for increased severity of hurricanes due to higher sea surface temperatures. As a result, incurred losses from such events and the demand, price and availability of reinsurance coverages for automobile and homeowners insurance may be affected.

Climate change may also impact insurability by impairing our ability to identify and quantify potential hazards that will result in losses and offer our customers products at an affordable price. Our investment portfolio is also subject to the effects of climate change as economic shifts alter the return dynamic of long-term investments and reduce valuations.

Due to significant variability associated with future changing climate conditions, we are unable to predict the impact climate change will have on our businesses.

We are subject to extensive regulation, and potential further restrictive regulation may increase operating costs and limit growth

Many of our affiliates operate in the highly regulated insurance and broader financial services sector and are subject to extensive laws and regulations that are complex and subject to change. Changes may lead to additional expenses, increased legal exposure, increased reserve or capital requirements limiting our ability to grow or to achieve targeted profitability. Moreover, laws and regulations are administered and enforced by governmental authorities that exercise interpretive latitude, including state insurance regulators; state securities administrators; state attorneys general as well as federal agencies including the SEC, the Financial Industry Regulatory Authority, the Department of Labor, the U.S. Department of

Regulatory Authority, the Department of Labor, the U.S. Department of Justice and the National Labor Relations Board. Consequently, compliance with one regulator's or enforcement authority's interpretation of a legal issue may not result in compliance with another's interpretation of the same issue.

In addition, there is risk that one regulator's or enforcement authority's interpretation of a legal issue may change to our detriment. There is also a risk that changes in the overall legal environment may cause us to change our views regarding the actions we need to take from a legal risk management perspective. This could necessitate changes to our practices that may adversely impact our business. In some cases, state insurance laws and regulations are generally intended to protect or benefit purchasers or users of insurance products, not holders of securities that we issue. These laws and regulations may limit our ability to grow or to improve the profitability of our business.

A regulatory environment that requires rate increases to be approved, can dictate underwriting practices and mandate participation in loss sharing arrangements may adversely affect results of operations and financial condition

Political events and positions can affect the insurance market, including efforts to suppress rates to a level that may not allow us to reach targeted levels of profitability. Regulatory challenges to rate increases may restrict rate changes that may be required to achieve targeted levels of profitability and returns on equity. If we are unsuccessful, our results of operations could be negatively impacted.

In addition, certain states have enacted laws that require an insurer conducting business in that state to participate in assigned risk plans, reinsurance facilities and joint underwriting associations. Certain states also require the insurer to offer coverage to all consumers, often restricting an insurer's ability to charge the price it might otherwise charge for the risk acceptance. In these markets, we may be compelled to underwrite significant amounts of business at lower-than-desired rates, possibly leading to an unacceptable return on equity. Alternatively, as the facilities recognize a financial deficit, they could have the ability to assess participating insurers, adversely affecting our results of operations and financial condition. Laws and regulations of many states also limit an insurer's ability to withdraw from one or more lines of insurance, except pursuant to a plan that is approved by the state insurance department. Certain states require an insurer to participate in guaranty funds for impaired or insolvent insurance companies. These funds periodically assess losses against all insurance companies doing business in the state. Our results of operations and financial condition could be adversely affected by any of these factors.

Regulatory reforms, and the more stringent application of existing regulations, may make it more expensive for us to conduct our business

The federal government has enacted comprehensive regulatory reforms for financial services entities. As part of a larger effort to strengthen the regulation of the financial services market, certain reforms are applicable to the insurance industry.

The Federal Insurance Office ("FIO") and Financial Stability Oversight Council were established, and the federal government may enact reforms that affect the state insurance regulatory framework. The potential impact of state or federal measures that change the nature or scope of insurance and financial regulation is uncertain but may make it more expensive for us to conduct business and limit our ability to grow or achieve profitability.

We have business process and information technology operations in Canada, India and the United Kingdom that are subject to operating, regulatory and political risks in those countries. We may incur substantial costs and other negative consequences if any of these occur, including an adverse effect on our business, results of operations and financial condition.

Losses from legal and regulatory actions may be material to our results of operations, cash flows and financial condition

We are involved in various legal actions, including class-action litigation challenging a range of company practices and coverage provided by our insurance products, some of which involve claims for substantial or indeterminate amounts. We are also involved in various regulatory actions and inquiries, including market conduct exams by state insurance regulatory agencies. In the event of an unfavorable outcome in any of these matters, the ultimate liability may be more than amounts currently accrued or disclosed in our reasonably possible loss range and may be material to our results of operations, cash flows and financial condition.

See Note 14 of the consolidated financial statements.

Changes in or the application of accounting standards issued by standard-setting bodies and changes in tax laws may adversely affect our results of operations and financial condition

Our financial statements are subject to the application of accounting principles generally accepted in the United States of America, which are periodically revised, interpreted and/or expanded. Accordingly, we may be required to adopt new guidance or interpretations, which may have a material effect on our results of operations and financial condition and could adversely impact financial strength ratings.

- Market declines, changes in business strategies or other events impacting the fair value of goodwill or purchased intangible assets could result in an impairment charge to income
- Pending changes to accounting for long-duration insurance contracts such as traditional life, life-contingent immediate annuities and certain

voluntary accident and health insurance products will have a material effect on reserves and could adversely impact financial strength ratings

- Realization of our deferred tax assets assumes that we can fully utilize the deductions recognized for tax purposes; we may recognize additional tax expense if these assets are not fully utilized
- New tax legislative initiatives may be enacted that may impact our effective tax rate and could adversely affect our tax positions or tax liabilities

See MD&A, Application of Critical Accounting Estimates and Note 2 of the consolidated financial statements for further details.

Loss of key vendor relationships or failure of a vendor to protect our data, confidential and proprietary information, or personal information of our customers, claimants or employees could adversely affect our operations

We rely on services and products provided by many vendors in the U.S. and abroad. These include, vendors of computer hardware, software, cloud technology and software as a service, as well as vendors and/or outsourcing of services such as:

- Claim adjustment or call center services
- Human resource benefits management
- Information technology support
- Investment management services

If any vendor becomes unable to continue to provide products or services, or fails to protect our confidential, proprietary, and other information, we may suffer operational impairments and financial losses.

Our ability to attract, develop, and retain talent to maintain appropriate staffing levels, and establish a successful work culture is critical to our success

Competition from within the insurance industry and from other industries, including the technology sector, for qualified employees with highly specialized knowledge in areas such as underwriting, data and analytics, technology and e-commerce, has often been intense and we have experienced increased competition in hiring and retaining employees.

Factors that affect our ability to attract and retain such employees include:

- Compensation and benefits
- Training and re-skilling programs
- Reputation as a successful business with a culture of fair hiring, and of training and promoting qualified employees
- Recognize and respond to changing trends and other circumstances that affect employees

The unexpected loss of key personnel could have a material adverse impact on our business because of the loss of their skills, knowledge of our products and offerings and years of industry experience and, in some cases, the difficulty of promptly finding qualified replacement personnel.

Misconduct or fraudulent acts by employees, agents and third parties may expose us to financial loss, disruption of business, regulatory assessments and reputational harm

The company and the insurance industry are inherently susceptible to past and future misconduct or fraudulent activities by employees, representative agents, vendors, customers and other third parties. These activities could include:

- Fraud against the company, its employees and its customers through illegal or prohibited activities
- Unauthorized acts or representations, unauthorized use or disclosure of personal or proprietary information, deception, and misappropriation of funds or other benefits

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our home office complex is owned and located in Northbrook, Illinois. As of December 31, 2019, the home office complex consists of several buildings totaling 1.9 million square feet of office space on a 186-acre site.

We also operate from approximately 450 administrative, data processing, claims handling and other support facilities in North America. In addition to our home office facilities, 825 thousand square feet are owned and 6.1 million square feet are leased.

Outside North America, we own one and lease three properties in Northern Ireland comprising approximately 220 thousand square feet. We also have two leased facilities in India for approximately 434 thousand square feet and two leased facilities in London for 7,182 square feet.

The locations where Allstate exclusive agencies operate in the U.S. are normally leased by the agencies.

Item 3. Legal Proceedings

Information required for Item 3 is incorporated by reference to the discussion under the heading “Regulation and compliance” and under the heading “Legal and regulatory proceedings and inquiries” in Note 14 of the consolidated financial statements.

Item 4. Mine Safety Disclosures

Not applicable.

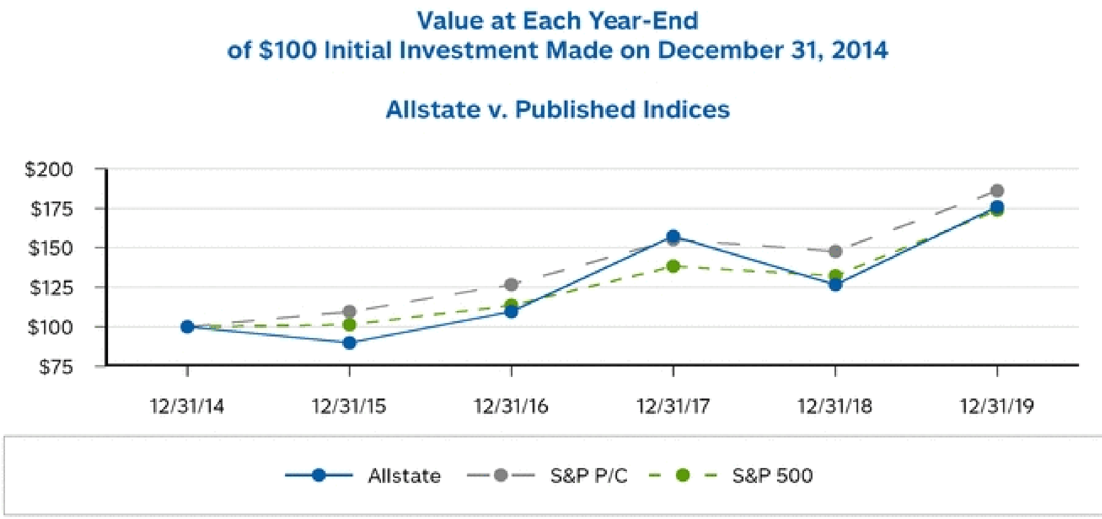
Part II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

As of January 31, 2020, there were 67,204 holders of record of The Allstate Corporation's common stock. The principal market for the common stock is the New York Stock Exchange, where our common stock trades under the trading symbol "ALL". Our common stock is also listed on the Chicago Stock Exchange.

Common stock performance graph

The following performance graph compares the cumulative total shareholder return on Allstate common stock for a five-year period (December 31, 2014 to December 31, 2019) with the cumulative total return of the S&P Property and Casualty Insurance Index (S&P P/C) and the S&P's 500 stock index.



Value at each year-end of $100 initial investment made on December 31, 2014

	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Allstate	$ 100.00	$ 90.04	$ 109.58	$ 157.38	$ 126.66	$ 175.82
S&P P/C	$ 100.00	$ 109.53	$ 126.73	$ 155.10	$ 147.83	$ 186.07
S&P 500	$ 100.00	$ 101.37	$ 113.49	$ 138.26	$ 132.19	$ 173.80

Issuer Purchases of Equity Securities

Period	Total number of shares (or units) purchased (1)	Average price paid per share (or unit)	Total number of shares (or units) purchased as part of publicly announced plans or programs (3)	Maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs (4)
October 1, 2019 - October 31, 2019				
Open Market Purchases	2,479,268	$ 107.41	2,472,623	
November 1, 2019 - November 30, 2019				
Open Market Purchases	122,866	$ 106.19	112,930	
ASR Agreement (2)	4,013,220	—	4,013,220	
December 1, 2019 - December 31, 2019				
Open Market Purchases	54	$ 110.14	—	
Total	**6,615,408**		**6,598,773**	**$ 259 million**

(1) In accordance with the terms of its equity compensation plans, Allstate acquired the following shares in connection with the vesting of restricted stock units and performance stock awards and the exercise of stock options held by employees and/or directors. The shares were acquired in satisfaction of withholding taxes due upon exercise or vesting and in payment of the exercise price of the options.

October: 6,645
November: 9,936
December: 54

(2) On November 1, 2019, Allstate entered into an accelerated share repurchase agreement ("ASR agreement") with Goldman Sachs & Co. LLC ("Goldman Sachs") to purchase $500 million of our outstanding common stock. In exchange for an upfront payment of $500 million, Goldman Sachs initially delivered 4.01 million shares to Allstate. The ASR agreement settled on January 8, 2020, and we repurchased a total of 4.6 million shares at an average price of $109.51.

(3) From time to time, repurchases under our programs are executed under the terms of a pre-set trading plan meeting the requirements of Rule 10b5-1(c) of the Securities Exchange Act of 1934.

(4) On October 31, 2018, we announced the approval of a common share repurchase program for $3 billion, which was completed in January 2020.

Item 6. Selected Financial Data

5-year summary of selected financial data					
($ in millions, except per share data)	**2019**	**2018**	**2017**	**2016**	**2015**
Consolidated Operating Results					
Insurance premiums and contract charges	$ 38,577	$ 36,513	$ 34,678	$ 33,582	$ 32,467
Other revenue	1,054	939	883	865	863
Net investment income	3,159	3,240	3,401	3,042	3,156
Realized capital gains and losses (1)	1,885	(877)	445	(90)	30
Total revenues	44,675	39,815	39,407	37,399	36,516
Net income applicable to common shareholders	4,678	2,012	3,438	1,692	2,138
Net income applicable to common shareholders per common share:					
Net income applicable to common shareholders per common share - Basic	14.25	5.78	9.50	4.54	5.33
Net income applicable to common shareholders per common share - Diluted	14.03	5.70	9.35	4.48	5.26
Cash dividends declared per common share	2.00	1.84	1.48	1.32	1.20
Consolidated Financial Position					
Investments	$ 88,362	$ 81,260	$ 82,803	$ 81,799	$ 77,758
Total assets	119,950	112,249	112,422	108,610	104,656
Reserves for claims and claims expense, life-contingent contract benefits and contractholder funds	57,704	58,002	58,308	57,749	57,411
Long-term debt	6,631	6,451	6,350	6,347	5,124
Shareholders’ equity	25,998	21,312	22,551	20,569	20,020
Shareholders’ equity per diluted common share	73.12	57.56	57.58	50.76	47.33

(1) Due to the adoption of a new accounting standard for the recognition and measurement of financial assets and financial liabilities, the periodic change in fair value of equity investments is recognized within realized capital gains and losses on the Consolidated Statements of Operations effective January 1, 2018. As a result, 2019 and 2018 net realized capital gains and losses are not comparable to other periods presented.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

2019 Highlights

Overview

The following discussion highlights significant factors influencing the consolidated financial position and results of operations of The Allstate Corporation (referred to in this document as "we," "our," "us," the "Company" or "Allstate"). It should be read in conjunction with the consolidated financial statements and related notes found under Item 8. contained herein.

This section of this Form 10-K generally discusses 2019 and 2018 results and year-to-year comparisons between 2019 and 2018. Discussions of 2017 results and year-to-year comparisons between 2018 and 2017 that are not included in this Form 10-K can be found in Management's Discussion and Analysis ("MD&A") in Part II, Item 7 of our annual report on Form 10-K for 2018, filed February 15, 2019, and the Company's Current Report on Form 8-K filed on May 16, 2019, Exhibit 99.1, reflecting the Company's 2018 Form 10-K with adjustments to Part II. Item 6., Item 7. and Item 8. for the Company's change in accounting principle for pension and other postretirement benefit plans.

The most important factors we monitor to evaluate the financial condition and performance for our reportable segments and the Company include:

- *Allstate Protection*: premium, policies in force ("PIF"), new business sales, policy retention, price changes, claim frequency and severity, catastrophes, loss ratio, expenses, underwriting results, and relative competitive position.
- *Service Businesses*: revenues, premium written, PIF, adjusted net income and net income.
- *Allstate Life*: premiums and contract charges, new business sales, PIF, benefit spread, investment spread, expenses, adjusted net income and net income.
- *Allstate Benefits*: premiums, new business sales, PIF, benefit ratio, expenses, adjusted net income and net income.
- *Allstate Annuities*: investment spread, asset-liability matching, contract benefits, expenses, adjusted net income, net income and invested assets.
- *Investments*: exposure to market risk, asset allocation, credit quality/experience, total return, net investment income, cash flows, realized capital gains and losses, unrealized capital gains and losses, stability of long-term returns, and asset and liability duration.
- *Financial condition*: liquidity, parent holding company deployable assets, financial strength ratings, operating leverage, debt levels, book value per share and return on equity.

Measuring segment profit or loss

The measure of segment profit or loss used in evaluating performance is underwriting income for the Allstate Protection and Discontinued Lines and Coverages segments and adjusted net income for the Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, and Corporate and Other segments.

Underwriting income is calculated as premiums earned and other revenue, less claims and claims expense ("losses"), amortization of deferred policy acquisition costs ("DAC"), operating costs and expenses, restructuring and related charges and amortization or impairment of purchased intangibles, as determined using accounting principles generally accepted in the United States of America ("GAAP"). We use this measure in our evaluation of results of operations to analyze the profitability of the Property-Liability insurance operations separately from investment results. Underwriting income is reconciled to net income applicable to common shareholders in the Property-Liability Operations section of Management's Discussion and Analysis ("MD&A").

Adjusted net income is net income applicable to common shareholders, excluding:

- Realized capital gains and losses, after-tax, except for periodic settlements and accruals on non-hedge derivative instruments, which are reported with realized capital gains and losses but included in adjusted net income
- Pension and other postretirement remeasurement gains and losses, after-tax
- Valuation changes on embedded derivatives not hedged, after-tax
- Amortization of DAC and deferred sales inducement costs ("DSI"), to the extent they resulted from the recognition of certain realized capital gains and losses or valuation changes on embedded derivatives not hedged, after-tax
- Business combination expenses and the amortization or impairment of purchased intangible assets, after-tax
- Gain (loss) on disposition of operations, after-tax
- Adjustments for other significant non-recurring, infrequent or unusual items, when (a) the nature of the charge or gain is such that it is reasonably unlikely to recur within two years, or (b) there has been no similar charge or gain within the prior two years

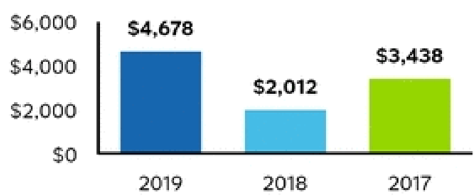
Adjusted net income is reconciled to net income applicable to common shareholders in the Service Businesses, Allstate Life, Allstate Benefits and Allstate Annuities Segment sections of MD&A.

Allstate Delivered on 2019 Operating Priorities (1)	
Better Serve Customers	Enterprise Net Promoter Score increased with improvement at most businesses
Grow Customer Base	Total policies in force reached 145.9 million, a 27.7% increase from prior year
	Property-Liability policies increased 1.3% from prior year to 33.7 million
Achieve Target Returns on Capital	Strong results in Property-Liability insurance with a combined ratio of 92.0
	21.7% return on average common shareholders' equity in 2019
Proactively Manage Investments	Net investment income of $3.2 billion in 2019 reflects higher market-based portfolio yields
	Performance-based results were below expectations, but long-term returns have been strong
	Total return of 9.2% on $88.4 billion investment portfolio in 2019
Build Long-Term Growth Platforms	Accelerating Transformative Growth Plan
	Arity continued to expand telematics usage and capabilities
	Expanding Allstate Identity Protection

(1) 2020 operating priorities will remain consistent with the 2019 priorities.

Consolidated Net Income

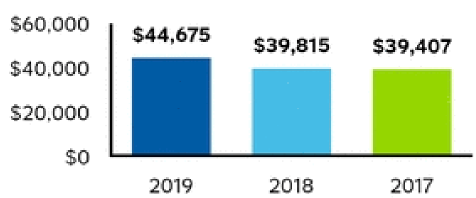
($ in millions)



Consolidated net income applicable to common shareholders increased $2.67 billion in 2019 compared to 2018, primarily due to net realized capital gains in 2019 compared to losses in 2018 from increased valuations on equity investments and higher underwriting income in Allstate Protection.

Total Revenue

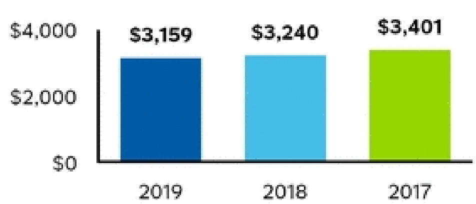
($ in millions)



Total revenue increased 12.2% in 2019 compared to 2018, driven by net realized capital gains in 2019 compared to losses in 2018 and a 5.7% increase in insurance premiums and contract charges. Insurance premiums increased in the following segments: Allstate Protection (Allstate and Esurance brands), Service Businesses (Allstate Protection Plans and Allstate Dealer Services), Allstate Life and Allstate Benefits.

Net Investment Income

($ in millions)



Net investment income decreased 2.5% in 2019 compared to 2018, primarily due to lower income from performance-based investment results, partially offset by higher income from the market-based portfolio.

Summarized financial results

($ in millions)	Years Ended December 31, 2019	2018	2017
Revenues			
Property and casualty insurance premiums	$ 36,076	$ 34,048	$ 32,300
Life premiums and contract charges	2,501	2,465	2,378
Other revenue	1,054	939	883
Net investment income	3,159	3,240	3,401
Realized capital gains and losses	1,885	(877)	445
Total revenues	**44,675**	**39,815**	**39,407**
Costs and expenses			
Property and casualty insurance claims and claims expense	(23,976)	(22,778)	(21,847)
Life contract benefits and interest credited to contractholder funds	(2,679)	(2,627)	(2,613)
Amortization of deferred policy acquisition costs	(5,533)	(5,222)	(4,784)
Operating, restructuring and interest expenses	(6,058)	(5,993)	(5,627)
Pension and other postretirement remeasurement gains and losses	(114)	(468)	217
Amortization of purchased intangibles	(126)	(105)	(99)
Impairment of goodwill and purchased intangibles	(106)	—	(125)
Total costs and expenses	**(38,592)**	**(37,193)**	**(34,878)**
Gain on disposition of operations	6	6	20
Income tax expense	(1,242)	(468)	(995)
Net income	**4,847**	**2,160**	**3,554**
Preferred stock dividends	(169)	(148)	(116)
Net income applicable to common shareholders	**$ 4,678**	**$ 2,012**	**$ 3,438**

Segment Highlights

Allstate Protection underwriting income totaled $2.91 billion in 2019, a 24.3% increase from $2.34 billion in 2018, primarily due to increased premiums earned and lower catastrophe losses, partially offset by higher non-catastrophe losses and amortization of DAC.

Catastrophe losses were $2.56 billion in 2019 compared $2.86 billion in 2018.

Premiums written increased 5.6% to $35.42 billion in 2019 compared to 2018.

Service Businesses adjusted net income was $38 million in 2019 compared to $8 million in 2018. The improvement in 2019 was primarily due to growth of Allstate Protection Plans, favorable loss experience of both Allstate Protection Plans and Allstate Dealer Services, partially offset by higher operating expenses related to investing in growth and developing new products and distribution channels for Allstate Protection Plans and Allstate Identity Protection.

Total revenues increased 25.1% or $331 million to $1.65 billion in 2019 from $1.32 billion in 2018.

Allstate Life adjusted net income was $261 million in 2019 compared to $295 million in 2018. The decrease was primarily due to higher amortization of DAC related to our annual review of assumptions and higher contract benefits, partially offset by higher premiums and net investment income, and lower operating costs and expenses.

Premiums and contract charges totaled $1.34 billion in 2019, an increase of 2.1% from $1.32 billion in 2018.

Allstate Benefits adjusted net income was $115 million in 2019 compared to $124 million in 2018. The decrease was primarily due to higher DAC amortization related primarily to the non-renewal of a large underperforming account and increased operating costs and expenses, partially offset by higher premiums.

Premiums and contract charges totaled $1.15 billion in 2019, an increase of 0.9% from $1.14 billion in 2018.

Allstate Annuities adjusted net income was $10 million in 2019 compared to $131 million in 2018. The decrease was primarily due to lower net investment income, partially offset by lower interest credited to contractholder funds.

Net investment income decreased 16.3% to $917 million in 2019 from $1.10 billion in 2018. The decrease was primarily due to lower performance-based investment results, mainly from limited partnerships, and lower average investment balances.

Financial Highlights

Investments totaled $88.36 billion as of December 31, 2019, increasing from $81.26 billion as of December 31, 2018. Unrealized net capital gains totaled $2.74 billion as of December 31, 2019 compared to net unrealized capital gains of $33 million as of December 31, 2018.

Shareholders' equity As of December 31, 2019, shareholders' equity was $26.00 billion. This total included $2.30 billion in deployable assets at the parent holding company level comprising cash and investments that are generally saleable within one quarter.

Book value per diluted common share (ratio of common shareholders' equity to total common shares outstanding and dilutive potential common shares outstanding) was $73.12 as of December 31, 2019, an increase of 27.03% from $57.56 as of December 31, 2018.

Return on average common shareholders' equity For the twelve months ended December 31, 2019, net income applicable to common shareholders' return on the average of beginning and ending period common shareholders' equity of 21.7% increased by 11.7 points from 10.0% for the twelve months ended December 31, 2018, primarily due to higher net income applicable to common shareholders, partially offset by an increase in average common shareholders' equity.

Pension and other postretirement measurement gains and losses Pension and other postretirement measurement losses were $114 million in 2019 compared to losses of $468 million in 2018. The decrease was primarily related to favorable asset performance compared to the expected return on plan assets, partially offset by a decrease in the discount rate used to value the liabilities. See Note 17 of the consolidated financial statements for further information.

Property-Liability Operations

Overview Property-Liability operations consist of two reportable segments: Allstate Protection and Discontinued Lines and Coverages. These segments are consistent with the groupings of financial information that management uses to evaluate performance and to determine the allocation of resources.

We do not allocate Property-Liability investment income, realized capital gains and losses, or assets to the Allstate Protection and Discontinued Lines and Coverages segments. Management reviews assets at the Property-Liability level for decision-making purposes.

The table below includes GAAP operating ratios we use to measure our profitability. We believe that they enhance an investor's understanding of our profitability. They are calculated as follows:

- *Loss ratio*: the ratio of claims and claims expense to premiums earned. Loss ratios include the impact of catastrophe losses.
- *Expense ratio*: the ratio of amortization of DAC, operating costs and expenses, amortization or impairment of purchased intangibles and restructuring and related charges, less other revenue to premiums earned.
- *Combined ratio*: is the sum of the loss ratio and the expense ratio. The difference between 100% and the combined ratio represents underwriting income as a percentage of premiums earned, or underwriting margin.

We have also calculated the following impacts of specific items on the GAAP operating ratios because of the volatility of these items between fiscal periods.

- *Effect of catastrophe losses on combined ratio*: the ratio of catastrophe losses included in claims and claims expense to premiums earned. This ratio includes prior year reserve reestimates of catastrophe losses.
- *Effect of prior year reserve reestimates on combined ratio*: the ratio of prior year reserve reestimates included in claims and claims expense to premiums earned. This ratio includes prior year reserve reestimates of catastrophe losses.
- *Effect of amortization of purchased intangibles on combined ratio*: the ratio of amortization of purchased intangibles to premiums earned.
- *Effect of impairment of purchased intangibles on combined ratio*: the ratio of impairment of purchased intangibles to premiums earned.
- *Effect of restructuring and related charges on combined ratio*: the ratio of restructuring and related charges to premiums earned.
- *Effect of Discontinued Lines and Coverages on combined ratio*: the ratio of claims and claims expense and operating costs and expenses in the Discontinued Lines and Coverages segment to Property-Liability premiums earned. The sum of the effect of Discontinued Lines and Coverages on the combined ratio and the Allstate Protection combined ratio is equal to the Property-Liability combined ratio.

Summarized financial data

($ in millions, except ratios)	2019	2018	2017
Premiums written	$ 35,419	$ 33,555	$ 31,648
Revenues			
Premiums earned	$ 34,843	$ 32,950	$ 31,433
Other revenue	741	738	703
Net investment income	1,533	1,464	1,478
Realized capital gains and losses	1,470	(639)	401
Total revenues	**38,587**	**34,513**	**34,015**
Costs and expenses			
Claims and claims expense	(23,622)	(22,435)	(21,484)
Amortization of DAC	(4,649)	(4,475)	(4,205)
Operating costs and expenses	(4,420)	(4,465)	(4,164)
Restructuring and related charges	(38)	(60)	(78)
Impairment of purchased intangibles (1)	(51)	—	—
Total costs and expenses	**(32,780)**	**(31,435)**	**(29,931)**
Gain on disposition of operations	—	—	14
Income tax expense	(1,196)	(613)	(1,285)
Net income applicable to common shareholders	**$ 4,611**	**$ 2,465**	**$ 2,813**
Underwriting income	$ 2,804	$ 2,253	$ 2,205
Net investment income	1,533	1,464	1,478
Income tax expense on operations	(887)	(747)	(1,187)
Realized capital gains and losses, after-tax	1,161	(500)	272
Gain on disposition of operations, after-tax	—	—	9
Tax Legislation (expense) benefit	—	(5)	36
Net income applicable to common shareholders	**$ 4,611**	**$ 2,465**	**$ 2,813**
Catastrophe losses			
Catastrophe losses, excluding reserve reestimates	$ 2,509	$ 2,830	$ 3,246
Catastrophe reserve reestimates (2)	48	25	(18)
Total catastrophe losses	**$ 2,557**	**$ 2,855**	**$ 3,228**
Non-catastrophe reserve reestimates (2)	(176)	(278)	(487)
Prior year reserve reestimates (2)	(128)	(253)	(505)
GAAP operating ratios			
Loss ratio	67.8	68.1	68.4
Expense ratio (3)	24.2	25.1	24.6
Combined ratio	92.0	93.2	93.0
Effect of catastrophe losses on combined ratio	7.3	8.7	10.3
Effect of prior year reserve reestimates on combined ratio	(0.3)	(0.7)	(1.6)
Effect of catastrophe losses included in prior year reserve reestimates on combined ratio	0.1	0.1	(0.1)
Effect of restructuring and related charges on combined ratio	0.1	0.2	0.2
Effect of impairment of purchased intangibles (1)	0.1	—	—
Effect of Discontinued Lines and Coverages on combined ratio	0.4	0.3	0.3

(1) Our Transformative Growth Plan included a decision to reposition the Allstate brand for broader customer access, resulting in a $51 million impairment for the Esurance brand trade name. See the Esurance section of this Item for further details.

(2) Favorable reserve reestimates are shown in parentheses.

(3) Other revenue is deducted from operating costs and expenses in the expense ratio calculation.

Net investment income increased 4.7% or $69 million in 2019 compared to 2018, due to higher income from market-based portfolios, partially offset by lower performance-based investment results, mainly from limited partnerships. 2019 performance-based investment results included lower valuations in the fourth quarter, on two private equity investments totaling $37 million. We increased the maturity profile of fixed income securities in our Property-Liability portfolio to a duration of 5.2 years as of December 31, 2019 compared to 4.1 years as of December 31, 2018.

Net investment income

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Fixed income securities	$ 1,066	$ 943	$ 909
Equity securities	155	121	122
Mortgage loans	17	17	12
Limited partnership interests	296	378	432
Short-term investments	56	40	17
Other	107	123	100
Investment income, before expense	1,697	1,622	1,592
Investment expense (1) (2)	(164)	(158)	(114)
Net investment income	**$ 1,533**	**$ 1,464**	**$ 1,478**

(1) Investment expense includes $51 million and $45 million of investee level expenses in 2019 and 2018, respectively. Investee level expenses include depreciation and asset level operating expenses on directly held real estate and other consolidated investments.

(2) Investment expense includes $27 million and $18 million related to the portion of reinvestment income on securities lending collateral paid to the counterparties in 2019 and 2018, respectively.

Realized capital gains and losses Net realized capital gains in 2019, primarily related to increased valuation of equity investments and gains on sales of fixed income securities. Valuation of equity investments for 2019 includes $883 million of appreciation in the valuation of equity securities and $141 million of appreciation primarily related to certain limited partnerships where the underlying assets are predominately public equity securities. Net realized capital losses in 2018, primarily related to decreases in the valuation of equity investments and losses on sales of fixed income securities.

Realized capital gains and losses

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Impairment write-downs	$ (26)	$ (5)	$ (56)
Change in intent write-downs	—	—	(44)
Net OTTI losses recognized in earnings	(26)	(5)	(100)
Sales	498	(148)	531
Valuation of equity investments	1,024	(522)	—
Valuation and settlements of derivative instruments	(26)	36	(30)
Realized capital gains and losses, pre-tax	1,470	(639)	401
Income tax (expense) benefit	(309)	139	(129)
Realized capital gains and losses, after-tax	**$ 1,161**	**$ (500)**	**$ 272**

Beginning January 1, 2018, equity securities are reported at fair value with changes in fair value recognized in realized capital gains and losses. Limited partnerships previously reported using the cost method are reported at fair value with changes in fair value recognized in net investment income. As a result, 2017 net investment income and net realized capital gains and losses are not comparable to other periods presented.

Allstate Protection Segment

Private passenger auto, homeowners, and other personal lines insurance products are offered to consumers through agencies and directly through contact centers and online. Our strategy is to position product offerings and distribution channels to meet customers' needs and protect them from life's uncertainties. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Underwriting results

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Premiums written	$ 35,419	$ 33,555	$ 31,648
Premiums earned	$ 34,843	$ 32,950	$ 31,433
Other revenue	741	738	703
Claims and claims expense	(23,517)	(22,348)	(21,388)
Amortization of DAC	(4,649)	(4,475)	(4,205)
Other costs and expenses	(4,417)	(4,462)	(4,161)
Restructuring and related charges	(38)	(60)	(78)
Impairment of purchased intangibles	(51)	—	—
Underwriting income	**$ 2,912**	**$ 2,343**	**$ 2,304**
Catastrophe losses	$ 2,557	$ 2,855	$ 3,228
Underwriting income (loss) by line of business			
Auto	$ 1,688	$ 1,791	$ 1,437
Homeowners	914	483	689
Other personal lines (1)	224	110	141
Commercial lines	14	(83)	(13)
Other business lines (2)	75	49	51
Answer Financial	(3)	(7)	(1)
Underwriting income	**$ 2,912**	**$ 2,343**	**$ 2,304**

(1) Other personal lines include renters, condominium, landlord and other personal lines products.

(2) Other business lines primarily represent Ivantage, a general agency for Allstate exclusive agencies. Ivantage provides agencies a solution for their customers when coverage through Allstate brand underwritten products is not available.

Changes in underwriting results from prior year by component and by line of business (1)

	For the year ended December 31,									
	Auto		Homeowners		Other personal lines		Commercial lines		Allstate Protection (2)	
($ in millions)	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**	**2019**	**2018**
Underwriting income (loss) - prior year	$ 1,791	$ 1,437	$ 483	$ 689	$ 110	$ 141	$ (83)	$ (13)	$ 2,343	$ 2,304
Changes in underwriting income (loss) from:										
Increase (decrease) premiums earned	1,218	1,092	395	207	53	58	227	160	1,893	1,517
Increase (decrease) other revenue	1	30	—	3	(1)	4	—	(2)	3	35
(Increase) decrease incurred claims and claims expense (“losses”):										
Incurred losses, excluding catastrophe losses and reserve reestimates	(1,002)	(642)	(183)	(263)	21	(72)	(219)	(138)	(1,383)	(1,115)
Catastrophe losses, excluding reserve reestimates	(33)	336	294	92	51	(13)	9	1	321	416
Catastrophe reserve reestimates	(22)	24	(1)	(72)	(1)	4	1	1	(23)	(43)
Non-catastrophe reserve reestimates	(110)	(59)	(50)	(73)	(14)	4	90	(90)	(84)	(218)
Losses subtotal	(1,167)	(341)	60	(316)	57	(77)	(119)	(226)	(1,169)	(960)
(Increase) decrease expenses	(155)	(427)	(24)	(100)	5	(16)	(11)	(2)	(158)	(553)
Underwriting income (loss)	**$ 1,688**	**$ 1,791**	**$ 914**	**$ 483**	**$ 224**	**$ 110**	**$ 14**	**$ (83)**	**$ 2,912**	**$ 2,343**

(1) The 2019 column presents changes in 2019 compared to 2018. The 2018 column presents changes in 2018 compared to 2017.

(2) Includes other business lines underwriting income of $75 million and $49 million in 2019 and 2018, respectively, and Answer Financial underwriting loss of $3 million and $7 million in 2019 and 2018, respectively.

Underwriting income increased 24.3% or $569 million in 2019 compared to 2018, primarily due to increased premiums earned and lower catastrophe losses, partially offset by higher non-catastrophe losses and amortization of DAC.

Premiums written is the amount of premiums charged for policies issued during a fiscal period. Premiums are considered earned and are included in the financial results on a pro-rata basis over the policy period. The portion of premiums written applicable to the unexpired term of the policies is recorded as unearned premiums on our Consolidated Statements of Financial Position.

Premiums written and earned by line of business

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written			
Auto	$ 24,462	$ 23,367	$ 22,042
Homeowners	8,165	7,698	7,350
Other personal lines	1,890	1,831	1,768
Subtotal – Personal lines	34,517	32,896	31,160
Commercial lines	902	659	488
Total premiums written	**$ 35,419**	**$ 33,555**	**$ 31,648**
Reconciliation of premiums written to premiums earned:			
Increase in unearned premiums	(614)	(544)	(258)
Other	38	(61)	43
Total premiums earned	**$ 34,843**	**$ 32,950**	**$ 31,433**
Auto	$ 24,188	$ 22,970	$ 21,878
Homeowners	7,912	7,517	7,310
Other personal lines	1,861	1,808	1,750
Subtotal – Personal lines	33,961	32,295	30,938
Commercial lines	882	655	495
Total premiums earned	**$ 34,843**	**$ 32,950**	**$ 31,433**

Auto insurance premiums written increased 4.7% or $1.10 billion in 2019 compared to 2018.

Homeowners insurance premiums written increased 6.1% or $467 million in 2019 compared to 2018.

Unearned premium balance and the time frame in which we expect to recognize these premiums as earned

($ in millions)	As of December 31, 2019	2018	% earned after Three months	Six months	Nine months	Twelve months
Allstate brand:						
Auto	$ 5,916	$ 5,635	70.9%	96.4%	99.1%	100.0%
Homeowners	4,158	3,908	43.3%	75.5%	94.2%	100.0%
Other personal lines	950	917	43.5%	75.5%	94.1%	100.0%
Commercial lines	270	250	43.4%	74.7%	93.7%	100.0%
Total Allstate brand	**11,294**	**10,710**	**58.0%**	**86.6%**	**96.8%**	**100.0%**
Esurance brand:						
Auto	489	471	74.4%	99.1%	99.8%	100.0%
Homeowners	62	53	43.4%	75.6%	94.2%	100.0%
Other personal lines	2	2	43.6%	75.5%	94.2%	100.0%
Total Esurance brand	**553**	**526**	**70.8%**	**96.3%**	**99.1%**	**100.0%**
Encompass brand:						
Auto	276	275	44.1%	75.9%	94.3%	100.0%
Homeowners	214	212	43.9%	75.8%	94.3%	100.0%
Other personal lines	41	42	44.2%	76.0%	94.3%	100.0%
Total Encompass brand	**531**	**529**	**44.0%**	**75.9%**	**94.3%**	**100.0%**
Allstate Protection unearned premiums	**$ 12,378**	**$ 11,765**	**57.9%**	**86.5%**	**96.8%**	**100.0%**

Combined ratios by line of business

	For the years ended December 31,								
	Loss ratio			Expense ratio (1)			Combined ratio		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	68.2	66.8	68.5	24.8	25.4	24.9	93.0	92.2	93.4
Homeowners	65.1	69.4	67.0	23.3	24.2	23.6	88.4	93.6	90.6
Other personal lines	61.1	66.0	63.8	26.9	27.9	28.1	88.0	93.9	91.9
Commercial lines	81.3	91.3	75.1	17.1	21.4	27.5	98.4	112.7	102.6
Total	**67.5**	**67.8**	**68.1**	**24.1**	**25.1**	**24.6**	**91.6**	**92.9**	**92.7**

(1) Other revenue is deducted from operating costs and expenses in the expense ratio calculation.

Loss ratios by line of business

	For the years ended December 31,											
	Loss ratio			Effect of catastrophe losses on combined ratio			Effect of prior year reserve reestimates on combined ratio			Effect of catastrophe losses included in prior year reserve reestimates on combined ratio		
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	68.2	66.8	68.5	1.7	1.6	3.3	(1.4)	(2.0)	(2.3)	(0.1)	(0.2)	(0.1)
Homeowners	65.1	69.4	67.0	24.8	30.0	31.1	0.8	0.2	(1.7)	0.8	0.8	(0.1)
Other personal lines	61.1	66.0	63.8	9.0	12.1	11.9	0.5	(0.4)	0.1	—	—	0.2
Commercial lines	81.3	91.3	75.1	1.4	3.4	4.8	1.9	16.5	3.9	(0.1)	—	0.2
Total	**67.5**	**67.8**	**68.1**	**7.3**	**8.7**	**10.3**	**(0.7)**	**(1.0)**	**(1.9)**	**0.1**	**0.1**	**(0.1)**

Catastrophe losses decreased 10.4% or $298 million in 2019 compared to 2018. We define a "catastrophe" as an event that produces pre-tax losses before reinsurance in excess of $1 million and involves multiple first party policyholders, or a winter weather event that produces a number of claims in excess of a preset, per-event threshold of average claims in a specific area, occurring within a certain amount of time following the event. Catastrophes are caused by various natural events including high winds, winter storms and freezes, tornadoes, hailstorms, wildfires, tropical storms, tsunamis, hurricanes, earthquakes and volcanoes. We are also exposed to man-made catastrophic events, such as certain types of terrorism, wildfires or industrial accidents. The nature and level of catastrophes in any period cannot be reliably predicted.

Catastrophe losses in 2019 by the size of event

($ in millions)	Number of events		Claims and claims expense		Combined ratio impact	Average catastrophe loss per event
Size of catastrophe loss						
Greater than $250 million	1	1.0%	$ 362	14.1%	1.0	$ 362
$101 million to $250 million	2	1.8	342	13.4	1.0	171
$50 million to $100 million	9	8.2	662	25.9	1.9	74
Less than $50 million	98	89.0	1,143	44.7	3.3	12
Total	**110**	**100.0%**	**2,509**	**98.1**	**7.2**	23
Prior year reserve reestimates			48	1.9	0.1	
Total catastrophe losses			**$ 2,557**	**100.0%**	**7.3**	

Catastrophe losses by the type of event

	For the years ended December 31,					
($ in millions)	Number of events	2019	Number of events	2018	Number of events	2017
Hurricanes/Tropical storms	3	$ 86	3	$ 200	3	$ 613
Tornadoes	6	551	3	17	3	100
Wind/Hail	91	1,721	99	1,752	93	1,973
Wildfires	4	28	10	745	10	536
Other events	6	123	2	116	2	24
Prior year reserve reestimates		48		25		(18)
Total catastrophe losses	**110**	**$ 2,557**	**117**	**$ 2,855**	**111**	**$ 3,228**

Catastrophe management

Historical catastrophe experience For the last ten years, the average annual impact of catastrophes on our loss ratio was 8.3 points, but it has varied from 4.5 points to 14.7 points. The average annual impact of catastrophes on the homeowners loss ratio for the last ten years was 26.8 points. Over time, we have limited our aggregate insurance exposure to catastrophe losses in certain regions of the country that are subject to high levels of natural catastrophes by our participation in various state facilities. For further discussion of these facilities, see Note 14 of the consolidated financial statements. However, the impact of these actions may be diminished by the growth in insured values, and the effect of state insurance laws and regulations. In addition, in various states we are required to participate in assigned risk plans, reinsurance facilities and joint underwriting associations that provide insurance coverage to individuals or entities that otherwise are unable to purchase such coverage from private insurers. Because of our participation in these and other state facilities such as wind pools, we may be exposed to losses that surpass the capitalization of these facilities and to assessments from these facilities.

We have continued to take actions to maintain an appropriate level of exposure to catastrophic events while continuing to meet the needs of our customers, including the following:

- Continuing to limit or not offer new homeowners, manufactured home and landlord package policy business in certain coastal geographies.
- Increased capacity in our brokerage platform for customers not offered an Allstate policy.
- We began to write a limited number of homeowners policies in select areas of California in 2016, additionally we:
  - Continue to renew current policyholders and allow replacement policies for existing customers who buy a new home or change their residence to rental property
  - Have decreased our overall homeowner exposures in California by more than 50% since 2007
  - Write homeowners coverage through our excess and surplus lines carrier, North Light Specialty Insurance Company (“North Light”), which includes earthquake coverage (other than fire following earthquakes) that is currently ceded via quota share reinsurance.
- In certain states, we have been ceding wind exposure related to insured property located in wind pool eligible areas.
- Starting in the second quarter of 2017, we began writing a limited number of homeowners policies in select areas of Florida and continue to support existing customers who replace their currently-insured home with an acceptable property. Encompass withdrew from property lines in Florida in 2009.
- Tropical cyclone deductibles are generally higher than all peril deductibles and are in place for a large portion of coastal insured properties.
- Auto comprehensive damage coverage generally includes coverage for flood-related loss. We have additional catastrophe exposure, beyond the property lines, for auto customers who have purchased comprehensive damage coverage.
- We offer a homeowners policy available in 43 states, Allstate House and Home®, that provides options of coverage for roof damage, including graduated coverage and pricing based on roof type and age. In 2019, premiums written totaled $3.44 billion or 42.1% of homeowners premiums written compared to $2.84 billion or 36.9% in 2018.

Hurricanes We consider the greatest areas of potential catastrophe losses due to hurricanes generally to be major metropolitan centers in counties along the eastern and gulf coasts of the United States. The average premium on a property policy near these coasts is generally greater than in other areas. However, average premiums are often not considered commensurate with the inherent risk of loss. In addition, as explained in Note 14 of the consolidated financial statements, in various states Allstate is subject to assessments from assigned risk plans, reinsurance facilities and joint underwriting associations providing insurance for wind related property losses.

We have addressed our risk of hurricane loss by, among other actions, purchasing reinsurance for specific states and on a countrywide basis for our personal lines property insurance in areas most exposed to hurricanes, limiting personal homeowners, landlord package policy and manufactured home new business writings in coastal areas in southern and eastern states, implementing tropical cyclone deductibles where appropriate, and not offering continuing coverage on certain policies in coastal counties in certain states. We continue to seek appropriate returns for the risks we write. This may require further actions, similar to those already taken, in geographies where we are not getting appropriate returns. However, we may maintain or opportunistically increase our presence in areas where adequate risk adjusted returns can be achieved.

Earthquakes We do not offer earthquake coverage in most states. We retain approximately 22,000 PIF with earthquake coverage, primarily in Kentucky, due to regulatory and other reasons. We purchase reinsurance in Kentucky and enter into arrangements in many states to make earthquake coverage available through our brokerage platform.

We continue to have exposure to earthquake risk on certain policies that do not specifically exclude coverage for earthquake losses, including our auto policies, and to fires following earthquakes. Allstate policyholders in California are offered homeowners coverage through the California Earthquake Authority (“CEA”), a privately-financed, publicly-managed state agency created to provide insurance coverage for earthquake damage. Allstate is subject to assessments from the CEA under certain circumstances as explained in Note 14 of the consolidated financial statements. While North Light writes property policies in California, which can include earthquake coverage, this coverage is 100% ceded via quota share reinsurance.

Fires following earthquakes Under a standard homeowners policy we cover fire losses, including those caused by an earthquake. Actions taken related to our risk of loss from fires following earthquakes include restrictive underwriting guidelines in California for new business writings, purchasing reinsurance for Kentucky personal lines property risks, and purchasing nationwide occurrence reinsurance, excluding Florida.

Wildfires Actions taken related to managing our risk of loss from wildfires include purchasing nationwide occurrence reinsurance, new and renewal inspection programs to identify and remediate wildfire risk as well as leveraging contemporary underwriting tools in select areas. While these programs are designed to mitigate risk, the exposure to wildfires still exists. We continue to manage our exposure and seek appropriate returns for the risks we write.

To manage the exposure, this may require further actions, similar to those already taken, in geographies where we are not achieving appropriate returns. However, we may maintain or opportunistically increase our presence in areas where adequate risk adjusted returns can be achieved.

Reinsurance A description of our current catastrophe reinsurance program appears in Note 10 of the consolidated financial statements.

California wildfire subrogation PG&E Corporation and Pacific Gas and Electric Company (together, "PG&E") have reached agreements to resolve insurance subrogation and tort claimants' claims arising from the 2017 Northern California wildfires and the 2018 Camp Fire for $11 billion and $13.5 billion, respectively. Allstate is one of the insurance companies that is party to the agreement with subrogating insurers. PG&E has also reached agreement to settle claims of its bondholders.

The settlements with insurers and tort claimants have been approved by the bankruptcy court overseeing PG&E's Chapter 11 case. The settlement with the bondholders has not yet been approved. All will be subject to confirmation of a Plan of Reorganization, which has not yet occurred. There remain other uncertainties with respect to the ultimate resolution of all claims, including the allocation of benefits among claimants and the amount of recovery, if any, that we may receive. Accordingly, we have not recorded any benefit related to the potential proceeds from the subrogation settlement agreement in the consolidated financial statements. We will continue to monitor this matter.

Expense ratio decreased 1.0 point in 2019 compared to 2018.

Impact of specific costs and expenses on the expense ratio

	For the years ended December 31,		
	2019	**2018**	**2017**
Amortization of DAC	13.4	13.6	13.4
Advertising expense	2.4	2.5	2.2
Other costs and expenses	8.1	8.8	8.8
Restructuring and related charges	0.1	0.2	0.2
Impairment of purchased intangibles	0.1	—	—
Total expense ratio	**24.1**	**25.1**	**24.6**

Deferred acquisition costs We establish a DAC asset for costs that are related directly to the successful acquisition of new or renewal insurance policies, principally agency remuneration and premium taxes. DAC is amortized to income over the period in which premiums are earned.

DAC balance as of December 31 by product type

($ in millions)	**2019**	**2018**
Auto	$ 849	$ 845
Homeowners	600	599
Other personal lines	141	141
Commercial lines	34	33
Total DAC	**$ 1,624**	**$ 1,618**

The following table presents premiums written, PIF and underwriting income (loss) by line of business for Allstate brand, Esurance brand, Encompass brand and Allstate Protection as of or for the year ended December 31, 2019. Detailed analysis of underwriting results, premiums written and earned, and the combined ratios, including loss and expense ratios, are discussed in the brand sections.

Premiums written, policies in force and underwriting income (loss)

($ in millions)	Allstate brand		Esurance brand		Encompass brand		Allstate Protection	
Premiums written	**Amount**	**Percent to total brand**	**Amount**	**Percent to total brand**	**Amount**	**Percent to total brand**	**Amount**	**Percent to total**
Auto	$ 21,936	67.9%	$ 1,986	94.0 %	$ 540	52.9 %	$ 24,462	69.1 %
Homeowners	7,645	23.7	119	5.6	401	39.3	8,165	23.1
Other personal lines	1,803	5.6	8	0.4	79	7.8	1,890	5.3
Commercial lines	902	2.8	—	—	—	—	902	2.5
Total	**$ 32,286**	**100.0%**	**$ 2,113**	**100.0 %**	**$ 1,020**	**100.0 %**	**$ 35,419**	**100.0 %**
Percent to total Allstate Protection		**91.1%**		**6.0 %**		**2.9 %**		**100.0 %**
PIF (thousands)								
Auto	20,398	65.4%	1,515	90.9 %	493	61.4 %	22,406	66.5 %
Homeowners	6,254	20.0	105	6.3	234	29.1	6,593	19.6
Other personal lines	4,344	13.9	46	2.8	76	9.5	4,466	13.2
Commercial lines	227	0.7	—	—	—	—	227	0.7
Total	**31,223**	**100.0%**	**1,666**	**100.0 %**	**803**	**100.0 %**	**33,692**	**100.0 %**
Percent to total Allstate Protection		**92.7%**		**4.9 %**		**2.4 %**		**100.0 %**
Underwriting income (loss)								
Auto	$ 1,727	58.5%	$ (47) (1)	109.4 %	$ 8	114.3 %	$ 1,688	58.0 %
Homeowners	910	30.9	2	(4.7)	2	28.6	914	31.4
Other personal lines	225	7.6	2	(4.7)	(3)	(42.9)	224	7.6
Commercial lines	14	0.5	—	—	—	—	14	0.5
Other business lines	75	2.5	—	—	—	—	75	2.6
Answer Financial	—	—	—	—	—	—	(3)	(0.1)
Total	**$ 2,951**	**100.0%**	**$ (43)**	**100.0 %**	**$ 7**	**100.0 %**	**$ 2,912**	**100.0 %**

(1) Our Transformative Growth Plan included a decision to reposition the Allstate brand for broader customer access, resulting in a $51 million impairment for the Esurance brand trade name. See the Esurance section of this Item for further details.

When analyzing premium measures and statistics for all three brands the following calculations are used as described below.

- *PIF*: Policy counts are based on items rather than customers. A multi-car customer would generate multiple item (policy) counts, even if all cars were insured under one policy while Commercial lines PIF counts for shared economy agreements typically reflect contracts that cover multiple rather than individual drivers.
- *New issued applications*: Item counts of automobile or homeowner insurance applications for insurance policies that were issued during the period, regardless of whether the customer was previously insured by another Allstate Protection brand. Allstate brand includes automobiles added by existing customers when they exceed the number allowed (currently 10) on a policy.
- *Average premium-gross written ("average premium")*: Gross premiums written divided by issued item count. Gross premiums written include the impacts from discounts, surcharges and ceded reinsurance premiums and exclude the impacts from mid-term premium adjustments and premium refund accruals. Average premiums represent the appropriate policy term for each line. Allstate and Esurance brand policy terms are 6 months for auto and 12 months for homeowners. Encompass brand policy terms are generally 12 months for auto and homeowners.
- *Renewal ratio*: Renewal policy item counts issued during the period, based on contract effective dates, divided by the total policy item counts issued 6 months prior for auto (generally 12 months prior for Encompass brand) or 12 months prior for homeowners.
- *Approved rate changes:* Based on historical premiums written in locations where the brands operate, not including rate plan enhancements (such as the introduction of discounts and surcharges that result in no change in the overall rate level) and initial rates filed for insurance subsidiaries initially writing business in a location. Includes rate changes approved based on our net cost of reinsurance. The rate change percentages are calculated using approved rate changes during the period as a percentage of:
  - Total brand premiums written
  - Premiums written in respective locations with rate changes

Allstate brand products are sold primarily through Allstate exclusive agencies and serve customers who prefer local personalized advice and service and are brand-sensitive. In 2019, the Allstate brand represented 91.1% of the Allstate Protection segment's written premium. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Underwriting results

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Premiums written	$ 32,286	$ 30,591	$ 28,885
Premiums earned	$ 31,738	$ 30,058	$ 28,631
Other revenue	583	582	559
Claims and claims expense	(21,178)	(20,237)	(19,273)
Amortization of DAC	(4,411)	(4,242)	(3,963)
Other costs and expenses	(3,748)	(3,752)	(3,497)
Restructuring and related charges	(33)	(52)	(70)
Underwriting income	**$ 2,951**	**$ 2,357**	**$ 2,387**
Catastrophe losses	$ 2,391	$ 2,701	$ 2,985
Underwriting income (loss) by line of business			
Auto	$ 1,727	$ 1,788	$ 1,465
Homeowners	910	496	754
Other personal lines [(1)]	225	107	130
Commercial lines	14	(83)	(13)
Other business lines [(2)]	75	49	51
Underwriting income	**$ 2,951**	**$ 2,357**	**$ 2,387**

(1) Other personal lines include renters, condominium, landlord and other personal lines products.

(2) Other business lines represent Ivantage.

Changes in underwriting results from prior year by component [(1)]

	For the years ended December 31,	
($ in millions)	**2019**	**2018**
Underwriting income - prior year	$ 2,357	$ 2,387
Changes in underwriting income (loss) from:		
Increase (decrease) premiums earned	1,680	1,427
Increase (decrease) other revenue	1	23
(Increase) decrease incurred claims and claims expense ("losses"):		
Incurred losses, excluding catastrophe losses and reserve reestimates	(1,185)	(1,022)
Catastrophe losses, excluding reserve reestimates	337	311
Catastrophe reserve reestimates	(27)	(27)
Non-catastrophe reserve reestimates	(66)	(226)
Losses subtotal	(941)	(964)
(Increase) decrease expenses	(146)	(516)
Underwriting income	**$ 2,951**	**$ 2,357**

(1) The 2019 column presents changes in 2019 compared to 2018. The 2018 column presents changes in 2018 compared to 2017.

Underwriting income increased 25.2% or $594 million in 2019 compared to 2018, primarily due to increased premiums earned and lower catastrophe losses, partially offset by higher non-catastrophe losses and amortization of DAC.

Premiums written and earned by line of business

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written			
Auto	$ 21,936	$ 20,991	$ 19,859
Homeowners (1)	7,645	7,199	6,865
Other personal lines	1,803	1,742	1,673
Subtotal – Personal lines	31,384	29,932	28,397
Commercial lines	902	659	488
Total	**$ 32,286**	**$ 30,591**	**$ 28,885**
Premiums earned			
Auto	$ 21,680	$ 20,662	$ 19,676
Homeowners	7,403	7,025	6,811
Other personal lines	1,773	1,716	1,649
Subtotal – Personal lines	30,856	29,403	28,136
Commercial lines	882	655	495
Total	**$ 31,738**	**$ 30,058**	**$ 28,631**

(1) The cost of our catastrophe reinsurance program increased $22 million to $286 million in 2019 from $264 million in 2018. Catastrophe placement premiums are recorded primarily in the Allstate brand and are a reduction of premium. For a more detailed discussion on reinsurance, see the Claims and Claims Expense Reserves section of the MD&A and Note 10 of the consolidated financial statements.

Auto premium measures and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	20,398	20,104	19,580	1.5%	2.7%
New issued applications (thousands)	2,942	2,933	2,520	0.3%	16.4%
Average premium	$ 586	$ 570	$ 550	2.8%	3.6%
Renewal ratio (%)	88.6	88.5	87.6	0.1	0.9
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 574	$ 215	$ 773	$ 359	$ (558)
# of locations (1)	47	47	49	—	(2)
Total brand (%)	2.7	1.1	4.0	1.6	(2.9)
Location specific (%)	4.6	2.9	6.0	1.7	(3.1)

(1) Allstate brand operates in 50 states, D.C. and 5 Canadian provinces.

Auto insurance premiums written increased 4.5% or $945 million in 2019 compared to 2018, primarily due to an increase in average premium and growth.

PIF increased by 294 thousand policies compared to the prior year with increases in 33 states, including 6 of our largest 10 states.

Homeowners premium measures and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	6,254	6,186	6,088	1.1%	1.6%
New issued applications (thousands)	848	826	733	2.7%	12.7%
Average premium	$ 1,295	$ 1,231	$ 1,197	5.2%	2.8%
Renewal ratio (%)	88.3	88.0	87.3	0.3	0.7
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 239	$ 189	$ 122	$ 50	$ 67
# of locations (1)	39	40	30	(1)	10
Total brand (%)	3.2	2.7	1.8	0.5	0.9
Location specific (%)	5.1	4.3	3.7	0.8	0.6

(1) Allstate brand operates in 50 states, D.C., and 5 Canadian provinces.

Homeowners insurance premiums written increased 6.2% or $446 million in 2019 compared to 2018, primarily due to higher average premiums, including rate changes and inflation in insured home valuations, and growth. PIF increased 68 thousand policies with increases in 31 states, including 6 of our largest 10 states.

Other personal lines premiums written increased 3.5% or $61 million in 2019 compared to 2018. The increase in 2019 was primarily due to increases in personal umbrella and condominium insurance premiums.

Commercial lines premiums written increased 36.9% or $243 million in 2019 compared to 2018. The increase in 2019 was primarily due to expansion in our shared economy business, including growth in our current agreements and addition of new customers. Growth in premiums written is not reflected in growth in policies in force as the shared economy agreements typically reflect contracts that cover multiple drivers as opposed to individual drivers.

Combined ratios by line of business

	For the years ended December 31,								
	Loss ratio			Expense ratio (1)			Combined ratio		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	67.3	65.9	67.9	24.7	25.4	24.7	92.0	91.3	92.6
Homeowners	64.9	69.3	66.0	22.8	23.6	22.9	87.7	92.9	88.9
Other personal lines	60.6	66.3	64.1	26.7	27.5	28.0	87.3	93.8	92.1
Commercial lines	81.3	91.3	75.1	17.1	21.4	27.5	98.4	112.7	102.6
Total	**66.7**	**67.3**	**67.3**	**24.0**	**24.9**	**24.4**	**90.7**	**92.2**	**91.7**

(1) Other revenue is deducted from operating costs and expenses in the expense ratio calculation.

Loss ratios by line of business

	For the years ended December 31,											
	Loss ratio			Effect of catastrophe losses			Effect of prior year reserve reestimates			Effect of catastrophe losses included in prior year reserve reestimates		
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	67.3	65.9	67.9	1.7	1.6	3.4	(1.5)	(2.2)	(2.4)	(0.1)	(0.2)	(0.1)
Homeowners	64.9	69.3	66.0	24.8	30.5	30.7	0.7	—	(2.0)	0.8	0.8	(0.1)
Other personal lines	60.6	66.3	64.1	9.2	12.3	12.2	0.6	0.5	0.7	0.1	(0.1)	0.2
Commercial lines	81.3	91.3	75.1	1.4	3.4	4.8	1.9	16.5	3.9	(0.1)	—	0.2
Total	**66.7**	**67.3**	**67.3**	**7.5**	**9.0**	**10.4**	**(0.7)**	**(1.1)**	**(2.0)**	**0.1**	**—**	**(0.1)**

Frequency and severity statistics, which are influenced by driving patterns, inflation and other factors, are provided to describe the trends in loss costs of the business. Our reserving process incorporates changes in loss patterns, operational statistics and changes in claims reporting processes to determine our best estimate of recorded reserves. We use the following statistics to evaluate losses:

- *Paid claim frequency* (1) is calculated as annualized notice counts closed with payment in the period divided by the average of PIF with the applicable coverage during the period.
- *Gross claim frequency* (1) is calculated as annualized notice counts received in the period divided by the average of PIF with the applicable coverage during the period. Gross claim frequency includes all actual notice counts, regardless of their current status (open or closed) or their ultimate disposition (closed with a payment or closed without payment).
- *Paid claim severity* is calculated by dividing the sum of paid losses and loss expenses by claims closed with a payment during the period.
- *Percent change in frequency or severity statistics* is calculated as the amount of increase or decrease in the paid or gross claim frequency or severity in the current period compared to the same period in the prior year divided by the prior year paid or gross claim frequency or severity.

(1) Frequency statistics exclude counts associated with catastrophe events.

Paid claim frequency trends will often differ from gross claim frequency trends due to differences in the timing of when notices are received and when claims are settled. For property damage claims, paid frequency trends reflect smaller differences as timing between opening and settlement is generally less. For bodily injury, gross frequency trends reflect emerging trends since the difference in timing between opening and settlement is much greater and gross frequency does not typically experience the same volatility in quarterly fluctuations seen in paid frequency. In evaluating frequency, we typically rely upon paid frequency trends for physical damage coverages such as property damage and gross frequency for casualty coverages such as bodily injury to provide an indicator of emerging trends in overall claim frequency while also providing insights for our analysis of severity.

We are continuing to implement new technology and process improvements that provide continued loss cost accuracy, efficient processing and enhanced customer experiences that are simple, fast and produce high degrees of satisfaction. We use Digital Operating Centers to handle auto physical damage claims countrywide utilizing our virtual estimation capabilities, which includes estimating damage with photos and video through the use of QuickFoto Claim® and Virtual Assist®. We are also leveraging virtual capabilities to handle property claims by estimating damage through video with Virtual Assist and aerial imagery using satellites, airplanes and drones. These organizational and process changes impact frequency and severity statistics as changes in claim opening and closing practices and shifts in timing, if any, can impact comparisons to prior periods.

Auto loss ratio increased 1.4 points in 2019 compared to 2018, primarily due to higher claim severity and lower favorable non-catastrophe prior year reserve reestimates, partially offset by higher premiums earned and lower claim frequency.

Property damage paid claim frequency decreased 2.2% in 2019 compared to 2018. Property damage paid claim severities increased 6.5% in 2019 compared to 2018 due to the impact of higher costs torepair more sophisticated, newer model vehicles, higher third-party subrogation demands and increased number of total losses.

Bodily injury gross claim frequency decreased 1.8% in 2019 compared to 2018. Bodily injury severity trends increased at a rate above medical care inflation indices in 2019.

Homeowners loss ratio decreased 4.4 points in 2019 compared to 2018, primarily due to lower catastrophes, increased premiums earned and improved claim frequency, partially offset by increased claim severity. Paid claim frequency excluding catastrophe losses decreased 6.0% in 2019 compared to 2018. Paid claim severity excluding catastrophe losses increased 11.8% in 2019 compared to 2018 as we experienced increased claim severity in fire and water perils. Homeowner paid claim severity can be impacted by both the mix of perils and the magnitude of specific losses paid during the year.

Other personal lines loss ratio decreased 5.7 points in 2019 compared to 2018, primarily due to lower catastrophe losses and increased premiums earned.

Commercial lines loss ratio decreased 10.0 points in 2019 compared to 2018, primarily due to increased premiums earned and lower unfavorable non-catastrophe prior year reserve reestimates, partially offset by higher severity. Commercial lines recorded losses related to the shared economy agreements are primarily based on original pricing expectations given limited loss experience.

Impact of specific costs and expenses on the expense ratio

	For the years ended December 31,		
	2019	2018	2017
Amortization of DAC	13.9	14.1	13.8
Advertising expense	2.2	2.2	2.0
Other costs and expenses	7.8	8.4	8.4
Restructuring and related charges	0.1	0.2	0.2
Total expense ratio	**24.0**	**24.9**	**24.4**

Expense ratio decreased 0.9 points in 2019 compared to 2018, primarily due to lower agent incentive compensation and decreased operating expenses driven by enterprise-wide cost reduction efforts. Amortization of DAC primarily includes agent remuneration and premium taxes. Allstate agency total incurred base commissions, variable compensation and bonuses in 2019 were lower than 2018.

Commercial lines expense ratio decreased 4.3 points in 2019 compared to 2018, primarily due to growth in our shared economy business, which has a lower expense ratio.

Esurance brand products are sold directly to self-directed, brand-sensitive consumers online and through contact centers. We manage the direct-to-customer business based on its profitability over the lifetime of the customer relationship. In 2019, the Esurance brand represented 6.0% of the Allstate Protection segment's written premium. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Underwriting results

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written	$ 2,113	$ 1,948	$ 1,728
Premiums earned	$ 2,087	$ 1,869	$ 1,712
Other revenue	83	80	67
Claims and claims expense	(1,650)	(1,443)	(1,329)
Amortization of DAC	(46)	(43)	(41)
Other costs and expenses	(465)	(487)	(462)
Restructuring and related charges	(1)	(1)	(3)
Impairment of purchased intangibles	(51)	—	—
Underwriting loss	**$ (43)**	**$ (25)**	**$ (56)**
Catastrophe losses	$ 51	$ 52	$ 50
Underwriting income (loss) by line of business			
Auto	$ (47)	$ (11)	$ (37)
Homeowners	2	(14)	(20)
Other personal lines	2	—	1
Underwriting loss	**$ (43)**	**$ (25)**	**$ (56)**

Changes in underwriting results from prior year by component (1)

($ in millions)	For the years ended December 31, 2019	2018
Underwriting income (loss) - prior year	$ (25)	$ (56)
Changes in underwriting income (loss) from:		
Increase (decrease) premiums earned	218	157
Increase (decrease) other revenue	3	13
(Increase) decrease incurred claims and claims expense ("losses"):		
Incurred losses, excluding catastrophe losses and reserve reestimates	(207)	(110)
Catastrophe losses, excluding reserve reestimates	—	1
Catastrophe reserve reestimates	1	(3)
Non-catastrophe reserve reestimates	(1)	(2)
Losses subtotal	(207)	(114)
(Increase) decrease expenses:		
Expenses, excluding impairment of purchased intangibles	19	(25)
Impairment of purchased intangibles	(51)	—
Expenses subtotal	(32)	(25)
Underwriting loss	**$ (43)**	**$ (25)**

(1) The 2019 column presents changes in 2019 compared to 2018. The 2018 column presents changes in 2018 compared to 2017.

Underwriting loss increased 72.0% or $18 million in 2019 compared to 2018, primarily due to the impairment of purchased intangibles of $51 million for the Esurance brand trade name as we integrate Esurance into the Allstate brand.

Excluding the impairment of purchased intangibles, Esurance underwriting income totaled $8 million in 2019, an increase of $33 million from an underwriting loss of $25 million in 2018. The improvement was primarily due to increased premiums earned and lower operating expenses, partially offset by increased loss costs.

Premiums written and earned by line of business

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written			
Auto	$ 1,986	$ 1,839	$ 1,641
Homeowners	119	101	79
Other personal lines	8	8	8
Total	**$ 2,113**	**$ 1,948**	**$ 1,728**
Premiums earned			
Auto	$ 1,969	$ 1,771	$ 1,636
Homeowners	110	90	68
Other personal lines	8	8	8
Total	**$ 2,087**	**$ 1,869**	**$ 1,712**

Auto premium measures and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	1,515	1,488	1,352	1.8 %	10.1%
New issued applications (thousands)	593	633	484	(6.3)%	30.8%
Average premium	$ 620	$ 605	$ 574	2.5 %	5.4%
Renewal ratio (%)	82.8	83.3	81.5	(0.5)	1.8
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 92	$ 28	$ 78	$ 64	$ (50)
# of locations (1)	30	30	39	—	(9)
Total brand (%)	5.0	1.8	4.8	3.2	(3.0)
Location specific (%)	5.7	2.7	5.5	3.0	(2.8)

(1) Esurance brand operates in 43 states.

Auto insurance premiums written increased 8.0% or $147 million in 2019 compared to 2018 due to higher average premium primarily due to rate changes approved and PIF growth, partially offset by a lower renewal ratio.

PIF increased 1.8% or 27 thousand in 2019 compared to 2018. New issued applications decreased 6.3% in 2019 compared to 2018 due to lower advertising spend.

Homeowners premium measures and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	105	95	79	10.5 %	20.3 %
New issued applications (thousands)	29	32	34	(9.4)%	(5.9)%
Average premium	$ 1,055	$ 982	$ 917	7.4 %	7.1 %
Renewal ratio (%) (1)	84.5	85.3	85.5	(0.8)	(0.2)
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 5	$ 2	$ 3	$ 3	$ (1)
# of locations (2)	5	6	3	(1)	3
Total brand (%)	4.7	2.1	4.5	2.6	(2.4)
Location specific (%)	17.1	6.9	18.5	10.2	(11.6)

(1) Esurance's renewal ratios exclude the impact of risk related cancellations. Customers can enter into a policy without a physical inspection. During the underwriting review period, a number of policies may be canceled if upon inspection the condition is unsatisfactory.

(2) Esurance brand operates in 31 states.

Homeowners insurance premiums written increased 17.8% or $18 million in 2019 compared to 2018 due to higher average premium primarily due to approved rate changes. As of December 31, 2019, Esurance continues to write homeowners insurance in 31 states with lower hurricane risk, contributing to lower average premium compared to the industry.

PIF increased 10.5% or 10 thousand in 2019 compared to 2018.

Combined ratios by line of business

	For the years ended December 31,								
	Loss ratio			Expense ratio (1)			Combined ratio		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	79.4	77.0	77.5	23.0	23.6	24.8	102.4	100.6	102.3
Homeowners	74.6	83.4	83.8	23.6	32.2	45.6	98.2	115.6	129.4
Total	**79.1**	**77.2**	**77.6**	**23.0**	**24.1**	**25.7**	**102.1**	**101.3**	**103.3**

(1) Other revenue is deducted from operating costs and expenses in the expense ratio calculation.

Loss ratios by line of business

	For the years ended December 31,											
	Loss ratio			Effect of catastrophe losses			Effect of prior year reserve reestimates			Effect of catastrophe losses included in prior year reserve reestimates		
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	79.4	77.0	77.5	1.2	1.5	2.1	0.1	0.1	0.1	—	—	—
Homeowners	74.6	83.4	83.8	24.6	27.8	23.5	0.9	2.2	(3.0)	0.9	2.2	(1.5)
Total	**79.1**	**77.2**	**77.6**	**2.4**	**2.8**	**2.9**	**0.1**	**0.2**	**(0.1)**	**—**	**0.1**	**(0.1)**

Auto loss ratio increased 2.4 points in 2019 compared to 2018, primarily due to higher claim severity and to a lesser extent higher frequency, partially offset by higher premiums earned.

Homeowners loss ratio decreased 8.8 points in 2019 compared to 2018, primarily due to lower frequency and higher premiums earned, partially offset by higher claims severity.

Impact of specific costs and expenses on the expense ratio

	For the years ended December 31,		
	2019	2018	2017
Amortization of DAC	2.2	2.3	2.4
Advertising expense	7.0	8.7	8.3
Amortization of purchased intangibles	0.1	0.1	0.2
Other costs and expenses	11.2	12.9	14.6
Restructuring and related charges	—	0.1	0.2
Impairment of purchased intangibles	2.5	—	—
Total expense ratio	**23.0**	**24.1**	**25.7**

Expense ratio decreased 1.1 points in 2019 compared to 2018. Excluding the impairment of purchased intangibles, the expense ratio decreased by 3.6 points compared to 2018.

Other costs and expenses, including salaries of telephone sales personnel and other underwriting costs related to customer acquisition, were 1.7 points lower in 2019 compared to 2018 reflecting continued implementation of digital self-service capabilities and premium growth.

Esurance uses a direct distribution model, therefore its primary acquisition-related costs are advertising as opposed to commissions. Esurance advertising expense ratio decreased 1.7 points in 2019 compared to 2018.

Encompass
Creating protection around you

Encompass products are sold through independent agencies that serve brand-neutral customers who prefer personal service and support from an independent agent. In 2019, the Encompass brand represented 2.9% of the Allstate Protection segment's written premium. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Underwriting results

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written	$ 1,020	$ 1,016	$ 1,035
Premiums earned	$ 1,018	$ 1,023	$ 1,090
Other revenue	5	5	6
Claims and claims expense	(689)	(668)	(786)
Amortization of DAC	(192)	(190)	(201)
Other costs and expenses	(131)	(145)	(130)
Restructuring and related charges	(4)	(7)	(5)
Underwriting income (loss)	**$ 7**	**$ 18**	**$ (26)**
Catastrophe losses	$ 115	$ 102	$ 193
Underwriting income (loss) by line of business			
Auto	$ 8	$ 14	$ 9
Homeowners	2	1	(45)
Other personal lines	(3)	3	10
Underwriting income (loss)	**$ 7**	**$ 18**	**$ (26)**

Changes in underwriting results from prior year by component (1)

($ in millions)	For the years ended December 31, 2019	2018
Underwriting income (loss) - prior year	$ 18	$ (26)
Changes in underwriting income (loss) from:		
Increase (decrease) premiums earned	(5)	(67)
Increase (decrease) other revenue	—	(1)
(Increase) decrease incurred claims and claims expense ("losses"):		
Incurred losses, excluding catastrophe losses and reserve reestimates	9	17
Catastrophe losses, excluding reserve reestimates	(16)	104
Catastrophes reserve reestimates	3	(13)
Non-catastrophe reserve reestimates	(17)	10
Losses subtotal	(21)	118
(Increase) decrease expenses	15	(6)
Underwriting income	**$ 7**	**$ 18**

(1) The 2019 column presents changes in 2019 compared to 2018. The 2018 column presents changes in 2018 compared to 2017.

Underwriting income decreased 61.1% or $11 million in 2019 compared to 2018, primarily due to higher catastrophe losses and lower favorable non-catastrophe prior year reestimates, partially offset by lower operating expenses.

Premiums written and earned by line of business

($ in millions)	For the years ended December 31, 2019	2018	2017
Premiums written			
Auto	$ 540	$ 537	$ 542
Homeowners	401	398	406
Other personal lines	79	81	87
Total	**$ 1,020**	**$ 1,016**	**$ 1,035**
Premiums earned			
Auto	$ 539	$ 537	$ 566
Homeowners	399	402	431
Other personal lines	80	84	93
Total	**$ 1,018**	**$ 1,023**	**$ 1,090**

Auto premium measures and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	493	502	530	(1.8)%	(5.3)%
New issued applications (thousands)	82	76	52	7.9 %	46.2 %
Average premium	$ 1,134	$ 1,118	$ 1,079	1.4 %	3.6 %
Renewal ratio (%) (1)	78.1	74.9	73.4	3.2	1.5
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 8	$ 13	$ 37	$ (5)	$ (24)
# of locations (2)	17	17	27	—	(10)
Total brand (%)	1.5	2.4	6.2	(0.9)	(3.8)
Location specific (%)	4.1	4.8	7.8	(0.7)	(3.0)

(1) Encompass announced a plan to exit business in Massachusetts in the second quarter of 2017 and previously announced a plan to exit business in North Carolina in the first half of 2016, which impacted the renewal ratio. Excluding Massachusetts and North Carolina, the renewal ratios were 76.5 points in 2018 compared to 74.5 points in 2017.

(2) Encompass brand operates in 40 states and D.C.

Auto insurance premiums written increased 0.6% or $3 million in 2019 compared to 2018, primarily due to higher average premiums due to rate changes over the past 12 months, with the top 10 states representing approximately 70% of premiums written. PIF decreased 1.8% or 9 thousand in 2019 compared to 2018.

Homeowners premium measure and statistics

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
PIF (thousands)	234	239	254	(2.1)%	(5.9)%
New issued applications (thousands)	42	37	30	13.5 %	23.3 %
Average premium	$ 1,795	$ 1,724	$ 1,684	4.1 %	2.4 %
Renewal ratio (%) (1)	82.5	80.0	78.5	2.5	1.5
Approved rate changes:					
Impact of rate changes ($ in millions)	$ 38	$ 20	$ 23	$ 18	$ (3)
# of locations (2)	27	20	21	7	(1)
Total brand (%)	9.2	4.7	4.8	4.5	(0.1)
Location specific (%)	10.9	8.1	8.4	2.8	(0.3)

(1) Encompass announced a plan to exit business in Massachusetts in the second quarter of 2017 and previously announced a plan to exit business in North Carolina in the first half of 2016, which has impacted the renewal ratio. Excluding Massachusetts and North Carolina, the renewal ratios were 80.8 points in 2018 compared to 79.0 points in 2017.

(2) Encompass brand operates in 40 states and D.C.

Homeowners insurance premiums written increased 0.8% or $3 million in 2019 compared to 2018, primarily due to higher average premiums due to rate changes over the past 12 months, with the top 10 states representing approximately 70% of premiums written. PIF decreased 2.1% or 5 thousand in 2019 compared to 2018.

Combined ratios by line of business

	For the years ended December 31,								
	Loss ratio			Expense ratio (1)			Combined ratio		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	66.8	65.0	68.0	31.7	32.4	30.4	98.5	97.4	98.4
Homeowners	68.2	66.7	80.3	31.3	33.1	30.1	99.5	99.8	110.4
Other personal lines	71.3	60.7	59.1	32.5	35.7	30.1	103.8	96.4	89.2
Total	**67.7**	**65.3**	**72.1**	**31.6**	**32.9**	**30.3**	**99.3**	**98.2**	**102.4**

(1) Other revenue is deducted from operating costs and expenses in the expense ratio calculation.

Loss ratios by line of business

	For the years ended December 31,											
	Loss ratio			Effect of catastrophe losses			Effect of prior year reserve reestimates			Effect of catastrophe losses included in prior year reserve reestimates		
	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017
Auto	66.8	65.0	68.0	1.9	1.1	2.1	(1.9)	(1.9)	(1.1)	—	(0.2)	(0.2)
Homeowners	68.2	66.7	80.3	25.1	22.1	40.1	3.7	3.3	0.5	2.5	3.0	—
Other personal lines	71.3	60.7	59.1	6.3	8.3	8.6	(2.5)	(16.7)	(10.8)	(1.2)	1.2	—
Total	**67.7**	**65.3**	**72.1**	**11.3**	**10.0**	**17.7**	**0.3**	**(1.1)**	**(1.3)**	**0.9**	**1.2**	**(0.1)**

Auto loss ratio increased 1.8 points in 2019 compared to 2018, primarily due to increased claim severity and higher catastrophe losses, partially offset by favorable claim frequency.

Homeowners loss ratio increased 1.5 points in 2019 compared to 2018, primarily due to higher catastrophe losses and unfavorable prior year reserve reestimates, partially offset by lower non-catastrophe losses driven by favorable claim frequency.

Impact of specific costs and expenses on the expense ratio

	For the years ended December 31,		
	2019	2018	2017
Amortization of DAC	18.8	18.5	18.3
Advertising expense	0.2	0.2	0.2
Other costs and expenses	12.2	13.5	11.3
Restructuring and related charges	0.4	0.7	0.5
Total expense ratio	**31.6**	**32.9**	**30.3**

Expense ratio decreased 1.3 points in 2019 compared to 2018, primarily due to lower technology and employee-related costs.

Discontinued Lines and Coverages Segment

The Discontinued Lines and Coverages segment includes results from property and casualty insurance coverage that primarily relates to policies written during the 1960s through the mid-1980s. Our exposure to asbestos, environmental and other discontinued lines claims arises principally from direct excess commercial insurance, assumed reinsurance coverage, direct primary commercial insurance and other businesses in run-off. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Underwriting results

($ in millions)	For the years ended December 31, 2019	2018	2017
Claims and claims expense (1)	$ (105)	$ (87)	$ (96)
Operating costs and expenses	(3)	(3)	(3)
Underwriting loss	**$ (108)**	**$ (90)**	**$ (99)**

(1) The cost of administering claims settlements totaled $11 million for all periods presented.

Underwriting losses in 2019 primarily related to our annual reserve review using established industry and actuarial best practices. The annual review resulted in unfavorable reestimates of $95 million, including $28 million for asbestos exposures, primarily related to new reported information and settlement agreements, including bankruptcy proceedings; $36 million for environmental exposures primarily related to the reporting of additional clean-up sites; $37 million for other exposures based on new reported information, partially offset by a $6 million decrease in the allowance for future uncollectible reinsurance.

Underwriting losses in 2018 primarily related to our annual reserve review, which resulted in unfavorable reestimates of $76 million, including $44 million for asbestos exposures, $20 million for environmental exposures and $13 million for other exposures, partially offset by a $1 million decrease in the allowance for future uncollectible reinsurance.

Reserves for asbestos, environmental and other discontinued lines claims before and after the effects of reinsurance

($ in millions)	December 31, 2019	December 31, 2018
Asbestos claims		
Gross reserves	$ 1,172	$ 1,266
Reinsurance	(362)	(400)
Net reserves	810	866
Environmental claims		
Gross reserves	219	209
Reinsurance	(40)	(39)
Net reserves	179	170
Other discontinued lines		
Gross reserves	427	389
Reinsurance	(51)	(34)
Net reserves	376	355
Total		
Gross reserves	1,818	1,864
Reinsurance	(453)	(473)
Net reserves	**$ 1,365**	**$ 1,391**

Reserves by type of exposure before and after the effects of reinsurance		
($ in millions)	**December 31, 2019**	**December 31, 2018**
Direct excess commercial insurance		
Gross reserves (1)	$ 948	$ 973
Reinsurance (2)	(332)	(355)
Net reserves	616	618
Assumed reinsurance coverage		
Gross reserves (3)	606	625
Reinsurance (4)	(53)	(53)
Net reserves	553	572
Direct primary commercial insurance		
Gross reserves (5)	169	171
Reinsurance (6)	(54)	(48)
Net reserves	115	123
Other run-off business		
Gross reserves	15	19
Reinsurance	(13)	(16)
Net reserves	2	3
Unallocated loss adjustment expenses		
Gross reserves	80	76
Reinsurance	(1)	(1)
Net reserves	79	75
Total		
Gross reserves	1,818	1,864
Reinsurance	(453)	(473)
Net reserves	**$ 1,365**	**$ 1,391**

(1) Gross reserves as of December 31, 2019 comprised 68% case reserves and 32% incurred but not reported ("IBNR") reserves. Approximately 72% of the total gross case reserves are subject to settlement agreements. In 2019, total gross payments from case reserves were $122 million with approximately 83% attributable to settlements. Reserves as of December 31, 2018, comprised 67% case reserves and 33% IBNR reserves.

(2) Ceded reserves as of December 31, 2019 comprised 78% case reserves and 22% IBNR reserves. Approximately 79% of the total ceded case reserves are subject to settlement agreements. In 2019, reinsurance billings of ceded case reserves were $53 million with approximately 87% attributable to settlements. Reserves as of December 31, 2018, comprised 78% case reserves and 22% IBNR reserves.

(3) Gross reserves as of December 31, 2019 comprised 34% case reserves and 66% IBNR reserves. In 2019, total gross payments from case reserves were $43 million. Reserves as of December 31, 2018, comprised 34% case reserves and 66% IBNR reserves.

(4) Ceded reserves as of December 31, 2019 comprised 35% case reserves and 65% IBNR reserves. In 2019, reinsurance billings of ceded case reserves were $3 million. Reserves as of December 31, 2018, comprised 37% case reserves and 63% IBNR reserves.

(5) Gross reserves as of December 31, 2019 comprised 56% case reserves and 44% IBNR reserves. In 2019, total gross payments from case reserves were $15 million. Reserves as of December 31, 2018, comprised 58% case reserves and 42% IBNR reserves.

(6) Ceded reserves as of December 31, 2019 comprised 78% case reserves and 22% IBNR reserves. In 2019, reinsurance billings of ceded case reserves were $2 million. Reserves as of December 31, 2018, comprised 78% case reserves and 22% IBNR reserves.

Total net reserves as of December 31, 2019, included $660 million or 48% of estimated IBNR reserves compared to $693 million or 50% of estimated IBNR reserves as of December 31, 2018.

Total gross payments were $183 million and $156 million for2019 and 2018, respectively, primarily related to payments on settlement agreements reached with several insureds on large claims, mainly asbestos related losses, where the scope of coverages has been agreed upon.

The claims associated with these settlement agreements are expected to be substantially paid out over the next several years as qualified claims are submitted by these insureds. Reinsurance collections were $49 million and $62 million for 2019 and 2018, respectively.

See the Claims and Claims Expense Reserves section of this Item for a more detailed discussion.

Service Businesses Segment

Service Businesses comprise Allstate Protection Plans, Allstate Dealer Services, Allstate Roadside Services, Arity and Allstate Identity Protection In 2019, Service Businesses represented 3.7% of total revenue, 72.6% of total PIF and 1.1% of total adjusted net income. We offer consumer product protection plans, finance and insurance products (including vehicle service contracts, guaranteed asset protection waivers, road hazard tire and wheel and paintless dent repair protection), roadside assistance, device and mobile data collection services and analytic solutions using automotive telematics information and identity protection. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Summarized financial information

($ in millions)	2019	2018	2017
	For the years ended December 31,		
Premiums written	$ 1,535	$ 1,431	$ 1,094
Revenues			
Premiums	$ 1,233	$ 1,098	$ 867
Other revenue	188	82	66
Intersegment insurance premiums and service fees (1)	154	122	110
Net investment income	42	27	16
Realized capital gains and losses	32	(11)	—
Total revenues	**1,649**	**1,318**	**1,059**
Costs and expenses			
Claims and claims expense	(363)	(350)	(369)
Amortization of DAC	(543)	(463)	(296)
Operating costs and expenses	(661)	(505)	(460)
Restructuring and related charges (2)	—	(4)	(13)
Amortization of purchased intangibles	(122)	(94)	(92)
Impairment of purchased intangibles	(55)	—	—
Total costs and expenses	**(1,744)**	**(1,416)**	**(1,230)**
Income tax benefit	18	19	194
Net (loss) income applicable to common shareholders	**$ (77)**	**$ (79)**	**$ 23**
Adjusted net income (loss)	**$ 38**	**$ 8**	**$ (54)**
Realized capital gains and losses, after-tax	25	(9)	—
Amortization of purchased intangibles, after-tax	(97)	(74)	(60)
Impairment of purchased intangibles, after-tax	(43)	—	—
Tax Legislation (expense) benefit	—	(4)	137
Net (loss) income applicable to common shareholders	**$ (77)**	**$ (79)**	**$ 23**
Allstate Protection Plans (3)	$ 60	$ 23	$ (22)
Allstate Dealer Services	26	15	(1)
Allstate Roadside Services	(15)	(20)	(17)
Arity	(7)	(11)	(14)
Allstate Identity Protection (4)	(26)	1	—
Adjusted net income (loss)	**$ 38**	**$ 8**	**$ (54)**
Allstate Protection Plans	99,632	68,588	38,719
Allstate Dealer Services	4,205	4,338	4,088
Allstate Roadside Services	599	663	699
Allstate Identity Protection	1,511	1,040	—
Policies in force as of December 31 (in thousands)	**105,947**	**74,629**	**43,506**

(1) Primarily related to Arity and Allstate Roadside Services and are eliminated in our consolidated financial statements.

(2) 2018 related to organizational changes at Allstate Roadside Services and 2017 related to a one-time vendor contract termination.

(3) SquareTrade, which sells consumer protection plans using the Allstate Protection Plans name in the U.S., acquired PlumChoice on November 30, 2018 and iCracked on February 12, 2019.

(4) InfoArmor, which sells identity protection plans using the Allstate Identity Protection name was acquired on October 5, 2018.

Net loss applicable to common shareholders decreased 2.5% or $2 million in 2019 compared to 2018. 2019 results included a $55 million intangible asset impairment related to the change in trade name from SquareTrade to Allstate Protection Plans.

Adjusted net income increased $30 million in 2019 compared to 2018. The improvement in 2019 was primarily due to growth of Allstate Protection Plans, favorable loss experience of both Allstate Protection Plans and Allstate Dealer Services, partially offset by higher operating expenses related to investing in growth and developing new products and distribution channels for Allstate Protection Plans and Allstate Identity Protection.

Total revenues increased 25.1% or $331 million in 2019 compared to 2018, primarily due to Allstate Protection Plan's growth through its U.S. retail and international channels, higher Allstate Identity Protection revenue due to its acquisition in fourth quarter 2018 and increased premiums earned on Allstate Dealer Services' vehicle service contracts.

Premiums written increased 7.3% or $104 million in 2019 compared to 2018, primarily due to growth at Allstate Protection Plans and increased premiums written by Allstate Dealer Services, partially offset by declines in Allstate Roadside Services wholesale and retail business.

PIF increased 42.0% or 31 million in 2019 compared to 2018 due to continued growth at Allstate Protection Plans.

Intersegment premiums and service fees increased 26.2% or $32 million in 2019 compared to 2018, primarily related to increased auto connections and device sales through Arity's device and mobile data collection services and analytic solutions.

Other revenue increased $106 million in 2019 compared to 2018, primarily due to the acquisition of Allstate Identity Protection and Allstate Protection Plans' acquisitions of PlumChoice and iCracked. All of the revenue from these acquired businesses is reported as other revenue. See Note 3 of the consolidated financial statements for further details.

Claims and claims expense increased 3.7% or $13 million in 2019 compared to 2018, primarily due to higher loss costs at Allstate Protection Plans driven by growth of the business, partially offset by improved loss experience at both Allstate Protection Plans and Allstate Dealer Services.

Amortization of DAC increased 17.3% or $80 million in 2019 compared to 2018. The increase is in line with the growth experienced at Allstate Protection Plans and Allstate Dealer Services.

Operating costs and expenses increased 30.9% or $156 million in 2019 compared to 2018, primarily due to the acquisitions of Allstate Identity Protection, PlumChoice and iCracked, product development costs, investments in growing Allstate Protection Plans and expanding Allstate Identity Protection.

Amortization and impairment of purchased intangibles relates to the acquisitions of Allstate Protection Plans in 2017 and Allstate Identity Protection in 2018. We recognized $486 million and $257 million of intangible assets subject to amortization for Allstate Protection Plans and Allstate Identity Protection, respectively. We recorded amortization expense of $122 million in 2019 compared to $94 million in 2018.

During 2019, we made the decision to phase-out the use of the SquareTrade trade name in the United States and sell consumer protection plans under the Allstate Protection Plans name. The SquareTrade trade name will continue to be used outside of the United States. This resulted in a $55 million impairment in 2019 of the intangible asset related to the trade name established in 2017 when SquareTrade was acquired.

Claims and Claims Expense Reserves

Underwriting results are significantly influenced by estimates of claims and claims expense reserves. For a description of our reserve process, see Note 8 of the consolidated financial statements. Further, for a description of our reserving policies and the potential variability in our reserve estimates, see the Application of Critical Accounting Estimates section of the MD&A. These reserves are an estimate of amounts necessary to settle all outstanding claims, including IBNR claims, as of the reporting date.

The facts and circumstances leading to reestimates of reserves relate to changes in claim activity and revisions to the development factors used to predict how losses are likely to develop from the end of a reporting period until all claims have been paid. Reestimates occur when actual losses differ from those predicted by the estimated development factors used in prior reserve estimates.

We believe the net loss reserves exposures are appropriately established based on available facts, technology, laws and regulations.

Total reserves, net of recoverables ("net reserves"), as of December 31, by line of business

($ in millions)	2019	2018	2017
Allstate brand	$ 17,809	$ 17,272	$ 16,826
Esurance brand	941	862	777
Encompass brand	646	691	758
Total Allstate Protection	19,396	18,825	18,361
Discontinued Lines and Coverages	1,365	1,391	1,407
Total Property-Liability	20,761	20,216	19,768
Service Businesses	39	52	86
Total net reserves	**$ 20,800**	**$ 20,268**	**$ 19,854**

The year-end 2019 gross reserves of $27.71 billion for insurance claims and claims expense were $8.34 billion more than the net reserve balance of $19.37 billion recorded on the basis of statutory accounting practices for reports provided to state regulatory authorities. The principal differences are recoverables from third parties totaling $6.91 billion, including $5.46 billion of indemnification recoverables related to the Michigan Catastrophic Claims Association ("MCCA"), that reduce reserves for statutory reporting, but are recorded as assets for GAAP reporting, and a liability for the reserves of the Canadian subsidiaries for $1.33 billion that are a component of our consolidated reserves, but not included in our U.S. statutory reserves. The tables below show net reserves representing the estimated cost of outstanding claims as they were recorded at the beginning of years 2019, 2018 and 2017, and the effect of reestimates in each year.

Net reserves

	January 1 reserves		
($ in millions)	2019	2018	2017
Allstate brand	$ 17,272	$ 16,826	$ 16,108
Esurance brand	862	777	740
Encompass brand	691	758	749
Total Allstate Protection	18,825	18,361	17,597
Discontinued Lines and Coverages	1,391	1,407	1,445
Total Property-Liability	20,216	19,768	19,042
Service Businesses	52	86	24
Total net reserves	**$ 20,268**	**$ 19,854**	**$ 19,066**

Impact of reserve reestimates by brand on combined ratio and net income applicable to common shareholders (1) (2)

($ in millions, except ratios)	2019 Reserve reestimate	2019 Effect on combined ratio	2018 Reserve reestimate	2018 Effect on combined ratio	2017 Reserve reestimate	2017 Effect on combined ratio
Allstate brand	$ (239)	(0.7)	$ (332)	(1.0)	$ (585)	(1.8)
Esurance brand	3	—	3	—	(2)	—
Encompass brand	3	—	(11)	—	(14)	(0.1)
Total Allstate Protection	(233)	(0.7)	(340)	(1.0)	(601)	(1.9)
Discontinued Lines and Coverages	105	0.4	87	0.3	96	0.3
Total Property-Liability	(128)	(0.3)	(253)	(0.7)	(505)	(1.6)
Service Businesses	(2)	—	(2)	—	2	—
Total	**$ (130)**		**$ (255)**		**$ (503)**	
Reserve reestimates, after-tax	$ (103)		$ (201)		$ (327)	
Consolidated net income applicable to common shareholders	$ 4,678		$ 2,012		$ 3,438	
Reserve reestimates as a % impact on consolidated net income applicable to common shareholders	2.2%		10.0%		9.5%	
Property-Liability prior year reserve reestimates included in catastrophe losses	$ 48		$ 25		$ (18)	

(1) Favorable reserve reestimates are shown in parentheses.

(2) Ratios are calculated using property and casualty premiums earned.

The following tables reflect the accident years to which the reestimates shown above are applicable. Favorable reserve reestimates are shown in parentheses.

2019 prior year reserve reestimates

($ in millions)	2014 & prior	2015	2016	2017	2018	Total
Allstate brand	$ (133)	$ (44)	$ (25)	$ (96)	$ 59	$ (239)
Esurance brand	(5)	(2)	(1)	(3)	14	3
Encompass brand	(2)	2	(2)	4	1	3
Total Allstate Protection	(140)	(44)	(28)	(95)	74	(233)
Discontinued Lines and Coverages	105	—	—	—	—	105
Total Property-Liability	(35)	(44)	(28)	(95)	74	(128)
Service Businesses	—	—	—	—	(2)	(2)
Total	**$ (35)**	**$ (44)**	**$ (28)**	**$ (95)**	**$ 72**	**$ (130)**

2018 prior year reserve reestimates

($ in millions)	2013 & prior	2014	2015	2016	2017	Total
Allstate brand	$ (61)	$ (50)	$ (25)	$ (146)	$ (50)	$ (332)
Esurance brand	(5)	(6)	9	13	(8)	3
Encompass brand	(12)	(11)	(15)	1	26	(11)
Total Allstate Protection	(78)	(67)	(31)	(132)	(32)	(340)
Discontinued Lines and Coverages	87	—	—	—	—	87
Total Property-Liability	9	(67)	(31)	(132)	(32)	(253)
Service Businesses	—	—	—	—	(2)	(2)
Total	**$ 9**	**$ (67)**	**$ (31)**	**$ (132)**	**$ (34)**	**$ (255)**

2017 prior year reserve reestimates

($ in millions)	2012 & prior	2013	2014	2015	2016	Total
Allstate brand	$ 3	$ (99)	$ (103)	$ (121)	$ (265)	$ (585)
Esurance brand	(3)	(1)	(12)	1	13	(2)
Encompass brand	(6)	(1)	(4)	(1)	(2)	(14)
Total Allstate Protection	(6)	(101)	(119)	(121)	(254)	(601)
Discontinued Lines and Coverages	96	—	—	—	—	96
Total Property-Liability	90	(101)	(119)	(121)	(254)	(505)
Service Businesses	—	—	—	—	2	2
Total	**$ 90**	**$ (101)**	**$ (119)**	**$ (121)**	**$ (252)**	**$ (503)**

Allstate Protection

The tables below show Allstate Protection net reserves representing the estimated cost of outstanding claims as they were recorded at the beginning of years 2019, 2018, and 2017, and the effect of reestimates in each year.

Net reserves by line

	January 1 reserves		
($ in millions)	**2019**	**2018**	**2017**
Auto	$ 14,378	$ 14,051	$ 13,530
Homeowners	2,157	2,205	1,990
Other personal lines	1,489	1,489	1,456
Commercial lines	801	616	621
Total Allstate Protection	**$ 18,825**	**$ 18,361**	**$ 17,597**

Impact of reserve reestimates by line on combined ratio and underwriting income

	2019		2018		2017	
($ in millions, except ratios)	**Reserve reestimate**	**Effect on combined ratio**	**Reserve reestimate**	**Effect on combined ratio**	**Reserve reestimate**	**Effect on combined ratio**
Auto	$ (323)	(0.9)	$ (455)	(1.3)	$ (490)	(1.6)
Homeowners	65	0.2	14	—	(131)	(0.4)
Other personal lines	8	—	(7)	—	1	—
Commercial lines	17	—	108	0.3	19	0.1
Total Allstate Protection	**$ (233)**	**(0.7)**	**$ (340)**	**(1.0)**	**$ (601)**	**(1.9)**
Underwriting income	$ 2,912		$ 2,343		$ 2,304	
Reserve reestimates as a % impact on underwriting income	8.0%		14.5%		26.1%	

Prior year reserve reestimates are developed based on factors that are calculated quarterly and periodically throughout the year for data elements such as claims reported and settled, paid losses and paid losses combined with case reserves. We use significant judgment and these data elements to make revisions to loss development factors that predict how losses are likely to develop from the end of a reporting period until all claims have been paid. When actual development of these data elements is different than the historical development pattern used in a prior period reserve estimate, reserves are revised as actuarial studies validate new trends based on the indications of updated development factor calculations. On-going claims organizational and process changes that are occurring are considered within our estimation process.

Favorable reserve reestimates for auto in2019 primarily related to continued favorable personal lines auto injury coverage development, offset by strengthening in our homeowners lines. Auto liability claims process changes implemented in prior years, including a program requiring enhanced documentation of injuries and related medical treatments, have resulted in favorable severity trends compared to those originally estimated as we continue to develop greater experience in settling claims under these programs. The impact of these program changes continues to moderate. Unfavorable results for homeowners lines in2019 were primarily due to catastrophe development being higher than anticipated in previous estimates.

Favorable reserve reestimates for auto in 2018primarily related to continued favorable personal lines auto injury coverage development, offset by strengthening in our commercial lines and personal injury protection ("PIP") coverage, including an unfavorable ruling against the insurance industry related to Florida PIP. Unfavorable results for commercial lines in 2018 were primarily due to non-catastrophe auto loss development being higher than anticipated in previous estimates.

Estimating the ultimate cost of claims and claims expenses is an inherently uncertain and complex process involving a high degree of judgment and is subject to the evaluation of numerous variables.

Discontinued Lines and Coverages

We conduct an annual review in the third quarter of each year to evaluate and establish asbestos, environmental and other discontinued lines reserves. Reserves are recorded in the reporting period in which they are determined. Using established industry and actuarial best practices and assuming no change in the regulatory or economic environment, this detailed and comprehensive methodology determines reserves based on assessments of the characteristics of exposure (e.g. claim activity, potential liability, jurisdiction, products versus non-products exposure) presented by policyholders.

Discontinued Lines and Coverages reserve reestimates

	2019		2018		2017	
($ in millions)	**January 1 reserves**	**Reserve reestimate**	**January 1 reserves**	**Reserve reestimate**	**January 1 reserves**	**Reserve reestimate**
Asbestos claims	$ 866	$ 28	$ 884	$ 44	$ 912	$ 61
Environmental claims	170	36	166	20	179	10
Other discontinued lines	355	41	357	23	354	25
Total	**$ 1,391**	**$ 105**	**$ 1,407**	**$ 87**	**$ 1,445**	**$ 96**
Underwriting loss		$ (108)		$ (90)		$ (99)

Reserve additions for asbestos in 2019 were primarily related to new reported information and settlement agreements, including bankruptcy proceedings. Reserve additions for asbestos in 2018 were primarily related to new reported information, changes in our projections of reported claims and settlement agreements, including bankruptcy proceedings.

Reserve additions for environmental in 2019 were primarily related to the reporting of additional clean-up sites. Reserve additions for environmental in 2018 were primarily related to expected greater loss activity for future claims.

Reserves and claim activity before (Gross) and after (Net) the effects of reinsurance

	2019		2018		2017	
($ in millions, except ratios)	**Gross**	**Net**	**Gross**	**Net**	**Gross**	**Net**
Asbestos claims						
Beginning reserves	$ 1,266	$ 866	$ 1,296	$ 884	$ 1,356	$ 912
Incurred claims and claims expense	39	28	89	44	79	61
Claims and claims expense paid	(133)	(84)	(119)	(62)	(139)	(89)
Ending reserves	**$ 1,172**	**$ 810**	**$ 1,266**	**$ 866**	**$ 1,296**	**$ 884**
Annual survival ratio	8.8	9.6	10.6	14.0	9.3	9.9
3-year survival ratio	9.0	10.3	9.1	9.7	9.2	8.9
Environmental claims						
Beginning reserves	$ 209	$ 170	$ 199	$ 166	$ 219	$ 179
Incurred claims and claims expense	42	36	30	20	9	10
Claims and claims expense paid	(32)	(27)	(20)	(16)	(29)	(23)
Ending reserves	**$ 219**	**$ 179**	**$ 209**	**$ 170**	**$ 199**	**$ 166**
Annual survival ratio	6.8	6.6	10.5	10.6	6.9	7.2
3-year survival ratio	8.1	8.1	8.4	8.2	6.9	6.9
Combined environmental and asbestos claims						
Annual survival ratio	8.4	8.9	10.6	13.3	8.9	9.4
3-year survival ratio	8.8	9.9	9.0	9.5	8.8	8.5
Percentage of IBNR in ending reserves		48.8%		49.6%		52.7%

The survival ratio is calculated by taking our ending reserves divided by payments made during the year. This is a commonly used but simplistic and imprecise approach to measuring the adequacy of asbestos and environmental reserve levels. Many factors, such as mix of business, level of coverage provided and settlement procedures have significant impacts on the amount of environmental and asbestos claims and claims expense reserves, claim payments and the resultant ratio. As payments result in corresponding reserve reductions, survival ratios can be expected to vary over time. In 2019 and 2018, the asbestos and environmental net 3-year survival ratio increased due to lower claim payments associated with settlement agreements.

Net asbestos reserves by type of exposure and total reserve additions

($ in millions)	December 31, 2019 Active policy-holders	Net reserves	% of reserves	December 31, 2018 Active policy-holders	Net reserves	% of reserves	December 31, 2017 Active policy-holders	Net reserves	% of reserves
Direct policyholders:									
Primary	58	$ 12	1%	51	$ 12	1%	48	$ 10	1%
Excess	299	292	36	295	309	36	296	308	35
Total case reserves	**357**	**304**	**37**	**346**	**321**	**37**	**344**	**318**	**36**
Assumed reinsurance		127	16		138	16		117	13
IBNR		379	47		407	47		449	51
Total net reserves		**$ 810**	**100%**		**$ 866**	**100%**		**$ 884**	**100%**
Total reserve additions		$ 28			$ 44			$ 61	

At December 31, 2019, there were 357 active policyholders with open asbestos claims.

- Active policyholders increased by 11 in 2019, including 16 policyholders reporting asbestos claims for the first time and the closing of all claims for 5 policyholders.
- Active policyholders increased by 2 in 2018, including 13 policyholders reporting asbestos claims for the first time and the closing of all claims for 11 policyholders.

IBNR net reserves decreased $28 million as of December 31, 2019 compared to December 31, 2018. IBNR provides for reserve development of known claims and future reporting of additional unknown claims from current policyholders and ceding companies.

Claims counts for asbestos and environmental exposures

Number of claims	For the years ended December 31, 2019	2018	2017
Asbestos			
Pending, beginning of year	6,440	6,659	6,883
New	332	427	406
Closed	(551)	(646)	(630)
Pending, end of year	**6,221**	**6,440**	**6,659**
Closed without payment	392	446	377
Environmental			
Pending, beginning of year	3,229	3,351	3,399
New	273	335	375
Closed	(323)	(457)	(423)
Pending, end of year	**3,179**	**3,229**	**3,351**
Closed without payment	197	320	299

Reinsurance and indemnification programs We utilize reinsurance to reduce exposure to catastrophe risk and manage capital, and to support the required statutory surplus and the insurance financial strength ratings of certain subsidiaries such as Castle Key Insurance Company ("CKIC") and Allstate New Jersey Insurance Company ("ANJ"). We purchase significant reinsurance to manage our aggregate countrywide exposure to an acceptable level. The price and terms of reinsurance and the credit quality of the reinsurer are considered in the purchase process, along with whether the price can be appropriately reflected in the costs that are considered in setting future rates charged to policyholders. We have also purchased reinsurance to mitigate exposures in our long-tail liability lines, including environmental, asbestos and other discontinued lines as well as our commercial lines, including shared economy. We also participate in various indemnification mechanisms, including state-based industry pool or facility programs mandating participation by insurers offering certain coverage in their state and the federal government National Flood Insurance Program ("NFIP"). See Note 10 of the consolidated financial statements for additional details on these programs.

Reinsurance and indemnification recoverables, net of the allowance established for uncollectible amounts

($ in millions)	S&P financial strength rating (1)	Reinsurance or indemnification recoverable on paid and unpaid claims, net 2019	2018
Indemnification programs			
State-based industry pool or facility programs			
MCCA (2)	N/A	$ 5,499	$ 5,400
New Jersey Property-Liability Insurance Guaranty Association ("PLIGA")	N/A	446	461
North Carolina Reinsurance Facility	N/A	78	86
Florida Hurricane Catastrophe Fund ("FHCF")	N/A	52	104
Other		9	9
Federal Government - NFIP	N/A	25	31
Subtotal		6,109	6,091
Catastrophe reinsurance recoverables			
Renaissance Reinsurance Limited	A+	27	65
Swiss Reinsurance America Corporation	AA-	15	39
Everest Reinsurance Company	A+	15	33
Other		179	416
Subtotal		236	553
Other reinsurance recoverables (3)			
Lloyd's of London ("Lloyd's") (4)	A+	158	165
Aleka Insurance Inc.	N/A	115	37
Westport Insurance Corporation	AA-	55	60
TIG Insurance Company	N/A	38	35
Other, including allowance for future uncollectible recoverables		293	307
Subtotal		659	604
Total Property-Liability		**7,004**	**7,248**
Service Businesses		**20**	**18**
Total		**$ 7,024**	**$ 7,266**

(1) N/A reflects no S&P Global Ratings ("S&P") rating available.

(2) As of December 31, 2019 and 2018, MCCA includes $39 million and $30 million of reinsurance recoverable on paid claims, respectively, and $5.46 billion and $5.37 billion of reinsurance recoverable on unpaid claims, respectively.

(3) Other reinsurance recoverables primarily relate to asbestos, environmental and other liability exposures as well as commercial lines, including shared economy.

(4) As of December 31, 2019, case reserves for Lloyd's were 68% of the reinsurance recoverable for unpaid claims.

Reinsurance and indemnification recoverables include an estimate of the amount of insurance claims and claims expense reserves that are ceded under the terms of the agreements, including incurred but not reported unpaid losses. We calculate our ceded reinsurance and indemnification estimates based on the terms of each applicable agreement, including an estimate of how IBNR losses will ultimately be ceded under the agreement. We also consider other limitations and coverage exclusions under our agreements. Accordingly, our estimate of recoverables is subject to similar risks and uncertainties as our estimate of reserves claims and claims expense. We believe the recoverables are appropriately established; however, as our underlying reserves continue to develop, the amount ultimately recoverable may vary from amounts currently recorded. We regularly evaluate the reinsurers and the respective amounts of our reinsurance recoverables, and a provision for uncollectible reinsurance recoverables is recorded, if needed. The establishment of reinsurance recoverables and the related allowance for uncollectible reinsurance is also an inherently uncertain process involving estimates. Changes in estimates could result in additional changes to the Consolidated Statements of Operations.

Indemnification recoverables are considered collectible based on the industry pool and facility enabling legislation and the Company has not had any credit losses related to these programs and we do not anticipate losses in the foreseeable future. We also have not experienced credit losses on our catastrophe reinsurance programs, which include highly rated reinsurers.

The allowance for uncollectible reinsurance relates to other reinsurance programs primarily related to our Discontinued Lines and Coverages segment. This allowance was $60 million and $65 million as of December 31, 2019 and 2018, respectively. The allowance is based upon our ongoing review of amounts outstanding, length of collection periods, changes in reinsurer credit standing, and other relevant factors. In addition, in the ordinary course of business, we may become involved in coverage disputes with certain of our reinsurers that may ultimately result in lawsuits and arbitrations brought by or against such reinsurers to determine the parties' rights and obligations under the various reinsurance agreements. We employ dedicated specialists to manage reinsurance collections and disputes. We also consider recent developments in commutation activity between reinsurers and cedents, and recent trends in arbitration and litigation outcomes in disputes between cedents and reinsurers in seeking to maximize our reinsurance recoveries.

Adverse developments in the insurance industry have led to a decline in the financial strength of some of our reinsurance carriers, causing amounts recoverable from them and future claims ceded to them to be considered a higher risk. There has also been consolidation activity in the industry, which causes reinsurance risk across the industry to be concentrated among fewer companies.

For further details related to our reinsurance and indemnification recoverables, see the Regulation section in Part I and Note 10 of the consolidated financial statements.

Effects of reinsurance ceded and indemnification programs on our premiums earned and claims and claims expense

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Allstate Protection - Premiums			
Indemnification programs			
State-based industry pool or facility programs			
MCCA	$ 89	$ 77	$ 73
PLIGA	8	9	9
FHCF	9	10	11
Other	85	90	108
Federal Government - NFIP	258	258	263
Catastrophe reinsurance	377	344	344
Other reinsurance programs	121	54	—
Total Allstate Protection	**947**	**842**	**808**
Discontinued Lines and Coverages	—	—	—
Total Property-Liability	**947**	**842**	**808**
Service Businesses	**175**	**174**	**163**
Total effect on premiums earned	**$ 1,122**	**$ 1,016**	**$ 971**
Allstate Protection - Claims			
Indemnification programs			
State-based industry pool or facility programs			
MCCA	$ 208	$ 233	$ 410
PLIGA	3	(6)	3
FHCF	31	148	19
Other	67	90	89
Federal Government - NFIP	150	118	1,116
Catastrophe reinsurance	(166) (1)	604	46
Other reinsurance programs	94	40	—
Total Allstate Protection	**387**	**1,227**	**1,683**
Discontinued Lines and Coverages	39	57	35
Total Property-Liability	**426**	**1,284**	**1,718**
Service Businesses	**98**	**94**	**89**
Total effect on claims and claims expense	**$ 524**	**$ 1,378**	**$ 1,807**

(1) Decline reflects reestimates in claims and claims expense related to the 2018 Camp Fire.

In 2019 and 2018, ceded premiums earned increased primarily due to increased activity within our shared economy business and catastrophe reinsurance premium rates. In 2019, ceded claims and claims expenses decreased $854 million, primarily due to lower amounts related to the catastrophe reinsurance program, partially offset by increased activity with our shared economy business. In 2018, ceded claims and claims expenses decreased $429 million, primarily due to higher amounts related to NFIP in 2017.

Our claim reserve development experience is consistent with the MCCA's overall experience with reported and pending claims increasing in recent years. The MCCA has reported severity increasing with nearly 55% of reimbursements for attendant and residential care services. The Governor of Michigan signed new legislation on May 30, 2019 to reform Michigan's no-fault auto insurance system. For further discussion of these items, see Regulation, Indemnification Programs and Note 10 of the consolidated financial statements.

Michigan personal injury protection reserve and claim activity before and after the effects of MCCA recoverables

	For the years ended December 31,					
	2019		2018		2017	
($ in millions)	**Gross**	**Net**	**Gross**	**Net**	**Gross**	**Net**
Beginning reserves	$ 5,975	$ 605	$ 5,799	$ 565	$ 5,443	$ 522
Incurred claims and claims expense-current year	446	202	449	189	513	195
Incurred claims and claims expense-prior years	(16)	20	9	35	117	25
Claims and claims expense paid-current year (1)	(55)	(53)	(52)	(51)	(54)	(53)
Claims and claims expense paid-prior years (1)	(244)	(127)	(230)	(133)	(220)	(124)
Ending reserves (2)	**$ 6,106**	**$ 647**	**$ 5,975**	**$ 605**	**$ 5,799**	**$ 565**

(1) Paid claims and claims expenses reported in the table for the current and prior years, recovered from the MCCA totaled $119 million, $98 million and $97 million in2019, 2018 and 2017, respectively.

(2) Gross reserves for the year ended December 31, 2019, comprise 85% case reserves and 15% IBNR. Gross reserves for the year ended December 31, 2018, comprise 88% case reserves and 12% IBNR. Gross reserves for the year ended December 31, 2017 comprise 87% case reserves and 13% IBNR. The MCCA does not require member companies to report ultimate case reserves.

Pending MCCA claims differ from most personal lines insurance pending claims as other personal lines policies have coverage limits and incurred claims settle in shorter periods. Claims are considered pending as long as payments are continuing pursuant to an outstanding MCCA claim, which can be for a claimant's lifetime. Many of these injuries are catastrophic in nature, resulting in serious permanent disabilities that require attendant and residential care for periods that may span decades. A significant portion of the ultimate incurred claim reserves and the recoverables can be attributed to a small number of catastrophic claims that occurred more than five years ago and continue to pay lifetime benefits.

Pending, new and closed claims for Michigan personal injury protection exposures

	For the years ended December 31,		
Number of claims (1)	**2019**	**2018**	**2017**
Pending, beginning of year	4,812	4,983	5,388
New	7,807	7,858	8,494
Closed	(7,677)	(8,029)	(8,899)
Pending, end of year	**4,942**	**4,812**	**4,983**

(1) Total claims includes those covered and not covered by the MCCA indemnification.

As of December 31, 2019, approximately 1,600 of our pending claims have been reported to the MCCA, of which approximately 55% represents claims that occurred more than 5 years ago. There are 73 Allstate brand claims with reserves in excess of $15 million as of December 31, 2019, which comprise approximately 32% of the gross ending reserves in the table above. As a result, significant developments with a single claimant can result in volatility in prior year incurred claims.

Intercompany reinsurance We enter into certain intercompany insurance and reinsurance transactions in order to maintain underwriting control and manage insurance risk among various legal entities. These reinsurance agreements have been approved by the appropriate regulatory authorities. All significant intercompany transactions have been eliminated in consolidation.

Catastrophe reinsurance Our catastrophe reinsurance program is designed to address our exposure to catastrophes nationwide, utilizing our risk management methodology. Our program is designed to provide reinsurance protection for catastrophes resulting from multiple perils including hurricanes, windstorms, hail, tornadoes, earthquakes, wildfires, and fires following earthquakes. These reinsurance agreements are part of our catastrophe management strategy, which is intended to provide our shareholders an acceptable return on the risks assumed in our property business, while providing protection to our customers.

We anticipate completing the placement of our2020 nationwide catastrophe reinsurance program in the second quarter of 2020. We expect the program will be similar to our 2019 nationwide catastrophe reinsurance program but will evaluate opportunities to improve the economic terms and conditions. For further details of the existing 2019 program, see Note 10 of the consolidated financial statements.

Allstate Life Segment

Allstate Life offers traditional, interest-sensitive and variable life insurance. In 2019, Allstate Life represented 4.4% of total revenue, 1.3% of total PIF and 7.5% of total adjusted net income. Our target customers are middle market consumers with family and financial protection needs For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Summarized financial information

($ in millions)	For the years ended December 31, 2019	2018	2017
Revenues			
Premiums and contract charges	$ 1,343	$ 1,315	$ 1,280
Other revenue	125	119	114
Net investment income	514	505	489
Realized capital gains and losses	1	(14)	5
Total revenues	**1,983**	**1,925**	**1,888**
Costs and expenses			
Contract benefits	(855)	(809)	(765)
Interest credited to contractholder funds	(299)	(285)	(282)
Amortization of DAC	(173)	(132)	(134)
Operating costs and expenses	(354)	(361)	(342)
Restructuring and related charges	(2)	(3)	(2)
Total costs and expenses	**(1,683)**	**(1,590)**	**(1,525)**
Income tax (expense) benefit	(53)	(75)	226
Net income applicable to common shareholders	**$ 247**	**$ 260**	**$ 589**
Adjusted net income	**$ 261**	**$ 295**	**$ 259**
Realized capital gains and losses, after-tax	—	(11)	2
Valuation changes on embedded derivatives not hedged, after-tax	(9)	—	—
DAC and DSI amortization related to realized capital gains and losses and valuation changes on embedded derivatives not hedged, after-tax	(5)	(8)	(10)
Tax Legislation (expense) benefit	—	(16)	338
Net income applicable to common shareholders	**$ 247**	**$ 260**	**$ 589**
Reserve for life-contingent contract benefits as of December 31	$ 2,736	$ 2,677	$ 2,636
Contractholder funds as of December 31	$ 7,805	$ 7,656	$ 7,608
Policies in force as of December 31 by distribution channel (in thousands)			
Allstate agencies	1,816	1,831	1,822
Closed channels	107	114	123
Total	1,923	1,945	1,945

Net income applicable to common shareholders decreased 5.0% or $13 million in 2019 compared to 2018. 2018 results include a tax expense of $16 million related to the Tax Legislation.

Adjusted net income decreased 11.5% or $34 million in 2019 compared to 2018, primarily due to higher amortization of DAC related to our annual review of assumptions and higher contract benefits, partially offset by higher premiums and net investment income, and lower operating costs and expenses.

Premiums and contract charges increased 2.1% or $28 million in 2019 compared to 2018, primarily due to growth in traditional life insurance. Approximately 85% of Allstate Life's traditional life insurance premium relates to term life insurance products.

Premiums and contract charges by product

($ in millions)	For the years ended December 31, 2019	2018	2017
Traditional life insurance premiums	$ 630	$ 600	$ 568
Accident and health insurance premiums	2	2	2
Interest-sensitive life insurance contract charges (1)	711	713	710
Premiums and contract charges	**$ 1,343**	**$ 1,315**	**$ 1,280**

(1) Contract charges related to the cost of insurance totaled $499 million, $493 million and $487 million in 2019, 2018 and 2017, respectively.

Other revenue increased 5.0% or $6 million in 2019 compared to 2018, primarily due to higher gross dealer concessions earned on Allstate agencies' sales of non-proprietary fixed and variable annuities, and mutual funds.

Contract benefits increased 5.7% or $46 million in 2019 compared to 2018, primarily due to higher claim experience on interest-sensitive life insurance, partially offset by a favorable change associated with the annual review of assumptions.

Our annual review of assumptions in 2019 resulted in a $5 million decrease in reserves primarily for secondary guarantees on interest-sensitive life insurance due to utilizing more refined policy level information and assumptions. In 2018, the review resulted in a $1 million increase in reserves, primarily for secondary guarantees on interest-sensitive life insurance due to higher than anticipated policyholder persistency.

Benefit spread reflects our mortality and morbidity results using the difference between premiums and contract charges earned for the cost of insurance and contract benefits ("benefit spread"). Benefit spread decreased 3.5% to $276 million in 2019 compared to $286 million in 2018, primarily due to higher claim experience on interest-sensitive life insurance, partially offset by growth in traditional life insurance premiums.

Interest credited to contractholder funds increased 4.9% or $14 million in 2019 compared to 2018. Valuation changes on derivatives embedded in equity-indexed universal life contracts that are not hedged increased interest credited to contractholder funds by $11 million in 2019 compared to zero in 2018.

Investment spread reflects the difference between net investment income and interest credited to contractholder funds ("investment spread") and is used to analyze the impact of net investment income and interest credited to contractholder funds on net income.

Investment spread

($ in millions)	For the years ended December 31, 2019	2018	2017
Investment spread before valuation changes on embedded derivatives not hedged	$ 226	$ 220	$ 207
Valuation changes on derivatives embedded in equity-indexed universal life contracts that are not hedged	(11)	—	—
Total investment spread	**$ 215**	**$ 220**	**$ 207**

Investment spread before valuation changes on embedded derivatives not hedged increased 2.7% in 2019 compared to 2018, primarily due to higher net investment income, partially offset by higher credited interest.

Amortization of DAC increased 31.1% or $41 million in 2019 compared to 2018, primarily due to higher amortization acceleration for changes in assumptions, partially offset by lower gross profits on interest-sensitive life insurance.

Components of amortization of DAC

($ in millions)	For the years ended December 31, 2019	2018	2017
Amortization of DAC before amortization relating to realized capital gains and losses, valuation changes on embedded derivatives that are not hedged and changes in assumptions	$ 109	$ 117	$ 134
Amortization relating to realized capital gains and losses (1) and valuation changes on embedded derivatives that are not hedged	6	10	14
Amortization acceleration (deceleration) for changes in assumptions (''DAC unlocking'')	58	5	(14)
Total amortization of DAC	**$ 173**	**$ 132**	**$ 134**

(1) The impact of realized capital gains and losses on amortization of DAC is dependent upon the relationship between the assets that give rise to the gain or loss and the product liability supported by the assets. Fluctuations result from changes in the impact of realized capital gains and losses on actual and expected gross profits.

Our annual comprehensive review of assumptions underlying estimated future gross profits for our interest-sensitive life contracts covers assumptions for mortality, persistency, expenses, investment returns, including capital gains and losses, interest crediting rates to policyholders, and the effect of any hedges. An assessment is made of future projections to ensure the reported DAC balances reflect current expectations.

In 2019, the review resulted in an acceleration of DAC amortization (decrease to income) of $58 million. DAC amortization acceleration primarily related to the investment margin component of estimated gross profits and was due to lower projected future interest rates and investment returns compared to our previous expectations. The acceleration related to benefit margin was due to decreased projected interest rates that result in lower projected policyholder account values which increases benefits on guaranteed products and more refined policy level information and assumptions.

In 2018, the review resulted in an acceleration of DAC amortization (decrease to income) of $5 million. DAC amortization acceleration primarily related to the investment margin component of estimated gross profits and was due to lower projected investment returns. This was partially offset by DAC amortization deceleration (increase to income) for changes in the benefit margin due to a decrease in projected mortality.

Changes in DAC

($ in millions)	Traditional life and accident and health		Interest-sensitive life insurance		Total	
	For the years ended December 31,					
	2019	2018	2019	2018	2019	2018
Balance, beginning of year	$ 489	$ 465	$ 811	$ 687	$ 1,300	$ 1,152
Acquisition costs deferred	63	65	60	65	123	130
Amortization of DAC before amortization relating to realized capital gains and losses, valuation changes on embedded derivatives that are not hedged and changes in assumptions (1)	(44)	(41)	(65)	(76)	(109)	(117)
Amortization relating to realized capital gains and losses (1) and valuation changes on embedded derivatives that are not hedged	—	—	(6)	(10)	(6)	(10)
Amortization (acceleration) deceleration for changes in assumptions (“DAC unlocking”) (1)	—	—	(58)	(5)	(58)	(5)
Effect of unrealized capital gains and losses (2)	—	—	(171)	150	(171)	150
Ending balance	**$ 508**	**$ 489**	**$ 571**	**$ 811**	**$ 1,079**	**$ 1,300**

(1) Included as a component of amortization of DAC on the Consolidated Statements of Operations.

(2) Represents the change in the DAC adjustment for unrealized capital gains and losses. The DAC adjustment represents the amount by which the amortization of DAC would increase or decrease if the unrealized gains and losses in the respective product portfolios were realized.

Operating costs and expenses decreased 1.9% or $7 million in 2019 compared to 2018, primarily due to lower employee-related expenses, partially offset by higher commissions on non-proprietary product sales.

Analysis of reserves and contractholder funds

Reserve for life-contingent contract benefits

($ in millions)	For the years ended December 31, 2019	2018
Traditional life insurance	$ 2,612	$ 2,539
Accident and health insurance	124	138
Reserve for life-contingent contract benefits	**$ 2,736**	**$ 2,677**

Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life insurance. The balance of contractholder funds is equal to the cumulative deposits received and interest credited to the contractholder less cumulative contract benefits, surrenders, withdrawals and contract charges for mortality or administrative expenses.

Change in contractholder funds

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Contractholder funds, beginning balance	$ 7,656	$ 7,608	$ 7,464
Deposits	949	965	973
Interest credited	298	284	282
Benefits, withdrawals and other adjustments			
Benefits	(233)	(232)	(241)
Surrenders and partial withdrawals	(261)	(259)	(254)
Contract charges	(702)	(704)	(704)
Net transfers from separate accounts	10	6	4
Other adjustments (1)	88	(12)	84
Total benefits, withdrawals and other adjustments	(1,098)	(1,201)	(1,111)
Contractholder funds, ending balance	**$ 7,805**	**$ 7,656**	**$ 7,608**

(1) The table above illustrates the changes in contractholder funds, which are presented gross of reinsurance recoverables on the Consolidated Statements of Financial Position. The table above is intended to supplement our discussion and analysis of revenues, which are presented net of reinsurance on the Consolidated Statements of Operations. As a result, the net change in contractholder funds associated with products reinsured is reflected as a component of the other adjustments line.

Contractholder deposits decreased 1.7% in 2019 compared to 2018. The weighted average guaranteed crediting rate and weighted average current crediting rate for our interest-sensitive life insurance contracts, excluding variable life, are both 3.9% as of December 31, 2019.

Allstate Life reinsurance ceded

In the normal course of business, we seek to limit aggregate and single exposure to losses on large risks by purchasing reinsurance. In addition, we have used reinsurance to effect the disposition of certain blocks of business.

We retain primary liability as a direct insurer for all risks ceded to reinsurers. As of December 31, 2019, approximately 13% of our face amount of life insurance in force was reinsured.

Reinsurance recoverables by reinsurer

	S&P financial strength rating (1)	Reinsurance recoverable on paid and unpaid benefits	
		For the years ended December 31,	
($ in millions)		2019	2018
RGA Reinsurance Company	AA-	$ 197	$ 210
Swiss Re Life and Health America, Inc.	AA-	155	156
Munich American Reassurance	AA-	80	87
Transamerica Life Group	AA-	75	76
Scottish Re (U.S.), Inc. (2)	N/A	70	66
John Hancock Life & Health Insurance Company	AA-	50	53
Triton Insurance Company (3)	N/A	43	45
American Health & Life Insurance Co. (3)	N/A	32	34
Lincoln National Life Insurance	AA-	27	25
Security Life of Denver	A+	23	24
SCOR Global Life	AA-	14	14
American United Life Insurance Company	AA-	11	13
Other (4)		17	20
Total		**$ 794**	**$ 823**

(1) N/A reflects no S&P rating available.

(2) In December 2018, the Delaware Insurance Commissioner placed Scottish Re (U.S.), Inc. under regulatory supervision and in March 2019, the reinsurer was placed in rehabilitation. We have been permitted to exercise certain setoff rights while the parties address any potential disputes. See Note 10 of the consolidated financial statements for further details.

(3) A.M. Best rating is B++.

(4) As of December 31, 2019 and 2018, the other category includes $12 million and $9 million, respectively, of recoverables due from reinsurers rated A- or better by S&P.

We continuously monitor the creditworthiness of reinsurers in order to determine our risk of recoverability on an individual and aggregate basis, and a provision for uncollectible reinsurance is recorded if needed. No amounts have been deemed unrecoverable in the three-years ended December 31, 2019, except for an allowance related to Scottish Re (U.S.), Inc. that was established in 2019.

We enter into certain intercompany reinsurance transactions for the Allstate Life operations in order to maintain underwriting control and manage insurance risk among various legal entities. These reinsurance agreements have been approved by the appropriate regulatory authorities. All significant intercompany transactions have been eliminated in consolidation.

Allstate Benefits Segment

Allstate Benefits offers voluntary benefits products, including life, accident, critical illness, short-term disability and other health products. In 2019, Allstate Benefits represented 2.8% of total revenue, 2.9% of total PIF and 3.3% of total adjusted net income. Our target customers are middle market consumers with family and financial protection needs. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Summarized financial information

($ in millions)	For the years ended December 31, 2019	2018	2017
Revenues			
Premiums and contract charges	$ 1,145	$ 1,135	$ 1,084
Net investment income	83	77	72
Realized capital gains and losses	12	(9)	1
Total revenues	**1,240**	**1,203**	**1,157**
Costs and expenses			
Contract benefits	(601)	(595)	(564)
Interest credited to contractholder funds	(34)	(35)	(35)
Amortization of DAC	(161)	(145)	(142)
Operating costs and expenses	(285)	(278)	(258)
Restructuring and related charges	—	—	(3)
Total costs and expenses	**(1,081)**	**(1,053)**	**(1,002)**
Income tax expense	(35)	(32)	(1)
Net income applicable to common shareholders	**$ 124**	**$ 118**	**$ 154**
Adjusted net income	**$ 115**	**$ 124**	**$ 100**
Realized capital gains and losses, after-tax	9	(7)	—
DAC and DSI amortization related to realized capital gains and losses, after-tax	—	1	—
Tax Legislation benefit	—	—	54
Net income applicable to common shareholders	**$ 124**	**$ 118**	**$ 154**
Benefit ratio (1)	52.5	52.4	52.0
Operating expense ratio (2)	24.9	24.5	23.8
Reserve for life-contingent contract benefits as of December 31	$ 1,034	$ 1,007	$ 979
Contractholder funds as of December 31	$ 915	$ 898	$ 890
Policies in force as of December 31 (in thousands)	4,183	4,208	4,033

(1) Benefit ratio is calculated as contract benefits divided by premiums and contract charges.

(2) Operating expense ratio is calculated as operating costs and expenses divided by premiums and contract charges.

Net income applicable to common shareholders increased 5.1% or $6 million in 2019 compared to 2018.

Adjusted net income decreased 7.3% or $9 million in 2019 compared to 2018, primarily due to higher DAC amortization related primarily to the non-renewal of a large underperforming account and increased operating costs and expenses, partially offset by higher premiums.

Premiums and contract charges increased 0.9% or $10 million in 2019 compared to 2018, primarily related to growth in hospital indemnity (included in other health), critical illness and life products.

Premiums and contract charges by product

($ in millions)	For the years ended December 31, 2019	2018	2017
Life	$ 157	$ 155	$ 155
Accident	298	297	280
Critical illness	479	476	468
Short-term disability	107	108	102
Other health	104	99	79
Premiums and contract charges	**$ 1,145**	**$ 1,135**	**$ 1,084**

New annualized premium sales (annualized premiums at initial customer enrollment) decreased 4.4% to $372 million in 2019 and decreased 12.4% to $389 million in 2018. The decrease in 2019 relates to increased competition and higher initial enrollments for certain accounts in the prior year.

Contract benefits increased 1.0% or $6 million in 2019 compared to 2018, primarily due to higher claim experience on critical illness and disability products, partially offset by favorable mortality experience on life products.

Benefit ratio increased to 52.5 in 2019 compared to 52.4 in 2018 due to higher claim experience on critical illness and disability products, partially offset by favorable mortality experience on life products and improved claims experience on other health products.

Amortization of DAC increased 11.0% or $16 million in 2019 compared to 2018, primarily due to DAC amortization related to the non-renewal of a large underperforming account and an unfavorable adjustment associated with our annual review of assumptions.

Our annual comprehensive review of assumptions underlying estimated future gross profits for our interest-sensitive life contracts resulted in an acceleration of DAC amortization (decrease to income) of $2 million in 2019 compared to a deceleration of DAC amortization (increase to income) of $4 million in 2018.

Changes in DAC

($ in millions)	For the years ended 2019	2018
Balance, beginning of year	$ 549	$ 542
Acquisition costs deferred	142	150
Amortization of DAC before amortization relating to changes in assumptions (1)	(159)	(150)
Amortization relating to realized capital gains and losses (1)	—	1
Amortization deceleration (acceleration) for changes in assumptions (“DAC unlocking”) (1)	(2)	4
Effect of unrealized capital gains and losses (2)	(3)	2
Ending balance	**$ 527**	**$ 549**

(1) Included as a component of amortization of DAC on the Consolidated Statements of Operations.

(2) Represents the change in the DAC adjustment for unrealized capital gains and losses. The DAC adjustment represents the amount by which the amortization of DAC would increase or decrease if the unrealized gains and losses in the respective product portfolios were realized.

Operating costs and expenses

($ in millions)	For the years ended December 31, 2019	2018	2017
Non-deferrable commissions	$ 104	$ 109	$ 98
General and administrative expenses	181	169	160
Total operating costs and expenses	**$ 285**	**$ 278**	**$ 258**

Operating costs and expenses increased 2.5% or $7 million in 2019 compared to 2018, primarily due to higher technology and employee-related costs.

Operating expense ratio increased to 24.9 in 2019 compared to 24.5 in 2018, primarily due to higher investment in technology.

Analysis of reserves

Reserve for life-contingent contract benefits

($ in millions)	For the years ended December 31, 2019	2018
Traditional life insurance	$ 285	$ 269
Accident and health insurance	749	738
Reserve for life-contingent contract benefits	**$ 1,034**	**$ 1,007**

Allstate Benefits reinsurance ceded

The vast majority of reinsurance relates to the disposition of long-term care and other closed blocks of business several years ago. We retain primary liability as a direct insurer for all risks ceded to reinsurers.

Reinsurance recoverables by reinsurer

($ in millions)	S&P financial strength rating	Reinsurance recoverable on paid and unpaid benefits — For the years ended December 31, 2019	2018
Mutual of Omaha Insurance	AA-	$ 64	$ 71
General Re Life Corporation	AA+	18	19
Other [(1)]		6	5
Total		**$ 88**	**$ 95**

(1) As of both December 31, 2019 and 2018, the other category includes $4 million of recoverables due from reinsurers rated A- or better by S&P.

We continuously monitor the creditworthiness of reinsurers in order to determine our risk of recoverability on an individual and aggregate basis, and a provision for uncollectible reinsurance is recorded if needed. No amounts have been deemed unrecoverable in the three-years ended December 31, 2019.

We enter into certain intercompany reinsurance transactions for the Allstate Benefits operations in order to maintain underwriting control and manage insurance risk among various legal entities. These reinsurance agreements have been approved by the appropriate regulatory authorities. All significant intercompany transactions have been eliminated in consolidation.

Allstate Annuities Segment

Allstate Annuities consists primarily of deferred fixed annuities and immediate fixed annuities (including standard and sub-standard structured settlements). In 2019, Allstate Annuities represented 2.9% of total revenue, 0.1% of total PIF and 0.3% of total adjusted net income. We discontinued the sale of proprietary annuities over an eight-year period from 2006 to 2014, reflecting our expectations of declining returns. This segment is in run-off, and we manage it with a focus on increasing economic value through our investment strategy. For additional information on our strategy and outlook, see Part I, Item 1. Business - Strategy and Segment Information.

Summarized financial information

($ in millions)	For the years ended December 31, 2019	2018	2017
Revenues			
Contract charges	$ 13	$ 15	$ 14
Net investment income	917	1,096	1,305
Realized capital gains and losses	346	(166)	44
Total revenues	**1,276**	**945**	**1,363**
Costs and expenses			
Contract benefits	(583)	(569)	(594)
Interest credited to contractholder funds	(307)	(334)	(373)
Amortization of DAC	(7)	(7)	(7)
Operating costs and expenses	(29)	(31)	(34)
Restructuring and related charges	(1)	—	—
Total costs and expenses	**(927)**	**(941)**	**(1,008)**
Gain on disposition of operations	6	6	6
Income tax (expense) benefit	(73)	66	58
Net income applicable to common shareholders	**$ 282**	**$ 76**	**$ 419**
Adjusted net income	**$ 10**	**$ 131**	**$ 205**
Realized capital gains and losses, after-tax	274	(131)	28
Valuation changes on embedded derivatives not hedged, after-tax	(6)	3	—
Gain on disposition of operations, after-tax	4	4	4
Tax Legislation benefit	—	69	182
Net income applicable to common shareholders	**$ 282**	**$ 76**	**$ 419**
Reserve for life-contingent contract benefits as of December 31	$ 8,530	$ 8,524	$ 8,934
Contractholder funds as of December 31	$ 8,972	$ 9,817	$ 10,936
Policies in force as of December 31 (in thousands)			
Deferred annuities	114	127	142
Immediate annuities	78	84	89
Total	**192**	**211**	**231**

Net income applicable to common shareholders increased $206 million in 2019 compared to 2018. 2018 results include a tax benefit of $69 million related to the Tax Legislation.

Adjusted net income decreased $121 million in 2019 compared to 2018, primarily due to lower net investment income, partially offset by lower interest credited to contractholder funds.

Net investment income decreased 16.3% or $179 million in 2019 compared to 2018, primarily due to lower performance-based investment results, mainly from limited partnerships, and lower average investment balances. 2019 performance-based investment results included lower valuations in the fourth quarter, on two private equity investments totaling $37 million.

The investment portfolio supporting immediate annuities is managed to ensure the assets match the characteristics of the liabilities and provide the long-term returns needed to support this business. To better match the long-term nature of our immediate annuities, we use performance-based investments in which we have ownership interests, and a greater proportion of return is derived from idiosyncratic asset or operating performance. Performance-based income can vary significantly between periods and is influenced by economic conditions, equity market performance, comparable public company earnings multiples, capitalization rates, operating performance of the underlying investments and the timing of asset sales.

Net realized capital gains in 2019 primarily related to increased valuation of equity investments and gains on sales of fixed income securities. Net realized capital losses in 2018 primarily related to decreased valuation of equity investments and losses on sales of fixed income securities.

Contract benefits increased 2.5% or $14 million in 2019 compared to 2018, primarily due to worse immediate annuity mortality experience, partially offset by lower implied interest on immediate annuities with life contingencies.

Our annual review of assumptions in 2019 resulted inno adjustment to reserves for guaranteed benefits. In 2018, the review resulted in a $2 million increase in reserves primarily for guaranteed withdrawal benefits on equity-indexed annuities due to higher projected guaranteed benefits.

As of December 31, 2019 and 2018, our premium deficiency and profits followed by losses evaluations for our immediate annuities with life contingencies concluded that no adjustments were required to be recognized. For further detail on these evaluations, see Reserve for life-contingent contract benefits estimation in the Application of Critical Accounting Estimates section.

Benefit spread reflects our mortality results using the difference between contract charges earned and contract benefits excluding the portion related to the implied interest on immediate annuities with life contingencies. This implied interest totaled $479 million and $492 million in 2019 and 2018, respectively. Total benefit spread was $(95) million and $(68) million in 2019 and 2018, respectively.

Interest credited to contractholder funds decreased 8.1% or $27 million in 2019 compared to 2018, primarily due to lower average contractholder funds. Valuation changes on derivatives embedded in equity-indexed annuity contracts that are not hedged increased interest credited to contractholder funds by $8 million in 2019 compared to a decrease of $3 million in 2018.

Investment spread reflects the difference between net investment income and the sum of interest credited to contractholder funds and the implied interest on immediate annuities with life contingencies, which is included as a component of contract benefits and is used to analyze the impact of net investment income and interest credited to contractholders on net income.

Investment spread

($ in millions)	For the years ended December 31, 2019	2018	2017
Investment spread before valuation changes on embedded derivatives not hedged	$ 139	$ 267	$ 432
Valuation changes on derivatives embedded in equity-indexed annuity contracts that are not hedged	(8)	3	(1)
Total investment spread	**$ 131**	**$ 270**	**$ 431**

Investment spread before valuation changes on embedded derivatives not hedged decreased 47.9% or $128 million in 2019 compared to 2018, primarily due to lower investment income, mainly from limited partnership interests, partially offset by lower interest credited to contractholder funds.

To further analyze investment spreads, the following table summarizes the weighted average investment yield on assets supporting product liabilities, interest crediting rates and investment spreads. Investment spreads may vary significantly between periods due to the variability in investment income, particularly for immediate fixed annuities where the investment portfolio includes performance-based investments.

Analysis of investment spread

	Weighted average investment yield			Weighted average interest crediting rate			Weighted average investment spreads		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Deferred fixed annuities	4.3%	4.1%	4.2%	2.7%	2.8%	2.8%	1.6 %	1.3%	1.4%
Immediate fixed annuities with and without life contingencies	5.0	6.4	8.0	5.9	6.0	6.0	(0.9)	0.4	2.0

The following table summarizes the weighted average guaranteed crediting rates and weighted average current crediting rates as of December 31, 2019 for certain fixed annuities where management has the ability to change the crediting rate, subject to a contractual minimum. Other products, including equity-indexed, variable and immediate annuities totaling $4.12 billion of contractholder funds, have been excluded from the analysis because management does not have the ability to change the crediting rate or the minimum crediting rate is not considered meaningful in this context.

Weighted average guaranteed crediting rates and weighted average current crediting rates

($ in millions)	Weighted average guaranteed crediting rates	Weighted average current crediting rates	Contractholder funds
Annuities with annual crediting rate resets	3.16%	3.17%	$ 4,220
Annuities with multi-year rate guarantees (1):			
Resettable in next 12 months	1.73	2.89	116
Resettable after 12 months	2.22	2.63	518

(1) These contracts include interest rate guarantee periods, the majority of which are 5 years.

Operating costs and expenses decreased 6.5% or $2 million in 2019 compared to 2018, primarily due to lower technology and employee-related costs.

Analysis of reserves and contractholder funds

Product liabilities

($ in millions)	For the years ended December 31, 2019	2018
Immediate fixed annuities with life contingencies		
Sub-standard structured settlements and group pension terminations (1)	$ 5,085	$ 4,990
Standard structured settlements and SPIA (2)	3,367	3,425
Other	78	109
Reserve for life-contingent contract benefits	**$ 8,530**	**$ 8,524**
Deferred fixed annuities	$ 6,499	$ 7,156
Immediate fixed annuities without life contingencies	2,346	2,525
Other	127	136
Contractholder funds	**$ 8,972**	**$ 9,817**

(1) Comprises structured settlement annuities for annuitants with severe injuries or other health impairments which increased their expected mortality rate at the time the annuity was issued (“sub-standard structured settlements”) and group annuity contracts issued to sponsors of terminated pension plans.

(2) Comprises structured settlement annuities for annuitants with standard life expectancy (“standard structured settlements”) and single premium immediate annuities (“SPIA”) with life contingencies.

Contractholder funds represent interest-bearing liabilities arising from the sale of products such as fixed annuities. The balance of contractholder funds is equal to the cumulative deposits received and interest credited to the contractholder less cumulative contract benefits, surrenders, withdrawals and contract charges for mortality or administrative expenses.

Changes in contractholder funds

	For the years ended December 31,		
($ in millions)	2019	2018	2017
Contractholder funds, beginning balance	$ 9,817	$ 10,936	$ 11,915
Deposits	16	15	28
Interest credited	304	331	370
Benefits, withdrawals and other adjustments			
Benefits	(547)	(587)	(638)
Surrenders and partial withdrawals	(602)	(854)	(723)
Contract charges	(9)	(9)	(9)
Net transfers from separate accounts	—	—	1
Other adjustments (1)	(7)	(15)	(8)
Total benefits, withdrawals and other adjustments	(1,165)	(1,465)	(1,377)
Contractholder funds, ending balance	**$ 8,972**	**$ 9,817**	**$ 10,936**

(1) The table above illustrates the changes in contractholder funds, which are presented gross of reinsurance recoverables on the Consolidated Statements of Financial Position. The table above is intended to supplement our discussion and analysis of revenues, which are presented net of reinsurance on the Consolidated Statements of Operations. As a result, the net change in contractholder funds associated with products reinsured is reflected as a component of the other adjustments line.

Contractholder funds decreased 8.6% in 2019, primarily due to the continued runoff of our deferred fixed annuity business. We discontinued the sale of proprietary annuities but still accept additional deposits on existing contracts.

Surrenders and partial withdrawals decreased 29.5% or $252 million in 2019 compared to 2018. 2018 had elevated surrenders on fixed annuities resulting from an increased number of contracts reaching the 30-45 day period during which there is no surrender charge. The surrender and partial withdrawal rate on deferred fixed annuities, based on the beginning of year contractholder funds, was 9.2% in 2019 compared to 11.4% in 2018.

Allstate Annuities reinsurance ceded

We ceded substantially all of the risk associated with our variable annuity business to Prudential Insurance Company of America (“Prudential”). Our reinsurance recoverables from Prudential totaled $1.29 billion and $1.36 billion as of December 31, 2019 and 2018, respectively. We also have reinsurance recoverables from other reinsurers of $17 million as of both December 31, 2019 and 2018.

We retain primary liability as a direct insurer for all risks ceded to reinsurers. We continuously monitor the creditworthiness of reinsurers in order to determine our risk of recoverability on an individual and aggregate basis, and a provision for uncollectible reinsurance is recorded if needed. No amounts have been deemed unrecoverable in the three-years ended December 31, 2019.

Investments

Overview and strategy The return on our investment portfolios is an important component of our ability to offer good value to customers, fund business improvements and create value for shareholders. Investment portfolios are held for Property-Liability, Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, and Corporate and Other operations. While taking into consideration the investment portfolio in aggregate, management of the underlying portfolios is significantly influenced by the nature of each respective business and its corresponding liability profile. For each business, we identify a strategic asset allocation which considers both the nature of the liabilities and the risk and return characteristics of the various asset classes in which we invest. This allocation is informed by our long-term and market expectations, as well as other considerations such as risk appetite, portfolio diversification, duration, desired liquidity and capital. Within appropriate ranges relative to strategic allocations, tactical allocations are made in consideration of prevailing and potential future market conditions. We manage risks that involve uncertainty related to interest rates, credit spreads, equity returns and currency exchange rates.

The Property-Liability portfolio emphasizes protection of principal and consistent income generation, within a total return framework. This approach has produced competitive returns over the long term and is designed to ensure financial strength and stability for paying claims, while maximizing economic value and surplus growth. Products with lower liquidity needs, such as auto insurance and discontinued lines and coverages, and capital create capacity to invest in less liquid higher yielding fixed income securities, performance-based investments such as limited partnerships and equity securities. Products with higher liquidity needs, such as homeowners insurance, are invested primarily in high quality liquid fixed income securities.

The Service Businesses portfolio is focused on protection of principal and consistent income generation, within a total return framework. The portfolio is largely comprised of fixed income securities with a lesser allocation to equity securities and short-term investments.

The Allstate Life portfolio is comprised of assets chosen to generate returns to support corresponding liabilities within an asset-liability framework that targets an appropriate return on capital. This portfolio is well diversified and primarily consists of longer duration fixed income securities and commercial mortgage loans.

The Allstate Benefits portfolio is focused on protection of principal and consistent income generation while targeting an appropriate return on capital. The portfolio is largely comprised of fixed income securities and commercial mortgage loans with a small allocation to equity securities.

The Allstate Annuities portfolio is managed to ensure the assets match the characteristics of the liabilities. For longer-term immediate annuity liabilities, we invest primarily in performance-based investments such as limited partnerships and equity securities. For shorter-term annuity liabilities, we invest primarily in fixed income securities and commercial mortgage loans with maturity profiles aligned with liability cash flow requirements.

The Corporate and Other portfolio balances liquidity needs related to the corporate capital structure with the pursuit of returns.

Within each segment, we utilize two primary strategies to manage risks and returns and to position our portfolio to take advantage of market opportunities while attempting to mitigate adverse effects. As strategies and market conditions evolve, the asset allocation may change or assets may be moved between strategies.

Market-based strategy includes investments primarily in public fixed income and equity securities. It seeks to deliver predictable earnings aligned to business needs and take advantage of short-term opportunities primarily through public and private fixed income investments and public equity securities.

Performance-based strategy seeks to deliver attractive risk-adjusted returns and supplement market risk with idiosyncratic risk. Returns are impacted by a variety of factors including general macroeconomic and public market conditions as public benchmarks are often used in the valuation of underlying investments. Variability in earnings will also result from the performance of the underlying assets or business and the timing of sales of those investments. Earnings from the sales of investments may be recorded as net investment income or realized capital gains and losses. The portfolio, which primarily includes private equity and real estate with a majority being limited partnerships, is diversified across a number of characteristics, including managers or partners, vintage years, strategies, geographies (including international) and industry sectors or property types. These investments are generally illiquid in nature, often require specialized expertise, typically involve a third-party manager, and often enhance returns and income through transformation at the company or property level. A portion of these investments seek returns in markets or asset classes that are dislocated or special situations, primarily in private markets.

Impact of Low Interest Rate Environment

In January 2020, the Federal Open Market Committee ("FOMC") maintained the target range for federal funds rate at 1-1/2 percent to 1-3/4 percent and maintained their inflation target of 2 percent. The FOMC noted that the current stance of monetary policy is appropriate to support sustained expansion of economic activity, strong labor market conditions and inflation returning to the target of 2 percent. The path of the federal funds rate will depend on economic conditions and their impact on the economic outlook. Interest-bearing investments are comprised of fixed income securities, mortgage loans, short-term investments and other investments, including bank and agent loans.

Contractual maturities and yields of fixed income securities and mortgage loans for the next three years

	Fixed income securities		Mortgage loans	
($ in millions)	Carrying value	Investment yield	Carrying value	Investment yield
2020	$ 3,239	3.6%	$ 58	4.8%
2021	5,877	3.4	446	4.8
2022	6,107	3.3	460	4.3

Investing activity will continue to decrease our portfolio yield as long as market yields remain below the current portfolio yield. In the Allstate Annuities segment, the portfolio yield has been less impacted by reinvestment in the current low interest rate environment than other portfolios because much of the investment cash flows have been used to fund the managed reduction in spread-based liabilities. The decline in market-based portfolio yield and Allstate Annuities invested assets are expected to result in lower net investment income in future periods.

Investments Outlook

We plan to focus on the following priorities:

- Enhance investment portfolio returns through use of a dynamic capital allocation framework and focus on tax efficiency.
- Leverage our broad capabilities to shift the portfolio mix to earn higher risk-adjusted returns on capital.
- Invest for the specific needs and characteristics of Allstate's businesses, including its corresponding liability profile.

We continue to increase performance-based investments in our Property-Liability portfolio, consistent with our ongoing strategy to have a greater proportion of return derived from idiosyncratic asset or operating performance.

Invested assets and market-based income are expected to decline with reductions in contractholder funds and income related to performance-based investments will result in variability of earnings for the Allstate Annuities segment.

Portfolio composition and strategy by reporting segment (1)

	As of December 31, 2019						
($ in millions)	Property-Liability	Service Businesses	Allstate Life	Allstate Benefits	Allstate Annuities	Corporate and Other	Total
Fixed income securities (2)	$ 33,299	$ 1,157	$ 8,061	$ 1,298	$ 13,984	$ 1,245	$ 59,044
Equity securities (3)	5,919	311	210	80	1,300	342	8,162
Mortgage loans	538	—	1,861	209	2,209	—	4,817
Limited partnership interests	4,846	—	—	—	3,232	—	8,078
Short-term investments (4)	2,186	76	396	44	815	739	4,256
Other	1,626	—	1,386	310	681	2	4,005
Total	**$ 48,414**	**$ 1,544**	**$ 11,914**	**$ 1,941**	**$ 22,221**	**$ 2,328**	**$ 88,362**
Percent to total	**54.9%**	**1.7%**	**13.5%**	**2.2%**	**25.1%**	**2.6%**	**100.0%**
Market-based	$ 43,256	$ 1,544	$ 11,914	$ 1,941	$ 18,672	$ 2,326	$ 79,653
Performance-based	5,158	—	—	—	3,549	2	8,709
Total	**$ 48,414**	**$ 1,544**	**$ 11,914**	**$ 1,941**	**$ 22,221**	**$ 2,328**	**$ 88,362**

(1) Balances reflect the elimination of related party investments between segments.

(2) Fixed income securities are carried at fair value. Amortized cost basis for these securities was $32.22 billion, $1.12 billion, $7.43 billion, $1.23 billion, $13.08 billion, $1.21 billion and $56.29 billion for Property-Liability, Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, Corporate and Other, and in Total, respectively.

(3) Equity securities are carried at fair value. The fair value of equity securities, held as of December 31, 2019, was $1.59 billion in excess of cost. These net gains were primarily concentrated in the consumer goods and technology sectors and in domestic equity index funds.

(4) Short-term investments are carried at fair value.

Investments totaled $88.36 billion as of December 31, 2019, increasing from $81.26 billion as of December 31, 2018, primarily due to higher fixed income and equity valuations, positive investment and operating cash flows and issuance of preferred stock and senior debt, partially offset by common share repurchases, dividends paid to shareholders, net reductions in contractholder funds and repayment of preferred stock and senior debt.

Beginning January 1, 2018, equity securities are reported at fair value with changes in fair value recognized in realized capital gains and losses. Limited partnerships previously reported using the cost method are reported at fair value with changes in fair value recognized in net investment income. As a result, 2017 net investment income and net realized capital gains and losses are not comparable to other periods presented.

Portfolio composition by investment strategy

	As of December 31, 2019		
($ in millions)	**Market-based**	**Performance-based**	**Total**
Fixed income securities	$ 58,950	$ 94	$ 59,044
Equity securities	7,822	340	8,162
Mortgage loans	4,817	—	4,817
Limited partnership interests	906	7,172	8,078
Short-term investments	4,256	—	4,256
Other	2,902	1,103	4,005
Total	**$ 79,653**	**$ 8,709**	**$ 88,362**
Percent to total	**90.1%**	**9.9%**	**100.0%**
Unrealized net capital gains and losses			
Fixed income securities	$ 2,751	$ —	$ 2,751
Limited partnership interests	—	(4)	(4)
Other	(3)	—	(3)
Total	**$ 2,748**	**$ (4)**	**$ 2,744**

During 2019, strategic actions focused on optimizing portfolio yield, return and risk in the low interest rate environment.

We continued to increase performance-based investments in the Property-Liability portfolio.

We increased the maturity profile of fixed income securities in our Property-Liability portfolio to a duration of 5.2 years, while maintaining duration at 5.9 years and 4.5 years for the Allstate Life and Allstate Annuities portfolios, respectively.

In the Allstate Annuities portfolio, invested assets and market-based income declined with reductions in contractholder funds. Performance-based investments and equity securities will continue to be allocated primarily to the longer-term immediate annuity liabilities to reduce the risk that investment returns are below levels required to meet their funding needs while shorter-term annuity liabilities will be invested in market-based investments.

Fixed income securities by type

	Fair value as of December 31,	
($ in millions)	**2019**	**2018**
U.S. government and agencies	$ 5,086	$ 5,517
Municipal	8,620	9,169
Corporate	43,078	40,158
Foreign government	979	747
Asset-backed securities ("ABS")	862	1,045
Mortgage-backed securities ("MBS")	419	534
Total fixed income securities	**$ 59,044**	**$ 57,170**

Fixed income securities are rated by third-party credit rating agencies and/or are internally rated. As of December 31, 2019, 87.9% of the consolidated fixed income securities portfolio was rated investment grade, which is defined as a security having a rating of Aaa, Aa, A or Baa from Moody's, a rating of AAA, AA, A or BBB from S&P, a comparable rating from another nationally recognized rating agency, or a comparable internal rating if an externally provided rating is not available. Credit ratings below these designations are considered lower credit quality or below investment grade, which includes high yield bonds. Market prices for certain securities may have credit spreads which imply higher or lower credit quality than the current third-party rating. Our initial investment decisions and ongoing monitoring procedures for fixed income securities are based on a thorough due diligence process which includes, but is not limited to, an assessment of the credit quality, sector, structure and liquidity risks of each issue.

Fair value and unrealized net capital gains (losses) for fixed income securities by credit quality

	As of December 31, 2019						
	Investment grade		Below investment grade		Total		
($ in millions)	Fair value	Unrealized gain (loss)	Fair value	Unrealized gain (loss)	Fair value	Unrealized gain (loss)	Percent rated investment grade
U.S. government and agencies	$ 5,086	$ 115	$ —	$ —	$ 5,086	$ 115	100.0%
Municipal	8,569	546	51	(6)	8,620	540	99.4
Corporate							
Public	27,777	1,356	3,103	122	30,880	1,478	90.0
Privately placed	8,581	391	3,617	119	12,198	510	70.3
Total Corporate	36,358	1,747	6,720	241	43,078	1,988	84.4
Foreign government	972	11	7	—	979	11	99.3
ABS	791	1	71	1	862	2	91.8
MBS	123	3	296	92	419	95	29.4
Total fixed income securities	**$ 51,899**	**$ 2,423**	**$ 7,145**	**$ 328**	**$ 59,044**	**$ 2,751**	**87.9%**

Municipal bonds, including tax exempt and taxable securities, include general obligations of state and local issuers and revenue bonds (including pre-refunded bonds, which are bonds for which an irrevocable trust has been established to fund the remaining payments of principal and interest).

Our practice for acquiring and monitoring municipal bonds is predominantly based on the underlying credit quality of the primary obligor. We currently rely on the primary obligor to pay all contractual cash flows and are not relying on bond insurers for payments. As a result of downgrades in the insurers' credit ratings, the ratings of the insured municipal bonds generally reflect the underlying ratings of the primary obligor.

Corporate bonds include publicly traded and privately placed securities. Privately placed securities primarily consist of corporate issued senior debt securities that are directly negotiated with the borrower or are in unregistered form.

Our portfolio of privately placed securities is diversified by issuer, industry sector and country. The portfolio is made up of 478 issuers. Privately placed corporate obligations may contain structural security features such as financial covenants and call protections that provide investors greater protection against credit deterioration, reinvestment risk or fluctuations in interest rates than those typically found in publicly registered debt securities. Additionally, investments in these securities are made after due diligence of the issuer, typically including discussions with senior management and on-site visits to company facilities. Ongoing monitoring includes direct periodic dialog with senior management of the issuer and continuous monitoring of operating performance and financial position. Every issue not rated by an independent rating agency is internally rated with a formal rating affirmation at least once a year.

Our corporate bonds portfolio includes $6.72 billion of below investment grade bonds, $3.62 billion of which are privately placed. These securities are diversified by issuer and industry sector. The below investment grade corporate bonds portfolio is made up of 289 issuers. We employ fundamental analyses of issuers and sectors along with macro and asset class views to identify investment opportunities. This results in a portfolio with broad exposure to the high yield market with an emphasis on idiosyncratic positions reflective of our views of market conditions and opportunities.

Foreign government securities include 83.8% of Canadian governmental and provincial securities (83.0% of which are held by our Canadian companies), 15.5% backed by the U.S. government and 0.7% that are highly diversified in other foreign governments.

ABS and MBS are structured securities that are primarily collateralized by consumer or corporate borrowings and residential and commercial real estate loans. The cash flows from the underlying collateral paid to the securitization trust are generally applied in a pre-determined order and are designed so that each security issued by the trust, typically referred to as a "class", qualifies for a specific original rating.

For example, the "senior" portion or "top" of the capital structure, or rating class, which would originally qualify for a rating of Aaa typically has priority in receiving principal repayments on the underlying collateral and retains this priority until the class is paid in full. In a sequential structure, underlying collateral principal repayments are directed to the most senior rated Aaa class in the structure until paid in full, after which principal repayments are directed to the next most senior Aaa class in the structure until it is paid in full. Senior Aaa classes generally share any losses from the underlying collateral on a pro-rata basis after losses are absorbed by classes with lower original ratings.

The payment priority and class subordination included in these securities serves as credit enhancement for holders of the senior or top portions of the structures. These securities continue to retain the payment priority features that existed at the origination of the securitization trust. Other forms of credit enhancement may include structural features embedded in the securitization trust, such as overcollateralization, excess spread and bond insurance. The underlying collateral may contain fixed interest rates, variable interest rates (such as adjustable rate mortgages), or both fixed and variable rate features.

ABS includes collateralized debt obligations, consumer and other ABS. Credit risk is managed by monitoring the performance of the underlying collateral. Many of the securities in the ABS portfolio have credit enhancement with features such as overcollateralization, subordinated structures, reserve funds, guarantees and/or insurance.

MBS includes residential mortgage-backed securities (“RMBS”) and commercial mortgage-backed securities (“CMBS”). RMBS is subject to interest rate risk, but unlike other fixed income securities, is additionally subject to prepayment risk from the underlying residential mortgage loans. RMBS consists of a U.S. Agency portfolio having collateral issued or guaranteed by U.S. government agencies and a non-agency portfolio consisting of securities collateralized by Prime, Alt-A and Subprime loans. CMBS investments are primarily traditional conduit transactions collateralized by commercial mortgage loans, broadly diversified across property types and geographical area.

Equity securities primarily include common stocks, exchange traded and mutual funds, non-redeemable preferred stocks and real estate investment trust equity investments. Exchange traded and mutual funds that have fixed income securities as their underlying investments totaled $1.79 billion as of December 31, 2019, an increase of$1.39 billion compared to December 31, 2018.

Mortgage loans mainly comprise loans secured by first mortgages on developed commercial real estate. Key considerations used to manage our exposure include property type and geographic diversification. For further detail on our mortgage loan portfolio, see Note 5 of the consolidated financial statements.

Limited partnership interests include $6.13 billion of private equity funds interests, $1.04 billion of real estate funds interests and$906 million of other funds interests as of December 31, 2019. We have commitments to invest additional amounts in limited partnership interests totaling $2.84 billion as of December 31, 2019.

Short-term investments primarily comprise money market funds, commercial paper, U.S. Treasury bills and other short-term investments, including securities lending collateral of $1.81 billion.

Other investments primarily comprise $1.20 billion of bank loans, $1.01 billion of real estate, $894 million of policy loans, $666 million of agent loans (loans issued to exclusive Allstate agents) and $140 million of derivatives as of December 31, 2019. For further detail on our use of derivatives, see Note 7 of the consolidated financial statements.

Unrealized net capital gains (losses)

	As of December 31,	
($ in millions)	**2019**	**2018**
U.S. government and agencies	$ 115	$ 131
Municipal	540	206
Corporate	1,988	(399)
Foreign government	11	8
ABS	2	(4)
MBS	95	94
Fixed income securities	**2,751**	**36**
Derivatives	(3)	(3)
Equity method of accounting (“EMA”) limited partnerships	(4)	—
Unrealized net capital gains and losses, pre-tax	**$ 2,744**	**$ 33**

Fixed income portfolio monitoring is a comprehensive process to identify and evaluate each security that may be other-than-temporarily impaired. The process includes a quarterly review of all securities to identify instances where the fair value of a security compared to its amortized cost is below established thresholds. The process also includes the monitoring of other impairment indicators such as ratings, ratings downgrades and payment defaults. The securities identified, in addition to other securities for which we may have a concern, are evaluated for potential other-than-temporary impairment using all reasonably available information relevant to the collectability or recovery of the security. Inherent in our evaluation of other-than-temporary impairment for these fixed income securities are assumptions and estimates about the financial condition and future earnings potential of the issue or issuer.

Some of the factors that may be considered in evaluating whether a decline in fair value is other than temporary are:

1) Financial condition, near-term and long-term prospects of the issue or issuer, including relevant industry specific market conditions and trends, geographic location and implications of rating agency actions and offering prices
2) Specific reasons that a security is in an unrealized loss position, including overall market conditions which could affect liquidity
3) Length of time and extent to which the fair value has been less than amortized cost or cost. All investments in an unrealized loss position as of December 31, 2019 were included in our portfolio monitoring process for determining whether declines in value were other than temporary.

Gross unrealized gains (losses) on fixed income securities

($ in millions)	As of December 31, 2019	2018
Gross unrealized gains	$ 2,847	$ 993
Gross unrealized losses	(96)	(957)
Unrealized net capital gains and losses	**$ 2,751**	**$ 36**

Fixed income valuations increased primarily due to a decrease in risk-free interest rates and tighter credit spreads.

Gross unrealized gains (losses) on fixed income securities by type

	As of December 31, 2019			
		Gross unrealized		
($ in millions)	Amortized cost	Gains	Losses	Fair value
Corporate	$ 41,090	$ 2,035	$ (47)	$ 43,078
U.S. government and agencies	4,971	141	(26)	5,086
Municipal	8,080	551	(11)	8,620
Foreign government	968	16	(5)	979
ABS	860	8	(6)	862
MBS	324	96	(1)	419
Total fixed income securities	**$ 56,293**	**$ 2,847**	**$ (96)**	**$ 59,044**

The consumer goods, utilities and capital goods sectors comprise 28%, 13% and 12%, respectively, of the carrying value of our corporate fixed income securities portfolio as of December 31, 2019. The banking, energy and utilities sectors comprise 30%, 30% and 13%, respectively, of the gross unrealized losses of our corporate fixed income securities portfolio as of December 31, 2019.

In general, the gross unrealized losses are related to an increase in market yields, which may include increased risk-free interest rates and/or wider credit spreads since the time of initial purchase. Similarly, gross unrealized gains reflect a decrease in market yields since the time of initial purchase.

As of December 31, 2019, we have not made the decision to sell and it is not more likely than not we will be required to sell fixed income securities with unrealized losses before recovery of the amortized cost basis.

Net investment income

($ in millions)	For the years ended December 31, 2019	2018	2017
Fixed income securities	$ 2,175	$ 2,077	$ 2,078
Equity securities	206	170	174
Mortgage loans	220	217	206
Limited partnership interests	471	705	889
Short-term investments	102	73	30
Other	262	272	236
Investment income, before expense	3,436	3,514	3,613
Investment expense (1) (2)	(277)	(274)	(212)
Net investment income	**$ 3,159**	**$ 3,240**	**$ 3,401**
Market-based	$ 2,893	$ 2,734	$ 2,661
Performance-based	543	780	952
Investment income, before expense	**$ 3,436**	**$ 3,514**	**$ 3,613**

(1) Investment expense includes $81 million, $71 million and $40 million of investee level expenses in 2019, 2018 and 2017, respectively, and has increased compared to prior year, primarily due to growth in real estate investments. Investee level expenses include depreciation and asset level operating expenses on directly held real estate and other consolidated investments.

(2) Investment expense includes $40 million, $28 million and $10 million related to the portion of reinvestment income on securities lending collateral paid to the counterparties in 2019, 2018 and 2017, respectively.

Net investment income decreased 2.5% or $81 million in 2019 compared to 2018, primarily due to lower performance-based results, primarily from limited partnerships, partially offset by higher market-based income.

Performance-based investment income

($ in millions)	For the years ended December 31, 2019	2018	2017
Limited partnerships			
Private equity	$ 330	$ 582	$ 725
Real estate	138	123	164
Performance-based - limited partnerships	**468**	**705**	**889**
Non-limited partnerships			
Private equity	9	9	19
Real estate	66	66	44
Performance-based - non-limited partnerships	**75**	**75**	**63**
Total			
Private equity	339	591	744
Real estate	204	189	208
Total performance-based	**$ 543**	**$ 780**	**$ 952**
Investee level expenses (1)	$ (74)	$ (64)	$ (35)

(1) Investee level expenses include depreciation and asset level operating expenses reported in investment expense.

Performance-based investment income decreased 30.4% or $237 million in 2019 compared to 2018, primarily due to lower asset appreciation related to private equity investments and lower valuations in the fourth quarter, on two private equity investments totaling $74 million.

Performance-based investment results and income can vary significantly between periods and are influenced by economic conditions, equity market performance, comparable public company earnings multiples, capitalization rates, operating performance of the underlying investments and the timing of asset sales.

Components of realized capital gains (losses) and the related tax effect

($ in millions)	For the year December 31, 2019	2018	2017
Impairment write-downs:			
Fixed income securities	$ (14)	$ (10)	$ (26)
Equity securities	—	—	(38)
Mortgage loans	—	—	(1)
Limited partnership interests	(6)	(3)	(32)
Other investments	(27)	(1)	(5)
Total impairment write-downs	**(47)**	**(14)**	**(102)**
Change in intent write-downs	—	—	(48)
Net OTTI losses recognized in earnings	**(47)**	**(14)**	**(150)**
Sales	575	(215)	641
Valuation of equity investments - appreciation (decline):			
Equity securities	1,210	(594)	—
Limited partnerships [(1)]	162	(97)	—
Total valuation of equity investments	**1,372**	**(691)**	**—**
Valuation and settlements of derivative instruments	(15)	43	(46)
Realized capital gains and losses, pre-tax	**1,885**	**(877)**	**445**
Income tax (expense) benefit	(397)	189	(147)
Realized capital gains and losses, after-tax	**$ 1,488**	**$ (688)**	**$ 298**
Market-based	$ 1,750	$ (946)	$ 486
Performance-based	135	69	(41)
Realized capital gains and losses, pre-tax	**$ 1,885**	**$ (877)**	**$ 445**

(1) Relates to limited partnerships where the underlying assets are predominately public equity securities.

Realized capital gains in 2019 related primarily to increased valuation of equity investments and gains on sales of fixed income securities.

Impairment write-downs in 2019 and 2018 related to investment-specific circumstances.

Sales in 2019 related primarily to fixed income securities in connection with ongoing portfolio management, as well as gains from limited partnerships. Sales in 2018 related primarily to fixed income securities in connection with ongoing portfolio management.

Valuation and settlements of derivative instruments in 2019 primarily comprised losses on equity options and futures used for risk management, partially offset by gains on interest rate futures and total return swaps used for asset replication due to increases in equity indices. 2018 primarily comprised gains on foreign currency contracts due to the strengthening of the U.S. dollar and gains on equity options used for risk management due to a decrease in equity indices, partially offset by losses on total return swaps and equity options and futures used for asset replication due to decreases in equity indices.

Realized capital gains (losses) for performance-based investments

($ in millions)	For the years ended December 31, 2019	2018	2017
Impairment write-downs	$ (6)	$ (3)	$ (32)
Sales	103	7	15
Valuation of equity investments	31	36	—
Valuation and settlements of derivative instruments	7	29	(24)
Total performance-based	**$ 135**	**$ 69**	**$ (41)**

Realized capital gains for performance-based investments in 2019 primarily related to gains on sales of investments in directly held real estate, a gain on the sale of a limited partnership and increased valuation of equity investments. 2018 primarily related to increased valuation of equity investments and gains on valuation and settlements of derivative instruments.

Market Risk

Market risk is the risk that we will incur losses due to adverse changes in interest rates, credit spreads, equity prices, commodity prices or currency exchange rates. Adverse changes to these rates and prices may occur due to changes in fiscal policy, the economic climate, the liquidity of a market or market segment, insolvency or financial distress of key market makers or participants or changes in market perceptions of credit worthiness and/or risk tolerance. Our primary market risk exposures are to changes in interest rates, credit spreads and equity prices. We also have direct and indirect exposure to commodity price changes through our diversified investments in timber, agriculture, infrastructure and energy primarily held in limited partnership interests and consolidated subsidiaries.

The active management of market risk is integral to our results of operations. We may use the following approaches to manage exposure to market risk within defined tolerance ranges:

1) Rebalancing existing asset or liability portfolios
2) Changing the type of investments purchased in the future
3) Using derivative instruments to modify the market risk characteristics of existing assets and liabilities or assets expected to be purchased

Overview In formulating and implementing guidelines for investing funds, we seek to earn attractive risk-adjusted returns that enhance our ability to offer competitive rates and prices to customers while contributing to stable profits and long-term capital growth. Accordingly, our investment decisions and objectives are informed by the underlying risks and product profiles. Investment policies define the overall framework for managing market and other investment risks, including accountability and controls over risk management activities. Subsidiaries that conduct investment activities follow policies that have been approved by their respective boards of directors and which specify the investment limits and strategies that are appropriate given the liquidity, surplus, product profile and regulatory requirements of the subsidiary. Executive oversight of investment activities is conducted primarily through the subsidiaries' boards of directors and legal entity investment committees. The Enterprise Risk and Return Council ("ERRC") oversees the aggregate risk of Allstate and its subsidiaries. Working in conjunction with the board or the investment committee of each subsidiary, as applicable, the ERRC evaluates the risk tolerance of each subsidiary and determines the aggregate risk tolerance of the enterprise.

For life and annuity products, the asset-liability management ("ALM") policies further define the overall framework for managing market and investment risks and are approved by the subsidiaries' respective boards of directors. ALM focuses on strategies to enhance yields, mitigate market risks and optimize capital to improve profitability and returns while incorporating future expected cash requirements to repay liabilities. These ALM policies specify limits, ranges and/or targets for investments that best meet business objectives in light of the unique demands and characteristics of the product liabilities and are intended to result in a prudent, methodical and effective adjudication of market risk and return.

We use widely-accepted quantitative and qualitative approaches to measure, monitor and manage market risk. We evaluate our market risk exposure using multiple measures including but not limited to:

- *Duration,* a measure of the price sensitivity of assets and liabilities to changes in interest rates
- *Value-at-risk,* a statistical estimate of the probability that the change in fair value of a portfolio will exceed a certain amount over a given time horizon
- *Scenario analysis,* an estimate of the potential changes in the fair value of a portfolio that could occur under hypothetical market conditions defined by changes to multiple market risk factors: interest rates, credit spreads, equity prices or currency exchange rates
- *Sensitivity analysis,* an estimate of the potential changes in the fair value of a portfolio that could occur using hypothetical shocks to a market risk factor.

The selection of measures used in our sensitivity analysis should not be construed as our prediction of future market events, but only as an illustration of the potential effect of such an event.

In general, we establish investment portfolio asset allocation and market risk limits based upon a combination of these measures. The asset allocation limits place restrictions on the total funds that may be invested within an asset class. Comprehensive day-to-day management of market risk within defined tolerance ranges occurs as portfolio managers buy and sell within their respective markets based upon the acceptable boundaries established by investment policies. Although we apply a similar overall philosophy to market risk, the underlying business frameworks and the accounting and regulatory environments may differ between our products and therefore affect investment decisions and risk parameters.

Interest rate risk is the risk that we will incur a loss due to adverse changes in interest rates relative to the characteristics of our interest-bearing assets and liabilities. Interest rate risk includes risks related to changes in U.S. Treasury yields and other key risk-free reference yields. This risk arises from many of our primary activities, as we invest substantial funds in interest-sensitive assets and issue interest-sensitive liabilities. Changes in interest rates can have favorable and unfavorable effects on our results. For example, increases in rates can improve investment income, but decrease the fair value of our fixed income securities portfolio and increase policyholder surrenders requiring us to liquidate assets. Decreases in rates could increase the fair value of our fixed income securities portfolio while decreasing investment income due to reinvesting at lower market yields and accelerating pay-downs and prepayments of certain investments.

For our corporate debt, we monitor market interest rates and evaluate refinancing opportunities as maturity dates approach. To mitigate this risk, we ladder the maturity dates of our debt. For our noncumulative perpetual preferred stock, we monitor market dividend rates and evaluate opportunities to redeem or refinance on or after specified dates. For further detail regarding our debt and our preferred stock, see Note 12 of the consolidated financial statements and the Capital Resources and Liquidity section of this Item.

We manage the interest rate risk in our assets relative to the interest rate risk in our liabilities and our assessment of overall economic and capital risk. One of the measures used to quantify this exposure is duration. The difference in the duration of our assets relative to our liabilities is our duration gap. To calculate the duration gap between assets and liabilities, we project asset and liability cash flows and calculate their net present value using a risk-free market interest rate adjusted for credit quality, sector attributes, liquidity and other specific risks. Duration is calculated by revaluing these cash flows at alternative interest rates and determining the percentage change in aggregate fair value. The cash flows used in this calculation include the expected maturity and repricing characteristics of our derivative financial instruments, all other financial instruments, and certain other items including, unearned premiums, claims and claims expense reserves, annuity liabilities and other interest-sensitive liabilities.

The projections include assumptions (based upon historical market experience and our experience) that reflect the effect of changing interest rates on the prepayment, lapse, leverage and/or option features of instruments, where applicable. The preceding assumptions relate primarily to callable municipal and corporate bonds, fixed rate single and flexible premium deferred annuities, mortgage-backed securities and municipal housing bonds. Additionally, the calculations include assumptions regarding the renewal of property and casualty products.

As of December 31, 2019, the difference between our asset and liability duration was a (1.48) gap compared to a (1.16) gap as of December 31, 2018. The calculation excludes traditional and interest-sensitive life insurance and accident and health insurance products that are not considered financial instruments. A negative duration gap indicates that the fair value of our liabilities is more sensitive to interest rate movements than the fair value of our assets, while a positive duration gap indicates that the fair value of our assets is more sensitive to interest rate movements than the fair value of our liabilities. Due to the relatively short duration of our property and casualty liabilities, primarily related to auto and homeowners claims, the investments generally maintain a positive duration gap between assets and liabilities. In contrast, for our annuity products the duration gap may be positive or negative as the assets and liabilities vary based on the characteristics of the products in-force and investing activity. As of December 31, 2019, property and casualty products had a positive duration gap while annuity products had a negative duration gap.

To reduce the risk that investment returns are below levels required to meet the funding needs of certain liabilities, we are executing our performance-based strategy that supplements market risk with idiosyncratic risk. We are using these investments, in addition to public equity securities, to support a portion of our property and casualty products and long-term annuity liabilities. Shorter-term annuity liabilities will continue to be invested in market-based investments to generate cash flows that will fund future claims, benefits and expenses, and that will earn stable returns across a wide variety of interest rate and economic scenarios. Performance-based investments and public equity securities are generally not interest-bearing; accordingly, using them to support interest-bearing liabilities contributes toward a negative duration gap.

Interest rate shock analysis (1)

	As of December 31,	
($ in millions)	**2019**	**2018**
Increase in fair value of the assets net of liabilities (2)	$ 1,209	$ 889

(1) Represents an immediate, parallel increase of 100 basis points based on information and assumptions used in the duration calculations and market interest rates as of December 31, 2019.

(2) Estimate excludes traditional and interest-sensitive life insurance and accident and health insurance products that are not considered financial instruments. The assets supporting these products totaled $12.14 billion and $11.07 billion as of December 31, 2019 and 2018, respectively. Based on assumptions described above, these assets would decrease in value by $649 million as of December 31, 2019 compared to a decrease of $593 million as of December 31, 2018.

To the extent that conditions differ from the assumptions we used in these calculations, duration and rate shock measures could be significantly impacted. Additionally, our calculations assume the current relationship between short-term and long-term interest rates (the term structure of interest rates) will remain constant over time. As a result, these calculations may not fully capture the effect of non-parallel changes in the term structure of interest rates and/or large changes in interest rates.

Credit spread risk is the risk that we will incur a loss due to adverse changes in credit spreads (“spreads”). Credit spread is the additional yield on fixed income securities and loans above the risk-free rate (typically referenced as the yield on U.S. Treasury securities) that market participants require to compensate them for assuming credit, liquidity and/or prepayment risks. The magnitude of the spread will depend on the likelihood that a particular issuer will default. This risk arises from many of our primary activities, as we invest substantial funds in spread-sensitive fixed income assets. We manage the spread risk in our assets. One of the measures used to quantify this exposure is spread duration. Spread duration measures the price sensitivity of the assets to changes in spreads. For example, if spreads increase 100 basis points, the fair value of an asset exhibiting a spread duration of 5 is expected to decrease in value by 5%.

Spread duration is calculated similarly to interest rate duration. As of December 31, 2019, the spread duration was 4.60 compared to 4.28 as of December 31, 2018.

Credit spread shock analysis (1)

($ in millions)	As of December 31, 2019	2018
Decrease in net fair value of the assets (2)	$ 2,877	$ 2,493

(1) Represents an immediate, parallel increase of 100 basis points across all asset classes, industry sectors and credit ratings based on information and assumptions used in the spread duration calculations and market interest rates as of December 31, 2019.

(2) Reflects effects of tactical positions that include the use of credit default swaps to manage spread risk.

Equity price risk is the risk that we will incur losses due to adverse changes in the general levels of the markets.

Equity investments As of December 31, 2019, we held $7.28 billion in equity securities, excluding those with fixed income securities as their underlying investments, and limited partnership interests where the underlying assets are predominately public equity securities, compared to $5.29 billion as of December 31, 2018. 80.4% of the common stocks and other investments with public equity risk supported property and casualty products as of December 31, 2019, compared to 73.2% as of December 31, 2018. As of December 31, 2019, these investments had an equity market portfolio beta of 1.02, compared to a beta of 1.00 as of December 31, 2018. Beta represents a widely used methodology to describe, quantitatively, an investment's market risk characteristics relative to an index such as the Standard & Poor's 500 Composite Price Index ("S&P 500").

Change in S&P 500 by 10%

($ in millions)	As of December 31, 2019	2018
Change in net fair value of equity investments	$ 742	$ 527

We periodically use put options to reduce equity price risk or call options to adjust our equity risk profile. Put options provide an offset to declines in equity market values below a targeted level, while call options provide participation in equity market appreciation above a targeted level. Options can expire, terminate early or the option can be exercised. If the equity index does not fall below the put's strike price or rise above the call's strike price, the maximum loss on purchased puts and calls is limited to the amount of the premium paid.

Limited partnership interests As of December 31, 2019, we held $7.17 billion in limited partnership interests excluding those limited partnership interests where the underlying assets are predominately public equity securities compared to $6.86 billion as of December 31, 2018. 56.7% of the limited partnership interests supported property and casualty products as of December 31, 2019, compared to 53.9% as of December 31, 2018. These investments are primarily comprised of private equity and real estate funds. These investments are idiosyncratic in nature and a greater portion of the return is derived from asset operating performance. They are not actively traded, and valuation changes typically reflect the performance of the underlying asset.

Change in private market valuations by 10%

($ in millions)	As of December 31, 2019	2018
Change in net fair value of limited partnership interests	$ 717	$ 686

For limited partnership interests, quarterly changes in fair values may not be highly correlated to equity indices in the short-term and changes in value of these investments are generally recognized on a three-month delay due to the availability of the related investee financial statements. The illustrations noted above may not reflect our actual experience if the future composition of the portfolio (hence its beta) and correlation relationships differ from the historical relationships.

Separate Accounts As of December 31, 2019 and 2018, we had separate account assets related to variable annuity and variable life contracts with account values totaling $3.04 billion and $2.81 billion, respectively. Equity risk exists for contract charges based on separate account balances and guarantees for death and/or income benefits provided by our variable products.

In 2006, we disposed of substantially all of the variable annuity business through reinsurance agreements with The Prudential Insurance Company of America, a subsidiary of Prudential Financial Inc. and therefore mitigated this aspect of our risk. Equity risk for our variable life business relates to contract charges and policyholder benefits. Total variable life contract charges, including reinsurance assumed, for 2019 and 2018 were $45 million and $44 million, respectively. Separate account liabilities related to variable life contracts were $85 million and $68 million as of December 31, 2019 and 2018, respectively.

Equity-indexed Life and Annuity Liabilities As of December 31, 2019 and 2018, we had $1.92 billion and $1.83 billion, respectively, in equity-indexed life and annuity liabilities that provide customers with interest crediting rates based on the performance of the S&P 500. We hedge the majority of the risk associated with these liabilities using equity-indexed options and futures and eurodollar futures, maintaining risk within specified value-at-risk limits.

Foreign currency exchange rate risk is the risk that we will incur economic losses due to adverse changes in foreign currency exchange rates. This risk primarily arises from our foreign equity investments, including common stocks, limited partnership interests, and our Canadian, Northern Ireland and Indian operations. We use foreign currency derivative contracts to partially offset this risk.

As of December 31, 2019, we had $2.80 billion in foreign currency denominated equity investments, including the impact of foreign currency derivative contracts, $1.08 billion net investment in our foreign subsidiaries, primarily related to our Canadian operations, and $113 million in unhedged non-U.S. dollar fixed income securities. These amounts were $2.10 billion, $860 million, and $96 million, respectively, as of December 31, 2018.

Change in foreign currency exchange rates (1)

	As of December 31,	
($ in millions)	**2019**	**2018**
Decrease in value of foreign currency denominated instruments	$ 402	$ 306

(1) Represents a 10% immediate unfavorable change in each of the foreign currency exchange rates to which we are exposed based on information and assumptions used, including the impact of foreign currency derivative contracts.

The modeling technique we use to report our currency exposure does not take into account correlation among foreign currency exchange rates. Even though we believe it is very unlikely that all of the foreign currency exchange rates that we are exposed to would simultaneously decrease by 10%, we nonetheless stress test our portfolio under this and other hypothetical extreme adverse market scenarios. Our actual experience may differ from these results because of assumptions we have used or because significant liquidity and market events could occur that we did not foresee.

Capital Resources and Liquidity

Capital resources consist of shareholders' equity and debt, representing funds deployed or available to be deployed to support business operations or for general corporate purposes.

Capital resources

($ in millions)	As of December 31, 2019	2018	2017
Preferred stock, common stock, treasury stock, retained income and other shareholders' equity items	$ 24,048	$ 21,194	$ 20,662
Accumulated other comprehensive (loss) income	1,950	118	1,889
Total shareholders' equity	**25,998**	**21,312**	**22,551**
Debt	6,631	6,451	6,350
Total capital resources	**$ 32,629**	**$ 27,763**	**$ 28,901**
Ratio of debt to shareholders' equity	25.5%	30.3%	28.2%
Ratio of debt to capital resources	20.3%	23.2%	22.0%

Shareholders' equity increased in 2019, primarily due to net income, increased net unrealized capital gains on investments and issuance of preferred stock, partially offset by common share repurchases and dividends paid to shareholders. In 2019, we paid dividends of $653 million and $134 million related to our common and preferred shares, respectively. Shareholders' equity decreased in 2018, primarily due to decreased net unrealized capital gains on investments, common share repurchases and dividends paid to shareholders, partially offset by net income and issuance of preferred stock.

Common share repurchases As of December 31, 2019, there was $259 million remaining on the $3.00 billion common share repurchase program. In January 2020, we completed the $3.00 billion share repurchase program that commenced in November 2018. On February 6, 2020, the Board authorized a new $3.00 billion common share repurchase program that is expected to be completed by the end of 2021.

In November 2019, we entered into an ASR agreement with Goldman Sachs & Co. LLC ("Goldman Sachs") to purchase $500 million of our outstanding common stock. Under the ASR agreement, we paid $500 million upfront and initially acquired 4.0 million shares. The ASR agreement settled on January 8, 2020, and we repurchased a total of 4.6 million shares at an average price of $109.51.

During 2019, we repurchased 16.4 million common shares for $1.81 billion. The common share repurchases were completed through open market transactions and ASR agreements.

Since 1995, we have acquired 724 million shares of our common stock at a cost of $35.18 billion, primarily as part of various stock repurchase programs. We have reissued 144 million common shares since 1995, primarily associated with our equity incentive plans, the 1999 acquisition of American Heritage Life Investment Corporation and the 2001 redemption of certain mandatorily redeemable preferred securities. Since 1995, total common shares outstanding has decreased by 580 million shares or 64.5%, primarily due to our repurchase programs.

Common shareholder dividends On January 2, 2019, April 1, 2019, July 1, 2019, and October 1, 2019, we paid common shareholder dividends of $0.46, $0.50, $0.50 and $0.50, respectively. On November 15, 2019, we declared a common shareholder dividend of $0.50, payable on January 2, 2020. On February 20, 2020, we declared a common shareholder dividend of $0.54, payable on April 1, 2020.

Issuance and redemption of preferred stock On August 8, 2019, we issued 46,000 shares of 5.100% Fixed Rate Noncumulative Perpetual Preferred Stock, Series H for gross proceeds of $1.15 billion.

On October 15, 2019, we redeemed all 5,400 shares of our Fixed Rate Noncumulative Perpetual Preferred Stock, Series D, all 29,900 shares of our Fixed Rate Noncumulative Perpetual Preferred Stock, Series E, and all 10,000 shares of our Fixed Rate Noncumulative Perpetual Preferred Stock, Series F and the corresponding depository shares for $1.13 billion.

On November 8, 2019, we issued 12,000 shares of 4.750% Fixed Rate Noncumulative Perpetual Preferred Stock, Series I for gross proceeds of $300 million.

On January 15, 2020, we redeemed all 11,500 shares of Fixed Rate Noncumulative Preferred Stock, Series A and the corresponding depositary shares for $288 million.

For additional details on these transactions, seeNote 12 of the consolidated financial statements.

Issuance and repayment of debt On June 10, 2019, we issued $500 million of 3.850% Senior Notes due 2049. Interest on the Senior Notes is payable semi-annually in arrears on February 10 and August 10 of each year, beginning on February 10, 2020. The Senior Notes are redeemable at any time at the applicable redemption price prior to the maturity date. The proceeds of this issuance are used for general corporate purposes.

On May 16, 2019, we repaid $317 million of 7.450% Senior Notes, Series B, at maturity.

Financial ratings and strength

Senior long-term debt, commercial paper and insurance financial strength ratings

	As of December 31, 2019		
	Moody's	**S&P Global Ratings**	**A.M. Best**
The Allstate Corporation (debt)	A3	A-	a
The Allstate Corporation (short-term issuer)	P-2	A-2	AMB-1+
Allstate Insurance Company (insurance financial strength)	Aa3	AA-	A+
Allstate Life Insurance Company (insurance financial strength)	A2	A+	A+
Allstate Assurance Company (insurance financial strength)	A2	N/A	A+

Our ratings are influenced by many factors including our operating and financial performance, asset quality, liquidity, asset/liability management, overall portfolio mix, financial leverage (i.e., debt), exposure to risks such as catastrophes and the current level of operating leverage. The preferred stock and subordinated debentures are viewed as having a common equity component by certain rating agencies and are given equity credit up to a pre-determined limit in our capital structure as determined by their respective methodologies. These respective methodologies consider the existence of certain terms and features in the instruments such as the noncumulative dividend feature in the preferred stock.

In May 2019, A.M. Best affirmed The Allstate Corporation's debt and short-term issuer ratings of a and AMB-1+, respectively, and the insurer financial strength ratings of A+ for Allstate Insurance Company ("AIC"), Allstate Life Insurance Company ("ALIC"), and Allstate Assurance Company ("AAC"). The outlook for the ratings is stable.

In July 2019, Moody's affirmed The Allstate Corporation's debt and short-term issuer ratings of A3 and P-2, respectively, and the insurance financial strength rating of Aa3 for AIC. Moody's downgraded ALIC and AAC insurance financial strength ratings to A2 from A1 reflecting Moody's shift to a more standard single rating level positive adjustment for subsidiary company ratings. The outlook for the ratings is stable.

In December 2019, S&P Global affirmed The Allstate Corporation's debt and short-term issuer ratings of A- and A-2, respectively, and the insurance financial strength ratings of AA- for AIC and A+ for ALIC. The outlook for the ratings is stable.

We have distinct and separately capitalized groups of subsidiaries licensed to sell property and casualty insurance that maintain separate group ratings. The ratings of these groups are influenced by the risks that relate specifically to each group. Many mortgage companies require property owners to have insurance from an insurance carrier with a secure financial strength rating from an accredited rating agency. In May 2019, A.M. Best affirmed the A rating of ANJ, which writes auto and homeowners insurance, and the A+ rating of North Light, our excess and surplus lines carrier. The outlook for the ANJ rating and North Light rating is stable. ANJ also has a Financial Stability Rating® of A" from Demotech, which was affirmed in November 2019. In March 2019, A.M. Best upgraded the CKIC, which underwrites personal lines property insurance in Florida, rating to B+. CKIC also has a Financial Stability Rating of A' from Demotech that was affirmed in November 2019. ANJ, North Light and CKIC do not have support agreements with AIC.

Allstate's domestic property and casualty and life insurance subsidiaries prepare their statutory-basis financial statements in conformity with accounting practices prescribed or permitted by the insurance department of the applicable state of domicile. Statutory surplus is a measure that is often used as a basis for determining dividend paying capacity, operating leverage and premium growth capacity, and it is also reviewed by rating agencies in determining their ratings.

The property and casualty business is comprised of 29 insurance companies, each of which has individual company dividend limitations. As of December 31, 2019, total statutory surplus is $20.40 billion compared to $18.15 billion as of December 31, 2018. Property and casualty subsidiaries surplus was $16.19 billion as of December 31, 2019, compared to $14.33 billion as of December 31, 2018. Life insurance subsidiaries surplus was $4.21 billion as of December 31, 2019, compared to $3.82 billion as of December 31, 2018.

The National Association of Insurance Commissioners ("NAIC") has developed financial relationships or tests known as the Insurance Regulatory Information System to assist state insurance regulators in monitoring the financial condition of insurance companies and identifying companies that require special attention or actions by state insurance regulators. The NAIC analyzes financial data provided by insurance companies using prescribed ratios, each with defined "usual ranges". Additional regulatory scrutiny may occur if a company's ratios fall outside the usual ranges for four or more of the ratios. Our domestic insurance companies have no significant departure from these ranges.

Liquidity sources and uses Our potential sources and uses of funds principally include the following activities below.

Activities for potential sources of funds

	Property-Liability	*Service Businesses*	*Allstate Life*	*Allstate Benefits*	*Allstate Annuities*	*Corporate and Other*
Receipt of insurance premiums	✓	✓	✓	✓		
Recurring service fees	✓	✓		✓		
Contractholder fund deposits			✓	✓	✓	
Reinsurance and indemnification program recoveries	✓	✓	✓	✓	✓	
Receipts of principal, interest and dividends on investments	✓	✓	✓	✓	✓	✓
Sales of investments	✓	✓	✓	✓	✓	✓
Funds from securities lending, commercial paper and line of credit agreements	✓		✓		✓	✓
Intercompany loans	✓	✓	✓	✓	✓	✓
Capital contributions from parent	✓	✓	✓	✓	✓	✓
Dividends or return of capital from subsidiaries	✓	✓	✓	✓	✓	✓
Tax refunds/settlements	✓	✓	✓	✓	✓	✓
Funds from periodic issuance of additional securities						✓
Receipt of intercompany settlements related to employee benefit plans						✓

Activities for potential uses of funds

	Property-Liability	*Service Businesses*	*Allstate Life*	*Allstate Benefits*	*Allstate Annuities*	*Corporate and Other*
Payment of claims and related expenses	✓	✓				
Payment of contract benefits, surrenders and withdrawals			✓	✓	✓	
Reinsurance cessions and indemnification program payments	✓	✓	✓	✓	✓	
Operating costs and expenses	✓	✓	✓	✓	✓	✓
Purchase of investments	✓	✓	✓	✓	✓	✓
Repayment of securities lending, commercial paper and line of credit agreements	✓		✓		✓	✓
Payment or repayment of intercompany loans	✓	✓	✓	✓	✓	✓
Capital contributions to subsidiaries	✓	✓	✓	✓	✓	✓
Dividends or return of capital to shareholders/parent company	✓	✓	✓	✓	✓	✓
Tax payments/settlements	✓	✓	✓	✓	✓	✓
Common share repurchases						✓
Debt service expenses and repayment	✓					✓
Payments related to employee benefit plans	✓	✓	✓	✓	✓	✓
Payments for acquisitions	✓	✓	✓	✓	✓	✓

We actively manage our financial position and liquidity levels in light of changing market, economic, and business conditions. Liquidity is managed at both the entity and enterprise level across the Company and is assessed on both base and stressed level liquidity needs. We believe we have sufficient liquidity to meet these needs. Additionally, we have existing intercompany agreements in place that facilitate liquidity management across the Company to enhance flexibility.

As of December 31, 2019, we held $12.79 billion of cash, U.S. government and agencies fixed income securities, and public equity securities (excluding non-redeemable preferred stocks and foreign equities) which, under normal market conditions, we would expect to be able to liquidate within one week. In addition, we regularly estimate how much of the total portfolio, which includes high quality corporate fixed income and municipal holdings, can be reasonably liquidated within one quarter. These estimates are subject to considerable uncertainty associated with evolving market conditions. As of December 31, 2019, cash and estimated liquidity available within one quarter, under normal market conditions and at current market prices, was $27.25 billion.

Certain remote events and circumstances could constrain our liquidity. Those events and circumstances include, for example, a catastrophe resulting in extraordinary losses, a downgrade in our senior long-term debt ratings to non-investment grade status, or a downgrade in AIC's or ALIC's financial strength ratings. The rating agencies also consider the interdependence of our individually rated entities; therefore, a rating change in one entity could potentially affect the ratings of other related entities.

The Allstate Corporation is party to an Amended and Restated Intercompany Liquidity Agreement ("Liquidity Agreement") with certain subsidiaries, which include, but are not limited to, ALIC and AIC. The Liquidity Agreement allows for short-term advances of funds to be made between parties for liquidity and other general corporate purposes. The Liquidity Agreement does not establish a commitment to advance funds on the part of any party. ALIC and AIC each serve as a lender and borrower, certain other subsidiaries serve only as borrowers, and the Corporation serves only as a lender. AIC also has a capital support agreement with ALIC. Under the capital support agreement, AIC is committed to providing capital to ALIC to maintain an adequate capital level. The maximum amount of potential funding under each of these agreements is $1.00 billion.

In addition to the Liquidity Agreement, the Corporation also has an intercompany loan agreement with certain of its subsidiaries, which include, but are not limited to, AIC and ALIC. The amount of intercompany loans available to the Corporation's subsidiaries is at the discretion of the Corporation. The maximum amount of loans the Corporation will have outstanding to all its eligible subsidiaries at any given point in time is limited to $1.00 billion. The Corporation may use commercial paper borrowings, bank lines of credit and securities lending to fund intercompany borrowings.

Parent company capital capacity At the parent holding company level, we have deployable assets totaling $2.30 billion as of December 31, 2019, comprising cash and investments that are generally saleable within one quarter. Deployable assets increased by the proceeds from the Preferred Stock, Series I issuance, which were subsequently used for the Series A redemption that occurred on January 15, 2020. The substantial earnings capacity of the operating subsidiaries is the primary source of capital generation for the Corporation.

The payment of dividends by AIC to The Allstate Corporation is limited by Illinois insurance law to formula amounts based on statutory net income and statutory surplus, as well as the timing and amount of dividends paid in the preceding twelve months. Based on the greater of 2019 statutory net income or 10% of statutory surplus, the maximum amount of dividends that AIC will be able to pay, without prior Illinois Department of Insurance approval, at a given point in time in 2020 is estimated at $3.73 billion, less dividends paid during the preceding twelve months measured at that point in time. Notification and approval of intercompany lending activities are also required by the Illinois Department of Insurance for those transactions that exceed formula amounts based on statutory admitted assets and statutory surplus.

These holding company assets and subsidiary dividends provide funds for the parent company's fixed charges and other corporate purposes.

Intercompany dividends were paid in 2019, 2018 and 2017 between the following companies: AIC, Allstate Insurance Holdings, LLC ("AIH"), the Corporation, ALIC, American Heritage Life Insurance Company ("AHL") and Allstate Financial Insurance Holdings Corporation ("AFIHC").

Intercompany dividends

($ in millions)	2019	2018	2017
AIC to AIH	$ 2,732	$ 2,874	$ 1,555
AIH to the Corporation	2,747	2,897	1,613
ALIC to AIC	75	250	600
AHL to AFIHC	80	55	70
AFIHC to the Corporation	50	—	—

Dividends may not be paid or declared on our common stock and shares of common stock may not be repurchased unless the full dividends for the latest completed dividend period on our preferred stock have been declared and paid or provided for.

We are prohibited from declaring or paying dividends on our Series G preferred stock if we fail to meet specified capital adequacy, net income or shareholders' equity levels, except out of the net proceeds of common stock issued during the 90 days prior to the date of declaration. As of December 31, 2019, we satisfied all of the tests with no current restrictions on the payment of preferred stock dividends. There were no capital contributions paid by the Corporation to AIC or capital contributions by AIC to ALIC in 2019, 2018 or 2017.

The terms of our outstanding subordinated debentures also prohibit us from declaring or paying any dividends or distributions on our common or preferred stock or redeeming, purchasing, acquiring, or making liquidation payments on our common stock or preferred stock if we have elected to defer interest payments on the subordinated debentures, subject to certain limited exceptions. In 2019, we did not defer interest payments on the subordinated debentures.

Additional resources to support liquidity are as follows:

- The Corporation has access to a commercial paper facility with a borrowing limit of $1.00 billion to cover short-term cash needs. As of December 31, 2019, there were no balances outstanding and therefore the remaining borrowing capacity was $1.00 billion.
- The Corporation, AIC and ALIC have access to a $1.00 billion unsecured revolving credit facility that is available for short-term liquidity requirements. The maturity date of this facility is April 2021. The facility is fully subscribed among 11 lenders with the largest commitment being $115 million. The commitments of the lenders are several and no lender is responsible for any other lender's commitment if such lender fails to make a loan

under the facility. This facility contains an increase provision that would allow up to an additional $500 million of borrowing. This facility has a financial covenant requiring that we not exceed a 37.5% debt to capitalization ratio as defined in the agreement. This ratio was 15.9% as of December 31, 2019. Although the right to borrow under the facility is not subject to a minimum rating requirement, the costs of maintaining the facility and borrowing under it are based on the ratings of our senior unsecured, unguaranteed long-term debt. There were no borrowings under the credit facility during 2019.

- The Corporation has access to a universal shelf registration statement with the Securities and Exchange Commission that expires in 2021. We can use this shelf registration to issue an unspecified amount of debt securities, common stock (including 581 million shares of treasury stock as of December 31, 2019), preferred stock, depositary shares, warrants, stock purchase contracts, stock purchase units and securities of trust subsidiaries. The specific terms of any securities we issue under this registration statement will be provided in the applicable prospectus supplements.

Liquidity exposure Contractholder funds were $17.69 billion as of December 31, 2019.

Contractholder funds by contractual withdrawal provisions

($ in millions)	December 31, 2019	Percent to total
Not subject to discretionary withdrawal	$ 2,718	15.4%
Subject to discretionary withdrawal with adjustments:		
Specified surrender charges (1)	4,760	26.9
Market value adjustments (2)	808	4.6
Subject to discretionary withdrawal without adjustments (3)	9,406	53.1
Total contractholder funds (4)	**$ 17,692**	**100.0%**

(1) Includes $1.46 billion of liabilities with a contractual surrender charge of less than 5% of the account balance.

(2) $369 million of the contracts with market value adjusted surrenders have a 30-45 day period at the end of their initial and subsequent interest rate guarantee periods (which are typically 1, 5, 7 or 10 years) during which there is no surrender charge or market value adjustment. $168 million of these contracts have their 30-45 day window period in 2020.

(3) 89% of these contracts have a minimum interest crediting rate guarantee of 3% or higher.

(4) Includes $698 million of contractholder funds on variable annuities reinsured to The Prudential Insurance Company of America, a subsidiary of Prudential Financial Inc., in 2006.

Retail life and annuity products may be surrendered by customers for a variety of reasons. Reasons unique to individual customers include a current or unexpected need for cash or a change in life insurance coverage needs. Other key factors that may impact the likelihood of customer surrender include the level of the contract surrender charge, the length of time the contract has been in force, distribution channel, market interest rates, equity market conditions and potential tax implications.

In addition, the propensity for retail life insurance policies to lapse is lower than it is for fixed annuities because of the need for the insured to be re-underwritten upon policy replacement.

The surrender and partial withdrawal rate on deferred fixed annuities and interest-sensitive life insurance products, based on the beginning of year contractholder funds, was 6.0% in 2019 and 7.2% in 2018. We strive to promptly pay customers who request cash surrenders; however, statutory regulations generally provide up to six months in most states to fulfill surrender requests.

Our asset-liability management practices enable us to manage the differences between the cash flows generated by our investment portfolio and the expected cash flow requirements of our life insurance and annuity product obligations.

Contractual obligations and commitments Our contractual obligations as of December 31, 2019, and the payments due by period are shown in the following table.

Contractual obligations and payments due by period

	As of December 31, 2019				
($ in millions)	**Total**	**Less than 1 year**	**1 to 3 years**	**Over 3 years to 5 years**	**Over 5 years**
Liabilities for collateral (1)	$ 1,829	$ 1,829	$ —	$ —	$ —
Contractholder funds (2)	35,751	2,058	3,903	3,561	26,229
Reserve for life-contingent contract benefits (2)	38,446	1,449	2,642	2,424	31,931
Long-term debt (3)	13,869	316	872	1,335	11,346
Operating leases (4)	644	133	223	151	137
Unconditional purchase obligations (4)	590	192	239	109	50
Defined benefit pension plans and other postretirement benefit plans (4)(5)	967	47	111	115	694
Reserve for property and casualty insurance claims and claims expense (6)	27,712	12,317	8,707	3,085	3,603
Other liabilities and accrued expenses (7)(8)	5,320	5,025	266	17	12
Net unrecognized tax benefits (9)	70	58	12	—	—
Total contractual cash obligations	**$ 125,198**	**$ 23,424**	**$ 16,975**	**$ 10,797**	**$ 74,002**

(1) Liabilities for collateral are typically fully secured with cash or short-term investments. We manage our short-term liquidity position to ensure the availability of a sufficient amount of liquid assets to extinguish short-term liabilities as they come due in the normal course of business, including utilizing potential sources of liquidity as disclosed previously.

(2) Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life and fixed annuities, including immediate annuities without life contingencies. The reserve for life-contingent contract benefits relates primarily to traditional life insurance, immediate annuities with life contingencies and voluntary accident and health insurance. These amounts reflect the present value of estimated cash payments to be made to contractholders and policyholders. Certain of these contracts, such as immediate annuities without life contingencies, involve payment obligations where the amount and timing of the payment are essentially fixed and determinable. These amounts relate to (i) policies or contracts where we are currently making payments and will continue to do so and (ii) contracts where the timing of a portion or all of the payments has been determined by the contract. Other contracts, such as interest-sensitive life, fixed deferred annuities, traditional life insurance and voluntary accident and health insurance, involve payment obligations where a portion or all of the amount and timing of future payments is uncertain. For these contracts, we are not currently making payments and will not make payments until (i) the occurrence of an insurable event such as death or illness or (ii) the occurrence of a payment triggering event such as the surrender or partial withdrawal on a policy or deposit contract, which is outside of our control. For immediate annuities with life contingencies, the amount of future payments is uncertain since payments will continue as long as the annuitant lives. We have estimated the timing of payments related to these contracts based on historical experience and our expectation of future payment patterns. Uncertainties relating to these liabilities include mortality, morbidity, expenses, customer lapse and withdrawal activity, estimated additional deposits for interest-sensitive life contracts, and renewal premium for life policies, which may significantly impact both the timing and amount of future payments. Such cash outflows reflect adjustments for the estimated timing of mortality, retirement, and other appropriate factors, but are undiscounted with respect to interest. As a result, the sum of the cash outflows shown for all years in the table exceeds the corresponding liabilities of $17.69 billion for contractholder funds and $12.30 billion for reserve for life-contingent contract benefits as included in the Consolidated Statements of Financial Position as of December 31, 2019. The liability amount in the Consolidated Statements of Financial Position reflects the discounting for interest as well as adjustments for the timing of other factors as described above. Future premium collections are not included in the amounts presented in the table above.

(3) Amount differs from the balance presented on the Consolidated Statements of Financial Position as of December 31, 2019, because the long-term debt amount above includes interest and excludes debt issuance costs.

(4) Our payment obligations relating to operating leases, unconditional purchase obligations and pension and other postretirement benefits ("OPEB") contributions are managed within the structure of our intermediate to long-term liquidity management program.

(5) The pension plans' obligations in the next 12 months represent our planned contributions to certain unfunded non-qualified plans where the benefit obligation exceeds the assets, and the remaining years' contributions are projected based on the average remaining service period using the current underfunded status of the plans. The OPEB plans' obligations are estimated based on the expected benefits to be paid. These liabilities are discounted with respect to interest, and as a result the sum of the cash outflows shown for all years in the table exceeds the corresponding liability amount of $534 million included in other liabilities and accrued expenses on the Consolidated Statements of Financial Position.

(6) Reserve for property and casualty insurance claims and claims expense is an estimate of amounts necessary to settle all outstanding claims, including claims that have been IBNR as of the balance sheet date. We have estimated the timing of these payments based on our historical experience and our expectation of future payment patterns. However, the timing of these payments may vary significantly from the amounts shown above, especially for IBNR claims. The ultimate cost of losses may vary materially from recorded amounts that are our best estimates.

(7) Other liabilities primarily include accrued expenses and certain benefit obligations and claim payments and other checks outstanding. Certain of these long-term liabilities are discounted with respect to interest, as a result, the sum of the cash outflows shown for all years in the table may exceed the corresponding liability amount.

(8) Balance sheet liabilities not included in the table above include unearned and advance premiums of $16.13 billion and gross deferred tax liabilities of $2.35 billion. These items were excluded as they do not meet the definition of a contractual liability as we are not contractually obligated to pay these amounts to third parties. Rather, they represent an accounting mechanism that allows us to present our financial statements on an accrual basis. In addition, other liabilities of $280 million were not included in the table above because they did not represent a contractual obligation or the amount and timing of their eventual payment was sufficiently uncertain.

(9) Net unrecognized tax benefits represent our potential future obligation to the taxing authority for a tax position that was not recognized in the consolidated financial statements. We believe it is reasonably possible that a decrease of up to $58 million in unrecognized tax benefits may occur within the next twelve months due to IRS settlements. The resolution of this obligation may be for an amount different than what we have accrued.

Contractual commitments and periods in which commitments expire

	As of December 31, 2019				
($ in millions)	**Total**	**Less than 1 year**	**1 to 3 years**	**Over 3 years to 5 years**	**Over 5 years**
Other commitments – conditional	$ 205	$ 91	$ 46	$ 8	$ 60
Other commitments – unconditional	2,889	284	250	385	1,970
Total commitments	**$ 3,094**	**$ 375**	**$ 296**	**$ 393**	**$ 2,030**

Contractual commitments represent investment commitments such as private placements, limited partnership interests and other loans. Limited partnership interests are typically funded over the commitment period which is shorter than the contractual expiration date of the partnership and as a result, the actual timing of the funding may vary.

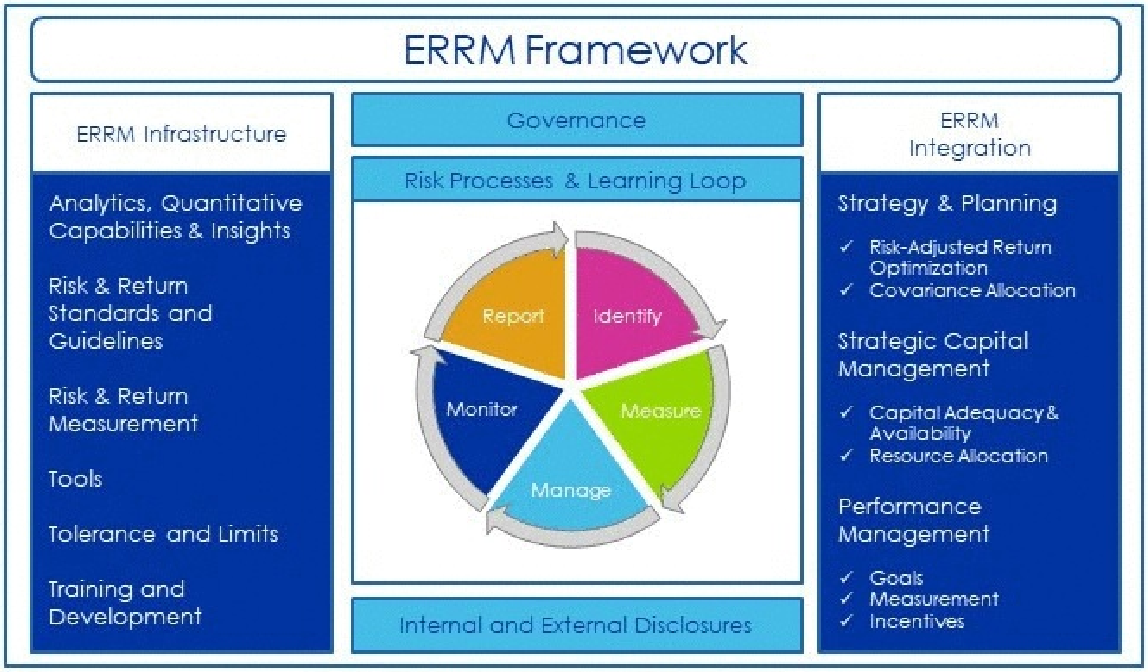
We have agreements in place for services we conduct, generally at cost, between subsidiaries relating to insurance, reinsurance, loans and capitalization. All material intercompany transactions have been appropriately eliminated in consolidation. Intercompany transactions among insurance subsidiaries and affiliates have been approved by the appropriate departments of insurance as required.

For a more detailed discussion of our off-balance sheet arrangements, see Note 7 of the consolidated financial statements.

Enterprise Risk and Return Management

In addition to the normal risks of the business, Allstate is subject to significant risks as an insurer and a provider of other products and services. These risks are discussed in more detail in the Risk Factors section of this document. We regularly identify, measure, manage, monitor and report all significant risks. Major categories of enterprise risk are strategic, insurance, investment, financial, operational and culture.

Allstate manages these risks through an Enterprise Risk and Return Management ("ERRM") framework that includes governance, processes, culture, and activities that are performed on an integrated, enterprise-wide basis, following our risk and return principles. Our legal and capital structures are designed to manage capital and solvency on a legal entity basis. Our risk-return principles define how we operate and guide risk and return decision making. These principles state that our priority is to maintain a strong foundation by protecting solvency, complying with laws and acting with integrity. Building upon this foundation, we strive to build strategic value and optimize risk and return.



Governance ERRM governance includes board oversight, an executive management committee, and enterprise and market-facing business chief risk officers.

- The Allstate Corporation Board of Directors ("Allstate Board") has overall responsibility for oversight of Management's design and implementation of ERRM.
- The Risk and Return Committee ("RRC") of the Allstate Board oversees effectiveness of the ERRM program, governance structure and risk-related decision-making, while focusing on the Company's overall risk profile.
- The Audit Committee oversees the effectiveness of internal controls over financial reporting, disclosure controls and procedures as well as management's risk control framework and cybersecurity program.
- The ERRC, directs ERRM by establishing risk and return targets, determining economic capital levels and monitoring integrated strategies and actions from an enterprise risk and return perspective. The ERRC consists of Allstate's chief executive officer, vice chair, chief financial officer, chief risk officer and other senior leaders.
- Other key committees work with the ERRC to direct ERRM activities, including the Operating Committee, the Operational Risk Council, the Information Security Council, the Corporate Asset Liability Committee, liability governance committees, and investment committees.

Key risks are assessed and reported through comprehensive ERRM reports prepared for senior management and the RRC. The risk summary report communicates alignment of Allstate's risk profile with risk and return principles while providing a perspective on risk position. Discussion promotes active engagement with management and the RRC. Internal controls over key risks are managed and reported to senior management and the Audit Committee of the Company through a semiannual risk control dashboard. Annually, we review risks related to the strategic plan, operating plan, and incentive compensation programs with the Allstate Board.

Framework We apply these principles using an integrated ERRM framework that focuses on assessment, transparency and dialogue. Our framework provides a comprehensive view of risks and is used by senior management and business managers to drive risk-return based decisions. We continually validate and improve our ERRM practices by benchmarking and obtaining external perspectives.

Management and the ERRC rely on internal and external perspectives to determine an appropriate level of target economic capital. Internal perspectives include enterprise solvency and volatility assessments, stress scenarios, model assumptions, and management judgment. External considerations include NAIC risk-based capital as well as S&P's, Moody's, and A.M. Best's capital adequacy measurement. Our economic capital reflects management's view of the aggregate level of capital necessary to satisfy stakeholder interests, manage Allstate's risk profile and maintain financial strength. The impact of strategic initiatives on enterprise risk is evaluated through the economic capital framework.

The NAIC has adopted the Risk Management and Own Risk and Solvency Assessment Model Act ("ORSA Model Act"), which has been enacted by our insurance subsidiaries' domiciliary states. The ORSA Model Act requires that insurers maintain a risk management framework and conduct an internal own risk and solvency assessment of the insurer's material risks in normal and stressed environments. Results of the assessment are filed annually.

Allstate's risk appetite is measured through our economic capital framework. The enterprise risk appetite is cascaded into individual risk limits which set boundaries on the amount of risk we are willing to accept from one specific risk category before escalating for further management discussion and action. Risk limits are established based upon expected returns, volatility, potential tail losses, and impact on the enterprise portfolio. To effectively operate within risk limits and for risk-return optimization, business units establish risk limits and capital targets specific to their businesses. Allstate's risk management strategies adapt to changes in business and market environments.

Process Our ERRM framework establishes a basis for transparency and dialogue across the enterprise and for continuous learning by embedding our risk and return management culture of identifying, assessing, managing, monitoring and reporting risks within the organization. Allstate designs business and enterprise strategies that seek to optimize risk-adjusted returns on capital. Risks are managed at both the legal entity and enterprise level.

A summary of our process to manage each of our major risk categories follows:

Strategic risk and return management addresses loss associated with inadequate or flawed business planning or strategy setting, including product mix, mergers or acquisitions and market positioning, and unexpected changes within the market or regulatory environment in which Allstate operates. This includes reputational risk, which is the potential for negative publicity regarding a company's conduct or business practices to adversely impact its profitability, operations, consumer base, or require costly litigation and other defensive measures.

We manage strategic risk through the Allstate Board and senior management strategy reviews that include a risk and return assessment of our strategic plans and ongoing monitoring of our strategic actions, key assumptions and the external competitive environment. Using the ERRM framework, Allstate designs strategies that seek to optimize risk-adjusted returns on economic capital for risk types including interest rate risk, credit risk, equity investments, including those with idiosyncratic return potential, auto profitability, and growing property exposure.

Insurance risk and return management addresses fluctuations in the timing, frequency, and severity of benefits, expenses, and premiums relative to the return expectations inclusive of systemic risk, concentration of insurance exposures, policy terms, reinsurance coverage, and claims handling practices.

Insurance risk exposures include our operating results and financial condition, claims frequency and severity, catastrophes and severe weather, and mortality and morbidity risk.

Insurance risk exposures are measured and monitored with different approaches including:

- Stochastic methods: measures and monitors risks such as natural catastrophes and severe weather. We develop probabilistic estimates of risk based on our exposures, historical observed volatility and/or industry-recognized models in the case of catastrophe risk.
- Scenario analysis: measures and monitors risks and estimated losses due to extreme but plausible insurance-related events such as multiple hurricanes and/or wildfires. Scenarios evaluated include combined multiple event scenarios across risk categories and time periods, considering the effects of macroeconomic conditions.

Investment risk and return management addresses financial loss due to changes in the valuations of assets held in the Allstate investment portfolio, as well as liability valuation within the Life and Annuity business. Such losses may be caused by macro developments, such as changes to interest rates, credit spreads, and equity price levels, or could be specific to individual investments in the portfolio. These losses can encompass both daily market volatility and permanent impairments of capital due to credit defaults and equity write-downs.

Investment risk exposures include interest rate risk, credit spread risk, equity price risk and foreign currency exchange rate risk.

Investment risk exposures are measured and monitored in a number of ways including:

- Sensitivity analysis: measures the impact from a unit change in a market risk input.

- Stochastic and probabilistic estimation of potential losses: combines portfolio risk exposures with historical or recent market volatilities and correlations to assess the potential range of future investment results.
- Scenario analysis: measures material adverse outcomes such as shock scenarios applied to credit, public and private equity markets.

Some of the stress scenarios are a combination of multiple scenarios across risk categories and over multiple time periods, considering the effects of macroeconomic conditions.

Financial risk and return management addresses the risk of insufficient cash flows to meet corporate or policyholder needs, risk of inadequate aggregate capital or capital within any subsidiary, inability to access capital markets, credit risk that arises when an external party fails to meet a contractual obligation such as reinsurance for ceded claims, or risk associated with a business counterparty default.

We actively manage our capital and liquidity levels in light of changing market, economic, and business conditions. Our capital position, capital generation capacity, and targeted risk profile provide strategic and financial flexibility.

We generally assess solvency on a statutory accounting basis, but also consider holding company capital and liquidity needs. Current enterprise capital, which exceeds economic targeted levels, is based on a combination of statutory surplus and deployable assets at the parent holding company level.

Operational risk and return management addresses loss as a result of the failure of people, processes, systems or culture. Operational risk exposures include human capital, privacy, regulatory compliance, ethics, fraud, system availability, cybersecurity, data quality, disaster recovery and business continuity.

Operational risk is managed at the enterprise and market-facing business levels, through an integrated Operational Risk and Return Management ("ORRM") program, with resources throughout the enterprise identifying, measuring, monitoring, managing, and reporting on operational risks at a detailed level.

From time to time, we engage independent advisors to assess and consult on operational risks. We also perform assessments of the quality of our operational risk program and identify opportunities to strengthen our internal controls.

NEW **Culture risk and return management** addresses the potential for loss of stakeholder value from a suboptimal work environment, missed opportunities, or ineffective risk management practices. Allstate defines organization culture as a self-sustaining system of shared values, principles and priorities that shape beliefs, drive behavior and influence decision-making within an organization.

Culture is managed based on a set of core cultural elements that have been established as a basis for assessment and measurement. Results of culture risk assessment are reported to the ERRC and RRC throughout the year.

Application of Critical Accounting Estimates

The preparation of financial statements in conformity with GAAP requires management to adopt accounting policies and make estimates and assumptions that affect amounts reported in the consolidated financial statements. The most critical estimates, presented in the order they appear in the Consolidated Statements of Financial Position, include those used in determining:

- Fair value of financial assets
- Impairment of fixed income securities
- Deferred policy acquisition costs amortization
- Evaluation of goodwill for impairment
- Reserve for property and casualty insurance claims and claims expense estimation
- Reserve for life-contingent contract benefits estimation
- NEW Pension and other postretirement plans net costs and assumptions

In making these determinations, management makes subjective and complex judgments that frequently require estimates about matters that are inherently uncertain. Many of these policies, estimates and related judgments are common in the insurance and financial services industries; others are specific to our businesses and operations. It is reasonably likely that changes in these estimates could occur from period to period and result in a material impact on our consolidated financial statements.

A summary of each of these critical accounting estimates follows. For a more detailed discussion of the effect of these estimates on our consolidated financial statements, and the judgments and assumptions related to these estimates, see the referenced sections of this document. For a more detailed summary of our significant accounting policies, see the notes to the consolidated financial statements.

Fair value of financial assets Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We are responsible for the determination of fair value of financial assets and the supporting assumptions and methodologies. We use independent third-party valuation service providers, broker quotes and internal pricing methods to determine fair values. We obtain or calculate only one single quote or price for each financial instrument.

Valuation service providers typically obtain data about market transactions and other key valuation model inputs from multiple sources and, through the use of proprietary models, produce valuation information in the form of a single fair value for individual fixed income and other securities for which a fair value has been requested under the terms of our agreements. The inputs used by the valuation service providers include, but are not limited to, market prices from recently completed transactions and transactions of comparable securities, interest rate yield curves, credit spreads, liquidity spreads, currency rates, and other information, as applicable. Credit and liquidity spreads are typically implied from completed transactions and transactions of comparable securities. Valuation service providers also use proprietary discounted cash flow models that are widely accepted in the financial services industry and similar to those used by other market participants to value the same financial instruments. The valuation models take into account, among other things, market observable information as of the measurement date, as described above, as well as the specific attributes of the security being valued including its term, interest rate, credit rating, industry sector, and where applicable, collateral quality and other issue or issuer specific information. Executing valuation models effectively requires seasoned professional judgment and experience. For certain equity securities, valuation service providers provide market quotations for completed transactions on the measurement date. In cases where market transactions or other market observable data is limited, the extent to which judgment is applied varies inversely with the availability of market observable information.

For certain of our financial assets measured at fair value, where our valuation service providers cannot provide fair value determinations, we obtain a single non-binding price quote from a broker familiar with the security who, similar to our valuation service providers, may consider transactions or activity in similar securities among other information. The brokers providing price quotes are generally from the brokerage divisions of financial institutions with market making, underwriting and distribution expertise regarding the security subject to valuation.

The fair value of certain financial assets, including privately placed corporate fixed income securities and free-standing derivatives, for which our valuation service providers or brokers do not provide fair value determinations, is developed using valuation methods and models widely accepted in the financial services industry. Our internal pricing methods are primarily based on models using discounted cash flow methodologies that develop a single best estimate of fair value. Our models generally incorporate inputs that we believe are representative of inputs other market participants would use to determine fair value of the same instruments, including yield curves, quoted market prices of comparable securities or instruments, published credit spreads, and other applicable market data as well as instrument-specific characteristics that include, but are not limited to, coupon rates, expected cash flows, sector of the issuer, and call provisions. Because judgment is required in developing the fair values of these financial assets, they may differ from the amount actually received to sell an asset in an orderly transaction between market participants at the measurement date. Moreover, the use of different valuation assumptions may have a material effect on the financial assets' fair values.

For most of our financial assets measured at fair value, all significant inputs are based on or corroborated by market observable data, and significant management judgment does not affect the periodic determination of fair value. The determination of fair value using discounted cash flow models involves management judgment when significant model inputs are not based on or corroborated by market observable data. However, where market observable data is available, it takes precedence, and as a result, no range of reasonably likely inputs exists from which the basis of a sensitivity analysis could be constructed.

We gain assurance that our financial assets are appropriately valued through the execution of various processes and controls designed to ensure the overall reasonableness and consistent application of valuation methodologies, including inputs and assumptions, and compliance with accounting standards. For fair values received from third parties or internally estimated, our processes and controls are designed to ensure that the valuation methodologies are appropriate and consistently applied, the inputs and assumptions are reasonable and consistent with the objective of determining fair value, and the fair values are accurately recorded. For example, on a continuing basis, we assess the reasonableness of individual fair values that have stale security prices or that exceed certain thresholds as compared to previous fair values received from valuation service providers or brokers or derived from internal models. We perform procedures to understand and assess the methodologies, processes and controls of valuation service providers.

In addition, we may validate the reasonableness of fair values by comparing information obtained from valuation service providers or brokers to other third-party valuation sources for selected securities. We perform ongoing price validation procedures such as back-testing of actual sales, which corroborate the various inputs used in internal models to market observable data. When fair value determinations are expected to be more variable, we validate them through reviews by members of management who have relevant expertise and who are independent of those charged with executing investment transactions.

We also perform an analysis to determine whether there has been a significant decrease in the volume and level of activity for the asset when compared to normal market activity, and if so, whether transactions may not be orderly. Among the indicators we consider in determining whether a significant decrease in the volume and level of market activity for a specific asset has occurred include the level of new issuances in the primary market, trading volume in the secondary market, level of credit spreads over historical levels, bid-ask spread, and price consensuses among market participants and sources. If evidence indicates that prices are based on transactions that are not orderly, we place little, if any, weight on the transaction price and will estimate fair value using an internal model. As of December 31, 2019 and 2018, we did not adjust fair values provided by our valuation service providers or brokers or substitute them with an internal model for such securities.

Fixed income, equity securities and short-term investments by source of fair value determination

	December 31, 2019	
($ in millions)	**Fair value**	**Percent to total**
Fair value based on internal sources	$ 2,611	3.7%
Fair value based on external sources (1)	68,851	96.3
Total	**$ 71,462**	**100.0%**

(1) Includes $373 million that are valued using broker quotes and $269 million that are valued using quoted prices or quoted net asset values from deal sponsors.

For additional detail on fair value measurements, see Note 6 of the consolidated financial statements.

Impairment of fixed income securities For fixed income securities classified as available-for-sale, the difference between fair value and amortized cost, net of certain other items and deferred income taxes (as disclosed in Note 5 of the consolidated financial statements), is reported as a component of AOCI on the Consolidated Statements of Financial Position and is not reflected in the operating results of any period until reclassified to net income upon the consummation of a transaction with an unrelated third party or when a write-down is recorded due to an other-than-temporary decline in fair value. We have a comprehensive portfolio monitoring process to identify and evaluate each fixed income security whose carrying value may be other-than-temporarily impaired.

For each fixed income security in an unrealized loss position, we assess whether management with the appropriate authority has made the decision to sell or whether it is more likely than not we will be required to sell the security before recovery of the amortized cost basis for reasons such as liquidity, contractual or regulatory purposes. If a security meets either of these criteria, the security's decline in fair value is considered other than temporary and is recorded in earnings.

If we have not made the decision to sell the fixed income security and it is not more likely than not we will be required to sell the fixed income security before recovery of its amortized cost basis, we evaluate whether we expect to receive cash flows sufficient to recover the entire amortized cost basis of the security. We use our best estimate of future cash flows expected to be collected from the fixed income security, discounted at the security's original or current effective rate, as appropriate, to calculate a recovery value and determine whether a credit loss exists. The determination of cash flow estimates is inherently subjective, and methodologies may vary depending on facts and circumstances specific to the security. All reasonably available information relevant to the collectability of the security, including past events, current conditions, and reasonable and supportable assumptions and forecasts, is considered when developing the estimate of cash flows expected to be collected. That information generally includes, but is not limited to, the remaining payment terms of the security, prepayment speeds, foreign exchange rates, the financial condition and future earnings potential of the issue or issuer, expected defaults, expected recoveries, the value of underlying collateral, vintage, geographic concentration, available reserves or escrows, current subordination levels, third-party guarantees and other credit enhancements. Other information, such as industry analyst reports and forecasts, sector credit ratings, financial condition of the bond insurer for insured fixed income securities, and other market data relevant to the realizability of contractual cash flows, may also be considered. The estimated fair value of collateral will be used to estimate recovery value if we determine that the security is dependent on the liquidation of collateral for ultimate settlement. If the estimated recovery value is less than the amortized cost of the security, a credit loss exists and an other-than-temporary impairment for the difference between the estimated recovery value and amortized cost is recorded in earnings. The portion of the unrealized loss related to factors other than credit remains classified in AOCI. If we determine that the fixed income security does not have sufficient cash flow or other information to estimate a recovery value for the security, we may conclude that the entire decline in fair value is deemed to be credit related and the loss is recorded in earnings.

Once assumptions and estimates are made, any number of changes in facts and circumstances could cause us to subsequently determine that a fixed income security is other-than-temporarily impaired, including: 1) general economic conditions that are worse than previously forecast or that have a greater adverse effect on a particular issuer or industry sector than originally estimated; 2) changes in the facts and circumstances related to a particular issue or issuer's ability to meet all of its contractual obligations; and 3) changes in facts and circumstances that result in management's decision to sell or result in our assessment that it is more likely than not we will be required to sell before recovery of the amortized cost basis. Changes in assumptions, facts and circumstances could result in additional charges to earnings in future periods to the extent that losses are realized. The charge to earnings, while potentially significant to net income, would not have a significant effect on shareholders' equity, since our fixed income securities are designated as available-for-sale and carried at fair value and as a result, any related unrealized loss, net of deferred income taxes and related DAC, deferred sales inducement costs and reserves for life-contingent contract benefits, would already be reflected as a component of AOCI in shareholders' equity.

The determination of the amount of other-than-temporary impairment is an inherently subjective process based on periodic evaluations of the factors described above. Such evaluations and assessments are revised as conditions change and new information becomes available. We update our evaluations regularly and reflect changes in other-than-temporary impairments in our results of operations as such evaluations are revised. The use of different methodologies and assumptions in the determination of the amount of other-than-temporary impairments may have a material effect on the amounts recognized and presented within the consolidated financial statements.

For additional detail on investment impairments, see Note 5 of the consolidated financial statements.

Deferred policy acquisition costs amortization We incur significant costs in connection with acquiring insurance policies and investment contracts. In accordance with GAAP, costs that are related directly to the successful acquisition of new or renewal insurance policies and investment contracts are deferred and recorded as an asset on the Consolidated Statements of Financial Position.

DAC related to property and casualty contracts is amortized into income as premiums are earned, typically over periods of six or twelve months for personal lines policies or generally one to five years for protection plans and other contracts (primarily related to finance and insurance products).

DAC related to traditional life and voluntary accident and health insurance is amortized over the premium paying period of the related policies in proportion to the estimated revenues on such business. Significant assumptions relating to estimated premiums, investment returns, as well as mortality, persistency and expenses to administer the business are established at the time the policy is issued and are generally not revised during the life of the policy. The assumptions for determining the timing and amount of DAC amortization are consistent with the assumptions used to calculate the reserve for life-contingent contract benefits. Any deviations from projected business in force resulting from actual policy terminations differing from expected levels and any estimated premium deficiencies may result in a change to the rate of amortization in the period such events occur. Generally, the amortization periods for these policies approximate the estimated lives of the policies. The recovery of DAC is dependent upon the future profitability of the business.

We periodically review the adequacy of reserves and recoverability of DAC using actual experience and current assumptions. We evaluate our traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance products individually. In the event actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance must be expensed to the extent not recoverable and a premium deficiency reserve may be required if the remaining DAC balance is insufficient to absorb the deficiency. In 2019 and

2018, our reviews concluded that no premium deficiency adjustments were necessary. For additional detail on reserve adequacy, see the Reserve for life-contingent contract benefits estimation section.

DAC related to interest-sensitive life insurance is amortized in proportion to the incidence of the total present value of gross profits, which includes both actual historical gross profits (“AGP”) and estimated future gross profits (“EGP”) expected to be earned over the estimated lives of the contracts. The amortization is net of interest on the prior period DAC balance using rates established at the inception of the contracts. Actual amortization periods generally range from 15-30 years; however, incorporating estimates of the rate of customer surrenders, partial withdrawals and deaths generally results in the majority of the DAC being amortized during the surrender charge period, which is typically 10-20 years for interest-sensitive life. The rate of DAC amortization is reestimated and adjusted by a cumulative charge or credit to income when there is a difference between the incidence of actual versus expected gross profits in a reporting period or when there is a change in total EGP.

AGP and EGP primarily consist of the following components: contract charges for the cost of insurance less mortality costs and other benefits (benefit margin); investment income and realized capital gains and losses less interest credited (investment margin); and surrender and other contract charges less maintenance expenses (expense margin). The principal assumptions for determining the amount of EGP are mortality, persistency, expenses, investment returns, including capital gains and losses on assets supporting contract liabilities, interest crediting rates to contractholders, and the effects of any hedges. These assumptions are reasonably likely to have the greatest impact on the amount of DAC amortization. Changes in these assumptions can be offsetting and we are unable to reasonably predict their future movements or offsetting impacts over time.

Each reporting period, DAC amortization is recognized in proportion to AGP for that period adjusted for interest on the prior period DAC balance. This amortization process includes an assessment of AGP compared to EGP, the actual amount of business remaining in force and realized capital gains and losses on investments supporting the product liability. The impact of realized capital gains and losses on amortization of DAC depends upon which product liability is supported by the assets that give rise to the gain or loss. If the AGP is greater than EGP in the period, but the total EGP is unchanged, the amount of DAC amortization will generally increase, resulting in a current period decrease to earnings. The opposite result generally occurs when the AGP is less than the EGP in the period, but the total EGP is unchanged. However, when DAC amortization or a component of gross profits for a quarterly period is potentially negative (which would result in an increase of the DAC balance) as a result of negative AGP, the specific facts and circumstances surrounding the potential negative amortization are considered to determine whether it is appropriate for recognition in the consolidated financial statements. Negative amortization is only recorded when the increased DAC balance is determined to be recoverable based on facts and circumstances. For products whose supporting investments are exposed to capital losses in excess of our expectations which may cause periodic AGP to become temporarily negative, EGP and AGP utilized in DAC amortization may be modified to exclude the excess capital losses.

Annually, we review and update the assumptions underlying the projections of EGP, including mortality, persistency, expenses, investment returns, comprising investment income and realized capital gains and losses, interest crediting rates and the effect of any hedges, using our experience and industry experience. At each reporting period, we assess whether any revisions to assumptions used to determine DAC amortization are required. These reviews and updates may result in amortization acceleration or deceleration, which are referred to as “DAC unlocking”. If the update of assumptions causes total EGP to increase, the rate of DAC amortization will generally decrease, resulting in a current period increase to earnings. A decrease to earnings generally occurs when the assumption update causes the total EGP to decrease.

Effect on DAC amortization of changes in assumptions relating to gross profit components

	For the years ended December 31,	
($ in millions)	**2019**	**2018**
Investment margin	$ 23	$ 10
Benefit margin	38	(11)
Expense margin	(1)	2
Net acceleration	**$ 60**	**$ 1**

In 2019, DAC amortization acceleration for changes in the investment margin component of EGP was due to lower projected future interest rates and investment returns compared to our previous expectations. The acceleration related to benefit margin was due to decreased projected interest rates that result in lower projected policyholder account values which increases benefits on guaranteed products and more refined policy level information and assumptions.

In 2018, DAC amortization acceleration for changes in the investment margin component of EGP related to interest-sensitive life insurance and was due to lower projected investment returns. The deceleration related to benefit margin primarily related to interest-sensitive life insurance and was due to a decrease in projected mortality.

The following table displays the sensitivity of reasonably likely changes in assumptions included in the gross profit components of investment margin or benefit margin to amortization of the DAC balance as of December 31,2019.

($ in millions)	Increase/(reduction)
Increase in future investment margins of 25 basis points	$ 52
Decrease in future investment margins of 25 basis points	(57)
Decrease in future life mortality by 1%	$ 14
Increase in future life mortality by 1%	(14)

Any potential changes in assumptions discussed above are measured without consideration of correlation among assumptions. Therefore, it would be inappropriate to add them together in an attempt to estimate overall variability in amortization.

For additional detail related to DAC, see the Allstate Life Segment section of the MD&A.

Evaluation of goodwill for impairment Goodwill represents the excess of amounts paid for acquiring businesses over the fair value of the net assets acquired, less any impairment of goodwill recognized. Goodwill is recognized when acquired and allocated to reporting units based on which unit is expected to benefit from the synergies of the business combination. Our goodwill reporting units are equivalent to our reportable segments: Allstate Protection, Service Businesses, Allstate Life and Allstate Benefits to which goodwill has been assigned.

Upon acquisition, the purchase price of the acquired business is assumed to be its fair value. Subsequently, we estimate the fair value of our businesses in each goodwill reporting unit, utilizing a combination of widely accepted valuation techniques including a stock price and market capitalization analysis, discounted cash flow ("DCF") calculations and an estimate of a business's fair value using market to book multiples derived from peer company analysis. The stock price and market capitalization analysis takes into consideration the quoted market price of our outstanding common stock and includes a control premium, derived from relevant historical acquisition activity, in determining the estimated fair value of the consolidated entity before allocating that fair value to individual reporting units. The DCF analysis utilizes long term assumptions for revenues, investment income, benefits, claims, other operating expenses and income taxes to produce projections of both income and cash flows available for dividends that are present valued using the weighted average cost of capital. Market to book multiples represent the mean market to book multiple for selected peer companies with operations similar to our goodwill reporting units to which the multiple is applied. The outputs from these methods are weighted based on the nature of the business and the relative amount of market observable assumptions supporting the estimates. The computed values are then weighted to reflect the fair value estimate based on the specific attributes of each goodwill reporting unit.

Estimating the fair value of reporting units is a subjective process that involves the use of significant estimates by management. Changes in market inputs or other events impacting the fair value of these businesses, including discount rates, operating results, investment returns, strategies and growth rate assumptions, among other factors, could result in goodwill impairments, resulting in a charge to income. Certain of our goodwill reporting units are comprised of a combination of legacy and acquired businesses and as a result have substantial internally generated and unrecognized intangibles and fair values that significantly exceed their carrying values. Our Service Businesses goodwill reporting unit is more heavily comprised of newly acquired businesses and as a result does not have a significant excess of fair value over its carrying value attributable to internally generated unrecognized intangibles. Therefore, this reporting unit may be more susceptible to potential future goodwill impairment based on changes to growth or margin assumptions.

The most significant assumptions utilized in the determination of the estimated fair value of the Service Businesses reporting unit are the earnings growth rate and discount rate. The growth rate utilized in our fair value estimates is consistent with our plans to grow these businesses more rapidly over the near-term with more moderated growth rates in later years.

The discount rate, which is consistent with the weighted average cost of capital expected by a market participant, is based upon industry specific required rates of return, including consideration of both debt and equity components of the capital structure. Our discount rate may be impacted by changes in the risk-free rate, cost of debt, equity risk premium and entity specific risks.

Changes in our growth assumptions, including the risk of loss of key customers, or adverse changes in the discount rates could result in a decline in fair value and result in a goodwill impairment charge.

Reserve for property and casualty insurance claims and claims expense estimation Reserves are established to provide for the estimated costs of paying claims and claims expenses under insurance policies we have issued. Underwriting results are significantly influenced by estimates of property and casualty insurance claims and claims expense reserves. These reserves are an estimate of amounts necessary to settle all outstanding claims, including IBNR, as of the financial statement date.

Characteristics of reserves Reserves are established independently of business segment management for each business segment and line of business based on estimates of the ultimate cost to settle claims, less losses that have been paid. The significant lines of business are auto, homeowners, and other personal lines for Allstate Protection, and asbestos, environmental, and other discontinued lines for Discontinued Lines and Coverages. Allstate Protection's claims are typically reported promptly with relatively little reporting lag between the date of occurrence and the date the loss is reported. Auto and homeowners liability losses generally take an average of about two years to settle, while auto physical damage, homeowners property and other personal lines have an average settlement time of less than one year. Discontinued Lines and Coverages involve long-tail losses, such as those related to asbestos and environmental claims, which often involve substantial reporting lags and extended times to settle.

Reserves are the difference between the estimated ultimate cost of losses incurred and the amount of paid losses as of the reporting date. Reserves are estimated for both reported and unreported claims, and include estimates of all expenses associated with processing and settling all incurred claims. We update most of our reserve estimates quarterly and as new information becomes available or as events emerge that may affect the resolution of unsettled claims. Changes in prior reserve estimates (reserve reestimates), which may be material, are determined by comparing updated estimates of ultimate losses to prior estimates, with the differences recorded as property and casualty insurance claims and claims expense in the Consolidated Statements of Operations in the period such changes are determined. Estimating the ultimate cost of claims and claims expenses is an inherently uncertain and complex process involving a high degree of judgment and is subject to the evaluation of numerous variables.

*The actuarial methods used to develop reserve estimates*Reserve estimates are derived by using several different actuarial estimation methods that are variations on one primary actuarial technique. The actuarial technique is known as a "chain ladder" estimation process in which historical loss patterns are applied to actual paid losses and reported losses (paid losses plus individual case reserves established by claim adjusters) for an accident year or a report year to create an estimate of how losses are likely to develop over time. An accident year refers to classifying claims based on the year in which the claims occurred. A report year refers to classifying claims based on the year in which the claims are reported. Both classifications are used to prepare estimates of required reserves for payments to be made in the future. The key assumptions affecting our reserve estimates comprise data elements including claim counts, paid losses, case reserves, and development factors calculated with this data.

See Discontinued and Lines and Coverages reserve estimates section for specific disclosures of industry and actuarial best practices for this segment.

In the chain ladder estimation technique, a ratio (development factor) is calculated which compares current period results to results in the prior period for each accident year. A multi-year average development factor, based on historical results, is usually multiplied by the current period experience to estimate the development of losses of each accident year into the next time period. The development factors for the future time periods for each accident year are compounded over the remaining future periods to calculate an estimate of ultimate losses for each accident year. The implicit assumption of this technique is that an average of historical development factors is predictive of future loss development, as the significant size of our experience database achieves a high degree of statistical credibility in actuarial projections of this type. The effects of inflation are implicitly considered in the reserving process, the implicit assumption being that a multi-year average development factor includes an adequate provision. The development factor estimation methodology may require modification when data changes due to changing claim reporting practices, changing claim settlement patterns, external regulatory or financial influences, or contractual coverage changes. In these situations, actuarial estimation techniques are applied to appropriately modify the "chain ladder" assumptions. These actuarial techniques are necessary to analyze the effects of changing loss data to develop modified development factor selections. The actuarial estimation techniques include exclusion of unusual losses or aberrations and adjustment of historical data to present conditions. Actuarially modified patterns of development are calculated with the adjusted historical data. Actuarial judgment is then applied to make appropriate development factor assumptions needed to develop a best estimate of gross ultimate losses. These developments are discussed further in the Allstate brand loss ratio disclosures in the Allstate Protection Segment and the Claims and Claims Expense Reserves sections of the MD&A.

*How reserve estimates are established and updated*Reserve estimates are developed at a very detailed level, and the results of these numerous micro-level best estimates are aggregated to form a consolidated reserve estimate. For example, over one thousand actuarial estimates of the types described above are prepared each quarter to estimate losses for each line of insurance, major components of losses (such as coverages and perils), major states or groups of states and for reported losses and IBNR. The actuarial methods described above are used to analyze the settlement patterns of claims by determining the development factors for specific data elements that are necessary components of a reserve estimation process. Development factors are calculated quarterly and periodically throughout the year for data elements such as claim counts reported and settled, paid losses, and paid losses combined with case reserves. The calculation of development factors from changes in these data elements also impacts claim severity trends. The historical development patterns for these data elements are used as the assumptions to calculate reserve estimates.

Often, several different estimates are prepared for each detailed component, incorporating alternative analyses of changing claim settlement patterns and other influences on losses, from which we select our best estimate for each component, occasionally incorporating additional analyses and actuarial judgment, as described above. These micro-level estimates are not based on a single set of assumptions. Actuarial judgments that may be applied to these components of certain micro-level estimates generally do not have a material impact on the consolidated level of reserves. Moreover, this detailed micro-level process does not permit or result in a compilation of a company-wide roll up to generate a range of needed loss reserves that would be meaningful. Based on our review of these estimates, our best estimate of required reserves for each state/line/coverage component is recorded for each accident year, and the required reserves for each component are summed to create the reserve balance carried on our Consolidated Statements of Financial Position.

Reserves are reestimated quarterly and periodically throughout the year, by combining historical results with current actual results to calculate new development factors. This process continuously incorporates the historic and latest actual trends, and other underlying changes in the data elements used to calculate reserve estimates. New development factors are likely to differ from previous development factors used in prior reserve estimates because actual results (claims reported or settled, losses paid, or changes to case reserves) occur differently than the implied assumptions contained in the previous development factor calculations. If claims reported, paid losses, or case reserve changes are greater or less than the levels estimated by previous development factors, reserve reestimates increase or decrease. When actual development of these data elements is different than the historical development pattern used in a prior period reserve estimate, a new reserve is determined. The difference between indicated reserves based on new reserve estimates and recorded reserves (the previous estimate) is the amount of reserve reestimate and is recognized as an increase or decrease in claims and claims expense in the Consolidated Statements of Operations. Total net reserve reestimates, after-tax, favorable impact on net income applicable to common shareholders were 2.2%, 10.0% and 9.5% in 2019, 2018 and 2017, respectively. The 3-year average of net reserve reestimates as a percentage of total reserves was a favorable 2.1% for Allstate Protection, an unfavorable 6.9% for Discontinued Lines and Coverages and a favorable 1.1% for Service Businesses, each of these results being consistent within a reasonable actuarial tolerance for the respective businesses. A more detailed discussion of reserve reestimates is presented in the Claims and Claims Expense Reserves section of the MD&A.

Net claims and claims expense reserves by segment and line of business

	As of December 31,		
($ in millions)	2019	2018	2017
Allstate Protection			
Auto	$ 14,728	$ 14,378	$ 14,051
Homeowners	2,138	2,157	2,205
Other lines	2,530	2,290	2,105
Total Allstate Protection	**19,396**	**18,825**	**18,361**
Discontinued Lines and Coverages			
Asbestos	810	866	884
Environmental	179	170	166
Other discontinued lines	376	355	357
Total Discontinued Lines and Coverages	**1,365**	**1,391**	**1,407**
Total Service Businesses	**39**	**52**	**86**
Total net claims and claims expense reserves	**$ 20,800**	**$ 20,268**	**$ 19,854**

Allstate Protection reserve estimate

Factors affecting reserve estimates Reserve estimates are developed based on the processes and historical development trends described above. These estimates are considered in conjunction with known facts and interpretations of circumstances and factors including our experience with similar cases, actual claims paid, historical trends involving claim payment patterns and pending levels of unpaid claims, loss management programs, product mix and contractual terms, changes in law and regulation, judicial decisions, and economic conditions. When we experience changes of the type previously mentioned, we may need to apply actuarial judgment in the determination and selection of development factors considered more reflective of the new trends, such as combining shorter or longer periods of historical results with current actual results to produce development factors based on two-year, three-year, or longer development periods to reestimate our reserves. For example, if a legal change is expected to have a significant impact on the development of claim severity for a coverage which is part of a particular line of insurance in a specific state, actuarial judgment is applied to determine appropriate development factors that will most accurately reflect the expected impact on that specific estimate. Another example would be when a change in economic conditions is expected to affect the cost of repairs to damaged autos or property for a particular line, coverage, or state, actuarial judgment is applied to determine appropriate development factors to use in the reserve estimate that will most accurately reflect the expected impacts on severity development.

As claims are reported, for certain liability claims of sufficient size and complexity, the field adjusting staff establishes case reserve estimates of ultimate cost, based on their assessment of facts and circumstances related to each individual claim. For other claims which occur in large volumes and settle in a relatively short time frame, it is not practical or efficient to set case reserves for each claim, and a statistical case reserve is set for these claims based on estimation techniques described above. In the normal course of business, we may also supplement our claims processes by utilizing third-party adjusters, appraisers, engineers, inspectors, and other professionals and information sources to assess and settle catastrophe and non-catastrophe related claims.

Historically, the case reserves set by the field adjusting staff have not proven to be an entirely accurate estimate of the ultimate cost of claims. To provide for this, a development reserve is estimated using the processes described above and allocated to pending claims as a supplement to case reserves. Typically, the case, including statistical case, and supplemental development reserves comprise about 90% of total reserves.

Another major component of reserves is IBNR, which comprises about 10% of total reserves. IBNR can be a small percentage of reserves for relatively short-term claims, such as auto physical damage claims, or a large percentage of reserves for claims that have uncertain payout requirements over a long period of time, such as auto injury and MCCA claims. All major components of reserves are affected by changes in claim frequency as well as claim severity.

Generally, the initial reserves for a new accident year are established based on actual claim frequency and severity assumptions for different business segments, lines and coverages based on historical relationships to relevant inflation indicators. Reserves for prior accident years are statistically determined using processes described above. Changes in auto claim frequency may result from changes in mix of business, the rate of distracted driving, miles driven or other macroeconomic factors. Changes in auto current year claim severity are generally influenced by inflation in the medical and auto repair sectors of the economy and the effectiveness and efficiency of our claim practices. We mitigate these effects through various loss management programs. Injury claims are affected largely by medical cost inflation while physical damage claims are affected largely by auto repair cost inflation and used car prices. For auto physical damage coverages, we monitor our rate of increase in average cost per claim against the auto maintenance, repair, parts and equipment price indices. We believe our claim settlement initiatives, such as improvements to the claim review and settlement process, the use of special investigative units to detect fraud and handle suspect claims, litigation management and defense strategies, as well as various other loss management initiatives underway, contribute to the mitigation of injury and physical damage severity trends.

Changes in homeowners current year claim severity are generally influenced by inflation in the cost of building materials, the cost of construction and property repair services, the cost of replacing home furnishings and other contents, the types of claims that qualify for coverage, deductibles, other economic and environmental factors and the effectiveness and efficiency of our claim practices. We employ various loss management programs to mitigate the effect of these factors.

As loss experience for the current year develops for each type of loss, it is monitored relative to initial assumptions until it is judged to have sufficient statistical credibility. From that point in time and forward, reserves are reestimated using statistical actuarial processes to reflect the impact actual loss trends have on development factors incorporated into the actuarial estimation processes. Statistical credibility is usually achieved by the end of the first calendar year; however, when trends for the current accident year exceed initial assumptions sooner, they are usually determined to be credible, and reserves are increased accordingly.

The very detailed processes for developing reserve estimates, and the lack of a need and existence of a common set of assumptions or development factors, limits aggregate reserve level testing for variability of data elements. However, by applying standard actuarial methods to consolidated historic accident year loss data for major loss types, comprising auto injury losses, auto physical damage losses and homeowner losses, we develop variability analyses consistent with the way we develop reserves by measuring the potential variability of development factors, as described in the section titled “Potential Reserve Estimate Variability” below.

Causes of reserve estimate uncertainty Since reserves are estimates of unpaid portions of claims and claims expenses that have occurred, including IBNR losses, the establishment of appropriate reserves, including reserves for catastrophe losses, requires regular reevaluation and refinement of estimates to determine our ultimate loss estimate.

At each reporting date, the highest degree of uncertainty in estimates for most of our losses from ongoing businesses arise from claims remaining to be settled for the current accident year and the most recent preceding accident year. The greatest degree of uncertainty exists in the current accident year because the current accident year contains the greatest proportion of losses that have not been reported or settled but must be estimated as of the current reporting date. Most of these losses relate to damaged property such as automobiles and homes, and medical care for injuries from accidents. During the first year after the end of an accident year, a large portion of the total losses for that accident year are settled. When accident year losses paid through the end of the first year following the initial accident year are incorporated into updated actuarial estimates, the trends inherent in the settlement of claims emerge more clearly. Consequently, this is the point in time at which we tend to make our largest reestimates of losses for an accident year. After the second year, the losses that we pay for an accident year typically relate to claims that are more difficult to settle, such as those involving serious injuries or litigation. Private passenger auto insurance provides a good illustration of the uncertainty of future loss estimates: our typical annual percentage payout of reserves remaining at December 31 for an accident year is approximately 45% in the first year after the end of the accident year, 20% in the second year, 15% in the third year, 10% in the fourth year, and the remaining 10% thereafter.

Reserves for catastrophe losses Catastrophe losses are an inherent risk of the property and casualty insurance industry that have contributed, and will continue to contribute, to potentially material year-to-year fluctuations in our results of operations and financial position. We define a "catastrophe" as an event that produces pre-tax losses before reinsurance in excess of $1 million and involves multiple first party policyholders, or a winter weather event that produces a number of claims in excess of a preset, per-event threshold of average claims in a specific area, occurring within a certain amount of time following the event. Catastrophes are caused by various natural events including high winds, winter storms and freezes, tornadoes, hailstorms, wildfires, tropical storms, hurricanes, earthquakes and volcanoes. We are also exposed to man-made catastrophic events, such as certain types of terrorism or industrial accidents. The nature and level of catastrophes in any period cannot be reliably predicted.

The estimation of claims and claims expense reserves for catastrophe losses also comprises estimates of losses from reported claims and IBNR, primarily for damage to property. In general, our estimates for catastrophe reserves are based on claim adjuster inspections and the application of historical loss development factors as described above. However, depending on the nature of the catastrophe, the estimation process can be further complicated. For example, for hurricanes, complications could include the inability of insureds to promptly report losses, limitations placed on claims adjusting staff affecting their ability to inspect losses, determining whether losses are covered by our homeowners policy (generally for damage caused by wind or wind driven rain) or specifically excluded coverage caused by flood, estimating additional living expenses, and assessing the impact of demand surge, exposure to mold damage, and the effects of numerous other considerations, including the timing of a catastrophe in relation to other events, such as at or near the end of a financial reporting period, which can affect the availability of information needed to estimate reserves for that reporting period. In these situations, we may need to adapt our practices to accommodate these circumstances in order to determine a best estimate of our losses from a catastrophe. For example, to complete estimates for certain areas affected by catastrophes not yet inspected by our claims adjusting staff, or where we believed our historical loss development factors were not predictive, we rely on analysis of actual claim notices received compared to total PIF, as well as visual, governmental and third-party information, including aerial photos, using satellites, aircrafts and drones, area observations, and data on wind speed and flood depth to the extent available.

Potential reserve estimate variability The aggregation of numerous micro-level estimates for each business segment, line of insurance, major components of losses (such as coverages and perils), and major states or groups of states for reported losses and IBNR forms the reserve liability recorded in the Consolidated Statements of Financial Position. Because of this detailed approach to developing our reserve estimates, there is not a single set of assumptions that determines our reserve estimates at the consolidated level. Given the numerous micro-level estimates for reported losses and IBNR, management does not believe the processes that we follow will produce a statistically credible or reliable actuarial reserve range that would be meaningful. Reserve estimates, by their very nature, are very complex to determine and subject to significant judgment, and do not represent an exact determination for each outstanding claim. Accordingly, as actual claims, paid losses, and/or case reserve results emerge, our estimate of the ultimate cost to settle will be different than previously estimated.

To develop a statistical indication of potential reserve variability within reasonably likely possible outcomes, an actuarial technique (stochastic modeling) is applied to the countrywide consolidated data elements for paid losses and paid losses combined with case reserves separately for injury losses, auto physical damage losses, and homeowners losses excluding catastrophe losses. Based on the combined historical variability of the development factors calculated for these data elements, an estimate of the standard error or standard deviation around these reserve estimates is calculated within each accident year for the last twelve years for each type of loss. The variability of these reserve estimates within one standard deviation of the mean (a measure of frequency of dispersion often viewed to be an acceptable level of accuracy) is believed by management to represent a reasonable and statistically probable measure of potential variability. Based on our products and coverages, historical experience, the statistical credibility of our extensive data and stochastic modeling of actuarial chain ladder methodologies used to develop reserve estimates, we estimate that the potential variability of our Allstate Protection reserves, excluding reserves for catastrophe losses, within a reasonable probability of other possible outcomes, may be approximately plus or minus 4%, or plus or minus $800 million in net income applicable to common shareholders. A lower level of variability exists for auto injury losses, which comprise approximately 80% of reserves, due to their relatively stable development patterns over a longer duration of time required to settle claims. Other types of losses, such as auto physical damage, homeowners losses and other personal lines losses, which comprise about 20% of reserves, tend to have greater variability but are settled in a much shorter period of time. Although this evaluation reflects most reasonably likely outcomes, it is possible the final outcome may fall below or above these amounts. Historical variability of reserve estimates is reported in the Claims and Claims Expense Reserves section of the MD&A.

Reserves for Michigan and New Jersey unlimited personal injury protection Claims and claims expense reserves include reserves for Michigan mandatory unlimited personal injury protection coverage to insureds involved in qualifying motor vehicle accidents. The administration of this program is through the MCCA, a state-mandated, non-profit association of which all insurers actively writing automobile coverage in Michigan are members.

The process employed to estimate MCCA covered losses involves a number of activities including the comprehensive review and interpretation of MCCA actuarial reports, other MCCA members' reports and our personal injury protection loss trends which have increased in severity over time. A significant portion of incurred claim reserves can be attributed to a small number of catastrophic claims and thus a large portion of the recoverable is similarly concentrated. We conduct comprehensive claim file reviews to develop case reserve type estimates of specific claims, which inform our view of future claim development and longevity of claimants. Each year, we update the actuarial estimate of our ultimate reserves and recoverables. We report our paid and unpaid claims based on MCCA requirements. The MCCA develops its own reserving estimates based on its own reserve methodologies, which may not align with our estimations. The MCCA does not provide member companies with its estimate of a company's claim costs. We continue to update each comprehensive claim file case reserve estimate when there is a significant change in the status of the claimant, or once every three years if there have been no significant changes.

We provide similar personal injury protection coverage in New Jersey for auto policies issued or renewed in New Jersey prior to 1991 that is administered by PLIGA. We use similar actuarial estimating techniques as for the MCCA exposures to estimate loss reserves for unlimited personal injury protection coverage for policies covered by PLIGA. We continue to update our estimates for these claims as the status of claimant's changes. However, unlimited coverage was no longer offered after 1991; therefore, no new claimants are being added.

Reserve estimates are confidential and proprietary and by their nature are very complex to determine and subject to significant judgments. Reserve estimates do not represent an exact determination for each outstanding claim. Claims may be subject to litigation. As actual claims, paid losses and/or case reserve results emerge, our estimate of the ultimate cost to settle may be materially greater or less than previously estimated amounts.

For additional information related to indemnification recoverables, see Item 1 - Regulation, Indemnification Programs and Note 10 of the consolidated financial statements.

Adequacy of reserve estimates We believe our net claims and claims expense reserves are appropriately established based on available methodologies, facts, technology, laws and regulations. We calculate and record a single best reserve estimate, in conformance with generally accepted actuarial standards and practices, for each line of insurance, its components (coverages and perils) and state, for reported losses and for IBNR losses, and as a result we believe that no other estimate is better than our recorded amount. Due to the uncertainties involved, the ultimate cost of losses may vary materially from recorded amounts, which are based on our best estimates.

Discontinued Lines and Coverages reserve estimates

Characteristics of Discontinued Lines exposure Our exposure to asbestos, environmental and other discontinued lines claims arise principally from assumed reinsurance coverage written during the 1960s through the mid-1980s, including reinsurance on primary insurance written on large U.S. companies, and from direct excess commercial insurance written from 1972 through 1985, including substantial excess general liability coverages on large U.S. companies. Additional exposure stems from direct primary commercial insurance written during the 1960s through the mid-1980s. Asbestos claims relate primarily to bodily injuries asserted by claimants who were exposed to asbestos or products containing asbestos. Environmental claims relate primarily to pollution and related clean-up costs. Other discontinued lines exposures primarily relate to general liability and product liability mass tort claims, such as those for medical devices and other products, workers' compensation claims and claims for various other coverage exposures other than asbestos and environmental.

In 1986, the general liability policy form used by us and others in the property and casualty industry was amended to introduce an "absolute pollution exclusion," which excluded coverage for environmental damage claims, and to add an asbestos exclusion. Most general liability policies issued prior to 1987 contain annual aggregate limits for product liability coverage. General liability policies issued in 1987 and thereafter contain annual aggregate limits for product liability coverage and annual aggregate limits for all coverages. Our experience to date is that these policy form changes have limited the extent of our exposure to environmental and asbestos claim risks.

Our exposure to liability for asbestos, environmental and other discontinued lines losses manifests differently depending on whether it arises from assumed reinsurance coverage, direct excess commercial insurance or direct primary commercial insurance. The direct insurance coverage we provided that covered asbestos, environmental and other discontinued lines was substantially "excess" in nature.

Direct excess commercial insurance and reinsurance involve coverage written by us for specific layers of protection above retentions and other insurance plans. The nature of excess coverage and reinsurance provided to other insurers limits our exposure to loss to specific layers of protection in excess of policyholder retention on primary insurance plans. Our exposure is further limited by the significant reinsurance that we had purchased on our direct excess business.

Our assumed reinsurance business involved writing generally small participations in other insurers' reinsurance programs. The reinsured losses in which we participate may be a proportion of all eligible losses or eligible losses in excess of defined retentions. The majority of our assumed reinsurance exposure, approximately 85%, is for excess of loss coverage, while the remaining 15% is for pro-rata coverage.

Our direct primary commercial insurance business did not include coverage to large asbestos manufacturers. This business comprises a cross section of policyholders engaged in many diverse business sectors throughout the country.

How reserve estimates are established and updated We conduct an annual review in the third quarter to evaluate, establish and adjust as necessary, asbestos, environmental and other discontinued lines reserves. Changes to reserves are recorded in the reporting period in which they are determined. Using established industry and actuarial best practices and assuming no change in the regulatory or economic environment, this detailed and comprehensive methodology determines asbestos reserves based on assessments of the characteristics of exposure (i.e. claim activity, potential liability, jurisdiction, products versus non-products exposure) presented by individual policyholders, and determines environmental reserves based on assessments of the characteristics of exposure (i.e. environmental damages, respective shares of liability of potentially responsible parties, appropriateness and cost of remediation) to pollution and related clean-up costs. The number and cost of these claims are affected by advertising by trial lawyers seeking asbestos plaintiffs, and entities with asbestos exposure seeking bankruptcy protection as a result of asbestos liabilities, initially causing a delay in the reporting of claims, often followed by an acceleration and an increase in claims and claims expenses as settlements occur.

After evaluating our insureds' probable liabilities for asbestos and/or environmental claims, we evaluate our insureds' coverage programs for such claims. We consider our insureds' total available insurance coverage, including the coverage we issued. We also consider relevant judicial interpretations of policy language and applicable coverage defenses or determinations, if any.

Evaluation of both the insureds' estimated liabilities and our exposure to the insureds depends heavily on an analysis of the relevant legal issues and litigation environment. This analysis is conducted by our specialized claims adjusting staff and legal counsel. Based on these evaluations, case reserves are established by claims adjusting staff and actuarial analysis is employed to develop an IBNR reserve, which includes estimated potential reserve development and claims that have occurred but have not been reported. As of December 31, 2019 and 2018, IBNR was 49% and 50%, respectively, of combined net asbestos and environmental reserves.

For both asbestos and environmental reserves, we also evaluate our historical direct net loss and expense paid and incurred experience to assess any emerging trends, fluctuations or characteristics suggested by the aggregate paid and incurred activity.

Other Discontinued Lines and Coverages

Characteristics of other exposures Other mass torts includes direct excess commercial and reinsurance general liability coverage provided for cumulative injury losses other than asbestos and environmental. Workers' compensation and commercial and other include run-off from discontinued direct primary, direct excess commercial and reinsurance commercial insurance operations of various coverage exposures other than asbestos and environmental. Reserves are based on considerations similar to those described above, as they relate to the characteristics of specific individual coverage exposures.

Reserves for other discontinued lines

($ in millions)	As of December 31, 2019	2018
Other mass torts	$ 177	$ 148
Workers' compensation	66	69
Commercial and other	133	138
Other discontinued lines	**$ 376**	**$ 355**

Potential reserve estimate variability Establishing Discontinued Lines and Coverages net loss reserves for asbestos, environmental and other discontinued lines claims is subject to uncertainties that are much greater than those presented by other types of property and casualty claims. Among the complications are lack of historical data, long reporting delays, uncertainty as to the number and identity of insureds with potential exposure and unresolved legal issues regarding policy coverage; unresolved legal issues regarding the determination, availability and timing of exhaustion of policy limits; plaintiffs' evolving and expanding theories of liability; availability and collectability of recoveries from reinsurance; retrospectively determined premiums and other contractual agreements; estimates of the extent and timing of any contractual liability; the impact of bankruptcy protection sought by various asbestos producers and other asbestos defendants; and other uncertainties. There are also complex legal issues concerning the interpretation of various insurance policy provisions and whether those losses are covered, or were ever intended to be covered, and could be recoverable through retrospectively determined premium, reinsurance or other contractual agreements. Courts have reached different and sometimes inconsistent conclusions as to when losses are deemed to have occurred and which policies provide coverage; what types of losses are covered; whether there is an insurer obligation to defend; how policy limits are determined; how policy exclusions and conditions are applied and interpreted; and whether clean-up costs represent insured property damage. Our reserves for asbestos and environmental exposures could be affected by tort reform, class action litigation, and other potential legislation and judicial decisions. Environmental exposures could also be affected by a change in the existing federal Superfund law and similar state statutes. There can be no assurance that any reform legislation will be enacted or that any such legislation will provide for a fair, effective and cost-efficient system for settlement of asbestos or environmental claims. We believe these issues are not likely to be resolved in the near future, and the ultimate costs may vary materially from the amounts currently recorded resulting in material changes in loss reserves. Historical variability of reserve estimates is demonstrated in the Claims and Claims Expense Reserves section of the MD&A.

Adequacy of reserve estimates Management believes its net loss reserves for asbestos, environmental and other discontinued lines exposures are appropriately established based on available facts, technology, laws, regulations, and assessments of other pertinent factors and characteristics of exposure (i.e. claim activity, potential liability, jurisdiction, products versus non-products exposure) presented by individual policyholders, assuming no change in the legal, legislative or economic environment. Due to the uncertainties and factors described above, management believes it is not practicable to develop a meaningful range for any such additional net loss reserves that may be required.

Further discussion of reserve estimates For further discussion of these estimates and quantification of the impact of reserve estimates, reserve reestimates and assumptions, see Notes 8 and 14 of the consolidated financial statements and the Claims and Claims Expense Reserves section of the MD&A.

Reserve for life-contingent contract benefits estimation Due to the long-term nature of traditional life insurance, life-contingent immediate annuities and voluntary accident and health insurance products, benefits are payable over many years; accordingly, the reserves are calculated as the present value of future expected benefits to be paid, reduced by the present value of future expected net premiums. Long-term actuarial assumptions of future investment yields, mortality, morbidity, policy terminations and expenses are used when establishing the reserve for life-contingent contract benefits payable under these insurance policies. These assumptions, which for traditional life insurance are applied using the net level premium method, include provisions for adverse deviation and generally vary by characteristics such as type of coverage, year of issue and policy duration. Future investment yield assumptions are determined based upon prevailing investment yields as well as estimated reinvestment yields. Mortality, morbidity and policy termination assumptions are based on our experience and industry experience. Expense assumptions include the estimated effects of inflation and expenses to be incurred beyond the premium-paying period. These assumptions are established at the time the policy is issued, are consistent with assumptions for determining DAC amortization for these policies, and are generally not changed during the policy coverage period. However, if actual experience emerges in a manner that is significantly adverse relative to the original assumptions, adjustments to DAC or reserves may be required resulting in a charge to earnings which could have a material effect on our operating results and financial condition.

We periodically review the adequacy of reserves and recoverability of DAC using actual experience and current assumptions. In the event actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance must be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required.

We evaluate our traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance individually. In 2019 and 2018, our reviews concluded that no premium deficiency adjustments were necessary. As of December 31, 2019, traditional life insurance and accident and health insurance both have a substantial sufficiency.

As of December 31, 2019, there is marginal sufficiency in the evaluation of immediate annuities with life contingencies which has been adversely impacted primarily by sub-standard structured settlement mortality expectations, where annuitants are living longer than originally anticipated, and the impact of interest rates, which are lower than originally anticipated and are expected to remain low for an extended period. The sufficiency represents approximately 3% of applicable reserves for Allstate Annuities as of December 31, 2019. Additional reserves may be required in future periods if mortality and interest rates continue to develop in a manner that results in a premium deficiency.

The following table displays the sensitivity of permanent changes in the future investment yield assumption included in the annuity premium deficiency evaluation to the sufficiency balance as of December 31, 2019.

($ in millions)	Increase/(reduction) in sufficiency	Change in sufficiency as a percentage of applicable reserves
Increase in future investment yields of 25 basis points	$200	3%
Decrease in future investment yields of 25 basis points	$(211)	(3)%

We also review these policies for circumstances where projected profits would be recognized in early years followed by projected losses in later years. In 2019 and 2018, our reviews concluded that there were no projected losses following projected profits in each long-term projection.

We will continue to monitor the experience of our traditional life insurance and immediate annuities. We periodically complete comprehensive mortality studies for our structured settlement annuities with life contingencies to determine whether annuitants are living for a longer period than originally estimated. We anticipate that investment and reinvestment yields, mortality, and policy terminations are the factors that would be most likely to require premium deficiency adjustments to reserves or related DAC. Mortality rates and investment and reinvestment yields are the factors that would be most likely to require a profits followed by losses liability accrual.

For further detail on the reserve for life-contingent contract benefits, see Note 9 of the consolidated financial statements.

Pension and other postretirement plans net costs and assumptions Our defined benefit pension plans cover most full-time employees, certain part-time employees and employee-agents. Benefits are based primarily on a cash balance formula; however, certain participants have a significant portion of their benefits attributable to a former final average pay formula. 88% of the projected benefit obligation (“PBO”) of our primary qualified employee plan is related to the former final average pay formula. See Note 17 of the consolidated financial statements for a discussion of these plans and their effect on the consolidated financial statements.

Our pension and other postretirement benefit costs are calculated using various actuarial assumptions and methodologies. These assumptions include discount rates, health care cost trend rates, inflation, expected returns on plan assets, mortality and other factors. The assumptions utilized in recording the obligations under our pension plans represent our best estimates and we believe they are reasonable based on information as to historical experience and performance as well as other factors that might cause future expectations to differ from past trends.

Net costs for our defined benefit plans are recognized on the Consolidated Statements of Operations and consist of two elements: 1) costs comprised of service and interest costs, expected return of plan assets and amortization of prior service credit which are reported in property and casualty claims and claims expense, operating costs and expenses, net investment income and, if applicable, restructuring charges and 2) remeasurement gains and losses comprised of changes in actuarial assumptions and the difference between actual and expected returns on plan assets which are recognized immediately in earnings as part of pension and other postretirement remeasurement gains and losses.

We recognize expected returns on plan assets using an unadjusted fair value method. Our policy is to remeasure our pension and postretirement plans on a quarterly basis. We immediately recognize remeasurement of projected benefit obligation and plan assets in earnings as it provides greater transparency of our economic obligations in accounting results and better aligns the recognition of the effects of economic and interest rate changes on pension and other postretirement plan assets and liabilities in the year in which the gains and losses are incurred.

Differences in actual experience or changes in assumptions affect our pension and other postretirement obligations, plan assets and expenses. The primary factors contributing to pension and postretirement remeasurement gains and losses are 1) changes in the discount rate used to value pension and postretirement obligations as of the measurement date, 2) differences between the expected and the actual return on plan assets, 3) changes in demographic assumptions, including mortality and participant experience.

Pension and other postretirement service cost, interest cost, expected return on plan assets and amortization of prior service credits are allocated to our reportable segments. The pension and other postretirement remeasurement gains and losses are reported in the Corporate and Other segment.

Impact of assumption changes to net cost for pension and other postretirement plans Due to changes in assumptions and the difference between actual and expected returns on plan assets as described below, we recognized pension and other postretirement remeasurement losses of $114 million in 2019 compared to $468 million in 2018.

The discount rate is based on rates at which expected pension benefits attributable to past employee service could effectively be settled on a present value basis at the measurement date. We develop the assumed discount rate by utilizing the weighted average yield of a theoretical dedicated portfolio derived from non-callable bonds and bonds with a make-whole provision available in the Bloomberg corporate bond universe having ratings of at least “AA” by S&P or at least “Aa” by Moody’s on the measurement date with cash flows that match expected plan benefit requirements. Significant changes in discount rates, such as those caused by changes in the credit spreads, yield curve, the mix of bonds available in the market, the duration of selected bonds and expected benefit payments, may result in volatility in pension cost. The weighted average discount rate used to measure the benefit obligation decreased to 3.31% in 2019 compared to 4.31% in 2018. Pension and other postretirement remeasurement losses due to declines in the weighted average discount rate were $633 million in 2019 compared to gains of $392 million in 2018.

The expected long-term rate of return on plan assets reflects the average rate of earnings expected on plan assets. While this rate reflects long-term assumptions and is consistent with long-term historical returns, sustained changes in the market or changes in the mix of plan assets may lead to revisions in the assumed long-term rate of return on plan assets that may result in variability of pension cost. Differences between the actual return on plan assets and the expected long-term rate of return on plan assets are immediately recognized through earnings upon remeasurement. Short-term asset performance can differ significantly from the expected rate of return, especially in volatile markets. In 2019, the actual return on plan assets compared to our expected return was a gain of $832 million compared to a loss of $727 million in 2018. The improvement was primarily due to strong equity market performance and declines in interest rates which increased the fair value of our fixed income investments.

We complete periodic evaluations of demographic information and historical experience that affects our pension and other postretirement obligations to identify any required changes to long-term actuarial assumptions and methodologies. Demographic assumptions affect both our pension and postretirement plans and include elements such as retirement rates and participation rates in our postretirement programs, among other factors. These actuarial assumption updates affect our pension and other postretirement obligations and are incorporated into our best estimates of these assumptions. Actuarial assumption updates that affect our pension and other postretirement obligations resulted in remeasurement losses of $313 million in 2019 compared to losses of $133 million in2018.

The assumed health care trend rate represents the rate at which health care costs are assumed to increase and is based on historical and expected experience. Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement health care plans. An increase in the trend rate would increase our obligation and expense.

Sensitivity of assumption changes included in the calculation of net cost as of December 31,2019

($ in millions)	Basis/percentage point change	Increase (decrease) to net cost
Pension plans discount rate	+100 basis points	$ (842)
	-100 basis points	1,045
Expected long-term rate of return on assets	+100 basis points	(59)
	-100 basis points	59
Postretirement plans assumed health care cost trend rate	+1%	27
	-1%	(23)

Regulation and Legal Proceedings

We are subject to extensive regulation and we are involved in various legal and regulatory actions, all of which have an effect on specific aspects of our business. For a detailed discussion of the legal and regulatory actions in which we are involved, see Note 14 of the consolidated financial statements.

Pending Accounting Standards

There are several pending accounting standards that we have not implemented because the implementation date has not yet occurred. For a discussion of these pending standards, see Note 2 of the consolidated financial statements.

The effect of implementing certain accounting standards on our financial results and financial condition is often based in part on market conditions at the time of implementation of the standard and other factors we are unable to determine prior to implementation. For this reason, we are sometimes unable to estimate the effect of certain pending accounting standards until the relevant authoritative body finalizes these standards or until we implement them.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Information required for Item 7A is incorporated by reference to the material under the caption “Market Risk” in Part II, Item 7 of this report.

Item 8. Financial Statements and Supplementary Data

The Allstate Corporation and Subsidiaries
Consolidated Statements of Operations

($ in millions, except per share data)	Years Ended December 31, 2019	2018	2017
Revenues			
Property and casualty insurance premiums (net of reinsurance ceded and indemnification programs of $1,122, $1,016 and $971)	$ 36,076	$ 34,048	$ 32,300
Life premiums and contract charges (net of reinsurance ceded of $285, $290 and $303)	2,501	2,465	2,378
Other revenue	1,054	939	883
Net investment income	3,159	3,240	3,401
Realized capital gains and losses:			
Total other-than-temporary impairment (“OTTI”) losses	(48)	(13)	(146)
OTTI losses reclassified to (from) other comprehensive income ("OCI")	1	(1)	(4)
Net OTTI losses recognized in earnings	**(47)**	**(14)**	**(150)**
Sales and valuation changes on equity investments and derivatives	1,932	(863)	595
Total realized capital gains and losses	**1,885**	**(877)**	**445**
Total revenues	**44,675**	**39,815**	**39,407**
Costs and expenses			
Property and casualty insurance claims and claims expense (net of reinsurance ceded and indemnification programs of $524, $1,378 and $1,807)	23,976	22,778	21,847
Life contract benefits (net of reinsurance ceded of $165, $240 and $179)	2,039	1,973	1,923
Interest credited to contractholder funds (net of reinsurance ceded of $20, $24 and $25)	640	654	690
Amortization of deferred policy acquisition costs	5,533	5,222	4,784
Operating costs and expenses	5,690	5,594	5,196
Pension and other postretirement remeasurement gains and losses	114	468	(217)
Restructuring and related charges	41	67	96
Amortization of purchased intangibles	126	105	99
Impairment of goodwill and purchased intangibles	106	—	125
Interest expense	327	332	335
Total costs and expenses	**38,592**	**37,193**	**34,878**
Gain on disposition of operations	6	6	20
Income from operations before income tax expense	**6,089**	**2,628**	**4,549**
Income tax expense	1,242	468	995
Net income	**4,847**	**2,160**	**3,554**
Preferred stock dividends	169	148	116
Net income applicable to common shareholders	**$ 4,678**	**$ 2,012**	**$ 3,438**
Earnings per common share:			
Net income applicable to common shareholders per common share - Basic	$ 14.25	$ 5.78	$ 9.50
Weighted average common shares - Basic	328.2	347.8	362.0
Net income applicable to common shareholders per common share - Diluted	$ 14.03	$ 5.70	$ 9.35
Weighted average common shares - Diluted	333.5	353.2	367.8

See notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

	Years Ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Net income	$ 4,847	$ 2,160	$ 3,554
Other comprehensive income (loss), after-tax			
Changes in:			
Unrealized net capital gains and losses	1,889	(754)	319
Unrealized foreign currency translation adjustments	(10)	(48)	45
Unamortized pension and other postretirement prior service credit	(47)	(59)	(52)
Other comprehensive income (loss), after-tax	**1,832**	**(861)**	**312**
Comprehensive income	**$ 6,679**	**$ 1,299**	**$ 3,866**

See notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries
Consolidated Statements of Financial Position

($ in millions, except par value data)	December 31, 2019	December 31, 2018
Assets		
Investments		
Fixed income securities, at fair value (amortized cost $56,293 and $57,134)	$ 59,044	$ 57,170
Equity securities, at fair value (cost $6,568 and $4,489)	8,162	5,036
Mortgage loans	4,817	4,670
Limited partnership interests	8,078	7,505
Short-term, at fair value (amortized cost $4,256 and $3,027)	4,256	3,027
Other	4,005	3,852
Total investments	**88,362**	**81,260**
Cash	338	499
Premium installment receivables, net	6,472	6,154
Deferred policy acquisition costs	4,699	4,784
Reinsurance and indemnification recoverables, net	9,211	9,565
Accrued investment income	600	600
Property and equipment, net	1,145	1,045
Goodwill	2,545	2,530
Other assets	3,534	3,007
Separate Accounts	3,044	2,805
Total assets	**$ 119,950**	**$ 112,249**
Liabilities		
Reserve for property and casualty insurance claims and claims expense	$ 27,712	$ 27,423
Reserve for life-contingent contract benefits	12,300	12,208
Contractholder funds	17,692	18,371
Unearned premiums	15,343	14,510
Claim payments outstanding	929	1,007
Deferred income taxes	1,154	425
Other liabilities and accrued expenses	9,147	7,737
Long-term debt	6,631	6,451
Separate Accounts	3,044	2,805
Total liabilities	**93,952**	**90,937**
Commitments and Contingent Liabilities (Note 7, 8 and 14)		
Shareholders' equity		
Preferred stock and additional capital paid-in, $1 par value, 25 million shares authorized, 92.5 thousand and 79.8 thousand shares issued and outstanding, $2,313 and $1,995 aggregate liquidation preference	2,248	1,930
Common stock, $.01 par value, 2.0 billion shares authorized and 900 million issued, 319 million and 332 million shares outstanding	9	9
Additional capital paid-in	3,463	3,310
Retained income	48,074	44,033
Deferred Employee Stock Ownership Plan ("ESOP") expense	—	(3)
Treasury stock, at cost (581 million and 568 million shares)	(29,746)	(28,085)
Accumulated other comprehensive income:		
Unrealized net capital gains and losses:		
Unrealized net capital gains and losses on fixed income securities with OTTI	70	75
Other unrealized net capital gains and losses	2,094	(51)
Unrealized adjustment to DAC, DSI and insurance reserves	(277)	(26)
Total unrealized net capital gains and losses	**1,887**	**(2)**
Unrealized foreign currency translation adjustments	(59)	(49)
Unamortized pension and other postretirement prior service credit	122	169
Total accumulated other comprehensive income ("AOCI")	**1,950**	**118**
Total shareholders' equity	**25,998**	**21,312**
Total liabilities and shareholders' equity	**$ 119,950**	**$ 112,249**

See notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries
Consolidated Statements of Shareholders' Equity

($ in millions, except per share data)	Years Ended December 31, 2019	2018	2017
Preferred stock par value	$ —	$ —	$ —
Preferred stock additional capital paid-in			
Balance, beginning of year	1,930	1,746	1,746
Preferred stock issuance, net of issuance costs	1,414	557	—
Preferred stock redemption	(1,096)	(373)	—
Balance, end of year	**2,248**	**1,930**	**1,746**
Common stock par value	**9**	**9**	**9**
Common stock additional capital paid-in			
Balance, beginning of year	3,310	3,313	3,303
Forward contract on accelerated share repurchase agreement	75	(105)	(45)
Equity incentive plans activity	78	102	55
Balance, end of year	**3,463**	**3,310**	**3,313**
Retained income			
Balance, beginning of year	44,033	41,579	39,009
Cumulative effect of change in accounting principle	21	1,088	—
Net income	4,847	2,160	3,554
Dividends on common stock (declared per share of $2.00, $1.84 and $1.48)	(658)	(646)	(540)
Dividends on preferred stock	(169)	(148)	(116)
Reclassification of tax effects due to change in accounting principle	—	—	(328)
Balance, end of year	**48,074**	**44,033**	**41,579**
Deferred ESOP expense			
Balance, beginning of year	(3)	(3)	(6)
Payments	3	—	3
Balance, end of year	**—**	**(3)**	**(3)**
Treasury stock			
Balance, beginning of year	(28,085)	(25,982)	(24,741)
Shares acquired	(1,810)	(2,198)	(1,423)
Shares reissued under equity incentive plans, net	149	95	182
Balance, end of year	**(29,746)**	**(28,085)**	**(25,982)**
Accumulated other comprehensive income (loss)			
Balance, beginning of year	118	1,889	1,249
Cumulative effect of change in accounting principle	—	(910)	—
Change in unrealized net capital gains and losses	1,889	(754)	319
Change in unrealized foreign currency translation adjustments	(10)	(48)	45
Change in unamortized pension and other postretirement prior service credit	(47)	(59)	(52)
Reclassification of tax effects due to change in accounting principle	—	—	328
Balance, end of year	**1,950**	**118**	**1,889**
Total shareholders' equity	**$ 25,998**	**$ 21,312**	**$ 22,551**

See notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries
Consolidated Statements of Cash Flows

($ in millions)	Years Ended December 31, 2019	2018	2017
Cash flows from operating activities			
Net income	$ 4,847	$ 2,160	$ 3,554
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and other non-cash items	647	511	483
Realized capital gains and losses	(1,885)	877	(445)
Pension and other postretirement remeasurement gains and losses	114	468	(217)
Gain on disposition of operations	(6)	(6)	(20)
Interest credited to contractholder funds	640	654	690
Impairment of goodwill and purchased intangibles	106	—	125
Changes in:			
Policy benefits and other insurance reserves	(508)	469	302
Unearned premiums	801	915	463
Deferred policy acquisition costs	(85)	(296)	(214)
Premium installment receivables, net	(299)	(396)	(131)
Reinsurance recoverables, net	320	(656)	(211)
Income taxes	487	(380)	(52)
Other operating assets and liabilities	(50)	855	(13)
Net cash provided by operating activities	**5,129**	**5,175**	**4,314**
Cash flows from investing activities			
Proceeds from sales			
Fixed income securities	29,849	33,183	25,341
Equity securities	5,277	6,859	6,504
Limited partnership interests	756	764	1,125
Other investments	303	533	274
Investment collections			
Fixed income securities	2,570	3,466	4,194
Mortgage loans	695	529	600
Other investments	254	488	642
Investment purchases			
Fixed income securities	(31,317)	(36,960)	(31,145)
Equity securities	(7,176)	(5,936)	(6,585)
Limited partnership interests	(1,332)	(1,679)	(1,440)
Mortgage loans	(844)	(664)	(646)
Other investments	(666)	(864)	(999)
Change in short-term investments, net	(767)	(505)	2,610
Change in other investments, net	42	(98)	(30)
Purchases of property and equipment, net	(433)	(277)	(299)
Acquisition of operations	(18)	(558)	(1,356)
Net cash used in investing activities	**(2,807)**	**(1,719)**	**(1,210)**
Cash flows from financing activities			
Proceeds from issuance of long-term debt	491	498	—
Redemption and repayment of long-term debt	(317)	(400)	—
Proceeds from issuance of preferred stock	1,414	557	—
Redemption of preferred stock	(1,132)	(385)	—
Contractholder fund deposits	996	1,010	1,025
Contractholder fund withdrawals	(1,662)	(1,967)	(1,890)
Dividends paid on common stock	(653)	(614)	(525)
Dividends paid on preferred stock	(134)	(134)	(116)
Treasury stock purchases	(1,735)	(2,303)	(1,495)
Shares reissued under equity incentive plans, net	120	73	135
Other	129	91	(57)
Net cash used in financing activities	**(2,483)**	**(3,574)**	**(2,923)**

Net (decrease) increase in cash	**(161)**	**(118)**	**181**
Cash at beginning of year	499	617	436
Cash at end of year	**$ 338**	**$ 499**	**$ 617**

See notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 General

Basis of presentation

The accompanying consolidated financial statements include the accounts of The Allstate Corporation (the "Corporation") and its wholly owned subsidiaries, primarily Allstate Insurance Company ("AIC"), a property and casualty insurance company with various property and casualty and life and investment subsidiaries, including Allstate Life Insurance Company ("ALIC") (collectively referred to as the "Company" or "Allstate"). These consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). All significant intercompany accounts and transactions have been eliminated.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("Tax Legislation") became effective, permanently reducing the U.S. corporate income tax rate from 35% to 21% beginning January 1, 2018. As a result, the corporate tax rate is not comparable between periods.

Nature of operations

Allstate is engaged, principally in the United States, in the property and casualty insurance and life insurance businesses. Allstate is one of the country's largest personal property and casualty insurers and is organized into seven reportable segments: Allstate Protection, Discontinued Lines and Coverages, Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, and Corporate and Other.

Allstate's primary business is the sale of private passenger auto and homeowners insurance. The Company also offers several other personal property and casualty insurance products, select commercial property and casualty coverages, consumer product protection plans, device and mobile data collection services and analytic solutions using automotive telematics information, roadside assistance, finance and insurance products, life insurance, voluntary accident and health insurance and identity protection. Allstate primarily distributes its products through exclusive agencies, financial specialists, independent agencies and brokers, major retailers, contact centers and the internet.

Risks and uncertainties

Allstate has exposure to catastrophic events, including wind and hail, wildfires, tornadoes, hurricanes, tropical storms, earthquakes, volcanic eruptions, terrorism and industrial accidents.

Catastrophes, an inherent risk of the property and casualty insurance business, have contributed, and will continue to contribute, to material year-to-year fluctuations in the Company's results of operations and financial position (see Note 8). The nature and level of catastrophic loss experienced in any period cannot be predicted and could be material to results of operations and financial position.

The Company considers the following categories and locations to be the greatest areas of potential catastrophe losses:

- Wildfires — California, Colorado, Arizona and Texas
- Hurricanes — Major metropolitan centers in counties along the eastern and gulf coasts of the United States
- Wind/Hail, Rain and Tornado — Texas, Illinois, Colorado and Georgia
- Earthquakes and fires following earthquakes —Major metropolitan areas near fault lines in the states of California, Oregon, Washington, South Carolina, Missouri, Kentucky and Tennessee

Note 2 Summary of Significant Accounting Policies

Investments

Fixed income securities include bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"). MBS includes residential and commercial mortgage-backed securities that were previously disclosed separately. Fixed income securities, which may be sold prior to their contractual maturity, are designated as available-for-sale and are carried at fair value. The difference between amortized cost and fair value, net of deferred income taxes and related life and annuity deferred policy acquisition costs ("DAC"), deferred sales inducement costs ("DSI") and reserves for life-contingent contract benefits, is reflected as a component of AOCI. Cash received from calls and make-whole payments is reflected as a component of proceeds from sales and cash received from maturities and pay-downs is reflected as a component of investment collections within the Consolidated Statements of Cash Flows.

Equity securities primarily include common stocks, exchange traded and mutual funds, non-redeemable preferred stocks and real estate investment trust equity investments. Certain exchange traded and mutual funds have fixed income securities as their underlying investments. Equity securities are carried at fair value. Equity securities without readily determinable or estimable fair values are measured using the measurement alternative, which is cost less impairment, if any, and adjustments resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer. Due to the adoption of a new accounting standard for the recognition and measurement of financial assets and financial liabilities, the periodic change in fair value of equity securities is recognized within realized capital gains and losses on the Consolidated Statements of Operations effective January 1, 2018. As a result, 2017 net investment income and net realized capital gains and losses are not comparable to other periods presented.

Mortgage loans are carried at unpaid principal balances, net of unamortized premium or discount and valuation allowances. Valuation allowances are established for impaired loans when it is probable that contractual principal and interest will not be collected.

Investments in limited partnership interests are primarily accounted for in accordance with the equity method of accounting ("EMA") and include interests in private equity funds, real estate funds and other funds. Investments in limited partnership interests purchased prior to January 1, 2018, where the Company's interest is so minor that it exercises virtually no influence over operating and financial policies, are accounted for at fair value primarily utilizing the net asset value ("NAV") as a practical expedient to determine fair value.

Short-term investments, including money market funds, commercial paper, U.S. Treasury bills and other short-term investments, are carried at fair value. Other investments primarily consist of bank loans, policy loans, real estate, agent loans and derivatives. Bank loans are primarily senior secured corporate loans and are carried at amortized cost. Policy loans are carried at unpaid principal balances. Real estate is carried at cost less accumulated depreciation. Agent loans are loans issued to exclusive Allstate agents and are carried at unpaid principal balances, net of valuation allowances. Derivatives are carried at fair value.

Investment income primarily consists of interest, dividends, income from limited partnership interests, rental income from real estate, and income from certain derivative transactions. Interest is recognized on an accrual basis using the effective yield method and dividends are recorded at the ex-dividend date. Interest income for ABS and MBS is determined considering estimated pay-downs, including prepayments, obtained from third-party data sources and internal estimates. Actual prepayment experience is periodically reviewed, and effective yields are recalculated when differences arise between the prepayments originally anticipated and the actual prepayments received and currently anticipated. For ABS and MBS of high credit quality with fixed interest rates, the effective yield is recalculated on a retrospective basis. For all others, the effective yield is recalculated on a prospective basis. Accrual of income is suspended for other-than-temporarily impaired fixed income securities when the timing and amount of cash flows expected to be received is not reasonably estimable. Accrual of income is suspended for mortgage loans, bank loans and agent loans that are in default or when full and timely collection of principal and interest payments is not probable. Cash receipts on investments on nonaccrual status are generally recorded as a reduction of carrying value. Income from limited partnership interests carried at fair value is recognized based upon the changes in fair value of the investee's equity primarily determined using NAV. Income from EMA limited partnership interests is recognized based on the Company's share of the partnerships' earnings. Income from EMA limited partnership interests is generally recognized on a three month delay due to the availability of the related financial statements from investees.

Realized capital gains and losses include gains and losses on investment sales, write-downs in value due to other-than-temporary declines in fair value, adjustments to valuation allowances on mortgage loans and agent loans, valuation changes of equity investments, including equity securities and certain limited partnerships where the underlying assets are predominately public equity securities, and periodic changes in fair value and settlements of certain derivatives, including hedge ineffectiveness. Realized capital gains and losses on investment sales are determined on a specific identification basis.

Derivative and embedded derivative financial instruments

Derivative financial instruments include interest rate swaps, credit default swaps, futures (interest rate and equity), options (including swaptions), interest rate caps, warrants and rights, foreign currency swaps, foreign currency forwards, total return swaps and certain investment risk transfer reinsurance agreements. Derivatives required to be separated from the host instrument and accounted for as derivative financial instruments ("subject to bifurcation") are embedded in equity-indexed life and annuity contracts and reinsured variable annuity contracts.

All derivatives are accounted for on a fair value basis and reported as other investments, other assets, other liabilities and accrued expenses or contractholder funds. Embedded derivative instruments subject to bifurcation are also accounted for on a fair value basis and are reported together with the host contract. The change in fair value of derivatives embedded in life and annuity product contracts and subject to bifurcation is reported in life and annuity contract benefits or interest credited to contractholder funds. Cash flows from embedded derivatives subject to bifurcation and derivatives receiving hedge accounting are reported consistently with the host contracts and hedged risks, respectively, within the Consolidated Statements of Cash Flows. Cash flows from other derivatives are reported in cash flows from investing activities within the Consolidated Statements of Cash Flows.

When derivatives meet specific criteria, they may be designated as accounting hedges and accounted for as fair value, cash flow, foreign currency fair value or foreign currency cash flow hedges. The hedged item may be either all or a specific portion of a recognized asset, liability or an unrecognized firm commitment attributable to a particular risk for fair value hedges. At the inception of the hedge, the Company formally documents the hedging relationship and risk management objective and strategy. The documentation identifies the hedging instrument, the hedged item, the nature of the risk being hedged and the methodology used to assess the effectiveness of the hedging instrument in offsetting the exposure to changes in the hedged item's fair value attributable to the hedged risk. For a cash flow hedge, this documentation includes the exposure to changes in the variability in cash flows attributable to the hedged risk. The Company does not exclude any component of the change in fair value of the hedging instrument from the effectiveness assessment. At each reporting date, the Company confirms that the hedging instrument continues to be highly effective in offsetting the hedged risk.

Fair value hedges The change in fair value of hedging instruments used in fair value hedges of investment assets or a portion thereof is reported in net investment income, together with the change in fair value of the hedged items. The change in fair value of hedging instruments used in fair value hedges of contractholder funds liabilities or a portion thereof is reported in interest credited to contractholder funds, together with the change in fair value of the hedged items. Accrued periodic settlements on swaps are reported together with the changes in fair value of the related swaps in net investment income or interest credited to contractholder funds. The amortized cost for fixed income securities, the carrying value for mortgage loans or the carrying value of a designated hedged liability is adjusted for the change in fair value of the hedged risk.

Cash flow hedges For hedging instruments used in cash flow hedges, the changes in fair value of the derivatives are reported in AOCI. Amounts are reclassified to net investment income, realized capital gains and losses or interest expense as the hedged or forecasted transaction affects income. Accrued periodic settlements on derivatives used in cash flow hedges are reported in net investment income. The amount reported in AOCI for a hedged transaction is the cumulative gain or loss on the derivative instrument from inception of the hedge less gains or losses previously reclassified from AOCI into income. If the Company expects at any time that the loss reported in AOCI would lead to a net loss on the combination of the hedging instrument and the hedged transaction which may not be recoverable, a loss is recognized immediately in realized capital gains and losses. If an impairment loss is recognized on an asset or an additional obligation is incurred on a liability involved in a hedge transaction, any offsetting gain in AOCI is reclassified and reported together with the impairment loss or recognition of the obligation.

Termination of hedge accounting If, subsequent to entering into a hedge transaction, the derivative becomes ineffective (including if the hedged item is sold or otherwise extinguished, the occurrence of a hedged forecasted transaction is no longer probable or the hedged asset becomes other-than-temporarily impaired), the Company may terminate the derivative position. The Company may also terminate derivative instruments or redesignate them as non-hedge as a result of other events or circumstances. If the derivative instrument is not terminated when a fair value hedge is no longer effective, the future gains and losses recognized on the derivative are reported in realized capital gains and losses. When a fair value hedge is no longer effective, is redesignated as non-hedge or when the derivative has been terminated, the fair value gain or loss on the hedged asset, liability or portion thereof previously recognized in income while the hedge was in place and used to adjust the amortized cost of hedged fixed income securities, carrying value of hedged mortgage loans or carrying value of a hedged liability, is amortized over the remaining life of the hedged asset, liability or portion thereof, and reflected in net investment income or interest credited to contractholder funds beginning in the period that hedge accounting is no longer applied. If the hedged item in a fair value hedge is an asset that has become other-than-temporarily impaired, the adjustment made to the amortized cost for fixed income securities or the carrying value for mortgage loans is subject to the accounting policies applied to other-than-temporarily impaired assets.

When a derivative instrument used in a cash flow hedge of an existing asset or liability is no longer effective or is terminated, the gain or loss recognized on the derivative is reclassified from AOCI to income as the hedged risk impacts income. If the derivative instrument is not terminated when a cash flow hedge is no longer effective, future gains and losses recognized on the derivative are reported in realized capital gains and losses. When a derivative instrument used in a cash flow hedge of a forecasted transaction is terminated because it is probable the forecasted transaction will not occur, the gain or loss recognized on the derivative is immediately reclassified from AOCI to realized capital gains and losses in the period that hedge accounting is no longer applied.

Non-hedge derivative financial instruments For derivatives for which hedge accounting is not applied, the income statement effects, including fair value gains and losses and accrued periodic settlements, are reported either in realized capital gains and losses or in a single line item together with the results of the associated asset or liability for which risks are being managed.

Securities loaned

The Company's business activities include securities lending transactions, which are used primarily to generate net investment income. The proceeds received in conjunction with securities lending transactions can be reinvested in short-term investments or fixed income securities. These transactions are short-term in nature, usually 30 days or less.

The Company receives cash collateral for securities loaned in an amount generally equal to 102% and 105% of the fair value of domestic and foreign securities, respectively, and records the related obligations to return the collateral in other liabilities and accrued expenses. The carrying value of these obligations approximates fair value because of their relatively short-term nature. The Company monitors the market value of securities loaned on a daily basis and obtains additional collateral as necessary under the terms of the agreements to mitigate counterparty credit risk. The Company maintains the right and ability to repossess the securities loaned on short notice.

Recognition of premium revenues and contract charges, and related benefits and interest credited

Property and casualty insurance premiums include premiums from personal lines policies, protection plans, other contracts (primarily finance and insurance products) and roadside assistance.

Personal lines insurance premiums are deferred and earned on a pro-rata basis over the terms of the policies, typically periods of six or twelve months.

Revenues related to protection plans, other contracts (primarily finance and insurance products) and roadside assistance are deferred and earned over the term of the contract in a manner that recognizes revenue as obligations under the contracts are performed. Revenues from these products are classified as premiums as the products are backed by insurance. Protection plans and finance and insurance premiums are recognized using a cost-based incurrence method over the term of the contracts, which is generally over one to five years. Roadside assistance premiums are recognized evenly over the term of the contract as performance obligations are fulfilled

The portion of premiums written applicable to the unexpired terms of the policies is recorded as unearned premiums. As of December 31, 2019, unearned premiums were $12.57 billion and $2.76 billion for Allstate Protection and Service Businesses, respectively. Premium installment receivables, net, represent premiums written and not yet collected, net of an allowance for uncollectible premiums. The Company regularly evaluates premium installment receivables and adjusts its valuation allowance as appropriate. The valuation allowance for uncollectible premium installment receivables was $90 million and $77 million as of December 31, 2019 and 2018, respectively.

Traditional life insurance products consist principally of products with fixed and guaranteed premiums and benefits, primarily term and whole life insurance products. Voluntary accident and health insurance products are expected to remain in force for an extended period and therefore are primarily classified as long-duration contracts. Premiums from these products are recognized as revenue when due from policyholders. Benefits are reflected in contract benefits and recognized over the life of the policy in relation to premiums.

Immediate annuities with life contingencies, including certain structured settlement annuities, provide benefits over a period that extends beyond the period during which premiums are collected. Premiums from these products are recognized as revenue when received at the inception of the contract. Benefits are recognized in relation to premiums with the establishment of a reserve. The change in reserve over time is recorded in contract benefits and primarily relates to accumulation at the discount rate and annuitant mortality. Profits from these policies come primarily from investment income, which is recognized over the life of the contract.

Interest-sensitive life contracts, such as universal life and single premium life, are insurance contracts whose terms are not fixed and guaranteed. The terms that may be changed include premiums paid by the contractholder, interest credited to the contractholder account balance and contract charges assessed against the contractholder account balance. Premiums from these contracts are reported as contractholder fund deposits. Contract charges consist of fees assessed against the contractholder account balance for the cost of insurance (mortality risk), contract administration and surrender of the contract prior to contractually specified dates. These contract charges are recognized as revenue when assessed against the contractholder account balance. Contract benefits include life-contingent benefit payments in excess of the contractholder account balance.

Contracts that do not subject the Company to significant risk arising from mortality or morbidity are referred to as investment contracts. Fixed annuities, including market value adjusted annuities, equity-indexed annuities and immediate annuities without life contingencies, are considered investment contracts. Consideration received for such contracts is reported as contractholder fund deposits. Contract charges for investment contracts consist of fees assessed against the contractholder account balance for maintenance, administration and surrender of the contract prior to contractually specified dates, and are recognized when assessed against the contractholder account balance.

Interest credited to contractholder funds represents interest accrued or paid on interest-sensitive life and investment contracts. Crediting rates for certain fixed annuities and interest-sensitive life contracts are adjusted periodically by the Company to reflect current market conditions subject to contractually guaranteed minimum rates. Crediting rates for indexed life and annuities are generally based on a specified interest rate index or an equity index, such as the Standard & Poor's 500 Index ("S&P 500"). Interest credited also includes amortization of DSI expenses. DSI is amortized into interest credited using the same method used to amortize DAC.

Contract charges for variable life and variable annuity products consist of fees assessed against the contractholder account balances for contract maintenance, administration, mortality, expense and surrender of the contract prior to contractually specified dates. Contract benefits incurred for variable annuity products include guaranteed minimum death, income, withdrawal and accumulation benefits. Substantially all of the Company's variable annuity business is ceded through reinsurance agreements and the contract charges and contract benefits related thereto are reported net of reinsurance ceded.

Other revenue

Other revenue represents fees collected from policyholders relating to premium installment payments, commissions on sales of non-proprietary products, sales of identity protection services, fee-based services and other revenue transactions. Other revenue is recognized when performance obligations are fulfilled.

Deferred policy acquisition and sales inducement costs

Costs that are related directly to the successful acquisition of new or renewal insurance policies and investment contracts are deferred and recorded as DAC. These costs are principally agency's and brokers' remuneration, premium taxes and certain underwriting expenses. DSI costs, which are deferred and recorded as other assets, relate to sales inducements offered on sales to new customers, principally on fixed annuity and interest-sensitive life contracts. These sales inducements are primarily in the form of additional credits to the customer's account balance or enhancements to interest credited for a specified period which are in excess of the rates currently being credited to similar contracts without sales inducements. DSI is amortized into income using the same methodology and assumptions as DAC and is included in interest credited to contractholder funds. All other acquisition costs are expensed as incurred and included in operating costs and expenses.

For property and casualty insurance, DAC is amortized into income as premiums are earned, typically over periods of six or twelve months for personal lines policies or generally one to five years for protection plans and other contracts (primarily related to finance and insurance products), and is included in amortization of deferred policy acquisition costs. DAC associated with property and casualty insurance is periodically reviewed for recoverability and adjusted if necessary. Future investment income is considered in determining the recoverability of DAC.

For traditional life and voluntary accident and health insurance, DAC is amortized over the premium paying period of the related policies in proportion to the estimated revenues on such business. Assumptions used in the amortization of DAC and reserve calculations are established at the time the policy is issued and are generally not revised during the life of the policy. Any deviations from projected business in force resulting from actual policy terminations differing from expected levels and any estimated premium deficiencies may result in a change to the rate of amortization in the period such events occur. Generally, the amortization periods for these policies approximates the estimated lives of the policies. The Company periodically reviews the recoverability of DAC using actual experience and current assumptions. Prior to fourth quarter 2017, the Company evaluated traditional life insurance products and immediate annuities with life contingencies on an aggregate basis. In conjunction with the segment changes that occurred in the fourth quarter of 2017, traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance products are reviewed individually. If actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance would be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required for any remaining deficiency.

For interest-sensitive life insurance, DAC and DSI are amortized in proportion to the incidence of the total present value of gross profits, which includes both actual historical gross profits ("AGP") and estimated future gross profits ("EGP") expected to be earned over the estimated lives of the contracts. The amortization is net of interest on the prior period DAC balance using rates established at the inception of the contracts. Actual amortization periods generally range from 15-30 years; however, incorporating estimates of the rate of customer surrenders, partial withdrawals and deaths generally results in the majority of the DAC being amortized during the surrender charge period, which is typically 10-20 years for interest-sensitive life. The rate of DAC and DSI amortization is reestimated and adjusted by a cumulative charge or credit to income when there is a difference between the incidence of actual versus expected gross profits in a reporting period or when there is a change in total EGP. When DAC or DSI amortization or a component of gross profits for a quarterly period is potentially negative (which would result in an increase of the DAC or DSI balance) as a result of negative AGP, the specific facts and circumstances surrounding the potential negative amortization are considered to determine whether it is appropriate for recognition in the consolidated financial statements. Negative amortization is only recorded when the increased DAC or DSI balance is determined to be recoverable based on facts and circumstances. Recapitalization of DAC and DSI is limited to the originally deferred costs plus interest.

AGP and EGP primarily consist of the following components: contract charges for the cost of insurance less mortality costs and other benefits; investment income and realized capital gains and losses less interest credited; and surrender and other contract charges less maintenance expenses. The principal assumptions for determining the amount of EGP are mortality, persistency, expenses, investment returns, including capital gains and losses on assets supporting contract liabilities, interest crediting rates to contractholders, and the effects of any hedges. For products whose supporting investments are exposed to capital losses in excess of the Company's expectations which may cause periodic AGP to become temporarily negative, EGP and AGP utilized in DAC and DSI amortization may be modified to exclude the excess capital losses.

The Company performs quarterly reviews of DAC and DSI recoverability for interest-sensitive life and fixed annuity contracts using current assumptions. If a change in the amount of EGP is significant, it could result in the unamortized DAC or DSI not being recoverable, resulting in a charge which is included as a component of amortization of deferred policy acquisition costs or interest credited to contractholder funds, respectively.

The DAC and DSI balances presented include adjustments to reflect the amount by which the amortization of DAC and DSI would increase or decrease if the unrealized capital gains or losses in the respective product investment portfolios were actually realized. The adjustments are recorded net of tax in AOCI. DAC, DSI and deferred income taxes determined on unrealized capital gains and losses and reported in AOCI recognize the impact on shareholders' equity consistently with the amounts that would be recognized in the income statement on realized capital gains and losses.

Customers of the Company may exchange one insurance policy or investment contract for another offered by the Company, or make modifications to an existing investment, life or property and casualty contract issued by the Company. These transactions are identified as internal replacements for accounting purposes. Internal replacement transactions determined to result in replacement contracts that are substantially unchanged from the replaced contracts are accounted for as continuations of the replaced contracts. Unamortized DAC and DSI related to the replaced contracts continue to be deferred and amortized in connection with the replacement contracts. For interest-sensitive life and investment contracts, the EGP of the replacement contracts are treated as a revision to the EGP of the replaced contracts in the determination of amortization of DAC and DSI. For traditional life and property and casualty insurance policies, any changes to unamortized DAC that result from replacement contracts are treated as prospective revisions. Any costs associated with the issuance of replacement contracts are characterized as maintenance costs and expensed as incurred. Internal replacement transactions determined to result in a substantial change to the replaced contracts are accounted for as an extinguishment of the replaced contracts, and any unamortized DAC and DSI related to the replaced contracts are eliminated with a corresponding charge to amortization of deferred policy acquisition costs or interest credited to contractholder funds, respectively.

The costs assigned to the right to receive future cash flows from certain business purchased from other insurers are also classified as DAC in the Consolidated Statements of Financial Position. The costs capitalized represent the present value of future profits expected to be earned over the lives of the contracts acquired. These costs are amortized as profits emerge over the lives of the acquired business and are periodically evaluated for recoverability. The present value of future profits was $39 million and $45 million as of December 31, 2019 and 2018, respectively. Amortization expense of the present value of future profits was $6 million, $2 million and $6 million in 2019, 2018 and 2017, respectively.

Reinsurance and Indemnification

Reinsurance In the normal course of business, the Company seeks to limit aggregate and single exposure to losses on large risks by purchasing reinsurance. The Company has also used reinsurance to effect the disposition of certain blocks of business. Reinsurance does not extinguish the Company's primary liability under the policies written. Therefore, the Company regularly evaluates the financial condition of its reinsurers, including their activities with respect to claim settlement practices and commutations, and establishes allowances for uncollectible reinsurance as appropriate.

Indemnification The Company also participates in various indemnification mechanisms, including industry pools and facilities, which are backed by the financial resources of the property and casualty insurance company market participants. Indemnification recoverables are considered collectible based on the industry pool and facility enabling legislation.

The amounts reported as reinsurance and indemnification recoverables include amounts billed to reinsurers and indemnitors on losses paid as well as estimates of amounts expected to be recovered from reinsurers and indemnitors on insurance liabilities and contractholder funds that have not yet been paid. Reinsurance and indemnification recoverables on unpaid losses are estimated based upon assumptions consistent with those used in establishing the liabilities related to the underlying contracts. Insurance liabilities are reported gross of reinsurance and indemnification recoverables. Reinsurance and indemnification premiums are generally reflected in income in a manner consistent with the recognition of premiums on the associated contracts. For catastrophe coverage, the cost of reinsurance premiums is recognized ratably over the contract period to the extent coverage remains available.

Reinsurance and indemnification recoverables are recognized as an offset to gross reserves for property and casualty insurance claims and claims expense.

Goodwill

Goodwill represents the excess of amounts paid for acquiring businesses over the fair value of the net assets acquired, less any impairment of goodwill recognized. The Company's goodwill reporting units are equivalent to its reportable segments, Allstate Protection, Service Businesses, Allstate Life and Allstate Benefits to which goodwill has been assigned.

Goodwill by reporting unit

	As of December 31,			
($ in millions)	**2019**		**2018**	
Allstate Protection	$	810	$	810
Service Businesses		1,464		1,449
Allstate Life		175		175
Allstate Benefits		96		96
Total	**$**	**2,545**	**$**	**2,530**

Goodwill is recognized when acquired and allocated to reporting units based on which unit is expected to benefit from the synergies of the business combination. Goodwill is not amortized but is tested for impairment at least annually. The Company performs its annual goodwill impairment testing during the fourth quarter of each year based upon data as of the close of the third quarter. Goodwill impairment is measured and recognized as the amount by which a reporting unit's carrying value, including goodwill, exceeds its fair value, not to exceed the carrying amount of goodwill allocated to the reporting unit. The Company also reviews goodwill for impairment whenever events or changes in circumstances, such as deteriorating or adverse market conditions, indicate that it is more likely than not that the carrying amount of the reporting unit including goodwill may exceed the fair value of the reporting unit. The goodwill impairment analysis is performed at the reporting unit level.

In fourth quarter 2017, the Company adopted new reportable segments, which required the Company to evaluate goodwill, including the allocation of goodwill to any new reporting units on a relative fair value basis. The reallocation was computed using fair values for the goodwill reporting units determined using discounted cash flow ("DCF") calculations and market to book multiples derived from a peer company analysis. In conjunction with the reallocation of goodwill, the Company recognized $125 million of goodwill impairment related to the goodwill allocated to the Allstate Annuities reporting unit reflecting a market-based valuation. As of December 31, 2019 and 2018, the fair value of the Company's reporting units exceeded their carrying values.

Intangible assets

Intangible assets (reported in other assets) consist of capitalized costs primarily related to acquired customer relationships, trade names and licenses, technology and other assets. The estimated useful lives of customer relationships, technology and other intangible assets are generally 10 years, 5 years and 7 years, respectively. Intangible assets are carried at cost less accumulated amortization. Amortization expense is calculated using an accelerated amortization method. Amortization expense on intangible assets was $126 million, $105 million and $99 million in 2019, 2018 and 2017, respectively.

Amortization expense of intangible assets for the next five years and thereafter

($ in millions)		
2020	$	109
2021		91
2022		74
2023		60
2024		45
Thereafter		64
Total amortization	**$**	**443**

Accumulated amortization on intangible assets was$633 million and $572 million as of December 31, 2019 and 2018, respectively. Trade names and licenses are considered to have an indefinite useful life and are reviewed for impairment at least annually or more frequent if circumstances arise that indicate an impairment may have occurred. An impairment is recognized if the carrying amount of the asset exceeds its estimated fair value.

Intangible assets by type

	As of December 31,			
($ in millions)	**2019**		**2018**	
Customers relationships	$	419	$	530
Trade names and licenses		38		143
Technology and other		24		40
Total	**$**	**481**	**$**	**713**

During second quarter 2019, the Company made the decision to phase-out the use of the SquareTrade trade name in the United States and sell consumer protection plans under the Allstate Protection Plans name. The SquareTrade trade name will continue to be used outside of the United States. The change required an impairment evaluation of the indefinite-lived intangible asset recognized in the Service Businesses segment for SquareTrade's trade name recorded when SquareTrade was acquired in 2017.

During fourth quarter 2019, the Company made the decision to integrate Esurance into the Allstate brand as part of the Transformative Growth Plan. This required an impairment evaluation of the indefinite-lived intangible asset recognized in the Allstate Protection segment for the Esurance trade name recorded when Esurance was acquired in 2011.

As a result of these actions, the Company recognized total impairment charges of $106 million pre-tax during 2019.

Property and equipment

Property and equipment is carried at cost less accumulated depreciation. Included in property and equipment are capitalized costs related to computer software licenses and software developed for internal use. These costs generally consist of certain external payroll and payroll related costs. Property and equipment depreciation is calculated using the straight-line method over the estimated useful lives of the assets, generally 3 to 10 years for equipment and 40 years for real property. Depreciation expense is reported in operating costs and expenses. Accumulated depreciation on property and equipment was $2.60 billion and $2.41 billion as of December 31, 2019 and 2018, respectively. Depreciation expense on property and equipment was $326 million, $299 million and $290 million in 2019, 2018 and 2017, respectively. The Company reviews its property and equipment for impairment at least annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Income taxes

Income taxes are accounted for using the asset and liability method under which deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax bases of assets and liabilities at the enacted tax rates. The principal assets and liabilities giving rise to such differences are DAC, unearned premiums, investments (including unrealized capital gains and losses) and insurance reserves. A deferred tax asset valuation allowance is established when it is more likely than not such assets will not be realized. The Company recognizes interest expense related to income tax matters in income tax expense and penalties in other expense.

Reserve for property and casualty insurance claims and claims expense

The reserve for property and casualty insurance claims and claims expense is the estimate of amounts necessary to settle all reported and unreported incurred claims for the ultimate cost of insured property and casualty losses, based upon the facts of each case and the Company's experience with similar cases. Estimated amounts of salvage and subrogation are deducted from the reserve for claims and claims expense. The establishment of appropriate reserves, including reserves for catastrophe losses, is an inherently uncertain and complex process. Reserve estimates are primarily derived using an actuarial estimation process in which historical loss patterns are applied to actual paid losses and reported losses (paid losses plus individual case reserves established by claim adjusters) for an accident or report year to create an estimate of how losses are likely to develop over time. Development factors are calculated quarterly and periodically throughout the year for data elements such as claims reported and settled, paid losses, and paid losses combined with case reserves. The historical development patterns for these data elements are used as the assumptions to calculate reserve estimates, including the reserves for reported and unreported claims. Reserve estimates are regularly reviewed and updated, using the most current information available. Any resulting reestimates are reflected in current results of operations.

Reserve for life-contingent contract benefits

The reserve for life-contingent contract benefits payable under insurance policies, including traditional life insurance, life-contingent immediate annuities and voluntary accident and health insurance products, is computed on the basis of long-term actuarial assumptions of future investment yields, mortality, morbidity, policy terminations and expenses. These assumptions, which for traditional life insurance are applied using the net level premium method, include provisions for adverse deviation and generally vary by characteristics such as type of coverage, year of issue and policy duration. The assumptions are established at the time the policy is issued and are generally not changed during the life of the policy. The Company periodically reviews the adequacy of reserves using actual experience and current assumptions. If actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance would be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required for any remaining deficiency. In 2019 and 2018, the Company's reviews concluded that no premium deficiency adjustments were necessary. Prior to fourth quarter 2017, the Company evaluated traditional life insurance products and immediate annuities with life contingencies on an aggregate basis. In conjunction with the Company's segment changes that occurred in the fourth quarter of 2017, traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance are reviewed individually. The Company also reviews these policies for circumstances where projected profits would be recognized in early years followed by projected losses in later years. If this circumstance exists, the Company will accrue a liability, during the period of profits, to offset the losses at such time as the future losses are expected to commence using a method updated prospectively over time. To the extent that unrealized gains on fixed income securities would result in a premium deficiency if those gains were realized, the related increase in reserves for certain immediate annuities with life contingencies is recorded net of tax as a reduction of unrealized net capital gains included in AOCI.

Contractholder funds

Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life insurance and fixed annuities. Contractholder funds primarily comprise cumulative deposits received and interest credited to the contractholder less cumulative contract benefits, surrenders, withdrawals and contract charges for mortality or administrative expenses. Contractholder funds also include reserves for secondary guarantees on interest-sensitive life insurance and certain fixed annuity contracts and reserves for certain guarantees on reinsured variable annuity contracts.

Pension and other postretirement remeasurement gains and losses

Pension and other postretirement gains and losses represent the remeasurement of projected benefit obligation and plan assets, which are immediately recognized in earnings and are referred to as pension and other postretirement remeasurement gains and losses on the Consolidated Statements of Operations. The Company's policy is to remeasure its pension and postretirement plans on a quarterly basis.

Differences between expected and actual returns and changes in assumptions affect our pension and other postretirement obligations, plan assets and expenses.

The primary factors contributing to pension and postretirement remeasurement gains and losses are:

- Changes in the discount rate used to value pension and postretirement obligations as of the measurement date
- Differences between the expected and the actual return on plan assets
- Changes in demographic assumptions, including mortality and participant experience

Pension and other postretirement service cost, interest cost, expected return on plan assets and amortization of prior service credits are allocated to the Company's reportable segments. The pension and other postretirement remeasurement gains and losses are reported in the Corporate and Other segment.

Separate accounts

Separate accounts assets are carried at fair value. The assets of the separate accounts are legally segregated and available only to settle separate accounts contract obligations. Separate accounts liabilities represent the contractholders' claims to the related assets and are carried at an amount equal to the separate accounts assets. Investment income and realized capital gains and losses of the separate accounts accrue directly to the contractholders and therefore are not included in the Company's Consolidated Statements of Operations. Deposits to and surrenders and withdrawals from the separate accounts are reflected in separate accounts liabilities and are not included in consolidated cash flows.

Absent any contract provision wherein the Company provides a guarantee, variable annuity and variable life insurance contractholders bear the investment risk that the separate accounts' funds may not meet their stated investment objectives. Substantially all of the Company's variable annuity business was reinsured beginning in 2006.

Legal contingencies

The Company reviews its lawsuits, regulatory inquiries, and other legal proceedings on an ongoing basis. The Company establishes accruals for such matters at management's best estimate when the Company assesses that it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company's assessment of whether a loss is reasonably possible or probable is based on its assessment of the ultimate outcome of the matter following all appeals. The Company does not include potential recoveries in its estimates of reasonably possible or probable losses. Legal fees are expensed as incurred.

Long-term debt

Long-term debt includes senior notes, senior debentures, subordinated debentures and junior subordinated debentures issued by the Corporation. Unamortized debt issuance costs are reported in long-term debt and are amortized over the expected period the debt will remain outstanding.

Equity incentive plans

The Company has equity incentive plans under which the Company grants nonqualified stock options, restricted stock units and performance stock awards ("equity awards") to certain employees and directors of the Company. The Company measures the fair value of equity awards at the award date and recognizes the expense over the shorter of the period in which the requisite service is rendered or retirement eligibility is attained. The expense for performance stock awards is adjusted each period to reflect the performance factor most likely to be achieved at the end of the performance period. The Company uses a binomial lattice model to determine the fair value of employee stock options.

Leases

The Company has certain operating leases for office facilities, computer and office equipment, and vehicles. The Company's leases have remaining lease terms of 1 year to 10 years, some of which include options to extend the leases for up to 20 years, and some of which include options to terminate the leases within 60 days.

The Company determines if an arrangement is a lease at inception. Leases with an initial term less than one year are not recorded on the balance sheet and the lease costs for these leases are recorded as an expense on a straight-line basis over the lease term. Operating leases with terms greater than one year result in a lease liability recorded in other liabilities with a corresponding right-of-use ("ROU") asset recorded in other assets. As of December 31, 2019, the Company had $586 million in lease liabilities and $483 million in ROU assets.

Operating lease liabilities are recognized at the commencement date based on the present value of future minimum lease payments over the lease term. ROU assets are recognized based on the corresponding lease liabilities adjusted for qualifying initial direct costs, prepaid or accrued lease payments and unamortized lease incentives. As most of the Company's leases do not disclose the implicit interest rate, the Company uses collateralized incremental borrowing rates based on information available at lease commencement when determining the present value of future lease payments. The Company has lease agreements with lease and non-lease components, which are accounted for as a single lease. Lease terms may include options to extend or terminate the lease which are incorporated into the Company's measurements when it is reasonably certain that the Company will exercise the option.

Operating lease costs are recognized on a straight-line basis over the lease term and include interest expense on the lease liability and amortization of the ROU asset. Variable lease costs are expensed as incurred and include maintenance costs and real estate taxes. Lease costs are reported in operating costs and expenses and totaled $171 million, including $30 million of variable lease costs in 2019.

Other information related to operating leases

	As of December 31, 2019
Weighted average remaining lease term (years)	6
Weighted average discount rate	3.15%

Maturity of lease liabilities

($ in millions)	Operating leases
2020	$ 133
2021	121
2022	102
2023	84
2024	67
Thereafter	137
Total lease payments	**$ 644**
Less: interest	(58)
Present value of lease liabilities	**$ 586**

Off-balance sheet financial instruments

Commitments to invest, commitments to purchase private placement securities, commitments to extend loans, financial guarantees and credit guarantees have off-balance sheet risk because their contractual amounts are not recorded in the Company's Consolidated Statements of Financial Position (see Notes 7 and 14).

Consolidation of variable interest entities ("VIEs")

The Company consolidates VIEs when it is the primary beneficiary. A primary beneficiary is the variable interest holder in a VIE with both the power to direct the activities of the VIE that most significantly impact the economic performance of the VIE and the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the VIE.

Foreign currency translation

The local currency of the Company's foreign subsidiaries is deemed to be the functional currency of the country in which these subsidiaries operate. The financial statements of the Company's foreign subsidiaries are translated into U.S. dollars at the exchange rate in effect at the end of a reporting period for assets and liabilities and at average exchange rates during the period for results of operations.

The unrealized gains and losses from the translation of the net assets are recorded as unrealized foreign currency translation adjustments and included in AOCI. Changes in unrealized foreign currency translation adjustments are included in OCI. Gains and losses from foreign currency transactions are reported in operating costs and expenses and have not been material.

Earnings per common share

Basic earnings per common share is computed using the weighted average number of common shares outstanding, including vested unissued participating restricted stock units. Diluted earnings per common share is computed using the weighted average number of common and dilutive potential common shares outstanding.

For the Company, dilutive potential common shares consist of outstanding stock options and unvested non-participating restricted stock units and contingently issuable performance stock awards. The effect of dilutive potential common shares does not include options with an anti-dilutive effect on earnings per common share because their exercise prices exceed the average market price of Allstate common shares during the period or for which the unrecognized compensation cost would have an anti-dilutive effect.

Computation of basic and diluted earnings per common share

	For the years ended December 31,		
($ in millions, except per share data)	**2019**	**2018**	**2017**
Numerator:			
Net income	$ 4,847	$ 2,160	$ 3,554
Less: Preferred stock dividends	169	148	116
Net income applicable to common shareholders (1)	**$ 4,678**	**$ 2,012**	**$ 3,438**
Denominator:			
Weighted average common shares outstanding	328.2	347.8	362.0
Effect of dilutive potential common shares:			
Stock options	3.2	3.6	4.3
Restricted stock units (non-participating) and performance stock awards	2.1	1.8	1.5
Weighted average common and dilutive potential common shares outstanding	**333.5**	**353.2**	**367.8**
Earnings per common share – Basic	$ 14.25	$ 5.78	$ 9.50
Earnings per common share – Diluted	$ 14.03	$ 5.70	$ 9.35
Anti-dilutive options excluded from diluted earnings per common share	3.7	2.0	1.5

Adopted accounting standards

Accounting for Leases Effective January 1, 2019 the Company adopted new Financial Accounting Standards Board ("FASB") guidance related to accounting for leases. Upon adoption of the guidance under the optional transition method that allows application of the transition provisions at the adoption date instead of the earliest period presented, the Company recorded a $585 million lease liability equal to the present value of lease payments and a $488 million ROU asset, which is the corresponding lease liability adjusted for qualifying accrued lease payments. The lease liability and ROU asset were reported as part of other liabilities and other assets on the Consolidated Statements of Financial Position. The impact of these changes at adoption had no impact on net income or shareholders' equity. Prior periods were not restated under the new standard. The Company utilized the package of practical expedients permitted under the transition guidance which, among other things, did not require reassessment of existing contracts for the existence of a lease or reassessment of existing lease classifications.

Upon adoption, the new guidance required sellers in a sale-leaseback transaction to recognize the entire gain from the sale of an underlying asset at the time the sale is recognized rather than over the leaseback term. The carrying value of unrecognized gains on sale-leaseback transactions executed prior to January 1, 2019 was $21 million, after-tax, and was recorded as an increase to retained income at the date of adoption.

Accounting for Hedging Activities Effective January 1, 2019 the Company adopted new FASB guidance intended to better align hedge accounting with an organization's risk management activities. The new guidance expands hedge accounting to nonfinancial and financial risk components and revises the measurement methodologies. Separate presentation of hedge ineffectiveness is eliminated with the intention to provide greater transparency to the full impact of hedging by requiring presentation of the results of the hedged item and hedging instrument in a single financial statement line item. In addition, the amendments were designed to reduce complexity by simplifying hedge effectiveness testing. The adoption had no impact on the Company's results of operations or financial position.

Pending accounting standards

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued guidance which revises the credit loss recognition criteria for certain financial assets measured at amortized cost, including reinsurance recoverables. The new guidance replaces the existing incurred loss recognition model with an expected loss recognition model. The objective of the expected credit loss model is for a reporting entity to recognize its estimate of expected credit losses for affected financial assets in a valuation allowance that when deducted from the amortized cost basis of the related financial assets results in a net carrying value at the amount expected to be collected. The reporting entity must consider all relevant information available when estimating expected credit losses, including details about past events, current conditions, and reasonable and supportable forecasts over the life of an asset. Financial assets may be evaluated individually or on a pooled basis when they share similar risk characteristics. The measurement of credit losses for available-for-sale debt securities measured at fair value is not affected except that credit losses recognized are limited to the amount by which fair value is below amortized cost and the carrying value adjustment is recognized through a valuation allowance which may change over time but once recorded cannot subsequently be reduced to an amount below zero. The guidance is effective for reporting periods beginning after December 15, 2019, and for most affected instruments must be adopted using a modified retrospective approach, with a cumulative effect adjustment recorded to beginning retained income.

The Company's implementation activities, which are being finalized, include review and validation of models, methodologies, data inputs and assumptions to be used to estimate expected credit losses. The implementation impacts relate primarily to the Company's commercial mortgage loans, bank loans and reinsurance recoverables and are dependent on economic conditions and judgments at the date of adoption. Based on the economic conditions at the date of adoption and the balances at the reporting date, the Company estimates the application of the current expected credit loss requirements will result in total valuation allowances for credit losses of approximately $300 million, as of the date of adoption. After consideration of existing valuation allowances maintained prior to adoption of the new guidance, the Company expects to recognize a cumulative-effect decrease in retained income of approximately $100 million, after-tax, to adjust existing valuation allowances to the basis in the new requirements.

Changes to the Disclosure Requirements for Defined Benefit Plans

In August 2018, the FASB issued amendments to modify certain disclosure requirements for defined benefit plans. Disclosure additions relate to the weighted-average interest crediting rates for cash balance plans and other plans with interest crediting rates and explanations for significant gains and losses related to changes in the benefit obligation during the reporting period. Disclosures to be removed include those that identify amounts that are expected to be reclassified out of AOCI and into the income statement in the coming year and the anticipated impact of a one-percentage point change in assumed health care cost trend rate on service and interest cost and on the accumulated benefit obligation. The amendments are effective for annual reporting periods beginning after December 15, 2020. The impacts of adoption are to the Company's disclosures only.

Accounting for Long-Duration Insurance Contracts

In August 2018, the FASB issued guidance revising the accounting for certain long-duration insurance contracts. The new guidance introduces material changes to the measurement of the Company's reserves for traditional life, life-contingent immediate annuities and certain voluntary accident and health insurance products.

Under the new guidance, measurement assumptions, including those for mortality, morbidity and policy terminations, will be required to be reviewed and updated at least annually. The effect of updating measurement assumptions other than the discount rate are required to be measured on a retrospective basis and reported in net income. In addition, reserves under the new guidance are required to be discounted using an upper medium grade fixed income instrument yield required to be updated through OCI at each reporting date. Current GAAP requires reserves to utilize assumptions set at policy issuance unless updated current assumptions indicate that recorded reserves are deficient.

The new guidance also requires DAC and other capitalized balances currently amortized in proportion to premiums or gross profits to be amortized on a constant level basis over the expected term for all long-duration insurance contracts. DAC will not be subject to loss recognition testing but will be reduced when actual lapse experience exceeds expected experience. The new guidance will no longer require adjustments to DAC and deferred sales inducement costs ("DSI") related to unrealized gains and losses on investment securities supporting the related business.

All market risk benefit product features will be measured at fair value with changes in fair value recorded in net income with the exception of changes in the fair value attributable to changes in the reporting entity's own credit risk, which are required to be recognized in OCI. Substantially all of the Company's market risk benefits are reinsured and therefore these impacts are not expected to be material to the Company.

The new guidance will be included in the comparable financial statements issued in reporting periods beginning after December 15, 2021, thereby requiring restatement of prior periods presented. Early adoption is permitted. The new guidance will be applied to affected contracts and DAC on the basis of existing carrying amounts at the earliest period presented or retrospectively using actual historical experience as of contract inception. The new guidance for market risk benefits is required to be adopted retrospectively.

The Company is evaluating the anticipated impacts of applying the new guidance to both retained income and AOCI. The requirements of the new guidance represent a material change from existing GAAP, however, the underlying economics of the business and related cash flows are unchanged. The Company is evaluating the specific impacts of adopting the new guidance and anticipates the financial statement impact of adopting the new guidance to be material, largely attributed to the impact of transitioning to a discount rate based on an upper-medium grade fixed income investment yield and updates to mortality assumptions. The Company expects the most significant impacts will occur in the run-off annuity segment. The revised accounting for DAC will be applied prospectively using the new model and any DAC effects existing in AOCI as a result of applying existing GAAP at the date of adoption will be reversed.

Simplifications to the Accounting for Income Taxes

In December 2019, the FASB issued amendments to simplify the accounting for income taxes. The amendments eliminate certain exceptions in the existing guidance including those related to intraperiod tax allocation and deferred tax liability recognition when changes in control of equity method and foreign subsidiary investments occur. The amendments require recognition of the effect of an enacted change in tax laws or rates in the interim period that includes the enactment date, provide an option to not allocate taxes to a legal entity that is not subject to tax as well as other minor changes. The amendments are effective for interim and annual reporting periods beginning after December 15, 2020. The new guidance specifies which amendments should be applied prospectively, retrospective to all periods presented or on a modified retrospective basis through a cumulative-effect adjustment to retained income as of the beginning of the year of adoption. The impact of adoption is not expected to be material to the Company's results of operations or financial position.

Change in accounting principle

The Company changed its accounting principle for recognizing actuarial gains and losses and expected return on plan assets for its pension and other postretirement plans to a more preferable policy under U.S. GAAP. Under the new principle, remeasurement of projected benefit obligation and plan assets are immediately recognized in earnings and are referred to as pension and other postretirement remeasurement gains and losses on the Consolidated Statements of Operations. Previously, actuarial gains and losses and differences between the expected and actual returns on plan assets were recognized as a component of AOCI, and were subject to amortization into earnings in future periods. This change has been applied on a retrospective basis. The Company's policy is to remeasure its pension and postretirement plans on a quarterly basis.

The Company also changed its policy for recognizing expected returns on plan assets by eliminating the permitted accounting practice allowing the five-year smoothing of equity returns and moving to an unadjusted fair value method.

The Company believes that immediately recognizing remeasurement of projected benefit obligation and plan assets in earnings is preferable as it provides greater transparency of the Company's economic obligations in accounting results and better aligns with fair value accounting principles by recognizing the effects of economic and interest rate changes on pension and other postretirement plan assets and liabilities in the year in which the gains and losses are incurred. These changes have been applied on a retrospective basis and as of January 1, 2017 resulted in a cumulative effect decrease to retained income of $1.58 billion, with a corresponding offset to AOCI and had no impact on total shareholders' equity.

The impacts of the adjustments on the financial statements are summarized in the following tables.

Consolidated Statements of Operations

($ in millions, except per share data)	Previous accounting principle	Impact of change (1)	As reported
	Year Ended December 31, 2019		
Property and casualty insurance claims and claims expense	$ 24,074	$ (98)	$ 23,976
Operating costs and expenses	5,752	(62)	5,690
Pension and other postretirement remeasurement gains and losses	—	114	114
Restructuring and related charges	41	—	41
Total costs and expenses	**38,638**	**(46)**	**38,592**
Income from operations before income tax expense	**6,043**	**46**	**6,089**
Income tax expense	1,232	10	1,242
Net income	**4,811**	**36**	**4,847**
Net income applicable to common shareholders	**$ 4,642**	**$ 36**	**$ 4,678**
Earnings per common share:			
Net income applicable to common shareholders per common share - Basic	$ 14.14	$ 0.11	$ 14.25
Net income applicable to common shareholders per common share - Diluted	$ 13.92	$ 0.11	$ 14.03

(1) The Company merged two of its pension plans, which had no impact on its financial statements as the Company remeasures pension plan assets and projected benefit obligations immediately in earnings on a quarterly basis. However, the plan merger increased the impact of change by $41 million for 2019, reflecting the shorter amortization period for losses deferred in AOCI from one of the merged plans that was required as part of the merger.

Consolidated Statements of Operations

	Previous accounting principle		Change in accounting principle		As adjusted	
	Year Ended December 31, 2018					
Property and casualty insurance claims and claims expense	$	22,839	$	(61)	$	22,778
Operating costs and expenses		5,869		(275)		5,594
Pension and other postretirement remeasurement gains and losses		—		468		468
Restructuring and related charges		83		(16)		67
Total costs and expenses		**37,077**		**116**		**37,193**
Income from operations before income tax expense		**2,744**		**(116)**		**2,628**
Income tax expense		492		(24)		468
Net income		**2,252**		**(92)**		**2,160**
Net income applicable to common shareholders	**$**	**2,104**	**$**	**(92)**	**$**	**2,012**
Earnings per common share:						
Net income applicable to common shareholders per common share - Basic	$	6.05	$	(0.27)	$	5.78
Net income applicable to common shareholders per common share - Diluted	$	5.96	$	(0.26)	$	5.70
	Year Ended December 31, 2017					
Property and casualty insurance claims and claims expense	$	21,929	$	(82)	$	21,847
Operating costs and expenses		5,442		(246)		5,196
Pension and other postretirement remeasurement gains and losses		—		(217)		(217)
Restructuring and related charges		109		(13)		96
Total costs and expenses		**35,436**		**(558)**		**34,878**
Income from operations before income tax expense		**3,991**		**558**		**4,549**
Income tax expense		802		193		995
Net income		**3,189**		**365**		**3,554**
Net income applicable to common shareholders	**$**	**3,073**	**$**	**365**	**$**	**3,438**
Earnings per common share:						
Net income applicable to common shareholders per common share - Basic	$	8.49	$	1.01	$	9.50
Net income applicable to common shareholders per common share - Diluted	$	8.36	$	0.99	$	9.35

Consolidated Statements of Comprehensive Income

($ in millions)	Previous accounting principle	Impact of change	As reported
	Year Ended December 31, 2019		
Net income	**$ 4,811**	**$ 36**	**$ 4,847**
Other comprehensive income (loss), after-tax			
Changes in:			
Unrealized net capital gains and losses	1,889	—	1,889
Unrealized foreign currency translation adjustments	(4)	(6)	(10)
Unrecognized pension and other postretirement benefit cost (1)	141	(188)	(47)
Other comprehensive income, after-tax	**2,026**	**(194)**	**1,832**
Comprehensive income	**6,837**	**(158)**	**6,679**
	Year Ended December 31, 2018		
Net income	**$ 2,252**	**$ (92)**	**$ 2,160**
Other comprehensive income (loss), after-tax			
Changes in:			
Unrealized net capital gains and losses	(754)	—	(754)
Unrealized foreign currency translation adjustments	(55)	7	(48)
Unrecognized pension and other postretirement benefit cost (1)	(144)	85	(59)
Other comprehensive loss, after-tax	**(953)**	**92**	**(861)**
Comprehensive income	**1,299**	**—**	**1,299**
	Year Ended December 31, 2017		
Net income	**$ 3,189**	**$ 365**	**$ 3,554**
Other comprehensive income (loss), after-tax			
Changes in:			
Unrealized net capital gains and losses	319	—	319
Unrealized foreign currency translation adjustments	47	(2)	45
Unrecognized pension and other postretirement benefit cost (1)	307	(359)	(52)
Other comprehensive income, after-tax	**673**	**(361)**	**312**
Comprehensive income	**3,862**	**4**	**3,866**

(1) Financial statement line item has been updated to "Unamortized pension and other postretirement prior service credit".

Consolidated Statements of Financial Position

($ in millions)	Previous accounting principle	Impact of change	As reported
	December 31, 2019		
Retained income	49,713	(1,639)	48,074
Unrealized foreign currency translation adjustments	(68)	9	(59)
Unrecognized pension and other postretirement benefit cost (1)	(1,350)	1,472	122
Total AOCI	**469**	**1,481**	**1,950**
Total shareholders' equity	**26,156**	**(158)**	**25,998**
	December 31, 2018		
Retained income	**45,708**	**(1,675)**	**44,033**
Unrealized foreign currency translation adjustments	(64)	15	(49)
Unrecognized pension and other postretirement benefit cost (1)	(1,491)	1,660	169
Total AOCI	**(1,557)**	**1,675**	**118**
Total shareholders' equity	**21,312**	**—**	**21,312**

(1) Financial statement line item has been updated to “Unamortized pension and other postretirement prior service credit“.

Consolidated Statements of Shareholders' Equity

($ in millions)	Previous accounting principle	Impact of change	As reported
	Year Ended December 31, 2019		
Retained income			
Balance, beginning of year	$ 45,708	$ (1,675)	$ 44,033
Cumulative effect of change in accounting principle	21	—	21
Net income	4,811	36	4,847
Dividends on common stock (declared per share of $2.00)	(658)	—	(658)
Dividends on preferred stock	(169)	—	(169)
Balance, end of year	**49,713**	**(1,639)**	**48,074**
Accumulated other comprehensive income (loss)			
Balance, beginning of year	(1,557)	1,675	118
Cumulative effect of change in accounting principle	—	—	—
Change in unrealized net capital gains and losses	1,889	—	1,889
Change in unrealized foreign currency translation adjustments	(4)	(6)	(10)
Change in unrecognized pension and other postretirement benefit cost (1)	141	(188)	(47)
Balance, end of year	**$ 469**	**$ 1,481**	**$ 1,950**
	Year Ended December 31, 2018		
Retained income			
Balance, beginning of year	$ 43,162	$ (1,583)	$ 41,579
Cumulative effect of change in accounting principle	1,088	—	1,088
Net income	2,252	(92)	2,160
Dividends on common stock (declared per share of $1.84)	(646)	—	(646)
Dividends on preferred stock	(148)	—	(148)
Balance, end of year	**45,708**	**(1,675)**	**44,033**
Accumulated other comprehensive income (loss)			
Balance, beginning of year	306	1,583	1,889
Cumulative effect of change in accounting principle	(910)	—	(910)
Change in unrealized net capital gains and losses	(754)	—	(754)
Change in unrealized foreign currency translation adjustments	(55)	7	(48)
Change in unrecognized pension and other postretirement benefit cost (1)	(144)	85	(59)
Balance, end of year	**(1,557)**	**1,675**	**118**
	Year Ended December 31, 2017		
Retained income			
Balance, beginning of year	$ 40,678	$ (1,669)	$ 39,009
Net income	3,189	365	3,554
Dividends on common stock (declared per share of $1.48)	(540)	—	(540)
Dividends on preferred stock	(116)	—	(116)
Reclassification of tax effects due to change in accounting principle	(49)	(279)	(328)
Balance, end of year	**43,162**	**(1,583)**	**41,579**
Accumulated other comprehensive income (loss)			
Balance, beginning of year	(416)	1,665	1,249
Change in unrealized net capital gains and losses	319	—	319
Change in unrealized foreign currency translation adjustments	47	(2)	45
Change in unrecognized pension and other postretirement benefit cost (1)	307	(359)	(52)
Reclassification of tax effects due to change in accounting principle	49	279	328
Balance, end of year	**306**	**1,583**	**1,889**

(1) Financial statement line item has been updated to "Change in unamortized pension and other postretirement prior service credit".

Consolidated Statements of Cash Flows

($ in millions)	Previous accounting principle	Impact of change	As reported
	Year Ended December 31, 2019		
Cash flows from operating activities			
Net income	$ 4,811	$ 36	$ 4,847
Adjustments to reconcile net income to net cash provided by operating activities:			
Pension and other postretirement measurement gains and losses	—	114	114
Income taxes	477	10	487
Other operating assets and liabilities	110	(160)	(50)
Net cash provided by operating activities	**$ 5,129**	**$ —**	**$ 5,129**
	Year Ended December 31, 2018		
Cash flows from operating activities			
Net income	$ 2,252	$ (92)	$ 2,160
Adjustments to reconcile net income to net cash provided by operating activities:			
Pension and other postretirement measurement gains and losses	—	468	468
Income taxes	(356)	(24)	(380)
Other operating assets and liabilities	1,207	(352)	855
Net cash provided by operating activities	**$ 5,175**	**$ —**	**$ 5,175**
	Year Ended December 31, 2017		
Cash flows from operating activities			
Net income	$ 3,189	$ 365	$ 3,554
Adjustments to reconcile net income to net cash provided by operating activities:			
Pension and other postretirement measurement gains and losses	—	(217)	(217)
Income taxes	(245)	193	(52)
Other operating assets and liabilities	328	(341)	(13)
Net cash provided by operating activities	**$ 4,314**	**$ —**	**$ 4,314**

Note 3 Acquisitions

iCracked On February 12, 2019, the Company acquired iCracked Inc. ("iCracked") which offers on-site, on-demand repair services for smartphones and tablets in North America, supporting Allstate Protection Plans' (formerly known as SquareTrade) operations. In conjunction with the iCracked acquisition, the Company recorded goodwill of $17 million.

PlumChoice On November 30, 2018, the Company acquired PlumChoice, Inc. ("PlumChoice") for $30 million in cash to provide technical support services to Allstate Protection Plans' customers and small businesses. In conjunction with the PlumChoice acquisition, the Company recorded goodwill of $23 million.

Allstate Identity Protection On October 5, 2018, the Company acquired InfoArmor, Inc. ("InfoArmor"), a leading provider of identity protection in the employee benefits market, for $525 million in cash. InfoArmor primarily offers identity protection to employees and their family members through voluntary benefit programs at over 1,400 firms, including more than100 of the Fortune 500 companies. Starting in the third quarter of 2019, the Company is reporting InfoArmor using the name Allstate Identity Protection.

In connection with the acquisition, the Company recorded goodwill of $318 million and intangible assets of$257 million. The intangible assets include $225 million and $32 million related to the acquired customer relationships and technology, respectively.

Note 4 Reportable Segments

The Company's chief operating decision maker reviews financial performance and makes decisions about the allocation of resources for the seven reportable segments. These segments are described below and align with the Company's key product and service offerings.

Allstate Protection principally offers private passenger auto and homeowners insurance in the United States and Canada, with earned premiums accounting for 78.0% of Allstate's 2019 consolidated revenues. Allstate Protection primarily operates in the U.S. (all 50 states and the District of Columbia ("D.C.")) and Canada. For 2019, the top U.S. geographic locations for premiums earned by the Allstate Protection segment were Texas, California, New York and Florida. No other jurisdiction accounted for more than 5% of premium earned for Allstate Protection. Revenues from external customers generated outside the United States were $1.37 billion, $1.20 billion and $1.13 billion in 2019, 2018 and 2017, respectively.

Discontinued Lines and Coverages includes property and casualty insurance coverage that primarily relates to policies written during the 1960s through the mid-1980s. Our exposure to asbestos, environmental and other discontinued lines claims arises principally from direct excess commercial insurance, assumed reinsurance coverage, direct primary commercial insurance and other businesses in run-off.

Service Businesses comprise Allstate Protection Plans, Allstate Dealer Services, Allstate Roadside Services, Arity and Allstate Identity Protection. Service Businesses offer consumer product protection plans, finance and insurance products (including vehicle service contracts, guaranteed asset protection waivers, road hazard tire and wheel and paintless dent repair protection), roadside assistance, device and mobile data collection services and analytic solutions using automotive telematics information and identity protection. The Service Businesses primarily operate in the U.S., with certain businesses offering services in Europe, Canada, and Puerto Rico. Revenues from external customers generated outside the United States relate to consumer product protection plans sold primarily in the European Union and were $95 million, $61 million and $35 million in 2019, 2018 and 2017, respectively.

Allstate Life offers traditional, interest-sensitive and variable life insurance products. Allstate Life primarily operates in the U.S. (all 50 states and D.C.). For 2019, the top geographic locations for statutory direct life insurance premiums were New York, California, Texas, Florida and Illinois. No other jurisdiction accounted for more than 5% of statutory direct life insurance premiums.

Allstate Benefits offers voluntary benefits products, including life, accident, critical illness, short-term disability and other health products. Allstate Benefits primarily operates in the U.S. (all 50 states and D.C.) and Canada. For 2019, the top geographic locations for statutory direct accident and health insurance premiums were Florida, Texas, North Carolina, New York and California. No other jurisdiction accounted for more than 5% of statutory direct accident and health insurance premiums. Revenues from external customers generated outside the United States relate to voluntary accident and health insurance sold in Canada and were not material.

Allstate Annuities consists primarily of deferred fixed annuities and immediate annuities (including standard and sub-standard structured settlements). This segment is in run-off.

Corporate and Other comprises holding company activities and certain non-insurance operations, including expenses associated with strategic initiatives.

Allstate Protection and Discontinued Lines and Coverages segments comprise Property-Liability. The Company does not allocate investment income, realized capital gains and losses, or assets to the Allstate Protection and Discontinued Lines and Coverages segments. Management reviews assets at the Property-Liability, Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, and Corporate and Other levels for decision-making purposes.

The accounting policies of the reportable segments are the same as those described in Note 2. The effects of intersegment transactions are eliminated in the consolidated results. For segment results, services provided by Service Businesses to Allstate Protection are not eliminated as management considers those transactions in assessing the results of the respective segments.

Measuring segment profit or loss

The measure of segment profit or loss used in evaluating performance is underwriting income for the Allstate Protection and Discontinued Lines and Coverages segments and adjusted net income for the Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities, and Corporate and Other segments. A reconciliation of these measures to net income applicable to common shareholders is provided below.

Underwriting income is calculated as premiums earned and other revenue, less claims and claims expenses ("losses"), amortization of DAC, operating costs and expenses, restructuring and related charges and amortization or impairment of purchased intangibles as determined using GAAP.

Adjusted net income is net income applicable to common shareholders, excluding:

- Realized capital gains and losses, after-tax, except for periodic settlements and accruals on non-hedge derivative instruments, which are reported with realized capital gains and losses but included in adjusted net income
- Pension and other postretirement remeasurement gains and losses, after-tax
- Valuation changes on embedded derivatives not hedged, after-tax
- Amortization of DAC and DSI, to the extent they resulted from the recognition of certain realized capital gains and losses or valuation changes on embedded derivatives not hedged, after-tax
- Business combination expenses and the amortization or impairment of purchased intangibles, after-tax
- Gain (loss) on disposition of operations, after-tax
- Adjustments for other significant non-recurring, infrequent or unusual items, when (a) the nature of the charge or gain is such that it is reasonably unlikely to recur within two years, or (b) there has been no similar charge or gain within the prior two years

Reportable segments revenue information

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Property-Liability			
Insurance premiums			
Auto	$ 24,188	$ 22,970	$ 21,878
Homeowners	7,912	7,517	7,310
Other personal lines	1,861	1,808	1,750
Commercial lines	882	655	495
Allstate Protection	34,843	32,950	31,433
Discontinued Lines and Coverages	—	—	—
Total Property-Liability insurance premiums	34,843	32,950	31,433
Other revenue	741	738	703
Net investment income	1,533	1,464	1,478
Realized capital gains and losses	1,470	(639)	401
Total Property-Liability	**38,587**	**34,513**	**34,015**
Service Businesses			
Consumer product protection plans	633	503	295
Roadside assistance	238	263	268
Finance and insurance products	362	332	304
Intersegment premiums and service fees (1)	154	122	110
Other revenue	188	82	66
Net investment income	42	27	16
Realized capital gains and losses	32	(11)	—
Total Service Businesses	**1,649**	**1,318**	**1,059**
Allstate Life			
Traditional life insurance premiums	630	600	568
Accident and health insurance premiums	2	2	2
Interest-sensitive life insurance contract charges	711	713	710
Other revenue	125	119	114
Net investment income	514	505	489
Realized capital gains and losses	1	(14)	5
Total Allstate Life	**1,983**	**1,925**	**1,888**
Allstate Benefits			
Traditional life insurance premiums	43	44	42
Accident and health insurance premiums	988	980	928
Interest-sensitive life insurance contract charges	114	111	114
Net investment income	83	77	72
Realized capital gains and losses	12	(9)	1
Total Allstate Benefits	**1,240**	**1,203**	**1,157**
Allstate Annuities			
Fixed annuities contract charges	13	15	14
Net investment income	917	1,096	1,305
Realized capital gains and losses	346	(166)	44
Total Allstate Annuities	**1,276**	**945**	**1,363**
Corporate and Other			
Net investment income	70	71	41
Realized capital gains and losses	24	(38)	(6)
Total Corporate and Other	**94**	**33**	**35**
Intersegment eliminations (1)	(154)	(122)	(110)
Consolidated revenues	**$ 44,675**	**$ 39,815**	**$ 39,407**

(1) Intersegment insurance premiums and service fees are primarily related to Arity and Allstate Roadside Services and are eliminated in the consolidated financial

statements.

Reportable segments financial performance

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Property-Liability			
Allstate Protection	$ 2,912	$ 2,343	$ 2,304
Discontinued Lines and Coverages	(108)	(90)	(99)
Total underwriting income	**2,804**	**2,253**	**2,205**
Net investment income	1,533	1,464	1,478
Income tax expense on operations	(887)	(747)	(1,187)
Realized capital gains and losses, after-tax	1,161	(500)	272
Gain on disposition of operations, after-tax	—	—	9
Tax Legislation (expense) benefit	—	(5)	36
Property-Liability net income applicable to common shareholders	**4,611**	**2,465**	**2,813**
Service Businesses			
Adjusted net income (loss)	38	8	(54)
Realized capital gains and losses, after-tax	25	(9)	—
Amortization of purchased intangibles, after-tax	(97)	(74)	(60)
Impairment of purchased intangibles, after-tax	(43)	—	—
Tax Legislation (expense) benefit	—	(4)	137
Service Businesses net (loss) income applicable to common shareholders	**(77)**	**(79)**	**23**
Allstate Life			
Adjusted net income	261	295	259
Realized capital gains and losses, after-tax	—	(11)	2
Valuation changes on embedded derivatives not hedged, after-tax	(9)	—	—
DAC and DSI amortization related to realized capital gains and losses and valuation changes on embedded derivatives not hedged, after-tax	(5)	(8)	(10)
Tax Legislation (expense) benefit	—	(16)	338
Allstate Life net income applicable to common shareholders	**247**	**260**	**589**
Allstate Benefits			
Adjusted net income	115	124	100
Realized capital gains and losses, after-tax	9	(7)	—
DAC and DSI amortization related to realized capital gains and losses, after-tax	—	1	—
Tax Legislation benefit	—	—	54
Allstate Benefits net income applicable to common shareholders	**124**	**118**	**154**
Allstate Annuities			
Adjusted net income	10	131	205
Realized capital gains and losses, after-tax	274	(131)	28
Valuation changes on embedded derivatives not hedged, after-tax	(6)	3	—
Gain on disposition of operations, after-tax	4	4	4
Tax Legislation benefit	—	69	182
Allstate Annuities net income applicable to common shareholders	**282**	**76**	**419**
Corporate and Other			
Adjusted net loss	(438)	(406)	(320)
Realized capital gains and losses, after-tax	19	(30)	(4)
Pension and other postretirement remeasurement gains and losses, after-tax	(90)	(370)	141
Goodwill impairment	—	—	(125)
Business combination expenses, after-tax	—	(7)	(14)
Tax Legislation expense	—	(15)	(238)
Consolidated and Other net loss applicable to common shareholders	**(509)**	**(828)**	**(560)**
Consolidated net income applicable to common shareholders	**$ 4,678**	**$ 2,012**	**$ 3,438**

Additional significant financial performance data

($ in millions)	For the years ended December 31, 2019	2018	2017
Amortization of DAC			
Property-Liability	$ 4,649	$ 4,475	$ 4,205
Service Businesses	543	463	296
Allstate Life	173	132	134
Allstate Benefits	161	145	142
Allstate Annuities	7	7	7
Consolidated	**$ 5,533**	**$ 5,222**	**$ 4,784**
Income tax expense (benefit)			
Property-Liability	$ 1,196	$ 613	$ 1,285
Service Businesses	(18)	(19)	(194)
Allstate Life	53	75	(226)
Allstate Benefits	35	32	1
Allstate Annuities	73	(66)	(58)
Corporate and Other	(97)	(167)	187
Consolidated	**$ 1,242**	**$ 468**	**$ 995**

Interest expense is primarily incurred in the Corporate and Other segment. Capital expenditures for long-lived assets are generally made in Property-Liability as the Company does not allocate assets to the Allstate Protection and Discontinued Lines and Coverages segments. A portion of these long-lived assets are used by entities included in the Service Businesses, Allstate Life, Allstate Benefits, Allstate Annuities and Corporate and Other segments and, accordingly, are charged to expenses in proportion to their use.

Reportable segment total assets and investments [1]

($ in millions)	As of December 31, 2019	2018
Assets		
Property-Liability	$ 67,243	$ 61,947
Service Businesses	5,746	5,473
Allstate Life	14,771	13,613
Allstate Benefits	2,915	2,822
Allstate Annuities	26,914	26,798
Corporate and Other	2,361	1,596
Consolidated	**$ 119,950**	**$ 112,249**
Investments		
Property-Liability	$ 48,414	$ 43,634
Service Businesses	1,544	1,203
Allstate Life	11,914	10,809
Allstate Benefits	1,941	1,809
Allstate Annuities	22,221	22,336
Corporate and Other	2,328	1,469
Consolidated	**$ 88,362**	**$ 81,260**

(1) The balances reflect the elimination of related party investments between segments.

Note 5 Investments

Amortized cost, gross unrealized gains (losses) and fair value for fixed income securities

($ in millions)	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
December 31, 2019				
U.S. government and agencies	$ 4,971	$ 141	$ (26)	$ 5,086
Municipal	8,080	551	(11)	8,620
Corporate	41,090	2,035	(47)	43,078
Foreign government	968	16	(5)	979
ABS	860	8	(6)	862
MBS	324	96	(1)	419
Total fixed income securities	**$ 56,293**	**$ 2,847**	**$ (96)**	**$ 59,044**
December 31, 2018				
U.S. government and agencies	$ 5,386	$ 137	$ (6)	$ 5,517
Municipal	8,963	249	(43)	9,169
Corporate	40,557	491	(890)	40,158
Foreign government	739	13	(5)	747
ABS	1,049	6	(10)	1,045
MBS	440	97	(3)	534
Total fixed income securities	**$ 57,134**	**$ 993**	**$ (957)**	**$ 57,170**

Scheduled maturities for fixed income securities

($ in millions)	As of December 31, 2019 Amortized cost	Fair value
Due in one year or less	$ 3,214	$ 3,239
Due after one year through five years	24,108	24,781
Due after five years through ten years	18,194	19,177
Due after ten years	9,593	10,566
	55,109	**57,763**
ABS and MBS	1,184	1,281
Total	**$ 56,293**	**$ 59,044**

Actual maturities may differ from those scheduled as a result of calls and make-whole payments by the issuers. ABS and MBS are shown separately because of the potential for prepayment of principal prior to contractual maturity dates.

Net investment income

($ in millions)	For the years ended December 31, 2019	2018	2017
Fixed income securities	$ 2,175	$ 2,077	$ 2,078
Equity securities	206	170	174
Mortgage loans	220	217	206
Limited partnership interests	471	705	889
Short-term investments	102	73	30
Other	262	272	236
Investment income, before expense	**3,436**	**3,514**	**3,613**
Investment expense	(277)	(274)	(212)
Net investment income	**$ 3,159**	**$ 3,240**	**$ 3,401**

Realized capital gains (losses) by asset type

($ in millions)	For the years ended December 31, 2019	2018	2017
Fixed income securities	$ 461	$ (237)	$ 94
Equity securities	1,210	(594)	255
Mortgage loans	—	2	1
Limited partnership interests	200	(101)	132
Derivatives	(15)	46	(46)
Other	29	7	9
Realized capital gains and losses	**$ 1,885**	**$ (877)**	**$ 445**

Realized capital gains (losses) by transaction type

($ in millions)	For the years ended December 31, 2019	2018	2017
Impairment write-downs	$ (47)	$ (14)	$ (102)
Change in intent write-downs	—	—	(48)
Net OTTI losses recognized in earnings	**(47)**	**(14)**	**(150)**
Sales	575	(215)	641
Valuation of equity investments (1)	1,372	(691)	—
Valuation and settlements of derivative instruments	(15)	43	(46)
Realized capital gains and losses	**$ 1,885**	**$ (877)**	**$ 445**

(1) Includes valuation of equity securities and certain limited partnership interests where the underlying assets are predominately public equity securities.

Sales of fixed income securities resulted in gross gains of$607 million, $120 million and $737 million and gross losses of$132 million, $347 million and $276 million during 2019, 2018 and 2017, respectively.

The following table presents the net pre-tax appreciation (decline) recognized in net income of equity securities and limited partnership interests carried at fair value that are still held as of December 31, 2019 and 2018, respectively.

Net appreciation (decline) recognized in net income

($ in millions)	For the years ended December 31, 2019	2018
Equity securities	$ 1,073	$ (261)
Limited partnership interests carried at fair value	149	249
Total	**$ 1,222**	**$ (12)**

OTTI losses by asset type

($ in millions)	2019 Gross	2019 Included in OCI	2019 Net	2018 Gross	2018 Included in OCI	2018 Net	2017 Gross	2017 Included in OCI	2017 Net
Fixed income securities:									
Municipal	$ (2)	$ 2	$ —	$ —	$ —	$ —	$ (1)	$ (3)	$ (4)
Corporate	(5)	(2)	(7)	(4)	2	(2)	(9)	3	(6)
ABS	(4)	—	(4)	(1)	(2)	(3)	(1)	(2)	(3)
MBS	(4)	1	(3)	(4)	(1)	(5)	(11)	(2)	(13)
Total fixed income securities	**(15)**	**1**	**(14)**	**(9)**	**(1)**	**(10)**	**(22)**	**(4)**	**(26)**
Equity securities	—	—	—	—	—	—	(86)	—	(86)
Mortgage loans	—	—	—	—	—	—	(1)	—	(1)
Limited partnership interests	(6)	—	(6)	(3)	—	(3)	(32)	—	(32)
Other	(27)	—	(27)	(1)	—	(1)	(5)	—	(5)
OTTI losses	**$ (48)**	**$ 1**	**$ (47)**	**$ (13)**	**$ (1)**	**$ (14)**	**$ (146)**	**$ (4)**	**$ (150)**

OTTI losses included in AOCI at the time of impairment for fixed income securities which were not included in earnings [(1)]

	As of December 31,	
($ in millions)	**2019**	**2018**
Municipal	$ (7)	$ (5)
Corporate	—	(2)
ABS	(10)	(10)
MBS	(56)	(69)
Total	**$ (73)**	**$ (86)**

(1) The amounts exclude $161 million and $180 million as of December 31, 2019 and 2018, respectively, of net unrealized gains related to changes in valuation of the fixed income securities subsequent to the impairment measurement date.

Rollforward of the cumulative credit losses recognized in earnings for fixed income securities held

	As of December 31,		
($ in millions)	**2019**	**2018**	**2017**
Beginning balance	$ (204)	$ (226)	$ (318)
Additional credit loss for securities previously other-than-temporarily impaired	(10)	(7)	(18)
Additional credit loss for securities not previously other-than-temporarily impaired	(4)	(3)	(8)
Reduction in credit loss for securities disposed or collected	32	30	116
Change in credit loss due to accretion of increase in cash flows	—	2	2
Ending balance	**$ (186)**	**$ (204)**	**$ (226)**

The Company uses its best estimate of future cash flows expected to be collected from the fixed income security, discounted at the security's original or current effective rate, as appropriate, to calculate a recovery value and determine whether a credit loss exists. The determination of cash flow estimates is inherently subjective, and methodologies may vary depending on facts and circumstances specific to the security. All reasonably available information relevant to the collectability of the security, including past events, current conditions, and reasonable and supportable assumptions and forecasts, are considered when developing the estimate of cash flows expected to be collected. That information generally includes, but is not limited to, the remaining payment terms of the security, prepayment speeds, foreign exchange rates, the financial condition and future earnings potential of the issue or issuer, expected defaults, expected recoveries, the value of underlying collateral, vintage, geographic concentration of underlying collateral, available reserves or escrows, current subordination levels, third-party guarantees and other credit enhancements. Other information, such as industry analyst reports and forecasts, sector credit ratings, financial condition of the bond insurer for insured fixed income securities, and other market data relevant to the realizability of contractual cash flows, may also be considered. The estimated fair value of collateral will be used to estimate recovery value if the Company determines that the security is dependent on the liquidation of collateral for ultimate settlement. If the estimated recovery value is less than the amortized cost of the security, a credit loss exists and an OTTI for the difference between the estimated recovery value and amortized cost is recorded in earnings. The portion of the unrealized loss related to factors other than credit remains classified in AOCI. If the Company determines that the fixed income security does not have sufficient cash flow or other information to estimate a recovery value for the security, the Company may conclude that the entire decline in fair value is deemed to be credit related and the loss is recorded in earnings.

Unrealized net capital gains and losses included in AOCI

($ in millions)	Fair value	Gross unrealized Gains	Gross unrealized Losses	Unrealized net gains (losses)
December 31, 2019				
Fixed income securities	$ 59,044	$ 2,847	$ (96)	$ 2,751
Short-term investments	4,256	—	—	—
Derivative instruments	—	—	(3)	(3)
EMA limited partnerships [1]				(4)
Unrealized net capital gains and losses, pre-tax				**2,744**
Amounts recognized for:				
Insurance reserves [2]				(126)
DAC and DSI [3]				(224)
Amounts recognized				**(350)**
Deferred income taxes				(507)
Unrealized net capital gains and losses, after-tax				**$ 1,887**
December 31, 2018				
Fixed income securities	$ 57,170	$ 993	$ (957)	$ 36
Short-term investments	3,027	—	—	—
Derivative instruments	—	—	(3)	(3)
EMA limited partnerships				—
Unrealized net capital gains and losses, pre-tax				**33**
Amounts recognized for:				
Insurance reserves				—
DAC and DSI				(33)
Amounts recognized				**(33)**
Deferred income taxes				(2)
Unrealized net capital gains and losses, after-tax				**$ (2)**

(1) Unrealized net capital gains and losses for limited partnership interests represent the Company's share of EMA limited partnerships' OCI. Fair value and gross unrealized gains and losses are not applicable.

(2) The insurance reserves adjustment represents the amount by which the reserve balance would increase if the net unrealized gains in the applicable product portfolios were realized and reinvested at lower interest rates, resulting in a premium deficiency. This adjustment primarily relates to structured settlement annuities with life contingencies (a type of immediate fixed annuities).

(3) The DAC and DSI adjustment balance represents the amount by which the amortization of DAC and DSI would increase or decrease if the unrealized gains or losses in the respective product portfolios were realized.

Change in unrealized net capital gains (losses)

($ in millions)	For the years ended December 31, 2019	2018	2017
Fixed income securities	$ 2,715	$ (1,431)	$ 204
Equity securities [1]	—	—	651
Derivative instruments	—	(2)	(3)
EMA limited partnerships	(4)	(1)	5
Total	**2,711**	**(1,434)**	**857**
Amounts recognized for:			
Insurance reserves	(126)	315	(315)
DAC and DSI	(191)	163	(50)
Amounts recognized	**(317)**	**478**	**(365)**
Deferred income taxes	(505)	202	117
Increase (decrease) in unrealized net capital gains and losses, after-tax	**$ 1,889**	**$ (754)**	**$ 609**

(1) Upon adoption of the recognition and measurement accounting standard on January 1, 2018, $1.16 billion of pre-tax unrealized net capital gains for equity securities were reclassified from AOCI to retained income.

Portfolio monitoring

The Company has a comprehensive portfolio monitoring process to identify and evaluate each fixed income security whose carrying value may be other-than-temporarily impaired.

For each fixed income security in an unrealized loss position, the Company assesses whether management with the appropriate authority has made the decision to sell or whether it is more likely than not the Company will be required to sell the security before recovery of the amortized cost basis for reasons such as liquidity, contractual or regulatory purposes. If a security meets either of these criteria, the security's decline in fair value is considered other than temporary and is recorded in earnings.

If the Company has not made the decision to sell the fixed income security and it is not more likely than not the Company will be required to sell the fixed income security before recovery of its amortized cost basis, the Company evaluates whether it expects to receive cash flows sufficient to recover the entire amortized cost basis of the security. The Company calculates the estimated recovery value by discounting the best estimate of future cash flows at the security's original or current effective rate, as appropriate, and compares this to the amortized cost of the security. If the Company does not expect to receive cash flows sufficient to recover the entire amortized cost basis of the fixed income security, the credit loss component of the impairment is recorded in earnings, with the remaining amount of the unrealized loss related to other factors recognized in OCI.

The Company's portfolio monitoring process includes a quarterly review of all securities to identify instances where the fair value of a security compared to its amortized cost is below established thresholds. The process also includes the monitoring of other impairment indicators such as ratings, ratings downgrades and payment defaults. The securities identified, in addition to other securities for which the Company may have a concern, are evaluated for potential OTTI using all reasonably available information relevant to the collectability or recovery of the security. Inherent in the Company's evaluation of OTTI for these securities are assumptions and estimates about the financial condition and future earnings potential of the issue or issuer. Some of the factors that may be considered in evaluating whether a decline in fair value is other than temporary are: 1) the financial condition, near-term and long-term prospects of the issue or issuer, including relevant industry specific market conditions and trends, geographic location and implications of rating agency actions and offering prices; 2) the specific reasons that a security is in an unrealized loss position, including overall market conditions which could affect liquidity; and 3) the length of time and extent to which the fair value has been less than amortized cost.

Gross unrealized losses and fair value by type and length of time held in a continuous unrealized loss position

($ in millions)	Less than 12 months			12 months or more			Total unrealized losses
	Number of issues	Fair value	Unrealized losses	Number of issues	Fair value	Unrealized losses	
December 31, 2019							
Fixed income securities							
U.S. government and agencies	31	$ 1,713	$ (26)	10	$ 26	$ —	$ (26)
Municipal	307	576	(9)	1	14	(2)	(11)
Corporate	186	1,392	(20)	65	485	(27)	(47)
Foreign government	55	412	(4)	6	102	(1)	(5)
ABS	36	193	(2)	23	160	(4)	(6)
MBS	27	15	—	123	14	(1)	(1)
Total fixed income securities	**642**	**$ 4,301**	**$ (61)**	**228**	**$ 801**	**$ (35)**	**$ (96)**
Investment grade fixed income securities	581	$ 3,878	$ (41)	185	$ 594	$ (20)	$ (61)
Below investment grade fixed income securities	61	423	(20)	43	207	(15)	(35)
Total fixed income securities	**642**	**$ 4,301**	**$ (61)**	**228**	**$ 801**	**$ (35)**	**$ (96)**
December 31, 2018							
Fixed income securities							
U.S. government and agencies	11	$ 55	$ —	38	$ 364	$ (6)	$ (6)
Municipal	943	1,633	(10)	1,147	1,554	(33)	(43)
Corporate	1,736	19,243	(543)	645	8,374	(347)	(890)
Foreign government	7	20	(1)	27	412	(4)	(5)
ABS	64	454	(5)	28	161	(5)	(10)
MBS	169	37	—	197	52	(3)	(3)
Total fixed income securities	**2,930**	**$ 21,442**	**$ (559)**	**2,082**	**$ 10,917**	**$ (398)**	**$ (957)**
Investment grade fixed income securities	2,348	$ 17,485	$ (331)	2,021	$ 10,626	$ (360)	$ (691)
Below investment grade fixed income securities	582	3,957	(228)	61	291	(38)	(266)
Total fixed income securities	**2,930**	**$ 21,442**	**$ (559)**	**2,082**	**$ 10,917**	**$ (398)**	**$ (957)**

Gross unrealized losses by unrealized loss position and credit quality as of December 31, 2019			
($ in millions)	**Investment grade**	**Below investment grade**	**Total**
Fixed income securities with unrealized loss position less than 20% of amortized cost (1) (2)	$ (48)	$ (27)	$ (75)
Fixed income securities with unrealized loss position greater than or equal to 20% of amortized cost (3) (4)	(13)	(8)	(21)
Total unrealized losses	**$ (61)**	**$ (35)**	**$ (96)**

(1) Below investment grade fixed income securities include $14 million that have been in an unrealized loss position for less than twelve months.

(2) Related to securities with an unrealized loss position less than 20% of amortized cost, the degree of which suggests that these securities do not pose a high risk of being other-than-temporarily impaired.

(3) No below investment grade fixed income securities have been in an unrealized loss position for a period of twelve or more consecutive months.

(4) Evaluated based on factors such as discounted cash flows and the financial condition and near-term and long-term prospects of the issue or issuer and were determined to have adequate resources to fulfill contractual obligations.

Investment grade is defined as a security having a rating of Aaa, Aa, A or Baa from Moody's, a rating of AAA, AA, A or BBB from S&P Global Ratings ("S&P"), a comparable rating from another nationally recognized rating agency, or a comparable internal rating if an externally provided rating is not available. Market prices for certain securities may have credit spreads which imply higher or lower credit quality than the current third-party rating. Unrealized losses on investment grade securities are principally related to an increase in market yields which may include increased risk-free interest rates and/or wider credit spreads since the time of initial purchase. The unrealized losses are expected to reverse as the securities approach maturity.

ABS and MBS in an unrealized loss position were evaluated based on actual and projected collateral losses relative to the securities' positions in the respective securitization trusts, security specific expectations of cash flows, and credit ratings. This evaluation also takes into consideration credit enhancement, measured in terms of (i) subordination from other classes of securities in the trust that are contractually obligated to absorb losses before the class of security the Company owns, and (ii) the expected impact of other structural features embedded in the securitization trust beneficial to the class of securities the Company owns, such as overcollateralization and excess spread. Municipal bonds in an unrealized loss position were evaluated based on the underlying credit quality of the primary obligor, obligation type and quality of the underlying assets.

As of December 31, 2019, the Company has not made the decision to sell and it is not more likely than not the Company will be required to sell fixed income securities with unrealized losses before recovery of the amortized cost basis.

Limited partnerships

Investments in limited partnership interests include interests in private equity funds, real estate funds and other funds. As of December 31, 2019 and 2018, the carrying value of EMA limited partnerships totaled $6.26 billion and $5.73 billion, respectively, and limited partnerships carried at fair value totaled $1.81 billion and $1.78 billion, respectively. Principal factors influencing carrying value appreciation or decline include operating performance, comparable public company earnings multiples, capitalization rates and the economic environment. For equity method limited partnerships, the Company recognizes an impairment loss when evidence demonstrates that the loss is other than temporary. Evidence of a loss in value that is other than temporary may include the absence of an ability to recover the carrying amount of the investment or the inability of the investee to sustain a level of earnings that would justify the carrying amount of the investment. Changes in fair value limited partnerships are recorded through net investment income and therefore are not tested for impairment.

Mortgage loans

The Company's mortgage loans are commercial mortgage loans collateralized by a variety of commercial real estate property types located across the United States and totaled, net of valuation allowance, $4.82 billion and $4.67 billion as of December 31, 2019 and 2018, respectively. Substantially all of the commercial mortgage loans are non-recourse to the borrower.

Principal geographic distribution of commercial real estate exceeding 5% of the mortgage loans portfolio

	As of December 31,	
(% of mortgage loan portfolio carrying value)	**2019**	**2018**
Texas	16.9%	14.9%
California	15.1	16.4
Illinois	7.1	7.8
Florida	6.4	6.1
New Jersey	5.6	6.8
North Carolina	4.5	5.1

Types of properties collateralizing the mortgage loan portfolio

	As of December 31,	
(% of mortgage loan portfolio carrying value)	**2019**	**2018**
Apartment complex	36.8%	34.4%
Office buildings	22.6	24.5
Warehouse	16.8	15.8
Retail	13.4	14.4
Other	10.4	10.9
Total	**100.0%**	**100.0%**

Contractual maturities of the mortgage loan portfolio

	As of December 31, 2019		
($ in millions)	**Number of loans**	**Carrying value**	**Percent**
2020	9	$ 58	1.2%
2021	36	446	9.3
2022	28	460	9.5
2023	52	776	16.1
Thereafter	161	3,077	63.9
Total	**286**	**$ 4,817**	**100.0%**

Mortgage loans are evaluated for impairment on a specific loan basis through a quarterly credit monitoring process and review of key credit quality indicators. Mortgage loans are considered impaired when it is probable that the Company will not collect the contractual principal and interest. Valuation allowances are established for impaired loans to reduce the carrying value to the fair value of the collateral less costs to sell or the present value of the loan's expected future repayment cash flows discounted at the loan's original effective interest rate. Impaired mortgage loans may not have a valuation allowance when the fair value of the collateral less costs to sell is higher than the carrying value. Valuation allowances are adjusted for subsequent changes in the fair value of the collateral less costs to sell or present value of the loan's expected future repayment cash flows. Mortgage loans are charged off against their corresponding valuation allowances when there is no reasonable expectation of recovery. The impairment evaluation is non-statistical in respect to the aggregate portfolio but considers facts and circumstances attributable to each loan. It is not considered probable that additional impairment losses, beyond those identified on a specific loan basis, have been incurred as of December 31, 2019.

Accrual of income is suspended for mortgage loans that are in default or when full and timely collection of principal and interest payments is not probable. Cash receipts on mortgage loans on nonaccrual status are generally recorded as a reduction of carrying value.

Debt service coverage ratio is considered a key credit quality indicator when mortgage loans are evaluated for impairment. Debt service coverage ratio represents the amount of estimated cash flows from the property available to the borrower to meet principal and interest payment obligations. Debt service coverage ratio estimates are updated annually or more frequently if conditions are warranted based on the Company's credit monitoring process.

Carrying value of non-impaired mortgage loans summarized by debt service coverage ratio distribution

($ in millions)	As of December 31, 2019			2018		
Debt Service Coverage Ratio Distribution	Fixed rate mortgage loans	Variable rate mortgage loans	Total	Fixed rate mortgage loans	Variable rate mortgage loans	Total
Below 1.0	$ 13	$ 32	$ 45	$ 6	$ 31	$ 37
1.0 - 1.25	225	—	225	273	—	273
1.26 - 1.50	1,219	18	1,237	1,192	—	1,192
Above 1.50	3,264	38	3,302	3,063	101	3,164
Total non-impaired mortgage loans	**$ 4,721**	**$ 88**	**$ 4,809**	**$ 4,534**	**$ 132**	**$ 4,666**

Mortgage loans with a debt service coverage ratio below1.0 that are not considered impaired primarily relate to instances where the borrower has the financial capacity to fund the revenue shortfalls from the properties for the foreseeable term, the decrease in cash flows from the properties is considered temporary, or there are other risk mitigating circumstances such as additional collateral, escrow balances or borrower guarantees.

Net carrying value of impaired mortgage loans

($ in millions)	As of December 31, 2019	2018
Impaired mortgage loans with a valuation allowance	$ 8	$ 4
Impaired mortgage loans without a valuation allowance	—	—
Total impaired mortgage loans	**$ 8**	**$ 4**
Valuation allowance on impaired mortgage loans	$ 3	$ 3

The average balance of impaired loans was$5 million, $4 million and $7 million during 2019, 2018 and 2017, respectively.

Rollforward of the valuation allowance on impaired mortgage loans

($ in millions)	For the years ended December 31, 2019	2018	2017
Beginning balance	$ 3	$ 3	$ 3
Net increase in valuation allowance	—	—	1
Charge offs	—	—	(1)
Ending balance	**$ 3**	**$ 3**	**$ 3**

Payments on all mortgage loans were current as ofDecember 31, 2019, 2018 and 2017.

Municipal bonds

The Company maintains a diversified portfolio of municipal bonds, including tax exempt and taxable securities, which totaled $8.62 billion and $9.17 billion as of December 31, 2019 and 2018, respectively.

The municipal bond portfolio includes general obligations of state and local issuers and revenue bonds (including pre-refunded bonds, which are bonds for which an irrevocable trust has been established to fund the remaining payments of principal and interest).

Principal geographic distribution of municipal bond issuers exceeding 5% of the portfolio

(% of municipal bond portfolio carrying value)	As of December 31, 2019	2018
Texas	12.7%	12.3%
California	8.6	7.4
Colorado	5.8	4.0
Washington	5.5	6.2
New York	3.7	5.6

Short-term investments

Short-term investments, including money market funds, commercial paper, U.S. Treasury bills and other short-term investments, are carried at fair value. As of December 31, 2019 and 2018, the fair value of short-term investments totaled $4.26 billion and $3.03 billion, respectively.

Other investments

Other investments primarily consist of bank loans, real estate, policy loans, agent loans and derivatives. Bank loans are primarily senior secured corporate loans and are carried at amortized cost. Policy loans are carried at unpaid principal balances. Real estate is carried at cost less accumulated depreciation. Agent

loans are loans issued to exclusive Allstate agents and are carried at unpaid principal balances, net of valuation allowances and unamortized deferred fees or costs. Derivatives are carried at fair value.

Other investments by asset type				
($ in millions)		**December 31, 2019**		**December 31, 2018**
Bank loans	$	1,204	$	1,350
Real estate		1,005		791
Policy loans		894		891
Agent loans		666		620
Derivatives and other		236		200
Total	**$**	**4,005**	**$**	**3,852**

Concentration of credit risk

As of December 31, 2019, the Company is not exposed to any credit concentration risk of a single issuer and its affiliates greater than 10% of the Company's shareholders' equity, other than the U.S. government and its agencies.

Securities loaned

The Company's business activities include securities lending programs with third parties, mostly large banks. As of December 31, 2019 and 2018, fixed income and equity securities with a carrying value of $1.74 billion and $1.40 billion, respectively, were on loan under these agreements. Interest income on collateral, net of fees, was $5 million, $4 million and $7 million in 2019, 2018 and 2017, respectively.

Other investment information

Included in fixed income securities are below investment grade assets totaling $7.15 billion and $5.23 billion as of December 31, 2019 and 2018, respectively.

As of December 31, 2019, fixed income securities and short-term investments with a carrying value of $147 million were on deposit with regulatory authorities as required by law.

As of December 31, 2019, the carrying value of fixed income securities and other investments that were non-income producing was $40 million.

Note 6 Fair Value of Assets and Liabilities

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The hierarchy for inputs used in determining fair value maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Assets and liabilities recorded on the Consolidated Statements of Financial Position at fair value are categorized in the fair value hierarchy based on the observability of inputs to the valuation techniques as follows:

Level 1: Assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that the Company can access.

Level 2: Assets and liabilities whose values are based on the following:

(a) Quoted prices for similar assets or liabilities in active markets;

(b) Quoted prices for identical or similar assets or liabilities in markets that are not active; or

(c) Valuation models whose inputs are observable, directly or indirectly, for substantially the full term of the asset or liability.

Level 3: Assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Unobservable inputs reflect the Company's estimates of the assumptions that market participants would use in valuing the assets and liabilities.

The availability of observable inputs varies by instrument. In situations where fair value is based on internally developed pricing models or inputs that are unobservable in the market, the determination of fair value requires more judgment. The degree of judgment exercised by the Company in determining fair value is typically greatest for instruments categorized in Level 3. In many instances, valuation inputs used to measure fair value fall into different levels of the fair value hierarchy. The category level in the fair value hierarchy is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company uses prices and inputs that are current as of the measurement date, including during periods of market disruption. In periods of market disruption, the ability to observe prices and inputs may be reduced for many instruments.

The Company is responsible for the determination of fair value and the supporting assumptions and methodologies. The Company gains assurance that assets and liabilities are appropriately valued through the execution of various processes and controls designed to ensure the overall reasonableness and consistent application of valuation methodologies, including inputs and assumptions, and compliance with accounting standards. For fair values received from third parties or internally estimated, the Company's processes and controls are designed to ensure that the valuation methodologies are appropriate and consistently applied, the inputs and assumptions are reasonable and consistent with the objective of determining fair value, and the fair values are accurately recorded. For example, on a continuing basis, the Company assesses the reasonableness of individual fair values that have stale security prices or that exceed certain thresholds as compared to previous fair values received from valuation service providers or brokers or derived from internal models. The Company performs procedures to understand and assess the methodologies, processes and controls of valuation service providers. In addition, the Company may validate the reasonableness of fair values by comparing information obtained from valuation service providers or brokers to other third-party valuation sources for selected securities. The Company performs ongoing price validation procedures such as back-testing of actual sales, which corroborate the various inputs used in internal models to market observable data. When fair value determinations are expected to be more variable, the Company validates them through reviews by members of management who have relevant expertise and who are independent of those charged with executing investment transactions.

The Company has two types of situations where investments are classified as Level 3 in the fair value hierarchy:

(1) Specific inputs significant to the fair value estimation models are not market observable. This primarily occurs in the Company's use of broker quotes to value certain securities where the inputs have not been corroborated to be market observable, and the use of valuation models that use significant non-market observable inputs.

(2) Quotes continue to be received from independent third-party valuation service providers and all significant inputs are market observable; however, there has been a significant decrease in the volume and level of activity for the asset when compared to normal market activity such that the degree of market observability has declined to a point where categorization as a Level 3 measurement is considered appropriate. The indicators considered in determining whether a significant decrease in the volume and level of activity for a specific asset has occurred include the level of new issuances in the primary market, trading volume in the secondary market, the level of credit spreads over historical levels, applicable bid-ask spreads, and price consensus among market participants and other pricing sources.

Certain assets are not carried at fair value on a recurring basis, including investments such as mortgage loans, bank loans, agent loans and policy loans. Accordingly, such investments are only included in the fair value hierarchy disclosure when the investment is subject to remeasurement at fair value after initial recognition and the resulting remeasurement is reflected in the consolidated financial statements.

In determining fair value, the Company principally uses the market approach which generally utilizes market transaction data for the same or similar instruments. To a lesser extent, the Company uses the income approach which involves determining fair values from discounted cash flow methodologies. For the majority of Level 2 and Level 3 valuations, a combination of the market and income approaches is used.

Summary of significant inputs and valuation techniques for Level 2 and Level 3 assets and liabilities measured at fair value on a recurring basis

Level 2 measurements

- *Fixed income securities:*

  U.S. government and agencies, municipal, corporate - public and foreign government: The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields and credit spreads.

  Corporate - privately placed: Privately placed are valued using a discounted cash flow model that is widely accepted in the financial services industry and uses market observable inputs and inputs derived principally from, or corroborated by, observable market data. The primary inputs to the discounted cash flow model include an interest rate yield curve, as well as published credit spreads for similar assets in markets that are not active that incorporate the credit quality and industry sector of the issuer.

  Corporate - privately placed also includes redeemable preferred stock that are valued using quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields, underlying stock prices and credit spreads.

  ABS and MBS: The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields, collateral performance, and credit spreads. Certain ABS are valued based on non-binding broker quotes whose inputs have been corroborated to be market observable. Residential MBS include prepayment speeds as a primary input for valuation.

- *Equity securities:* The primary inputs to the valuation include quoted prices or quoted net asset values for identical or similar assets in markets that are not active.

- *Short-term:* The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields and credit spreads.

- *Other investments:* Free-standing exchange listed derivatives that are not actively traded are valued based on quoted prices for identical instruments in markets that are not active.

  Over-the-counter ("OTC") derivatives, including interest rate swaps, foreign currency swaps, total return swaps, foreign exchange forward contracts, certain options and certain credit default swaps, are valued using models that rely on inputs such as interest rate yield curves, implied volatilities, index price levels, currency rates, and credit spreads that are observable for substantially the full term of the contract. The valuation techniques underlying the models are widely accepted in the financial services industry and do not involve significant judgment.

Level 3 measurements

- *Fixed income securities:*

  Municipal: Comprise municipal bonds that are not rated by third-party credit rating agencies. The primary inputs to the valuation of these municipal bonds include quoted prices for identical or similar assets in markets that exhibit less liquidity relative to those markets supporting Level 2 fair value measurements, contractual cash flows, benchmark yields and credit spreads. Also included are municipal bonds valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable and municipal bonds in default valued based on the present value of expected cash flows.

  Corporate - public and privately placed, ABS and MBS: Primarily valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable. Other inputs for corporate fixed income securities include an interest rate yield curve, as well as published credit spreads for similar assets that incorporate the credit quality and industry sector of the issuer.

- *Equity securities:* The primary inputs to the valuation include quoted prices or quoted net asset values for identical or similar assets in markets that exhibit less liquidity relative to those markets supporting Level 2 fair value measurements.

- *Short-term:* For certain short-term investments, amortized cost is used as the best estimate of fair value.

- *Other investments:* Certain OTC derivatives, such as interest rate caps, certain credit default swaps and certain options (including swaptions), are valued using models that are widely accepted in the financial services industry. These are categorized as Level 3 as a result of the significance of non-market observable inputs such as volatility. Other primary inputs include interest rate yield curves and credit spreads.

- *Contractholder funds:* Derivatives embedded in certain life and annuity contracts are valued internally using models widely accepted in the financial services industry that determine a single best estimate of fair value for the embedded derivatives within a block of contractholder liabilities. The models primarily use stochastically determined cash flows based on the contractual elements of embedded derivatives, projected option cost and applicable market data, such as interest rate yield curves and equity index volatility assumptions. These are categorized as Level 3 as a result of the significance of non-market observable inputs.

Investments excluded from the fair value hierarchy

Limited partnerships carried at fair value, which do not have readily determinable fair values, use NAV provided by the investees and are excluded from the fair value hierarchy. These investments are generally not redeemable by the investees and generally cannot be sold without approval of the general partner. The Company receives distributions of income and proceeds from the liquidation of the underlying assets of the investees, which usually takes place in years 4-9 of the typical contractual life of 10-12 years. As of December 31, 2019, the Company has commitments to invest$492 million in these limited partnership interests.

Assets and liabilities measured at fair value

	As of December 31, 2019				
($ in millions)	**Quoted prices in active markets for identical assets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Counterparty and cash collateral netting**	**Total**
Assets					
Fixed income securities:					
U.S. government and agencies	$ 4,689	$ 397	$ —		$ 5,086
Municipal	—	8,558	62		8,620
Corporate - public	—	30,819	61		30,880
Corporate - privately placed	—	12,084	114		12,198
Foreign government	—	979	—		979
ABS	—	797	65		862
MBS	—	379	40		419
Total fixed income securities	**4,689**	**54,013**	**342**		**59,044**
Equity securities	7,407	384	371		8,162
Short-term investments	1,940	2,291	25		4,256
Other investments: Free-standing derivatives	—	180	—	(40)	140
Separate account assets	3,044	—	—		3,044
Other assets	1	—	—		1
Total recurring basis assets	**17,081**	**56,868**	**738**	**(40)**	**74,647**
Total assets at fair value	**$ 17,081**	**$ 56,868**	**$ 738**	**$ (40)**	**$ 74,647**
% of total assets at fair value	22.9%	76.2%	1.0%	(0.1)%	100.0%
Investments reported at NAV					1,814
Total					**$ 76,461**
Liabilities					
Contractholder funds: Derivatives embedded in life and annuity contracts	$ —	$ —	$ (462)		$ (462)
Other liabilities: Free-standing derivatives	—	(84)	—	$ 12	(72)
Total recurring basis liabilities	**$ —**	**$ (84)**	**$ (462)**	**$ 12**	**$ (534)**
% of total liabilities at fair value	—%	15.7%	86.5%	(2.2)%	100.0%

Assets and liabilities measured at fair value

($ in millions)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Counterparty and cash collateral netting	Total
	As of December 31, 2018				
Assets					
Fixed income securities:					
U.S. government and agencies	$ 5,085	$ 432	$ —		$ 5,517
Municipal	—	9,099	70		9,169
Corporate - public	—	29,200	70		29,270
Corporate - privately placed	—	10,798	90		10,888
Foreign government	—	747	—		747
ABS	—	976	69		1,045
MBS	—	508	26		534
Total fixed income securities	**5,085**	**51,760**	**325**		**57,170**
Equity securities	4,364	331	341		5,036
Short-term investments	1,338	1,659	30		3,027
Other investments: Free-standing derivatives	—	139	1	$ (23)	117
Separate account assets	2,805	—	—		2,805
Other assets	2	—	—		2
Total recurring basis assets	**$ 13,594**	**$ 53,889**	**$ 697**	**$ (23)**	**$ 68,157**
% of total assets at fair value	19.9%	79.1%	1.0%	— %	100.0%
Investments reported at NAV					1,779
Total					**$ 69,936**
Liabilities					
Contractholder funds: Derivatives embedded in life and annuity contracts	$ —	$ —	$ (224)		$ (224)
Other liabilities: Free-standing derivatives	(1)	(62)	—	$ 6	(57)
Total recurring basis liabilities	**$ (1)**	**$ (62)**	**$ (224)**	**$ 6**	**$ (281)**
% of total liabilities at fair value	0.3%	22.1%	79.7%	(2.1)%	100.0%

Quantitative information about the significant unobservable inputs used in Level 3 fair value measurements

($ in millions)	Fair value	Valuation technique	Unobservable input	Range	Weighted average
December 31, 2019					
Derivatives embedded in life and annuity contracts – Equity-indexed and forward starting options	$ (430)	Stochastic cash flow model	Projected option cost	1.0 - 4.2%	2.67%
December 31, 2018					
Derivatives embedded in life and annuity contracts – Equity-indexed and forward starting options	$ (185)	Stochastic cash flow model	Projected option cost	1.0 - 2.2%	1.74%

The embedded derivatives are equity-indexed and forward starting options in certain life and annuity products that provide customers with interest crediting rates based on the performance of the S&P 500. If the projected option cost increased (decreased), it would result in a higher (lower) liability fair value.

As of December 31, 2019 and 2018, Level 3 fair value measurements of fixed income securities total $342 million and $325 million, respectively, and include $50 million and $105 million, respectively, of securities valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable and $36 million and $44 million, respectively, of municipal fixed income securities that are not rated by third-party credit rating agencies. As the Company does not develop the Level 3 fair value unobservable inputs for these fixed income securities, they are not included in the table above. However, an increase (decrease) in credit spreads for fixed income securities valued based on non-binding broker quotes would result in a lower (higher) fair value, and an increase (decrease) in the credit rating of municipal bonds that are not rated by third-party credit rating agencies would result in a higher (lower) fair value.

Rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2019

($ in millions)	Balance as of December 31, 2018	Total gains (losses) included in: Net income	OCI	Transfers: Into Level 3	Out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2019
Assets										
Fixed income securities:										
Municipal	$ 70	$ 1	$ 4	$ —	$ (5)	$ —	$ (5)	$ —	$ (3)	$ 62
Corporate - public	70	—	3	30	(113)	86	(11)	—	(4)	61
Corporate - privately placed	90	(1)	2	43	(2)	4	(13)	—	(9)	114
ABS	69	1	(1)	76	(210)	159	(22)	—	(7)	65
MBS	26	—	(2)	9	—	9	—	—	(2)	40
Total fixed income securities	**325**	**1**	**6**	**158**	**(330)**	**258**	**(51)**	**—**	**(25)**	**342**
Equity securities	341	30	—	—	—	82	(82)	—	—	371
Short-term investments	30	—	—	—	—	35	(40)	—	—	25
Free-standing derivatives, net	1	(1)	—	—	—	—	—	—	—	—
Total recurring Level 3 assets	**697**	**30**	**6**	**158**	**(330)**	**375**	**(173)**	**—**	**(25)**	**738**
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	(224)	(61)	—	(175)	—	—	—	(16)	14	(462)
Total recurring Level 3 liabilities	**$ (224)**	**$ (61)**	**$ —**	**$ (175)**	**$ —**	**$ —**	**$ —**	**$ (16)**	**$ 14**	**$ (462)**

Total Level 3 gains (losses) included in net income for the year ended December 31, 2019

($ in millions)	Net investment income	Realized capital gains and losses	Life contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ (2)	$ 32	$ 7	$ (68)	$ (31)

Rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2018

($ in millions)	Balance as of December 31, 2017	Total gains (losses) included in: Net income	OCI	Transfers: Into Level 3	Out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2018
Assets										
Fixed income securities:										
Municipal	$ 101	$ 1	$ (2)	$ —	$ (26)	$ 10	$ (8)	$ —	$ (6)	$ 70
Corporate - public	108	—	(3)	17	(21)	10	(38)	—	(3)	70
Corporate - privately placed	224	(1)	(3)	20	(119)	22	(5)	—	(48)	90
ABS	147	—	2	42	(159)	160	(97)	—	(26)	69
MBS	26	—	—	—	—	1	—	—	(1)	26
Total fixed income securities	**606**	**—**	**(6)**	**79**	**(325)**	**203**	**(148)**	**—**	**(84)**	**325**
Equity securities	210	37	—	—	—	109	(15)	—	—	341
Short-term investments	20	—	—	—	—	55	(45)	—	—	30
Free-standing derivatives, net	1	—	—	—	—	—	—	—	—	1
Total recurring Level 3 assets	**$ 837**	**$ 37**	**$ (6)**	**$ 79**	**$ (325)**	**$ 367**	**$ (208)**	**$ —**	**$ (84)**	**$ 697**
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (286)	$ 58	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (224)
Total recurring Level 3 liabilities	**$ (286)**	**$ 58**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ (2)**	**$ 6**	**$ (224)**

Total Level 3 gains (losses) included in net income for the year ended December 31, 2018

($ in millions)	Net investment income	Realized capital gains and losses	Life contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ —	$ 37	$ (5)	$ 63	$ 95

Rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2017

($ in millions)	Balance as of December 31, 2016	Total gains (losses) included in: Net income	OCI	Transfers: Into Level 3	Out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2017
Assets										
Fixed income securities:										
Municipal	$ 125	$ (1)	$ 7	$ —	$ (6)	$ 8	$ (29)	$ —	$ (3)	$ 101
Corporate - public	78	—	—	4	(30)	60	—	—	(4)	108
Corporate - privately placed	263	8	(2)	30	(49)	44	(30)	—	(40)	224
ABS	69	—	6	60	(280)	322	—	—	(30)	147
MBS	23	—	—	—	—	6	—	—	(3)	26
Total fixed income securities	**558**	**7**	**11**	**94**	**(365)**	**440**	**(59)**	**—**	**(80)**	**606**
Equity securities	163	13	4	—	(4)	48	(14)	—	—	210
Short-term investments	15	—	—	—	—	45	(40)	—	—	20
Free-standing derivatives, net	(2)	3	—	—	—	—	—	—	—	1
Other assets	1	(1)	—	—	—	—	—	—	—	—
Total recurring Level 3 assets	**$ 735**	**$ 22**	**$ 15**	**$ 94**	**$ (369)**	**$ 533**	**$ (113)**	**$ —**	**$ (80)**	**$ 837**
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (290)	$ —	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (286)
Total recurring Level 3 liabilities	**$ (290)**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ —**	**$ (2)**	**$ 6**	**$ (286)**

Total Level 3 gains (losses) included in net income for the year ended December 31, 2017

($ in millions)	Net investment income	Realized capital gains and losses	Life contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ 19	$ 4	$ 9	$ (10)	$ 22

Transfers between level categorizations may occur due to changes in the availability of market observable inputs, which generally are caused by changes in market conditions such as liquidity, trading volume or bid-ask spreads. Transfers between level categorizations may also occur due to changes in the valuation source, including situations where a fair value quote is not provided by the Company's independent third-party valuation service provider resulting in the price becoming stale or replaced with a broker quote whose inputs have not been corroborated to be market observable. This situation will result in the transfer of a security into Level 3. Transfers in and out of level categorizations are reported as having occurred at the beginning of the quarter in which the transfer occurred. Therefore, for all transfers into Level 3, all realized and changes in unrealized gains and losses in the quarter of transfer are reflected in the Level 3 rollforward table.

There were no transfers between Level 1 and Level 2 during 2019, 2018 or 2017.

Transfers into Level 3 during 2019, 2018 and 2017 included situations where a quote was not provided by the Company's independent third-party valuation service provider and as a result the price was stale or had been replaced with a broker quote where the inputs had not been corroborated to be market observable resulting in the security being classified as Level 3. Transfers into Level 3 during 2019 also included derivatives embedded in equity-indexed universal life contracts due to refinements in the valuation modeling resulting in an increase in significance of non-market observable inputs.

Transfers out of Level 3 during 2019, 2018 and 2017 included situations where a broker quote was used in the prior period and a quote became available from the Company's independent third-party valuation service provider in the current period. A quote utilizing the new pricing source was not available as of the prior period, and any gains or losses related to the change in valuation source for individual securities were not significant.

Valuation changes included in net income for Level 3 assets and liabilities held as of

($ in millions)	December 31, 2019	2018	2017
Assets			
Fixed income securities:			
Municipal	$ 1	$ —	$ (3)
Corporate	—	—	1
Total fixed income securities	**1**	**—**	**(2)**
Equity securities	6	36	13
Free-standing derivatives, net	(1)	—	—
Other assets	—	—	(1)
Total recurring Level 3 assets	**$ 6**	**$ 36**	**$ 10**
Liabilities			
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (61)	$ 58	$ —
Total recurring Level 3 liabilities	**(61)**	**58**	**—**
Total included in net income	**$ (55)**	**$ 94**	**$ 10**
Components of net income			
Net investment income	$ (2)	$ —	$ 19
Realized capital gains and losses	8	36	(8)
Life contract benefits	7	(5)	9
Interest credited to contractholder funds	(68)	63	(10)
Total included in net income	**$ (55)**	**$ 94**	**$ 10**

Carrying values and fair value estimates of financial instruments not carried at fair value

($ in millions)		December 31, 2019		December 31, 2018	
Financial assets	**Fair value level**	**Carrying value**	**Fair value**	**Carrying value**	**Fair value**
Mortgage loans	Level 3	$ 4,817	$ 5,012	$ 4,670	$ 4,703
Bank loans	Level 3	1,204	1,185	1,350	1,298
Agent loans	Level 3	666	664	620	617
Financial liabilities					
Contractholder funds on investment contracts	Level 3	8,438	9,158	9,250	9,665
Long-term debt	Level 2	6,631	7,738	6,451	6,708
Liability for collateral	Level 2	$ 1,829	$ 1,829	$ 1,458	$ 1,458

Note 7 Derivative Financial Instruments and Off-balance Sheet Financial Instruments

The Company uses derivatives for risk reduction and to increase investment portfolio returns through asset replication. Risk reduction activity is focused on managing the risks with certain assets and liabilities arising from the potential adverse impacts from changes in risk-free interest rates, changes in equity market valuations, increases in credit spreads and foreign currency fluctuations.

Asset replication refers to the “synthetic” creation of assets through the use of derivatives. The Company replicates fixed income securities using a combination of a credit default swap, index total return swap, or a foreign currency forward contract and one or more highly rated fixed income securities, primarily investment grade host bonds, to synthetically replicate the economic characteristics of one or more cash market securities. The Company replicates equity securities using futures, index total return swaps, and options to increase equity exposure.

Property-Liability may use interest rate swaps, swaptions, futures and options to manage the interest rate risks of existing investments. These instruments are utilized to change the duration of the portfolio in order to offset the economic effect that interest rates would otherwise have on the fair value of its fixed income securities. Fixed income index total return swaps are used to offset valuation losses in the fixed income portfolio during periods of declining market values. Credit default swaps are typically used to mitigate the credit risk within the Property-Liability fixed income portfolio. Equity index total return swaps, futures and options are used by Property-Liability to offset valuation losses in the equity portfolio during periods of declining equity market values. In addition, equity futures are used to hedge the market risk related to deferred compensation liability contracts. Forward contracts are primarily used by Property-Liability to hedge foreign currency risk associated with holding foreign currency denominated investments and foreign operations.

Asset-liability management is a risk management practice that is principally employed by Allstate Life and Allstate Annuities to balance the respective interest-rate sensitivities of its assets and liabilities. Depending upon the attributes of the assets acquired and liabilities issued, derivative instruments such as interest rate swaps, caps, swaptions and futures are utilized to change the interest rate characteristics of existing assets and liabilities to ensure the relationship is maintained within specified ranges and to reduce exposure to rising or falling interest rates. Fixed income index total return swaps are used to offset valuation losses in the portfolio during periods of declining market values. Credit default swaps are typically used to mitigate the credit risk within the Allstate Life and Allstate Annuities fixed income portfolios. Futures and options are used for hedging the equity exposure contained in equity indexed life and annuity product contracts that offer equity returns to contractholders. In addition, the Company uses equity index total return swaps, options and futures to offset valuation losses in the equity portfolio during periods of declining equity market values. Foreign currency swaps and forwards are primarily used to reduce the foreign currency risk associated with holding foreign currency denominated investments.

The Company also has derivatives embedded in non-derivative host contracts that are required to be separated from the host contracts and accounted for at fair value with changes in fair value of embedded derivatives reported in net income. The Company's primary embedded derivatives are equity options in life and annuity product contracts, which provide returns linked to equity indices to contractholders.

When derivatives meet specific criteria, they may be designated as accounting hedges and accounted for as fair value, cash flow, foreign currency fair value or foreign currency cash flow hedges. The Company designates certain investment risk transfer reinsurance agreements as fair value hedges when the hedging instrument is highly effective in offsetting the risk of changes in the fair value of the hedged item. The fair value of the hedged liability is reported in contractholder funds in the Consolidated Statements of Financial Position. The impact from results of the fair value hedge is reported in interest credited to contractholder funds in the Consolidated Statements of Operations.

The notional amounts specified in the contracts are used to calculate the exchange of contractual payments under the agreements and are generally not representative of the potential for gain or loss on these agreements. However, the notional amounts specified in credit default swaps where the Company has sold credit protection represent the maximum amount of potential loss, assuming no recoveries.

Fair value, which is equal to the carrying value, is the estimated amount that the Company would receive or pay to terminate the derivative contracts at the reporting date. The carrying value amounts for OTC derivatives are further adjusted for the effects, if any, of enforceable master netting agreements and are presented on a net basis, by counterparty agreement, in the Consolidated Statements of Financial Position.

For those derivatives which qualify and have been designated as fair value accounting hedges, net income includes the changes in the fair value of both the derivative instrument and the hedged risk. For cash flow hedges, gains and losses are amortized from AOCI and are reported in net income in the same period the forecasted transactions being hedged impact net income.

Non-hedge accounting is generally used for "portfolio" level hedging strategies where the terms of the individual hedged items do not meet the strict homogeneity requirements to permit the application of hedge accounting. For non-hedge derivatives, net income includes changes in fair value and accrued periodic settlements, when applicable. With the exception of non-hedge derivatives used for asset replication and non-hedge embedded derivatives, all of the Company's derivatives are evaluated for their ongoing effectiveness as either accounting hedge or non-hedge derivative financial instruments on at least a quarterly basis.

Fair value hedges The Company had one derivative designated as a fair value hedge as of December 31, 2019 and 2018.

Cash flow hedges The Company had no derivatives designated as a cash flow hedge as of December 31, 2019 and 2018.

Summary of the volume and fair value positions of derivative instruments as of December 31, 2019

($ in millions, except number of contracts)	Balance sheet location	Volume (1) Notional amount	Volume (1) Number of contracts	Fair value, net	Gross asset	Gross liability
Asset derivatives						
Derivatives designated as fair value accounting hedging instruments						
Other	Other assets	$ 2	n/a	$ —	$ —	$ —
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Futures	Other assets	—	3,668	—	—	—
Equity and index contracts						
Options	Other investments	—	5,539	140	140	—
Futures	Other assets	—	1,533	1	1	—
Total return index contracts						
Total return swap agreements - fixed income	Other investments	56	n/a	1	1	—
Credit default contracts						
Credit default swaps – buying protection	Other investments	17	n/a	—	—	—
Subtotal		**73**	**10,740**	**142**	**142**	**—**
Total asset derivatives		**$ 75**	**10,740**	**$ 142**	**$ 142**	**$ —**
Liability derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other liabilities & accrued expenses	$ 34	n/a	$ —	$ —	$ —
Futures	Other liabilities & accrued expenses	—	1,089	—	—	—
Equity and index contracts						
Options	Other liabilities & accrued expenses	—	5,400	(68)	—	(68)
Futures	Other liabilities & accrued expenses	—	3	—	—	—
Total return index contracts						
Total return swap agreements - fixed income	Other liabilities & accrued expenses	119	n/a	—	—	—
Total return swap agreements - equity index	Other liabilities & accrued expenses	187	n/a	11	11	—
Foreign currency contracts						
Foreign currency forwards	Other liabilities & accrued expenses	745	n/a	19	28	(9)
Embedded derivative financial instruments						
Guaranteed accumulation benefits	Contractholder funds	161	n/a	(18)	—	(18)
Guaranteed withdrawal benefits	Contractholder funds	205	n/a	(14)	—	(14)
Equity-indexed and forward starting options in life and annuity product contracts	Contractholder funds	1,791	n/a	(430)	—	(430)
Credit default contracts						
Credit default swaps – buying protection	Other liabilities & accrued expenses	152	n/a	(7)	—	(7)
Credit default swaps – selling protection	Other liabilities & accrued expenses	9	n/a	—	—	—
Total liability derivatives		**3,403**	**6,492**	**(507)**	**$ 39**	**$ (546)**
Total derivatives		**$ 3,478**	**17,232**	**$ (365)**		

(1) Volume for OTC and cleared derivative contracts is represented by their notional amounts. Volume for exchange traded derivatives is represented by the number of contracts, which is the basis on which they are traded. (n/a = not applicable)

Summary of the volume and fair value positions of derivative instruments as of December 31, 2018

($ in millions, except number of contracts)	Balance sheet location	Volume: Notional amount	Volume: Number of contracts	Fair value, net	Gross asset	Gross liability
Asset derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other investments	$ 6	n/a	$ —	$ —	$ —
Futures	Other assets	—	1,330	1	1	—
Equity and index contracts						
Options	Other investments	—	11,131	115	115	—
Futures	Other assets	—	1,453	1	1	—
Total return index contracts						
Total return swap agreements - fixed income	Other investments	7	n/a	—	—	—
Total return swap agreements - equity index	Other investments	61	n/a	(2)	—	(2)
Foreign currency contracts						
Foreign currency forwards	Other investments	258	n/a	10	11	(1)
Credit default contracts						
Credit default swaps – buying protection	Other investments	136	n/a	(1)	2	(3)
Other contracts						
Other	Other assets	2	n/a	—	—	—
Total asset derivatives		**$ 470**	**13,914**	**$ 124**	**$ 130**	**$ (6)**
Liability derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other liabilities & accrued expenses	$ 31	n/a	$ 1	$ 1	$ —
Futures	Other liabilities & accrued expenses	—	1,300	(1)	—	(1)
Equity and index contracts						
Options and futures	Other liabilities & accrued expenses	—	10,956	(50)	—	(50)
Total return index contracts						
Total return swap agreements - fixed income	Other liabilities & accrued expenses	38	n/a	(1)	—	(1)
Total return swap agreements - equity index	Other liabilities & accrued expenses	71	n/a	(4)	—	(4)
Foreign currency contracts						
Foreign currency forwards	Other liabilities & accrued expenses	341	n/a	10	11	(1)
Embedded derivative financial instruments						
Guaranteed accumulation benefits	Contractholder funds	169	n/a	(25)	—	(25)
Guaranteed withdrawal benefits	Contractholder funds	210	n/a	(14)	—	(14)
Equity-indexed and forward starting options in life and annuity product contracts	Contractholder funds	1,770	n/a	(185)	—	(185)
Credit default contracts						
Credit default swaps – buying protection	Other liabilities & accrued expenses	40	n/a	—	—	—
Credit default swaps – selling protection	Other liabilities & accrued expenses	5	n/a	—	—	—
Total liability derivatives		**2,675**	**12,256**	**(269)**	**$ 12**	**$ (281)**
Total derivatives		**$ 3,145**	**26,170**	**$ (145)**		

Gross and net amounts for OTC derivatives [(1)]

($ in millions)	Gross amount	Offsets: Counter-party netting	Offsets: Cash collateral (received) pledged	Net amount on balance sheet	Securities collateral (received) pledged	Net amount
December 31, 2019						
Asset derivatives	$ 40	$ (39)	$ (1)	$ —	$ —	$ —
Liability derivatives	(16)	39	(27)	(4)	—	(4)
December 31, 2018						
Asset derivatives	$ 25	$ (18)	$ (5)	$ 2	$ —	$ 2
Liability derivatives	(12)	18	(12)	(6)	—	(6)

(1) All OTC derivatives are subject to enforceable master netting agreements.

Gains (losses) from valuation and settlements reported on derivatives not designated as accounting hedges

($ in millions)	Realized capital gains (losses)	Life contract benefits	Interest credited to contractholder funds	Operating costs and expenses	Total gain (loss) recognized in net income on derivatives
2019					
Interest rate contracts	$ 51	$ —	$ —	$ —	$ 51
Equity and index contracts	(116)	—	63	40	(13)
Embedded derivative financial instruments	—	7	(70)	—	(63)
Foreign currency contracts	8	—	—	—	8
Credit default contracts	(8)	—	—	—	(8)
Total return swaps - fixed income	14	—	—	—	14
Total return swaps - equity index	36	—	—	—	36
Total	**$ (15)**	**$ 7**	**$ (7)**	**$ 40**	**$ 25**
2018					
Interest rate contracts	$ (2)	$ —	$ —	$ —	$ (2)
Equity and index contracts	21	—	(24)	(21)	(24)
Embedded derivative financial instruments	—	(5)	67	—	62
Foreign currency contracts	29	—	—	(1)	28
Credit default contracts	2	—	—	—	2
Total return swaps - fixed income	(1)	—	—	—	(1)
Total return swaps - equity index	(6)	—	—	—	(6)
Total	**$ 43**	**$ (5)**	**$ 43**	**$ (22)**	**$ 59**
2017					
Equity and index contracts	$ (15)	$ —	$ 47	$ 28	$ 60
Embedded derivative financial instruments	—	9	(6)	—	3
Foreign currency contracts	(27)	—	—	6	(21)
Credit default contracts	(4)	—	—	—	(4)
Total	**$ (46)**	**$ 9**	**$ 41**	**$ 34**	**$ 38**

The Company manages its exposure to credit risk by utilizing highly rated counterparties, establishing risk control limits, executing legally enforceable master netting agreements (“MNAs”) and obtaining collateral where appropriate. The Company uses MNAs for OTC derivative transactions that permit either party to net payments due for transactions and collateral is either pledged or obtained when certain predetermined exposure limits are exceeded. As of December 31, 2019, counterparties pledged $31 million in collateral to the Company, and the Company pledged $3 million in cash and securities to counterparties which includes $3 million of collateral posted under MNAs for contracts containing credit-risk contingent provisions that are in a liability position.

The Company has not incurred any losses on derivative financial instruments due to counterparty nonperformance. Other derivatives, including futures and certain option contracts, are traded on organized exchanges which require margin deposits and guarantee the execution of trades, thereby mitigating any potential credit risk.

Counterparty credit exposure represents the Company's potential loss if all of the counterparties concurrently fail to perform under the contractual terms of the contracts and all collateral, if any, becomes worthless. This exposure is measured by the fair value of OTC derivative contracts with a positive fair value at the reporting date reduced by the effect, if any, of legally enforceable master netting agreements.

OTC derivatives counterparty credit exposure by counterparty credit rating

($ in millions)	2019				2018			
Rating (1)	Number of counter-parties	Notional amount (2)	Credit exposure (2)	Exposure, net of collateral (2)	Number of counter-parties	Notional amount (2)	Credit exposure (2)	Exposure, net of collateral (2)
A+	6	868	29	—	3	643	19	1
A	—	—	—	—	2	121	1	—
Total	**6**	**$ 868**	**$ 29**	**$ —**	**5**	**$ 764**	**$ 20**	**$ 1**

(1) Allstate uses the lower of S&P's or Moody's long-term debt issuer ratings.

(2) Only OTC derivatives with a net positive fair value are included for each counterparty.

For certain exchange traded and cleared derivatives, margin deposits are required as well as daily cash settlements of margin accounts. As of December 31, 2019, the Company pledged $48 million in the form of margin deposits.

Market risk is the risk that the Company will incur losses due to adverse changes in market rates and prices. Market risk exists for all of the derivative financial instruments the Company currently holds, as these instruments may become less valuable due to adverse changes in market conditions. To limit this risk, the Company's senior management has established risk control limits. In addition, changes in fair value of the derivative financial instruments that the Company uses for risk management purposes are generally offset by the change in the fair value or cash flows of the hedged risk component of the related assets, liabilities or forecasted transactions.

Certain of the Company's derivative instruments contain credit-risk-contingent termination events, cross-default provisions and credit support annex agreements. Credit-risk-contingent termination events allow the counterparties to terminate the derivative agreement or a specific trade on certain dates if AIC's, ALIC's or Allstate Life Insurance Company of New York's ("ALNY") financial strength credit ratings by Moody's or S&P fall below a certain level. Credit-risk-contingent cross-default provisions allow the counterparties to terminate the derivative agreement if the Company defaults by pre-determined threshold amounts on certain debt instruments. Credit-risk-contingent credit support annex agreements specify the amount of collateral the Company must post to counterparties based on AIC's, ALIC's or ALNY's financial strength credit ratings by Moody's or S&P, or in the event AIC, ALIC or ALNY are no longer rated by either Moody's or S&P.

The following summarizes the fair value of derivative instruments with termination, cross-default or collateral credit-risk-contingent features that are in a liability position as of December 31, as well as the fair value of assets and collateral that are netted against the liability in accordance with provisions within legally enforceable MNAs.

($ in millions)	2019	2018
Gross liability fair value of contracts containing credit-risk-contingent features	$ 16	$ 11
Gross asset fair value of contracts containing credit-risk-contingent features and subject to MNAs	(11)	(5)
Collateral posted under MNAs for contracts containing credit-risk-contingent features	(3)	(2)
Maximum amount of additional exposure for contracts with credit-risk-contingent features if all features were triggered concurrently	**$ 2**	**$ 4**

Off-balance sheet financial instruments

Contractual amounts of off balance sheet financial instruments

	As of December 31,	
($ in millions)	2019	2018
Commitments to invest in limited partnership interests	$ 2,837	$ 3,028
Private placement commitments	68	47
Other loan commitments	189	233

In the preceding table, the contractual amounts represent the amount at risk if the contract is fully drawn upon, the counterparty defaults and the value of any underlying security becomes worthless. Unless noted otherwise, the Company does not require collateral or other security to support off-balance sheet financial instruments with credit risk.

Commitments to invest in limited partnership interests represent agreements to acquire new or additional participation in certain limited partnership investments. The Company enters into these agreements in the normal course of business. Because the investments in limited partnerships are not actively traded, it is not practical to estimate the fair value of these commitments.

Private placement commitments represent commitments to purchase private placement debt and private equity securities at a future date. The Company enters into these agreements in the normal course of business. The fair value of the debt commitments generally cannot be estimated on the date the commitment is made as the terms and conditions of the underlying private placement securities are not yet final. Because the private equity securities are not actively traded, it is not practical to estimate fair value of the commitments.

Other loan commitments are agreements to lend to a borrower provided there is no violation of any condition established in the contract. The Company enters into these agreements to commit to future loan fundings at predetermined interest rates. Commitments have either fixed or varying expiration dates or other termination clauses. The fair value of these commitments is insignificant.

Note 8 Reserve for Property and Casualty Insurance Claims and Claims Expense

The Company establishes reserves for claims and claims expense on reported and unreported claims of insured losses. The Company's reserving process takes into account known facts and interpretations of circumstances and factors including the Company's experience with similar cases, actual claims paid, historical trends involving claim payment patterns and pending levels of unpaid claims, loss management programs, product mix and contractual terms, changes in law and regulation, judicial decisions, and economic conditions. In the normal course of business, the Company may also supplement its claims processes by utilizing third-party adjusters, appraisers, engineers, inspectors, and other professionals and information sources to assess and settle catastrophe and non-catastrophe related claims. The effects of inflation are implicitly considered in the reserving process.

Because reserves are estimates of unpaid portions of losses that have occurred, including incurred but not reported ("IBNR") losses, the establishment of appropriate reserves, including reserves for catastrophes, Discontinued Lines and Coverages and reinsurance and indemnification recoverables, is an inherently uncertain and complex process. The ultimate cost of losses may vary materially from recorded amounts, which are based on management's best estimates. The highest degree of uncertainty is associated with reserves for losses incurred in the current reporting period as it contains the greatest proportion of losses that have not been reported or settled. The Company regularly updates its reserve estimates as new information becomes available and as events unfold that may affect the resolution of unsettled claims. Changes in prior year reserve estimates, which may be material, are reported in property and casualty insurance claims and claims expense in the Consolidated Statements of Operations in the period such changes are determined.

Rollforward of reserve for property and casualty insurance claims and claims expense

($ in millions)	2019	2018	2017
Balance as of January 1	$ 27,423	$ 26,325	$ 25,250
Less recoverables (1)	(7,155)	(6,471)	(6,184)
Net balance as of January 1	**20,268**	**19,854**	**19,066**
SquareTrade acquisition as of January 3, 2017	—	—	17
Incurred claims and claims expense related to:			
Current year	24,106	23,033	22,350
Prior years	(130)	(255)	(503)
Total incurred	**23,976**	**22,778**	**21,847**
Claims and claims expense paid related to:			
Current year	(15,160)	(14,877)	(14,112)
Prior years	(8,284)	(7,487)	(6,964)
Total paid	**(23,444)**	**(22,364)**	**(21,076)**
Net balance as of December 31	20,800	20,268	19,854
Plus recoverables	6,912	7,155	6,471
Balance as of December 31	**$ 27,712**	**$ 27,423**	**$ 26,325**

(1) Recoverables comprises reinsurance and indemnification recoverables. See Note 10 for further details.

Reconciliation of total claims and claims expense incurred and paid by coverage	**December 31, 2019**	
($ in millions)	**Incurred**	**Paid**
Allstate Protection		
Auto insurance - liability coverage	$ 9,142	$ (8,419)
Auto insurance - physical damage coverage	5,576	(5,570)
Homeowners insurance	4,625	(4,616)
Total auto and homeowners insurance	19,343	(18,605)
Other personal lines	1,024	(1,059)
Commercial lines	648	(404)
Service Businesses	297	(311)
Discontinued Lines and Coverages	91	(121)
Unallocated loss adjustment expenses (“ULAE”)	2,687	(2,585)
Claims incurred and paid from before 2015	(97)	(444)
Other	(17)	85
Total	**$ 23,976**	**$ (23,444)**

Incurred claims and claims expense represents the sum of paid losses, claim adjustment expenses and reserve changes in the calendar year. This expense includes losses from catastrophes of $2.56 billion, $2.86 billion and $3.23 billion in 2019, 2018 and 2017, respectively, net of recoverables. Catastrophes are an inherent risk of the property and casualty insurance business that have contributed to, and will continue to contribute to, material year-to-year fluctuations in the Company’s results of operations and financial position.

The Company calculates and records a single best reserve estimate for losses from catastrophes, in conformance with generally accepted actuarial standards. As a result, management believes that no other estimate is better than the recorded amount. Due to the uncertainties involved, including the factors described above, the ultimate cost of losses may vary materially from recorded amounts, which are based on management’s best estimates. Accordingly, management believes that it is not practical to develop a meaningful range for any such changes in losses incurred.

Prior year reserve reestimates included in claims and claims expense (1)

	Twelve months ended December 31,								
($ in millions)	**Non-catastrophe losses**			**Catastrophe losses**			**Total**		
	2019	**2018**	**2017**	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Auto (2)	$ (306)	$ (416)	$ (475)	$ (17)	$ (39)	$ (15)	$ (323)	$ (455)	$ (490)
Homeowners	(1)	(51)	(124)	66	65	(7)	65	14	(131)
Other personal lines	8	(6)	(2)	—	(1)	3	8	(7)	1
Commercial lines	18	108	18	(1)	—	1	17	108	19
Discontinued Lines and Coverages (3)	105	87	96	—	—	—	105	87	96
Service Businesses	(2)	(2)	2	—	—	—	(2)	(2)	2
Total prior year reserve reestimates	**$ (178)**	**$ (280)**	**$ (485)**	**$ 48**	**$ 25**	**$ (18)**	**$ (130)**	**$ (255)**	**$ (503)**

(1) Favorable reserve reestimates are shown in parentheses.

(2) Non-catastrophe results related to continued favorable personal lines auto injury coverage development.

(3) The Company’s 2019 annual reserve review, using established industry and actuarial best practices, resulted in unfavorable reestimates of $95 million.

The following presents information about incurred and paid claims development as of December 31,2019, net of recoverables, as well as the cumulative number of reported claims and the total of IBNR reserves plus expected development on reported claims included in the net incurred claims amounts. See Note 2 for the accounting policy and methodology for determining reserves for claims and claims expense, including both reported and IBNR claims. The cumulative number of reported claims is identified by coverage and excludes reported claims for industry pools and facilities where information is not available. The information about incurred and paid claims development for the 2015 to 2019 years, and the average annual percentage payout of incurred claims by age as of December 31, 2019, is presented as required supplementary information.

Auto insurance – liability coverage

($ in millions, except number of reported claims)	Incurred claims and allocated claim adjustment expenses, net of recoverables						IBNR reserves plus expected development on reported claims	Cumulative number of reported claims
	For the years ended December 31,							
Accident year	(unaudited) 2015	(unaudited) 2016	(unaudited) 2017	(unaudited) 2018	2019	Prior year reserve reestimates	As of December 31, 2019	
2015	$ 8,763	$ 8,733	$ 8,677	$ 8,617	$ 8,578	$ (39)	$ 519	2,383,853
2016	—	9,030	8,833	8,732	8,683	(49)	988	2,399,890
2017	—	—	8,457	8,389	8,305	(84)	1,777	2,214,254
2018	—	—	—	8,727	8,708	(19)	3,093	2,169,753
2019	—	—	—	—	9,333		5,838	2,108,919
				Total	**$ 43,607**	**$ (191)**		
Reconciliation to total prior year reserve reestimates recognized by line								
Prior year reserve reestimates for pre-2015 accident years						**(56)**		
Prior year reserve reestimates for ULAE						**14**		
Other						**(1)**		
Total prior year reserve reestimates						**$ (234)**		

	Cumulative paid claims and allocated claims adjustment expenses, net of recoverables				
	For the years ended December 31,				
Accident year	(unaudited) 2015	(unaudited) 2016	(unaudited) 2017	(unaudited) 2018	2019
2015	$ 3,524	$ 5,837	$ 6,883	$ 7,565	$ 8,059
2016	—	3,485	5,768	6,849	7,695
2017	—	—	3,149	5,330	6,528
2018	—	—	—	3,229	5,615
2019	—	—	—	—	3,495
				Total	**$ 31,392**
All outstanding liabilities before 2015, net of recoverables					1,274
Liabilities for claims and claim adjustment expenses, net of recoverables					**$ 13,489**

Average annual percentage payout of incurred claims by age, net of recoverables, as of December 31, 2019					
	1 year	2 years	3 years	4 years	5 years
Auto insurance – liability coverage	40.0%	27.2%	12.9%	8.2%	4.9%

Auto insurance – physical damage coverage

($ in millions, except number of reported claims)	Incurred claims and allocated claim adjustment expenses, net of recoverables						IBNR reserves plus expected development on reported claims	Cumulative number of reported claims
	For the years ended December 31,							
	(unaudited)	(unaudited)	(unaudited)	(unaudited)		Prior year reserve reestimates	As of December 31, 2019	
Accident year	2015	2016	2017	2018	2019			
2015	$ 4,653	$ 4,681	$ 4,669	$ 4,660	$ 4,656	$ (4)	$ 2	4,390,288
2016	—	5,125	5,052	5,025	5,020	(5)	5	4,431,735
2017	—	—	5,119	5,037	5,025	(12)	(2)	4,236,640
2018	—	—	—	5,216	5,154	(62)	17	4,306,335
2019	—	—	—	—	5,659		244	4,312,306
				Total	**$ 25,514**	**$ (83)**		
Reconciliation to total prior year reserve reestimates recognized by line								
Prior year reserve reestimates for pre-2015 accident years						**(4)**		
Prior year reserve reestimates for ULAE						**(2)**		
Other						—		
Total prior year reserve reestimates						**$ (89)**		

	Cumulative paid claims and allocated claims adjustment expenses, net of recoverables				
	For the years ended December 31,				
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
Accident year	2015	2016	2017	2018	2019
2015	$ 4,507	$ 4,672	$ 4,658	$ 4,655	$ 4,654
2016	—	4,887	5,031	5,019	5,016
2017	—	—	4,845	5,036	5,027
2018	—	—	—	4,968	5,137
2019	—	—	—	—	5,414
				Total	**$ 25,248**
All outstanding liabilities before 2015, net of recoverables					7
Liabilities for claims and claim adjustment expenses, net of recoverables					**$ 273**

Average annual percentage payout of incurred claims by age, net of recoverables, as of December 31, 2019					
	1 year	2 years	3 years	4 years	5 years
Auto insurance – physical damage coverage	97.0%	3.0%	(0.2)%	—%	—%

Homeowners insurance

($ in millions, except number of reported claims)	Incurred claims and allocated claim adjustment expenses, net of recoverables						IBNR reserves plus expected development on reported claims	Cumulative number of reported claims
	For the years ended December 31,							
	(unaudited)	(unaudited)	(unaudited)	(unaudited)				
Accident year	2015	2016	2017	2018	2019	Prior year reserve reestimates	As of December 31, 2019	
2015	$ 3,558	$ 3,611	$ 3,553	$ 3,537	$ 3,520	$ (17)	$ 36	721,328
2016	—	3,959	3,993	3,955	3,951	(4)	77	813,728
2017	—	—	4,475	4,617	4,612	(5)	177	907,218
2018	—	—	—	4,747	4,851	104	340	807,012
2019	—	—	—	—	4,547		1,233	721,434
				Total	**$ 21,481**	**$ 78**		
Reconciliation to total prior year reserve reestimates recognized by line								
Prior year reserve reestimates for pre-2015 accident years						**(36)**		
Prior year reserve reestimates for ULAE						**23**		
Other						**—**		
Total prior year reserve reestimates						**$ 65**		

	Cumulative paid claims and allocated claims adjustment expenses, net of recoverables				
	For the years ended December 31,				
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	
Accident year	2015	2016	2017	2018	2019
2015	$ 2,586	$ 3,296	$ 3,399	$ 3,458	$ 3,484
2016	—	2,947	3,678	3,809	3,874
2017	—	—	3,227	4,246	4,435
2018	—	—	—	3,489	4,511
2019	—	—	—	—	3,314
				Total	**$ 19,618**
All outstanding liabilities before 2015, net of recoverables					126
Liabilities for claims and claim adjustment expenses, net of recoverables					**$ 1,989**

Average annual percentage payout of incurred claims by age, net of recoverables, as of December 31, 2019					
	1 year	2 years	3 years	4 years	5 years
Homeowners insurance	74.5%	18.9%	3.1%	1.4%	0.7%

Reconciliation of the net incurred and paid claims development tables above to the reserve for property and casualty insurance claims and claims expense

($ in millions)	As of December 31, 2019
Net outstanding liabilities	
Allstate Protection	
Auto insurance - liability coverage	$ 13,489
Auto insurance - physical damage coverage	273
Homeowners insurance	1,989
Other personal lines	1,326
Commercial lines	1,010
Service Businesses	36
Discontinued Lines and Coverages (1)	1,286
ULAE	1,391
Net reserve for property and casualty insurance claims and claims expense	**20,800**
Recoverables	
Allstate Protection	
Auto insurance - liability coverage	5,891
Auto insurance - physical damage coverage	3
Homeowners insurance	214
Other personal lines	160
Commercial lines	130
Service Businesses	13
Discontinued Lines and Coverages	452
ULAE	49
Total recoverables	**6,912**
Gross reserve for property and casualty insurance claims and claims expense	**$ 27,712**

(1) Discontinued Lines and Coverages includes business in run-off with most of the claims related to accident years more than 30 years ago. IBNR reserves represent $660 million of the total reserves as of December 31, 2019.

Management believes that the reserve for property and casualty insurance claims and claims expense, net of recoverables, is appropriately established in the aggregate and adequate to cover the ultimate net cost of reported and unreported claims arising from losses which had occurred by the date of the Consolidated Statements of Financial Position based on available facts, technology, laws and regulations.

Allstate's reserves for asbestos claims were $810 million and $866 million, net of reinsurance recoverables of $362 million and $400 million, as of December 31, 2019 and 2018, respectively. Reserves for environmental claims were $179 million and $170 million, net of reinsurance recoverables of $40 million and $39 million, as of December 31, 2019 and 2018, respectively. For further discussion of asbestos and environmental reserves, see Note 14.

Note 9 Reserve for Life-Contingent Contract Benefits and Contractholder Funds

Reserve for life-contingent contract benefits

($ in millions)	As of December 31, 2019	2018
Immediate fixed annuities:		
Structured settlement annuities	$ 6,840	$ 6,701
Other immediate fixed annuities	1,612	1,714
Traditional life insurance	2,897	2,808
Accident and health insurance	873	876
Other	78	109
Total reserve for life-contingent contract benefits	**$ 12,300**	**$ 12,208**

Key assumptions generally used in calculating the reserve for life-contingent contract benefits

Product	Mortality	Interest rate	Estimation method
Structured settlement annuities	U.S. population with projected calendar year improvements; mortality rates adjusted for each impaired life based on reduction in life expectancy	Interest rate assumptions range from 3.8% to 7.5%	Present value of contractually specified future benefits
Other immediate fixed annuities	1983 group annuity mortality table with internal modifications; 1983 individual annuity mortality table; Annuity 2000 mortality table with internal modifications; Annuity 2000 mortality table; 1983 individual annuity mortality table with internal modifications	Interest rate assumptions range from 0.3% to 9.0%	Present value of expected future benefits based on historical experience
Traditional life insurance	Actual company experience plus loading	Interest rate assumptions range from 2.5% to 11.3%	Net level premium reserve method using the Company’s withdrawal experience rates; includes reserves for unpaid claims
Accident and health insurance	Actual company experience plus loading	Interest rate assumptions range from 3.0% to 7.0%	Unearned premium; additional contract reserves for mortality risk and unpaid claims
Other: Variable annuity guaranteed minimum death benefits (1)	Annuity 2012 mortality table with internal modifications	Interest rate assumptions range from 2.0% to 5.8%	Projected benefit ratio applied to cumulative assessments

(1) In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with The Prudential Insurance Company of America, a subsidiary of Prudential Financial, Inc. (collectively “Prudential”).

The Company records an adjustment to the reserve for life-contingent contract benefits that represents the amount by which the reserve balance would increase if the net unrealized gains in the applicable product investment portfolios were realized and reinvested at current lower interest rates, resulting in a premium deficiency. The offset to this liability is recorded as a reduction of the unrealized net capital gains included in AOCI. This liability was $126 million and zero as of December 31, 2019 and 2018, respectively.

Contractholder funds

($ in millions)	As of December 31, 2019	2018
Interest-sensitive life insurance	$ 8,384	$ 8,229
Investment contracts:		
Fixed annuities	8,845	9,681
Other investment contracts	463	461
Total contractholder funds	**$ 17,692**	**$ 18,371**

Key contract provisions of contractholder funds

Product	Interest rate	Withdrawal/surrender charges
Interest-sensitive life insurance	Interest rates credited range from 0.0% to 10.0% for equity-indexed life (whose returns are indexed to the S&P 500) and 1.0% to 6.0% for all other products	Either a percentage of account balance or dollar amount grading off generally over 20 years
Fixed annuities	Interest rates credited range from 0.5% to 7.5% for immediate annuities; (8.0)% to 10.0% for equity-indexed annuities (whose returns are indexed to the S&P 500); and 0.1% to 6.0% for all other products	Either a declining or a level percentage charge generally over ten years or less. Additionally, approximately 12.0% of fixed annuities are subject to market value adjustment for discretionary withdrawals
Other investment contracts: Guaranteed minimum income, accumulation and withdrawal benefits on variable (1) and fixed annuities and secondary guarantees on interest-sensitive life insurance and fixed annuities	Interest rates used in establishing reserves range from 1.7% to 10.3%	Withdrawal and surrender charges are based on the terms of the related interest-sensitive life insurance or fixed annuity contract

(1) In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with Prudential.

Contractholder funds activity

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Balance, beginning of year	$ 18,371	$ 19,434	$ 20,260
Deposits	1,091	1,109	1,130
Interest credited	636	650	687
Benefits	(791)	(844)	(901)
Surrenders and partial withdrawals	(884)	(1,135)	(999)
Contract charges	(825)	(824)	(826)
Net transfers from separate accounts	10	6	5
Other adjustments	84	(25)	78
Balance, end of year	**$ 17,692**	**$ 18,371**	**$ 19,434**

The Company offered various guarantees to variable annuity contractholders. In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with Prudential. Liabilities for variable contract guarantees related to death benefits are included in the reserve for life-contingent contract benefits and the liabilities related to the income, withdrawal and accumulation benefits are included in contractholder funds. All liabilities for variable contract guarantees are reported on a gross basis on the balance sheet with a corresponding reinsurance recoverable asset for those contracts subject to reinsurance.

Absent any contract provision wherein the Company guarantees either a minimum return or account value upon death, a specified contract anniversary date, partial withdrawal or annuitization, variable annuity and variable life insurance contractholders bear the investment risk that the separate accounts' funds may not meet their stated investment objectives. The account balances of variable annuity contracts' separate accounts with guarantees included $2.68 billion and $2.47 billion of equity, fixed income and balanced mutual funds and $253 million and $245 million of money market mutual funds as of December 31, 2019 and 2018, respectively.

The table below presents information regarding the Company's variable annuity contracts with guarantees. The Company's variable annuity contracts may offer more than one type of guarantee in each contract; therefore, the sum of amounts listed exceeds the total account balances of variable annuity contracts' separate accounts with guarantees.

($ in millions)	As of December 31, 2019	As of December 31, 2018
In the event of death		
Separate account value	$ 2,928	$ 2,711
Net amount at risk (1)	$ 373	$ 605
Average attained age of contractholders	71 years	71 years
At annuitization (includes income benefit guarantees)		
Separate account value	$ 848	$ 778
Net amount at risk (2)	$ 173	$ 264
Weighted average waiting period until annuitization options available	None	None
For cumulative periodic withdrawals		
Separate account value	$ 190	$ 190
Net amount at risk (3)	$ 13	$ 16
Accumulation at specified dates		
Separate account value	$ 123	$ 129
Net amount at risk (4)	$ 15	$ 26
Weighted average waiting period until guarantee date	4 years	4 years

(1) Defined as the estimated current guaranteed minimum death benefit in excess of the current account balance as of the balance sheet date.

(2) Defined as the estimated present value of the guaranteed minimum annuity payments in excess of the current account balance.

(3) Defined as the estimated current guaranteed minimum withdrawal balance (initial deposit) in excess of the current account balance as of the balance sheet date.

(4) Defined as the estimated present value of the guaranteed minimum accumulation balance in excess of the current account balance.

The liability for death and income benefit guarantees is equal to a benefit ratio multiplied by the cumulative contract charges earned, plus accrued interest less contract excess guarantee benefit payments. The benefit ratio is calculated as the estimated present value of all expected contract excess guarantee benefits divided by the present value of all expected contract charges. The establishment of reserves for these guarantees requires the projection of future fund values, mortality, persistency and customer benefit utilization rates. These assumptions are periodically reviewed and updated. For guarantees related to death benefits, benefits represent the projected excess guaranteed minimum death benefit payments. For guarantees related to income benefits, benefits represent the present value of the minimum guaranteed annuitization benefits in excess of the projected account balance at the time of annuitization.

Projected benefits and contract charges used in determining the liability for certain guarantees are developed using models and stochastic scenarios that are also used in the development of estimated expected gross profits. Underlying assumptions for the liability related to income benefits include assumed future annuitization elections based on factors such as the extent of benefit to the potential annuitant, eligibility conditions and the annuitant's attained age. The liability for guarantees is re-evaluated periodically, and adjustments are made to the liability balance through a charge or credit to life and annuity contract benefits.

Guarantees related to the majority of withdrawal and accumulation benefits are considered to be derivative financial instruments; therefore, the liability for these benefits is established based on its fair value.

Summary of liabilities for guarantees

($ in millions)	Liability for guarantees related to death benefits and interest-sensitive life products	Liability for guarantees related to income benefits	Liability for guarantees related to accumulation and withdrawal benefits	Total
Balance, December 31, 2018 (1)	$ 308	$ 39	$ 97	$ 444
Less reinsurance recoverables	111	35	39	185
Net balance as of December 31, 2018	**197**	**4**	**58**	**259**
Incurred guarantee benefits	18	—	12	30
Paid guarantee benefits	(3)	—	—	(3)
Net change	**15**	**—**	**12**	**27**
Net balance as of December 31, 2019	212	4	70	286
Plus reinsurance recoverables	81	20	32	133
Balance, December 31, 2019 (2)	**$ 293**	**$ 24**	**$ 102**	**$ 419**
Balance, December 31, 2017 (3)	$ 262	$ 29	$ 79	$ 370
Less reinsurance recoverables	87	25	34	146
Net balance as of December 31, 2017	**175**	**4**	**45**	**224**
Incurred guarantee benefits	24	—	13	37
Paid guarantee benefits	(2)	—	—	(2)
Net change	**22**	**—**	**13**	**35**
Net balance as of December 31, 2018	197	4	58	259
Plus reinsurance recoverables	111	35	39	185
Balance, December 31, 2018 (1)	**$ 308**	**$ 39**	**$ 97**	**$ 444**

(1) Included in the total liability balance as of December 31, 2018 are reserves for variable annuity death benefits of $109 million, variable annuity income benefits of $36 million, variable annuity accumulation benefits of $25 million, variable annuity withdrawal benefits of $14 million and other guarantees of $260 million.

(2) Included in the total liability balance as of December 31, 2019 are reserves for variable annuity death benefits of $78 million, variable annuity income benefits of $21 million, variable annuity accumulation benefits of $18 million, variable annuity withdrawal benefits of $14 million and other guarantees of $288 million.

(3) Included in the total liability balance as of December 31, 2017 are reserves for variable annuity death benefits of $85 million, variable annuity income benefits of $26 million, variable annuity accumulation benefits of $22 million, variable annuity withdrawal benefits of $12 million and other guarantees of $225 million.

Note 10 Reinsurance and Indemnification

Effects of reinsurance and indemnification on property and casualty premiums written and earned and life premiums and contract charges

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Property and casualty insurance premiums written			
Direct	$ 37,976	$ 35,895	$ 33,685
Assumed	95	99	64
Ceded	(1,117)	(1,008)	(1,007)
Property and casualty insurance premiums written, net of recoverables	**$ 36,954**	**$ 34,986**	**$ 32,742**
Property and casualty insurance premiums earned			
Direct	$ 37,104	$ 34,977	$ 33,221
Assumed	94	87	50
Ceded	(1,122)	(1,016)	(971)
Property and casualty insurance premiums earned, net of recoverables	**$ 36,076**	**$ 34,048**	**$ 32,300**
Life premiums and contract charges			
Direct	$ 2,074	$ 2,001	$ 1,894
Assumed	712	754	787
Ceded	(285)	(290)	(303)
Life premiums and contract charges, net of recoverables	**$ 2,501**	**$ 2,465**	**$ 2,378**

Property and casualty reinsurance and indemnification recoverables

Total amounts recoverable from reinsurers and indemnitors as of December 31, 2019 and 2018 were $7.02 billion and $7.27 billion, respectively, including $112 million and $111 million, respectively, related to property and casualty losses paid by the Company and billed to reinsurers and indemnitors, and $6.91 billion and $7.15 billion, respectively, estimated by the Company with respect to ceded or indemnifiable unpaid losses (including IBNR), which are not billable until the losses are paid. The allowance for uncollectible reinsurance was $60 million and $65 million as of December 31, 2019 and 2018, respectively, primarily related to reinsurance recoverables arising from the Discontinued Lines and Coverages segment. Indemnification recoverables are considered collectible based on the industry pool and facility enabling legislation.

Property and casualty programs are grouped by the following characteristics:

1. Indemnification programs - industry pools, facilities or associations that are governed by state insurance statutes or regulations or the federal government.
2. Catastrophe reinsurance programs - reinsurance protection for catastrophe exposure nationwide and by specific states, as applicable.
3. Other reinsurance programs - reinsurance protection for asbestos, environmental and other liability exposures as well as commercial lines, including shared economy.

Property and casualty reinsurance is in place for the Allstate Protection, Discontinued Lines and Coverages and Service Businesses segments. The Company purchases reinsurance after evaluating the financial condition of the reinsurer as well as the terms and price of coverage.

Indemnification programs

The Company participates in state-based industry pools or facilities mandating participation by insurers offering certain coverage in their state, including the Michigan Catastrophic Claims Association (“MCCA”), the New Jersey Property-Liability Insurance Guaranty Association (“PLIGA”), the North Carolina Reinsurance Facility (“NCRF”) and the Florida Hurricane Catastrophe Fund (“FHCF”). When the Company pays qualifying claims under the coverage indemnified by a state’s pool or facility, the Company is reimbursed for the qualifying claim losses or expenses. Each state pool or facility may assess participating companies to collect sufficient amounts to meet its total indemnification requirements. The enabling legislation for each state’s pool or facility compels the pool or facility only to indemnify participating companies for qualifying claim losses or expenses; the state pool or facility does not underwrite the coverage or take on the ultimate risk of the indemnified business. As a pass through, these pools or facilities manage the receipt of assessments paid by participating companies and payment of indemnified amounts for covered claims presented by participating companies. The Company has not had any credit losses related to these indemnification programs.

State-based industry pools or facilities

Michigan Catastrophic Claims Association The MCCA is a statutory indemnification mechanism for member insurers' qualifying personal injury protection claims paid for the unlimited lifetime medical benefits above the applicable retention level for qualifying injuries from automobile, motorcycle and commercial vehicle accidents. Indemnification recoverables on paid and unpaid claims, including IBNR, as of December 31, 2019 and 2018 include $5.50 billion and $5.40 billion, respectively, from the MCCA for its indemnification obligaton.

The MCCA is funded by annually assessing participating member companies actively writing motor vehicle coverage in Michigan on a per vehicle basis that is currently $220 per vehicle insured. The MCCA's calculation of the annual assessment is based upon the total of members' actuarially determined present value of expected payments on lifetime claims by all persons expected to be catastrophically injured in that year and ultimately qualify for MCCA reimbursement, its operating expenses, and adjustments for the amount of excesses or deficiencies in prior assessments. The assessment is incurred by the Company as policies are written and recovered as a component of premiums from the Company's customers.

The MCCA indemnifies qualifying claims of all current and former member companies (whether or not actively writing motor vehicle coverage in Michigan) for qualifying claims and claims expenses incurred while the member companies were actively writing the mandatory personal injury protection coverage in Michigan. Member companies actively writing automobile coverage in Michigan include the MCCA annual assessments in determining the level of premiums to charge insureds in the state.

As required for member companies by the MCCA, the Company reports covered paid and unpaid claims to the MCCA when estimates of loss for a reported claim are expected to exceed the retention level, the claims involve certain types of severe injuries, or there are litigation demands received suggesting the claim value exceeds certain thresholds. The retention level is adjusted upward every other MCCA fiscal year by the lesser of 6% or the increase in the Consumer Price Index. The retention level will be $580 thousand per claim for the fiscal two-years ending June 30, 2021 compared to $555 thousand per claim for the fiscal two-years ending June 30, 2019.

The MCCA is obligated to fund the ultimate liability of member companies' qualifying claims and claim expenses. The MCCA does not underwrite the insurance coverage or hold any underwriting risk.

The MCCA indemnifies members as qualifying claims are paid and billed by members to the MCCA. Unlimited lifetime covered losses result in significant levels of ultimate incurred claim reserves being recorded by member companies along with offsetting indemnification recoverables. Disputes with claimants over coverage on certain reported claims can result in additional losses, which may be recoverable from the MCCA, excluding litigation expenses. There is currently no method by which insurers are able to obtain the benefit of managed care programs to reduce claims costs through the MCCA.

The MCCA annual assessments fund current operations and member company reimbursements. The MCCA prepares statutory-basis financial statements in conformity with accounting practices prescribed or permitted by the State of Michigan Department of Insurance and Financial Services ("MI DOI"). The MI DOI has granted the MCCA a statutory permitted practice that expires in June 30, 2022 to discount its liabilities for loss and loss adjustment expense. As of June 30, 2019, the date of its most recent annual financial report, the MCCA had cash and invested assets of $21.83 billion and an accumulated surplus of $1.28 billion. The permitted practice reduced the accumulated deficit by $39.64 billion.

New Jersey Property-Liability Insurance Guaranty Association PLIGA serves as the statutory administrator of the Unsatisfied Claim and Judgment Fund ("UCJF"), Workers' Compensation Security Fund and the New Jersey Surplus Lines Insurance Guaranty Fund.

In addition to its insolvency protection responsibilities, PLIGA reimburses insurers for unlimited excess medical benefits ("EMBs") paid in connection with personal injury protection claims in excess of $75,000 for policies issued or renewed prior to January 1, 1991, and limited EMB claims in excess of $75,000 and capped at $250,000 for policies issued or renewed on or after January 1, 1991, to December 31, 2003.

A significant portion of the incurred claim reserves and the recoverables can be attributed to a small number of catastrophic claims. Assessments paid to PLIGA for the EMB program totaled $8.1 million in 2019. The amounts of paid and unpaid recoverables as of December 31, 2019 and 2018 were $446 million and $461 million, respectively.

PLIGA annually assesses all admitted property and casualty insurers writing covered lines in New Jersey for PLIGA indemnification and expenses. PLIGA assessments may be recouped as a surcharge on premiums collected. PLIGA does not ultimately retain underwriting risk as it assesses member companies for their expected qualifying losses to provide funding for payment of its indemnification obligation to member companies for their actual losses. As a pass through, PLIGA facilitates these transactions of receipt of assessments paid by member companies and payment to member companies for covered claims presented by them for indemnification. As of December 31, 2018, the date of its most recent annual financial report, PLIGA had a fund balance of $250 million.

As statutory administrator of the UCJF, PLIGA provides compensation to qualified claimants for personal injury protection, bodily injury, or death caused by private passenger automobiles operated by uninsured or "hit and run" drivers. The UCJF also provides private passenger pedestrian personal injury protection benefits when no other coverage is available.

PLIGA annually collects a UCJF assessment from all admitted property and casualty insurers writing motor vehicle liability insurance in New Jersey for UCJF indemnification and expenses. UCJF assessments can be expensed as losses recoverable in rates as appropriate. As of December 31, 2018, the date of its most recent annual financial report, the UCJF fund had a balance of $41 million.

North Carolina Reinsurance Facility The NCRF provides automobile liability insurance to drivers that insurers are not otherwise willing to insure. All insurers licensed to write automobile insurance in North Carolina are members of the NCRF. Premiums, losses and expenses are assigned to the NCRF. North Carolina law allows the NCRF to recoup operating losses for certain insureds through a surcharge to policyholders. As of September 30, 2019, the NCRF reported a deficit of $110 million in members' equity. The NCRF implemented a loss recoupment surcharge on all private passenger and commercial fleet policies effective October 1, 2019, through September 30, 2020. Member companies are assessed the recoupment surcharge. The loss recoupment surcharge will be adjusted on October 1, 2020 and discontinued once losses are recovered. The NCRF results are shared by the member companies in proportion to their respective North Carolina automobile liability writings. For the fiscal quarter ending September 30, 2019, net income was $105 million, including $1.10 billion of earned premiums, $271 million of certain private passenger auto risk recoupment and $137 million of member loss recoupments. As of December 31, 2019, the NCRF recoverables on paid claims is $9.4 million and recoverables on unpaid claims is $69.1 million. Paid recoverable balances, if covered, are typically settled within sixty days of monthly filing.

Florida Hurricane Catastrophe Fund Allstate subsidiaries Castle Key Insurance Company ("CKIC") and Castle Key Indemnity Company ("CKI", and together with CKIC, "Castle Key") participate in the mandatory coverage provided by the FHCF and therefore have access to reimbursement for certain qualifying Florida hurricane losses from the FHCF. Castle Key has exposure to assessments and pays annual premiums to the FHCF for this reimbursement protection. The FHCF has the authority to issue bonds to pay its obligations to participating insurers in excess of its capital balances. Payment of these bonds is funded by emergency assessments on all property and casualty premiums in the state, except workers' compensation, medical malpractice, accident and health insurance and policies written under the National Flood Insurance Program ("NFIP"). The FHCF emergency assessments are limited to 6% of premiums per year beginning the first year in which reimbursements require bonding, and up to a total of 10% of premiums per year for assessments in the second and subsequent years, if required to fund additional bonding. The FHCF issued $2.00 billion in pre-event bonds in 2013 to build its capacity to reimburse member companies' claims. The FHCF plans to fund these pre-event bonds through current FHCF cash flows. Pursuant to an Order issued by the Florida Office of Insurance Regulation ("FL OIR"), the emergency assessment is zero for all policies issued or renewed on or after January 1, 2015.

Annual premiums earned and paid under the FHCF agreement were $9 million, $10 million and $11 million in 2019, 2018 and 2017, respectively. Qualifying losses were $33 million, $143 million and $19 million in 2019, 2018 and 2017, respectively. The Company has access to reimbursement provided by the FHCF for 90% of qualifying personal property losses that exceed its current retention of $52 million for the two largest hurricanes and $17 million for other hurricanes, up to a maximum total of $145 million, effective from June 1, 2019 to May 31, 2020. The amounts recoverable from the FHCF totaled $52 million and $104 million as of December 31, 2019 and 2018, respectively.

Federal Government - National Flood Insurance Program NFIP is a program administered by the Federal Emergency Management Agency ("FEMA") whereby the Company sells and services NFIP flood insurance policies as an agent of FEMA and receives fees for its services. The Company is fully indemnified for claims and claim expenses and does not retain any ultimate risk for the indemnified business. The federal government is obligated to pay all claims and certain allocated loss adjustment expenses in accordance with the arrangement.

Congressional authorization for the NFIP is periodically evaluated and may be subjected to freezes, including when the federal government experiences a shutdown. FEMA has a NFIP reinsurance program to manage the future exposure of the NFIP through the transfer of risk to private reinsurance companies and capital market investors. Congress is evaluating the funding of the program as well as considering reforms to the program that would be incorporated in legislation to reauthorize the NFIP.

The amounts recoverable as of December 31, 2019 and 2018 were $25 million and $31 million, respectively. Premiums earned under the NFIP include $258 million, $258 million and $263 million in 2019, 2018 and 2017, respectively. Qualifying losses incurred include $150 million, $118 million and $1.12 billion in 2019, 2018 and 2017, respectively.

Catastrophe reinsurance

The Company's reinsurance program is designed to provide reinsurance protection for catastrophes resulting from multiple perils including hurricanes, windstorms, hail, tornadoes, earthquakes, wildfires, and fires following earthquakes.

- The majority of the Company's program comprises multi-year contracts, primarily placed in the traditional reinsurance market, such that generally one-third of the program is renewed every year.
- Coverage is generally purchased on a broad geographic, product line and multiple peril loss basis.
- The Company purchases reinsurance from traditional reinsurance companies as well as the insurance linked securities market.

- Florida property and New Jersey property and auto are each covered by separate agreements, as the risk of loss is different and the Company's subsidiaries operating in these states are separately capitalized.

The Company has not experienced credit losses on its catastrophe reinsurance programs. The Company ceded premiums earned of $376 million, $343 million and $344 million under catastrophe reinsurance agreements in 2019, 2018 and 2017, respectively. The Company has the following catastrophe reinsurance agreements in effect as of December 31, 2019:

The Nationwide Excess Catastrophe Reinsurance Program (the "Nationwide Program") provides $4.86 billion of reinsurance coverage subject to a $500 million retention and is subject to the amount of reinsurance placed in each of its nine layers.

Per Occurrence and Aggregate Excess Agreements, include occurrence coverage in contracts from both the traditional reinsurance and insurance linked securities ("ILS") markets, while aggregate protection is included in two contracts supported by the ILS market. The agreements provide multi-line catastrophe coverage in every state except Florida, where coverage is only provided for personal lines automobile.

Layer 1 through Layer 5 - Per Occurrence Excess Agreement For the June 1, 2019 to May 31, 2020 term, coverage for each of layers one through five is placed in the traditional reinsurance market with each layer comprising three contracts. Each contract provides one-third of 95% of the total layer limit expiring May 31, 2020, May 31, 2021 and May 31, 2022, respectively. One-third of the limit provided by each of layers one through five includes coverage for New Jersey. Two-thirds of the limit provided by each of layers one through five also includes coverage for the Company's commercial lines property and automobile catastrophe losses. The contracts for each of layers one through five include one reinstatement of limits per year, with premium required. Reinsurance premiums are subject to redetermination for exposure changes on an annual basis.

Layer 6 – Per Occurrence Excess Agreement The layer six contract placed in the traditional reinsurance market contains comparable contract terms and conditions as layers one through five, with New Jersey and commercial lines property and automobile catastrophe losses included in the definition of subject loss. The layer six contract provides a $324 million limit, is 95% placed, and expires May 31, 2022. This contract contains a variable reset option, which the ceding entities may elect to invoke at each anniversary and which allows for the annual adjustment of the attachment and exhaustion level within specified limits. The layer six contract contains one reinstatement of limits over its seven-year term with premium required. As of July 1, 2019, a reinstatement of limits has not been executed under this contract. Reinsurance premiums for this contract are subject to redetermination for exposure changes on an annual basis.

Layer 7 – Per Occurrence Excess and Aggregate Agreements The seventh layer consists of four contracts:

- Seven-Year Term
- 2019-1 Excess Catastrophe Reinsurance
- Wrap Fill Excess Catastrophe Reinsurance
- 2017-1 Excess Catastrophe Reinsurance

Seven-Year Term Contract, which is placed in the traditional reinsurance market contains comparable contract terms and conditions as layer six. The contract provides a $446 million limit and is 29.37% placed, and expires May 31, 2022. The contract contains a variable reset option which allows for the annual adjustment of the attachment and exhaustion level within specified limits. The variable reset option requires a premium adjustment. The contract contains one reinstatement of limits over its seven-year term with premium required. Reinsurance premiums for all contracts are subject to redetermination for exposure changes on an annual basis.

2019-1 Excess Catastrophe Reinsurance Contract reinsures personal lines property and automobile excess losses in 49 states and the District of Columbia, excluding Florida, caused by named storms, earthquakes and fire following earthquakes, severe weather, wildfires, and other naturally occurring or man-made events declared to be a catastrophe by the Company. This contract is placed with Sanders Re II Ltd. which obtained funding from the ILS market to collateralize the contract's limit. The contract reinsures business located in the covered territory and arising out of covered events. The contract's risk period began April 1, 2019 and terminates on March 31, 2023. The contract provides a $400 million limit and is 75% placed, during its four-year term which can be used on a per occurrence or an annual aggregate basis. For a qualifying loss occurrence, the contract provides 75% of $400 million in reinsurance limits in excess of a minimum $2.75 billion retention for the April 1, 2019 to March 31, 2020 period. The New Jersey Excess Catastrophe Agreement, layer six, the Seven-Year Term Contract for layer seven, and the 5% co-participation inure to the benefit of this contract for events that exceed the retention. As a result, while those layers are fully intact, the contract would begin to pay subject losses in excess of $3.07 billion.

The contract also provides an annual aggregate limit of 75% of $400 million in reinsurance limits between a $3.54 billion to $3.94 billion layer subject to an annual retention of $3.54 billion. For each annual period beginning April 1, the Company declared catastrophes occurring during such annual period can be aggregated to erode the aggregate retention and qualify for coverage under the aggregate limit. Reinsurance recoveries from and including layers one through seven of the Nationwide Program and the New Jersey Excess Catastrophe Agreement inure to the benefit of the annual aggregate layer.

Reinsurance recoveries collected under the per occurrence limit of this contract are not eligible for cession under the annual aggregate limit of this contract. Reinsurance recoveries for all loss occurrences and annual aggregate losses qualifying for coverage during the contract's four-year risk period are limited to the Company's ultimate net loss from covered events and subject to the contract's $400 million limit, 75% placed. The contract contains a variable reset option, which the ceding entities may invoke for risk periods subsequent to the first risk period and which allows for the annual adjustment of the contract's attachment and exhaustion levels within specified limits.

Wrap Fill Excess Catastrophe Reinsurance Contract provides a $200 million limit in excess of a minimum $2.75 billion retention, is 100% placed in the traditional market, and expires March 31, 2020. This layer is structured to cover gaps around the traditional Seven-Year Term Contract and the Sanders Re II Ltd. 2019-1 contract. The contract provides additional gap coverage as the layer shifts down in attachment, subject to the $2.75 billion minimum retention level as lower layer limits are exhausted. A retention co-participation of 5% for a layer of $1.61 billion in excess of $2.75 billion is deemed in place and inures to the benefit of this contract. Recoveries from contracts in layers six and seven, with the exception of Sanders Re Ltd. 2017-1, inure to the benefit of this contract, as this multiple peril contract provides coverage for perils and subject business not reinsured in portions of layers seven. While those layers are fully intact, the contract would begin to pay subject losses in excess of $3.07 billion. This contract does not include a reinstatement of limits.

2017-1 Excess Catastrophe Reinsurance Contract reinsures personal lines property and automobile excess losses in 49 states and the District of Columbia, excluding the State of Florida, caused by named storms, earthquakes and fire following earthquakes, severe thunderstorms, winter storms, volcanic eruptions, and meteorite impacts. This contract is placed with Sanders Re Ltd., which obtained funding from the ILS market to collateralize the contract's limit. The contract reinsures actual losses to personal lines property business located in the covered territory and arising out of a covered event. Amounts payable for automobile losses are based on insured industry losses as reported by Property Claim Services ("PCS") and further adjusted to account for the Company's auto exposures in reinsured areas. Reinsurance recoveries under the contract are limited to the Company's ultimate net loss from a covered event subject to the contract's limit. The contract's risk period began March 31, 2017 and terminates on November 30, 2021. The contract provides a $375 million limit in excess of $2.75 billion retention. The New Jersey Excess Catastrophe Agreement, layer six, the Seven-Year Term Contract for layer seven, the Wrap Fill contract, and the 5% co-participation inure to the benefit of this contract for events that exceed the retention. As a result, while those layers are fully intact, the contract would begin to pay subject losses in excess of $3.69 billion.

The contract contains a variable reset option, which the ceding entities may invoke for risk periods subsequent to the first risk period and which allows for the annual adjustment of the contract's attachment and exhaustion levels within specified limits. The variable reset option requires a premium adjustment. The contract does not include a reinstatement of limits.

To summarize the order of operations and inuring protection for the seventh layer for an occurrence loss, for losses below $3.40 billion, the portion of the seventh layer placed in the traditional market would not be enacted. Once the sixth layer is exhausted, the co-participation of 5% would apply and then the 2019-1 Excess Catastrophe Reinsurance contract and Wrap Fill contract, dependent on the subject business contributing to the per occurrence loss. For losses greater than the $3.40 billion retention, the portions of the seventh layer placed in the traditional market would apply first as they inure to the benefit of the portions of the seventh layer placed in the ILS market. This would be followed by the co-participation of 5%, the 2019-1 Excess Catastrophe Reinsurance Contract, the Wrap Fill, and the 2017-1 Excess Catastrophe Reinsurance Contract, dependent on the per occurrence loss.

Layer 8 – Per Occurrence Excess Agreement – Gap Fill Excess Catastrophe Reinsurance Contract provides a $219 million limit in excess of a $2.75 billion retention, is 100% placed in the traditional market, and expires May 31, 2020. The contract provides additional gap coverage as the layer shifts down to the $2.75 billion retention level as lower layers are exhausted. A retention co-participation of 5% for a layer of $1.61 billion in excess of $2.75 billion is deemed in place and inures to the benefit of this contract. Recoveries from contracts in layers six and seven inure to the benefit of this contract, as this multiple peril contract provides coverage for perils and subject business not reinsured in portions of layers seven. While all inuring contracts are fully in place, this contract would begin to cover an occurrence subject loss in excess of $4.13 billion. This contract does not include a reinstatement of limits.

Layer 9 – Per Occurrence and Aggregate Excess Agreement – 2018-1 Excess Catastrophe Reinsurance Contract reinsures personal lines property and automobile excess catastrophe losses in 49 states and the District of Columbia, excluding the State of Florida, caused by named storms, earthquakes and fire following earthquakes, severe weather, wildfires, and other naturally occurring or man-made events declared to be a catastrophe by the Company. This contract is placed with Sanders Re Ltd., which obtained funding from the ILS market to collateralize the contract's limit. The contract reinsures business located in the covered territory and arising out of a covered event. The contract's risk period began April 1, 2018 and terminates on March 31, 2022. The contract provides one limit of $500 million during its four-year term, which can be used on a per occurrence or aggregate basis. For each qualifying loss occurrence, the contract provides 100% of $500 million in reinsurance limits, between a $4.36 billion to $4.86 billion layer for the April 1, 2019 to March 31, 2020 period.

The contract also provides an aggregate limit of 100% of $500 million in reinsurance limits between a

$3.94 billion to $4.44 billion. For each annual period beginning April 1, the Company declared catastrophes occurring during such annual period can be aggregated to erode the aggregate retention and qualify for coverage under the aggregate limit. Reinsurance recoveries from and including layers one through seven of the Nationwide Program and the New Jersey Excess Catastrophe Agreement inure to the benefit of the annual aggregate layer.

Reinsurance recoveries collected under the per occurrence limit of this contract are not eligible for cession under the aggregate limit of this contract. Reinsurance recoveries for all loss occurrences and aggregate losses qualifying for coverage during the contract's four-year risk period are limited to the Company's ultimate net loss from covered events and subject to the contract's $500 million limit. The contract does not include a reinstatement of limits.

Other catastrophe reinsurance programs – The following programs are designed separately from the Nationwide Program to address distinct exposures in certain states and markets.

The Company has a separate reinsurance program designed to cover personal lines property policies in Florida written through Castle Key, its separately capitalized wholly-owned subsidiaries.

Florida Excess Catastrophe Reinsurance Agreement comprises five contracts, as described below, which reinsures Castle Key for personal lines property excess catastrophe losses in Florida. For the June 1, 2019 to May 31, 2020 term, the agreement includes two contracts placed in the traditional market, Castle Key's reimbursement contracts with the Florida Hurricane Catastrophe Fund ("Mandatory FHCF contracts"), and the Sanders Re 2017-2 Contract ("Sanders Re 2017-2") placed in the ILS markets.

Below FHCF Contract reinsures personal lines property excess catastrophe losses caused by multiple perils in Florida. The contract provides three separate limits of $34 million in excess of a $20 million retention, each occurrence, and is 100% placed. The contract includes two reinstatements of limits. The first reinstatement of limits is prepaid and the second or final reinstatement requires additional premium. Only the portion of the limit utilized to indemnify losses from an event mandatorily reinstates; the remaining reinstatement limit remains available and will be used as future events erode the per occurrence contract limit. Reinsurance premium is subject to redetermination for exposure changes.

Mandatory FHCF Contracts indemnify qualifying personal lines property losses caused by storms the National Hurricane Center declares to be hurricanes. The contracts provide $151 million of limits in excess of a $54 million provisional retention and are 90% placed (or $136 million in excess of a $54 million provisional retention), and also include reimbursement of up to 10% of eligible loss adjustment expenses, which is part of and not in addition to the reinsurance limit provided, with no reinstatement of limits. For each of the two largest hurricanes, the provisional retention is $54 million and a retention equal to one-third of that amount, or approximately $18 million, is applicable to all other hurricanes for the season beginning June 1, 2019. The limit and retention of the Mandatory FHCF Contracts are subject to remeasurement based on June 30, 2019 exposure data. In addition, the FHCF's retention is subject to adjustment upward or downward to an actual retention based on exposures submitted to the FHCF by all participants.

Excess contract reinsures personal lines property excess catastrophe losses caused by multiple perils in Florida. The contract is a two-year term contract effective June 1, 2018 to May 31, 2020 and provides $249 million of reinsurance limits each contract year. For the June 1, 2019 to May 31, 2020 term, the contract provides one limit of $249 million in excess of a $20 million retention and is 100% placed. Recoveries from the Below FHCF contract and Mandatory FHCF contracts inure to the benefit of this contract. The contract provides reinsurance limits above the Mandatory FHCF Contracts, for CKIC's and CKI's 10% co-participation in the Mandatory FHCF Contracts, and for loss occurrences not subject to reimbursement under the Mandatory FHCF Contracts which only reinsure losses arising out of hurricanes. The contract does not include a reinstatement of limits. Reinsurance premium is subject to redetermination for exposure changes.

Sanders Re 2017-2 is a three-year term contract with a risk period effective June 1, 2017 through May 31, 2020. It reinsures qualifying personal lines property losses caused by a named storm event, a severe thunderstorm event, an earthquake event, a wildfire event, a volcanic eruption event, or a meteorite impact event in Florida as events declared by various reporting agencies, including PCS and as defined in the contract. Should PCS cease to report on severe thunderstorms, then such event will be deemed a severe thunderstorm event if Castle Key has assigned a catastrophe code to such severe thunderstorm. Sanders Re obtained funding from the ILS market to provide collateral equal to the contract's limit.

The contract provides limits of $200 million in excess of a $20 million retention and in excess of "stated reinsurance" and is 100% placed. For the June 1, 2019 to May 31, 2020 risk period, stated reinsurance is defined to include the Below FHCF contract, the Mandatory FHCF contracts, which are deemed to exhaust due to loss occurrences subject to the non-FHCF contracts, and the Excess contract. Stated reinsurance is deemed to be provided on a multiple peril basis under the terms of the non-FHCF contracts and includes an erosion feature, which provides that upon the exhaustion of a portion of the stated reinsurance, coverage under the Sanders Re contract shall be concurrently placed above and contiguous to the unexhausted portion of the stated reinsurance, if any. The Sanders Re 2017-2 contract contains a variable reset option, which Castle Key may invoke for risk periods subsequent to the first risk period and which allows for the annual adjustment of the contract's attachment and exhaustion levels. The variable reset option requires a premium adjustment.

The contract does not contain a reinstatement of limits.

The Company's New Jersey, Kentucky, Florida and Southeast States and California reinsurance agreements are described below.

New Jersey Excess Catastrophe Reinsurance Agreement comprises two existing contracts and a newly placed contract that reinsures personal lines property and automobile excess catastrophe losses in New Jersey caused by multiple perils. The placed contracts effective June 1, 2018 and June 1, 2019 include coverage for commercial lines property and automobile (physical damage only) catastrophe losses.

The contracts expire May 31, 2020, May 31, 2021 and May 31, 2022, and provide 31.67%, 31.67% and 31.66%, respectively, of $400 million of limits in excess of a $145 million retention, a $150 million retention, and a $150 million retention, respectively. Each contract includes one reinstatement of limits per contract year with premium due. The reinsurance premium and retention are subject to redetermination for exposure changes on an annual basis.

Kentucky Earthquake Excess Catastrophe Reinsurance Contract is a three-year contract that reinsures personal lines property losses in Kentucky caused by earthquakes and fire following earthquakes. The contract expires May 31, 2020 and provides three limits of $28 million in excess of a $2 million retention, with two limits available in anyone contract year, and is 95% placed. The reinsurance premium and retention are not subject to redetermination for exposure changes.

Florida and Southeast Auto Aggregate Excess Catastrophe Contract is a one-year term contract effective June 1, 2019 to May 31, 2020. This contract provides a single reinsurance limit at 80% of $250 million, subject to a $250 million aggregate retention, for catastrophe losses to personal lines and commercial lines automobile business (physical damage only) arising out of multiple perils and provided such losses arise out of a company declared catastrophe and result in a qualifying loss in the State of Florida. For these qualifying catastrophe events, coverage is also provided for losses to personal lines and commercial lines automobile business (physical damage only) in Alabama, Georgia, Louisiana, Mississippi, North Carolina, and/or South Carolina. The contract does not include a reinstatement of limits.

Excess & Surplus (E&S) Earthquake Contract is a three-year contract that reinsures personal lines property catastrophe losses in California caused by the peril of earthquakes and is insured by the Company's excess and surplus lines insurer. The contract reinsures only shake damage resulting from the earthquake peril. The contract is effective July 1, 2018 and expires June 30, 2021, both days inclusive, and provides reinsurance on a 100% quota share basis with no retention. The contract allows for cession of policies providing earthquake coverage as long as the total amount of in-force building limits provided by those policies does not exceed $400 million. This $400 million cap limits the policies that are covered by the reinsurance contract and not the amount of loss eligible for cession, which includes losses to dwellings, other structures, personal property and additional living expenses on policies covered by this program. As of December 31, 2019, the $400 million cap which serves to limit cessions to the contract has not been exceeded.

Other reinsurance programs

The Company's other reinsurance programs relate to asbestos, environmental, and other liability exposures and commercial lines, including shared economy. These programs include reinsurance recoverables of $158 million and $165 million from Lloyd's of London as of December 31, 2019 and 2018, respectively. Excluding Lloyd's of London, the largest reinsurance recoverable balance the Company had outstanding was $115 million and $37 million from Aleka Insurance Inc. as of December 31, 2019 and 2018, respectively.

Lloyd's of London, through the creation of Equitas Limited ("Equitas"), implemented a restructuring to solidify its capital base and to segregate claims for years prior to 1993. In 2007, Berkshire Hathaway's subsidiary, National Indemnity Company, assumed responsibility for the Equitas' claim liabilities through a loss portfolio transfer reinsurance agreement and continues to runoff the Equitas' claims.

Life and annuity reinsurance recoverables

The Company reinsures certain life insurance and annuity risks to other insurers primarily under yearly renewable term, coinsurance, modified coinsurance and coinsurance with funds withheld agreements. These agreements result in a passing of the agreed-upon percentage of risk to the reinsurer in exchange for negotiated reinsurance premium payments. Modified coinsurance and coinsurance with funds withheld are similar to coinsurance, except that the cash and investments that support the liability for contract benefits are not transferred to the assuming company and settlements are made on a net basis between the companies.

For certain term life insurance policies issued prior to October 2009, the Company ceded up to 90% of the mortality risk depending on the year of policy issuance under coinsurance agreements to a pool of fourteen unaffiliated reinsurers. Effective October 2009, mortality risk on term business is ceded under yearly renewable term agreements under which the Company cedes mortality in excess of its retention, which is consistent with how the Company generally reinsures its permanent life insurance business.

Retention limits by period of policy issuance

Period	Retention limits
April 2015 through current	Single life: $2 million per life Joint life: no longer offered
April 2011 through March 2015	Single life: $5 million per life, $3 million age 70 and over, and $10 million for contracts that meet specific criteria Joint life: $8 million per life, and $10 million for contracts that meet specific criteria
July 2007 through March 2011	$5 million per life, $3 million age 70 and over, and $10 million for contracts that meet specific criteria
September 1998 through June 2007	$2 million per life, in 2006 the limit was increased to $5 million for instances when specific criteria were met
August 1998 and prior	Up to $1 million per life

In addition, the Company has used reinsurance to effect the disposition of certain blocks of business. The Company had reinsurance recoverables of $1.29 billion and $1.36 billion as of December 31, 2019 and 2018, respectively, due from Prudential related to the disposal of substantially all of its variable annuity business that was effected through reinsurance agreements.

Amounts ceded to Prudential

	As of December 31,		
($ in millions)	**2019**	**2018**	**2017**
Premiums and contract charges	$ 65	$ 72	$ 76
Contract benefits	4	87	7
Interest credited to contractholder funds	19	20	20
Operating costs and expenses	12	14	15

As of December 31, 2019 and 2018, the Company had reinsurance recoverables of $112 million and $118 million, respectively, due from subsidiaries of Citigroup (Triton Insurance and American Health and Life Insurance) and Scottish Re (U.S.), Inc. in connection with the disposition of substantially all of the direct response distribution business in 2003.

As of December 31, 2019, the Company had $70 million of reinsurance recoverables, net of an allowance for estimated uncollectible amounts, related to Scottish Re (U.S.), Inc. On December 14, 2018, the Delaware Insurance Commissioner placed Scottish Re (U.S.), Inc. under regulatory supervision. On March 6, 2019, the Chancery Court of the State of Delaware entered a Rehabilitation and Injunction Order (the "Rehabilitation Order") in response to a petition filed by the Insurance Commissioner (the "Petition"). Pursuant to the Petition, it is expected that Scottish Re (U.S.), Inc. will submit a Plan of Rehabilitation. The Company joined in a joint motion filed on behalf of several affected parties asking the court to allow a specified amount of offsetting claim payments and losses against premiums remitted to Scottish Re (U.S.), Inc. The Company also filed a separate motion related to the reimbursement of claim payments where Scottish Re (U.S.), Inc. is also acting as administrator. The Court has not yet ruled on either of these motions. In the interim, the Company and several other affected parties have been permitted to exercise certain setoff rights while the parties address any potential disputes. The Company continues to monitor Scottish Re (U.S.), Inc. for future developments and will reevaluate its allowance for uncollectible amounts as new information becomes available.

The Company is the assuming reinsurer for Lincoln Benefit Life Company's ("LBL's") life insurance business sold through the Allstate agency channel and LBL's payout annuity business in force prior to the sale of LBL on April 1, 2014. Under the terms of the reinsurance agreement, the Company is required to have a trust with assets greater than or equal to the statutory reserves ceded by LBL to the Company, measured on a monthly basis. As of December 31, 2019, the trust held $6.25 billion of investments, which are reported in the Consolidated Statement of Financial Position.

As of December 31, 2019, the gross life insurance in force was$449.20 billion of which $74.02 billion was ceded to the unaffiliated reinsurers.

Reinsurance recoverables on paid and unpaid benefits

	As of December 31,	
($ in millions)	**2019**	**2018**
Annuities	$ 1,305	$ 1,381
Life insurance	749	776
Other	133	142
Total	**$ 2,187**	**$ 2,299**

As of both December 31, 2019 and 2018, approximately 93% of the reinsurance recoverables are due from companies rated A- or better by S&P.

Note 11 Deferred Policy Acquisition and Sales Inducement Costs

Deferred policy acquisition costs activity

($ in millions)	For the years ended December 31, 2019	2018	2017
Balance, beginning of year	$ 4,784	$ 4,191	$ 3,954
SquareTrade acquisition	—	—	66
Acquisition costs deferred	5,622	5,663	5,001
Amortization charged to income	(5,533)	(5,222)	(4,784)
Effect of unrealized gains and losses	(174)	152	(46)
Balance, end of year	**$ 4,699**	**$ 4,784**	**$ 4,191**

Deferred sales inducement costs activity(1)

($ in millions)	For the years ended December 31, 2019	2018	2017
Balance, beginning of year	$ 34	$ 36	$ 40
Amortization charged to income	(5)	(4)	(4)
Effect of unrealized gains and losses	(2)	2	—
Balance, end of year	**$ 27**	**$ 34**	**$ 36**

(1) Deferred sales inducement costs primarily relate to fixed annuities and interest-sensitive life contracts and are recorded as part of other assets on the Consolidated Statements of Financial Position.

Note 12 Capital Structure

Total debt outstanding

($ in millions)	As of December 31, 2019	2018
7.450% Senior Notes, due 2019 (1)	$ —	$ 317
Floating Rate Senior Notes, due 2021(1)	250	250
Floating Rate Senior Notes, due 2023 (1)	250	250
3.150% Senior Notes, due 2023 (1)	500	500
Due after one year through five years	**1,000**	**1,317**
3.280% Senior Notes, due 2026 (1)	550	550
Due after five years through ten years	**550**	**550**
6.125% Senior Notes, due 2032 (1)	159	159
5.350% Senior Notes due 2033 (1)	323	323
5.550% Senior Notes due 2035 (1)	546	546
5.950% Senior Notes, due 2036 (1)	386	386
6.900% Senior Debentures, due 2038	165	165
5.200% Senior Notes, due 2042 (1)	62	62
4.500% Senior Notes, due 2043 (1)	500	500
4.200% Senior Notes, due 2046 (1)	700	700
3.850% Senior Notes, due 2049	500	—
5.100% Subordinated Debentures, due 2053	500	500
5.750% Subordinated Debentures, due 2053	800	800
6.500% Junior Subordinated Debentures, due 2067	500	500
Due after ten years	**5,141**	**4,641**
Long-term debt total principal	**6,691**	**6,508**
Debt issuance costs	(60)	(57)
Total long-term debt	**6,631**	**6,451**
Short-term debt (2)	—	—
Total debt	**$ 6,631**	**$ 6,451**

(1) Senior Notes, with the exception of Senior Floating Notes (as defined below), are subject to redemption at the Company's option in whole or in part at any time at the greater of either 100% of the principal amount plus accrued and unpaid interest to the redemption date or the discounted sum of the present values of the remaining scheduled payments of principal and interest and accrued and unpaid interest to the redemption date.

(2) The Company classifies any borrowings which have a maturity of twelve months or less at inception as short-term debt.

Debt maturities for each of the next five years and thereafter

($ in millions)	
2020	$ —
2021	250
2022	—
2023	750
2024	—
Thereafter	5,691
Total long-term debt principal	**$ 6,691**

On May 16, 2019, the Company repaid $317 million of 7.450% Senior Notes, Series B, at maturity.

On June 10, 2019, the Company issued $500 million of 3.850% Senior Notes due 2049. Interest on the Senior Notes is payable semi-annually in arrears on February 10 and August 10 of each year, beginning on February 10, 2020. The Senior Notes are redeemable at any time at the applicable redemption price prior to the maturity date. The proceeds of this issuance are used for general corporate purposes.

The Subordinated Debentures may be redeemed (i) in whole at any time or in part from time to time on or after January 15, 2023 for the 5.100% Subordinated Debentures and August 15, 2023 for the 5.750% Subordinated Debentures at their principal amount plus accrued and unpaid interest to, but excluding, the date of redemption; provided that if the Subordinated Debentures are not redeemed in whole, at least $25 million aggregate principal amount must remain outstanding, or (ii) in whole, but not in part, prior to January 15, 2023 for the 5.100% Subordinated Debentures and August 15, 2023 for the 5.750% Subordinated Debentures, within 90 days after the occurrence of certain tax and rating agency events, at their principal amount or, if greater, a make-whole redemption price, plus accrued and unpaid interest to, but excluding, the date of redemption. The 5.750% Subordinated Debentures have this make-whole redemption price provision only when a reduction of equity credit assigned by a rating agency has occurred.

Interest on the 5.100% Subordinated Debentures is payable quarterly at the stated fixed annual rate to January 14, 2023, or any earlier redemption date, and then at an annual rate equal to the three-month LIBOR plus 3.165%. Interest on the 5.750% Subordinated Debentures is payable semi-annually at the stated fixed annual rate to August 14, 2023, or any earlier redemption date, and then quarterly at an annual rate equal to the three-month LIBOR plus 2.938%. The Company may elect to defer payment of interest on the Subordinated Debentures for one or more consecutive interest periods that do not exceed five years. During a deferral period, interest will continue to accrue on the Subordinated Debentures at the then-applicable rate and deferred interest will compound on each interest payment date. If all deferred interest on the Subordinated Debentures is paid, the Company can again defer interest payments.

As of December 31, 2019, the Company had outstanding $500 million of Series A 6.500% Fixed-to-Floating Rate Junior Subordinated Debentures (“Debentures”). The scheduled maturity date for the Debentures is May 15, 2057 with a final maturity date of May 15, 2067. The Debentures may be redeemed (i) in whole or in part, at any time on or after May 15, 2037 at the principal amount plus accrued and unpaid interest to the date of redemption, or (ii) in certain circumstances, in whole or in part, prior to May 15, 2037 at the principal amount plus accrued and unpaid interest to the date of redemption or, if greater, a make-whole price.

Interest on the Debentures is payable semi-annually at the stated fixed annual rate to May 15, 2037, and then payable quarterly at an annual rate equal to the three-month LIBOR plus 2.120%. The Company may elect at one or more times to defer payment of interest on the Debentures for one or more consecutive interest periods that do not exceed 10 years. Interest compounds during such deferral periods at the rate in effect for each period. The interest deferral feature obligates the Company in certain circumstances to issue common stock or certain other types of securities if it cannot otherwise raise sufficient funds to make the required interest payments. The Company has reserved 75 million shares of its authorized and unissued common stock to satisfy this obligation.

The continuation of LIBOR on the current basis is not guaranteed after 2021 and LIBOR may be discontinued or modified by 2021. The Subordinated Debentures allow for the use of an alternative benchmark if LIBOR is no longer available.

The terms of the Company’s outstanding subordinated debentures prohibit the Company from declaring or paying any dividends or distributions on common or preferred stock or redeeming, purchasing, acquiring, or making liquidation payments on common stock or preferred stock if the Company has elected to defer interest payments on the subordinated debentures, subject to certain limited exceptions.

In connection with the issuance of the Debentures, the Company entered into a replacement capital covenant (“RCC”). This covenant was not intended for the benefit of the holders of the Debentures and could not be enforced by them. Rather, it was for the benefit of holders of one or more other designated series of the Company’s indebtedness (“covered debt”), currently the 5.750% Subordinated Debentures due 2053. Pursuant to the RCC, the Company has agreed that it will not repay, redeem, or purchase the Debentures on or before May 15, 2067 (or such earlier date on which the RCC terminates by its terms) unless, subject to certain limitations, the Company has received net cash proceeds in specified amounts from the sale of common stock or certain other qualifying securities. The promises and covenants contained in the RCC will not apply if (i) S&P upgrades the Company’s issuer credit rating to A or above, (ii) the Company redeems the Debentures due to a tax event, (iii) after notice of redemption has been given by the Company and a market disruption event occurs preventing the Company from raising proceeds in accordance with the RCC, or (iv) the Company repurchases or redeems up to 10% of the outstanding principal of the Debentures in anyone-year period, provided that no more than 25% will be so repurchased, redeemed or purchased in any ten-year period.

The RCC terminates in 2067. The RCC will terminate prior to its scheduled termination date if (i) the Debentures are no longer outstanding and the Company has fulfilled its obligations under the RCC or it is no longer applicable, (ii) the holders of a majority of the then-outstanding principal amount of the then-effective series of covered debt consent to agree to the termination of the RCC, (iii) the Company does not have any series of outstanding debt that is eligible to be treated as covered debt under the RCC, (iv) the Debentures are accelerated as a result of an event of default, (v) certain rating agency or change in control events occur, (vi) S&P, or any successor thereto, no longer assigns a solicited rating on senior debt issued or guaranteed by the Company, or (vii) the termination of the RCC would have no effect on the equity credit provided by S&P with respect to the Debentures. An event of default, as defined by the supplemental indenture, includes default in the payment of interest or principal and bankruptcy proceedings.

To manage short-term liquidity, the Company maintains a commercial paper program and a credit facility as a potential source of funds. These include a $1.00 billion unsecured revolving credit facility and a commercial paper program with a borrowing limit of $1.00 billion. In April 2016, the Company extended the maturity date of the facility to April 2021. This facility contains an increase provision that would allow up to an additional $500 million of borrowing. This facility has a financial covenant requiring the Company not to exceed a 37.5% debt to capitalization ratio as defined in the agreement. Although the right to borrow under the facility is not subject to a minimum rating requirement, the costs of maintaining the facility and borrowing under it are based on the ratings of the Company’s senior unsecured, unguaranteed long-term debt. The total amount outstanding at any point in time under the combination of the commercial paper program and the credit facility cannot exceed the amount that can be borrowed under the credit facility. No amounts were outstanding under the credit facility as of December 31, 2019 or 2018. The Company had no commercial paper outstanding as of December 31, 2019 or 2018.

The Company paid $312 million, $330 million and $332 million of interest on debt in 2019, 2018 and 2017, respectively.

The Company had $389 million and $260 million of investment-related debt that is reported in other liabilities and accrued expenses as of December 31, 2019 and 2018, respectively.

During 2018, the Company filed a universal shelf registration statement with the Securities and Exchange Commission ("SEC") that expires in 2021. The registration statement covers an unspecified amount of securities and can be used to issue debt securities, common stock, preferred stock, depositary shares, warrants, stock purchase contracts, stock purchase units and securities of trust subsidiaries.

Common stock The Company had 900 million shares of issued common stock of which 319 million shares were outstanding and 581 million shares were held in treasury as of December 31, 2019. In 2019, the Company acquired 16 million shares at an average cost of $110.37 and reissued 3 million net shares under equity incentive plans.

Preferred stock All outstanding preferred stock represents noncumulative perpetual preferred stock with a $1.00 par value per share and a liquidation preference of $25,000 per share.

Total preferred stock outstanding

	As of December 31,		Aggregate liquidation preference ($ in millions)			Dividend per depository share (1)			Aggregate dividend payment ($ in millions)		
	2019	2018	2019	2018	Dividend rate	2019	2018	2017	2019	2018	2017
Series A	11,500	11,500	$ 287.5	$ 287.5	5.625%	$ 1.41	$ 1.41	$ 1.41	$ 16	$ 16	$ 16
Series C	—	—	—	—	6.750%	—	1.69	1.69	—	26 (2)	26
Series D	—	5,400	—	135.0	6.625%	1.66	1.66	1.66	9 (2)	9	9
Series E	—	29,900	—	747.5	6.625%	1.66	1.66	1.66	49 (2)	49	49
Series F	—	10,000	—	250.0	6.250%	1.56	1.56	1.56	16 (2)	16	16
Series G	23,000	23,000	575.0	575.0	5.625%	1.41	1.41	—	32	18	—
Series H	46,000	—	1,150.0	—	5.100%	1.28	—	—	12	—	—
Series I	12,000	—	300.0	—	4.750%	1.19	—	—	—	—	—
Total	**92,500**	**79,800**	**$ 2,313**	**$ 1,995**					**$ 134** (2)	**$ 134** (2)	**$ 116**

(1) Each depositary share represents a 1/1,000th interest in a share of preferred stock.

(2) Excludes $37 million and $13 million in 2019 and 2018, respectively, related to original issuance costs in preferred stock dividends on the Consolidated Statements of Operations and Consolidated Statements of Shareholders' Equity as a result of the preferred stock redemptions.

On August 8, 2019, the Company issued 46,000 shares of 5.100% Fixed Rate Noncumulative Perpetual Preferred Stock, Series H, par value $1.00 per share and liquidation preference $25,000 per share, for gross proceeds of $1.15 billion.

On October 15, 2019, the Company redeemed all 5,400 shares of its Fixed Rate Noncumulative Perpetual Preferred Stock, Series D, par value $1.00 per share and liquidation preference $25,000 per share, all 29,900 shares of its Fixed Rate Noncumulative Perpetual Preferred Stock, Series E, par value $1.00 per share and liquidation preference $25,000 per share, all 10,000 shares of its Fixed Rate Noncumulative Perpetual Preferred Stock, Series F, par value $1.00 per share and liquidation preference $25,000 per share, and the corresponding depositary shares. The total redemption payment was $1.13 billion, using the proceeds from the issuance of the Fixed Rate Noncumulative Perpetual Preferred Stock, Series H. In 2019, the Company recognized $37 million of original issuance costs in preferred stock dividends on the Consolidated Statements of Operations and Consolidated Statements of Shareholders' Equity as a result of the preferred stock redemptions.

On November 8, 2019, the Company issued 12,000 shares of 4.750% Fixed Rate Noncumulative Perpetual Preferred Stock, Series I, par value $1.00 per share and liquidation preference $25,000 per share, for gross proceeds of $300 million.

Subsequent event On January 15, 2020, the Company redeemed all 11,500 shares of its Fixed Rate Noncumulative Preferred Stock, Series A, par value $1.00 per share and liquidation preference $25,000 per share and the corresponding depositary shares. The total redemption payment was $288 million, using the proceeds from the issuance of the Fixed Rate Noncumulative Perpetual Preferred Stock, Series I. In the first quarter of 2020, the Company will recognize $10 million of original issuance costs in preferred stock dividends on the Consolidated Statements of Operations and Consolidated Statements of Shareholders' Equity as a result of the preferred stock redemption.

The preferred stock ranks senior to the Company's common stock with respect to the payment of dividends and liquidation rights. The Company will pay dividends on the preferred stock on a noncumulative basis only when, as and if declared by the Company's board of directors (or a duly authorized committee of the board) and to the extent that the Company has legally available funds to pay dividends. If dividends are declared on the preferred stock, they will be payable quarterly in arrears at an annual fixed rate. Dividends on the preferred stock are not cumulative. Accordingly, in the event dividends are not declared on the preferred stock for payment on any dividend payment date, then those dividends will cease to be payable. If the Company has not declared a dividend before the dividend payment date for any dividend period, the Company has no obligation to pay dividends for that dividend period, whether or not dividends are declared for any future dividend period. No dividends may be paid or declared on the Company's common stock and no shares of the Company's common stock may be repurchased unless the full dividends for the latest completed dividend period on the preferred stock have been declared and paid or provided for.

The Company is prohibited from declaring or paying dividends on its Series G preferred stock in excess of the amount of net proceeds from an issuance of common stock taking place within 90 days before a dividend declaration date if, on that dividend declaration date, either: (1) the risk-based capital ratios of the largest U.S. property-casualty insurance subsidiaries that collectively account for 80% or more of the net written premiums of U.S. property-casualty insurance business on a weighted average basis were less than 175% of their company action level risk-based capital as of the end of the most recent year; or (2) consolidated net income for the four-quarter period ending on the preliminary quarter end test date (the quarter that is two quarters prior to the most recently completed quarter) is zero or negative and consolidated shareholders' equity (excluding AOCI, and subject to certain other adjustments relating to changes in U.S. GAAP) as of each of the preliminary quarter test date and the most recently completed quarter has declined by 20% or more from its level as measured at the end of the benchmark quarter (the date that is ten quarters prior to the most recently completed quarter). If the Company fails to satisfy either of these tests on any dividend declaration date, the restrictions on dividends will continue until the Company is able again to satisfy the test on a dividend declaration date. In addition, in the case of a restriction arising under (2) above, the restrictions on dividends will continue until consolidated shareholders' equity (excluding AOCI, and subject to certain other adjustments relating to changes in U.S. GAAP) has increased, or has declined by less than 20%, in either case as compared to its level at the end of the benchmark quarter for each dividend payment date as to which dividend restrictions were imposed.

The preferred stock does not have voting rights except with respect to certain changes in the terms of the preferred stock, in the case of certain dividend nonpayments, certain other fundamental corporate events, mergers or consolidations and as otherwise provided by law. If and when dividends have not been declared and paid in full for at least six quarterly dividend periods or their equivalent (whether or not consecutive), the authorized number of directors then constituting our board of directors will be increased by two. The holders of the preferred stock, together with the holders of all other affected classes and series of voting parity stock, voting as a single class, will be entitled to elect the two additional members of the board of directors of the Company, subject to certain conditions. The board of directors shall at no time have more than two preferred stock directors.

The preferred stock is perpetual and has no maturity date. The preferred stock is redeemable at the Company's option in whole or in part, on or after April 15, 2023 for Series G, October 15, 2024 for Series H and January 15, 2025 for Series I at a redemption price of $25,000 per share of preferred stock, plus declared and unpaid dividends. Prior to April 15, 2023 for Series G, October 15, 2024 for Series H and January 15, 2025 for Series I, the preferred stock is redeemable at the Company's option, in whole but not in part, within 90 days of the occurrence of certain regulatory capital event at a redemption price equal to $25,000 or $25,500 per share or a certain rating agency event at a redemption price equal to $25,000 or $25,500 per share, plus declared and unpaid dividends for Series G and for Series H and I, respectively.

Note 13 Company Restructuring

The Company undertakes various programs to reduce expenses. These programs generally involve a reduction in staffing levels, and in certain cases, office closures. Restructuring and related charges primarily include the following costs related to these programs:

- *Employee* - severance and relocation benefits
- *Exit* - contract termination penalties

The expenses related to these activities are included in the Consolidated Statements of Operations as restructuring and related charges, and totaled $41 million, $67 million and $96 million in 2019, 2018 and 2017, respectively. Restructuring expenses in 2019 primarily related to realignment of certain employees to centralized talent centers as well as claims reorganization initiatives.

Restructuring activity during the period

($ in millions)	Employee costs	Exit costs	Total liability
Restructuring liability as of December 31, 2018	$ 29	$ 15	$ 44
Expense incurred	43	7	50
Adjustments to liability	(9)	—	(9)
Payments and non-cash pension settlements	(49)	(14)	(63)
Restructuring liability as of December 31, 2019	**$ 14**	**$ 8**	**$ 22**

As of December 31, 2019, the cumulative amount incurred to date for active programs related to employee severance, relocation benefits and post-exit rent expenses totaled $112 million for employee costs and $12 million for exit costs.

Note 14 Commitments, Guarantees and Contingent Liabilities

Shared markets and state facility assessments

The Company is required to participate in assigned risk plans, reinsurance facilities and joint underwriting associations in various states that provide insurance coverage to individuals or entities that otherwise are unable to purchase such coverage from private insurers.

The Company routinely reviews its exposure to assessments from these plans, facilities and government programs. Underwriting results related to these arrangements, which tend to be adverse, have been immaterial to the Company's results of operations. Because of the Company's participation, it may be exposed to losses that surpass the capitalization of these facilities and/or assessments from these facilities.

Florida Citizens Castle Key is subject to assessments from Citizens Property Insurance Corporation in the state of Florida ("FL Citizens"), which was initially created by the state of Florida to provide insurance to property owners unable to obtain coverage in the private insurance market. FL Citizens, at the discretion and direction of its Board of Governors ("FL Citizens Board"), can levy a regular assessment on assessable insurers and assessable insureds for a deficit in any calendar year up to a maximum of the greater of: 2% of the projected deficit or 2% of the aggregate statewide direct written premium for the prior calendar year. The base of assessable insurers includes all property and casualty premiums in the state, except workers' compensation, medical malpractice, accident and health insurance and policies written under the NFIP. An insurer may recoup a regular assessment through a surcharge to policyholders. In order to recoup this assessment, an insurer must file for a policy surcharge with the FL OIR at least fifteen days prior to imposing the surcharge on policies. If a deficit remains after the regular assessment, FL Citizens can also levy emergency assessments in the current and subsequent years. Companies are required to collect the emergency assessments directly from residential property policyholders and remit to FL Citizens as collected. Currently, the emergency assessment is zero for all policies issued or renewed on or after July 1, 2015.

Louisiana Citizens Louisiana Citizens Property Insurance Corporation ("LA Citizens") can levy a regular assessment on participating companies for a deficit in any calendar year up to a maximum of the greater of 10% of the calendar year deficit or 10% of Louisiana direct property premiums industry-wide for the prior calendar year. If the plan year deficit exceeds the amount that can be recovered through Regular Assessments, LA Citizens may fund the remaining deficit by issuing revenue assessment bonds in the capital markets. LA Citizens then declares Emergency Assessments each year to provide debt service on the bonds until they are retired. Companies writing assessable lines must surcharge their policyholders Emergency Assessments in the percentage established annually by LA Citizens and must remit amounts collected to the bond trustee on a quarterly basis. Emergency assessments to pay off bonds issued in 2007 for the hurricanes of 2005 will continue until 2025.

Facilities such as FL Citizens and LA Citizens are generally designed so that the ultimate cost is borne by policyholders; however, the exposure to assessments from these facilities and the availability of recoupments or premium rate increases may not offset each other in the Company's financial statements. Moreover, even if they do offset each other, they may not offset each other in financial statements for the same fiscal period due to the ultimate timing of the assessments and recoupments or premium rate increases, as well as the possibility of policies not being renewed in subsequent years.

California Earthquake Authority Exposure to certain potential losses from earthquakes in California is limited by the Company's participation in the California Earthquake Authority ("CEA"), which provides insurance for California earthquake losses. The CEA is a privately-financed, publicly-managed state agency created to provide insurance coverage for earthquake damage. Insurers selling homeowners insurance in California are required to offer earthquake insurance to their customers either through their company or by participation in the CEA. The Company's homeowners policies continue to include coverages for losses caused by explosions, theft, glass breakage and fires following an earthquake, which are not underwritten by the CEA.

As of October 31, 2019, the CEA's capital balance was approximately $6.01 billion. Should losses arising from an earthquake cause a deficit in the CEA, an additional $721 million would be obtained from the proceeds of revenue bonds the CEA may issue, an existing $8.26 billion reinsurance layer, $1.0 billion from policyholders surcharge, and finally, if needed, assessments on participating insurance companies. Participating insurers are required to pay an assessment, currently estimated not to exceed $1.66 billion, if the capital of the CEA falls below $350 million. Within the limits previously described, the assessment could be intended to restore the CEA's capital to a level of $350 million. There is no provision that allows insurers to recover assessments through a premium surcharge or other mechanism. The CEA's projected aggregate claim paying capacity is $17.65 billion as of October 31, 2019 and if an event were to result in claims greater than its capacity, affected policyholders may be paid a prorated portion of their covered losses, paid on an installment basis, or no payments may be made if the claim paying capacity of the CEA is insufficient.

All future assessments on participating CEA insurers are based on their CEA insurance market share as of December 31 of the preceding year. As of December 31, 2018, the Company's market share was 9.8%. The Company does not expect its market share to materially change. At this level, the Company's maximum possible CEA assessment would be $162 million during 2020. These amounts are re-evaluated by the board of directors of the CEA on an annual basis. Accordingly, assessments from the CEA for a particular quarter or annual period may be material to the results of operations and cash flows, but not the financial position of the Company. Management believes the Company's exposure to earthquake losses in California has been significantly reduced as a result of its participation in the CEA.

Texas Windstorm Insurance Association The Company participates as a member of the Texas Windstorm Insurance Association ("TWIA"), which provides wind and hail property coverage to coastal risks unable to procure coverage in the voluntary market. Wind and hail coverage is written on a TWIA-issued policy. TWIA follows a funding structure first utilizing currently available funds set aside from current and prior years. Under the current law, to the extent losses exceed premiums received from policyholders, TWIA utilizes a combination of reinsurance, TWIA issued securities, as well as member and policyholder assessments to fund loss payments.

During 2019, the TWIA Board announced assessments primarily related to Hurricane Harvey for which the Company's share was $12 million. These costs were recorded in property and casualty insurance claims and claims expense as catastrophe losses on the Consolidated Statements of Operations. Any assessments from TWIA for a particular quarter or annual period may be material to the results of operations and cash flows, but not to the financial position of the Company.

Texas Fair Plan Association The Company participates as a member of the Texas Fair Plan Association ("FAIR Plan"), which provides residential property insurance to inland areas designated as underserved by the Commissioner of Insurance and the applicant(s) are unable to procure coverage in the voluntary market. The FAIR Plan issues insurance policies, like an insurance company, and it also functions as a pooling mechanism that allocates premiums, claims and expenses back to the insurance industry. As a result of the losses incurred related to Hurricane Harvey, in 2017 the FAIR Plan Board unanimously voted to approve its first ever member assessment of which the Company's share was $8 million based on total direct premium written in Texas. Insurers are permitted to recover the assessment through either a premium surcharge applied to existing customers over a three-year period or increased rates, but the ability to fully recover the assessment may be impacted by market conditions or other factors.

North Carolina Joint Underwriters Association The North Carolina Joint Underwriters Association ("NCJUA") was created to provide property insurance for properties (other than the state's beach and coastal areas) that insurers are not otherwise willing to insure. All insurers licensed to write property insurance in North Carolina are members of the NCJUA. Premiums, losses and expenses of the NCJUA are shared by the member companies in proportion to their respective North Carolina property insurance writings. Member companies participate in plan deficits or surpluses based on their participation ratios, which are determined annually. The Company had a $5 million receivable from the NCJUA at December 31, 2019 representing our participation in the NCJUA's deficit of $29 million for all open years.

North Carolina Insurance Underwriting Association The North Carolina Insurance Underwriting Association ("NCIUA") provides windstorm and hail coverage as well as homeowners policies for properties located in the state's beach and coastal areas that insurers are not otherwise willing to insure. All insurers licensed to write residential and commercial property insurance in North Carolina are members of the NCIUA. Members are assessed in proportion to their North Carolina residential and commercial property insurance writings, which is determined annually and varies by coverage, for plan deficits. As of December 31, 2019, the NCIUA had a surplus of $439 million. No member company is entitled to the distribution of any portion of the Association's surplus. The Company does not recognize any interest related to this surplus. Legislation in 2009 capped insurers' assessments for losses incurred in any calendar year at $1.00 billion. Subsequent to an industry assessment of $1.00 billion, if the plan continues to require funding, it may authorize insurers to assess a 10% catastrophe recovery charge on each property insurance policy statewide to be remitted to the plan.

Other programs The Company is also subject to assessments by the NCRF and the FHCF, which are described in Note 10.

Guaranty funds

Under state insurance guaranty fund laws, insurers doing business in a state can be assessed, up to prescribed limits, for certain obligations of insolvent insurance companies to policyholders and claimants. Amounts assessed to each company are typically related to its proportion of business written in each state. The Company's policy is to accrue assessments when the entity for which the insolvency relates has met its state of domicile's statutory definition of insolvency, the amount of the loss is reasonably estimable and the related premium upon which the assessment is based is written. In most states, the definition is met with a declaration of financial insolvency by a court of competent jurisdiction. In certain states there must also be a final order of liquidation. Since most states allow a credit against premium or other state related taxes for assessments, an asset is recorded based on paid and accrued assessments for the amount the Company expects to recover on the respective state's tax return and is realized over the period allowed by each state. As of December 31, 2019 and 2018, the liability balance included in other liabilities and accrued expenses was $13 million and $12 million, respectively. The related premium tax offsets included in other assets were $15 million and $16 million as of December 31, 2019 and 2018, respectively.

Guarantees

In the normal course of business, the Company provides standard indemnifications to contractual counterparties in connection with numerous transactions, including acquisitions and divestitures. The types of indemnifications typically provided include indemnifications for breaches of representations and warranties, taxes and certain other liabilities, such as third-party lawsuits. The indemnification clauses are often standard contractual terms and are entered into in the normal course of business based on an assessment that the risk of loss would be remote. The terms of the indemnifications vary in duration and nature. In many cases, the maximum obligation is not explicitly stated and the contingencies triggering the obligation to indemnify have not occurred and are not expected to occur. Consequently, the maximum amount of the obligation under such indemnifications is not determinable. Historically, the Company has not made any material payments pursuant to these obligations.

Related to the sale of Lincoln Benefit Life Company on April 1, 2014, ALIC agreed to indemnify Resolution Life Holdings, Inc. in connection with certain representations, warranties and covenants of ALIC, and certain liabilities specifically excluded from the transaction, subject to specific contractual limitations regarding ALIC's maximum obligation. Management does not believe these indemnifications will have a material effect on results of operations, cash flows or financial position of the Company.

The aggregate liability balance related to all guarantees was not material as of December 31, 2019.

Regulation and compliance

The Company is subject to extensive laws, regulations, administrative directives, and regulatory actions. From time to time, regulatory authorities or legislative bodies seek to influence and restrict premium rates, require premium refunds to policyholders, require reinstatement of terminated policies, prescribe rules or guidelines on how affiliates compete in the marketplace, restrict the ability of insurers to cancel or non-renew policies, require insurers to continue to write new policies or limit their ability to write new policies, limit insurers' ability to change coverage terms or to impose underwriting standards, impose additional regulations regarding agency and broker compensation, regulate the nature of and amount of investments, impose fines and penalties for unintended errors or mistakes, impose additional regulations regarding cybersecurity and privacy, and otherwise expand overall regulation of insurance products and the insurance industry. In addition, the Company is subject to laws and regulations administered and enforced by federal agencies, international agencies, and other organizations, including but not limited to the SEC, the Financial Industry Regulatory Authority, the U.S. Equal Employment Opportunity Commission, and the U.S. Department of Justice. The Company has established procedures and policies to facilitate compliance with laws and regulations, to foster prudent business operations, and to support financial reporting. The Company routinely reviews its practices to validate compliance with laws and regulations and with internal procedures and policies. As a result of these reviews, from time to time the Company may decide to modify some of its procedures and policies. Such modifications, and the reviews that led to them, may be accompanied by payments being made and costs being incurred. The ultimate changes and eventual effects of these actions on the Company's business, if any, are uncertain.

Legal and regulatory proceedings and inquiries

The Company and certain subsidiaries are involved in a number of lawsuits, regulatory inquiries, and other legal proceedings arising out of various aspects of its business.

Background These matters raise difficult and complicated factual and legal issues and are subject to many uncertainties and complexities, including the underlying facts of each matter; novel legal issues; variations between jurisdictions in which matters are being litigated, heard, or investigated; changes in assigned judges; differences or developments in applicable laws and judicial interpretations; judges reconsidering prior rulings; the length of time before many of these matters might be resolved by settlement, through litigation, or otherwise; adjustments with respect to anticipated trial schedules and other proceedings; developments in similar actions against other companies; the fact that some of the lawsuits are putative class actions in which a class has not been certified and in which the purported class may not be clearly defined; the fact that some of the lawsuits involve multi-state class actions in which the applicable law(s) for the claims at issue is in dispute and therefore unclear; and the challenging legal environment faced by corporations and insurance companies.

The outcome of these matters may be affected by decisions, verdicts, and settlements, and the timing of such decisions, verdicts, and settlements, in other individual and class action lawsuits that involve the Company, other insurers, or other entities and by other legal, governmental, and regulatory actions that involve the Company, other insurers, or other entities. The outcome may also be affected by future state or federal legislation, the timing or substance of which cannot be predicted.

In the lawsuits, plaintiffs seek a variety of remedies which may include equitable relief in the form of injunctive and other remedies and monetary relief in the form of contractual and extra-contractual damages. In some cases, the monetary damages sought may include punitive or treble damages. Often specific information about the relief sought, such as the amount of damages, is not available because plaintiffs have not requested specific relief in their pleadings. When specific monetary demands are made, they are often set just below a state court jurisdictional limit in order to seek the maximum amount available in state court, regardless of the specifics of the case, while still avoiding the risk of removal to federal court. In Allstate's experience, monetary demands in pleadings bear little relation to the ultimate loss, if any, to the Company.

In connection with regulatory examinations and proceedings, government authorities may seek various forms of relief, including penalties, restitution, and changes in business practices. The Company may not be advised of the nature and extent of relief sought until the final stages of the examination or proceeding.

Accrual and disclosure policy The Company reviews its lawsuits, regulatory inquiries, and other legal proceedings on an ongoing basis and follows appropriate accounting guidance when making accrual and disclosure decisions. The Company establishes accruals for such matters at management's best estimate when the Company assesses that it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company does not establish accruals for such matters when the Company does not believe both that it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The Company's assessment of whether a loss is reasonably possible, or probable, is based on its assessment of the ultimate outcome of the matter following all appeals. The Company does not include potential recoveries in its estimates of reasonably possible or probable losses. Legal fees are expensed as incurred.

The Company continues to monitor its lawsuits, regulatory inquiries, and other legal proceedings for further developments that would make the loss contingency both probable and estimable, and accordingly accruable, or that could affect the amount of accruals that have been previously established. There may continue to be exposure to loss in excess of any amount accrued. Disclosure of the nature and amount of an accrual is made when there have been sufficient legal and factual developments such that the Company's ability to resolve the matter would not be impaired by the disclosure of the amount of accrual.

When the Company assesses it is reasonably possible or probable that a loss has been incurred, it discloses the matter. When it is possible to estimate the reasonably possible loss or range of loss above the amount accrued, if any, for the matters disclosed, that estimate is aggregated and disclosed. Disclosure is not required when an estimate of the reasonably possible loss or range of loss cannot be made.

For certain of the matters described below in the "Claims related proceedings" and "Other proceedings" subsections, the Company is able to estimate the reasonably possible loss or range of loss above the amount accrued, if any. In determining whether it is possible to estimate the reasonably possible loss or range of loss, the Company reviews and evaluates the disclosed matters, in conjunction with counsel, in light of potentially relevant factual and legal developments.

These developments may include information learned through the discovery process, rulings on dispositive motions, settlement discussions, information obtained from other sources, experience from managing these and other matters, and other rulings by courts, arbitrators or others. When the Company possesses sufficient appropriate information to develop an estimate of the reasonably possible loss or range of loss above the amount accrued, if any, that estimate is aggregated and disclosed below. There may be other disclosed matters for which a loss is probable or reasonably possible, but such an estimate is not possible. Disclosure of the estimate of the reasonably possible loss or range of loss above the amount accrued, if any, for any individual matter would only be considered when there have been sufficient legal and factual developments such that the Company's ability to resolve the matter would not be impaired by the disclosure of the individual estimate.

The Company currently estimates that the aggregate range of reasonably possible loss in excess of the amount accrued, if any, for the disclosed matters where such an estimate is possible is zero to $75 million, pre-tax. This disclosure is not an indication of expected loss, if any. Under accounting guidance, an event is "reasonably possible" if "the chance of the future event or events occurring is more than remote but less than likely" and an event is "remote" if "the chance of the future event or events occurring is slight." This estimate is based upon currently available information and is subject to significant judgment and a variety of assumptions, and known and unknown uncertainties. The matters underlying the estimate will change from time to time, and actual results may vary significantly from the current estimate. The estimate does not include matters or losses for which an estimate is not possible. Therefore, this estimate represents an estimate of possible loss only for certain matters meeting these criteria. It does not represent the Company's maximum possible loss exposure. Information is provided below regarding the nature of all of the disclosed matters and, where specified, the amount, if any, of plaintiff claims associated with these loss contingencies.

Due to the complexity and scope of the matters disclosed in the “Claims related proceedings” and “Other proceedings” subsections below and the many uncertainties that exist, the ultimate outcome of these matters cannot be predicted and in the Company’s judgment, a loss, in excess of amounts accrued, if any, is not probable. In the event of an unfavorable outcome in one or more of these matters, the ultimate liability may be in excess of amounts currently accrued, if any, and may be material to the Company’s operating results or cash flows for a particular quarterly or annual period. However, based on information currently known to it, management believes that the ultimate outcome of all matters described below, as they are resolved over time, is not likely to have a material effect on the financial position of the Company.

Claims related proceedings The Company is managing various disputes in Florida that raise challenges to the Company’s practices, processes, and procedures relating to claims for personal injury protection benefits under Florida auto policies. Medical providers continue to pursue litigation under various theories that challenge the amounts that the Company pays under the personal injury protection benefits. There are pending putative class actions and litigation involving individual plaintiffs. The Company is vigorously asserting both procedural and substantive defenses to these lawsuits.

Other proceedings The stockholder derivative actions described below are disclosed pursuant to SEC disclosure requirements for these types of matters. The putative class action alleging violations of the federal securities laws is disclosed because it involves similar allegations to those made in the stockholder derivative actions.

Biefeldt / IBEW Consolidated Action. Two separately filed stockholder derivative actions have been consolidated into a single proceeding that is pending in the Circuit Court for Cook County, Illinois, Chancery Division. The original complaint in the first-filed of those actions, *Biefeldt v. Wilson, et al*., was filed on August 3, 2017, in that court by a plaintiff alleging that she is a stockholder of the Company. On June 29, 2018, the court granted defendants’ motion to dismiss that complaint for failure to make a pre-suit demand on the Allstate Board before instituting the suit, but granted the plaintiff permission to file an amended complaint. The original complaint in *IBEW Local No. 98 Pension Fund v. Wilson, et al*, was filed on April 12, 2018, in the same court by another plaintiff alleging to be a stockholder of the Company. After the court issued its dismissal decision in the *Biefeldt* action, the plaintiffs agreed to consolidate the two actions and filed a consolidated amended complaint naming the Company’s chairman, president and chief executive officer, its former president, and certain present or former members of the board of directors. In that complaint, the plaintiffs allege that the directors and officer defendants breached their fiduciary duties to the Company in connection with allegedly material misstatements or omissions concerning the Company’s automobile insurance claim frequency statistics and the reasons for a claim frequency increase for Allstate brand auto insurance between October 2014 and August 3, 2015. The factual allegations are substantially similar to those at issue in *In re The Allstate Corp. Securities Litigation*. The plaintiffs further allege that a senior officer and several outside directors engaged in stock option exercises allegedly while in possession of material nonpublic information. The plaintiffs seek, on behalf of the Company, an unspecified amount of damages and various forms of equitable relief. Defendants moved to dismiss the consolidated complaint on September 24, 2018 for failure to make a demand on the Allstate Board. On May 14, 2019, the court granted the defendants’ motion to dismiss the complaint, but allowed the plaintiffs leave to file a second consolidated amended complaint by June 11, 2019. On June 3, 2019, the plaintiffs filed a motion to stay the action, or in the alternative defer the filing of the second consolidated amended complaint, to allow the plaintiffs to conduct an inspection of the Company’s books and records. The parties reached a compromise by which the Company produced certain board materials and the deadline for the plaintiffs to file the second consolidated amended complaint was extended. On September 17, 2019, the plaintiffs filed a second consolidated amended complaint. Defendants moved to dismiss the complaint on November 1, 2019 for failure to make a demand on the Allstate Board.

In *Sundquist v. Wilson, et al*, another plaintiff alleging to be a stockholder of the Company filed a stockholder derivative complaint in the United States District Court for the Northern District of Illinois on May 21, 2018. The plaintiff seeks, on behalf of the Company, an unspecified amount of damages and various forms of equitable relief. The complaint names as defendants the Company’s chairman, president and chief executive officer, its former president, its former chief financial officer, who is now the Company’s vice chairman, and certain present or former members of the board of directors.

The complaint alleges breaches of fiduciary duty based on allegations similar to those asserted in *In re The Allstate Corp. Securities Litigation* as well as state law “misappropriation” claims based on stock option transactions by the Company’s chairman, president and chief executive officer, its former chief financial officer, who is now the Company’s vice chairman, and certain members of the board of directors. Defendants moved to dismiss and/or stay the complaint on August 7, 2018. On December 4, 2018, the court granted the defendants’ motion and stayed the case pending the resolution of the consolidated *Biefeldt/IBEW* matter.

Mims v. Wilson, et al., is an additional stockholder derivative action filed on February 12, 2020 in the United States District Court for the Northern District of Illinois. The plaintiff seeks, on behalf of the Company, an unspecified amount of damages and various forms of equitable relief. The complaint names as defendants the Company’s chairman, president and chief executive officer, its former president, its former chief financial officer, who is now the Company’s vice chairman, and certain present or former members of the board of directors. The complaint alleges breaches of fiduciary duty and unjust enrichment based on allegations similar to those asserted in *In re The Allstate Corp. Securities Litigation*.

In re The Allstate Corp. Securities Litigation is a certified class action filed on November 11, 2016 in the United States District Court for the Northern District of Illinois against the Company and two of its officers asserting claims under the federal securities laws. Plaintiffs allege that they purchased Allstate common stock during the class period and suffered damages as the result of the conduct alleged. Plaintiffs seek an unspecified amount of damages, costs, attorney's fees, and other relief as the court deems appropriate. Plaintiffs allege that the Company and certain senior officers made allegedly material misstatements or omissions concerning claim frequency statistics and the reasons for a claim frequency increase for Allstate brand auto insurance between October 2014 and August 3, 2015.

Plaintiffs' further allege that a senior officer engaged in stock option exercises during that time allegedly while in possession of material nonpublic information about Allstate brand auto insurance claim frequency. The Company, its chairman, president and chief executive officer, and its former president are the named defendants. After the court denied their motion to dismiss on February 27, 2018, defendants answered the complaint, denying plaintiffs' allegations that there was any misstatement or omission or other misconduct. On June 22, 2018, plaintiffs filed their motion for class certification, which was fully briefed as of January 11, 2019. On September 12, 2018, the court allowed the lead plaintiffs to amend their complaint to add the City of Providence Employee Retirement System as a proposed class representative.

The amended complaint was filed the same day. On March 26, 2019, the court granted plaintiffs' motion for class certification and certified a class consisting of all persons who purchased Allstate common stock between October 29, 2014 and August 3, 2015. On April 9, 2019, defendants filed with the Seventh Circuit Court of Appeals a petition for permission to appeal this ruling pursuant to Federal Rule of Civil Procedure 23 (f) and the Court of Appeals granted that petition on April 25, 2019. The appeal was fully briefed as of July 31, 2019, and the Seven Circuit Court of Appeals heard oral argument on September 18, 2019.

Asbestos and environmental

Management believes its net loss reserves for asbestos, environmental and other discontinued lines exposures are appropriately established based on available facts, technology, laws and regulations. However, establishing net loss reserves for asbestos, environmental and other discontinued lines claims is subject to uncertainties that are much greater than those presented by other types of claims. The ultimate cost of losses may vary materially from recorded amounts, which are based on management's best estimate. Among the complications are lack of historical data, long reporting delays, uncertainty as to the number and identity of insureds with potential exposure and unresolved legal issues regarding policy coverage; unresolved legal issues regarding the determination, availability and timing of exhaustion of policy limits; plaintiffs' evolving and expanding theories of liability; availability and collectability of recoveries from reinsurance; retrospectively determined premiums and other contractual agreements; estimates of the extent and timing of any contractual liability; the impact of bankruptcy protection sought by various asbestos producers and other asbestos defendants; and other uncertainties.

There are also complex legal issues concerning the interpretation of various insurance policy provisions and whether those losses are covered, or were ever intended to be covered, and could be recoverable through retrospectively determined premium, reinsurance or other contractual agreements. Courts have reached different and sometimes inconsistent conclusions as to when losses are deemed to have occurred and which policies provide coverage; what types of losses are covered; whether there is an insurer obligation to defend; how policy limits are determined; how policy exclusions and conditions are applied and interpreted; and whether clean-up costs represent insured property damage. Further, insurers and claims administrators acting on behalf of insurers are increasingly pursuing evolving and expanding theories of reinsurance coverage for asbestos and environmental losses. Adjudication of reinsurance coverage is predominately decided in confidential arbitration proceedings which may have limited precedential or predictive value further complicating management's ability to estimate probable loss for reinsured asbestos and environmental claims. Management believes these issues are not likely to be resolved in the near future, and the ultimate costs may vary materially from the amounts currently recorded resulting in material changes in loss reserves. In addition, while the Company believes that improved actuarial techniques and databases have assisted in its ability to estimate asbestos, environmental, and other discontinued lines net loss reserves, these refinements may subsequently prove to be inadequate indicators of the extent of probable losses. Due to the uncertainties and factors described above, management believes it is not practicable to develop a meaningful range for any such additional net loss reserves that may be required.

Note 15 Income Taxes

The Company and its domestic subsidiaries file a consolidated federal income tax return. Tax liabilities and benefits realized by the consolidated group are allocated as generated by the respective entities.

Deferred income taxes result from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements that will result in taxable or deductible amounts in future years. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in years in which those temporary differences are expected to be recovered or settled. Deferred tax assets and liabilities are adjusted through income tax expense as changes in tax laws or rates are enacted.

Regulatory tax examinations The Internal Revenue Service ("IRS") is currently examining the Company's 2015 and 2016 federal income tax returns and is expected to complete its exam by mid-2020. The 2017 and 2018 audit cycle is expected to begin mid-2020. The 2013 and 2014 federal income tax return audit is complete through the exam phase and the Company has reached a tentative agreement on one outstanding issue, pending final review by the Joint Committee of Taxation expected in 2020. Any adjustments that may result from IRS examinations of the Company's tax returns are not expected to have a material effect on the consolidated financial statements.

Unrecognized tax benefits The Company recognizes tax positions in the consolidated financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the consolidated financial statements.

Reconciliation of the change in the amount of unrecognized tax benefits

($ in millions)	For the years ended December 31, 2019	2018	2017
Balance – beginning of year	$ 70	$ 55	$ 10
Increase for tax positions taken in a prior year	—	3	34
Increase for tax positions taken in the current year	—	12	11
Balance – end of year	**$ 70**	**$ 70**	**$ 55**

The Company believes it is reasonably possible that a decrease of up to$58 million in unrecognized tax benefits may occur within the next twelve months due to IRS settlements.

Components of the deferred income tax assets and liabilities

($ in millions)	As of December 31, 2019	2018
Deferred tax assets		
Unearned premium reserves	$ 642	$ 594
Pension	197	192
Accrued compensation	147	145
Discount on loss reserves	78	67
Other postretirement benefits	49	45
Net operating loss carryover	26	50
Other assets	54	57
Total deferred tax assets	**1,193**	**1,150**
Deferred tax liabilities		
DAC	(847)	(854)
Unrealized net capital gains	(507)	(2)
Investments	(567)	(278)
Life and annuity reserves	(222)	(194)
Intangible assets	(98)	(145)
Other liabilities	(106)	(102)
Total deferred tax liabilities	**(2,347)**	**(1,575)**
Net deferred tax liability	**$ (1,154)**	**$ (425)**

Although realization is not assured, management believes it is more likely than not that the deferred tax assets will be realized based on the Company's assessment that the deductions ultimately recognized for tax purposes will be fully utilized. As of December 31, 2019, the Company has U.S. federal and foreign net operating loss carryforwards of $93 million and $29 million, respectively.

The provisions of the Tax Cuts and Jobs Act of 2017 eliminated the 20-year carryforward period and made it indefinite for federal net operating losses generated in tax years after December 31, 2017. For such amounts generated prior to 2018, the 20-year carryforward period continues to apply.

Components of the net operating loss carryforwards as of December 31, 2019

($ in millions)	20-Year Carryforward Expires in 2025-2037	Indefinite Carryforward Period	Total
US Federal	$ 72	$ 21	$ 93
Foreign	—	29	29
Total	**$ 72**	**$ 50**	**$ 122**

Components of income tax expense

($ in millions)	For the years ended December 31, 2019	2018	2017
Current	$ 991	$ 704	$ 1,018
Deferred	251	(236)	(23)
Total income tax expense	**$ 1,242**	**$ 468**	**$ 995**

The Company paid income taxes of $648 million, $731 million and $968 million in 2019, 2018 and 2017, respectively.

The Company had a current income tax payable of$124 million and a current tax receivable of$124 million as of December 31, 2019 and 2018, respectively.

Reconciliation of the statutory federal income tax rate to the effective income tax rate

($ in millions)	For the years ended December 31, 2019		2018		2017	
Income before income taxes	$ 6,089		$ 2,628		$ 4,549	
Statutory federal income tax rate on income from operations	1,279	21.0 %	552	21.0 %	1,592	35.0 %
Tax credits	(33)	(0.5)	(34)	(1.3)	(59)	(1.3)
Share-based payments	(24)	(0.4)	(16)	(0.6)	(63)	(1.4)
Tax-exempt income	(27)	(0.4)	(24)	(0.9)	(32)	(0.7)
State income taxes	41	0.7	27	1.0	21	0.5
Tax Legislation benefit	—	—	(29)	(1.1)	(509)	(11.2)
Non-deductible goodwill impairment	—	—	—	—	44	1.0
Other	6	—	(8)	(0.3)	1	—
Effective income tax rate on income from operations	**$ 1,242**	**20.4 %**	**$ 468**	**17.8 %**	**$ 995**	**21.9 %**

Note 16 Statutory Financial Information and Dividend Limitations

Allstate's domestic property and casualty and life insurance subsidiaries prepare their statutory-basis financial statements in conformity with accounting practices prescribed or permitted by the insurance department of the applicable state of domicile. Prescribed statutory accounting practices include a variety of publications of the National Association of Insurance Commissioners ("NAIC"), as well as state laws, regulations and general administrative rules. Permitted statutory accounting practices encompass all accounting practices not so prescribed.

All states require domiciled insurance companies to prepare statutory-basis financial statements in conformity with the NAIC Accounting Practices and Procedures Manual, subject to any deviations prescribed or permitted by the applicable insurance commissioner and/or director. Statutory accounting practices differ from GAAP primarily since they require charging policy acquisition and certain sales inducement costs to expense as incurred, establishing life insurance reserves based on different actuarial assumptions, and valuing certain investments and establishing deferred taxes on a different basis.

Statutory net income (loss) and capital and surplus of Allstate's domestic insurance subsidiaries

($ in millions)	Net income (loss)			Capital and surplus	
	2019	2018	2017	2019	2018
Amounts by major business type:					
Property and casualty insurance	$ 3,989	$ 2,939	$ 3,050	$ 16,192	$ 14,328
Life insurance, annuities and voluntary accident and health insurance	422	465	327	4,208	3,819
Amount per statutory accounting practices	**$ 4,411**	**$ 3,404**	**$ 3,377**	**$ 20,400**	**$ 18,147**

Dividend Limitations

There are no regulatory restrictions that limit the payment of dividends by the Corporation, except those generally applicable to corporations incorporated in Delaware. Dividends are payable only out of certain components of shareholders' equity as permitted by Delaware law. However, the ability of the Corporation to pay dividends is dependent on business conditions, income, cash requirements of the Company, receipt of dividends from AIC and other relevant factors.

The payment of shareholder dividends by AIC without the prior approval of the Illinois Department of Insurance ("IL DOI") is limited to formula amounts based on net income and capital and surplus, determined in conformity with statutory accounting practices, as well as the timing and amount of dividends paid in the preceding twelve months. AIC paid dividends of $2.73 billion in 2019. The maximum amount of dividends AIC will be able to pay without prior IL DOI approval at a given point in time during 2020 is $3.73 billion, less dividends paid during the preceding twelve months measured at that point in time. The payment of a dividend in excess of this amount requires 30 days advance written notice to the IL DOI. The dividend is deemed approved, unless the IL DOI disapproves it within the 30 day notice period. Additionally, any dividend must be paid out of unassigned surplus excluding unrealized appreciation from investments, which for AIC totaled $12.09 billion as of December 31, 2019, and cannot result in capital and surplus being less than the minimum amount required by law.

Under state insurance laws, insurance companies are required to maintain paid up capital of not less than the minimum capital requirement applicable to the types of insurance they are authorized to write. Insurance companies are also subject to risk-based capital ("RBC") requirements adopted by state insurance regulators. A company's "authorized control level RBC" is calculated using various factors applied to certain financial balances and activity. Companies that do not maintain adjusted statutory capital and surplus at a level in excess of the company action level RBC, which is two times authorized control level RBC, are required to take specified actions. Company action level RBC is significantly in excess of the minimum capital requirements. Total adjusted statutory capital and surplus and authorized control level RBC of AIC were $19.57 billion and $3.04 billion, respectively, as of December 31, 2019. Most of the Corporation's insurance subsidiaries are subsidiaries of and/or reinsure all of their business to AIC, including ALIC. AIC's subsidiaries are included as a component of AIC's total statutory capital and surplus.

The amount of restricted net assets, as represented by the Corporation's investment in its insurance subsidiaries, was $28.93 billion as of December 31, 2019.

Intercompany transactions

Notification and approval of intercompany lending activities is also required by the IL DOI for transactions that exceed a level that is based on a formula using statutory admitted assets and statutory surplus.

Note 17 Benefit Plans

Pension and other postretirement plans

Defined benefit pension plans cover most full-time employees, certain part-time employees and employee-agents. Benefits under the pension plans are based upon the employee's length of service, eligible annual compensation and, prior to January 1, 2014, either a cash balance or final average pay formula. A cash balance formula applies to all eligible employees hired after August 1, 2002. Eligible employees hired before August 1, 2002 chose between the cash balance formula and the final average pay formula. In July 2013, the Company amended its primary plans effective January 1, 2014 to introduce a new cash balance formula to replace the previous formulas (including the final average pay formula and the previous cash balance formula) under which eligible employees accrue benefits. The Company merged two of its qualified pension plans effective March 31, 2019.

The Company also provides a medical coverage subsidy for eligible employees hired before January 1, 2003, including their eligible dependents, when they retire and certain life insurance benefits for eligible retirees ("postretirement benefits"). In July 2013, the Company amended the plan to eliminate the life insurance benefits effective January 1, 2014 for current eligible employees and effective January 1, 2016 for eligible retirees who retired after 1989. The Company continues to pay life insurance premiums for certain retiree plaintiffs subject to a court order requiring it to do so until such time as their lawsuit seeking to keep their life insurance benefits intact is resolved. Qualified employees may become eligible for a medical subsidy if they retire in accordance with the terms of the applicable plans and are continuously insured under the Company's group plans or other approved plans in accordance with the plan's participation requirements. The Company shares the cost of retiree medical benefits with non Medicare-eligible retirees based on years of service, with the Company's share being subject to a 5% limit on future annual medical cost inflation after retirement. For Medicare-eligible retirees, the Company provides a fixed Company contribution based on years of service and other factors, which is not subject to adjustments for inflation.

The Company has reserved the right to modify or terminate its benefit plans at any time and for any reason.

Obligations and funded status

The Company calculates benefit obligations based upon generally accepted actuarial methodologies using the projected benefit obligation ("PBO") for pension plans and the accumulated postretirement benefit obligation ("APBO") for other postretirement plans. Pension costs and other postretirement obligations are determined using a December 31 measurement date. The benefit obligations represent the actuarial present value of all benefits attributed to employee service rendered as of the measurement date. The PBO is measured using the pension benefit formulas and assumptions. A plan's funded status is calculated as the difference between the benefit obligation and the fair value of plan assets. The Company's funding policy for the pension plans is to make contributions at a level in accordance with regulations under the Internal Revenue Code ("IRC") and generally accepted actuarial principles. The Company's other postretirement benefit plans are not funded.

Change in projected benefit obligation, plan assets and funded status

	As of December 31,			
	Pension benefits		Postretirement benefits	
($ in millions)	**2019**	**2018**	**2019**	**2018**
Change in projected benefit obligation				
Benefit obligation, beginning of year	$ 6,224	$ 6,815	$ 375	$ 386
Service cost	117	110	8	7
Interest cost	240	255	14	15
Participant contributions	—	—	15	13
Actuarial losses (gains)	927	(255)	19	(4)
Benefits paid	(356)	(646)	(39)	(35)
Translation adjustment and other	(13)	(55)	5	(7)
Benefit obligation, end of year	**$ 7,139**	**$ 6,224**	**$ 397**	**$ 375**
Change in plan assets				
Fair value of plan assets, beginning of year	$ 5,299	$ 6,284		
Actual return on plan assets	1,235	(300)		
Employer contribution	27	16		
Benefits paid	(356)	(646)		
Translation adjustment and other	(13)	(55)		
Fair value of plan assets, end of year	**$ 6,192**	**$ 5,299**		
Funded status (1)	**$ (947)**	**$ (925)**	**$ (397)**	**$ (375)**
Amounts recognized in AOCI				
Unamortized pension and other postretirement prior service credit	**$ (142)**	**$ (198)**	**$ (13)**	**$ (16)**

(1) The funded status is recorded within other liabilities and accrued expenses on the Consolidated Statements of Financial Position.

Changes in items not yet recognized as a component of net cost for pension and other postretirement plans

($ in millions)	**Pension benefits**	**Postretirement benefits**
Items not yet recognized as a component of net cost – December 31, 2018	$ (198)	$ (16)
Prior service credit amortized to net cost	56	3
Items not yet recognized as a component of net cost – December 31, 2019	**$ (142)**	**$ (13)**

The prior service credit is recognized as a component of net cost for pension and other postretirement plans amortized over the average remaining service period of active employees expected to receive benefits. The prior service credit that will be amortized to net cost for pension and postretirement plans in 2020 is estimated to be $56 million and $3 million, respectively.

The accumulated benefit obligation ("ABO") for all defined benefit pension plans was $7.02 billion and $6.15 billion as of December 31, 2019 and 2018, respectively. The ABO is the actuarial present value of all benefits attributed by the pension benefit formula to employee service rendered at the measurement date. However, it differs from the PBO due to the exclusion of an assumption as to future compensation levels.

The PBO, ABO and fair value of plan assets for the Company's pension plans with an ABO in excess of plan assets were $6.73 billion, $6.62 billion and $5.79 billion, respectively, as of December 31, 2019 and $5.99 billion, $5.93 billion and $5.07 billion, respectively, as of December 31, 2018. Included in the accrued benefit cost of the pension benefits are certain unfunded non-qualified plans with accrued benefit costs of $137 million and $135 million for 2019 and 2018, respectively.

Components of net cost (benefit) for pension and other postretirement plans

	For the years ended December 31,								
	Pension benefits			Postretirement benefits			Total Pension and Postretirement Benefits		
($ in millions)	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Service cost	$ 117	$ 110	$ 111	$ 8	$ 7	$ 8	$ 125	$ 117	$ 119
Interest cost	240	255	254	14	15	15	254	270	269
Expected return on plan assets	(403)	(427)	(419)	—	—	—	(403)	(427)	(419)
Amortization of prior service credit	(56)	(56)	(56)	(3)	(21)	(25)	(59)	(77)	(81)
Costs and expenses	**(102)**	**(118)**	**(110)**	**19**	**1**	**(2)**	**(83)**	**(117)**	**(112)**
Remeasurement of projected benefit obligation	927	(255)	406	19	(4)	8	946	(259)	414
Remeasurement of plan assets	(832)	727	(631)	—	—	—	(832)	727	(631)
Remeasurement gains and losses	**95**	**472**	**(225)**	**19**	**(4)**	**8**	**114**	**468**	**(217)**
Total net (benefit) cost	**$ (7)**	**$ 354**	**$ (335)**	**$ 38**	**$ (3)**	**$ 6**	**$ 31**	**$ 351**	**$ (329)**

The service cost component is the actuarial present value of the benefits attributed by the plans' benefit formula to services rendered by the employees during the period.

Interest cost is the increase in the PBO in the period due to the passage of time at the discount rate. Interest cost fluctuates as the discount rate changes and is also impacted by the related change in the size of the PBO.

The expected return on plan assets is determined as the product of the expected long-term rate of return on plan assets and the fair value of plan assets.

Pension and other postretirement service cost, interest cost, expected return on plan assets and amortization of prior service credit are reported in property and casualty insurance claims and claims expense, operating costs and expenses, net investment income and (if applicable) restructuring and related charges on the Consolidated Statements of Operations.

Remeasurement gains and losses relate to changes in discount rates, the differences between actual return on plan assets and the expected long-term rate of return on plan assets, and differences between actual plan experience and actuarial assumptions.

Weighted average assumptions used to determine net pension cost and net postretirement benefit cost

	For the years ended December 31,					
	Pension benefits			Postretirement benefits		
($ in millions)	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Discount rate	3.70%	4.06%	3.96%	3.61%	3.95%	3.91%
Expected long-term rate of return on plan assets	7.34	7.33	7.32	n/a	n/a	n/a

Weighted average assumptions used to determine benefit obligations

	For the years ended December 31,			
	Pension benefits		Postretirement benefits	
	2019	**2018**	**2019**	**2018**
Discount rate	3.31%	4.31%	3.27%	4.22%

The weighted average health care cost trend rate used in measuring the accumulated postretirement benefit cost is 7.0% for 2020, gradually declining to 4.5% in 2035 and remaining at that level thereafter.

Pension plan assets In general, the Company's pension plan assets are managed in accordance with investment policies approved by pension investment committees. The purpose of the policies is to ensure the plans' long-term ability to meet benefit obligations by prudently investing plan assets and Company contributions, while taking into consideration regulatory and legal requirements and current market conditions. The investment policies are reviewed periodically and specify target plan asset allocation by asset category. In addition, the policies specify various asset allocation and other risk limits. The target asset allocation takes the plans' funding status into consideration, among other factors, including anticipated demographic changes or liquidity requirements that may affect the funding status such as the potential impact of lump sum settlements as well as existing or expected market conditions. In general, the allocation has a lower overall investment risk when a plan is in a stronger funded status position since there is less economic incentive to take risk to increase the expected returns on the plan assets. The pension plans' asset exposure within each asset category is tracked against widely accepted established benchmarks for each asset class with limits on variation from the benchmark established in the investment policy. Pension plan assets are regularly monitored for compliance with these limits and other risk limits specified in the investment policies.

Weighted average target asset allocation and actual percentage of plan assets by asset category

	As of December 31, 2019		
	Target asset allocation (1)	**Actual percentage of plan assets**	
Pension plan's asset category	**2019**	**2019**	**2018**
Equity securities (2)	37 - 55%	50%	47%
Fixed income securities	37 - 48%	38	41
Limited partnership interests	1 - 15%	10	9
Short-term investments and other	—	2	3
Total without securities lending (3)		**100%**	**100%**

(1) The target asset allocation considers risk-based exposure while the actual percentage of plan assets utilizes a financial reporting view excluding exposure provided through derivatives.

(2) The actual percentage of plan assets for equity securities includes 1% of private equity investments in both 2019 and 2018 that are subject to the limited partnership interests target allocation and none and 4% of fixed income mutual funds in 2019 and 2018, respectively, that are subject to the fixed income securities target allocation.

(3) Securities lending collateral reinvestment of $258 million and $208 million is excluded from the table above in 2019 and 2018, respectively.

The target asset allocation for an asset category may be achieved either through direct investment holdings, through replication using derivative instruments (e.g., futures or swaps) or net of hedges using derivative instruments to reduce exposure to an asset category. The net notional amount of derivatives used for replication and non-hedging strategies is limited to 115% of total plan assets. Market performance of the different asset categories may, from time to time, cause deviation from the target asset allocation. The asset allocation mix is reviewed on a periodic basis and rebalanced to bring the allocation within the target ranges.

Outside the target asset allocation, the pension plans participate in a securities lending program to enhance returns. As of December 31, 2019, U.S. government fixed income securities and U.S. equity securities are lent out and cash collateral is invested in short-term investments.

Fair values of pension plan assets as of December 31, 2019

($ in millions)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance as of December 31, 2019
Equity securities	$ 216	$ 45	$ —	$ 261
Fixed income securities:				
U.S. government and agencies	237	1,096	—	1,333
Corporate	—	1,060	—	1,060
Short-term investments	128	252	—	380
Free-standing derivatives:				
Assets	—	5	—	5
Liabilities	(2)	(17)	—	(19)
Total plan assets at fair value	**$ 579**	**$ 2,441**	**$ —**	**3,020**
% of total plan assets at fair value	19.2%	80.8%	—%	100.0%
Investments measured using the net asset value practical expedient				3,418
Securities lending obligation (1)				(272)
Derivatives counterparty and cash collateral netting				9
Other net plan assets (2)				17
Total reported plan assets				**$ 6,192**

(1) The securities lending obligation represents the plan's obligation to return securities lending collateral received under a securities lending program. The terms of the program allow both the plan and the counterparty the right and ability to redeem/return the securities loaned on short notice. Due to its relatively short-term nature, the outstanding balance of the obligation approximates fair value.

(2) Other net plan assets represent cash and cash equivalents, interest and dividends receivable and net receivables related to settlements of investment transactions, such as purchases and sales.

Fair values of pension plan assets as of December 31, 2018

($ in millions)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Balance as of December 31, 2018
Equity securities	$ 51	$ 265	$ —	$ 316
Fixed income securities:				
U.S. government and agencies	172	509	—	681
Corporate	—	1,479	5	1,484
Short-term investments	122	198	—	320
Free-standing derivatives:				
Assets	—	19	—	19
Liabilities	—	(11)	—	(11)
Total plan assets at fair value	**$ 345**	**$ 2,459**	**$ 5**	**2,809**
% of total plan assets at fair value	12.3%	87.5%	0.2%	100.0%
Investments measured using the net asset value practical expedient				2,687
Securities lending obligation				(222)
Derivatives counterparty and cash collateral netting				(6)
Other net plan assets				31
Total reported plan assets				**$ 5,299**

The fair values of pension plan assets are estimated using the same methodologies and inputs as those used to determine the fair values for the respective asset category of the Company. These methodologies and inputs are disclosed in Note 6.

Rollforward of Level 3 plan assets during December 31, 2019

($ in millions)	Balance as of December 31, 2018	Actual return on plan assets: Relating to assets sold during the period	Actual return on plan assets: Relating to assets still held at the reporting date	Purchases, sales and settlements, net	Net transfers in and/or (out) of Level 3	Balance as of December 31, 2019
Equity securities	$ —	$ —	$ —	$ —	$ —	$ —
Fixed income securities:						
Corporate	5	—	—	(5)	—	—
Total Level 3 plan assets	**$ 5**	**$ —**	**$ —**	**$ (5)**	**$ —**	**$ —**

Rollforward of Level 3 plan assets during December 31, 2018

($ in millions)	Balance as of December 31, 2017	Actual return on plan assets: Relating to assets sold during the period	Actual return on plan assets: Relating to assets still held at the reporting date	Purchases, sales and settlements, net	Net transfers in and/or (out) of Level 3	Balance as of December 31, 2018
Equity securities	$ 29	$ —	$ 3	$ —	$ (32)	$ —
Fixed income securities:						
Corporate	10	—	—	(5)	—	5
Total Level 3 plan assets	**$ 39**	**$ —**	**$ 3**	**$ (5)**	**$ (32)**	**$ 5**

Rollforward of Level 3 plan assets during December 31, 2017

($ in millions)	Balance as of December 31, 2016	Actual return on plan assets: Relating to assets sold during the period	Actual return on plan assets: Relating to assets still held at the reporting date	Purchases, sales and settlements, net	Net transfers in and/or (out) of Level 3	Balance as of December 31, 2017
Equity securities	$ —	$ —	$ —	$ 29	$ —	$ 29
Fixed income securities:						
Corporate	10	—	—	—	—	10
Total Level 3 plan assets	**$ 10**	**$ —**	**$ —**	**$ 29**	**$ —**	**$ 39**

The expected long-term rate of return on plan assets reflects the average rate of earnings expected on plan assets. The Company's assumption for the expected long-term rate of return on plan assets is reviewed annually giving consideration to appropriate financial data including, but not limited to, the plan asset allocation, forward-looking expected returns for the period over which benefits will be paid, historical returns on plan assets and other relevant market data. Given the long-term forward-looking nature of this assumption, the actual returns in any one year do not immediately result in a change. In giving consideration to the targeted plan asset allocation, the Company evaluated returns using the same sources it has used historically which include: historical average asset class returns from an independent nationally recognized vendor of this type of data blended together using the asset allocation policy weights for the Company's pension plans; asset class return forecasts from a large global independent asset management firm that specializes in providing multi-asset class investment fund products which were blended together using the asset allocation policy weights; and expected portfolio returns from a proprietary simulation methodology of a widely recognized external investment consulting firm that performs asset allocation and actuarial services for corporate pension plan sponsors. This same methodology has been applied on a consistent basis each year. All of these were consistent with the Company's weighted average long-term rate of return on plan assets assumption of 7.34% used for 2019 and an estimate of 7.08% that will be used for 2020. As of the 2019 measurement date, the arithmetic average of the annual actual return on plan assets for the most recent 10 and 5 years was 10.0% and 9.6%, respectively.

Cash flows There was no required cash contribution necessary to satisfy the minimum funding requirement under the IRC for the tax qualified pension plan for the year ended December 31, 2019.

The Company currently plans to contribute $25 million to its unfunded non-qualified plans and zero and $4 million to its primary and other qualified funded pension plans, respectively, in 2020.

The Company contributed $24 million and $22 million to the postretirement benefit plans in 2019 and 2018, respectively. Contributions by participants were $15 million and $13 million in 2019 and 2018, respectively.

Estimated future benefit payments expected to be paid in the next 10 years

($ in millions)	As of December 31, 2019 Pension benefits	Postretirement benefits
2020	$ 600	$ 23
2021	629	24
2022	636	26
2023	634	27
2024	626	27
2025-2029	2,401	136
Total benefit payments	**$ 5,526**	**$ 263**

Allstate 401(k) Savings Plan

Employees of the Company, with the exception of those employed by the Company's international, SquareTrade, InfoArmor and Esurance subsidiaries, are eligible to become members of the Allstate 401(k) Savings Plan ("Allstate Plan"). The Company's contributions are based on the Company's matching obligation. The Company is responsible for funding its anticipated contribution to the Allstate Plan, and has used the remaining ESOP shares to pre-fund a portion of the contribution. In connection with the Allstate Plan, the Company had a note from the ESOP. On December 31, 2019, the note matured and the remaining principal balance of $2 million was repaid. The Company records dividends on the ESOP shares in retained income and all the shares held by the ESOP are included in basic and diluted weighted average common shares outstanding.

The Company's contribution to the Allstate Plan was$93 million, $89 million and $81 million in 2019, 2018 and 2017, respectively. These amounts were reduced by the ESOP benefit.

ESOP benefit

($ in millions)	For the years December 31, 2019	2018	2017
Interest expense recognized by ESOP	$ —	$ —	$ —
Less: dividends accrued on ESOP shares	(1)	(1)	(1)
Cost of shares allocated	3	—	3
Compensation expense	**2**	**(1)**	**2**
Reduction of defined contribution due to ESOP	43	1	38
ESOP benefit	**$ (41)**	**$ (2)**	**$ (36)**

The Company made $2 million, zero and $1 million in contributions to the ESOP in 2019, 2018 and 2017, respectively. As of December 31, 2019, there were 0.4 million, 39 million and zero of the remaining ESOP shares that have been committed to be released, allocated and unallocated, respectively.

Allstate's Canadian, SquareTrade, Esurance and Answer Financial subsidiaries sponsor defined contribution plans for their eligible employees. Expense for these plans was $15 million, $15 million and $12 million in 2019, 2018 and 2017, respectively. Effective January 1, 2020, Answer Financial employees will be included in the Allstate Plan.

Note 18 Equity Incentive Plans

The Company currently has equity incentive plans under which the Company grants nonqualified stock options, restricted stock units and performance stock awards to certain employees and directors of the Company. The total compensation expense related to equity awards was $105 million, $125 million and $106 million and the total income tax benefits were $17 million, $22 million and $22 million for 2019, 2018 and 2017, respectively. Total cash received from the exercise of options was$154 million, $92 million and $178 million for 2019, 2018 and 2017, respectively. Total tax benefit realized on options exercised and the release of stock restrictions was $43 million, $28 million and $96 million for 2019, 2018 and 2017, respectively.

The Company records compensation expense related to awards under these plans over the shorter of the period in which the requisite service is rendered or retirement eligibility is attained. Compensation expense for performance share awards is based on the probable number of awards expected to vest using the performance level most likely to be achieved at the end of the performance period. As of December 31, 2019, total unrecognized compensation cost related to all nonvested awards was $79 million, of which $29 million related to nonqualified stock options which is expected to be recognized over the weighted average vesting period of 1.68 years, $21 million related to restricted stock units which is expected to be recognized over the weighted average vesting period of 1.69 years and $29 million related to performance stock awards which is expected to be recognized over the weighted average vesting period of 1.55 years.

Options are granted to employees with exercise prices equal to the closing share price of the Company's common stock on the applicable grant date. Options granted to employees on or after February 18, 2014 vest ratably over a three-year period. Options granted prior to February 18, 2014 vest 50% on the second anniversary of the grant date and25% on each of the third and fourth anniversaries of the grant date. Vesting is subject to continued service, except for employees who are retirement eligible and in certain other limited circumstances. Options may be exercised once vested and will expire no later than ten years after the date of grant.

Restricted stock units for directors vest immediately and convert into shares of stock on the earlier of the day of the third anniversary of the grant date or the date the director's service terminates, unless a deferred period of restriction is elected. Restricted stock units granted to directors prior to June 1, 2016 convert upon leaving the board. Restricted stock units granted to employees on or after February 18, 2014 vest on the day prior to the third anniversary of the grant date. Restricted stock units granted to employees subsequently convert into shares of stock on the day of the respective anniversary of the grant date. Vesting is subject to continued service, except for employees who are retirement eligible and in certain other limited circumstances.

Performance stock awards vest into shares of stock on the day prior to the third anniversary of the grant date. Vesting of the number of performance stock awards earned based on the attainment of performance goals for each of the performance periods is subject to continued service, except for employees who are retirement eligible and in certain other limited circumstances. Performance stock awards subsequently convert into shares of stock in full the day of the third anniversary of the grant date.

Since 2001, a total of 110.8 million shares of common stock were authorized to be used for awards under the plans, subject to adjustment in accordance with the plans' terms. As of December 31, 2019, 24.0 million shares were reserved and remained available for future issuance under these plans. The Company uses its treasury shares for these issuances.

The fair value of each option grant is estimated on the date of grant using a binomial lattice model. The Company uses historical data to estimate option exercise and employee termination within the valuation model. In addition, separate groups of employees that have similar historical exercise behavior are considered separately for valuation purposes. The expected term of options granted is derived from the output of the binomial lattice model and represents the period of time that options granted are expected to be outstanding. The expected volatility of the price of the underlying shares is implied based on traded options and historical volatility of the Company's common stock. The expected dividends were based on the current dividend yield of the Company's stock as of the date of the grant. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

Option grant assumptions

	2019	2018	2017
Weighted average expected term	5.8 years	5.7 years	6.1 years
Expected volatility	15.6 - 28.9%	15.6 - 30.7%	15.7 - 32.7%
Weighted average volatility	18.4%	19.8%	21.0%
Expected dividends	1.9 - 2.2%	1.5 - 2.2%	1.4 - 1.9%
Weighted average expected dividends	2.2%	2.0%	1.9%
Risk-free rate	1.3 - 2.7%	1.3 - 3.2%	0.5 - 2.5%

Summary of option activity

	For the year ended December 31, 2019			
	Number (in 000s)	Weighted average exercise price	Aggregate intrinsic value (in 000s)	Weighted average remaining contractual term (years)
Outstanding as of January 1, 2019	11,730	$ 65.82		
Granted	2,802	92.66		
Exercised	(2,622)	58.70		
Forfeited	(235)	89.20		
Expired	(4)	31.78		
Outstanding as of December 31, 2019	**11,671**	73.40	$ 455,691	6.3
Outstanding, net of expected forfeitures	11,547	73.20	453,268	6.3
Outstanding, exercisable (“vested”)	6,744	60.81	348,285	4.8

The weighted average grant date fair value of options granted was$14.96, $17.03 and $14.60 during 2019, 2018 and 2017, respectively. The intrinsic value, which is the difference between the fair value and the exercise price, of options exercised was $114 million, $72 million and $199 million during 2019, 2018 and 2017, respectively.

Changes in restricted stock units

	For the year ended December 31, 2019	
	Number (in 000s)	Weighted average grant date fair value
Nonvested as of January 1, 2019	957	$ 74.58
Granted	271	92.97
Vested	(308)	62.89
Forfeited	(43)	84.75
Nonvested as of December 31, 2019	**877**	83.87

The fair value of restricted stock units is based on the market value of the Company’s stock as of the date of the grant. The market value in part reflects the payment of future dividends expected. The weighted average grant date fair value of restricted stock units granted was $92.97, $93.16 and $80.12 during 2019, 2018 and 2017, respectively. The total fair value of restricted stock units vested was $29 million, $47 million and $58 million during 2019, 2018 and 2017, respectively.

Changes in performance stock awards

	For the year ended December 31, 2019	
	Number (in 000s)	Weighted average grant date fair value
Nonvested as of January 1, 2019	1,248	$ 77.35
Granted	415	92.49
Adjustment for performance achievement	267	62.32
Vested	(702)	62.32
Forfeited	(47)	87.83
Nonvested as of December 31, 2019	**1,181**	87.78

The change in performance stock awards comprises those initially granted in2019 and the adjustment to previously granted performance stock awards for performance achievement. The fair value of performance stock awards is based on the market value of the Company’s stock as of the date of the grant. The market value in part reflects the payment of future dividends expected. The weighted average grant date fair value of performance stock awards granted was $92.49, $92.88 and $78.47 during 2019, 2018 and 2017, respectively. The total fair value of performance stock awards vested was $65 million, $15 million and $17 million during 2019, 2018 and 2017, respectively.

The Company recognizes all tax effects related to share-based payments at settlement or expiration through the income statement.

Note 19 Supplemental Cash Flow Information

Non-cash investing activities include $198 million, $94 million and $106 million related to mergers and exchanges completed with equity securities, fixed income securities and limited partnerships, and modifications of certain mortgage loans and other investments in 2019, 2018 and 2017, respectively.

Non-cash financing activities include $50 million, $32 million and $43 million related to the issuance of Allstate common shares for vested equity awards in 2019, 2018 and 2017, respectively. Non-cash financing activities also include $90 million related to debt acquired in conjunction with purchases of investments in 2017.

Cash flows used in operating activities in the Consolidated Statements of Cash Flows include cash paid for operating leases related to amounts included in the measurement of lease liabilities of $155 million for the twelve months ended December 31, 2019. Non-cash operating activities include $604 million related to ROU assets obtained in exchange for lease obligations, including $488 million related to the adoption of new guidance related to accounting for leases, for the twelve months ended December 31, 2019.

Liabilities for collateral received in conjunction with the Company's securities lending program and OTC and cleared derivatives are reported in other liabilities and accrued expenses or other investments. The accompanying cash flows are included in cash flows from operating activities in the Consolidated Statements of Cash Flows along with the activities resulting from management of the proceeds as follows:

	For the years ended December 31,		
($ in millions)	**2019**	**2018**	**2017**
Net change in proceeds managed			
Net change in fixed income securities	$ 80	$ 234	$ 259
Net change in short-term investments	(451)	(568)	(255)
Operating cash flow (used) provided	**(371)**	**(334)**	**4**
Net change in cash	—	—	1
Net change in proceeds managed	**$ (371)**	**$ (334)**	**$ 5**
Net change in liabilities			
Liabilities for collateral, beginning of year	$ (1,458)	$ (1,124)	$ (1,129)
Liabilities for collateral, end of year	(1,829)	(1,458)	(1,124)
Operating cash flow provided (used)	**$ 371**	**$ 334**	**$ (5)**

Note 20 Other Comprehensive Income

Components of other comprehensive income (loss) on a pre-tax and after-tax basis

	For the years ended December 31,								
($ in millions)	**2019**			**2018**			**2017**		
	Pre-tax	**Tax**	**After-tax**	**Pre-tax**	**Tax**	**After-tax**	**Pre-tax**	**Tax**	**After-tax**
Unrealized net holding gains and losses arising during the period, net of related offsets	$ 2,807	$ (592)	$ 2,215	$ (1,142)	$ 241	$ (901)	$ 866	$ (304)	$ 562
Less: reclassification adjustment of realized capital gains and losses	413	(87)	326	(186)	39	(147)	374	(131)	243
Unrealized net capital gains and losses	**2,394**	**(505)**	**1,889**	**(956)**	**202**	**(754)**	**492**	**(173)**	**319**
Unrealized foreign currency translation adjustments	**(13)**	**3**	**(10)**	**(61)**	**13**	**(48)**	**69**	**(24)**	**45**
Unamortized pension and other postretirement prior service credit	**(59)**	**12**	**(47)**	**(77)**	**18**	**(59)**	**(80)**	**28**	**(52)**
Other comprehensive income (loss)	**$ 2,322**	**$ (490)**	**$ 1,832**	**$ (1,094)**	**$ 233**	**$ (861)**	**$ 481**	**$ (169)**	**$ 312**

Note 21 Quarterly Results (unaudited)

($ in millions, except per share data)	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	2019	2018	2019	2018	2019	2018	2019	2018
Revenues	$ 10,990	$ 9,770	$ 11,144	$ 10,099	$ 11,069	$ 10,465	$ 11,472	$ 9,481
Net income (loss) applicable to common shareholders	1,261	977	821	678	889	942	1,707	(585)
Earnings per common share - Basic	3.79	2.76	2.47	1.94	2.71	2.72	5.32	(1.71)
Earnings per common share - Diluted	3.74	2.71	2.44	1.91	2.67	2.68	5.23	(1.71)

The Company changed its accounting principle for recognizing actuarial gains and losses and expected return on plan assets for its pension and other postretirement plans to a more preferable policy under U.S. GAAP. See Note 2 for discussion of the change in accounting principle and further information regarding the impact of the change on the consolidated financial statements.

Impact of change	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
($ in millions, except per share data)	2019	2018	2019	2018	2019	2018	2019	2018
Revenues	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Net income (loss) applicable to common shareholders	5	31	(69)	41	(140)	109	240	(273)
Earnings per common share - Basic	0.01	0.09	(0.21)	0.12	(0.43)	0.31	0.75	(0.80)
Earnings per common share - Diluted	0.02	0.08	(0.20)	0.11	(0.42)	0.31	0.73	(0.80)

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
The Allstate Corporation
Northbrook, Illinois 60062

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying Consolidated Statements of Financial Position of The Allstate Corporation and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related Consolidated Statements of Operations, Comprehensive Income, Shareholders' Equity, and Cash Flows for each of the three years in the period ended December 31, 2019, and the related notes and the schedules listed in the Index at Item 15 (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Change in Accounting Principles

As discussed in Note 2 to the financial statements, the Company elected during 2019 to change its principles of accounting for recognizing pension and other postretirement benefit plan costs. The Company adopted this change on a retrospective basis. Also discussed in Note 2 to the financial statements, the Company changed its presentation and method of accounting for the recognition and measurement of financial assets and financial liabilities on January 1, 2018, due to the adoption of FASB Accounting Standards Update No. 2016-01, Financial Instruments - Overall (Subtopic 825-10).

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Item 9A. Controls and Procedures*. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Reserve for Property and Casualty Insurance Claims and Claims Expense - Refer to Notes 2 and 8 to the Financial Statements

Critical Audit Matter Description

The Company establishes reserves for property and casualty insurance claims and claims expense on reported and unreported claims of insured losses. Using established industry and actuarial best practices as well as the Company's historical claims experience, the reserve for property and casualty insurance claims and claims expense is estimated based on (i) claims reported, (ii) claims incurred but not reported, and (iii) projections of claim payments to be made in the future.

Given the subjectivity of estimating claims incurred but not reported and projections of claim payments to be made in the future, particularly those with payout requirements over a longer period of time, the related audit effort in evaluating the reserve for property and casualty insurance claims and claims expense required a high degree of auditor judgment and an increased extent of effort, including involvement of our actuarial specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our principal audit procedures related to the reserve for property and casualty insurance claims and claims expense included the following:

- We tested the effectiveness of controls related to the reserve for property and casualty insurance claims and claims expense, including those over the Company's estimates and projections.
- We evaluated the methods and assumptions used by the Company to estimate the reserve for property and casualty insurance claims and claims expense by:
    - Testing the underlying data that served as the basis for the actuarial analysis, including historical claims, to test that the inputs to the actuarial estimate were complete and accurate.
    - Comparing the Company's prior year assumptions of expected development and ultimate loss to actual losses incurred during the year to assess the reasonableness of those assumptions, including consideration of potential bias, in the determination of the reserve for property and casualty claims and claims expense.
    - With the assistance of our actuarial specialists, we developed independent estimates for the reserve for property and casualty insurance claims and claims expense, utilizing loss data and industry claim development factors, and compared our estimates to management's estimates.

Premium Deficiency Reserve for Life-Contingent Immediate Annuities - Refer to Notes 2 and 9 to the Financial Statements.

Critical Audit Matter Description

Due to the long-term nature of life-contingent immediate annuities, benefits are payable over many years. The Company establishes reserves as the present value of future expected benefits to be paid, reduced by the present value of future expected net premiums. Long-term actuarial assumptions of future investment yields and mortality are used when establishing the reserve. These assumptions are established at the time the policy is issued and are generally not changed during the life of the policy. The Company periodically performs a gross premium valuation ("GPV") analysis to review the adequacy of reserves using actual experience and current assumptions. If actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized deferred acquisition costs ("DAC") balance would be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required for any remaining deficiency. As of December 31, 2019, the Company's GPV analysis indicated that reserves for these policies were sufficient and therefore, the Company has not established a premium deficiency reserve.

The Company also reviews these policies for circumstances where projected profits would be recognized in early years followed by projected losses in later years through a profits followed by losses ("PFBL") analysis. If this circumstance exists, the Company will accrue a liability, during the period of profits, to offset the losses at such time as the future losses are expected to commence using a method updated prospectively over time. As of December 31, 2019, the Company's PFBL analysis did not indicate periods of profits followed by periods of losses and therefore, the Company has not established a PFBL reserve.

Given the subjectivity involved in selecting the current assumptions for projected investment yields and mortality, and the sensitivity of the estimate to these assumptions, the related audit effort in evaluating the premium deficiency reserve and PFBL analysis for life-contingent immediate annuities required a high degree of auditor judgment and an increased extent of effort, including involvement of our actuarial specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our principal audit procedures related to the premium deficiency reserve, including the GPV and PFBL analysis for life-contingent immediate annuities, included the following:

- We tested the effectiveness of controls over management's premium deficiency reserve and GPV and PFBL analysis, including those over the Company's selection of assumptions.
- With the assistance of our actuarial specialists, we evaluated the reasonableness of assumptions and their incorporation into the projection model used by the Company to perform its premium deficiency reserve analysis by:
    - Testing the underlying data that served as the basis for the assumptions setting and the underlying data used in the projection model to ensure the inputs were complete and accurate.
    - Comparing mortality assumptions selected to actual historical experience.
    - Comparing projected investment yields selected to historical portfolio returns, evaluating for consistency with current investment portfolio yields and the Company's long-term reinvestment strategy, and comparing to independently obtained market data.
- With the assistance of our actuarial specialists, we independently calculated the gross premium valuation reserves from the Company's projection model for a sample of contracts and compared our estimates to management's estimates.
- With the assistance of our actuarial specialists, we evaluated the aggregate cash flows generated through the Company's premium deficiency reserve testing for evidence of potential PFBL scenarios that would require the accrual of additional reserves to cover such future losses.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois

February 21, 2020

We have served as the Company's auditor since 1992.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. We maintain disclosure controls and procedures as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based upon this evaluation, the principal executive officer and the principal financial officer concluded that our disclosure controls and procedures are effective in providing reasonable assurance that material information required to be disclosed in our reports filed with or submitted to the Securities and Exchange Commission under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified by the Securities Exchange Act and made known to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting. Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the criteria related to internal control over financial reporting described in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this Form 10-K, has issued their attestation report on the Company's internal control over financial reporting, which is included herein.

Changes in Internal Control over Financial Reporting. During the fiscal quarter ended December 31, 2019, there have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

On February 20, 2020, The Allstate Corporation filed a Certificate of Elimination to its Restated Certificate of Incorporation with the Secretary of State of the State of Delaware eliminating from the Restated Certificate of Incorporation all matters set forth in the Certificates of Designations with respect to its: (i) 5.625% Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series A; (ii) 6.750% Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series C; (iii) 6.625% Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series D; (iv) 6.625% Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series E; and (v) 6.250% Fixed Rate Non-Cumulative Perpetual Preferred Stock, Series F (together collectively referred to as the "Preferred Stock"). These series of Preferred Stock have been previously redeemed by the Corporation and no shares remain outstanding.

A copy of the Certificate of Elimination relating to the Preferred Stock is listed as Exhibit 3.6 to this report and is incorporated herein by reference.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding directors of The Allstate Corporation standing for election at the 2020 annual stockholders meeting is incorporated in this Item 10 by reference to the descriptions in the Proxy Statement under the captions “Corporate Governance – Director Nominees’ Skills and Experience.”

Information regarding our audit committee and audit committee financial experts is incorporated in this Item 10 by reference to the information under the caption “Corporate Governance – Board Meetings and Committees” in the Proxy Statement.

Information regarding executive officers of The Allstate Corporation is incorporated in this Item 10 by reference to Part I, Item 1 of this report under the caption “Information about our Executive Officers.”

We have adopted a Global Code of Business Conduct that applies to all of our directors and employees, including our principal executive officer, principal financial officer and controller and principal accounting officer. The text of our Global Code of Business Conduct is posted on our website, www.allstateinvestors.com. We intend to satisfy the disclosure requirements, regarding amendments to, and waiver from, the provisions of our Global Code of Business Conduct by posting such information on the same website pursuant to applicable NYSE and SEC rules.

Item 11. Executive Compensation

Information required for Item 11 is incorporated by reference to the sections of the Proxy Statement with the following captions:

- Corporate Governance – Director Compensation
- Executive Compensation

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information regarding security ownership of certain beneficial owners and management is incorporated in this Item 12 by reference to the sections of the Proxy Statement with the following captions:

- Stock Ownership Information – Security Ownership of Directors and Executive Officers
- Stock Ownership Information – Security Ownership of Certain Beneficial Owners

Equity compensation plan information

The following table includes information as of December 31, 2019, with respect to The Allstate Corporation's equity compensation plans:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity Compensation Plans Approved by Security Holders (1)	14,910,325 (2)	$ 73.40	21,472,103 (3)
Total	14,910,325 (2)	$ 73.40	21,472,103 (3)

(1) Consists of the 2019 Equity Incentive Plan, which amended and restated the 2013 Equity Incentive Plan; the 2017 Equity Compensation Plan for Non-Employee Directors; the 2006 Equity Compensation Plan for Non-Employee Directors; and the Equity Incentive Plan for Non-Employee Directors (the equity plan for non-employee directors prior to 2006). The Corporation does not maintain any equity compensation plans not approved by stockholders.

(2) As of December 31, 2019, 877,151 restricted stock units ("RSUs") and 2,362,608 performance stock awards ("PSAs") were outstanding. The weighted-average exercise price of outstanding options, warrants, and rights does not take into account RSUs and PSAs, which have no exercise price. PSAs are reported at the maximum potential amount awarded for incomplete performance periods and the amount earned for the 2017 PSA grant, reduced for forfeitures. For incomplete performance periods, the actual number of shares earned may be less and are based upon measures achieved at the end of the three-year performance period for those PSAs granted in 2018 and 2019.

(3) Includes 21,121,308 shares that may be issued in the form of stock options, unrestricted stock, restricted stock, restricted stock units, stock appreciation rights, performance units, performance stock, and stock in lieu of cash under the 2019 Equity Incentive Plan; and 350,795 shares that may be issued in the form of stock options, unrestricted stock, restricted stock, restricted stock units, and stock in lieu of cash compensation under the 2017 Equity Compensation Plan for Non-Employee Directors.

Asset managers, such as those that manage mutual funds and exchange traded funds, principally on behalf of third-party investors, at times acquire sufficient voting ownership interests in Allstate to require disclosure. State Street Corp. manages an investment portfolio of $3.4 billion on behalf of participants in Allstate's 401(k) Savings Plan and $2.3 billion on behalf of Allstate domestic qualified pension plan. The terms of these arrangements are customary, and the aggregate related fees are not material.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information required for Item 13 is incorporated by reference to the material in the Proxy Statement under the captions "Corporate Governance – Board Independence and Related Person Transactions - Nominee Independence Determinations," "Corporate Governance – Board Independence and Related Person Transactions - Related Person Transactions" and "Other Information - Appendix B – Categorical Standards of Independence."

Item 14. Principal Accounting Fees and Services

Information required for Item 14 is incorporated by reference to the material in the Proxy Statement under the caption "Audit Committee Matters – Proposal 3. Ratification of Deloitte & Touche LLP as the Independent Registered Public Accountant for 2020."

Part IV

Item 15. (a) (1) Exhibits and Financial Statement Schedules.

The following consolidated financial statements, notes thereto and related information of The Allstate Corporation (the "Company") are included in Item 8.

- Consolidated Statements of Operations
- Consolidated Statements of Comprehensive Income
- Consolidated Statements of Financial Position
- Consolidated Statements of Shareholders' Equity
- Consolidated Statements of Cash Flows
- Notes to the Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm

Item 15. (a) (2)

The following additional financial statement schedules are furnished herewith pursuant to the requirements of Form 10-K.

The Allstate Corporation		Page
Schedules required to be filed under the provisions of Regulation S-X Article 7:		
Schedule I	Summary of Investments – Other than Investments in Related Parties	S-1
Schedule II	Condensed Financial Information of Registrant (The Allstate Corporation)	S-2
Schedule III	Supplementary Insurance Information	S-6
Schedule IV	Reinsurance	S-7
Schedule V	Valuation Allowances and Qualifying Accounts	S-8

All other schedules are omitted because they are not applicable, or not required, or because the required information is included in the Consolidated Financial Statements or notes thereto.

Item 15. (a) (3)

The following is a list of the exhibits filed as part of this Form 10-K. The exhibit numbers followed by an asterisk (*) indicate exhibits that are management contracts or compensatory plans or arrangements. A dagger (†) indicates an award form first used under The Allstate Corporation 2001 Equity Incentive Plan, which was amended and restated as The Allstate Corporation 2009 Equity Incentive Plan. A plus (+) indicates an award form first used under The Allstate Corporation 2009 Equity Incentive Plan, which was subsequently amended and restated as The Allstate Corporation 2013 Equity Incentive Plan, and further amended and restated as The Allstate Corporation 2019 Equity Incentive Plan.

		Incorporated by Reference				
Exhibit Number	Exhibit Description	Form	File Number	Exhibit	Filing Date	Filed or Furnished Herewith
3.1	Restated Certificate of Incorporation filed with the Secretary of State of Delaware on May 23, 2012	8-K	1-11840	3(i)	May 23, 2012	
3.2	Amended and Restated Bylaws of The Allstate Corporation as amended November 19, 2015	8-K	1-11840	3.1	November 19, 2015	
3.3	Certificate of Designations with respect to the Preferred Stock, Series G of the Registrant, dated March 27, 2018	8-K	1-11840	3.1	March 29, 2018	
3.4	Certificate of Designations with respect to the Preferred Stock, Series H of the Registrant, date August 5, 2019	8-K	1-11840	3.1	August 5, 2019	
3.5	Certificate of Designations with respect to the Preferred Stock, Series I of the Registrant, dated November 8, 2019	8-K	1-11840	3.1	November 8, 2019	
3.6	Certificate of Elimination with respect to the Preferred Stock, Series A, C, D, E and F of the Registrant, dated February 20, 2020					X
4.1	The Allstate Corporation hereby agrees to furnish to the Commission, upon request, the instruments defining the rights of holders of each issue of long-term debt of it and its consolidated subsidiaries					
4.2	Description of Registrant's Securities					X

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Exhibit	Filing Date	Filed or Furnished Herewith
4.3	Deposit Agreement, dated March 29, 2018, among the Registrant, Equiniti Trust Company, as depositary, and the holders from time to time of the depositary receipts described therein (Series G)	8-K	1-11840	4.1	March 29, 2018	
4.4	Form of Preferred Stock Certificate, Series G (included as Exhibit A to Exhibit 3.9 above)	8-K	1-11840	4.2	March 29, 2018	
4.5	Form of Depositary Receipt, Series G (included as Exhibit A to Exhibit 4.3 above)	8-K	1-11840	4.3	March 29, 2018	
4.6	Deposit Agreement, dated August 8, 2019, among the Registrant, Equiniti Trust Company, as depositary, and the holders from time to time of the depositary receipts described therein (Series H)	8-K	1-11840	4.1	August 8, 2019	
4.7	Form of Preferred Stock Certificate, Series H (included as Exhibit A to Exhibit 3.10 above)	8-K	1-11840	4.2	August 8, 2019	
4.8	Form of Depositary Receipt, Series H (included as Exhibit A to Exhibit 4.6 above)	8-K	1-11840	4.3	August 8, 2019	
4.9	Deposit Agreement, dated November 8, 2019, among the Registrant, Equiniti Trust Company, as depositary, and the holders from time to time of the depositary receipts described therein (Series I)	8-K	1-11840	4.1	November 8, 2019	
4.10	Form of Preferred Stock, Series I (included as Exhibit A to Exhibit 3.11 above)	8-K	1-11840	4.2	November 8, 2019	
4.11	Form of Depositary Receipt, Series I (included as Exhibit A to Exhibit 4.9 above)	8-K	1-11840	4.3	November 8, 2019	
10.1	Credit Agreement dated April 27, 2012 among The Allstate Corporation, Allstate Insurance Company and Allstate Life Insurance Company, as Borrowers; the Lenders party thereto, Wells Fargo Bank, National Association, as Syndication Agent; Citibank, N.A. and Bank of America, N.A., as Documentation Agents; and JPMorgan Chase Bank, N.A., as Administrative Agent	10-Q	1-11840	10.6	May 2, 2012	
10.2	Amendment No. 1 to Credit Agreement dated as of April 27, 2014	8-K	1-11840	10.1	April 29, 2014	
10.3*	The Allstate Corporation Annual Executive Incentive Plan	Proxy	1-11840	App. B	April 7, 2014	
10.4*	The Allstate Corporation Deferred Compensation Plan, as amended and restated effective January 1, 2019	S-8	1-11840	4	November 20, 2018	
10.5*	The Allstate Corporation 2019 Equity Incentive Plan	Proxy	1-11840	App. D	April 8, 2019	
10.6*+	Form of Performance Stock Award Agreement for awards granted on or after April 13, 2018, under The Allstate Corporation 2013 Equity Incentive Plan	10-Q	1-11840	10.2	May 1, 2018	
10.7*+	Form of Performance Stock Award Agreement for awards granted on or after March 6, 2012 and prior to April 13, 2018 under The Allstate Corporation 2009 Equity Incentive Plan	10-Q	1-11840	10.4	May 2, 2012	
10.8*+	Form of Option Award Agreement for awards granted on or after April 13, 2018, under The Allstate Corporation 2013 Equity Incentive Plan	10-Q	1-11840	10.3	May 1, 2018	
10.9*+	Form of Option Award Agreement for awards granted on or after February 21, 2012 and prior to April 13, 2018 under The Allstate Corporation 2009 Equity Incentive Plan	10-Q	1-11840	10.3	May 2, 2012	
10.10*+	Form of Option Award Agreement for awards granted on or after December 30, 2011 and prior to February 21, 2012 under The Allstate Corporation 2009 Equity Incentive Plan	8-K	1-11840	10.2	December 28, 2011	
10.11*+	Form of Option Award Agreement for awards granted on or after February 22, 2011 and prior to December 30, 2011 under The Allstate Corporation 2009 Equity Incentive Plan	10-Q	1-11840	10.3	April 27, 2011	
10.12*+	Form of Option Award Agreement for awards granted on or after May 19, 2009 and prior to February 22, 2011 under The Allstate Corporation 2009 Equity Incentive Plan	8-K/A	1-11840	10.3	May 20, 2009	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed or Furnished Herewith
		Form	File Number	Exhibit	Filing Date	
10.13*+	Form of Restricted Stock Unit Award Agreement for awards granted on or after February 21, 2012 and prior to April 13, 2018 under The Allstate Corporation 2009 Equity Incentive Plan	10-Q	1-11840	10.2	May 2, 2012	
10.14*+	Form of Restricted Stock Unit Award Agreement for awards granted on or after April 13, 2018, under The Allstate Corporation 2013 Equity Incentive Plan	10-Q	1-11840	10.4	May 1, 2018	
10.15*	Supplemental Retirement Income Plan, as amended and restated effective October 19, 2018	10-K	1-11840	10.16	February 15, 2019	
10.16*	The Allstate Corporation Change in Control Severance Plan effective December 30, 2011	8-K	1-11840	10.1	December 28, 2011	
10.17*	The Allstate Corporation Deferred Compensation Plan for Non-Employee Directors, as amended and restated effective September 15, 2008	8-K	1-11840	10.7	September 19, 2008	
10.18*	The Allstate Corporation Equity Incentive Plan for Non-Employee Directors, as amended and restated effective September 15, 2008	8-K	1-11840	10.5	September 19, 2008	
10.19*	The Allstate Corporation 2006 Equity Compensation Plan for Non-Employee Directors, as amended and restated effective September 15, 2008	8-K	1-11840	10.6	September 19, 2008	
10.20*	The Allstate Corporation 2017 Equity Compensation Plan for Non-Employee Directors	Proxy	1-11840	App. D	April 12, 2017	
10.21*	Form of amended and restated Restricted Stock Unit Award Agreement with regards to awards outstanding on September 15, 2008 under The Allstate Corporation 2006 Equity Compensation Plan for Non-Employee Directors	8-K	1-11840	10.8	September 19, 2008	
10.22*	Form of Restricted Stock Unit Award Agreement for awards granted on or after September 15, 2008, and prior to June 1, 2016, under The Allstate Corporation 2006 Equity Compensation Plan for Non-Employee Directors	8-K	1-11840	10.9	September 19, 2008	
10.23*	Form of Restricted Stock Unit Award Agreement for awards granted on or after June 1, 2016, and prior to June 1, 2017, under The Allstate Corporation 2006 Equity Compensation Plan for Non-Employee Directors	10-Q	1-11840	10.2	August 3, 2016	
10.24*	Form of Restricted Stock Unit Award Agreement for awards granted on or after June 1, 2017, under The Allstate Corporation 2017 Equity Compensation Plan for Non-Employee Directors	10-Q	1-11840	10.2	August 1, 2017	
10.25*	Form of Indemnification Agreement between the Registrant and Director	10-Q	1-11840	10.2	August 1, 2007	
10.26*	Resolutions regarding Non-Employee Director Compensation adopted November 18, 2016	10-K	1-11840	10.24	February 17, 2017	
10.27*	Resolutions regarding Non-Employee Director Compensation adopted November 16, 2018	10-K	1-11840	10.29	February 15, 2019	
10.28	Amended and Restated Reinsurance Agreement, dated April 1, 2014, between Allstate Life Insurance Company and Lincoln Benefit Life Company	8-K	1-11840	10.1	April 7, 2014	
10.29*	Offer Letter dated September 30, 2016, to John E. Dugenske	10-Q	1-11840	10.1	May 1, 2018	
10.30*	Offer Letter dated February 16, 2016, to Glenn T. Shapiro	10-Q	1-11840	10.1	May 1, 2019	
21	Subsidiaries of The Allstate Corporation					X
23	Consent of Independent Registered Public Accounting Firm					X
31(i)	Rule 13a-14(a) Certification of Principal Executive Officer					X
31(i)	Rule 13a-14(a) Certification of Principal Financial Officer					X
32	Section 1350 Certifications					X
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed or Furnished Herewith
		Form	File Number	Exhibit	Filing Date	
101.SCH	Inline XBRL Taxonomy Extension Schema					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)					X

Item 15. (b)

The exhibits are listed in Item 15. (a)(3) above.

Item 15. (c)

The financial statement schedules are listed in Item 15. (a)(2) above.

Item 16.

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

The Allstate Corporation
(Registrant)

/s/ John C. Pintozzi

By: John C. Pintozzi
Senior Vice President, Controller, and Chief Accounting Officer
(Principal Accounting Officer)
February 21, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Thomas J. Wilson Thomas J. Wilson	Chairman of the Board, President, Chief Executive Officer and a Director (Principal Executive Officer)	February 21, 2020
/s/ Mario Rizzo Mario Rizzo	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 21, 2020
/s/ John C. Pintozzi John C. Pintozzi	Senior Vice President, Controller, and Chief Accounting Officer (Principal Accounting Officer)	February 21, 2020
/s/ Kermit R. Crawford Kermit R. Crawford	Director	February 21, 2020
/s/ Michael L. Eskew Michael L. Eskew	Director	February 21, 2020
/s/ Margaret M. Keane Margaret M. Keane	Director	February 21, 2020
/s/ Siddharth N. Mehta Siddharth N. Mehta	Director	February 21, 2020
/s/ Jacques P. Perold Jacques P. Perold	Director	February 21, 2020
/s/ Andrea Redmond Andrea Redmond	Director	February 21, 2020
/s/ Gregg M. Sherrill Gregg M. Sherrill	Director	February 21, 2020
/s/ Judith A. Sprieser Judith A. Sprieser	Lead Director	February 21, 2020
/s/ Perry M. Traquina Perry M. Traquina	Director	February 21, 2020

The Allstate Corporation and Subsidiaries
Schedule I — Summary of Investments Other than Investments in Related Parties

	As of December 31, 2019		
($ in millions)	Cost/amortized cost	Fair value (if applicable)	Amount shown in the Balance Sheet
Type of investment			
Fixed maturities:			
Bonds:			
United States government, government agencies and authorities	$ 4,971	$ 5,086	$ 5,086
States, municipalities and political subdivisions	8,080	8,620	8,620
Foreign governments	968	979	979
Public utilities	5,197	5,576	5,576
All other corporate bonds	35,893	37,502	37,502
Asset-backed securities	860	862	862
Mortgage-backed securities	324	419	419
Total fixed maturities	56,293	$ 59,044	59,044
Equity securities:			
Common stocks:			
Public utilities	98	136	136
Banks, trusts and insurance companies	565	771	771
Industrial, miscellaneous and all other	5,662	6,957	6,957
Nonredeemable preferred stocks	243	298	298
Total equity securities	6,568	$ 8,162	8,162
Mortgage loans on real estate	4,817	5,012	4,817
Real estate (none acquired in satisfaction of debt)	1,005		1,005
Policy loans	894		894
Derivative instruments	140	140	140
Limited partnership interests	8,078		8,078
Other long-term investments	1,966		1,966
Short-term investments	4,256	4,256	4,256
Total investments	$ 84,017		$ 88,362

The Allstate Corporation and Subsidiaries

Schedule II — Condensed Financial Information of Registrant Statement of Operations

($ in millions)	Year Ended December 31, 2019	2018	2017
Revenues			
Investment income, less investment expense	$ 35	$ 25	$ 10
Realized capital gains and losses	9	(10)	(2)
Other income	41	3	36
	85	18	44
Expenses			
Interest expense	355	337	334
Pension and other postretirement remeasurement gains and losses	103	454	(219)
Pension and other postretirement benefit expense	(122)	(116)	(224)
Other operating expenses	49	50	50
	385	725	(59)
(Loss) gain from operations before income tax benefit and equity in net income of subsidiaries	(300)	(707)	103
Income tax (benefit) expense	(75)	(136)	105
Loss before equity in net income of subsidiaries	(225)	(571)	(2)
Equity in net income of subsidiaries	5,072	2,731	3,556
Net income	4,847	2,160	3,554
Preferred stock dividends	169	148	116
Net income applicable to common shareholders	4,678	2,012	3,438
Other comprehensive income (loss), after-tax			
Changes in:			
Unrealized net capital gains and losses	1,889	(754)	319
Unrealized foreign currency translation adjustments	(10)	(48)	45
Unamortized pension and other postretirement prior service credit	(47)	(59)	(52)
Other comprehensive income (loss), after-tax	1,832	(861)	312
Comprehensive income	$ 6,679	$ 1,299	$ 3,866

See accompanying notes to condensed financial information and notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries

Schedule II (Continued) — Condensed Financial Information of Registrant Statement of Financial Position

($ in millions, except par value data)	December 31, 2019	December 31, 2018
Assets		
Investments in subsidiaries	$ 33,428	$ 29,301
Fixed income securities, at fair value (amortized cost $458 and $355)	466	356
Short-term investments, at fair value (amortized cost $702 and $285)	702	285
Cash	2	—
Receivable from subsidiaries	448	426
Deferred income taxes	230	225
Other assets	86	92
Total assets	$ 35,362	$ 30,685
Liabilities		
Long-term debt	$ 6,631	$ 6,451
Pension and other postretirement benefit obligations	1,081	1,050
Deferred compensation	327	281
Payable to subsidiaries	14	3
Notes due to subsidiaries	1,000	1,250
Dividends payable to shareholders	199	198
Other liabilities	112	140
Total liabilities	9,364	9,373
Shareholders' equity		
Preferred stock and additional capital paid-in, $1 par value, 25 million shares authorized, 92.5 thousand and 79.8 thousand shares issued and outstanding, $2,313 and $1,995 aggregate liquidation preference	2,248	1,930
Common stock, $.01 par value, 2.0 billion shares authorized and 900 million issued, 319 million and 332 million shares outstanding	9	9
Additional capital paid-in	3,463	3,310
Retained income	48,074	44,033
Deferred ESOP expense	—	(3)
Treasury stock, at cost (581 million and 568 million shares)	(29,746)	(28,085)
Accumulated other comprehensive income:		
Unrealized net capital gains and losses	1,887	(2)
Unrealized foreign currency translation adjustments	(59)	(49)
Unamortized pension and other postretirement prior service credit	122	169
Total accumulated other comprehensive income	1,950	118
Total shareholders' equity	25,998	21,312
Total liabilities and shareholders' equity	$ 35,362	$ 30,685

See accompanying notes to condensed financial information and notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries

Schedule II (Continued) — Condensed Financial Information of Registrant Statement of Cash Flows

($ in millions)	Years Ended December 31, 2019	2018	2017
Cash flows from operating activities			
Net income	$ 4,847	$ 2,160	$ 3,554
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in net income of subsidiaries	(5,072)	(2,731)	(3,556)
Dividends received from subsidiaries	2,434	2,059	1,671
Realized capital gains and losses	(9)	10	2
Pension and other postretirement remeasurement gains and losses	103	454	(219)
Changes in:			
Pension and other postretirement benefits	(122)	(116)	(224)
Income taxes	13	(28)	232
Operating assets and liabilities	111	160	56
Net cash provided by operating activities	2,305	1,968	1,516
Cash flows from investing activities			
Proceeds from sales of investments	1,094	1,370	880
Proceeds from sales of investments to subsidiaries	—	390	—
Investment purchases	(892)	(1,037)	(748)
Investment collections	65	108	13
Capital contribution or return of capital from subsidiaries	43	(975)	42
Change in short-term investments, net	(417)	(115)	48
Net cash (used in) provided by investing activities	(107)	(259)	235
Cash flows from financing activities			
Proceeds from borrowings from subsidiaries	1,000	1,250	300
Repayment of notes due to subsidiaries	(1,250)	(250)	(50)
Proceeds from issuance of long-term debt	491	498	—
Redemption of preferred stock	(1,132)	(385)	—
Redemption and repayment of long-term debt	(317)	(400)	—
Proceeds from issuance of preferred stock	1,414	557	—
Dividends paid on common stock	(653)	(614)	(525)
Dividends paid on preferred stock	(134)	(134)	(116)
Treasury stock purchases	(1,735)	(2,303)	(1,495)
Shares reissued under equity incentive plans, net	120	73	135
Other	—	(1)	(2)
Net cash used in financing activities	(2,196)	(1,709)	(1,753)
Net increase (decrease) in cash	2	—	(2)
Cash at beginning of year	—	—	2
Cash at end of year	$ 2	$ —	$ —

See accompanying notes to condensed financial information and notes to consolidated financial statements.

The Allstate Corporation and Subsidiaries
Schedule II (Continued) — Condensed Financial Information of Registrant
Notes to Condensed Financial Information

1. General

Pursuant to rules and regulations of the SEC, the unconsolidated condensed financial statements of the Parent Company do not reflect all of the information and notes normally included with financial statements prepared in accordance with GAAP. Therefore, these condensed financial statements of the Registrant should be read in conjunction with the consolidated financial statements and notes thereto included in Item 8.

The long-term debt presented in Note 12 “Capital Structure” are direct obligations of the Registrant. A majority of the pension and other postretirement benefits plans presented in Note 17 “Benefit Plans” are direct obligations of the Registrant.

Participating subsidiaries fund the pension plans contributions under a master services cost sharing agreement. In addition, as a result of joint and several pension liability rules under the Internal Revenue Code and the Employee Retirement Income Security Act of 1974, as amended, many liabilities that arise in connection with pension plans are joint and several across all members of a controlled group of entities.

2. Notes due to subsidiaries

On June 19, 2019, the Registrant issued a $1.00 billion note, with a rate of 2.63% due on June 19, 2020 to Kennett Capital Inc. The proceeds of this issuance were used for cash management purposes.

On October 11, 2018 and December 18, 2018, the Registrant issued $250 million and $1.00 billion notes, with a rate of 2.49% and 3.03% due on April 11, 2019 and June 18, 2019, respectively, both to its wholly owned subsidiary Kennett Capital Inc. The proceeds of these issuances were used for cash management purposes. On April 11, 2019 and June 18, 2019, the Registrant repaid $250 million and $1.00 billion, respectively, to Kenneth Capital Inc.

3. Supplemental Disclosures of Cash Flow Information

The Registrant paid $312 million, $330 million and $331 million of interest on debt in2019, 2018 and 2017, respectively.

The Allstate Corporation and Subsidiaries

Schedule III — Supplementary Insurance Information

($ in millions)	As of December 31,			For the years ended December 31,					
Segment	Deferred policy acquisition costs	Reserves for claims and claims expense, contract benefits and contractholder funds	Unearned premiums	Premium revenue and contract charges	Net investment income (1)	Claims and claims expense, contract benefits and interest credited to contractholders	Amortization of deferred policy acquisition costs	Other operating costs and expenses	Premiums written (excluding life)
2019									
Property-Liability									
Allstate Protection	$ 1,624	$ 25,843	$ 12,567	$ 34,843		$ 23,517	$ 4,649	$ 4,506	$ 35,419
Discontinued Lines and Coverages	—	1,818	—	—		105	—	3	—
Total Property-Liability	1,624	27,661	12,567	34,843	$ 1,533	23,622	4,649	4,509	35,419
Service Businesses (2)	1,449	51	2,765	1,387	42	363	543	838	1,535
Allstate Life	1,079	10,541	3	1,343	514	1,154	173	356	—
Allstate Benefits	527	1,950	8	1,145	83	635	161	285	988
Allstate Annuities	20	17,501	—	13	917	890	7	30	—
Corporate and Other	—	—	—	—	70	—	—	531	—
Intersegment Eliminations (2)	—	—	—	(154)	—	(9)	—	(145)	—
Total	$ 4,699	$ 57,704	$ 15,343	$ 38,577	$ 3,159	$ 26,655	$ 5,533	$ 6,404	$ 37,942
2018									
Property-Liability									
Allstate Protection	$ 1,618	$ 25,495	$ 11,953	$ 32,950		$ 22,348	$ 4,475	$ 4,522	$ 33,555
Discontinued Lines and Coverages	—	1,864	—	—		87	—	3	—
Total Property-Liability	1,618	27,359	11,953	32,950	$ 1,464	22,435	4,475	4,525	33,555
Service Businesses (2)	1,290	64	2,546	1,220	27	350	463	603	1,431
Allstate Life	1,300	10,333	3	1,315	505	1,094	132	364	—
Allstate Benefits	549	1,905	8	1,135	77	630	145	278	980
Allstate Annuities	27	18,341	—	15	1,096	903	7	31	—
Corporate and Other	—	—	—	—	71	—	—	880	—
Intersegment Eliminations (2)	—	—	—	(122)	—	(7)	—	(115)	—
Total	$ 4,784	$ 58,002	$ 14,510	$ 36,513	$ 3,240	$ 25,405	$ 5,222	$ 6,566	$ 35,966
2017									
Property-Liability									
Allstate Protection	$ 1,510	$ 24,336	$ 11,409	$ 31,433		$ 21,388	$ 4,205	$ 4,239	$ 31,648
Discontinued Lines and Coverages	—	1,893	—	—		96	—	3	—
Total Property-Liability	1,510	26,229	11,409	31,433	$ 1,478	21,484	4,205	4,242	31,648
Service Businesses (2)	954	96	2,052	977	16	369	296	565	1,094
Allstate Life	1,152	10,244	4	1,280	489	1,047	134	344	—
Allstate Benefits	541	1,869	8	1,084	72	599	142	261	919
Allstate Annuities	34	19,870	—	14	1,305	967	7	34	—
Corporate and Other	—	—	—	—	41	—	—	292	—
Intersegment Eliminations (2)	—	—	—	(110)	—	(6)	—	(104)	—
Total	$ 4,191	$ 58,308	$ 13,473	$ 34,678	$ 3,401	$ 24,460	$ 4,784	$ 5,634	$ 33,661

(1) A single investment portfolio supports both Allstate Protection and Discontinued Lines and Coverages segments.

(2) Includes intersegment premiums and service fees and the related incurred losses and expenses that are eliminated in the consolidated financial statements.

The Allstate Corporation and Subsidiaries

Schedule IV — Reinsurance

($ in millions)	Gross amount	Ceded to other companies (1)	Assumed from other companies	Net amount	Percentage of amount assumed to net
Year ended December 31, 2019					
Life insurance in force	$ 219,785	$ 74,021	$ 229,419	$ 375,183	61.1%
Premiums and contract charges:					
Life insurance	$ 1,062	$ 262	$ 712	$ 1,512	47.1%
Accident and health insurance	1,012	23	—	989	—%
Property and casualty insurance	37,104	1,122	94	36,076	0.3%
Total premiums and contract charges	$ 39,178	$ 1,407	$ 806	$ 38,577	2.1%
Year ended December 31, 2018					
Life insurance in force	$ 207,434	$ 81,186	$ 243,161	$ 369,409	65.8%
Premiums and contract charges:					
Life insurance	$ 994	$ 266	$ 754	$ 1,482	50.9%
Accident and health insurance	1,007	24	—	983	—%
Property and casualty insurance	34,977	1,016	87	34,048	0.3%
Total premiums and contract charges	$ 36,978	$ 1,306	$ 841	$ 36,513	2.3%
Year ended December 31, 2017					
Life insurance in force	$ 188,186	$ 86,642	$ 259,671	$ 361,215	71.9%
Premiums and contract charges:					
Life insurance	$ 936	$ 276	$ 787	$ 1,447	54.4%
Accident and health insurance	958	27	—	931	—%
Property and casualty insurance	33,221	971	50	32,300	0.2%
Total premiums and contract charges	$ 35,115	$ 1,274	$ 837	$ 34,678	2.4%

(1) No reinsurance or coinsurance income was netted against premium ceded in 2019, 2018 or 2017.

The Allstate Corporation and Subsidiaries
Schedule V — Valuation Allowances and Qualifying Accounts

($ in millions)		Additions			
Description	**Balance as of beginning of period**	**Charged to costs and expenses**	**Other additions**	**Deductions**	**Balance as of end of period**
Year ended December 31, 2019					
Allowance for reinsurance recoverables	$ 65	$ (2)	$ —	$ —	$ 63
Allowance for premium installment receivable	77	137	—	124	90
Allowance for deferred tax assets	—	—	—	—	—
Allowance for estimated losses on mortgage loans	3	—	—	—	3
Allowance for estimated losses on agent loans	2	1	—	—	3
Year ended December 31, 2018					
Allowance for reinsurance recoverables	$ 70	$ (5)	$ —	$ —	$ 65
Allowance for premium installment receivable	77	118	—	118	77
Allowance for deferred tax assets	—	—	—	—	—
Allowance for estimated losses on mortgage loans	3	—	—	—	3
Allowance for estimated losses on agent loans	2	—	—	—	2
Year ended December 31, 2017					
Allowance for reinsurance recoverables	$ 84	$ (10)	$ —	$ 4	$ 70
Allowance for premium installment receivable	84	109	—	116	77
Allowance for deferred tax assets	—	—	—	—	—
Allowance for estimated losses on mortgage loans	3	1	—	1	3
Allowance for estimated losses on agent loans	2	—	—	—	2

Exhibit 3.6

CERTIFICATE OF ELIMINATION

OF

FIXED RATE NONCUMULATIVE PERPETUAL PREFERRED STOCK, SERIES A,

FIXED RATE NONCUMULATIVE PERPETUAL PREFERRED STOCK, SERIES C,

FIXED RATE NONCUMULATIVE PERPETUAL PREFERRED STOCK, SERIES D,

FIXED RATE NONCUMULATIVE PERPETUAL PREFERRED STOCK, SERIES E AND

FIXED RATE NONCUMULATIVE PERPETUAL PREFERRED STOCK, SERIES F,

OF

THE ALLSTATE CORPORATION

Pursuant to Section 151(g) of the General Corporation Law
of the State of Delaware

The Allstate Corporation, a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), in accordance with the provisions of Section 151(g) of the General Corporation Law of the State of Delaware, does hereby certify:

1. That, on June 5, 2013, a Pricing Committee (the "Committee") of the Board of Directors of the Corporation (the "Board"), pursuant to the authority vested in the Committee and in accordance with the resolutions adopted at a meeting duly called and held by the Board on May 21, 2013, the provisions of the Restated Certificate of Incorporation and the Amended and Restated By-Laws of the Corporation and applicable law, adopted a resolution creating a series of shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series A" (the "Series A Preferred Stock"), of which 11,500 shares were authorized, and caused to be filed a Certificate of Designations of the Series A Preferred Stock with the Secretary of State of the State of Delaware (the "Secretary of State". The Corporation issued 11,500 shares of the Series A Preferred Stock.

2. That, on September 23, 2013, the Committee, pursuant to the authority vested in the Committee and in accordance with the resolutions adopted at a meeting duly called and held by the Board on May 21, 2013, the provisions of the Restated Certificate of Incorporation and the Amended and Restated By-Laws of the Corporation and applicable law, adopted a resolution creating a series of shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series C" (the "Series C Preferred Stock"), of which 16,100 shares were authorized, and caused to be filed a Certificate of Designations of the Series C Preferred Stock with the Secretary of State. The Corporation issued 15,400 shares of the Series C Preferred Stock.

3. That, on December 9, 2013, the Committee, pursuant to the authority vested in the Committee and in accordance with the resolutions adopted at a meeting duly called and held by the Board on May 21, 2013, the provisions of the Restated Certificate of Incorporation and the Amended and Restated By-Laws of the Corporation and applicable law, adopted a resolution creating a series of shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series D" (the "Series D Preferred Stock"), of which 20,000 shares were authorized, and caused to be filed a Certificate of Designations of the Series D Preferred Stock with the Secretary of State. The Corporation issued 5,400 shares of the Series D Preferred Stock.

4. That, on February 24, 2014, the Committee, pursuant to the authority vested in the Committee and in accordance with the resolutions adopted at a meeting duly called and held by the Board on May 21, 2013, the provisions of the Restated Certificate of Incorporation and the Amended and Restated By-Laws of the Corporation and applicable law, adopted a resolution creating a series of shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series E" (the "Series E Preferred Stock"), of which 29,900 shares were authorized, and caused to be filed a Certificate of Designations of the Series E Preferred Stock with the Secretary of State. The Corporation issued 29,900 shares of the Series E Preferred Stock.

5. That, on June 2, 2014, the Committee, pursuant to the authority vested in the Committee and in accordance with the resolutions adopted at a meeting duly called and held by the Board on May 21, 2013, the provisions of the Restated Certificate of Incorporation and the Amended and Restated By-Laws of the Corporation and applicable law, adopted a resolution creating a series of shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series F" (the "Series F Preferred Stock," and together with the Series A Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock, the "Preferred Stock"), of which 20,000 shares were authorized, and caused to be filed a Certificate of Designations of the Series F Preferred Stock with the Secretary of State. The Corporation issued 10,000 shares of the Series F Preferred Stock.

6. That the terms of each series of the Preferred Stock provide that any shares of Preferred Stock that are purchased or otherwise acquired by the Corporation shall not be reissued as shares of such series and shall become authorized but unissued shares of preferred stock.

7. That all shares of the Preferred Stock that were previously issued have been purchased or otherwise acquired by the Corporation pursuant to resolutions adopted by the Board. No shares of the Preferred Stock remain outstanding, and no shares of the Preferred Stock will be issued subject to the Certificates of Designations.

8. That the Board adopted the following resolutions:

"WHEREAS, by resolutions of the Board of Directors (the "Board") of the Corporation, a Pricing Committee of the Board (the "Committee") and by a Certificate of Designations (the "Series A Certificate of Designations") filed with the Secretary of State of the State of Delaware (the "Secretary of State") on June 10, 2013, the Corporation authorized the issuance of a series of 11,500 shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series A" (the "Series A Preferred Stock") and established the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof; and

WHEREAS, by resolution of the Board, the Committee and by a Certificate of Designations (the "Series C Certificate of Designations") filed with the Secretary of State on September 26, 2013, the Corporation authorized the issuance of a series of 16,100 shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series C" (the "Series C Preferred Stock") and established the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof; and

WHEREAS, by resolution of the Board, the Committee and by a Certificate of Designations (the "Series D Certificate of Designations") filed with the Secretary of State on December 13, 2013, the Corporation authorized the issuance of a series of 20,000 shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series D" (the "Series D Preferred Stock") and established the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof; and

WHEREAS, by resolution of the Board, the Committee and by a Certificate of Designations (the "Series E Certificate of Designations") filed with the Secretary of State on February 27, 2014, the Corporation authorized the issuance of a series of 29,900 shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series E" (the "Series E Preferred Stock") and established the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof; and

WHEREAS, by resolution of the Board, the Committee and by a Certificate of Designations (the "Series F Certificate of Designations," and together with the Series A Certificate of Designations, the Series C Certificate of Designations, the Series D Certificate of Designations and the Series E Certificate of Designations, the "Certificates of Designations") filed with the Secretary of State on June 11, 2014, the Corporation authorized the issuance of a series of 20,000 shares of preferred stock, par value $1.00 per share, of the Corporation, designated as the "Fixed Rate Noncumulative Perpetual Preferred Stock, Series F" (the "Series F Preferred Stock," and together with the Series A Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series E Preferred Stock, the "Preferred Stock") and established the voting and other powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations and restrictions thereof; and

WHEREAS, as of the date hereof, no shares of such Preferred Stock are outstanding and no shares of such Preferred Stock will be issued subject to said Certificates of Designation; and

WHEREAS, it is desirable that all matters set forth in the Certificates of Designation with respect to such Preferred Stock be eliminated from the Restated Certificate of Incorporation of the Corporation.

NOW, THEREFORE, BE IT AND IT HEREBY IS

RESOLVED, that all matters set forth in the Certificates of Designation with respect to such Preferred Stock be eliminated from the Restated Certificate of Incorporation of the Corporation; and it is further

RESOLVED, that the officers of the Corporation be, and hereby are, authorized and directed to file a Certificate of Elimination with the Secretary of State setting forth a copy of these resolutions whereupon all matters set forth in the Certificates of Designation with respect to such Preferred Stock shall be eliminated from the Restated Certificate of Incorporation of the Corporation and the shares of the Preferred Stock shall resume the status of authorized and unissued shares of preferred stock, par value $1.00 per share, of the Corporation, without designation as to series."

9. That, accordingly, upon the filing of this Certificate of Elimination, the Restated Certificate of Incorporation of the Corporation, as heretofore amended, shall be amended so as to eliminate therefrom all reference to the Preferred Stock, and the shares that were designated to each such series are hereby returned to the status of authorized but unissued shares of preferred stock, par value $1.00 per share, of the Corporation, without designation as to series. This Certificate of Elimination shall not affect the total number of authorized shares of capital stock of the Corporation or the total number of authorized shares of preferred stock.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Elimination to be signed by its duly authorized officer this 20th day of February, 2020.

THE ALLSTATE CORPORATION

By: /s/ Daniel G. Gordon
Name: Daniel G. Gordon
Title: Vice President, Assistant General Counsel and Assistant Secretary

[Signature Page to Certificate of Elimination]

Exhibit 4.2

DESCRIPTION OF THE ALLSTATE CORPORATION'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

References herein to "we," "us," "our" and "Allstate" are references to The Allstate Corporation, and not to any of our subsidiaries, unless we state otherwise or the context otherwise requires.

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of our capital stock is based upon our Restated Certificate of Incorporation and our Amended and Restated Bylaws and the Delaware General Corporation Law. The summary is not complete, and is qualified by reference to our Restated Certificate of Incorporation and our Amended and Restated Bylaws, which are filed as exhibits to this Annual Report on Form 10-K and are incorporated by reference herein.

Our Restated Certificate of Incorporation authorizes us to issue up to 2,000,000,000 shares of common stock, par value of $0.01 per share, and up to 25,000,000 shares of preferred stock, par value $1.00 per share.

Common Stock

Outstanding shares of our common stock are listed on the New York Stock Exchange (the "*NYSE*") and the Chicago Stock Exchange under the symbol "ALL." All outstanding shares of common stock are fully paid and non-assessable.

Dividends. Subject to the prior rights of the holders of shares of preferred stock that may be issued and outstanding, the holders of common stock are entitled to receive dividends as and when declared by our Board of Directors. The issuance of dividends will depend upon, among other factors deemed relevant by our Board of Directors, our financial condition, results of operations, cash requirements, future prospects, changes in tax or other applicable laws relating to the treatment of dividends and regulatory restrictions on the payment of dividends that apply under applicable insurance laws. Dividends may be paid in cash, stock or other form. Each such dividend shall be payable to holders of record as they appear on our stock books on such record dates as shall be fixed by the Board of Directors.

Subject to certain limited exceptions, unless the full dividends on each of our (i) 5.625% Fixed Rate Noncumulative Perpetual Preferred Stock, Series G ("*Series G Preferred Stock*"), (ii) 5.10% Fixed Rate Noncumulative Perpetual Preferred Stock, Series H ("*Series H Preferred Stock*"), and (iii) our 4.750% Fixed Rate Noncumulative Perpetual Preferred Stock, Series I (the "*Series I Preferred Stock*", and together with the Series G Preferred Stock and the Series H Preferred Stock, our "*Outstanding Preferred Stock*"), for the preceding dividend period have been declared and paid or declared and a sum sufficient for the payment thereof has been set aside and any declared but unpaid dividends on such Outstanding Preferred Stock for any prior period have been paid, we may not pay dividends on our common stock. If and when dividends on our Outstanding Preferred Stock have not been declared and paid in full for at least six quarterly dividend periods, the authorized number of directors then constituting our Board of Directors will be increased by two additional directors, to be elected by the holders of our Outstanding Preferred Stock together with the holders of all other affected classes and series of voting parity stock, voting as a single class, subject to certain conditions.

We are prohibited from declaring or paying dividends on the Series G Preferred Stock if we fail to meet specified capital adequacy, net income or stockholders' equity levels. The prohibition is subject to an exception permitting us to declare dividends out of the net proceeds of common stock issued by us during the 90 days prior to the date of declaration even if we fail to meet such levels.

The terms of our outstanding Series A 6.50% Fixed-to-Floating Rate Junior Subordinated Debentures due 2067, 5.100% Fixed-To-Floating Rate Subordinated Debentures due 2053 and Series B 5.750% Fixed-to-Floating Rate Subordinated Debentures due 2053 (collectively, the "*Outstanding Subordinated Debentures*") also prohibit us from declaring or paying any dividends or distributions on our common or preferred stock if we have elected to defer interest payments on the Outstanding Subordinated Debentures, subject to certain limited exceptions.

Voting Rights. Each holder of common stock is entitled to one vote for each share held of record on all matters presented to a vote at a stockholders meeting, including the election of directors. The holders of common stock are not entitled to cumulative voting rights. Directors are elected if they receive the vote of the majority of the votes cast at any meeting for the election of directors at which a quorum is present. A majority of votes cast means the number of shares voted "for" a director exceeds 50% of the votes cast with respect to that director's election. Votes cast shall include votes to withhold authority in each case and exclude abstentions. Except as otherwise provided in our Restated Certificate of Incorporation or Amended and Restated Bylaws or as required by law, all other matters can be approved by the affirmative vote of a majority of the common shares represented at a meeting and entitled to vote on the matter.

Liquidation Rights. In the event of any liquidation, dissolution or winding-up of Allstate, the holders of common stock will share equally in the assets remaining after creditors and preferred stockholders are paid.

Other Rights. The holders of common stock have no preemptive rights to purchase or subscribe for any additional shares of common stock or other securities and there are no conversion rights or redemption or sinking fund provisions with respect to the common stock.

Preferred Stock

In addition to the Outstanding Preferred Stock, as of December 31, 2019, our 5.625% Fixed Rate Noncumulative Perpetual Preferred Stock, Series A ("*Series A Preferred Stock*" and, together with the Outstanding Preferred Stock, the "*Preferred Stock*") was outstanding. We redeemed the Depositary Shares representing our Series A Preferred Stock and all of the shares of our Series A Preferred Stock on January 15, 2020. On such date, the NYSE also removed the Depositary Shares representing our Series A Preferred Stock from listing and registration under Section 12(b) of Securities Exchange Act of 1934, as amended, (the "*Exchange Act*"). None of our Series A Preferred Stock is currently outstanding.

Each series of the Preferred Stock is perpetual and has no maturity date.

Liquidation Rights. The Preferred Stock has preference over our common stock with respect to the payment of dividends and the distribution of assets in the event of our liquidation, winding-up or dissolution. Each series of Preferred Stock ranks on a parity with each other series of Preferred Stock. In the event of our liquidation, dissolution or winding-up, the holders of the Preferred Stock will be entitled to receive out of our assets, before any distribution of assets is made to holders of common stock, liquidating distributions in the amount of $25,000 per share, plus all accrued and unpaid dividends. If, upon any liquidation, dissolution or winding-up of Allstate, the amounts payable with respect to the Preferred Stock and any other shares of our stock ranking as to any such distribution on a parity with the Preferred Stock are not paid in full, the holders of the Preferred Stock and of such other shares will share ratably in any such distribution of our assets in proportion to the full respective preferential amounts to which they are entitled. After payment of the full amount of the liquidating distribution the holders of Preferred Stock will not be entitled to any further participation in any distribution of our assets. Our consolidation or merger with or into any other corporation or corporations or a sale of all or substantially all of our assets shall not be deemed to be our liquidation, dissolution or winding-up.

Other Rights. The holders of our Preferred Stock do not have preemptive or subscription rights to acquire more of our stock. The Preferred Stock is not convertible or exchangeable into our common stock or other securities. Neither holders of our Preferred Stock nor holders of the Depositary Shares representing the Preferred Stock will have the right to require the redemption or repurchase of the Preferred Stock.

Transfer Agent, Registrar & Dividend Disbursement Agent. Equiniti Trust Company, located at 1110 Centre Pointe Curve, Suite 101, Mendota Heights, MN 55120, is the transfer agent, registrar and dividend disbursement agent for our Preferred Stock. We may terminate such appointment and may appoint a successor transfer agent, registrar and/or dividend disbursement agent at any time and from time to time, *provided* that we will use our best efforts to ensure that there is, at all relevant times when the Preferred Stock is outstanding, a person or entity appointed and serving as transfer agent, registrar and/or dividend disbursement agent.

Dividends

The Preferred Stock, in preference to the holders of our common stock and of any other junior stock, are entitled to receive, only when, as and if declared by our Board of Directors (or a duly authorized committee thereof), out of funds legally available for payment, noncumulative cash dividends on each dividend payment date applied to the liquidation amount of $25,000 per share at the annual rate of (i) 5.625%, with respect to the Series A Preferred Stock and the Series G Preferred Stock, (ii) 5.100%, with respect to the Series H Preferred Stock and (iii) 4.750%, with respect to the Series I Preferred Stock.

A "*dividend payment date*" means each January 15, April 15, July 15 and October 15;*provided* that if any such date is not a business day, then such date will nevertheless be a dividend payment date but dividends on the Preferred Stock, when, as and if declared, will be paid on the next succeeding business day (without adjustment in the amount of the dividend per share of such Preferred Stock).

A "*business day*" means any day other than (i) a Saturday or Sunday or (ii) a day on which banking institutions in The City of New York are authorized or required by law or executive order to remain closed.

A "*dividend period*" means each period from and including a dividend payment date (except that the initial dividend period will commence on the original issue date of the applicable series of the Preferred Stock, as applicable) and continuing to but not including the next succeeding dividend payment date. As that term is used herein, each dividend payment date "relates" to the dividend period most recently ending before such dividend payment date.

Dividends will be paid to holders of record of Preferred Stock as they appear on our books on the applicable record date, which will be the 15th calendar day before such dividend payment date, or such other record date fixed for that purpose by our Board of Directors (or a duly authorized committee thereof) that is not more than 60 nor less than 10 days prior to such dividend payment date, in advance of payment of each particular dividend.

The amount of dividends payable per share of the Preferred Stock will be computed by Equiniti Trust Company as the dividend disbursement agent (as defined below) on the basis of a 360-day year consisting of twelve 30-day months.

Dividends on shares of the Preferred Stock will not be cumulative and will not be mandatory. If our Board of Directors (or a duly authorized committee of the board) does not declare a dividend on any series of the Preferred Stock in respect of a dividend period, then no dividend will be deemed to have accrued for such dividend period for such series, be payable on the related dividend payment date, or accumulate, and we will have no obligation to pay any dividend accrued for such dividend period for such series, whether or not our Board of Directors (or a duly authorized committee of the board) declares a dividend on the Preferred Stock or any other series of our preferred stock or on our common stock for any future dividend period. References to the "accrual" (or similar terms) of dividends herein refer only to the determination of the amount of such dividend and do not imply that any right to a dividend arises prior to the date on which a dividend is declared.

During any dividend period while any series of the Preferred Stock is outstanding, unless the full dividends for the preceding dividend period on all such outstanding shares of each series have been declared and paid or declared and a sum sufficient for the payment thereof has been set aside and any declared but unpaid dividends for any prior period have been paid:

(i) no dividend shall be declared or paid or set aside for payment and no distribution shall be declared or made or set aside for payment on any junior stock (other than (1) a dividend payable solely in junior stock or (2) any dividend in connection with the implementation of a shareholders' rights plan or the redemption or repurchase of any rights under such plan),

(ii) no shares of junior stock shall be repurchased, redeemed or otherwise acquired for consideration by us, directly or indirectly (other than (1) as a result of a reclassification of junior stock for or into other junior stock, (2) the exchange or conversion of one share of junior stock for or into another share of junior stock, (3) purchases, redemptions or other acquisitions of shares of junior stock in connection with any employment contract, benefit plan or other similar arrangement with or for the benefit of employees, officers, directors or consultants, (4) the purchase of fractional interests in shares of junior stock pursuant to the conversion or exchange provisions of such securities or the security being converted or exchanged and (5) through the use of the proceeds of a substantially contemporaneous sale of other shares of junior stock) nor shall any monies be paid to or made available for a sinking fund for the redemption of any such securities by us and

(iii) no shares of stock designated as ranking on a parity with the Preferred Stock, as to payments of dividends and the distribution of assets on our liquidation, dissolution or winding-up ("*dividend parity stock*"), shall be repurchased, redeemed or otherwise acquired for consideration by us other than pursuant to *pro rata* offers to purchase all, or a*pro rata* portion, of the Preferred Stock and such dividend parity stock (other than the exchange or conversion of such dividend parity stock for or into shares of junior stock).

When dividends are not paid in full upon the shares of the Preferred Stock (except with respect to the Series A Preferred Stock and the Series G Preferred Stock for the reasons described below) and any dividend parity stock, all dividends declared upon shares of the Outstanding Preferred Stock and any dividend parity stock will be declared on a proportional basis so that the amount of dividends declared per share will bear to each other the same ratio that accrued dividends for the then-current dividend period, and any prior dividend periods for which dividends were declared but not paid, per share on the Preferred Stock, and accrued dividends, including any accumulations, on any dividend parity stock, bear to each other.

We may pay dividends on the Series H Preferred Stock and the Series I Preferred Stock, neither of which include the dividend restrictions described below, for periods during which we may not be able to pay dividends on the Series A Preferred Stock or Series G Preferred Stock as a result of such dividend restrictions in such series of the Preferred Stock.

Restrictions on Declaration and Payment of Dividends – Series A Preferred Stock and Series G Preferred Stock. We are prohibited from declaring dividends for payment on the Series A Preferred Stock or Series G Preferred Stock on any dividend payment date in an aggregate amount exceeding the New Common Equity Amount, if on that declaration date, either:

- our Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio was less than 175%; or

- (x) our Trailing Four Quarters Net Income Amount for the period ending on the quarter that is two quarters prior to the most recently completed quarter is less than or equal to zero and (y) our Adjusted Shareholders' Equity Amount as of the most recently completed quarter and as of the end of the quarter that is two quarters before the most recently completed quarter has declined by 20% or more as compared to our Adjusted Shareholders' Equity Amount at the date that is ten quarters prior to the most recently completed quarter (the "*Benchmark Quarter End Test Date*").

The limitation on dividends provided for in the first bullet point above will be of no force and effect if, as of a dividend declaration date, the combined total assets of our Insurance Subsidiaries do not account for 25% or more of our consolidated total assets as reflected on our most recent consolidated financial statements.

If we fail to satisfy either of the above tests for any dividend payment date, the restrictions on dividends will continue until we satisfy both tests for a dividend payment date. In addition, in the case of a restriction arising under the second bullet point above, the restriction on payment of dividends on the Series A Preferred Stock or Series G Preferred Stock, as applicable, in an aggregate amount exceeding the New Common Equity Amount will continue until we satisfy the two tests set forth above for a dividend payment date and our Adjusted Shareholders' Equity Amount has increased, or has declined by less than 20%, in either case as compared to our Adjusted Shareholders' Equity Amount at the end of the Benchmark Quarter End Test Date for each dividend payment date as to which dividend restrictions were imposed under the second test above. For example, if we failed to satisfy the second test above for three consecutive dividend payment dates, we would be able to declare dividends on the Series A Preferred Stock or Series G Preferred Stock, as applicable, on the fourth dividend payment date only if, as of the related declaration date:

- we satisfied both of the tests set forth above for that fourth dividend payment date; and

- our Adjusted Shareholders' Equity Amount as of the last completed quarter for that dividend payment date had increased from, or was less than 20% below, its level as of the end of each of the eleventh, twelfth and thirteenth quarters, preceding the most recently completed quarter.

The information required to calculate the Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio for a year will be set forth in the Annual Statements of the Covered Insurance Subsidiaries, which are typically filed on or before March 1 of the following year.

There can be no assurance that future financial results will not result in these tests restricting the declaration of dividends.

The term "Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio" is defined below and is based upon the "RBC" or "risk-based capital" ratios that insurance companies are required to calculate and report to their regulators as of the end of each year in accordance with prescribed procedures. The ratio measures the relationship of an insurance company's "total adjusted capital", calculated in accordance with those prescribed procedures, relative to a standard that is determined based on the magnitude of various risks present in an insurance company's operations. The prescribed procedures set forth the RBC levels, ranging from the "company action level" to the "mandatory control level", at which certain corrective actions are required and at which a state insurance regulator is required, or authorized and expected, to take regulatory action.

The highest RBC level is known as the "company action level". If an insurance company's "total adjusted capital" is greater than the "company action level", no corrective action is required to be taken. At progressively lower levels of "total adjusted capital", an insurance company faces increasingly rigorous levels of corrective action, including the submission of a comprehensive financial plan to the insurance regulator in its state of domicile, a mandatory examination or analysis of the insurance company's business and operations by the regulator and the issuance of appropriate corrective orders to address the insurance company's financial problems, and, at the lowest levels, either voluntary or mandatory action by the regulator to place the insurer under regulatory control. The "company action level" is twice the level (known as the "authorized control level") below which the regulator is authorized (but not yet required) to place the insurance company under regulatory control. The Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio is based upon the "company action level".

If because of a change or cumulative effect of changes in insurance company statutory accounting or in the determination of Company Action Level RBC, our Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio is higher or lower than it would have been absent such change or cumulative effect of changes, then, for purposes of the calculations in the first test set forth above, and for so long as such calculations are required to be performed, our Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio may, in our discretion, be calculated on a best efforts *pro forma* basis as if such change or cumulative effect of changes had not occurred.

With the exception of terms that have specific insurance regulatory meanings such as "risk-based capital", all financial terms used herein will be determined in accordance with U.S. GAAP as applied and reflected in our related financial statements as of the relevant dates, except as provided in the next sentence. If because of a change or cumulative effect of changes in U.S. GAAP, either:

- our net income for the quarter in which such change or cumulative effect of changes take effect is higher or lower than it would have been absent such change or cumulative effect of changes and our Trailing Four Quarters Net Income Amount is higher or lower than it would have been absent such change or cumulative effect of changes, then, for purposes of the calculations described in the second test set forth above, commencing with the fiscal quarter for which such changes in U. S. GAAP becomes effective, and for so long as such calculations are required to be performed, such Trailing Four Quarters Net Income Amount may, in our discretion, be calculated on a best efforts *pro forma* basis as if such change or cumulative effect of changes had not occurred; or

- our Adjusted Shareholders' Equity Amount as of the end of the quarter in which such change or cumulative effect of changes take effect is higher or lower than it would have been absent such change or cumulative effect of changes then, for purposes of the calculations described in the second test set forth above, commencing with the fiscal quarter for which such changes in U. S. GAAP becomes effective, and for so long as such calculations are required to be performed, our Adjusted Shareholders' Equity Amount may, in our discretion, be calculated on a best efforts *pro forma* basis as if such change or cumulative effect of changes had not occurred.

If at any relevant time or for any relevant period, we are not a reporting company under the Exchange Act, then for any such relevant dates and periods we will prepare and post on our web site, or otherwise make publicly available, the financial statements that we would have been required to file with the SEC had we continued to be a reporting company under the Exchange Act, in each case on or before the dates that we would have been required to file such financial statements had we continued to be a "large accelerated filer" within the meaning of Rule 12b-2 under the Exchange Act.

As used in this section:

"*Adjusted Shareholders' Equity Amount*" means, as of any quarter end, our shareholders' equity, as reflected on our consolidated statement of financial position as of such quarter end, excluding (i) accumulated other comprehensive income and loss and (ii) any increase in our shareholders' equity resulting from the issuance of preferred stock (other than either the Series A Preferred Stock or the Series G Preferred Stock) during the period from and including the first dividend payment date on which we were restricted in our ability to pay dividends on the Series A Preferred Stock and/or the Series G Preferred Stock as a result of our Trailing Four Quarters Net Income Amount having been less than zero and our Adjusted Shareholders' Equity Amount having declined by 20% or more as compared to the Benchmark Quarter End Test Date, through to the first quarter end thereafter as of which our Adjusted Shareholders' Equity Amount has declined by less than 20% or increased as compared to the Benchmark Quarter End Test Date, in each case, as reflected on such consolidated statement of financial position.

"*Annual Statement*" means, as to an Insurance Subsidiary, the annual statement of such Insurance Subsidiary containing its statutory balance sheet and income statement as required to be filed by it with one or more state insurance commissioners or other state insurance regulatory authorities.

"*Company Action Level RBC*" has the meaning specified in Section 35A-15 (or the relevant successor section, if any) of the Illinois Insurance Code or similar provision of the laws governing property-casualty insurance companies for the state in which a Covered Insurance Subsidiary is domiciled.

"*Covered Insurance Subsidiaries*" means, for any year, Insurance Subsidiaries that account for 80% or more of the Net Written Premiums of our property liability Insurance Subsidiaries for such year. Our Insurance Subsidiaries for any year will be identified by first ranking the Insurance Subsidiaries from largest to smallest based upon the amount of each Insurance Subsidiary's Net Written Premiums during such year and then, beginning with the Insurance Subsidiary that has the greatest amount of Net Written Premiums during such year, identifying such Insurance Subsidiaries as Covered Insurance Subsidiaries until the ratio of the combined Net Written Premiums of the Insurance

Subsidiaries so identified to the combined Net Written Premiums of all of the Insurance Subsidiaries during such year equals or exceeds 80%.

"*Covered Insurance Subsidiaries' Most Recent Weighted Average RBC Ratio*" means, as of any date, an amount (expressed as a percentage) calculated as (i) the sum of the Total Adjusted Capital of each of our Covered Insurance Subsidiaries as shown on such Covered Insurance Subsidiary's most recently filed Annual Statement, divided by (ii) the sum of the Company Action Level RBC of each of our Covered Insurance Subsidiaries, which is determined as two times the authorized control level RBC, as shown on such Covered Subsidiary's most recently filed Annual Statement. The computation will be done in a manner that does not double count subsidiary RBC.

"*Net Written Premiums*" means, as to an Insurance Subsidiary for any full fiscal year, the total net written premiums by such Insurance Subsidiary for such year as shown on such Insurance Subsidiary's most recently filed Annual Statement including any affiliate assumed or ceded premiums.

"*Insurance Subsidiary*" means any of our subsidiaries that is organized under the laws of any state in the United States and is licensed as a property-casualty insurance company in any state in the United States.

"*New Common Equity Amount*" means, at any date, the net proceeds (after underwriters' or placement agents' fees, commissions or discounts and other expenses relating to the issuances) received by us from new issuances of our common stock (whether in one or more public offerings registered under the Securities Act of 1933, as amended (the "*Securities Act*"), or private placements or other transactions exempt from registration under the Securities Act) during the period commencing on the 90th day prior to such date, and which are designated by our Board of Directors (or a duly authorized committee of the board) at or before the time of issuance as available to pay dividends on the Series A Preferred Stock or Series G Preferred Stock, as applicable.

"*Total Adjusted Capital*" has the meaning specified in Section 35A-5 (or the relevant successor section, if any) of the Illinois Insurance Code or similar provision of the laws governing property-casualty insurance companies for the state in which a Covered Insurance Subsidiary is domiciled.

"*Trailing Four Quarters Net Income Amount*" means, for any period ending on the last day of a fiscal quarter, the sum of our U.S. GAAP net income for the four fiscal quarters ending on the last day of such fiscal quarter, with losses being treated as negative numbers for such purpose.

"*U.S. GAAP*" means, at any date or for any period, U.S. generally accepted accounting principles as in effect on such date or for such period.

Notices Related to Potential or Actual Restrictions on Declaration and Payment of Dividends – Series A Preferred Stock and Series G Preferred Stock. We are required to give notice to holders of the Series A Preferred Stock and Series G Preferred Stock of a potential restriction on the declaration and payment of dividends that could take effect for a subsequent dividend payment date two quarters in the future if:

- our Trailing Four Quarters Net Income Amount for the most recently completed quarter is less than or equal to zero; and

- our Adjusted Shareholders' Equity Amount as of the most recently completed quarter has declined by 20% or more as compared to our Adjusted Shareholders' Equity Amount as of the date that is eight quarters prior to the most recently completed quarter.

We will send such a notice no later than the first dividend payment date following the end of the most recently completed quarter as of which the above tests indicate that a potential restriction on declaration and payment of dividends could occur. Such notice will be sent by first class mail, postage prepaid, addressed to the holders of record of the Series A Preferred Stock or the Series G Preferred Stock at their respective last addresses appearing on our books and we will file a copy of such notice on Form 8-K with the SEC. Such notice will (i) set forth the results of our Trailing Four Quarters Net Income Amount and our Adjusted Shareholders' Equity Amounts for the relevant period and dates, and (ii) state that we may be limited by the terms of the Series A Preferred Stock or Series G Preferred Stock, as applicable, from declaring and paying dividends on such future dividend payment date unless we, through the generation of earnings or new issuances of our common stock, increase our Adjusted Shareholders' Equity Amount by an amount specified in such notice by the second dividend payment date after the date of such notice.

By not later than the 15th day prior to each dividend payment date for which dividends are being suspended because we have failed either of the two tests set forth above and we are not otherwise able to pay dividends out of New Common Equity Amount, we will give notice of such suspension by first class mail, postage prepaid, addressed to the holders of record of the Series A Preferred Stock or Series G Preferred Stock, as applicable, and we will file a copy of such notice on Form 8-K with the SEC. Such notice, in addition to stating that dividends will be suspended, will set forth the fact that the Covered Insurance Subsidiaries' risk based capital ratio is less than 175% of such subsidiaries' company action level if dividends are suspended by reason of failing to satisfy the first test above and the applicable Adjusted Shareholders' Equity Amount (and the amount by which our Adjusted Shareholders' Equity Amount must increase in order for declaration and payment of dividends to be resumed) if dividends are suspended by reason of failing to satisfy the second test above.

Interpretive Provisions and Qualifications– Series A Preferred Stock and Series G Preferred Stock. In order to give effect to the foregoing, the terms of the Series A Preferred Stock and Series G Preferred Stock prohibit our Board of Directors (or duly authorized committee of the board) from declaring dividends on such series of Preferred Stock on a declaration date (i) that is more than 60 days prior to the related dividend payment date or (ii) that is earlier than the date on which our financial statements for the most recently completed quarter prior to the related dividend payment date have been filed with or furnished to the SEC (*e.g*., on a Form 10-K, 10-Q or 8-K) or have otherwise been made publicly available. The limitation in clause (ii) of the preceding sentence is subject to the exception that, if the Board of Directors determines to delay filing our financial statements with the SEC to a date later than the date on which "large accelerated filers" under the SEC's rules would normally be required to file such financial statements (without giving effect to any permitted extensions), for example because of concerns over the accuracy of such financial statements or their compliance with U.S. GAAP, then the Board of Directors (or any duly authorized committee of the board) will be permitted to determine the ability of the Board of Directors (or any duly authorized committee of the board) to declare dividends under the financial test outlined above based upon our financial statements as most recently filed with the SEC or otherwise made publicly available.

Any other class or series of our preferred stock will not be deemed to rank senior to (or other than on a parity with) the Series A Preferred Stock or Series G Preferred Stock in the payment of dividends solely because such other class or series of our stock does not include the limitation on payment of dividends (and the related exceptions) described herein. Therefore, we may pay dividends on the shares of any such other class or series of our stock that is otherwise on a parity with the Series A Preferred Stock or Series G Preferred Stock, as applicable, for periods during which we may not pay dividends on such series of Preferred Stock because of such limitation.

Redemption

Redemption – Series A Preferred Stock and Series G Preferred Stock. We may, at our option, redeem the shares of the Series A Preferred Stock or the Series G Preferred Stock (i) in whole but not in part at any time prior to (x) June 15, 2018, with respect to the Series A Preferred Stock and (y) April 15, 2023, with respect to the Series G Preferred Stock, in each case, within 90 days after the occurrence of a "rating agency event" at a redemption price equal to $25,000 per share, or if greater, a "make-whole redemption price" calculated as described below, in each case, plus any declared and unpaid dividends, without regard to any undeclared dividends, to, but excluding, the redemption date, or (ii) in whole or in part, from time to time, on any dividend payment date on or after (x) June 15, 2018, with respect to the Series A Preferred Stock and (y) April 15, 2023, with respect to the Series G Preferred Stock, in each case, at a redemption price equal to $25,000 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends, to, but excluding, the redemption date. Dividends will cease to accrue on the shares of the Series A Preferred Stock or the Series G Preferred Stock called for redemption from, and including, the redemption date.

For the purposes of the preceding paragraph:

- "*make-whole redemption price*" means, with respect to a redemption of the Series A Preferred Stock or the Series G Preferred Stock in whole prior to (x) June 15, 2018, with respect to the Series A Preferred Stock and (y) April 15, 2023, with respect to the Series G Preferred Stock, as applicable, the present values of (i) $25,000 per share of Series A Preferred Stock or Series G Preferred Stock and (ii) all undeclared dividends for the dividend periods from the date of redemption to and including (x) June 15, 2018, with respect to the Series A Preferred Stock and (y) April 15, 2023, with respect to the Series G Preferred Stock, in each case, discounted to the date of redemption on a quarterly basis (assuming a 360-day year consisting of twelve 30-day months) at the treasury rate, as calculated by the treasury dealer plus (x) 0.35%, with respect to the Series A Preferred Stock and (y) 0.40%, with respect to the Series G Preferred Stock;

- "*treasury rate*" means the quarterly equivalent yield to maturity of the treasury security that corresponds to the treasury price (calculated in accordance with standard market practice and computed by the treasury dealer as of the second trading day preceding the redemption date);

- "*treasury security*" means the United States Treasury security that the treasury dealer determines would be appropriate to use, at the time of determination and in accordance with standard market practice, in pricing the Series A Preferred Stock or the Series G Preferred Stock, as applicable, being redeemed in a tender offer based on a spread to United States Treasury yields;

- "*treasury price*" means the bid-side price for the treasury security as of the third trading day preceding the redemption date, as set forth in the Wall Street Journal in the table entitled "Treasury Bonds, Notes and Bills", except that: (i) if that table (or any successor table) is not published or does not contain that price information on that trading day, or (ii) if the treasury dealer determines that the price information is not reasonably reflective of the actual bid-side price of the treasury security prevailing at 3:30 p.m., New York City time, on that trading day, then treasury price will instead mean the bid-side price for the treasury security at or around 3:30 p.m., New York City time, on that trading day (expressed on a next trading day settlement basis) as determined by the treasury dealer through such alternative means as are commercially reasonable under the circumstances; and

- "*treasury dealer*" means:

  (x) with respect to the Series A Preferred Stock, one of (i) BofA Securities, Inc., J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC, UBS Securities LLC and their respective successors, or (ii) a Primary Treasury Dealer selected by Wells Fargo Securities, LLC or its successor, in each case, as selected by us, or if any of the foregoing refuse to act as treasury dealer for this purpose or cease to be primary U.S. Government securities dealers in the United States (a "*Primary Treasury Dealer*"), another Primary Treasury Dealer specified by us for these purposes.

  (y) with respect to the Series G Preferred Stock, Morgan Stanley & Co. LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated, UBS Securities LLC, Wells Fargo Securities, LLC or their respective successors, as selected by us, or if any of the foregoing refuse to act as treasury dealer for this purpose or cease to be a Primary Treasury Dealer, another Primary Treasury Dealer specified by us for these purposes.

- "*rating agency event*" means that any nationally recognized statistical rating organization as defined in Section 3(a)(62) of the Exchange Act, that then publishes a rating for us (a "*rating agency*") amends, clarifies or changes the criteria it uses to assign equity credit to securities such as the Series A Preferred

Stock or the Series G Preferred Stock, as applicable, which amendment, clarification or change results in:

- o the shortening of the length of time the Series A Preferred Stock or the Series G Preferred Stock, as applicable, is assigned a particular level of equity credit by that rating agency as compared to the length of time it would have been assigned that level of equity credit by that rating agency or its predecessor on the initial issuance of the Series A Preferred Stock or the Series G Preferred Stock, as applicable; or

- o the lowering of the equity credit (including up to a lesser amount) assigned to the Series A Preferred Stock or the Series G Preferred Stock, as applicable, by that rating agency as compared to the equity credit assigned by that rating agency or its predecessor on the initial issuance of the Series A Preferred Stock or the Series G Preferred Stock, as applicable.

As noted above, all Series A Preferred Stock was redeemed on January 15, 2020.

Redemption – Series H Preferred Stock and Series I Preferred Stock. We may, at our option, redeem the shares of the Series H Preferred Stock or the Series I Preferred Stock (i) in whole but not in part at any time prior to (x) October 15, 2024, with respect to the Series H Preferred Stock or (ii) January 15, 2025, with respect to the Series I Preferred Stock, in each case, within 90 days after the occurrence of a "rating agency event" at a redemption price equal to $25,500 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends, to, but excluding, the redemption date, or (ii) (a) in whole but not in part at any time prior to (x) October 15, 2024, with respect to the Series H Preferred Stock or (ii) January 15, 2025, with respect to the Series I Preferred Stock, in each case, within 90 days after the occurrence of a "regulatory capital event," or (b) in whole or in part, from time to time, on any dividend payment date on or after (x) October 15, 2024, with respect to the Series H Preferred Stock or (ii) January 15, 2025, with respect to the Series I Preferred Stock, in each case, at a redemption price equal to $25,000 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends, to, but excluding, the redemption date. Dividends will cease to accrue on the shares of the Series H Preferred Stock or the Series I Preferred Stock called for redemption from, and including, the redemption date.

For the purposes of the preceding paragraph:

- "*rating agency event*" means that any rating agency that then publishes a rating for us amends, clarifies or changes the criteria it uses to assign equity credit to securities such as the Series H Preferred Stock or the Series I Preferred Stock, as applicable, which amendment, clarification or change results in:

  - o the shortening of the length of time the Series H Preferred Stock or the Series I Preferred Stock, as applicable, is assigned a particular level of equity credit by that rating agency as compared to the length of time it would have been assigned that level of equity credit by that rating agency or its predecessor on the initial issuance of the Series H Preferred Stock or the Series I Preferred Stock, as applicable; or

  - o the lowering of the equity credit (including up to a lesser amount) assigned to the Series H Preferred Stock or the Series I Preferred Stock, as applicable, by that rating agency as compared to the equity credit assigned by that rating agency or its predecessor on the initial issuance of the Series H Preferred Stock or the Series I Preferred Stock, as applicable.

- "*regulatory capital event*" means our good faith determination that, as a result of:

- any amendment to, or change in, the laws, rules or regulations of the United States or any political subdivision of or in the United States or any other governmental agency or instrumentality as may then have group-wide oversight of our regulatory capital that is enacted or becomes effective after the initial issuance of the Series H Preferred Stock or the Series I Preferred Stock, as applicable,

- any proposed amendment to, or change in, those laws, rules or regulations that is announced or becomes effective after the initial issuance of the Series H Preferred Stock or the Series I Preferred Stock, as applicable, or

- any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules or regulations that is announced after the initial issuance of the Series H Preferred Stock or the Series I Preferred Stock, as applicable.

Provisions of Our Restated Certificate of Incorporation and Amended and Restated Bylaws that May Delay or Make More Difficult Unsolicited Acquisitions or Changes of Our Control

Some provisions of our Restated Certificate of Incorporation and Amended and Restated Bylaws may delay or make more difficult unsolicited acquisitions or changes of our control. We believe that these provisions will enable us to develop our business in a manner that will foster long-term growth without disruption caused by the threat of a takeover not thought by our Board of Directors to be in the best interests of Allstate and its stockholders.

Those provisions could have the effect of discouraging third parties from making proposals involving an unsolicited acquisition or change of control of our company, although the proposals, if made, might be considered desirable by a majority of our stockholders. Those provisions may also have the effect of making it more difficult for third parties to cause the replacement of our current management without the concurrence of our Board of Directors.

These provisions include:

- our Amended and Restated Bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before annual or special stockholders meetings;

- special meetings of the stockholders may be called only by (i) the Secretary upon the written request of stockholders owning not less than 10% of all outstanding common stock, in accordance with the applicable requirements and procedures of the Amended and Restated Bylaws or (ii) the chairman of the Board of Directors; and

- stockholders may act by written consent only if such action is taken in accordance with the applicable requirements of the Restated Certificate of Incorporation or by holders of a class or series of preferred stock, if the terms of such class or series of preferred stock expressly provide for such action by written consent.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law. Generally, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” during the three years after the date the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes a merger, asset sale or a transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person, who together with affiliates and associates, owns (or, in certain cases, within the preceding three years, did own) 15% or more of the corporation’s outstanding voting stock. Under Section 203, a business combination between us and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became an interested stockholder, our Board of Directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon the completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock outstanding at the time the transaction commenced, excluding, for purposes of determining the number of shares outstanding, shares owned by persons who are directors and officers; or
- the business combination is approved by our Board of Directors and authorized at an annual or special meeting of stockholders, and not by written consent, by at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Limitations on Liability

Our Restated Certificate of Incorporation limits our directors' liability to the fullest extent permitted by law. Generally, our directors will not be held liable for their actions. However, they will be held liable for:

- a breach of their duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or in a way which involves intentional misconduct or a knowing violation of law;
- payment of an improper dividend or improper repurchase of our stock; or
- acting or not acting for improper personal benefit.

Because of these limitations on liability, our stockholders may not sue one of our directors for money unless the stockholder can show the director committed one of the offenses listed above. These provisions do not affect our directors' liability under federal securities laws. Also, our directors still have a duty of care. The limitation of our directors' liability may discourage or deter stockholders or management from suing directors for a breach of their duties, even though such an action, if successful, might otherwise have benefited us or our stockholders. This limitation on our directors' liability should not affect the availability of equitable remedies such as injunctions or rescissions based upon a director's breach of his or her duty of care.

DESCRIPTION OF DEPOSITARY SHARES

The following description of the depositary shares representing each series of the Preferred Stock and the terms of the applicable deposit agreements is a summary. It is the deposit agreement, and not this summary, which defines the rights of the holder of depositary shares representing each series of the Preferred Stock. Please read the deposit agreement for a full description of the terms of the depositary shares representing each series of the Preferred Stock.

On January 15, 2020, we redeemed all 11,500 shares of our Series A Preferred Stock and, in turn, the Equiniti Trust Company, as Depositary of the Series A Preferred Stock, redeemed all 11,500,000 of our Series A Depositary Shares using the proceeds therefrom. No Series A Preferred Stock or Series A Depositary Shares are currently outstanding and none will be reissued under the terms of the Certificate of Designations therefor.

As described above under "Description of the Preferred Stock", we issued fractional interests in shares of the Preferred Stock in the form of the Depositary Shares. Each Depositary Share represents a 1/1,000th interest in a share of the Outstanding Preferred Stock, and is evidenced by a depositary receipt. The shares of the applicable series of the Preferred Stock represented by the Depositary Shares were each deposited under a separate deposit agreement among us, Equiniti Trust Company, as the Depositary, and the holders from time to time of the depositary receipts evidencing the applicable Depositary Shares. Subject to the terms of the applicable deposit agreement, each holder of Depositary

Shares is entitled, through the Depositary, in proportion to the applicable fraction of a share of the applicable series of the Preferred Stock represented by such Depositary Shares, to all the rights and preferences of the applicable series of the Preferred Stock represented thereby (including dividend, voting, redemption and liquidation rights).

Dividends and Other Distributions

The Depositary will distribute any cash dividends or other cash distributions received in respect of each series of the deposited Preferred Stock to the record holders of the applicable Depositary Shares relating to the underlying series of the Preferred Stock in proportion to the number of the applicable Depositary Shares held by the holders. The Depositary will distribute any property received by it other than cash to the record holders of the applicable Depositary Shares entitled to those distributions, unless it determines that the distribution cannot be made proportionally among those holders or that it is not feasible to make a distribution. In that event, the Depositary may, with our approval, sell the property and distribute the net proceeds from the sale to the holders of the applicable Depositary Shares in proportion to the number of such Depositary Shares they hold.

Record dates for the payment of dividends and other matters relating to the Depositary Shares will be the same as the corresponding record dates for the applicable series of the Preferred Stock.

The amounts distributed to holders of the Depositary Shares will be reduced by any amounts required to be withheld by the Depositary or by us on account of taxes or other governmental charges.

Redemption of the Depositary Shares

If we redeem any series of the Preferred Stock represented by Depositary Shares, the applicable Depositary Shares will be redeemed from the proceeds received by the Depositary resulting from the redemption of such series of the Preferred Stock held by the Depositary. The redemption price per applicable Depositary Share will be equal to 1/1,000th of the redemption price per share payable with respect to the applicable series of the Preferred Stock (equivalent to $25 per Depositary Share), plus any declared and unpaid dividends, without accumulation of any undeclared dividends, on the shares of such Preferred Stock. Whenever we redeem shares of the applicable series of the Preferred Stock held by the Depositary, the Depositary will redeem, as of the same redemption date, the number of the applicable Depositary Shares representing shares of the applicable series of the Preferred Stock so redeemed.

In case of any redemption of less than all of the outstanding Depositary Shares representing shares of a series of the Preferred Stock, the applicable Depositary Shares to be redeemed will be selected by us *pro rata*, by lot or in such other manner we determine to be equitable. In any such case, we will redeem the applicable Depositary Shares only in increments of 1,000 shares and any integral multiple thereof.

Voting of the Outstanding Preferred Stock

When the Depositary receives notice of any meeting at which the holders of the applicable series of the Preferred Stock are entitled to vote, the Depositary will mail (or otherwise transmit by an authorized method) the information contained in the notice to the record holders of the applicable Depositary Shares relating to the such series of the Preferred Stock. Each record holder of Depositary Shares on the record date, which will be the same date as the record date for the applicable series of the Preferred Stock, may instruct the Depositary to vote the amount of the applicable series of the Preferred Stock represented by the holder's Depositary Shares. To the extent possible, the Depositary will vote the amount of the applicable series of the Preferred Stock represented by the Depositary Shares in accordance with the instructions it receives. We will agree to take all reasonable actions that the Depositary determines are necessary to enable the Depositary to vote as instructed. If the Depositary does not receive specific instructions from the holders of any Depositary Shares, it will not vote the amount of the applicable series of the Preferred Stock represented by such Depositary Shares.

Amendment and Termination of each Deposit Agreement

We and the Depositary may amend the form of each depositary receipt evidencing the applicable Depositary Shares and any provision of the applicable Deposit Agreement at any time. However, any amendment which materially and adversely alters the rights of the holders of the applicable Depositary Shares will not be effective unless the amendment has been approved by the holders of at least a majority of such series of Depositary Shares then outstanding.

Each Deposit Agreement will terminate if:

- all outstanding Depositary Shares with respect thereto have been redeemed; or
- there has been a final distribution in respect of the applicable Preferred Stock, including in connection with our liquidation, dissolution or winding-up, and the repayment, redemption or distribution proceeds, as the case may be, has been distributed the holders of the applicable series of Depositary Shares.

Listing

The Series A Depositary Shares were listed on the New York Stock Exchange under the symbol “ALL PR A”.

The Series G Depositary Shares are listed on the New York Stock Exchange under the symbol “ALL PR G”.

The Series H Depositary Shares are listed on the New York Stock Exchange under the symbol “ALL PR H”.

The Series I Depositary Shares are listed on the New York Stock Exchange under the symbol “ALL PR I”.

Form of the Depositary Shares

Each series of the Depositary Shares representing the Preferred Stock was issued in book-entry form through DTC. Each series of the Preferred Stock was issued in registered form to the Depositary.

Depositary

Equiniti Trust Company is the Depositary for each series of the Depositary Shares. We may terminate any such appointment and may appoint a successor Depositary at any time and from time to time, *provided* that we will use our best efforts to ensure that there is, at all relevant times when any series of the Preferred Stock is outstanding, a person or entity appointed and serving as such Depositary with respect to such series.

The Depositary may resign at any time by delivering to us notice of its election to do so. We also may, at any time, remove the Depositary. Any resignation or removal will take effect upon the appointment of a successor Depositary and its acceptance of such appointment. We must appoint the successor Depositary within 60 days after delivery of the notice of resignation or removal. The successor Depositary must be a bank or trust company having its principal office in the United States and having a combined capital and surplus of at least $50,000,000.

Charges of Depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. We will pay charges of the Depositary in connection with the initial deposit of the Preferred Stock and the issuance of depositary receipts, all withdrawals of Depositary Shares representing the applicable series of Preferred Stock and any repayment or redemption of such Preferred Stock, as the case may be. The holders of the Depositary Shares will pay other transfer and other taxes and governmental charges, as well as the other charges that are expressly provided in the applicable Deposit Agreement to be for the account of the holders.

Miscellaneous

The Depositary will forward all reports and communications from us which are delivered to the Depositary and which we are required or otherwise determine to furnish to holders of the Preferred Stock.

Neither we nor the Depositary will be liable under any Deposit Agreement other than for gross negligence, willful misconduct or bad faith. Neither we nor the Depositary will be obligated to prosecute or defend any legal proceedings relating to any Depositary Shares or Preferred Stock unless satisfactory indemnity is furnished. We and the Depositary may rely upon written advice of counsel or accountants, or upon information provided by persons presenting the Preferred Stock for deposit, believed to be competent and on documents which we and the Depositary believe to be genuine.

Subsidiaries **Exhibit 21**

Company Name	Domicile
AIMCO Private Fund I Holding, LLC	Delaware
AIMCO Private Fund I, LLC	Delaware
AIMCO Private Fund II, LLC	Delaware
ALIC Reinsurance Company	South Carolina
ALINV Mosaic, LLC	Delaware
Allstate Assignment Company	Nebraska
Allstate Assurance Company	Illinois
Allstate County Mutual Insurance Company	Texas
Allstate Digital Ventures, LLC	Delaware
Allstate Distributors, L.L.C.	Delaware
Allstate Enterprises, LLC	Delaware
Allstate Exchange Services, LLC	Delaware
Allstate Finance Company, LLC	Delaware
Allstate Finance Company Agency Loans, LLC	Delaware
Allstate Financial Advisors, LLC	Delaware
Allstate Financial Corporation	Illinois
Allstate Financial Insurance Holdings Corporation	Delaware
Allstate Financial Services, LLC (1)	Delaware
Allstate Financial, LLC	Delaware
Allstate Fire and Casualty Insurance Company	Illinois
Allstate Global Holdings Limited	Northern Ireland
Allstate Indemnity Company	Illinois
Allstate Insurance Company	Illinois
Allstate Insurance Company of Canada	Canada
Allstate Insurance Holdings, LLC	Delaware
Allstate International Assignments, Ltd.	Delaware
Allstate International Holdings, Inc.	Delaware
Allstate Investment Management Company	Delaware
Allstate Investments, LLC	Delaware
Allstate Life Insurance Company (2)	Illinois
Allstate Life Insurance Company of Canada	Canada
Allstate Life Insurance Company of New York	New York
Allstate Motor Club, Inc.	Delaware
Allstate New Jersey Insurance Company	Illinois
Allstate New Jersey Property and Casualty Insurance Company	New Jersey
Allstate Non-Insurance Holdings, Inc.	Delaware
Allstate North American Insurance Company	Illinois
Allstate Northbrook Indemnity Company	Illinois
Allstate Northern Ireland Limited	Northern Ireland
Allstate Property and Casualty Insurance Company	Illinois
Allstate Settlement Corporation	Nebraska
Allstate Short Term Pool, LLC	Delaware
Allstate Solutions Private Limited	India
Allstate Texas Lloyd’s	Texas
Allstate Texas Lloyd’s, Inc.	Texas
Allstate Vehicle and Property Insurance Company	Illinois
American Heritage Life Insurance Company	Florida
American Heritage Service Company	Florida
ANIHI Newco, LLC	Delaware
Answer Financial Inc.	Delaware
Answer Marketplace, LLC	Delaware
AP Real Estate, LLC	Delaware
AP Riverway Plaza, LLC	Delaware
AP Timber, LLC	Delaware

Arity, LLC	Delaware
Arity 875, LLC	Delaware
Arity International Limited	Northern Ireland

Company Name	Domicile
Arity Services, LLC	Delaware
Castle Key Indemnity Company	Illinois
Castle Key Insurance Company	Illinois
CE Care Plan Corp	Delaware
Collective Sourcing, LLC	Delaware
Complete Product Care Corp	Delaware
Current Creek Investments, LLC	Delaware
E.R.J. Insurance Group, Inc. (3)	Florida
Encompass Floridian Indemnity Company	Illinois
Encompass Floridian Insurance Company	Illinois
Encompass Home and Auto Insurance Company	Illinois
Encompass Indemnity Company	Illinois
Encompass Independent Insurance Company	Illinois
Encompass Insurance Company	Illinois
Encompass Insurance Company of America	Illinois
Encompass Insurance Company of Massachusetts	Massachusetts
Encompass Insurance Company of New Jersey	Illinois
Encompass Insurance Holdings, LLC	Delaware
Encompass Property and Casualty Company	Illinois
Encompass Property and Casualty Insurance Company of New Jersey	Illinois
Esurance Holdings, Inc.	Delaware
Esurance Insurance Company	Wisconsin
Esurance Insurance Company of Canada	Canada
Esurance Insurance Company of New Jersey	Wisconsin
Esurance Insurance Services Company of Canada	Canada
Esurance Insurance Services, Inc. (4)	Delaware
Esurance Property and Casualty Insurance Company	Wisconsin
First Colonial Insurance Company	Florida
iCracked Canada Inc.	Canada
iCracked Inc.	Delaware
iCracked Japan, Inc.	Japan
Identity Protection Strategic Solutions, LLC	New Jersey
InfoArmor, Inc.	Delaware
Insurance Answer Center, LLC (5)	Delaware
Intramerica Life Insurance Company	New York
Ivantage Insurance Brokers Inc.	Canada
Ivantage Select Agency, Inc.	Illinois
Kennett Capital, Inc.	Delaware
NBInv AF1, LLC	Delaware
NBInv AF2, LLC	Delaware
NBInv AF3, LLC	Delaware
NBInv AF4, LLC	Delaware
NBInv AF5, LLC	Delaware
NBInv AF6, LLC	Delaware
NBInv AP1, LLC	Delaware
NBInv AP2, LLC	Delaware
NBInv AP3, LLC	Delaware
NBInv AP4, LLC	Delaware
NBInv AP5, LLC	Delaware
NBInv AP6, LLC	Delaware
NBInv AP7, LLC	Delaware
NBInv AP8, LLC	Delaware
NBInv AP9, LLC	Delaware
NBInv APAF1, LLC	Delaware
NBInv Riverside Cars1, LLC	Delaware
NBInv Riverside Management, LLC	Delaware
North Light Specialty Insurance Company	Illinois

Northeast Agencies, Inc. (6)	New York

Company Name	Domicile
Pablo Creek Services, Inc.	Illinois
Pafco Insurance Company	Canada
Pembridge Insurance Company	Canada
PlumChoice Business Services, Inc.	Delaware
PlumChoice, Inc.	Delaware
Protection Plan Group, Inc.	Delaware
Right Answer Insurance Agency, LLC	Delaware
Road Bay Investments, LLC	Delaware
Signature Agency, Inc.	Delaware
Signature Motor Club of California, Inc.	California
Signature Motor Club, Inc.	Delaware
Signature Nationwide Auto Club of California, Inc.	California
Signature's Nationwide Auto Club, Inc.	Delaware
SquareTradeGo, Inc.	Delaware
SquareTrade, Inc. (7)	Delaware
SquareTrade Australia Pty Ltd	Australia
SquareTrade Canada, Inc.	Canada
SquareTrade Europe Limited	Malta
SquareTrade Holding Company, Inc.	Delaware
SquareTrade Insurance Services, Inc.	Delaware
SquareTrade Japan GK	Japan
SquareTrade Limited	United Kingdom
SquareTrade Protection Solutions, Inc.	Delaware
SquareTrade Singapore Pte. Ltd.	Singapore
ST Product Care Corp	Delaware
Tech-Cor, LLC	Delaware
VigilanteATI, Inc.	Delaware
West Plaza RE Holdings, LLC	Delaware

(1) Doing business as LSA Securities in Louisiana and Pennsylvania
(2) Conducting commercial mortgage business in New York under the assumed name Allstate T.F.I.
(3) Doing business as American Heritage Insurance Services in all states except Massachusetts
(4) Doing business as Esurance Insurance Agency Services in New York
(5) Doing business as Insurance Answer Center, LLC, an Insurance Agency in New York
(6) Doing business as Northeast Agency Insurance Services in California, NEA Insurance Services in Georgia, NEA Brokerage Solutions in New Hampshire, and Northeast Insurance Agencies, Inc. in Utah
(7) Doing business as SquareTrade New York in New York

Exhibit 23

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following registration statements of our reports dated February 21, 2020, relating to the financial statements of The Allstate Corporation and subsidiaries, and the effectiveness of The Allstate Corporation's internal control over financial reporting, appearing in this Annual Report on Form 10-K of The Allstate Corporation for the year ended December 31, 2019, and to the reference to us under the heading "Experts" in the Prospectus, which is part of the registration statements.

Form S-3 Registration Statement Nos.	Form S-8 Registration Statement Nos.
333-34583	333-04919
333-224541	333-40283
	333-134243
	333-175526
	333-188821
	333-200390
	333-218343
	333-228490
	333-228491
	333-228492
	333-231753

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 21, 2020

Certifications

Exhibit 31 (i)

I, Thomas J. Wilson, certify that:

1. I have reviewed this report on Form 10-K of The Allstate Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2020

/s/ Thomas J. Wilson

Thomas J. Wilson

Chairman of the Board, President, and Chief Executive Officer

Certifications

Exhibit 31 (i)

I, Mario Rizzo, certify that:

1. I have reviewed this report on Form 10-K of The Allstate Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2020

/s/ Mario Rizzo

Mario Rizzo
Executive Vice President and Chief Financial Officer

Exhibit 32

Section 1350 Certifications

Each of the undersigned hereby certifies that to his knowledge the report on Form 10-K for the fiscal year ended December 31, 2019 of The Allstate Corporation filed with the Securities and Exchange Commission fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and result of operations of The Allstate Corporation.

Date: February 21, 2020

/s/ Thomas J. Wilson

Thomas J. Wilson

Chairman of the Board, President, and Chief Executive Officer

/s/ Mario Rizzo

Mario Rizzo

Executive Vice President and Chief Financial Officer