



Accelerating sustainable transformation

NN Group N.V.
Financial Report 2019



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The 2019 Annual Report consists of the 2019 Annual Review and the 2019 Financial Report. It provides an integrated review of the performance of NN Group.

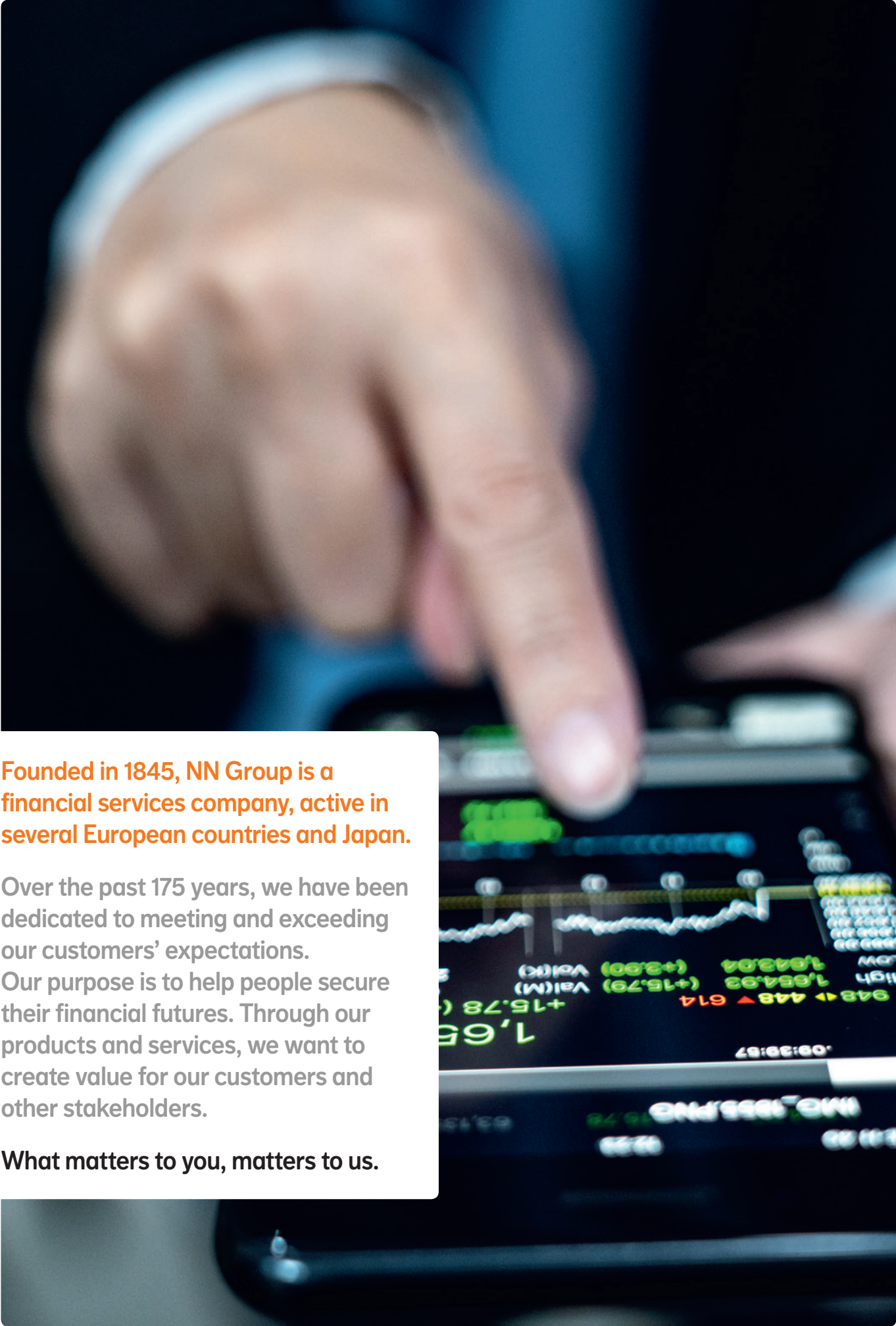
The Annual Report aligns relevant information about our governance, strategy, performance and future prospects in a way that reflects the economic, environmental and social contexts in which we operate. It is prepared in accordance with Dutch law and relevant reporting standards.

Together with this report, NN Group publishes a Solvency and Financial Condition Report, a Total Tax Contribution Report, and a Carbon Footprint Report. Next to that, NN Investment Partners launches a Responsible Investing Report. All these reports are published on NN Group's corporate website in the Investors/Annual Report section.

Read more on our approach to reporting on page 57 of the Annual Review.



Visit our website for further information
www.nn-group.com

A close-up photograph of a person's hand pointing at a smartphone screen. The screen displays financial data, including a line chart with a yellow trend line and various numerical values in green and red. The background is blurred, showing a person in a blue shirt.

Founded in 1845, NN Group is a financial services company, active in several European countries and Japan.

Over the past 175 years, we have been dedicated to meeting and exceeding our customers' expectations.

Our purpose is to help people secure their financial futures. Through our products and services, we want to create value for our customers and other stakeholders.

What matters to you, matters to us.

Financial developments

This Financial developments section includes the analysis of results and key figures of NN Group and its reporting segments. The results presented in this section are derived from the 2019 annual accounts where relevant. In explaining the financial results, NN Group uses Operating result, Adjusted allocated equity (as used in the calculation of Net operating ROE) and Administrative expenses. These are Alternative Performance Measures (APMs). Alternative performance measures are non-IFRS-EU measures that have a relevant IFRS-EU equivalent from which these are derived. For definitions of the Alternative Performance Measures and explanation of their use reference is made to Note 30 'Segments' in the section 'Alternative Performance Measures (Non-GAAP measures)' in the annual accounts. That section also includes a reconciliation between the Alternative Performance Measures and their IFRS equivalent. Furthermore, it includes definitions of other financial metrics used in this Financial developments section.

The Solvency II ratios presented below are not final until filed with the regulators. The Solvency II ratios for NN Group and NN Life are based on the Partial Internal Model.

NN Group

Analysis of result

amounts in millions of euros	2019	2018
Netherlands Life	922	972
Netherlands Non-life	203	94
Insurance Europe	283	271
Japan Life	218	167
Asset Management	161	155
Banking	152	130
Other	-144	-164
Operating result	1,794	1,626
Non-operating items:	887	1,276
- of which gains/losses and impairments	335	1,034
- of which revaluations	827	427
- of which market & other impacts	-275	-185
Special items	-262	-321
Acquisition intangibles and goodwill	1	-984
Result on divestments	8	60
Result before tax	2,429	1,657
Taxation	444	524
Minority interests	23	16
Net result	1,962	1,117

Key figures

amounts in millions of euros	2019	2018
New sales life insurance (APE)	1,741	1,640
Value of new business (VNB)	358	391
Total administrative expenses	2,076	2,116
Net operating ROE	9.0%	8.9%
Solvency II ratio	218%	230%

Operating result

The full-year 2019 operating result increased to EUR 1,794 million from EUR 1,626 million in 2018, which benefited from a total of EUR 38 million of private equity and special dividends and other non-recurring items, versus a total of EUR 121 million of non-recurring benefits in 2019. Excluding these items, the increase mainly reflects improved underwriting results at Netherlands Non-life and higher results at Japan Life.

Result before tax

The full-year 2019 result before tax increased to EUR 2,429 million from EUR 1,657 million in 2018, which included the impairment of goodwill, while 2019 reflects a higher operating result, lower amortisation of acquisition intangibles and lower special items, partly offset by lower non-operating items.

Net result

The full-year 2019 net result was EUR 1,962 million compared with EUR 1,117 million in 2018. The effective tax rate for the full-year 2019 was 18.3%.

Sales and Value of New Business

In 2019, total new sales (APE) were EUR 1,741 million, up 4.8% at constant currencies, driven by higher sales at Netherlands Life and Insurance Europe, partly offset by lower sales at Japan Life.

The value of new business in 2019 amounted to EUR 358 million, down 8.3% on 2018, reflecting lower sales at Japan Life, partly compensated by an improved business mix and higher life and pension sales at Insurance Europe.

Financial developments continued

Netherlands Life

Analysis of result

amounts in millions of euros	2019	2018
Investment margin	844	872
Fees and premium-based revenues	412	444
Technical margin	161	188
Operating income	1,417	1,504
Administrative expenses	462	494
DAC amortisation and trail commissions	33	38
Expenses	495	532
Operating result	922	972
Non-operating items:	833	1,310
– of which gains/losses and impairments	205	1,022
– of which revaluations	864	428
– of which market & other impacts	-237	-140
Special items	-57	-63
Result on divestments	5	56
Result before tax	1,703	2,275
Taxation	308	430
Minority interests	8	10
Net result	1,386	1,835

Key figures

amounts in millions of euros	2019	2018
New sales life insurance (APE)	480	262
Value of new business (VNB)	9	9
Total administrative expenses	462	494
Net operating ROE	7.1%	7.9%
NN Life Solvency II ratio	213%	255%

The full-year 2019 operating result of Netherlands Life decreased to EUR 922 million from EUR 972 million in 2018. The decrease is largely due to lower fees and premium-based revenues which includes a non-recurring charge of EUR 6 million, lower private equity and special dividends and a lower technical margin, partly offset by lower administrative expenses. The investment margin for full-year 2019 includes private equity and special dividends for a total amount of EUR 83 million, whereas the same period in 2018 included EUR 110 million of such items.

The full-year 2019 result before tax decreased to EUR 1,703 million compared with EUR 2,275 million in 2018. The decrease mainly reflects lower gains on the sale of government bonds.

New sales (APE) for the full-year 2019 increased to EUR 480 million from EUR 262 million in 2018, reflecting a higher volume of group pension contracts up for renewal as well as new business.

The value of new business for the full-year 2019 was stable at EUR 9 million.

Financial developments continued

Netherlands Non-life

Analysis of result

amounts in millions of euros	2019	2018
Earned premiums	2,941	2,954
Investment income	106	118
Other income	-5	-4
Operating income	3,042	3,068
Claims incurred, net of reinsurance	2,045	2,151
Acquisition costs	516	534
Administrative expenses	305	316
Acquisition costs and administrative expenses	821	850
Expenditure	2,866	3,001
Operating result insurance businesses	176	67
Operating result health business and broker business	28	27
Total operating result	203	94
Non-operating items:	61	-2
– of which gains/losses and impairments	48	11
– of which revaluations	12	2
– of which market & other impacts	1	-15
Special items	-67	-91
Result before tax	197	1
Taxation	42	-2
Minority interests	13	6
Net result	143	-3

Key figures

amounts in millions of euros	2019	2018
Gross premium income	3,097	3,083
Total administrative expenses	385	393
Combined ratio:	95.4%	99.4%
– of which Claims ratio	67.4%	70.6%
– of which Expense ratio	27.9%	28.8%
Net operating ROE	22.1%	10.8%

The full-year 2019 operating result of Netherlands Non-life increased to EUR 203 million from EUR 94 million in 2018, which included the impact of the January 2018 storm for an amount of EUR 56 million net of reinsurance and EUR 11 million of private equity dividends. Excluding these, the increase was mainly attributable to an improved claims experience in both Property & Casualty (P&C) and Disability & Accident (D&A) and lower administrative expenses.

The full-year 2019 result before tax increased to EUR 197 million from EUR 1 million in 2018, reflecting the higher operating result, higher non-operating items and lower special items. Non-operating items in 2019 benefited from gains on the sale of government bonds and private equity revaluations. Special items include integration expenses and costs related to the migration of the legal aid service provider, while 2018 also included a charge related to the agreement with Van Ameyde to insource claims handling activities.

The combined ratio for 2019 was 95.4% compared with 99.4% in 2018, or 97.5% excluding the impact of the January 2018 storm.

Financial developments continued

Insurance Europe
Analysis of result

amounts in millions of euros	2019	2018
Investment margin	102	93
Fees and premium-based revenues	737	703
Technical margin	239	207
Operating income non-modelled business	1	1
Operating income Life Insurance	1,080	1,005
Administrative expenses	419	398
DAC amortisation and trail commissions	386	328
Expenses Life Insurance	805	725
Operating result Life Insurance	275	280
Operating result Non-life	8	-8
Operating result	283	271
Non-operating items:	51	4
– of which gains/losses and impairments	73	-2
– of which revaluations	-20	22
– of which market & other impacts	-2	-16
Special items	-35	-28
Acquisition intangibles and goodwill	33	
Result before tax	331	247
Taxation	73	55
Net result	259	191

Key figures

amounts in millions of euros	2019	2018
New sales life insurance (APE)	674	627
Value of new business (VNB)	204	168
Total administrative expenses (Life & Non-life)	431	418
Net operating ROE	10.3%	10.9%

The full-year 2019 operating result of Insurance Europe increased to EUR 283 million from EUR 271 million in 2018, mainly driven by higher performance fees in Slovakia, protection growth and a EUR 6 million non-recurring benefit in Non-life, partly offset by lower pension fees in Romania.

The full-year 2019 result before tax increased to EUR 331 million from EUR 247 million in 2018, reflecting the negative goodwill arising from the acquisition of the Czech and Slovak businesses, gains on the sale of government bonds as well as the higher operating result, partly offset by lower revaluations in Belgium.

Full-year 2019 new sales (APE) increased to EUR 674 million from EUR 627 million in 2018. The increase was mainly driven by higher pension and protection sales across the region and the contribution of the aforementioned acquisition, partly offset by negative currency impacts in Turkey and lower unit-linked sales in Belgium.

The full-year 2019 value of new business increased to EUR 204 million from EUR 168 million, up 21.4% from 2018, reflecting an improved business mix and higher life and pension sales.

Financial developments continued

Japan Life

Analysis of result

amounts in millions of euros	2019	2018
Investment margin	-16	-9
Fees and premium-based revenues	659	605
Technical margin	24	-1
Operating income	667	594
Administrative expenses	148	140
DAC amortisation and trail commissions	302	287
Expenses	449	427
Operating result	218	167
Non-operating items:	-34	-25
– of which gains/losses and impairments	-6	-3
– of which revaluations	-28	-22
Special items	-4	-3
Result before tax	180	139
Taxation	48	41
Net result	131	97

Key figures

amounts in millions of euros	2019	2018
New sales life insurance (APE)	587	751
Value of new business (VNB)	146	214
Total administrative expenses	148	140
Net operating ROE	7.8%	6.8%

The full-year 2019 operating result of Japan Life was EUR 218 million, up 23.0% compared with 2018, excluding currency effects. The increase was primarily driven by the strong sales in the first quarter of 2019, a higher technical margin on favourable mortality and morbidity results as well as higher surrender results reflecting better persistency after the revised tax regulations.

The result before tax for 2019 was EUR 180 million, up 22.3% compared with the same period in 2018, at constant currencies, reflecting the higher operating result partly offset by lower non-operating items.

New sales (APE) for the full-year 2019 were EUR 587 million, down 24.6% from 2018 at constant currencies, due to lower sales of COLI products following the revised tax regulations.

Full-year 2019 value of new business decreased to EUR 146 million, down 31.8% from the 2018, reflecting the lower sales.

Financial developments continued

Asset Management

Analysis of result

amounts in millions of euros	2019	2018
Investment income	1	-1
Fees	443	454
Operating income	444	453
Administrative expenses	283	298
Operating result	161	155
Special items	-15	-31
Result before tax	146	123
Taxation	35	29
Minority interests	2	
Net result	108	94

Key figures

amounts in millions of euros	2019	2018
Total administrative expenses	283	298
Assets under Management (in EUR billion)	276	246
Net operating ROE	34.1%	27.6%

The full-year 2019 operating result of Asset Management was EUR 161 million compared with EUR 155 million in 2018. This increase reflects lower administrative expenses, partly offset by lower fees, due to a less favourable asset mix and fee pressure.

The full-year 2019 result before tax increased to EUR 146 million from EUR 123 million in 2018, driven by the higher operating result and lower special items.

Financial developments continued

Banking

Analysis of result

amounts in millions of euros	2019	2018
Interest result	259	259
Commission income	35	36
Total investment and other income	67	35
Operating income	361	330
Operating expenses	192	189
Regulatory levies	17	17
Addition to Loan loss provision	-1	-7
Total expenses	209	200
Operating result	152	130
Non-operating items:	-14	-15
– of which gains/losses and impairments	7	
– of which market & other impacts	-21	-15
Special items	-15	-17
Result before tax	123	99
Taxation	30	32
Net result	93	66

Key figures

amounts in millions of euros	2019	2018
Total administrative expenses	210	206
Cost/income ratio	53.3%	57.3%
Total assets (in EUR billion)	25	22
Net operating ROE	15.0%	12.9%

The full-year 2019 operating result of Banking increased to EUR 152 million from EUR 130 million in 2018, mainly driven by higher investment and other income which included EUR 26 million of non-recurring benefits, partly offset by a lower release of Loan loss provisions and higher operating expenses reflecting the increased mortgage production.

The full-year 2019 result before tax increased to EUR 123 million from EUR 99 million in 2018, mainly reflecting the higher operating result.

Financial developments continued

Other

Analysis of result

amounts in millions of euros	2019	2018
Interest on hybrids and debt	-108	-108
Investment income and fees	105	96
Holding expenses	-145	-156
Amortisation of intangible assets		-1
Holding result	-148	-170
Operating result reinsurance business	-5	-12
Other results	10	18
Operating result	-144	-164
Non-operating items:	-9	5
– of which gains/losses and impairments	8	7
– of which revaluations	-1	-3
– of which market & other impacts	-16	1
Special items	-69	-87
Acquisition intangibles and goodwill	-32	-984
Result on divestments	4	4
Result before tax	-251	-1,226
Taxation	-92	-63
Net result	-158	-1,163

Key figures

amounts in millions of euros	2019	2018
Total administrative expenses:	158	167
– of which reinsurance business	7	9
– of which corporate/holding	152	158

The full-year 2019 operating result of the segment Other was EUR -144 million compared with EUR -164 million in 2018, which was impacted by EUR 44 million of non-recurring charges, while 2019 reflects EUR 12 million of non-recurring benefits and a lower result of the reinsurance business.

The full-year 2019 holding result improved to EUR -148 million from EUR -170 million in 2018, which was impacted by EUR 12 million of non-recurring charges, while the 2019 holding result reflects higher investment income and fees.

The full-year 2019 operating result of the reinsurance business was EUR -5 million compared with EUR -12 million in 2018, which included EUR 33 million of claims relating to the storm in January 2018, a EUR 8 million claim from a legacy reinsurance portfolio as well as EUR 9 million positive hedge-related results on the VA Europe portfolio. The full-year 2019 operating result reflects EUR 22 million of claims related to Non-life's Disability portfolio, as well as a large claim from a legacy reinsurance portfolio.

Other results in 2019 were EUR 10 million compared with EUR 18 million in 2018, which included a provision release of EUR 14 million, while 2019 includes a net release of provisions of EUR 12 million, both related to a legacy entity.

The full-year 2019 result before tax of the segment Other was EUR -251 million compared with EUR -1,226 million in 2018, which included a EUR 852 million impairment of goodwill, while 2019 reflects lower amortisation of acquisition intangibles, the improved operating result and lower special items.

Report of the Supervisory Board



Introduction by the Supervisory Board Chair
As Supervisory Board, we attach great value to good corporate governance and to the role we play in a listed, international company, firmly rooted in the Netherlands. In fulfilling our duties, we oversee and advise the group's Executive Board and Management Board, at all times taking into account the interests of NN Group's many stakeholders, while aiming for long-term value creation.

In 2019, the Supervisory Board was closely involved in three key developments in particular: (i) the appointment of a new CEO and other changes to the composition of the Supervisory Board and Management Board; (ii) the announced acquisition of VIVAT Non-life; and (iii) the topic of transition and innovation.

Following the announcement on 12 August 2019 that Lard Friese had stepped down, the Supervisory Board appointed David Knibbe as Member and Chair of the Executive Board and CEO of NN Group, effective 1 October 2019. David was appointed as the result of a sound succession planning process. The Supervisory Board is pleased to have found an excellent successor from within the company, with the right leadership skills to drive NN Group going forward. David has a deep understanding and experience of the company's businesses, the sector, and the markets in which we operate. Furthermore, David is a dynamic, customer-focused and values-driven business leader.

At the end of the annual general shareholders' meeting in May 2019, Jan Holsboer stepped down as Member and Chair of our Supervisory Board. Jan left us with a well-positioned international company, a strong leadership group and

an effective governance system, and we are grateful to him for the manner in which he fulfilled his responsibilities. On a personal note, I was honoured to be selected as his successor as Chair of the Supervisory Board as from May 2019. For other changes that the Supervisory Board and Management Board underwent in 2019, please refer to the corporate governance chapter included in this Annual Report.

The second key development in which the Supervisory Board was closely involved in 2019 was the announced acquisition in the Netherlands of VIVAT's non-life activities (VIVAT Schadeverzekeringen N.V.), which is expected to close early in 2020. The Supervisory Board considered the transaction carefully from the perspective of NN Group's customers, employees, shareholders, regulators and other key stakeholders. The announced acquisition will result in NN becoming the market leader in non-life insurance in the Netherlands, a position NN already holds for life insurance. NN has gained valuable experience in successfully integrating business operations following the acquisition of Delta Lloyd in 2017. We are aware of the complexity such acquisitions and integrations bring. At the same time, we are confident adequate steps will be taken towards a successful combined non-life business.

Third, the Supervisory Board is conscious of the fast and continuously changing environment in which our company operates. Ongoing developments in technology and the need to adapt to new ways of working have significant impact on the company and its employees. NN is transforming and innovating its businesses. With a broad product offering, and by introducing service solutions alongside more traditional insurance products, NN intends to further increase its potential to create long-term value for customers and other stakeholders.

The Supervisory Board is closely involved and regularly updated on the progress of these transformations. Together with the Executive Board and Management Board, we continuously consider whether we are optimising the delivery on our purpose and relevant value to our stakeholders.

On behalf of the entire Supervisory Board, I would like to express our gratitude to Supervisory Board Members Dick Harryvan and Robert Ruijter, whose appointment term will end in 2020. Since joining the Supervisory Board, both Robert and Dick have demonstrated immense commitment and provided critical support to NN Group in establishing its position and pursuing its ambitions and we value their contributions and have enjoyed their constructive engagement.

The Supervisory Board would also like to thank all NN Group employees for their dedication and hard work in 2019. Their efforts and results are noticed and highly appreciated.

The Supervisory Board looks forward to continuing to contribute to the company's purpose to help people secure their financial futures, together with the Executive Board and the Management Board.

For a comprehensive overview of the Supervisory Board's activities during 2019, I invite you to read the full report.

Yours faithfully,

David A. Cole

David Cole
 Chair Supervisory Board NN Group

Report of the Supervisory Board continued

Supervisory Board

The Supervisory Board is responsible for supervising the management of the Executive Board, as well as the general course of affairs of NN Group and the businesses affiliated with it.



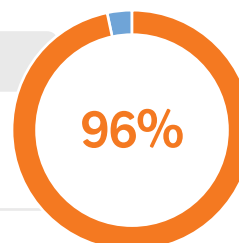
From left to right: Dick Harryvan Vice-chair, Robert Jenkins, H el ene Vletter-van Dort, David Cole Chair, Robert Ruijter, Hans Schoen, Clara Streit, Heijo Hauser



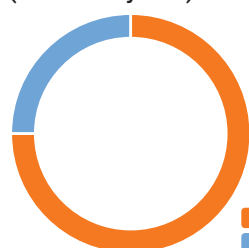
Supervisory Board meetings held in 2019

Attendance rate

Overall attendance of the Supervisory Board meetings



Supervisory Board composition (after 29 May 2019)



Supervisory Board facts & figures



On average, 19 hours spent on Permanent Education sessions arranged by NN Group
Permanent Education attendance rate: 88.9%

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Supervisory Board Committees

Report of the Supervisory Board continued

Supervisory Board

The Supervisory Board is responsible for supervising the management of the Executive Board, as well as the general course of affairs of NN Group and the businesses affiliated with it. The Supervisory Board also advises the Executive Board. In the performance of its duties, the Supervisory Board carefully considers and acts in accordance with the interests of NN Group and its affiliated businesses, taking into account the interests of all stakeholders.

This Report of the Supervisory Board must be read in conjunction with the Corporate Governance section (pages 21-31) and the Remuneration Report (pages 32-37) of this Financial Report.

Profile of the Supervisory Board

The composition of the Supervisory Board is such that the members are able to act critically and independently of one another, the Executive Board and any particular interests. The Supervisory Board operates as a collegial body and the knowledge, experience and background of its individual members is considered in the context of the Supervisory Board as a whole.

The overall composition of the Supervisory Board is balanced taking into account the members' (a) nationalities, gender, age, education, experience and work background, (b) affinity with the nature of the businesses and culture of NN Group, and (c) executive experience, experience in complex multinationals, and experience in the political and social environment in which such multinationals operate. This ensures a wide range of relevant perspectives and opinions on NN Group, and the opportunities and challenges it faces today and will face tomorrow.

The matrix on the next page provides an overview of the range of knowledge, experience and backgrounds of the individual Supervisory Board members.

Supervisory Board meetings

The Supervisory Board held 14 Supervisory Board meetings in 2019, one of which in Madrid, Spain as part of the Supervisory Board's visit to NN Group's business unit NN Spain. The average attendance rate for Supervisory Board meetings was 96.8%. None of the Supervisory Board members were frequently absent from meetings, and at all meetings attendance was sufficient to constitute a valid quorum.

In addition to the formal meetings, the chair and other members of the Supervisory Board maintained regular contact with the Chief Executive Officer, other members of the Executive Board and Management Board, senior management, heads of staff, business unit CEOs, etc. The Supervisory Board also regularly met with the supervisory authorities. In these meetings, topical issues were discussed, as well as the general course of events at NN Group and its affiliated businesses. Finally, the chair and the Works Council-nominated members of the Supervisory Board met with (representatives of) the Central Works Council.

The attendance rate of the individual Supervisory Board Members was as follows:

Name	Supervisory Board	Audit Committee	Risk Committee	Remuneration Committee	NoCoGov Committee	Combined RemCo/ NoCoGovCo
David Cole ¹	14/14		3/3	4/4	6/6	1/1
Dick Harryvan	14/14	6/6		5/5	7/7	3/3
Heijo Hauser	13/14	6/6	4/4			
Jan Holsboer ²	5/5	4/4		2/2	3/3	2/2
Robert Jenkins	14/14		4/4	5/5		3/3
Robert Ruijter	12/14	6/6		5/5		3/3
Hans Schoen	13/14	6/6	4/4			
Clara Streit	14/14		4/4		7/7	3/3
Hélène Vletter-van Dort ³	14/14		4/4	3/3	7/7	3/3
Total	96%	100%	100%	100%	100%	100%

¹ Mr Cole was appointed as a member of the Risk Committee, the Remuneration Committee and the Nomination and Corporate Governance Committee on 13 February 2019.

² Mr Holsboer stepped down as a member of the Supervisory Board after the AGM on 29 May 2019.

³ Ms Vletter-van Dort was appointed as a member and chair of the Remuneration Committee on 29 May 2019.

Report of the Supervisory Board continued

	D. Cole	D. Harryvan	H. Hauser	R. Jenkins	R. Ruijter	H. Schoen	C. Streit	H. Vletter-van Dort
Nationality	NL/US	NL	DE	US	NL	NL	US/DE	NL
Gender	Male	Male	Male	Male	Male	Male	Female	Female
Year of birth	1961	1953	1955	1951	1951	1954	1968	1964
Education	Business Administration	Business Administration	Mathematics	International Studies	Accounting	Economics Auditing	Business Administration	Law
Insurance	✓	✓	✓		✓	✓	✓	✓
Asset management	✓	✓		✓		✓	✓	
Banking	✓	✓		✓	✓		✓	✓
Risk	✓	✓	✓	✓	✓	✓	✓	✓
Finance & Control	✓	✓	✓	✓	✓	✓	✓	
Law & Governance	✓	✓	✓	✓	✓	✓	✓	✓
Technology	✓	✓	✓		✓	✓		
Organisation & Conduct	✓	✓	✓	✓	✓	✓	✓	✓
Executive maturity	✓	✓	✓	✓	✓	✓	✓	✓
Multinationals	✓	✓	✓	✓	✓	✓	✓	✓
Social antenna	✓	✓	✓	✓	✓	✓	✓	✓
International Business	✓	✓	✓	✓	✓	✓	✓	✓
Financial Expert	✓	✓	✓	✓	✓	✓		

¹ As defined in article 39 (1) of Directive 2014/56/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2006/43/EC on statutory audits of annual accounts and consolidated accounts.

All members of the Supervisory Board are independent (as defined in the 2016 Dutch Corporate Governance Code).

Supervisory Board Committees

Four committees support the Supervisory Board: the Risk Committee, Audit Committee, Remuneration Committee, and Nomination and Corporate Governance Committee. The committees are responsible for preparing matters delegated to them. The chair of each committee verbally reports the main points of discussion and resulting recommendations to the Supervisory Board. This enables the Supervisory Board as a whole to make a decision on these matters. For each committee, the key inputs and underlying considerations leading to a recommendation are recorded.

Please refer to pages 16 to 20 of this Report of the Supervisory Board for the reports of each of the committees.

Key developments

In 2019, the Supervisory Board was involved in three key developments aimed at long-term value creation for NN Group and its affiliated businesses.

Changes to the NN Group Supervisory Board Chair and Chief Executive Officer

On 14 February 2019, NN Group announced that Mr Holsboer, chair of the Supervisory Board of NN Group, would step down as of the close of the annual general meeting on 29 May 2019. The Supervisory Board elected Mr Cole as successor to Mr Holsboer, based on Mr Cole's extensive international experience in the insurance and banking industry, his experience as a board member and supervisory board member, and his in-depth knowledge of banking and insurance services. The appointment was approved by the Dutch Central Bank.

On 12 August 2019, NN Group announced that the Supervisory Board intended to appoint Mr Knibbe as a member of the Executive Board and CEO of NN Group. He succeeded Mr Friese, who stepped down as a member and chair of the Executive Board and CEO of NN Group. The appointment of Mr Knibbe was subject to notification of the General Meeting of NN Group at an extraordinary general meeting, and approval from the Dutch Central Bank.

On 26 September 2019, NN Group announced that it had notified the General Meeting of the intended appointment of Mr Knibbe as a member of the Executive Board and CEO of NN Group, and that the intended appointment had been approved by the Dutch Central Bank and supported by the Central Works Council of NN Group. The Supervisory Board subsequently decided to appoint Mr Knibbe as of 1 October 2019.

The Supervisory Board was actively assisted by the Nomination and Corporate Governance Committee in drafting the selection criteria and identifying a successor, while also taking into account the profile of the Executive Board and observing the Diversity Policy.

A number of criteria play a role in identifying a successor to this key position. These include background, age and nationality, but also experience in corporate governance, experience in a political and social/economic setting, and the DNB guidelines. In line with the long-term objectives of NN Group, diversity criteria are also taken into consideration. The appointment of Mr Knibbe was the result of taking these criteria into consideration and having a sound succession planning process in place.

The Supervisory Board is convinced that Mr Knibbe has the right leadership skills to drive NN Group forward. We are also pleased that the position has been filled by promoting a successor from within the group.

VIVAT Schadeverzekeringen N.V. acquisition

On 7 June 2019, NN Group announced its intention to acquire VIVAT Schadeverzekeringen N.V. (VIVAT Non-Life) from Athora, following the intended acquisition of VIVAT by Athora. This acquisition provides the opportunity to create scale while also becoming the market leader for Non-Life in the Dutch market.

The NN Group Executive Board and Management Board held discussions with the Supervisory Board over an extended period of time leading up to the decision to acquire VIVAT Non-Life activities.

Report of the Supervisory Board continued

The Supervisory Board ensured that a rigid governance process was in place, and offered support and guidance throughout that process. Our focus was on maintaining the operational integrity of NN Group during the acquisition, as well as making sure the intended offer was in the best interests of all stakeholders, and that the NN Group values and Code of Conduct were upheld. The Supervisory Board considered the transaction from the perspective of NN Group's customers, employees, shareholders, regulators and other key stakeholders. The Supervisory Board believes that the transaction is in the best interest of all stakeholders, that it is a strategic fit, and that there is a strong financial rationale to support the acquisition.

Transformation and innovation

NN Group has a strong heritage and foundation. However, to stay competitive and relevant, and create long-term value for the generations to come, it must build on its existing capabilities, adapt to the fast-changing and digital environment it operates in, and secure the business of tomorrow. The ambition of NN Group is to truly matter in the lives of its customers by having more digital contact, becoming more personal and being more relevant.

In light of the NN Group strategic priorities and challenges in the various markets, a number of transformation and innovation initiatives have been launched. Throughout 2019, the Supervisory Board was updated by the Executive Board and Management Board on progress on these initiatives. Amongst other things, the updates covered the process of identifying and approving the various initiatives; as well as any successes or challenges involved in implementing them, including issues arising from carrying out the initiatives while also dealing with the demands of decommissioning and replatforming as part of the Delta Lloyd integration.

Other discussion topics

Other important topics of discussion during the meetings of the Supervisory Board in 2019 included (i) progress on the Delta Lloyd integration, (ii) culture, (iii) business plan, capital plan and strategy, (iv) responsible investment, (v) unit-linked products in the Netherlands, (vi) Executive Board assessment, and (vii) annual accounts and dividend. Topics (i) – (vii) are addressed below in turn.

In addition, the Supervisory Board:

- actively followed developments, opportunities and challenges in the various insurance markets, the impact of continued low interest rates, and the integration of the former AEGON activities into the Czech Republic and Slovakia;
- was periodically updated by the Executive Board and Management Board on the overall commercial performance of NN Group and its affiliated businesses;
- discussed and approved the financial quarterly results of NN Group, NN Group's proposed interim and final dividend, proposed distribution of excess capital to shareholders via an open market buyback of NN Group ordinary shares, issuance of the Covered Bond transactions under the Covered Bond Programme and the issuance of Preferred Senior transactions under the Debt Issuance Programme by Nationale-Nederlanden Bank, and the repurchase of Hypenn 1 A3 notes from ING Bank by Nationale-Nederlanden Bank;
- was updated on the (ongoing) review of the internal governance arrangements applicable within the group; and

- was updated on and addressed matters concerning charitable programmes of NN Group, dialogue with non-governmental organisations on social and environmental issues, the International Corporate Social Responsibility covenant for the Dutch insurance sector, the results of the annual employee engagement survey, and the performance goals for the Executive Board and Management Board (including non-financial KPIs).

Delta Lloyd integration

A Transition Committee was established in 2017 to supervise, monitor and advise on the fairness of the Delta Lloyd integration, and safeguard the interests of the combined company. The Transition Committee consisted of three members: Mr Holsboer (chair), Mr Friese and Mr Ruijter. During the Transition Committee meeting held in February 2019, the members concluded that the integration of Delta Lloyd had progressed better than anticipated. The Transition Committee members therefore agreed to discontinue the Transition Committee, subject to the NN Group Supervisory Board being briefed on a quarterly basis by the Executive Board and the Management Board on any remaining integration matters.

The Executive Board and Management Board provided the Supervisory Board with quarterly updates on the progress of the remaining Delta Lloyd integration matters. These included: principles applied, performance against set ambitions, the key challenges identified in relation to decommissioning, replatforming and document management, risk evaluations and monitoring of the remaining integration matters, IT interdependencies, change priorities for 2019, progress in Belgium given a highly complex IT environment, and the result of the negotiations with the trade unions on a harmonised Collective Labour Agreement.

For its part, the Supervisory Board offered support and focused on maintaining the operational integrity of NN Group, as well as ensuring the approach taken was in the best interests of all stakeholders, and that the NN Living our Values statement and Code of Conduct were upheld.

Culture

The values of NN Group, described in the Living our Values statement set the standard for conduct and provided a compass for decision-making within the group. In addition, the NN Code of Conduct clearly outlines minimum rules of conduct that NN Group employees must adhere to at all times, and which they are requested to formally acknowledge on an annual basis.

The Executive Board and Management Board are responsible for creating a culture aimed at long-term value creation, for which the statement and NN Code of Conduct form the foundation. The Executive Board and Management Board therefore periodically report to the Supervisory Board on how the Living our Values statement is being put into practice within the group, and the effectiveness of and compliance with the Code of Conduct. The Supervisory Board supervises the Executive Board and Management Board on this issue.

In 2019, the Supervisory Board also approved the next steps in implementing the Programme, Living our Values 2018, aimed at ensuring the NN values are kept alive and stand the test of time.

Report of the Supervisory Board continued

Business plan, capital plan and strategy

In January 2019, the Executive Board and Management Board presented the Supervisory Board with the NN Group's business plan for 2019–2021 and capital plan for 2019–2023. This outlined, amongst other things, the projected growth of the operating result and value of new business, administrative expense savings and investments within the integration scope, investments related to innovation, projected improvements to the combined ratio (non-life), return on equity (bank) and cost/income ratio (asset management), the capital and cash position over the plan period, and projected performance against various other financial parameters.

Throughout the year, the Supervisory Board was regularly updated on how NN Group was performing on its business and capital plan, and delivering on its strategy. Topics of particular focus included: digital transformation of the business and driving innovation across markets, performance improvement at Netherlands Non-Life, shifting investor preferences confronting the investment industry and thus NN Investment Partners, the impact of the low interest rates and market volatility, especially in Greece and Belgium, the Romanian pensions agreement reached with the government, Polish pension reform, the business environment in Turkey, and the changes to fiscal legislation in Japan.

Responsible investment

NN Group applies a norms-based Responsible Investment Framework policy, which reflects the measures the group takes to responsibly invest its own assets and those entrusted to them by customers. Measures include integration of environmental, social and governance (ESG) factors in research/valuation, voting, engagement and as a measure of last resort restriction.

Compliance with NN Group's Responsible Investment restrictions is managed through a Restricted List, which applies globally across the organisation. The Restricted List is updated four times a year and the Supervisory Board is informed on changes where relevant, for example, when it concerns the exclusion of specific sectors.

Unit-linked products in the Netherlands

See Note 42 in this Financial Report for a description of legal proceedings with respect to unit-linked products in the Netherlands. The Supervisory Board was periodically updated on relevant developments in the collective actions and individual legal proceedings pending against Nationale-Nederlanden.

Executive Board assessment

In the fourth quarter of 2019, the Supervisory Board assessed the performance during 2019 of the Executive Board and Management Board and its members. To this end, the Supervisory Board members met with the Executive Board and Management Board members individually in a series of two-on-one meetings. In addition, the four Management Board members appointed in 2018 were also assessed by an external bureau. Based on the outcome of the two-on-one meetings and external assessments, personal professional development plans are being formulated for each of the Management Board members reflecting their individual needs.

Annual accounts and dividend

The Executive Board prepared the 2019 annual accounts and discussed these with the Supervisory Board. The 2019 annual accounts will be submitted for adoption by the General Meeting at the 2020 annual general meeting, as part of the 2019 Financial Report. NN Group will propose to pay a final dividend of EUR 2.16 per ordinary share, or EUR 698 million in total, based on the number of

outstanding shares on the date of this Financial Report, excluding the shares held by NN Group in its own capital in treasury.

Continuous learning

It is essential that the Supervisory Board is knowledgeable about how NN Group and its affiliated businesses are run. The Supervisory Board Induction Programme and Permanent Education Programme for Supervisory Board members therefore cover topics necessary to ensure the continuous learning of Supervisory Board members, both at the outset and after their appointment.

The Supervisory Board members followed the 2019 NN Group Permanent Education Programme, which was developed based on the input received from the 2018 annual Supervisory Board self-assessment and requests from the Supervisory Board members, the Executive Board and Management Board, and staff. In addition, it was decided in 2019 to benchmark the current NN Group Permanent Education Programme (content and best practices) against those of peers, in order to identify areas of improvement. Based on the outcome of the Supervisory Board self-assessment and the benchmark, it was decided to include business deep-dive sessions in addition to the general knowledge sessions, in the 2019 NN Group Permanent Education Programme.

On average, Supervisory Board members spent approximately 19 hours on general knowledge and deep dive sessions arranged by NN Group. The general knowledge sessions included an update on sustainability ratings and NN Group's position in the Dow Jones Sustainability Index, 2019 DNB Themes, Recovery and Resolution law, IFRS, top shifts and developments in technology and digitalisation in the sector, tax, Europe in the light of the May 2019 elections, climate change risks and opportunities, and the impact of the low interest rate environment. The business deep-dive sessions covered NN Life Japan, NN Investment Partners, NN Bank and NN Spain, the latter being part of the Supervisory Board business unit visit in September 2019.

Aside from the Permanent Education Programme, the Supervisory Board members also met with NN Group colleagues and teams, as well as with some of the function heads of NN Group's support functions, in order to learn more about NN Group's businesses and activities. The Supervisory Board members also participated in a number of education and knowledge sessions organised by external organisations.

Self-assessment

As in previous years, in 2019 the Supervisory Board and its committees evaluated their own performance. They were supported by an external party in reviewing the functioning of the Supervisory Board as a whole, of its committees and their respective chairs, and of the individual Supervisory Board members. Each Supervisory Board, Executive Board and Management Board member completed an array of online questionnaires in this regard. The outcome of the self-assessment was discussed during a feedback session with the full Supervisory Board in January 2020. The chair of the Supervisory Board also discussed the self-assessment results with each Supervisory Board member individually.

The performance of the Supervisory Board was seen by all respondents to have either been maintained or improved since the last review and the management of the transition in Supervisory Board Chair was rated highly overall. The Supervisory Board identified succession planning, enhancing the relationship with the Executive Board and Management Board members and making

Report of the Supervisory Board continued

more effective use of board time as the top priorities for the coming year. In addition, during the feedback session in January 2020 the Supervisory Board agreed that each chair will formulate two further priorities for the year 2020.

Risk Committee

The Risk Committee assists the Supervisory Board in the performance of its duties. To this end, it prepares items for discussion and decision-making by the Supervisory Board, and recommends actions in various areas, including:

- NN Group's key risks and risk appetite statements, risk strategy and policies;
- risk exposures resulting from the business strategies and plans of NN Group and its affiliated businesses;
- the design, operation and effectiveness of the internal risk management and control systems of NN Group (the 'Risk Control Framework');
- NN Group's public disclosures on risk and risk management; and
- any Material Transactions, including an assessment of whether Ordinary Material Transactions have been entered into in the ordinary course of business and on terms that are customary for arm's length transactions in the relevant branch of business.

The Risk Committee works closely with the Audit Committee in order to avoid duplication and omissions in its activities. For this reason, the chair of the Risk Committee is also a member of the Audit Committee, and vice versa.

Composition and attendance

The members of the Risk Committee are Mr Hauser (chair), Mr Cole, Mr Jenkins, Mr Schoen, Ms Streit and Ms Vletter-van Dort. The Risk Committee met four times in 2019 with a 100% attendance rate. Mr Cole attended the meeting in February 2019 as observer (as he was appointed a member of the Risk Committee on 13 February 2019), Mr Harryvan attended the meetings in May 2019 and November 2019 as observer, and Mr Ruijter attended the meetings held in February 2019, May 2019 and August 2019 as observer. In addition, Mr Holsboer attended the meetings in February 2019 and May 2019 as observer, after which he stepped down as a member of the Supervisory Board. Other attendees were the Chief Executive Officer, Chief Financial Officer, Chief Risk Officer, General Counsel, General Manager Corporate Audit Services, Head of Group Enterprise Risk Management and the external auditor (KPMG).

During 2019, the chair of the Risk Committee regularly liaised with the Chief Risk Officer and met with the external auditors, the Chief Compliance Officer and relevant subject-matter experts.

Discussion topics

During its meetings, the Risk Committee discussed, amongst other things: (i) the Risk Plan 2019, (ii) the Compliance Operational Plan 2019 and NN Group systematic integrity risk assessment, (iii) the Risk Control Framework, (iv) the risk management report, (v) information technology (IT) and security, and (vi) financial and economic crime. These topics are addressed below in turn.

The Risk Committee also discussed the Own Risk and Solvency Assessment Report for the period 2019-2021, the Key Risks and Risk Appetite Statements 2019, Scope of the 2020 Actuarial Assumption Review, 2020 Preparatory Crisis Plan, Directors and Officers ('D&O') liability insurance policy, and NN Group's D&O indemnity statements.

NN Group Risk Plan 2019

The NN Group Risk Plan 2019 outlines the ex-ante risk priorities for 2019, taking into account NN Group's strategic direction and risk profile, the Risk Control Framework, and external developments and regulations, and is consistent with the NN Group Business Plan 2019-2021. The Risk Plan 2019 focuses, amongst other things, on embedding risk-return considerations in the decision-making process and supporting NN Group's strategic direction by embracing technological developments, automating the risk activities and ensuring the right skills.

Compliance Operational Plan 2019 and NN Group SIRA

The main focus of the Compliance Operational Plan 2019 was on consolidation of what had already been achieved. This included further implementation of the Risk Control Framework, continuous development of the business in managing compliance and integrity risks including effective feedback, rolling-out of e-learning on key non-financial risk topics, and maintaining a solid and sustainably mature compliance function that takes due account of regulatory developments. NN Group SIRA (Systematic Integrity Risk Assessment) forms the basis for the Compliance Operational Plan, and describes the main compliance risks in the Dutch and international contexts, and within NN Group's Asset Management Business and Corporate Staff Departments. For the Compliance function, the SIRA is a key source for setting priorities in the Compliance Operational Plan.

Risk Control Framework

The objectives of the Risk Control Framework include ensuring that the management boards of the NN Group business units and function heads at head office:

- ensure relevant risks are understood at all levels of their organisation/department and mitigated through effective controls;
- have robust processes in place that demonstrate effectiveness of controls and compliance with governance, policies and standards;
- are appropriately informed about the levels of risks and effectiveness of controls; and
- can confirm they operate within the risk appetite and, if not, are aware of the issues and necessary mitigating actions.

In 2019, NN Group and its business units continued to make progress in the ongoing implementation and embedding of the Risk Control Framework. The Risk Committee was informed on the performance and compliance of NN Group and its affiliated businesses with respect to the objectives of the Risk Control Framework. The results of the year-end review of the Risk Control Framework showed positive steps by business units and Corporate Staff Departments in the design and effectiveness of the Risk Control Framework as well as in performing control testing and monitoring. However the Risk Committee acknowledged that more time is required to grow in completeness and effectiveness of the Risk Control Framework as well as in maturity of monitoring activities by the first and second line.

The risk management report

The quarterly risk management report of NN Group to the Supervisory Board reports risks against the risk appetite of NN Group and its affiliated businesses. It covers strategic, financial and non-financial risks.

The Risk Committee therefore periodically discussed the key strategic challenges facing the insurance, asset management and banking businesses of NN Group, the risks associated with the integration of Delta Lloyd business, the balance sheet and sound business performance, specific risk assessments carried out and their

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quality, specific measures adopted to mitigate risks, and the status of ongoing legal claims and incidents, and any related major incidents.

Information technology and security

NN Group deems the reliability and security of IT and IT infrastructure paramount. Each quarter, the Risk Committee is therefore updated on developments, achievements and risks in the field of IT and security. In 2019, the Risk Committee and Executive Board and Management Board regularly discussed the main IT risks and how to mitigate them, including timely prevention and detection of data breaches and cybersecurity attacks, which could lead to misuse of information, or financial or reputational loss. No major data breaches or cybersecurity attacks were reported in 2019.

The main challenges from an IT perspective in 2019 were in the integration and decommissioning of the Delta Lloyd environment, as well as implementation of various upgrades due to continuous innovation, transformation and the availability of resources in some business units. Furthermore, attracting IT talent has proved challenging, and NN Group has been actively promoting talent engagement and development through graduate traineeship programmes and the training of current employees.

In 2019, progress was made in implementing the IT Availability Programme (ITAP) with respect to improving the availability of core systems, and implementing the IT Security Programme with respect to improving the cyber technology and security environment. Significant progress was also achieved in cloud migration endeavours, the migration of the group Collections & Disbursements, the SAP landscape, and the migration of the group's document management to a new archiving environment, as part of the Delta Lloyd integration.

Financial Economic Crime

Financial and economic crime (FEC), such as money laundering, terrorist financing and non-compliance with sanctions regulations, can harm confidence in the financial sector. Combating FEC is therefore high on the agenda of regulators and supervisory authorities in the Netherlands and elsewhere. In light of this and the recent developments within the financial sector, the Risk Committee was periodically informed on the design, operation and effectiveness of the risk framework aimed at managing and controlling FEC-related risks.

FEC-related risks are an integral part of NN Group's Risk Control Framework. Amongst other things, the framework includes quarterly reporting by the businesses affiliated to NN Group on inherent FEC-related risks, measures adopted to mitigate these risks and how any managed FEC-related risks relate to the risk appetite of NN Group. These reports are incorporated in the risk management report, which is discussed with the Risk Committee on a quarterly basis.

NN Group actively takes preventive measures and has no tolerance for any deviation from relevant FEC laws and regulations. For each area, NN Group looks at the potential impact any incident could have, taking into account not only the financial impact, but also the impact on its customers and reputation.

Audit Committee

The Audit Committee assists the Supervisory Board in the performance of its duties. To this end, it prepares items for discussion and decision-making by the Supervisory Board, and recommends actions in various areas, including:

- the design, operation and effectiveness of the internal risk management and control systems related to financial reporting;
- the integrity and quality of the financial reporting process;
- periodic financial reports and any ad hoc financial information;
- the findings and outcomes of any audit work, by both the external auditor and Corporate Audit Services, the internal audit department of NN Group (e.g. as contained in the quarterly audit reports and yearly management letter/report); and
- establish a procedure for the selection and recommendation of the (re)appointment by the Supervisory Board of the external auditor.

The Audit Committee works closely with the Risk Committee to avoid duplication and omissions in its activities. For this reason, the chair of the Audit Committee is also a member of the Risk Committee, and vice versa.

Composition and attendance

The members of the Audit Committee are Mr Schoen (chair), Mr Harryvan, Mr Hauser and Mr Ruijter. Mr Holsboer stepped down as a member of the Audit Committee on 29 May 2019.

The Audit Committee held six meetings during 2019 with a 100% attendance rate. Mr Cole attended all six meetings as observer and Mr Jenkins attended the meeting in August 2019 as observer. Other attendees were the Chief Executive Officer, Chief Financial Officer, Chief Risk Officer, General Counsel, General Manager Corporate Audit Services, Head of Group Finance & Reporting, Head of Performance & Analytics and the external auditor (KPMG). Subject-matter specialists also regularly attended the meetings.

During 2019, the chair of the Audit Committee separately met with the Chief Financial Officer, General Manager Corporate Audit Services, subject-matter experts and the external auditor to discuss topical issues.

In addition to the regular Audit Committee meetings, the Audit Committee also held closed sessions, which were only attended by the Audit Committee members, the General Manager Corporate Audit Services and the external auditor. In all its meetings, the Audit Committee encouraged open and interactive discussion, and the sharing of critical insights and observations.

Discussion topics

In 2019, the Audit Committee covered a variety of topics in its meetings. These included recurring items that the Audit Committee deals with as a matter of course, typically in relation to the (quarterly) financial reports, (quarterly) press releases, accounting and regulatory developments, pending legal proceedings, interim and final dividend payments to shareholders, the 2019 Audit Plans of the Corporate Audit Services and of KPMG, the independence, remuneration and evaluation of both KPMG and the General Manager Corporate Audit Services, specific financial transactions, the actuarial analyses on the outcome of the reserve adequacy tests in respect of the insurance liabilities, Solvency II, internal controls on financial reporting, (planned) changes in financial reporting processes and systems, and NN Group external reporting frequency.

During 2019, the Audit Committee regularly addressed the acquisition and integration of Aegon Czech and Slovakia, and the intended acquisition of VIVAT Non-life focusing on the key operational, IT and legal risks, as well as the impact on financial reporting and the control environment, with the Executive Board and Management Board, Corporate Audit Services and KPMG. The Audit Committee was also involved in discussions on the implications of the change in external

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reporting frequency of NN Group from quarterly to semi-annually and was regularly provided with accounting and regulatory updates, including on the preparations for the implementation of IFRS 17.

In its meetings, the Audit Committee also assessed and discussed, amongst other things: (i) the quarterly reports of Corporate Audit Services, (ii) the quarterly reports of KPMG, (iii) reappointment of KPMG, (iv) information technology and security, (v) the annual KPMG Management Letter and annual standard of internal control report of Corporate Audit Services, and (vi) whether there was reasonable assurance that the financial reporting did not contain any errors of material importance. These topics are addressed below in turn.

Quarterly reports of Corporate Audit Services

The quarterly reports of Corporate Audit Services included findings and observations regarding governance, risk management and internal control, focusing on significant internal control weaknesses noted in ongoing audit activities, and follow-up by the Executive Board and Management Board on agreed actions and weaknesses.

The reports categorised the findings and observations into six areas: (i) primary processes, (ii) information technology, cyber and physical security, (iii) financial risk management and reporting, (iv) integration activities, (v) the development of outstanding risks and their mitigation, and (vi) the key internal developments of Corporate Audit Services. The findings of Corporate Audit Services are summarised annually in a Report on the NN Group Standard of Internal Control.

During 2019, Corporate Audit Services reported ongoing progress in the Delta Lloyd integration and transformation process, and in strengthening internal controls leading to improvements in solving high-risk issues. Amongst the challenges, the quarterly reports addressed the high degree of change, and resulting potential vulnerabilities and operational risks for NN Group that should be addressed.

Quarterly reports of KPMG

In its quarterly reports, KPMG presented the outcome of its review of activities and findings in the areas of significant risk identified in its 2019 audit plan, which relate to valuation of insurance liabilities, Solvency II disclosures, unit-linked exposure, valuation of hard-to-value assets, application of hedge accounting and Delta Lloyd integration.

Regarding the areas of significant risk, the quarterly reports provided observations on the valuation of insurance contract liabilities and the reserve adequacy test (RAT), Solvency II capital and risk management disclosures, unit-linked exposure, valuation of hard-to-value assets including impairments, application of hedge accounting, and Delta Lloyd integration. The report also presented specific observations on internal control and external developments relevant to NN Group, including the follow-up on recommendations in the KPMG Management Letter and earlier quarterly reports. Once a year, the findings on internal control are summarised in the annual management letter (described below).

Reappointment of KPMG

The chair of the Audit Committee took an active role in the reappointment process of KPMG as external auditor of NN Group for the three-year term 2020-2022, which reappointment took place at the annual general meeting on 29 May 2019. During this meeting, the chair of the Audit Committee provided an extensive explanation on the process supporting this proposal, which explanation is specifically described in the minutes, available on NN Group website.

Information technology, physical and cybersecurity

The quarterly reports of both Corporate Audit Services and KPMG encompass IT, and the current status and developments concerning the reliability, integrity and availability of data and assets across NN Group and its affiliated businesses. During the Audit Committee meetings, continuous attention was paid to strengthening control, as well as to the IT strategy, processes and priorities, and engineering an IT culture in line with the latest technology.

With respect to IT challenges in 2019, the Audit Committee was regularly updated on the complex integration of Delta Lloyd, including replatforming and decommissioning, as well as a significant number of business initiatives that also put pressure on IT financial resources.

The Audit Committee meetings also addressed in detail the progress and development of IT capabilities during 2019, including reducing the number of incidents and remediation time; increasing the availability of core systems; ensuring an empowered and mature security function, focused on security by design and cybersecurity; automating IT processes and workflows; and attracting and maintaining highly-skilled internal engineering employees. In its meetings, the Audit Committee also regularly discussed agile working methods with an emphasis on the appropriate culture.

KPMG Management Letter 2019

Each year, KPMG issues a management letter which contains observations on NN Group's internal control over financial reporting. The letter is based on the audit and performed quarterly review procedures.

The KPMG Management Letter 2019 contains (i) attention points for the year-end closing, (ii) improvement observations with regards to internal control environment of NN Group, and (iii) a follow-up on the KPMG Management Letter 2018. Section (ii) of the letter contains a set of eight findings. Amongst other things, these relate to NN Group's cyber security controls and observations with respect to CIO and control over IT risk. The findings are rated based on financial reporting risk and urgency or occurrence. The letter also contains a list of concrete recommendations and actions to address (ii) and (iii) above, developed by KPMG and NN Group. In its January 2020 meeting, the Audit Committee discussed the KPMG Management Letter 2019 and the Executive Board and Management Board's response, and reflected extensively on the matters it covered.

No errors of material importance

The Audit Committee discussed on a quarterly basis the financial reporting topics, and related processes and controls, described above. During these discussions, the Audit Committee evaluated these various topics, processes and other considerations, including the risk of fraud, for their potential impact on the quarterly reporting process. The Audit Committee determined that there is reasonable assurance that the financial reporting does not contain any errors of material importance, consistent with the conclusion of the Executive Board on internal control over financial reporting.

Remuneration Committee

The Remuneration Committee assists the Supervisory Board in the performance of its duties. To this end, it prepares items for discussion and decision-making by the Supervisory Board, and recommends actions in various areas, including the:

- remuneration policy for the Executive Board, as well as its implementation and evaluation;
- remuneration and concrete terms & conditions of engagement of individual Executive Board and Management Board members;
- remuneration policy of the Supervisory Board;

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- remuneration of individual Supervisory Board members;
- remuneration and remuneration policies with respect to Identified Staff (as defined);
- design and implementation of any stock-based compensation programmes;
- application of the remuneration policies within the company;
- compliance with statutory and legal requirements and regulations; and
- performance targets for the Executive Board and Management Board.

Composition and attendance

The members of the Remuneration Committee are Ms Vletter-van Dort (chair), Mr Cole, Mr Harryvan, Mr Jenkins and Mr Ruijter. On 29 May 2019, Ms Vletter-van Dort (previously chair of the Nomination and Corporate Governance Committee) succeeded the former chair of the Remuneration Committee, Mr Holsboer, who stepped down as a member of the Remuneration Committee. The Supervisory Board considers it of great importance that the chair of the Remuneration Committee has affinity with the political and public sphere in the Netherlands.

The Remuneration Committee met five times in 2019 and had a 100% attendance rate. Ms Vletter-van Dort attended the meetings in February 2019 and May 2019 as observer, Mr Cole attended the meeting in February 2019 as observer (as he was appointed as a member of the Remuneration Committee on 13 February 2019) and Mr Hauser attended the meeting in February 2019 as observer. The Chief Executive Officer and Chief Organisation & Corporate Relations also joined the meetings of the Remuneration Committee, unless the committee determined otherwise. The Head of Reward, or a representative, also attended. The chair and members of the Remuneration Committee were in regular contact with the Chief Organisation & Corporate Relations and the Head of Reward.

In addition to the regular Remuneration Committee meetings, three combined meetings with the Nomination and Corporate Governance Committee (Combined Meetings) were held with a 100% attendance rate. Mr Hauser and Mr Schoen attended the Combined Meetings in January 2019 and February 2019 as observers.

Discussion topics

Remuneration policies

The Remuneration Committee reviewed and evaluated the remuneration policies of NN Group as laid down in the NN Group Remuneration Framework, and the remuneration policies for the Executive Board and the Supervisory Board. The NN Group Remuneration Framework was updated with the minimum legal requirements to ensure alignment with regulations and guidelines on governance with effect from 1 January 2019.

Part of the Dutch Law implementing the revised Shareholders' Rights Directive came into force on 1 December 2019. This requires the remuneration policies of the Executive Board and the Supervisory Board to be reviewed and brought in line with the new legislation, and therefore the Supervisory Board, supported by the Remuneration Committee, reviewed these remuneration policies in 2019. The Supervisory Board held various consultation sessions with stakeholders, including shareholders, proxy advisors, employees, regulators and customers and the general public to obtain their feedback on the draft updated policies.

Please refer to page 36 of this Financial Report for more information on the remuneration of the Supervisory Board members.

Other topics

As is required on an annual basis, the Remuneration Committee discussed the risk assessment carried out on the NN Group Remuneration Framework and related processes, which focused on the processes designed to avoid excessive risk-taking by NN Group staff. No high risks have been identified. Identified Staff-related remuneration matters were reviewed and approved in line with the NN Group Remuneration Framework, including the variable remuneration proposals for Identified Staff for performance year 2018 and the 2019 Identified Staff selection. The Remuneration Committee was consulted in relation to the appointment of the new NN Group Chief Executive Officer.

Topics addressed during the Combined Meetings

The following matters were addressed during the Combined Meetings:

- The Remuneration Committee and the Nomination and Corporate Governance Committee assessed the functioning and performance of the Executive Board members, and provided input for the Management Board's performance assessment. Individual meetings with Executive Board and Management Board members formed part of the assessments. The combined committee also reviewed and endorsed the variable remuneration proposals for the Executive Board and Management Board.
- The objectives for the Executive Board for performance year 2019 were discussed and endorsed by the Remuneration Committee and the Nomination and Corporate Governance Committee.
- The Remuneration Committee and the Nomination and Corporate Governance Committee recommended approval of the exception to the NN Group Remuneration Framework in relation to the delivery scheme of variable remuneration selected Identified Staff members of NN Group working at NN Investment Partners. This exception was a result of a change in the remuneration regulatory context.

Nomination and Corporate Governance Committee

The Nomination and Corporate Governance Committee assists the Supervisory Board in the performance of its duties. To this end, it prepares items for discussion and decision-making by the Supervisory Board, and recommends actions concerning various areas, including:

- the policy of the Executive Board on the selection criteria and appointment procedures for Identified Staff;
- drafting the selection criteria and appointment procedures for Supervisory Board members and Executive Board members;
- the composition of the Supervisory Board and Executive Board; and
- the succession plan for Supervisory Board and Executive Board members.

Composition and attendance

The members of the Nomination and Corporate Governance Committee are Mr Cole (chair), Mr Harryvan, Ms Streit and Ms Vletter-van Dort. On 29 May 2019, Mr Cole succeeded the former chair of the Nomination and Corporate Governance Committee, Ms Vletter-van Dort, who became the chair of the Remuneration Committee. On 29 May 2019, Mr Holsboer stepped down as a member of the Nomination and Corporate Governance Committee.

Report of the Supervisory Board continued

The Nomination and Corporate Governance Committee met seven times in 2019 and had an attendance rate of 100%. Mr Cole, Mr Hauser and Mr Schoen attended the meeting in February 2019 as observers. The Chief Executive Officer and the Chief Organisation & Corporate Relations also joined the meetings of the Nomination and Corporate Governance Committee unless the committee determined otherwise.

Discussion topics

Succession planning

The Nomination and Corporate Governance Committee discussed and evaluated the succession plan for the Executive Board and Management Board members, and other key staff (including Identified Staff), and NN Group's talent management programme. The committee again recommended that more effort should be made to increase the diversity (age, gender, culture and ethnicity) of the succession plan.

Appointment of the Chief Executive Officer

The Nomination and Corporate Governance Committee played an active role in supporting the Supervisory Board in the process of drafting selection criteria and identifying a successor for Mr Friese when he stepped down as a member and chair of the Executive Board and Chief Executive Officer of NN Group, and in the subsequent appointment of Mr Knibbe. The decision to appoint Mr Knibbe was a result of having a sound succession planning process in place. Throughout the appointment process, the Profile of the Executive Board and the Diversity Policy were duly observed.

Composition of the Supervisory Board

The rotation and succession plan for the Supervisory Board was discussed, and the Supervisory Board self-assessment process for 2018 evaluated.

The Nomination and Corporate Governance Committee evaluated, discussed and made recommendations to the Supervisory Board on the composition of the Supervisory Board and its committees, and individual Supervisory Board competencies and skills as at the date of Mr Holsboer's resignation. In this context, the Nomination and Corporate Governance Committee prepared the discussion for (i) the proposal to appoint Mr Cole as Chair of the Supervisory Board and designate him as a member of the Risk Committee and Remuneration Committee, and a member and chair of the Nomination and Corporate Governance Committee, and (ii) the proposed reappointment of Ms. Vletter-van Dort as a member of the Supervisory Board, Risk Committee, and Nomination and Corporate Governance Committee, and a member and chair of the Remuneration Committee.

Other topics

As is required on an annual basis, the Nomination and Corporate Governance Committee reviewed and discussed the booklet on the application of the Dutch Corporate Governance Code for the financial year 2018. The Nomination and Corporate Governance Committee was consulted in relation to the governance to be followed for, amongst other things, the acquisition of VIVAT Non-Life. The Nomination and Corporate Governance Committee was further consulted in relation to the changes prompted by part of the Dutch Law implementing the revised EU Shareholders' Rights Directive, which came into force on 1 December 2019 in the Charters of the NN Group N.V. Executive Board, Management Board, Supervisory Board and Committees, and the NN Group N.V. Decision Structure.

Evaluation

NN Group has achieved significant progress in 2019 on its path of transformation and innovation initiatives, building on its strong heritage and solid foundation, while adapting to the fast-changing and digital environment and, crucially, becoming more personal and relevant to its customers. NN Group has experienced many changes in 2019 which created opportunities for growth but also posed challenges. Notably, NN Group's intended acquisition of VIVAT Non-Life activities from Athora, has provided opportunities to create scale and become the market leader for Non-Life in the Dutch market. At the same time, this new endeavour coincides with completing Delta Lloyd integration and solving related challenges in relation to monitoring of the remaining integration matters which requires a lot of effort and dedication as well. The Supervisory Board has been continuously involved in discussions on key developments and challenges and has provided its support and guidance, while ensuring that rigid governance processes are in place.

The Supervisory Board appreciates the constructive and successful cooperation with the Executive Board and the Management Board, which have undergone significant changes in 2019. As of 12 August 2019, Mr Friese stepped down as member and chair of the Executive Board and CEO of NN Group. The Supervisory Board is thankful for his outstanding performance over the years and his commitment to serving the long-term interests of the company. Also the Supervisory Board is pleased with the appointment of Mr Knibbe as a member of the Executive Board and CEO of NN Group and is convinced that he has the right leadership skills to drive NN Group forward.

The Supervisory Board would like to extend its gratitude to Mr Erasmus who stepped down as CRO and member of the Management Board of NN Group, effective 31 December 2019. During his tenure, Mr Erasmus made a significant contribution to the stable position that NN Group is in today. The Supervisory Board is playing an active role in supporting the Executive Board in identifying a successor for Mr Erasmus.

On 14 February 2019 it was announced that Mr Holsboer, chair of the Supervisory Board of NN Group, would step down as of the close of the annual general meeting on 29 May 2019. The Supervisory Board elected Mr Cole as his successor, based on Mr Cole's extensive international experience and in-depth knowledge of banking and insurance services. The Supervisory Board appreciates the profound contribution of Mr Holsboer to the development of NN Group and is delighted with Mr Cole joining the Supervisory Board to further strengthen its role and responsibilities towards NN Group.

The Supervisory Board continues to cherish being part of NN Group's resilient journey towards transformation and innovation with long-term values at heart. The Supervisory Board thanks the members of the Executive Board and the Management Board, and all talented people of NN Group and its businesses for their immense efforts, drive and devotion to help NN Group to accelerate transformation and improve the financial futures of its customers.

Corporate governance

General

NN Group N.V. (NN Group) is a public limited liability company (naamloze vennootschap) incorporated under the laws of the Netherlands and has a two-tier board structure consisting of an executive board (Executive Board) and a supervisory board (Supervisory Board). NN Group also has a management board (Management Board).

NN Group was incorporated on 29 March 2011 under the name ING Insurance Topholding N.V. On 28 February 2014, NN Group entered into a legal merger with its wholly-owned subsidiary ING Verzekeringen N.V. (ING Verzekeringen), at that time a public limited liability company incorporated under the laws of the Netherlands. On 1 March 2014, the legal merger became effective. As a result of this merger, ING Verzekeringen ceased to exist, NN Group acquired all assets and liabilities of ING Verzekeringen under universal title of succession and was renamed NN Group N.V. At that time NN Group had one shareholder: ING Groep N.V. (ING Group), a public limited liability company incorporated under the laws of the Netherlands. On 2 July 2014, ING Group offered part of its shares in the share capital of NN Group to the public and the shares in the capital of NN Group were listed on Euronext Amsterdam (IPO). Settlement of the offering took place on 7 July 2014. ING Group completed its divestment of NN Group on 19 April 2016. As of 5 October 2015, NN Group voluntarily applied the full large company regime (volledig structuurregime). Effective 29 May 2015, NN Group filed a declaration with the commercial register in which it stated to meet the requirements of paragraph 2 of clause 153 of book 2 of the Dutch Civil Code. As a result, and effective 29 May 2018, NN Group mandatorily applies the full large company regime.

On 2 February 2017, NN Group announced a recommended public cash offer to all holders of issued and outstanding ordinary shares in the capital of Delta Lloyd N.V. (Delta Lloyd) to acquire their shares. On 26 April 2017, NN Group announced that following the settlement, NN Group – via its wholly-owned subsidiary NN Group Bidco B.V. (NN Group Bidco) – held 93.3% of the issued and outstanding ordinary shares in the capital of Delta Lloyd. On 31 May 2017, NN Group Bidco, NN Group and Delta Lloyd entered into a legal merger. On 1 June 2017, the legal merger became effective. As a result of this merger, remaining holders of Delta Lloyd ordinary shares received NN Group's ordinary shares, Delta Lloyd ceased to exist, and NN Group Bidco acquired all assets and liabilities of Delta Lloyd under universal title of succession. Subsequently, as part of the legal restructuring process, NN Group entered into a legal merger with NN Group Bidco. As a result of this merger, NN Group Bidco ceased to exist and NN Group assumed all assets and liabilities of NN Group Bidco, including its subordinated notes of EUR 750 million and the Delta Lloyd legal entities. The legal merger became effective on 31 December 2017.

As at 31 December 2019 the Executive Board consisted of the following persons:

Name	Position	Date of birth	Gender	Nationality	Appointment	Termination/ reappointment	Tenure
David Knibbe	Chair, Chief Executive Officer (CEO)	15 March 1971	Male	Dutch	1 October 2019	2023*	Less than 1 year
Delfin Rueda	Vice-chair, Chief Financial Officer (CFO)	8 April 1964	Male	Spanish	1 March 2014, reappointment 31 May 2018	2022*	6 years

* Terms of appointment will end at the close of the annual general meeting (AGM) of NN Group N.V. in 2023 and 2022 respectively.

Executive Board

Duties

The Executive Board is entrusted with the management, the strategy and the operations of NN Group under supervision of the Supervisory Board. In performing its duties, the Executive Board must carefully consider and act in accordance with the interests of NN Group and the business connected with it, taking into consideration the interests of all the stakeholders of NN Group. The organisation, duties and working methods of the Executive Board are detailed in the charter of the Executive Board. This charter is available on the NN Group website.

Certain resolutions of the Executive Board require the approval of the Supervisory Board and/or general meeting of shareholders (General Meeting). These resolutions are outlined in the Articles of Association of NN Group (Articles of Association), which are available on the NN Group website, and in the charter of the Executive Board.

Appointment, removal and suspension

In 2019 NN Group applied the full large company regime. Under this regime the members of the Executive Board are appointed by the Supervisory Board. Prior to appointing a member of the Executive Board, the Supervisory Board must notify the General Meeting of such an intended appointment.

Under the full large company regime, only the Supervisory Board may suspend or remove a member of the Executive Board. However, the Supervisory Board is only entitled to remove a member of the Executive Board after the General Meeting has been consulted on the intended removal.

Composition

The Executive Board must consist of two or more members, with the total number of members of the Executive Board determined by the Supervisory Board after consultation with the Executive Board. Guiding principles for the appointment of members and the composition of the Executive Board are provided in the profile of the Executive Board and Management Board which includes the diversity policy for the composition of these boards. The profile including the diversity policy is available on the NN Group website.

Lard Friese stepped down on 12 August 2019 as member and Chair of the Executive Board and Chief Executive Officer of the company. He had been appointed as member and Vice-chair of the Executive Board on 1 March 2014 and Chair and Chief Executive Officer as of 7 July 2014. He had been reappointed as member of the Executive Board and had again been designated as Chair of the Executive Board and Chief Executive Officer on 1 June 2017.

Corporate governance continued

David Knibbe was appointed to the Executive Board and designated as Chief Executive Officer of NN Group and chair of the Executive Board effective 1 October 2019. He is responsible for the business strategy, performance and day-to-day operations of NN Group. Mr Knibbe has already been a member of the Management Board since 7 July 2014. On 1 September 2014, Mr Knibbe was appointed Chief Executive Officer Netherlands. In this role Mr Knibbe was responsible for NN Group's insurance and banking business in the Netherlands and leading the integration of NN and Delta Lloyd. From 2013 until 2014, he served as Chief Executive Officer of ING Insurance International. In 2013 he became member of the NN Group Operating Committee. From 2011 to 2013, he served as Chief Executive Officer of ING Insurance Central and Rest of Europe. During 2010, Mr Knibbe was Chief Executive Officer Insurance Corporate Clients in the Netherlands. From 2007 to 2008, Mr Knibbe was General Manager of Nationale-Nederlanden Individual Life (retail life and individual pensions), which then became Intermediary Pensions and Retail Life with the addition of the SME pensions business in 2008. In 2009, Mr Knibbe became General Manager Pensions with the addition of corporate pensions and removal of retail life from his area of responsibility. Prior to that, from 2004 to 2007, Mr Knibbe was Director Disability and Accident Insurance of Nationale-Nederlanden. From 2002 to 2004, he was Managing Director of ING's life insurance and employee benefits joint venture with Piraeus Bank in Greece. Mr Knibbe was Head of Investments of Central-Holland of ING Bank from 2000 to 2002. Mr Knibbe started his professional career in 1997 when he joined ING, serving in various positions in investment management and banking. Mr Knibbe holds a Master's degree in monetary economics from the Erasmus University in Rotterdam (the Netherlands). Mr Knibbe was chair of the board of the Dutch Association of Insurers (Verbond van Verzekeraars) from 9 December 2015 until 20 June 2018. From 20 July 2018 until 18 December 2019, he was Vice-chair of the Dutch Association of Insurers. Furthermore, Mr Knibbe is member of the board and treasurer of the Confederation of Netherlands Industry and Employers (VNO-NCW), as well as Member of the Federative Board VNO-NCW and MKB NL. He is also member of the board of the Johan Cruyff Foundation and member of the advisory board of JINC.

Delfin Rueda was appointed to the Executive Board as Chief Financial Officer on 1 March 2014. As of 7 July 2014, he serves as Vice-chair of the Executive Board. On 31 May 2018, he was reappointed as member of the Executive Board and again designated Chief Financial Officer of NN Group and Vice-chair of the Executive Board. Mr Rueda is responsible for NN Group's finance departments and investor relations. As of 1 January 2020 he assumes the Chief Risk Officer portfolio ad interim. From 1 October 2013 until the legal merger between NN Group and ING Verzekeringen, which became effective on 1 March 2014, he was a member of the management board and Chief Financial Officer of ING Verzekeringen. Mr Rueda served as Chief Financial Officer and as a member of the management board of ING Insurance Eurasia from 1 November 2012 until 7 July 2014. Prior to joining ING in November 2012, Mr Rueda served as Chief Financial and Risk Officer and as a member of the management board at Atradius from 2005 to 2012. From 2000 to 2005, Mr Rueda served as Senior Vice-president of the Financial Institutions Group, Corporate Finance, at J.P. Morgan. Prior to that, from 1993 to 2000, he was Executive Director of the Financial Institutions Group, Corporate Finance, at UBS. Mr Rueda began his career with Andersen Consulting, which later became Accenture, where he undertook different advisory assignments in information systems and strategic management services from 1987 to 1991. Mr Rueda holds a master degree in economic analysis and quantitative economics from the Complutense University of Madrid (Spain) and an MBA with

a finance major from the Wharton School, University of Pennsylvania (USA). Besides being a member of the Executive Board, Mr Rueda is supervisory board member and chairman of the audit committee of the supervisory board of Adyen N.V. Mr Rueda is also Vice-chair of the CFO Forum and member of the Supervisory Committee of Alma Mundi Insurtech Fund.

Remuneration

Information on the remuneration policy for members of the Executive Board and on their individual remuneration can be found in the Remuneration Report, on page 32-37.

Management Board

Role and duties

The Management Board is entrusted with the day-to-day management of NN Group and the overall strategic direction of NN Group. In performing its duties, the Management Board must carefully consider and act in accordance with the interests of NN Group and the business connected with it, taking into consideration the interests of all the stakeholders of NN Group. The authority to manage NN Group is vested in the Executive Board as a whole, notwithstanding that each of the members of the Management Board is responsible and accountable to the Executive Board and within the Management Board for the specific tasks as assigned. Being comprised of the Executive Board members as well as key leaders with a divisional or functional responsibility, the Management Board allows for integral and holistic decision-making at the highest level of NN Group with functions, the businesses and Executive Board members represented. Besides serving balanced, effective and timely decision-making, NN Group having a Management Board also provides for flexibility in terms of composition, allocation of tasks and responsibilities and required knowledge. In supervising the functioning of NN Group's corporate governance structure, including its checks and balances, the Supervisory Board pays specific attention to the dynamics and relationship between the Executive Board and the Management Board as well as the manner in which the Management Board operates. The Supervisory Board will be provided with all the information necessary for the proper performance of this duty. In principle, members of the Management Board are present at meetings with the Supervisory Board where topics are discussed that relate to their area of responsibility. Next to that, the Supervisory Board regularly meets with the full Management Board. The organisation, role, duties and working methods of the Management Board are detailed in the charter of the Management Board. The charter is available on the NN Group website.

Composition, appointment and removal

The Management Board consists of the members of the Executive Board and such other members as appointed by the Executive Board after consultation with the Supervisory Board. The number of members of the Management Board is determined by the Executive Board. Guiding principles for the appointment of members and the composition of the Management Board are provided in the profile of the Executive Board and Management Board which includes the diversity policy for the composition of these boards. The profile including the diversity policy is available on the NN Group website.

The members of the Management Board may be suspended and removed by the Executive Board after consultation with the Supervisory Board.

Corporate governance continued

As at 31 December 2019 the Management Board consisted of the following persons:

Name	Position	Date of birth	Gender	Nationality	Appointment	Tenure
David Knibbe	Chair, Chief Executive Officer (CEO) (as of 1 October 2019)	15 March 1971	Male	Dutch	7 July 2014	5 years
Delfin Rueda	Vice-chair, Chief Financial Officer (CFO)	8 April 1964	Male	Spanish	7 July 2014	6 years
Satish Bapat	Chief Executive Officer NN Investment Partners	23 June 1966	Male	Dutch	1 April 2017	2 year
Tjeerd Bosklopper	Chief Executive Officer Netherlands a.i. (as of 17 December 2019) and CTO	3 March 1975	Male	Dutch	1 September 2018	1 year
Jan-Hendrik Erasmus	Chief Risk Officer (CRO) (as of 1 October 2016)	27 July 1980	Male	British and South African	1 September 2016 Mr Erasmus stepped down on 31 December 2019	3 years
Dailah Nihot	Chief Organisation & Corporate Relations	12 June 1973	Female	Dutch	1 September 2018	1 year
Fabian Rupprecht	Chief Executive Officer International Insurance	22 December 1969	Male	German and Swiss	1 September 2018	1 year
Janet Stuijt	General Counsel	26 September 1969	Female	Dutch	1 September 2018	1 year

Lard Friese had been appointed to the Executive Board on 1 March 2014 and reappointed in 2017 and was also a member of the Management Board. He stepped down on 12 August 2019 as member of the Executive Board, resulting in the termination of his membership of the Management Board.

Information in respect of the members of the Management Board who are also members of the Executive Board, David Knibbe and Delfin Rueda, can be found under 'Executive Board – Composition', on page 21.

Satish Bapat was appointed to the Management Board as Chief Executive Officer NN Investment Partners as of 1 April 2017. Mr Bapat is responsible for NN Group's asset management business. From 2013 to 1 April 2017, he was Chief Executive Officer of NN Life Japan and, prior to this, Chief Executive Officer of Asia Pacific for ING Investment Management. From 2011 to 2012, Mr Bapat was Global Chief Financial Officer at ING Investment Management and from 2010 to 2011 he was Chief Financial Officer Europe for ING Investment Management. Before joining ING, Mr Bapat was Change Project Manager at RBS N.V. from 2009 to 2010. From 2008 to 2009, he served as Global Head of Finance at Robeco Asset Management, and from 2006 to 2008 as Global Head of Finance at ABN AMRO Asset Management. Prior to this, from 2005 to 2006 Mr Bapat was Group Financial Controller at TNT N.V. From 1998 to 2005, Mr Bapat served as Senior Manager at Deloitte & Touche in the Netherlands, after having held the role of Audit Senior at Deloitte & Touche in the USA since 1994. Mr Bapat holds a Master of Business Administration degree in finance from the Temple University of Philadelphia (USA) and a Bachelor's degree in Accounting from the University of Bombay (India). He is also a public accountant (USA).

Tjeerd Bosklopper was appointed CEO Netherlands ad interim as of 17 December 2019. In this role, he is responsible for all insurance and banking business in the Netherlands and IT. Mr Bosklopper was appointed to the Management Board as Chief Transformation Officer on 1 September 2018, and as such responsible for three areas: IT, driving (technological) transformation, and innovation. In 2018, Mr Bosklopper was Head of Integration of Nationale-Nederlanden Netherlands and Belgium. From 2015 to 2018, Mr Bosklopper was Head of Individual Life at NN Group in the Netherlands. From 2012 to 2015, Mr Bosklopper was Chief Executive Officer at Nationale-Nederlanden Life & Pensions in Poland. From 2010

to 2012, he was Chief Information & Transformation Officer at Nationale-Nederlanden Netherlands. From 2006 to 2010, he was Director Product Management at Nationale-Nederlanden Non-life Netherlands. From 2004 to 2006, Mr Bosklopper was Executive Vice-president and Chief Marketing Officer at ING Life South Korea. From 2003 to 2004, he was Project Manager at ING Aetna Life Indonesia. From 2001 to 2003, he was Regional e-business Manager at ING Group's regional office in Hong Kong. From 1999 to 2001, he participated in the Global Management Programme (GMP) at ING Group. Mr Bosklopper holds a Master of Science in Business Information Technology from the University of Twente (the Netherlands). As of 18 December 2019, Mr Bosklopper is a member of the board of the Dutch Association of Insurers (Verbond van Verzekeraars).

Jan-Hendrik Erasmus was appointed to the Management Board on 1 September 2016 and as Chief Risk Officer of NN Group on 1 October 2016. Mr Erasmus stepped down as Management Board member and Chief Risk Officer of NN Group on 31 December 2019. Mr Erasmus was responsible for NN Group's overall risk framework with direct responsibility for the risk management departments. He was also responsible for the Actuarial function, reinsurance and procurement globally. Prior to joining NN Group, Mr Erasmus was a partner in Oliver Wyman's Financial Services business, Head of the UK Insurance Practice and a member of the European leadership team. Jan-Hendrik joined Oliver Wyman in 2009 and his consulting work predominantly focused on risk, capital and asset-liability management for UK and European insurers. From 2007 to 2009, Mr Erasmus worked for Lucida plc where he led one of the deal teams and was the Director of Risk and Capital Management. From 2005 to 2007, Mr Erasmus worked at Prudential plc's Group Head Office, lastly as Head of Group Risk-adjusted Profitability. He started his professional career in 2003 at Momentum Life in the investment product development department. Mr Erasmus holds an Executive MBA (with distinction) from London Business School (United Kingdom) and a Bachelor of Commerce (Hons) in actuarial science from the University of Pretoria (South Africa). He is a Fellow of the Institute of Actuaries in the United Kingdom, and holds the Chartered Enterprise Risk Actuary (CERA) qualification. Mr Erasmus is also member of the CRO Forum and member of the Supervisory Committee of Alma Mundi Insurtech Fund.

Corporate governance continued

Dailah Nihot was appointed to the Management Board as Chief Organisation & Corporate Relations as of 1 September 2018. Ms Nihot is responsible for human resources, corporate communications, sustainability and corporate citizenship, branding and sponsorship, public and government affairs, and facility management. From 2013 to 2018, she was Managing Director of Corporate Relations for NN Group. Prior to this, from 2006 to 2013, she was Global Head of Sustainability, and Director of the ING for Something Better Foundation at ING Group, which focuses on the company's global ethical, social and environmental strategy and performance. Ms Nihot started her professional career in the external communications department of ING Group, and was a corporate spokesperson and strategic communications advisor from 2001 to 2006. Ms Nihot serves as management representative in the Central Works Council of NN Group (Works Council). She holds a Master of European Studies from the University of Amsterdam (the Netherlands) and an Executive Master in Corporate Communication from the RSM Erasmus University in Rotterdam (the Netherlands).

Fabian Rupprecht was appointed to the Management Board as Chief Executive Officer International Insurance as of 1 September 2018. Mr Rupprecht is responsible for NN Group's insurance businesses outside the Netherlands: Insurance Europe, Japan Life and Japan Closed Block VA businesses. From 1996 to 2018, Mr Rupprecht worked for AXA. From 2016 to 2018, he was Chief Executive Officer Middle East & Africa, and Regional Chief Financial Officer and member of the regional executive committee at AXA Emerging Markets (CEE, MEA, LATAM). From 2013 to 2016, he was Regional Chief Financial Officer at AXA Mediterranean Holding, and member of the regional executive committee. From 2010 to 2013, he was Head of AXA Global Life, and member of the Global Life & Health board. From 2008 to 2010, he was Head of Individual Life, and member of the executive board of AXA-Winterthur. From 2001 to 2007, he was Head of Life & Annuity Offer at AXA Germany. From 1998 to 2000, Mr Rupprecht was Head of EquiVest Product Management at The Equitable Life Assurance (AXA) USA. From 1996 to 1998, he served as Head of Accounting for Health & Life Insurance at Colonia Konzern AG (AXA/UAP). From 1994 to 1996, he was assistant to the executive board at Colonia Konzern AG (UAP). Mr Rupprecht holds a Diploma in Business Administration, with majors in finance and controlling, from the WHU Otto Beisheim School of Management (Koblenz, Germany).

Janet Stuijt was appointed to the Management Board as General Counsel as of 1 September 2018. Ms Stuijt is responsible for NN Group's legal function and compliance function and holds the position of company secretary. Ms Stuijt joined ING Verzekeringen in 2011 in that same capacity. From 2008 to 2010 she was General Counsel Commercial Banking at ING Group. From 1998 to 2008, Ms Stuijt held various senior (global) management positions within ABN AMRO's legal department, primarily relating to ABN AMRO's corporate strategic and investment banking activities. In 1998, she was Regional Legal Counsel at ABN AMRO's regional office in Singapore. From 1993 to 1997 Ms Stuijt practised law as an associate at Loeff Claeys Verbeke/Allen Overy, Singapore office (1997) and De Brauw Blackstone Westbroek (1993-1997). Ms Stuijt holds a Master's in Civil law, from the University of Leiden, the Netherlands. Since 2016 she is a member of the supervisory board of N.V. Nederlandse Spoorwegen and a member of its risk & audit committee and chair of the nomination & remuneration committee.

Supervisory Board

Duties

The Supervisory Board is responsible for supervising the management of the Executive Board and the general course of affairs of NN Group and its businesses. The Supervisory Board may, on its own initiative, provide the Executive Board with advice and may request any information from the Executive Board that it deems appropriate. In performing its duties, the Supervisory Board must carefully consider and act in accordance with the interests of NN Group and the business connected with it, taking into consideration the relevant interests of all the stakeholders of NN Group. The organisation, duties and working methods of the Supervisory Board are detailed in the charter of the Supervisory Board. The charter is available on the NN Group website.

Appointment, removal and suspension

The members of the Supervisory Board are appointed by the General Meeting upon nomination of the Supervisory Board. The General Meeting and the Works Council may recommend candidates for nomination to the Supervisory Board. The Supervisory Board must simultaneously inform the General Meeting and the Works Council of the nomination. The nomination must state the reasons on which it is based. The Supervisory Board is required to nominate one-third of the Supervisory Board members on the enhanced recommendation (versterkt aanbevelingsrecht) of the Works Council, unless the Supervisory Board objects to the recommendation on the grounds that the recommended candidate is not suitable to fulfil the duties of a member of the Supervisory Board or that the Supervisory Board will not be properly composed if the nominated candidate is appointed.

The General Meeting may reject the nomination of a Supervisory Board member by an absolute majority of the votes cast by shareholders representing at least one-third of NN Group's issued share capital. If the General Meeting resolves to reject the nomination by an absolute majority of the votes cast, but this majority does not represent at least one-third of NN Group's issued share capital, a new meeting can be convened in which the nomination can be rejected by an absolute majority of the votes cast, irrespective of the part of NN Group's issued share capital represented. If the General Meeting resolves to reject the recommendation, the Supervisory Board will then prepare a new nomination. If the General Meeting does not appoint the person nominated by the Supervisory Board and does not resolve to reject the nomination, the Supervisory Board will appoint the person nominated.

A member of the Supervisory Board is appointed for a maximum period of four years. The members of the Supervisory Board retire periodically in accordance with a rotation schedule drawn up by the Supervisory Board. The rotation schedule is available on the NN Group website.

Corporate governance continued

The Supervisory Board may suspend a member of the Supervisory Board. The suspension will lapse by law if NN Group has not submitted a petition to the Enterprise Chamber of the Amsterdam Court of Appeal (Ondernemingskamer van het Gerechtshof te Amsterdam) within one month after commencement of the suspension. The General Meeting can, by an absolute majority of votes cast, representing at least one-third of the issued share capital, resolve to abandon its trust (het vertrouwen opzeggen) in the entire Supervisory Board. A resolution to remove the Supervisory Board for lack of confidence cannot be adopted until the Executive Board has notified the Works Council of the proposal for the resolution and the reasons therefore. If the General Meeting removes the Supervisory Board members for lack of confidence, the Executive Board must request the Commercial Division of the Amsterdam Court of Appeal to temporarily appoint one or more Supervisory Board members.

The profile of the Supervisory Board is available on the NN Group website.

As at 31 December 2019 the Supervisory Board consisted of the following persons:

Name	Position	Date of birth	Gender	Nationality	Appointment	Termination/ reappointment	Tenure
David Cole	Chair (as of the close of the AGM on 29 May 2019)	2 October 1961	Male	Dutch and American	1 January 2019	2022	1 year
Dick Harryvan	Vice-chair (as of 24 February 2016)	10 May 1953	Male	Dutch	2 February 2016	2020	4 years
Heijo Hauser	Member	23 June 1955	Male	German	7 July 2014, reappointment 31 May 2018	2022	5 years
Robert Jenkins	Member	17 January 1951	Male	American	2 February 2016	2020	4 years
Robert Ruijter	Member (recommended by Works Council)	14 April 1951	Male	Dutch	1 June 2017	12 April 2020	2 years
Hans Schoen	Member	2 August 1954	Male	Dutch	7 July 2014, reappointment 31 May 2018	2022	5 years
Clara Streit	Member	18 December 1968	Female	German and American	1 June 2017	12 April 2020	2 years
Hélène Vletter-van Dort	Member (recommended by Works Council)	15 October 1964	Female	Dutch	6 October 2015, reappointment 29 May 2019	2023	4 years

Jan Holsboer who had been appointed to the Supervisory Board on 1 March 2014, who served as Chair as of 7 July 2014 and was considered by the Central Works Council as appointed pursuant to its enhanced recommendation as of 31 May 2018, stepped down as of the close of the AGM on 29 May 2019.

David Cole was appointed to the Supervisory Board on 31 May 2018, which became effective on 1 January 2019. As of the close of the AGM on 29 May 2019, he serves as Chair of the Supervisory Board. Mr Cole was born on 2 October 1961 and has Dutch and American nationality. He was chief financial officer and chief risk officer of Swiss Re Ltd., chief financial officer and chief risk officer of (former) ABN AMRO Holding (Bank) N.V. and member of the board of directors of FWD Group Management Holdings Ltd. Besides being a member of the Supervisory Board, Mr Cole is, amongst others, member of the board of directors of Vontobel Holding AG (Zürich) and of Swiss Re Asia Pte. Ltd and Swiss Re Corporate Solutions Brazil and chair of the supervisory board of IMC B.V.

Composition

The Supervisory Board must consist of three or more members, with the total number of members of the Supervisory Board determined by the Supervisory Board. As at 31 December 2019 the Supervisory Board consisted of eight members, who are all independent within the meaning of best practice provision 2.1.8. of the Dutch Corporate Governance Code. In accordance with the Offer Memorandum, issued in connection with the recommended public cash offer to all holders of issued and outstanding ordinary shares in the capital of Delta Lloyd, two Continuing Members – as described in the Offer Memorandum – were appointed as members of the Supervisory Board on 1 June 2017. The Continuing Members monitor and protect the interests of Delta Lloyd's stakeholders.

Dick Harryvan was appointed to the Supervisory Board on 6 October 2015, which became effective on 2 February 2016. He was appointed Vice-chair of the Supervisory Board on 24 February 2016. From 2006 through 2009, Mr Harryvan was member of the executive board of ING Group and chief executive officer of ING Direct. Other former positions include co-chair of the International Academy of Retail Banking, non-executive director of Voya Financial Inc., general manager Bancassurance at ING Bank, deputy general manager at Nationale-Nederlanden, vice-president Operations of the Halifax Insurance Company, member of the advisory board of Gulf Bank and member of the advisory board of ONYX4People. Besides being a member of the Supervisory Board, Mr Harryvan is, amongst others, member of the supervisory board of ANWB B.V. and partner at Finch Capital (formerly called Orange Growth Capital). The term of appointment of Mr Harryvan ends at the close of the AGM on 28 May 2020 (2020 AGM). He has indicated that he is not available for reappointment.

Corporate governance continued

Heijo Hauser was appointed to the Supervisory Board as of 7 July 2014. On 31 May 2018, he was reappointed as Supervisory Board member. From January 1991 until June 2011, Mr Hauser was managing director of Towers Watson in Germany. He specialised in providing consulting services to insurance companies in areas such as strategy, distribution, product and risk management. He also managed Towers Watson's businesses in the German-speaking, Nordic and Central European countries. From September 1987 until December 1990, Mr Hauser was managing director of the travel and financial services subsidiaries of Metro in Germany. Other previous positions include sales director of Deutsche Krankenversicherung and marketing actuary of Victoria Lebensversicherung. Mr Hauser holds a Master's degree in mathematics from the Ruhr University of Bochum (Germany). Besides being a member of the Supervisory Board, Mr Hauser is chair of the board of Freundeskreis Elisabeth-Hospiz e.V.

Robert Jenkins was appointed to the Supervisory Board on 6 October 2015, which became effective on 2 February 2016. Since 2009, he is adjunct professor of finance at London Business School where he teaches investment management. From 2014 to 2016 he was founding chair of the AQR Asset Management Institute at LBS. From September 2013 through September 2019 Mr Jenkins was a member of the board of governors of CFA Institute. During his tenure he served as chairman of the board, chair of the audit and risk committee, chair of the remuneration committee and chair of the nominations committee. From 2009 until 2014 Mr Jenkins was a senior advisor to CVC Capital Partners and from 2011 until 2013 he was an external independent member of the interim Financial Policy Committee of the Bank of England. Mr Jenkins has served as chair of the Investment Management Association, UK, chair of the board of F&C Asset Management, plc (non-executive) and chief executive officer of the F&C Group. Other former positions include that of chief operating officer of Credit Suisse Asset Management Holding, UK, chief investment officer and head of asset management at Credit Suisse, Japan, and senior vice-president at Citigroup with executive assignments in the Middle East, Switzerland, United States and Japan. He was senior fellow at Better Markets, Washington, D.C. The Supervisory Board has nominated him for reappointment as member of the Supervisory Board for a term of four years. The proposal for reappointment will be submitted for adoption at the 2020 AGM.

Robert Ruijter was appointed to the Supervisory Board on 1 June 2017. He is the former chair of the supervisory board of Delta Lloyd N.V. and one of the Continuing Members. He was managing director and chief financial officer of KLM Royal Dutch Airlines, director of finance of the Philips Group and chief financial officer and member of the executive board of VNU N.V. (currently called: The Nielsen Company). He has also served as non-executive board member of Inmarsat plc. Besides being a member of the Supervisory Board, Robert Ruijter is member of the supervisory board of Wavin N.V. and non-executive board member of Interxion Holding N.V. The term of appointment of Mr Ruijter ends on 12 April 2020. He has indicated that he is not available for reappointment.

Hans Schoen was appointed to the Supervisory Board as of 7 July 2014. On 31 May 2018, he was reappointed as Supervisory Board member. From September 1977 until October 2008, Mr Schoen worked at KPMG Accountants and was a partner as of January 1989. He specialised in providing audit and advisory services to domestic and foreign insurance companies. Other former significant positions of Mr Schoen include member and chair of several insurance industry committees of the NIVRA and the Dutch Accounting Standards Board, member of the governmental advice

committee Traas in respect of the financial and prudential reporting obligations of Dutch insurance companies, member of several advisory committees of the IASC/IASB on insurance company financial reporting requirements and member and part-time acting director of research of the Technical Expert Group of EFRAG in Brussels (Belgium). Until 27 April 2016, Mr Schoen served as chair of the EFRAG Insurance Accounting Working Group. Mr Schoen holds a degree in economics and a postdoctoral degree in accountancy from the University of Amsterdam (the Netherlands). In September 2015, he received a Doctorate (PhD) from the VU University Amsterdam (the Netherlands). As of 12 April 2020, Mr Schoen will be considered as appointed pursuant to the enhanced recommendation right of the Central Works Council.

Clara Streit was appointed to the Supervisory Board on 1 June 2017. She is a former member of the supervisory board of Delta Lloyd N.V. and one of the Continuing Members. Clara Streit was senior partner at McKinsey & Company Inc. in Munich and Frankfurt. Until 12 April 2018, she was member of the board of directors of Unicredit S.p.A (Milan). Positions currently held by Ms Streit include membership of the board of directors of Vontobel Holding AG (Zürich) and membership of the supervisory board of Vonovia SE (Düsseldorf). Ms Streit is also a member of the board of directors of Jerónimo Martins SGPS S.A. (Lisbon). In May 2019, Ms Streit was appointed member of the supervisory board of Deutsche Börse AG (Frankfurt). The term of appointment of Ms Streit ends on 12 April 2020. The Supervisory Board has nominated her for reappointment as member of the Supervisory Board for a term of four years. The proposal for reappointment will be submitted for adoption at the 2020 AGM.

Hélène Vletter-van Dort was appointed to the Supervisory Board on 6 October 2015 pursuant to the enhanced recommendation right of the Works Council. On 29 May 2019, she was reappointed as Supervisory Board member. In addition to being a member of the Supervisory Board, Ms Vletter-van Dort is, amongst others, a professor of financial law & governance at the Erasmus School of Law, chair of the supervisory board of Intertrust N.V. and chair of the board of Stichting Luchtmans. Ms Vletter-van Dort is a former non-executive board member of Barclays Bank plc. Ms Vletter-van Dort also served as a member of the supervisory board of the Dutch Central Bank (DNB) and chair of its committee on supervisory policy. Other previous positions include, amongst others, visiting research professor at New York University, professor of securities law at the University of Groningen, judge at the Enterprise Chamber of the Amsterdam Court of Appeal, lawyer at Clifford Chance in Amsterdam (the Netherlands), member of the supervisory board of Fortis Bank Nederland (Holding) N.V. and Fortis Bank (Nederland) N.V., chair of the Appeal Panel of the Single Resolution Board and member of the Monitoring Committee Corporate Governance Code. As of the close of the 2020 AGM, Ms Vletter-van Dort will serve as Vice-chair of the Supervisory Board.

More information on the composition of the Supervisory Board can be found in the Report of the Supervisory Board, on pages 10-20.

Remuneration

Information on the remuneration of the members of the Supervisory Board can be found in the Remuneration Report, on pages 32-37.

Corporate governance continued

Committees of the Supervisory Board

The Supervisory Board has established four committees: the Audit Committee, the Risk Committee, the Remuneration Committee, and the Nomination and Corporate Governance Committee.

The organisation, duties and working methods of the Supervisory Board committees are detailed in a separate charter for each committee. These charters are available on the NN Group website. Information on the duties and responsibilities of the respective committees and their composition can also be found in the Report of the Supervisory Board on pages 10-20.

Diversity

NN Group aims to have an adequate and balanced composition of its boards. When composing a board, several relevant selection criteria need to be balanced.

When Lard Friese stepped down as member of the Executive Board on 12 August 2019, he was succeeded by David Knibbe, an excellent successor from within the company. Mr Knibbe has the right leadership skills to drive NN Group going forward. Having worked in a variety of senior management roles, Mr Knibbe has a deep understanding and experience of NN's businesses, the sector, and the markets in which NN operates. He successfully led the integration of Delta Lloyd and is a dynamic, customer-focused and values-driven business leader, whose vision and execution track record contribute to the future of NN Group. The appointment of Mr Knibbe was in accordance with the profile of the Executive Board and Management Board. With the appointment of Mr Knibbe, the gender balance within the Executive Board, which consists of two members, remained unchanged and did not meet the gender balance of having at least 30% men and at least 30% women in 2019.

Two out of the four appointments to the Management Board in 2018 were women. As a result, 22% of the members of the Management Board were female and 78% were male. Following the resignation of Lard Friese on 12 August 2019, the composition of the Management Board was 25% female and 75% male.

In 2019 the gender balance of having at least 30% men and at least 30% women amongst the members of the Supervisory Board was not met. When searching for suitable candidates for the Supervisory Board, various criteria play a role, for instance background, age and nationality, but also experience in corporate governance, experience in a political and social/economic setting, and DNB guidelines. In line with the long-term objectives of NN Group diversity criteria are also taken into consideration as factors. In case of vacancies, efforts were made to find suitable female successors. At the same time, appointments must be made on the basis of suitability for a position. This means considering someone's personality and the experience and insights that he or she can bring.

As announced, the Supervisory Board nominated Clara Streit and Robert Jenkins for reappointment. If reappointed, the composition of the Supervisory Board will be 33% female and 67% male following the 2020 AGM.

In future appointments of board members, NN Group will continue to take into account all laws and regulations and relevant selection criteria including but not limited to executive experience, experience in corporate governance of large stock-listed companies, and experience in the political and social environment in which such companies operate. In the selection of the members of the Executive Board and the Management Board considered as a whole, and in the selection of the members of the Supervisory Board, there will be

a balance in terms of nationality, gender, age, experience, education and work background. In addition, there will be a balance in the affinity with the nature and culture of the business of the company and its subsidiaries.

In order to ensure that the Executive Board, the Management Board and the Supervisory Board are at all times adequately composed, appointments to these boards are made on the basis of harmonised policies and visions of the various corporate bodies of NN Group and in accordance with legal and regulatory requirements. Both the profile of the Executive Board and Management Board and the profile of the Supervisory Board include a diversity policy. The guiding principles included in the profiles are taken into account when (re-) appointing board members. Notwithstanding the above, the principle of having at least 30% men and at least 30% women is applied in the succession planning for all Executive Board and Supervisory Board positions, as well as for all Strategic Leadership Group – including Management Board – positions. Succession planning is a key instrument in achieving the long-term diversity objectives and is part of the Human Capital Development policies of NN Group. More detail can be found in the Diversity and inclusion section on page 33 in the Annual Review.

Conflicts of interest

No transactions were entered into in 2019 in which there were conflicts of interest with Executive Board members and/or Supervisory Board members that are of material significance to NN Group and/or to the relevant board members.

General meeting

Frequency, notice and agenda

Each year, not later than the month of June, a general meeting is held. Its general purpose is to discuss the Report of the management board, adopt the annual accounts, release the members of the Executive Board and the members of the Supervisory Board from liability for their respective duties, appoint and reappoint members of the Supervisory Board, decide on dividend to be declared, if applicable, and decide on other items that require shareholder approval under Dutch law. Extraordinary general meetings are held whenever the Supervisory Board or the Executive Board deems such to be necessary. In addition, one or more shareholders who jointly represent at least 10% of the issued share capital of NN Group may, on application, be authorised by the court in interlocutory proceedings of the district court to convene a general meeting.

General meetings are convened by a public notice via the NN Group website no later than on the 42nd day before the day of the general meeting. The notice includes the place and time of the meeting and the agenda items. Shareholders who, alone or jointly, represent at least 3% of the issued share capital of NN Group may request to place items on the agenda, provided that the reasons for the request are stated therein and the request is received by the chair of the Executive Board or the chair of the Supervisory Board in writing at least 60 days before the date of the general meeting.

Corporate governance continued

Admission to the general meeting

Each holder of shares in the share capital of NN Group entitled to vote, and each other person entitled to attend and address the general meeting, is authorised to attend the general meeting, to address the general meeting and to exercise voting rights. For each general meeting a statutory record date will in accordance with Dutch law be set on the 28th day prior to the date of the general meeting, in order to determine whose voting rights and rights to attend and address the general meeting are vested. Those entitled to attend and address a general meeting may be represented at a general meeting by a proxy holder authorised in writing.

Voting and resolutions

Each share in the share capital of NN Group confers the right on the holder to cast one vote. At a general meeting all resolutions must be adopted by an absolute majority of the votes cast, except in those cases in which the law or the Articles of Association require a greater majority. If there is a tie in voting, the proposal concerned will be rejected.

Powers of the General Meeting

The most important powers of the General Meeting are to:

- Appoint members of the Supervisory Board upon nomination of the Supervisory Board
- Recommend persons to the Supervisory Board for nomination as a member of that board
- Abandon its trust in the Supervisory Board
- Release the members of the Executive Board and the members of the Supervisory Board from liability for their respective duties
- Adopt the annual accounts
- Appoint the external auditor
- Approve resolutions of the Executive Board regarding important changes in the identity or character of NN Group or its business
- Issue shares, restrict or exclude pre-emptive rights of shareholders and delegate these powers to the Executive Board, upon a proposal of the Executive Board which has been approved by the Supervisory Board
- Authorise the Executive Board to repurchase shares
- Reduce the issued share capital, upon a proposal of the Executive Board which has been approved by the Supervisory Board
- Adopt the remuneration policy for the members of the Executive Board and the remuneration of the members of the Supervisory Board, upon a proposal of the Supervisory Board
- Dispose the profit remaining after the payment of dividend on any outstanding preference shares and after a decision has been taken on the addition of all or part of the profits to the reserves, upon a proposal of the Executive Board which has been approved by the Supervisory Board
- Amend the Articles of Association, upon a proposal of the Executive Board which has been approved by the Supervisory Board

In addition, as of 1 December 2019, the General Meeting advises on the Remuneration Report and adopts the remuneration policy for the members of the Supervisory Board, including the remuneration for the Supervisory Board members, upon a proposal of the Supervisory Board.

Shares and share capital

Classes of shares and NN Group Continuity Foundation

The authorised share capital of NN Group consists of ordinary shares and preference shares. Depositary receipts for shares are not issued with the cooperation of NN Group.

Currently, only ordinary shares are issued, while a call option to acquire preference shares is granted to the foundation (stichting): Stichting Continuïteit NN Group (NN Group Continuity Foundation). The objectives of NN Group Continuity Foundation are to protect the interests of NN Group, the business maintained by NN Group and the entities with which NN Group forms a group and all persons involved therein, in such a way that the interests of NN Group and those businesses and all persons involved therein are protected to the best of its abilities, and by making every effort to prevent anything which may affect the independence and/or the continuity and/or the identity of NN Group and of those businesses in violation of the interests referred above. NN Group Continuity Foundation shall pursue its objectives, inter alia, by acquiring and holding preference shares in the share capital of NN Group and by enforcing the rights, in particular the voting rights, attached to those preference shares. To this end, NN Group Continuity Foundation has been granted a call option by NN Group. According to the call option agreement concluded between NN Group and NN Group Continuity Foundation, NN Group Continuity Foundation has the right to subscribe for preference shares in the share capital of NN Group, consisting of the right to subscribe for such preference shares repeatedly. This may happen each time up to a maximum corresponding with 100% of the issued share capital of NN Group in the form of ordinary shares, as outstanding immediately prior to the exercise of the subscribed rights, less one share, from which maximum shall be deducted any preference shares already placed with NN Group Continuity Foundation at the time of the exercise of the subscribed rights. NN Group Continuity Foundation qualifies as a legal entity independent from NN Group, within the meaning of section 5:71, paragraph 1, subparagraph c of the Dutch Financial Supervision Act.

As at 31 December 2019, the board of NN Continuity Foundation consisted of three members who are independent from NN Group: Marc van Gelder (chair), Hessel Lindenbergh (treasurer) and Steven Perrick (secretary).

Issuance of shares and pre-emptive rights

The General Meeting may resolve to issue shares in the share capital of NN Group, or grant rights to subscribe for such shares, upon a proposal of the Executive Board which has been approved by the Supervisory Board. The Articles of Association provide that the General Meeting may delegate the authority to issue shares, or grant rights to subscribe for shares, to the Executive Board, upon a proposal of the Executive Board which has been approved by the Supervisory Board. If the Executive Board has been designated as the body authorised to resolve upon an issue of shares in the share capital of NN Group, the number of shares of each class concerned must be specified in such designation. Upon such designation, the duration of the designation shall be set, which shall not exceed five years. A resolution of the Executive Board to issue shares requires the approval of the Supervisory Board.

Corporate governance continued

Upon the issue of new ordinary shares (or the granting of rights to subscribe for ordinary shares), each holder of ordinary shares in the share capital of NN Group has a pre-emptive right in proportion to the aggregate nominal value of his or her shareholding of ordinary shares. Holders of ordinary shares have no pre-emptive right upon (a) the issue of new ordinary shares (or the granting of rights to subscribe for ordinary shares): (i) against a payment in kind (ii) to employees of NN Group or of a group company or (iii) to persons exercising a previously-granted right to subscribe for ordinary shares and (b) the issue of preference shares.

Upon a proposal of the Executive Board which has been approved by the Supervisory Board, the General Meeting may resolve to limit or exclude the pre-emptive rights. According to the Articles of Association, the General Meeting may designate the Executive Board as the competent body to do so upon a proposal of the Executive Board which has been approved by the Supervisory Board. Both resolutions require a majority of at least two-thirds of the votes cast, if less than one-half of the issued share capital is represented at the general meeting. The designation to the Executive Board to resolve to limit or exclude the pre-emptive rights may be granted for a specified period of time of not more than five years and only if the Executive Board has also been designated or is simultaneously designated the authority to resolve to issue shares. A resolution of the Executive Board to limit or exclude the pre-emptive rights requires the approval of the Supervisory Board.

Designation of the Executive Board at the 2019 AGM

Share issuance in the context of issuing Contingent Convertible Securities

On 29 May 2019, the General Meeting designated the Executive Board for a term of five years, from 29 May 2019 up to and including 28 May 2024, as the competent body to resolve, subject to the approval of the Supervisory Board, on the issuance of ordinary shares in the share capital of the NN Group (including the granting of rights to subscribe for ordinary shares) upon conversion of any CCS instruments in accordance with its terms and conditions during the term of the CCS instruments. This authority of the Executive Board is limited to a maximum of 30% of the issued share capital of NN Group as at 29 May 2019. This designation enables the Executive Board to issue CCS instruments and to set the terms and conditions for any CCS instrument, including the limitation or exclusion of pre-emptive rights, the mechanism for the conversion and the conversion price.

Share issuance and limitation of pre-emptive rights

On 29 May 2019, the General Meeting designated the Executive Board for a term of 18 months, from 29 May 2019 up to and including 28 November 2020, as the competent body to resolve, subject to the approval of the Supervisory Board:

- on the issuance of ordinary shares in the share capital of NN Group and on the granting of rights to subscribe for such shares; and
- to limit or exclude the pre-emptive rights of existing shareholders with respect to such issue of ordinary shares in the share capital of NN Group and such granting of rights to subscribe for ordinary shares.

The authority of the Executive Board is limited to a maximum of 10% of the issued share capital of NN Group as at 29 May 2019.

Rights issue

On 29 May 2019, the General Meeting designated the Executive Board for a term of 18 months, from 29 May 2019 up to and including 28 November 2020, as the competent body to resolve, subject to the approval of the Supervisory Board, on the issuance of ordinary shares in the share capital of NN Group and on the granting of rights to subscribe for ordinary shares by way of a rights issue. This authority of the Executive Board is limited to a maximum of 20% of the issued share capital of NN Group as at 29 May 2019. This authority to issue shares may be used for any purpose, including but not limited to safeguarding or conserving the capital position of NN Group and mergers or acquisitions.

Acquisition of own shares

NN Group may acquire fully paid-up shares in its own share capital for no consideration (om niet) or if: (a) NN Group's shareholder's equity less the payment required to make the acquisition does not fall below the sum of called-up and paid-in share capital and any statutory reserves, and (b) the nominal value of the shares which NN Group acquires, holds or holds as pledge, or which are held by a subsidiary, does not exceed half of the issued share capital. The acquisition of its own shares by NN Group for consideration requires authorisation by the General Meeting. The authorisation is not required for the acquisition of shares for employees of NN Group or of a group company under a scheme applicable to such employees. The Executive Board may resolve, subject to the approval of the Supervisory Board, to alienate the shares acquired by NN Group in its own share capital. The resolution of the Executive Board to acquire shares in its own share capital for consideration requires the prior approval of the Supervisory Board. No voting rights may be exercised in the general meeting with respect to any share or depositary receipt for such share held by NN Group or by a subsidiary, and no payments will be made on shares which NN Group holds in its own share capital.

On 29 May 2019, the General Meeting authorised the Executive Board for a term of 18 months, from 29 May 2019 up to and including 28 November 2020, to acquire in the name of NN Group, subject to the approval of the Supervisory Board, fully paid-up ordinary shares in the share capital of NN Group. This authorisation is subject to the condition that following such acquisition the par value of the ordinary shares in the share capital of NN Group which are held by NN Group or for which NN Group holds a right of pledge, or which are held by its subsidiaries for their own account, shall not exceed 10% of the issued share capital of NN Group on 29 May 2019. Shares may be acquired on the stock exchange or otherwise, at a price not less than the par value of the ordinary shares in the share capital of NN Group and not higher than 110% of the highest market price of the shares on Euronext Amsterdam on the date of the acquisition or on the preceding day of stock market trading.

Corporate governance continued

Cancellation of own shares

On 29 May 2019, the General Meeting adopted the proposal to reduce the issued share capital of NN Group by cancellation of ordinary shares held by NN Group in its own share capital up to a maximum of 20% of the issued share capital of NN Group as at 29 May 2019. The cancellation may be executed in one or more tranches. The number of ordinary shares to be cancelled shall be determined by the Executive Board. Capital reduction shall take place with due observance of the applicable statutory provisions and the articles of association of NN Group.

Transfer of shares and transfer restrictions

The transfer of ordinary shares in the share capital of NN Group included in the Statutory Giro System must take place in accordance with the provisions of the Dutch Securities Giro Act (*Wet giraal effectenverkeer*). The transfer of shares in the share capital of NN Group not included in the Statutory Giro System requires an instrument intended for that purpose. To become effective, NN Group has to acknowledge the transfer, unless NN Group itself is a party to the transfer. The Articles of Association do not restrict the transfer of ordinary shares in the share capital of NN Group, while the transfer of preference shares in the share capital of NN Group requires the prior approval of the Executive Board. NN Group is not aware of the existence of any agreement pursuant to which the transfer of ordinary shares in the share capital of NN Group is restricted.

Significant shareholdings

Substantial shareholdings, gross and net short positions

Under the Dutch Financial Supervision Act each legal and natural person having a substantial holding or gross short position in relation to the issued share capital and/or voting rights of NN Group that reaches, exceeds or falls below any one of the following thresholds: 3%, 5%, 10 %, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%, must immediately give written notice to the Dutch Authority for Financial Markets. These notifications will be made public via the Register substantial holdings and gross short positions (*Register substantiële deelnemingen en bruto shortposities*) of the Dutch Authority for Financial Markets.

Information on shareholders with an (indirect) holding and/or gross short position of 3% or more can be found in the Annual Review on page 35 and is deemed to be incorporated by reference herein.

Pursuant to EU regulation No 236/2012, each legal and natural person holding a net short position representing 0.2% of the issued share capital of NN Group must report this position and any subsequent increase by 0.1% to the Dutch Authority for Financial Markets. Each net short position equal to 0.5% of the issued share capital of NN Group and any subsequent increase of that position by 0.1% will be made public via the short selling register of the Dutch Authority for Financial Markets.

In 2019 no legal or natural person held at least 10% of the shares in NN Group, therefore NN Group did not enter into any transaction with any such person.

Dutch Corporate Governance Code

NN Group is subject to the Dutch Corporate Governance Code (Code). The application of the Code by NN Group during the financial year 2019 is described in the publication 'Application of the Dutch Corporate Governance Code by NN Group', dated 11 March 2020, which is available on the website of NN Group. This publication is to be read in conjunction with this chapter and is deemed to be incorporated by reference herein. The Code is available on the website of the Dutch Corporate Governance Code Monitoring Committee (www.commissiecorporategovernance.nl).

Articles of Association

The General Meeting may pass a resolution to amend the Articles of Association with an absolute majority of the votes cast, but only on a proposal of the Executive Board, which has been approved by the Supervisory Board. NN Group's Articles of Association were last amended on 2 June 2017.

Change of Control

NN Group is not party to any material agreement that takes effect, alters or terminates upon a change of control of NN Group following a take-over bid as referred to in article 5:70 of the Dutch Financial Supervision Act, other than a revolving credit facility agreement entered into with a syndicate of lenders. The revolving credit facility agreement includes a change of control provision which entitles the lenders to cancel the commitment under the facility and declare any outstanding amounts under the facility immediately due and payable.

The assignment contracts with the members of the Executive Board provide for severance payments, which are to become due in case of termination of the contract in connection with a public bid as defined in article 5:70 of the Dutch Financial Supervision Act. Severance payments to the members of the Executive Board are limited to a maximum of one year's fixed salary, in line with the Code and the Dutch Financial Supervision Act.

External auditor

The external auditor is appointed by the General Meeting upon nomination of the Supervisory Board, after recommendation by the Audit Committee. On 28 May 2015, the General Meeting appointed KPMG Accountants N.V. as the external auditor of NN Group for the financial years 2016 through 2019. On 29 May 2019 KPMG Accountants N.V. was reappointed as the external auditor of NN Group for the financial years 2020 through 2022.

The external auditor may be questioned at the general meeting in relation to its audit opinion on the annual accounts. The external auditor will therefore attend and be entitled to address this meeting. The external auditor attended the meetings of the Audit Committee and the Risk Committee of the Supervisory Board in 2019.

More information on NN Group's policy on external auditor independence is available on the website of NN Group.

Corporate governance continued

Risk management and control systems

A description of the main characteristics of the risk management and control systems of NN Group and its group companies can be found in Note 49 'Risk management' to the Consolidated annual accounts, which is deemed to be incorporated by reference herein.

The Executive Board is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the annual accounts in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets.
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of the annual accounts in accordance with generally accepted accounting principles (International Financial Reporting Standards as endorsed by the European Union and Part 9 of Book 2 of the Dutch Civil Code).
- Provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use or disposition of assets that could have a material effect on the annual accounts.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect all 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.

Corporate Governance Statement

This chapter, including parts of this Annual Report incorporated by reference, together with the separate publication 'Application of the Dutch Corporate Governance Code by NN Group', dated 11 March 2020, which is available on the NN Group website, also serves as the corporate governance statement referred to in section 2a of the Decree contents of the management report (Besluit inhoud bestuursverslag).

Remuneration report

Introduction

This remuneration report describes NN Group's remuneration philosophy and methodology. Furthermore, details are provided on the remuneration of the Supervisory Board and the Executive Board. This Report is divided into the following subsections:

- I Remuneration in general
- II Remuneration of the Executive Board
- III Remuneration of the Supervisory Board
- IV 2019 review of Executive Board remuneration policy and Supervisory Board remuneration

Reference is made to Note 46 'Key management personnel compensation' in the Consolidated annual accounts for more information on the remuneration of the Executive Board, Management Board and Supervisory Board, including loans and advances provided to the members of these Boards. This remuneration report serves as the report referred to in article 2:135b of the Dutch Civil Code and Best Practice Provision 3.4.1 of the Dutch Corporate Governance Code.

The information as provided in this remuneration report is based on the current applicable remuneration policy of NN Group. Throughout the year 2019, the Supervisory Board has reviewed the current remuneration policy for the Executive Board and the remuneration for the Supervisory Board. The Supervisory Board will propose to adopt amended remuneration policies for the members of the Executive Board and the members of the Supervisory Board at the annual general meeting to be held on 28 May 2020. Further details are provided in the last paragraph of this remuneration report (subsection IV).

I Remuneration in general

NN Group has an overall remuneration policy, as described in the NN Group Remuneration Framework, which provides for reward guidelines and principles for all country and business unit remuneration policies within NN Group. NN Group aims to apply a clear and transparent remuneration policy that is adequate to attract and retain expert leaders, senior staff and other highly qualified employees. The remuneration policy is also designed to support NN Group's employees to act with integrity and to carefully balance the interests of our stakeholders, including the future of our customers and of our company.

NN Group's remuneration policy for executives and senior staff is based on a total compensation approach, and is benchmarked on a regular basis with relevant national and international peers, both within the financial sector and outside the financial sector. Clear financial and non-financial performance objectives are set which are aligned with the overall strategy of NN Group, both in the short term and the long term, to ensure that remuneration is properly linked to individual, team and NN Group performance. The remuneration policy supports a focus on the company's long-term interests and the interests of its customers and various stakeholders by ensuring that there is careful management of risk and that staff is not encouraged, via remuneration, to take excessive risk. In addition, the remuneration policy ensures that NN Group complies with all the relevant (inter)national regulations on remuneration, such as the Act on the Remuneration Policies of Financial Undertakings (Wet beloningsbeleid financiële ondernemingen), as relevant to our business.

With respect to performance year 2019, the total number of staff of NN Group eligible for variable remuneration is 6,696. The total amount of variable remuneration approved is EUR 65.4 million, which will be paid in March or April 2020. In 2019, six persons employed within NN Group and NN IP received a total remuneration of more than EUR 1 million.

II Remuneration of the Executive Board

The Executive Board members have an assignment contract (in Dutch: overeenkomst van opdracht) with NN Group N.V. Mr Knibbe, previously CEO of NN Netherlands, was appointed as member and chair of the Executive Board and CEO of NN Group by the Supervisory Board on 1 October 2019, after notification to the General Meeting of NN Group at an extraordinary general meeting (EGM) on 26 September 2019. He succeeded Mr Friese, who stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019. The term of appointment of Mr Knibbe will end at the close of the annual general meeting to be held in 2023. Mr Rueda was reappointed as member of the Executive Board and again designated as CFO of NN Group and as vice-chair of the Executive Board on 31 May 2018 for a term of four years. His term of appointment will end at the close of the annual general meeting to be held in 2022. Executive Board members can be reappointed by the Supervisory Board for consecutive periods of up to four years after notification to the General Meeting of NN Group.

The remuneration policy for the Executive Board members was approved by the General Meeting on 28 May 2015, effective as from 1 January 2015. The Supervisory Board conducted a scenario analysis in February 2019 and determined that this policy is still effective in changing circumstances. This remuneration policy has not been amended since its effective date and was also applicable in 2019. The data presented in this report relates to remuneration awarded to the Executive Board members in respect of the whole of 2019. The 2019 total remuneration as provided to the members of the Executive Board is in line with the applicable remuneration policy. The Supervisory Board has not applied any deviation or derogation from the remuneration policy of the Executive Board.

Remuneration report continued

The remuneration of the Executive Board members consists of a combination of fixed remuneration ('base salary': of which 80% is paid in cash and 20% in shares) and base salary allowances, variable remuneration, pension arrangements and other emoluments as described below. To support the long-term value creation, a retention period of five years starting from the date of award is applicable to all share awards. The total compensation of the Executive Board members is benchmarked on a regular basis against market data that includes peers both inside and outside the financial sector in the Netherlands and abroad. The peers are selected with reference to asset base, market capitalisation, revenue and number of employees. In line with the remuneration policy as adopted by the General Meeting on 28 May 2015, the Supervisory Board aims to set the remuneration levels slightly below market median. If, based on the annual benchmark the remuneration level is not in line with the approved policy, appropriate measures will be considered. The Supervisory Board also takes into account all stakeholders' interests, including social context, before finalising executive pay levels.

Only in the event of an involuntary exit (e.g. a mutual agreement at NN Group's initiative whereas the Executive Board member has been requested to leave), Executive Board members are eligible to an exit-arrangement limited to a maximum of one year base salary. Exit-arrangements will in no way qualify as reward for failure (within the meaning of the applicable regulatory requirements).

Executive Board base salary

In 2017, the Supervisory Board announced a gradual, step-by-step increase in the remuneration of the Executive Board members. That increase has been implemented in 2017 and 2018. Even after these adjustments, the salary of the CEO of NN Group was still below the median for comparable positions in the market. As announced in the annual general meeting on 29 May 2019, the Supervisory Board has decided to increase NN Group's CEO base salary by 5% with effect from 1 January 2019 and by 3% as of 1 October 2019. The base salary of Mr Knibbe is positioned at the same level as previously agreed and disclosed for Mr Friese. No changes in the base salary of the CFO of NN Group have been adopted throughout 2019.

Executive Board variable remuneration

The remuneration policy for the Executive Board members combines the short and long-term variable components into one structure. This structure supports both long-term value creation and short-term company objectives. Performance objectives follow NN Group's medium-term strategic priorities as communicated to the market and as such contribute to the long-term strategy of NN Group. Variable remuneration is based on both financial and non-financial performance of the individual and the company. The Supervisory Board annually determines the performance objectives at the start of the performance year and defines the relevant 'at target' level. Following the performance year, the Supervisory Board determines based on the full-year financial results the extent to which the financial performance objectives are met. The extent to which non-financial performance objectives are met is assessed by the Supervisory Board. Performance regarding the year 2019 is assessed based on a number of objectives, as outlined in the table below. Estimated risks and capital adequacy were also taken into account when determining the award of variable remuneration. The Risk and Compliance function provided input in this respect.

The emphasis on long-term performance indicators within the variable component of the compensation package is realised by means of deferral of 60% of the total variable remuneration. Furthermore, an annual re-evaluation by the Supervisory Board will take place with the possibility to hold back (i.e. prevent from ever vesting) and/or claw back vested and paid variable remuneration. The Supervisory Board has the authority to reclaim any variable remuneration allocated to an Executive Board member based on inaccurate data and/or behaviour that led to significant harm to the company. In addition, the Supervisory Board has the authority to adjust variable remuneration in the event that the application of the predetermined performance criteria would result in an undesired outcome.

The maximum variable remuneration of the Executive Board members for performance year 2015 onwards has been capped at 20% of the base salary and the on target level of the annual variable remuneration has been set at 16% of the base salary.

Additionally, the short-term component of variable remuneration (the so called 'Upfront Portion') is 40% of the total variable remuneration and is equally divided between an award in cash and an award in stock. The Deferred Portion is also equally divided between an award in deferred cash and an award in deferred stock. Both the deferred cash and the deferred stock awards are subject to a tiered vesting on the first, second and third anniversary of the grant date (one third per annum). Similar to the shares awarded as fixed remuneration, a retention period of five years starting from the date of award is applicable to all stock awards (both upfront and deferred), with the exception that part of the stock will be withheld at the relevant date of vesting to cover any income tax liability arising from the vested share award (withhold-to-cover). In addition to the general principles described above, more specific details on the 2019 variable remuneration of the Executive Board members are provided below.

Performance objectives Executive Board members

The performance of the Executive Board members is assessed against their financial and non-financial objectives, set at by the Supervisory Board at the beginning of 2019. When determining the objectives for a specific performance year, the Supervisory Board takes into account the medium-term financial and non-financial company objectives. At the end of the year, the Supervisory Board executes a performance assessment to determine to what extent the objectives have been met. The Supervisory Board is supported by the relevant functions, such as Finance, Corporate Development, Compliance, Corporate Relations, Risk and HR, to provide relevant input. In 2019 the financial and non-financial performance objectives included the following:

Remuneration report continued

2019 Objectives	Weight CEO	Weight CFO	Financial and non-financial performance criteria
NN Group financial targets	40%	25%	The following financial performance objectives were used: cost reduction, free cash flow to the holding, operating result and Solvency II operating capital generation. Cost reduction, free cash flow to the holding and operating result ambitions were also communicated to the financial markets. Overall the financial objectives were met in 2019.
Strategy, customer and society	30%	30%	Several strategic, customer and societal objectives were used in 2019, in which the aim was to execute the corporate strategy by launching or preparing the launch of new strategic partnerships, improve customer engagement (as measured by the Global Brand Health Monitor), brand performance and corporate reputation amongst the public (both measured by external partners) and further integrate ESG criteria in investment decisions. Overall these objectives were met in 2019.
Sustainable business and Risk	15%	30%	The focus for 2019 was to further embed a sustainable control environment. For example, the target to materially complete the Risk Control Framework cycle with tracking and independent testing of key and assurance controls in 2019. The control environment objective was met in 2019.
Employee engagement	15%	15%	NN Group's position as an employer of choice was measured by employee engagement scores, focusing on building the future leadership and maintaining a diversity level of at least 30% of women in senior roles. All these objectives were met in 2019.

In 2019 there was no hold back applied to unvested deferred variable remuneration nor was claw back applied to paid or vested variable remuneration for any of the Executive Board members.

Executive Board pension arrangements

The pension arrangement for the Executive Board members is the same as the pension arrangement that is applicable to all staff of NN Group in the Netherlands and comprises a collective defined contribution (CDC) plan up to the annual tax limit (EUR 107,593 as from 1 January 2019) and a taxable individual savings allowance on pensionable fixed remuneration exceeding the tax limit.

The table on next page provides details on the amount of contribution that was paid by NN Group to the pension arrangement of the Executive Board members.

Executive Board other emoluments

The Executive Board members were eligible for a range of other emoluments, such as health care insurance, life cycle saving scheme, security, transportation, external tax advice and expat allowances (CFO only). The Executive Board members were also able to obtain banking and insurance services from NN Group in the ordinary course of business and on terms that apply to all employees of NN Group in the Netherlands. As at 31 December 2019, the Executive Board members had EUR 415,000 of loans outstanding with NN Group regulated entities. No guarantees or advanced payments were granted to the Executive Board members. The table below provides details on the amount of emoluments that was paid by NN Group to the benefit of the Executive Board members.

Remuneration of the Executive Board members (in EUR 1,000 and gross)

	Lard Friese		David Knibbe		Delfin Rueda	
	2019 ¹	2018	2019 ²	2018	2019	2018
Base salary in cash	849	1,314	355		1,137	1,058
Base salary in shares	212	328	89		284	264
Total base salary	1,061	1,642	444	0	1,421	1,322
Variable remuneration	0	328	71		284	264
Total direct remuneration	1,061	1,970	515	0	1,705	1,586
Employer contribution to pension fund	17	27	6		25	27
Individual savings allowance ³	273	418	97		339	331
Other emoluments ⁴	102	69	38		227	142
Employer cost social security ⁵	45	86	18		61	70
Relative proportion base salary versus variable remuneration	100%/0%	83.4%/16.6%	86.2%/13.8%		83.3%/16.7%	83.4%/16.6%

- Mr Friese stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019. His remuneration in the capacity of CEO of NN Group is shown in the table above. No severance payments have been provided, the unvested deferred share and cash awards at the moment of resignation have lapsed, and no variable remuneration award in relation to his performance in 2019 has been granted.
- Mr Knibbe was appointed by the Supervisory Board as member and chair of the Executive Board and CEO of NN Group on 1 October 2019. His remuneration in the capacity of CEO of NN Group is shown in the table above. The annual base salary of Mr Knibbe, as approved by the Supervisory Board amounts EUR 1,775,000, with an annual target variable remuneration opportunity of 16%. As a result, the total at target direct remuneration amounts EUR 2,059,000, which is the same level as previously approved for Mr Friese. The new salary of Mr Knibbe is based on the new responsibilities, and has been determined in line with the principles (including market positioning) as outlined in the remuneration policy for the Executive Board as adopted by the annual general meeting. The remuneration package is at the same level as was agreed and approved for the previous CEO.
- The individual saving allowance scheme is applicable for both the Executive Board and staff of NN Group in the Netherlands.
- The increase in other benefits compared to the performance year 2018 is mainly caused by costs in relation to security, and the fact that external tax advice for the Executive Board members at the request of the employer and transportation were not included for performance year 2018.
- The employer social security contributions do not impact the overall remuneration received by Executive Board members.

Remuneration report continued

The total remuneration as disclosed in the table above (for 2019: EUR 4.5 million) includes all variable remuneration related to the performance year 2019. Under IFRS-EU, certain components of variable remuneration are not recognised in the profit and loss account directly, but are allocated over the vesting period of the award. The comparable amount recognised in staff expenses in 2019 and therefore included in 'Total expenses' in 2019, relating to the fixed expenses of 2019 and the vesting of variable remuneration of 2019 and earlier performance years, is EUR 4.7 million.

2019 Variable remuneration of the Executive Board members (in EUR 1,000 and gross)

	Upfront cash paid	Deferred cash granted	Upfront shares granted	Deferred shares granted	Total
Lard Friese					
David Knibbe	14	21	14	21	71
Delfin Rueda	57	85	57	85	284

Long-term incentives awarded in previous years and in 2019 to the Executive Board members

The Executive Board members receive deferred cash and upfront and deferred share awards under NN Group's Aligned Remuneration Plan (ARP).

The table below provides an overview of the number of NN Group shares awarded and vested for the Executive Board members during 2019 under the ARP. Mr Knibbe was appointed by the Supervisory Board as member and chair of the Executive Board and CEO of NN Group on 1 October 2019. Since the remuneration in shares in relation to long-term incentives are awarded yearly in March, Mr Knibbe did not receive granted or vested shares in the capacity of CEO of NN Group during 2019.

Overview of number of NN Group shares awarded and vested for the Executive Board members during 2019

	Plan	Award Date	Outstanding and unvested per 1 January 2019	Awarded during 2019	Vested during 2019	Outstanding and unvested per 31 December 2019	Vesting Price in euros
Lard Friese	Deferred Shares Plan	29 March 2016	748		748	0	36.60
	Deferred Shares Plan	20 March 2017	1,725		862	0	38.84
	Deferred Shares Plan	15 March 2018	2,414		804	0	38.45
	Deferred Shares Plan	18 March 2019	0	2,636		0	
	Upfront Shares Plan	18 March 2019	0	1,758	1,758	0	38.71
Delfin Rueda	Deferred Shares Plan	29 March 2016	649		649	0	36.60
	Deferred Shares Plan	20 March 2017	1,362		681	681	38.84
	Deferred Shares Plan	15 March 2018	1,820		606	1,214	38.45
	Deferred Shares Plan	18 March 2019	0	2,123		2,123	
	Upfront Shares Plan	18 March 2019	0	1,415	1,415	0	38.71

The table below shows an overview of the (vested) NN Group shares held by the Executive Board members on 31 December 2019 (including the shares vested during 2019) and 31 December 2018. Mr Friese stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019. Therefore the overview shows the NN Group shares held by Mr Friese on 31 December 2018. Mr Knibbe was appointed by the Supervisory Board as member and chair of the Executive Board and CEO of NN Group on 1 October 2019. Therefore the overview shows the NN Group shares held by Mr Knibbe on 31 December 2019.

Overview of NN Group shares held by the Executive Board members

	2019	2018
Lard Friese	n/a	44,549
David Knibbe	22,224	n/a
Delfin Rueda	43,760	37,697

The table below shows the annual change of remuneration of each Executive Board member, the performance of the company, and the average remuneration of employees of the company over the past five financial years.

Remuneration report continued

Remuneration of the Executive Board members, company performance and average employee remuneration (amounts in EUR 1,000 and gross)

	2019	2018	2017	2016	2015
Executive Board remuneration					
Total direct remuneration Mr Friese	1,061 ¹	1,970	1,713	1,558	1,394
Total direct remuneration Mr Knibbe	515 ²				
Total direct remuneration Mr Rueda	1,705	1,586	1,292	1,230	1,210
Company performance					
Operating result	1,794	1,626	1,586	1,227	1,435
Solvency II ratio	218%	230%	199%	241%	239%
Average remuneration					
Average employee remuneration	78.5	76.2	75.5	75.8	75.6
Pay ratio ³	27:1 ⁴	33:1	29:1	26:1	23:1

1 Mr Friese stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019. His remuneration in the capacity of CEO of NN Group is shown in the table above.
 2 Mr Knibbe was appointed by the Supervisory Board as member and chair of the Executive Board and CEO of NN Group on 1 October 2019. His remuneration in the capacity of CEO of NN Group is shown in the table above.
 3 The ratio compares the total CEO compensation and the remuneration of all staff ('Pay ratio') as stated in the Dutch Corporate Governance Code. For the CEO, the total remuneration used in the pay ratio is the total remuneration as disclosed in the Remuneration report. For the staff members, the total remuneration used in the pay ratio is the total remuneration as disclosed in the Consolidated annual accounts Note 26 'Staff expenses'; in order to provide a meaningful comparison, the total remuneration of the staff population excludes Social security costs, External staff costs and the remuneration of the CEO of NN Group. The total remuneration of the CEO of NN Group excludes Social security costs as well. The Supervisory Board takes the pay ratio into consideration when deciding on the remuneration for the Executive Board members.
 4 The 2019 decrease in total remuneration compared with the 2018 total remuneration of the CEO reflects the fact that Mr Friese stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019, as a result of which no variable remuneration was paid to Mr Friese in relation to his performance in 2019. Given the fact that Mr Knibbe was appointed as CEO of NN Group as of 1 October 2019, no CEO base salary was paid between 12 August 2019 and 1 October 2019, which reduces the outcome of the pay ratio calculation.

III Remuneration of the Supervisory Board

The Supervisory Board was comprised of the following members in 2019: Mr Cole, Mr Holsboer (until 29 May 2019), Mr Harryvan, Mr Hauser, Mr Jenkins, Mr Ruijter, Mr Schoen, Ms Streit and Ms Vletter-van Dort.

More information on the composition of the Supervisory Board and its Committees can be found in the Report of the Supervisory Board, on pages 10-20 of this Financial Report.

The remuneration scheme of the Supervisory Board members was approved by the General Meeting on 6 May 2014 and amendments (in relation to the international attendance fee) were approved by the General Meeting on 28 May 2015. The proposal for a more simplified and balanced structure with more moderate payments for extra meetings and better alignment of the fixed annual remuneration in relation to the number of Supervisory Board (Committee) meetings per calendar year was adopted by the General Meeting on 1 June 2017, effective as from 1 January 2017. The 2019 total remuneration as paid to the members of the Supervisory Board is in line with the adopted scheme. However, the Supervisory board decided not to receive additional fees for the additional meetings held in 2019.

NN Group does not grant variable remuneration, shares or options to the Supervisory Board members. This ensures the independence of the Supervisory Board, contributes to NN Group's long-term performance and is in line with the Dutch Corporate Governance Code. Supervisory Board members may obtain banking and insurance services from NN Group in the ordinary course of business and on terms that are customary in the sector. As from 31 December 2019, the Supervisory Board members have EUR 426,890 of loans outstanding with NN Group regulated entities. No repayments were made during the year. No guarantees or advanced payments were granted to Supervisory Board members.

In line with market practice, a distinction is made between chair, vice-chair and other Supervisory Board members. A fixed annual expense allowance is payable to cover all out-of-pocket expenses. Travel and lodging expenses in relation to meetings are paid by NN Group. An additional fee is payable for the additional time commitments when intercontinental or international travel is required for attending meetings.

Remuneration report continued

The remuneration for the members of the Supervisory Board (in EUR)

	Chair	Vice-chair	Member
Fixed Annual fee Supervisory Board	85,000	65,000	52,500
Fixed annual fee Nomination and Corporate Governance Committee/Remuneration Committee/Risk Committee	11,000	n/a	7,000
Fixed annual fee Audit Committee	15,000	n/a	11,000
Fixed fee for extra Supervisory Board meeting (due as from the eleventh meeting within a calendar year)	3,000	3,000	3,000
Fixed fee for extra Supervisory Board Committee meeting (due as from the ninth meeting of a Committee within a calendar year)	750	750	750
Fixed annual expense allowance to cover out of pocket expenses (travel and lodging will be paid)	9,000	6,500	6,500
International attendance fee	4,000	4,000	4,000

As from the eleventh Supervisory Board meeting within the same calendar year, a fixed fee of EUR 3,000 is paid for each extra Supervisory Board meeting. Furthermore, as from the ninth meeting of a Supervisory Board Committee within the same calendar year, a fixed fee of EUR 750 is paid for each additional meeting of that Supervisory Board Committee. In 2019, the Supervisory Board decided not to receive additional fees for the additional meetings held in 2019.

Fees and allowances of Supervisory Board members¹

In EUR and gross	Fees		Total fixed gross expense allowance		Total international attendance fees		VAT	
	2019	2018	2019	2018	2019	2018	2019	2018
J.H. (Jan) Holsboer (Chair) ²	47,500	112,000	3,750	9,000	0	4,000	10,763	26,250
D.A. (David) Cole (Chair) ³	91,292	0	7,959	0	32,000	0	27,563	0
D.H. (Dick) Harryvan	90,000	90,000	6,500	6,500	4,000	4,000	21,105	21,105
H.J.G. (Heijo) Hauser	74,500	74,500	6,500	6,500	28,000	32,000	22,890	23,730
J.W. (Hans) Schoen	74,500	74,500	6,500	6,500	4,000	4,000	17,850	17,850
H.M. (Hélène) Vletter-van Dort	74,584	70,500	6,500	6,500	4,000	4,000	17,868	17,010
R.W. (Robert) Jenkins	66,500	66,500	6,500	6,500	28,000	28,000	21,210	21,210
R.A. (Robert) Ruijter	70,500	70,500	6,500	6,500	4,000	4,000	17,010	17,010
C.C.F.T. (Clara) Streit	66,500	66,500	6,500	6,500	28,000	24,000	21,210	20,370

1 This table shows the fixed fees, expense allowances and international attendance fees for the members of the Supervisory Board for 2019 and 2018.

2 Mr Holsboer stepped down as member and Chair of the Supervisory Board as of 29 May 2019. His remuneration in the capacity of Supervisory Board member of NN Group is shown in the table above.

3 Mr Cole was appointed as member of the Supervisory Board as per 1 January 2019. He was appointed Chair of the Supervisory Board as per 29 May 2019.

IV 2019 review of Executive Board remuneration policy and Supervisory Board remuneration

On 1 December 2019 part of the Dutch law implementing the revised EU Shareholders' Rights Directive (2017/828/EU) ('SRDII Implementation Act') entered into force. The SRDII Implementation Act introduces new requirements for the remuneration policy for the members of the Executive Board, and requires a detailed remuneration policy for the members of the Supervisory Board. In order to comply with the new legislation, the Supervisory Board will propose to adopt remuneration policies for the members of the Executive Board and the members of the Supervisory Board at the annual general meeting to be held on 28 May 2020. In 2019, the Supervisory Board, supported by the Remuneration Committee, reviewed the current remuneration policy for the Executive Board and the remuneration for the Supervisory Board. The Supervisory Board held various consultation sessions with stakeholders, including shareholders, proxy advisors, employees, regulators, customers, and the general public to obtain their feedback on the draft remuneration policies.

One of the conclusions from the stakeholder feedback was their support for a simple and transparent remuneration of the Executive Board and Supervisory Board. When designing the proposed remuneration policies for the Executive Board and the Supervisory Board, simplicity and transparency were therefore the guiding principles. In this respect, among other changes NN Group will disclose the peers selected for the compensation benchmark on an annual basis, as also outlined in the Executive Board and Supervisory Board remuneration policies that are subject to adoption by the General Meeting on 28 May 2020. These companies are selected based on comparability with NN Group in terms of size, scope and international footprint. For the year of 2020, the proposed peer group consists of ABN AMRO Bank, Achmea, Aegon, Ageas, Akzo Nobel, Aviva, CNP Assurances, Koninklijke DSM, Legal & General Group, Munich Re, Rabobank, Randstad, Swiss Life Holding, Talanx and Wolters Kluwer.

Works Councils

Members Central Works Council 2019¹

Afra Peeters-Stans	Secretary	OR Leven
Alexander ter Haar		OR Leven
Alfred Botterman		OR S&I
Cormac Harkin		OR NNIP
Dennis Molenberg		OR Zicht
Eric Spakman		OR S&I
Erik van Vliet		OR NNIP
Frank Meijer		OR S&I
Hennie Post	Vice-chair	OR Staven
Jan Krutzen		OR AZL
Koen van Vliet		OR NN Bank
Leo Baars		OR NN Bank
Martin Potma		OR Staven
Mervyn Verploegen		OR NN Bank
Michel Vonk	Chair	OR S&I
Oscar Willems		OR Leven
Pieke vd Pas		OR Zicht
Richarda Hogeboom		OR S&I
Robert Heinsbroek	Daily board member	OR AAV
Ronald Knier		OR AAV
Sjoerd Comello		OR S&I
Willem van der Hel		OR Staven

¹ In the Netherlands, all works councils held elections in October, with those elected taking up their roles in January 2020.

Members European Works Council 2019

EU country	Primary member	Deputy
Belgium	René de Meij (Secretary)	Kris Neefs
Bulgaria	Maria Milanova	
Czech Republic	Jana Doskočilová	-
Greece	Maria Tapini	Foteini Goublia
Hungary	Mátyás Németh	-
Netherlands	Reinoud Rijkema (Chair)	
	Robert Coleridge	Elisabeth Juillard
	Alexander ter Haar	
Poland	Agnieszka Majerkiewicz	-
Romania	Alexandra Vulpeanu	Melania Manole
Slovakia	Maria Vítálosová	Marcela Sarlinova
Spain	Angel Otero	Trini Aguilar

Statements Dutch Financial Supervision Act and Dutch Corporate Governance Code

The Executive Board is required to prepare the annual accounts and the Report of the management board (bestuursverslag) of NN Group N.V. for each financial year in accordance with applicable Dutch law and the International Financial Reporting Standards (IFRS) as endorsed by the European Union.

As required by section 5:25c paragraph 2(c) of the Dutch Financial Supervision Act, each of the signatories hereby confirms that to the best of his knowledge:

- The NN Group N.V. 2019 annual accounts, as referred to in section 2:361 of the Dutch Civil Code including the relevant additional information as referred to in section 2:392 paragraph 1 of the Dutch Civil Code, give a true and fair view of the assets, liabilities, financial position and profit or loss of NN Group N.V. and the enterprises included in the consolidation taken as a whole.
- The NN Group N.V. 2019 Report of the management board (bestuursverslag), as referred to in section 2:391 of the Dutch Civil Code, gives a true and fair view of the position at the balance sheet date, and the development and performance of the business during the 2019 financial year of NN Group N.V. and the enterprises included in the consolidation taken as a whole, together with a description of the principal risks NN Group N.V. is confronted with.

With reference to best practice provision 1.4.3(i), (iii) and (iv) of the Dutch Corporate Governance Code, the Executive Board hereby confirms that, to the best of its knowledge:

- The NN Group N.V.'s description of its risk management organisation and framework as described in the Report of the management board (bestuursverslag) including Note 49 'Risk management' to the Consolidated annual accounts provides sufficient insights into any material failings in the effectiveness of the internal risk management and control systems,
- Based on the current state of affairs, it is justified that the financial reporting is prepared on a going concern basis, and
- The NN Group N.V. 2019 Report of the management board (bestuursverslag) includes those material risks and uncertainties that are relevant to the expectation of NN Group N.V.'s continuity for the period of twelve months after the preparation of the report.

The Executive Board of NN Group N.V. assessed the effectiveness of the internal control over financial reporting during 2019. Based on the Executive Board's assessment, with reference to best practice provision 1.4.3(ii) of the Dutch Corporate Governance Code, the Executive Board of NN Group N.V. concluded that the risk management and control systems provide reasonable assurance that the financial reporting does not contain any material inaccuracies.

The Hague, 11 March 2020

David Knibbe
CEO, Chair of the Executive Board

Delfin Rueda
CFO, Vice-chair of the Executive Board

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Consolidated balance sheet

Amounts in millions of euros, unless stated otherwise

Consolidated balance sheet

As at 31 December	notes	2019	2018
Assets			
Cash and cash equivalents	2	6,436	8,886
Financial assets at fair value through profit or loss:	3		
– investments for risk of policyholders		34,433	30,230
– non-trading derivatives		10,189	5,096
– designated as at fair value through profit or loss		1,184	722
Available-for-sale investments	4	117,644	104,329
Loans	5	61,768	58,903
Reinsurance contracts	16	988	1,010
Associates and joint ventures	6	5,457	5,000
Real estate investments	7	2,571	2,374
Property and equipment	8	465	151
Intangible assets	9	995	863
Deferred acquisition costs	10	1,913	1,843
Deferred tax assets	32	84	131
Other assets	11	4,470	4,708
Total assets		248,597	224,246
Equity			
Shareholders' equity (parent)		30,768	22,850
Minority interests		260	234
Undated subordinated notes		1,764	1,764
Total equity	12	32,792	24,848
Liabilities			
Subordinated debt	13	2,409	2,445
Debt securities issued	14	1,992	1,990
Other borrowed funds	15	7,614	5,717
Insurance and investment contracts	16	168,251	161,118
Customer deposits and other funds on deposit	17	15,161	14,729
Financial liabilities at fair value through profit or loss:	18		
– non-trading derivatives		3,232	2,163
Deferred tax liabilities	32	4,030	1,809
Other liabilities	19	13,116	9,427
Total liabilities		215,805	199,398
Total equity and liabilities		248,597	224,246

References relate to the notes starting with Note 1 'Accounting policies'. These form an integral part of the Consolidated annual accounts.

Consolidated profit and loss account

Consolidated profit and loss account

For the year ended 31 December	notes	2019	2018
Gross premium income	20	14,508	13,272
Investment income	21	4,373	5,169
Result on disposals of group companies		8	60
– gross fee and commission income		1,037	1,087
– fee and commission expenses		-328	-332
Net fee and commission income:	22	709	755
Valuation results on non-trading derivatives	23	166	283
Foreign currency results		-9	-56
Share of result from associates and joint ventures	6	619	500
Other income		84	67
Total income		20,458	20,050
– gross underwriting expenditure		20,024	13,249
– investment result for risk of policyholders		-4,794	1,258
– reinsurance recoveries		-237	-192
Underwriting expenditure:	24	14,993	14,315
Intangible amortisation and other impairments	25	32	986
Staff expenses	26	1,564	1,521
Interest expenses	27	519	475
Other operating expenses	28	921	1,096
Total expenses		18,029	18,393
Result before tax		2,429	1,657
Taxation	32	444	524
Net result		1,985	1,133

Net result

For the year ended 31 December	2019	2018
Net result attributable to:		
Shareholders of the parent	1,962	1,117
Minority interests	23	16
Net result	1,985	1,133

Earnings per ordinary share

amounts in euros	2019	2018
Earnings per ordinary share		
Basic earnings per ordinary share	5.76	3.15
Diluted earnings per ordinary share	5.75	3.15

Reference is made to Note 29 'Earnings per ordinary share' for the disclosure on the Earnings per ordinary share.

Consolidated statement of comprehensive income

Consolidated statement of comprehensive income

For the year ended 31 December

	2019	2018
Net result	1,985	1,133
- unrealised revaluations available-for-sale investments and other	4,487	-333
- realised gains/losses transferred to the profit and loss account	-286	-823
- changes in cash flow hedge reserve	4,284	793
- deferred interest credited to policyholders	-1,403	-38
- share of other comprehensive income of associates and joint ventures	-4	1
- exchange rate differences	53	93
Items that may be reclassified subsequently to the profit and loss account:	7,131	-307
- remeasurement of the net defined benefit asset/liability	-38	
- unrealised revaluations property in own use	3	7
Items that will not be reclassified to the profit and loss account:	-35	7
Total other comprehensive income	7,096	-300
Total comprehensive income	9,081	833
Comprehensive income attributable to:		
Shareholders of the parent	9,039	827
Minority interests	42	6
Total comprehensive income	9,081	833

Reference is made to Note 32 'Taxation' for the disclosure on the income tax effects on each component of comprehensive income.

Consolidated statement of cash flows

Consolidated statement of cash flows

For the year ended 31 December	notes	2019	2018
Result before tax		2,429	1,657
Adjusted for:			
– depreciation and amortisation		146	195
– deferred acquisition costs and value of business acquired		-41	-73
– underwriting expenditure (change in insurance liabilities)		-277	-2,575
– realised results and impairments of Available-for-sale investments		-347	-1,032
– other impairments and reversals of other impairments			852
– other		15	451
Taxation paid (received)		37	-55
Changes in:			
– non-trading derivatives		2,433	450
– other financial assets at fair value through profit or loss		-493	-36
– loans		-3,327	-3,079
– other assets		437	911
– customer deposits and other funds on deposit		464	331
– financial liabilities at fair value through profit or loss – non-trading derivatives		-1,899	-131
– other liabilities		3,177	-357
Net cash flow from operating activities		2,754	-2,491
Investments and advances:			
– group companies, net of cash acquired		-104	-5
– available-for-sale investments	4	-26,437	-12,704
– associates and joint ventures		-531	-326
– real estate investments		-120	-206
– property and equipment		-144	-40
– investments for risk of policyholders		-6,430	-6,749
– other investments		-43	-85
Disposals and redemptions:			
– group companies		38	
– available-for-sale investments	4	19,750	13,266
– associates and joint ventures		497	262
– real estate investments		6	552
– property and equipment		2	3
– investments for risk of policyholders		7,182	9,046
– other investments		414	
Net cash flow from investing activities		-5,920	3,014
Repayments of subordinated debt	13	-12	
Proceeds from other borrowed funds		4,704	1,695
Repayments of other borrowed funds		-2,827	-2,023
Dividend paid		-411	-421
Purchase/sale of treasury shares and warrants		-697	-307
Coupon on undated subordinated notes		-78	-78
Net cash flow from financing activities		679	-1,134
Net cash flow		-2,487	-611

Consolidated statement of cash flows continued**Included in Net cash flow from operating activities**

For the year ended 31 December	2019	2018
Interest received	4,410	4,224
Interest paid	-533	-506
Dividend received	512	701

Cash and cash equivalents

For the year ended 31 December	2019	2018
Cash and cash equivalents at beginning of the period	8,886	9,383
Net cash flow	-2,487	-611
Effect of exchange rate changes on cash and cash equivalents	37	114
Cash and cash equivalents at end of the period	6,436	8,886

Consolidated statement of changes in equity

Consolidated statement of changes in equity (2019)

	Share capital	Share premium	Reserves	Total Shareholders' equity (parent)	Minority interest	Undated subordinated notes	Total equity
Balance at 1 January 2019	41	12,572	10,237	22,850	234	1,764	24,848
Unrealised revaluations available-for-sale investments and other			4,468	4,468	19		4,487
Realised gains/losses transferred to the profit and loss account			-286	-286			-286
Changes in cash flow hedge reserve			4,284	4,284			4,284
Deferred interest credited to policyholders			-1,403	-1,403			-1,403
Share of other comprehensive income of associates and joint ventures			-4	-4			-4
Exchange rate differences			53	53			53
Remeasurement of the net defined benefit asset/liability			-38	-38			-38
Unrealised revaluations property in own use			3	3			3
Total amount recognised directly in equity (Other comprehensive income)	0	0	7,077	7,077	19	0	7,096
Net result for the period			1,962	1,962	23		1,985
Total comprehensive income	0	0	9,039	9,039	42	0	9,081
Dividend			-387	-387	-24		-411
Purchase/sale of treasury shares			-707	-707			-707
Employee stock option and share plans			2	2			2
Coupon on undated subordinated notes			-59	-59			-59
Changes in composition of the group and other changes			30	30	8		38
Balance at 31 December 2019	41	12,572	18,155	30,768	260	1,764	32,792

Consolidated statement of changes in equity continued

Consolidated statement of changes in equity (2018)

	Share capital	Share premium	Reserves	Total Shareholders' equity (parent)	Minority interest	Undated subordinated notes	Total equity
Balance at 1 January 2018	41	12,572	10,105	22,718	317	1,764	24,799
Unrealised revaluations available-for-sale investments and other			-323	-323	-10		-333
Realised gains/losses transferred to the profit and loss account			-823	-823			-823
Changes in cash flow hedge reserve			793	793			793
Deferred interest credited to policyholders			-38	-38			-38
Share of other comprehensive income of associates and joint ventures			1	1			1
Exchange rate differences			93	93			93
Unrealised revaluations property in own use			7	7			7
Total amount recognised directly in equity (Other comprehensive income)	0	0	-290	-290	-10	0	-300
Net result for the period			1,117	1,117	16		1,133
Total comprehensive income	0	0	827	827	6	0	833
Dividend			-332	-332	-89		-421
Purchase/sale of treasury shares			-231	-231			-231
Employee stock option and share plans			2	2			2
Coupon on undated subordinated notes			-58	-58			-58
Changes in composition of the group and other changes			-76	-76			-76
Balance at 31 December 2018	41	12,572	10,237	22,850	234	1,764	24,848

Notes to the Consolidated annual accounts

NN Group N.V. (NN Group) is a public limited liability company (naamloze vennootschap) incorporated under Dutch law. NN Group has its official seat in Amsterdam, the Netherlands and its office address in The Hague, the Netherlands. NN Group is recorded in the Commercial Register no. 52387534. The principal activities of NN Group are described in the section 'About NN'.

1 Accounting policies

NN Group prepares its Consolidated annual accounts in accordance with International Financial Reporting Standards as endorsed by the European Union (IFRS-EU) and Part 9 of Book 2 of the Dutch Civil Code. In the Consolidated annual accounts, the term IFRS-EU is used to refer to these standards, including the decisions NN Group made with regard to the options available under IFRS-EU. IFRS-EU provides a number of options in accounting policies. The key areas, in which IFRS-EU allows accounting policy choices and the related NN Group accounting policy, are summarised as follows:

- Under IFRS 4, an insurer may continue to apply its existing pre-IFRS accounting policies for insurance contracts, provided that certain minimum requirements are met. Upon adoption of IFRS in 2005, NN Group decided to continue the then existing accounting principles for insurance contracts. NN Group operates in different countries and the accounting principles for insurance contracts follow local practice in these countries. For NN Group's businesses in the Netherlands, NN Group for example applies accounting standards generally accepted in the Netherlands (Dutch GAAP) for its insurance liabilities. Changes in those local accounting standards (including Dutch GAAP) subsequent to the adoption of IFRS-EU are considered for adoption on a case-by-case basis. If adopted, the impact thereof is accounted for as a change in accounting policy under IFRS-EU.
- NN Group's accounting policy for real estate investments is fair value, with changes in the fair value reflected immediately in the Consolidated profit and loss account.
- NN Group's accounting policy for property in own use is fair value, with changes in the fair value reflected, after tax, in the 'Revaluation reserve' in 'Other comprehensive income' (equity). A net negative revaluation on individual properties is reflected immediately in the Consolidated profit and loss account.

NN Group applies fair value hedge accounting to portfolio hedges of interest rate risk (macro hedging) under the EU 'carve out' of IFRS-EU.

NN Group's accounting policies under IFRS-EU and its decision on the options available are included below. Except for the options included above, the principles are IFRS-EU and do not include other significant accounting policy choices made by NN Group. The accounting policies that are most significant to NN Group are included in the section 'Critical accounting policies'.

The preparation of the Consolidated annual accounts requires the use of estimates and assumptions. These estimates and assumptions affect the reported amounts of the assets and liabilities and the amounts of the contingent liabilities at the balance sheet date, as well as reported income and expenses for the year. The actual outcome may differ from these estimates.

Changes in IFRS-EU effective in 2019

IFRS 16 'Leases'

IFRS 16 'Leases' is effective for NN Group as of 1 January 2019. IFRS 16 contains a new accounting model for lessees. Under IFRS 16, the net present value of operating lease commitments is recognised on the consolidated balance sheet as a 'right of use asset' under Property and equipment or Real estate investments and a lease liability is recognised under Other liabilities. Until 2018, the operating lease commitments were disclosed as an off-balance commitment, but not recognised in the balance sheet.

The implementation of IFRS 16 as at 1 January 2019 did not impact shareholders' equity and net result of NN Group. A right of use asset and a lease liability were recognised in the balance sheet. At 31 December 2019 a right of use asset of EUR 304 million is presented under Property and equipment (1 January 2019: EUR 249 million) and EUR 38 million under Real estate investments (1 January 2019: EUR 38 million). A lease liability of EUR 345 million is presented under Other liabilities (1 January 2019: EUR 287 million). IFRS 16 applies to all lease contracts entered into, or modified, on or after 1 January 2019. For existing lease contracts at 1 January 2019, NN Group applied the modified retrospective approach for implementing IFRS 16 and, therefore, the comparative figures have not been amended.

Upon implementation of IFRS 16, lease liabilities were measured at the present value of the remaining lease payments, discounted at the incremental borrowing rate (as at 1 January 2019: 2.8% for all lease contracts). The right of use asset was recognised at an amount equal to the lease liability. There were no significant differences between the operating lease commitments disclosed in the 2018 NN Group Consolidated annual accounts and the amounts used to determine the lease liabilities under IFRS 16. NN Group elected not to recognise a right of use asset and a lease liability for short-term leases that have a lease term of 12 months or less and for leases of low value assets. The lease payments associated with these leases are recognised as an expense.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Upcoming changes in IFRS-EU

IFRS 9 'Financial Instruments'

IFRS 9 'Financial Instruments' was issued by the IASB in July 2014. IFRS 9 replaces most of the current IAS 39 'Financial Instruments: Recognition and Measurement' and includes requirements for classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting.

Classification and measurement

The classification and measurement of financial assets under IFRS 9 will depend on NN Group's business model and the instrument's contractual cash flow characteristics. These may result in financial assets being recognised at amortised cost, at fair value through other comprehensive income (equity) or at fair value through profit or loss. In many instances, the classification and measurement under IFRS 9 will be similar to IAS 39, although changes in classification will occur. The classification of financial liabilities remains unchanged.

Impairment

The recognition and measurement of impairments under IFRS 9 is intended to be more forward-looking than under IAS 39. The new impairment requirements will apply to all financial assets measured at amortised cost and at fair value through other comprehensive income (equity). Initially, a provision is required for expected credit losses resulting from default events that are expected within the next twelve months. In the event of a significant increase in credit risk, a provision is required for expected credit losses resulting from all possible default events over the expected life of the financial assets.

Hedge accounting

The hedge accounting requirements of IFRS 9 aim to simplify hedge accounting. IFRS 9 includes the option to continue applying IAS 39 for hedge accounting.

IFRS 9 is effective as of 2018. However, in September 2016 the IASB issued an amendment to IFRS 4 'Insurance Contracts' (the 'Amendment'). This Amendment addresses the issue arising from the different effective dates of IFRS 9 and the new standard on accounting for insurance contracts (IFRS 17). The Amendment allows applying a temporary exemption from implementing IFRS 9, so that it can be implemented together with IFRS 17. This exemption is only available to entities whose activities are predominantly connected with insurance.

NN Group's activities are predominantly connected with insurance as defined in this Amendment as more than 90% of liabilities are connected with insurance activities. Liabilities connected with insurance activities of NN Group include insurance liabilities within the scope of IFRS 4, certain investment contract liabilities and other liabilities relating to insurance entities and activities. Liabilities of NN Group that are not related to insurance activities represent mainly the liabilities of the Banking operations. NN Group qualified for the temporary exemption at the reference date (31 December 2015) and continued to qualify for the temporary exemption after the acquisition of Delta Lloyd in 2017.

NN Group applies the temporary exemption and, therefore, NN Group expects to implement IFRS 9 together with IFRS 17.

The Amendment requires certain additional disclosures on whether financial assets that remain accounted for under IAS 39 meet the definition of 'solely payments of principal and interest on the principal amount outstanding' in IFRS 9 as well as additional information on the credit rating of such assets and whether such assets are 'low credit risk'. In this context, 'low credit risk' is equivalent to 'investment grade' as defined by ratings agencies (generally a rating of BBB- or better). These additional disclosures are included in Note 33 'Fair value of financial assets and liabilities' and in Note 49 'Risk management'. These disclosures reflect the current business models and the current accounting choices and interpretations. These may therefore change when IFRS 9 and IFRS 17 are implemented.

Certain subsidiaries within NN Group (mainly NN Bank) do not qualify under the Amendment. Therefore, the financial information of these entities is based on IFRS 9 in the statutory IFRS reporting of these entities, but not in the consolidated financial reporting of NN Group. The impact of applying IFRS 9 for these entities would not have been significant to NN Group. NN Group does not have associates or joint ventures for which IFRS 9 has a significant impact.

IFRS 17 'Insurance Contracts'

IFRS 17 'Insurance Contracts' was issued in May 2017. IFRS 17 covers the recognition and measurement, presentation and disclosure of insurance contracts and replaces the current IFRS 4. IFRS 17 will fundamentally change the accounting for insurance liabilities and DAC for all insurance companies, including NN Group and its subsidiaries. The published but not EU-endorsed IFRS 17 includes 1 January 2021 as the effective date.

NN Group's current accounting policies for insurance liabilities and DAC under IFRS 4 are largely based on the pre-IFRS accounting policies in the relevant local jurisdictions. IFRS 17 provides a comprehensive model (the general model) for insurance contracts, supplemented by the variable fee approach for contracts with direct participation features that are substantially investment-related service contracts and the premium allocation approach mainly for short-duration contracts (typically certain non-life insurance contracts).

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

The main features of IFRS 17 are:

- Measurement of the insurance liabilities in the balance sheet at current fulfilment value, being the sum of the present value of future cash flows and a risk adjustment
- Remeasurement of the current fulfilment value every reporting period using current assumptions and discount rates
- A Contractual Service Margin (CSM) recognised in the balance sheet that is equal to the unearned profit in the insurance contract at issue and is subsequently recognised as result in the profit and loss account over the remaining life of the portfolio
- Certain changes in the insurance liability are adjusted against the CSM and thereby recognised in the profit and loss account over the remaining life of the portfolio
- The effect of changes in discount rates is recognised either in the profit and loss account or in equity (OCI)
- The presentation of the profit and loss account and the disclosures in the Notes will change fundamentally

IFRS 17 must be implemented retrospectively with amendment of comparative figures. However, several simplifications may be used on transition.

NN Group will implement IFRS 17 together with IFRS 9 (see above). NN Group initiated an implementation project and has been performing high-level impact assessments. Whilst the current published IFRS 17 includes an effective date of 1 January 2021, in June 2019 the IASB issued the Exposure Draft 'Amendments to IFRS 17' in which it proposed various changes to the current published IFRS 17, including a deferral of the effective date to 1 January 2022. Based on the ongoing discussions, it is not unlikely that further changes will be made to IFRS 17 and that the effective date may be deferred further. NN Group expects that the implementation of IFRS 9 and IFRS 17 will result in significant changes to its accounting policies and will have a significant impact on shareholders' equity, net result, presentation and disclosure.

Interest rate benchmark reform

In September 2019 the IASB issued an amendment to IAS 39 and IFRS 7 in relation to the interest rate benchmark reform. These amendments eliminate the impact, if any, of the interest rate benchmark reform on derivatives qualifying for hedge accounting under IFRS. The amendments are effective as of 2020. Almost all hedge accounting applied by NN Group relates to interest rate risk based on Euribor. The calculation method of Euribor changed during 2019 and Euribor will continue to be used after the benchmark reform. As a result, NN Group expects that Euribor will continue to exist as a benchmark and does not anticipate replacing Euribor in its interest rate risk management and related hedge accounting. Therefore, the implementation of the amendments are not expected to have an impact on NN Group.

Changes in presentation

The presentation of and certain terms used in the Consolidated balance sheet, Consolidated profit and loss account, Consolidated statement of cash flows, Consolidated statement of changes in equity and the notes was changed to provide additional and more relevant information or (for changes in comparative information) to better align with the current period presentation. The impact of these changes is explained in the respective notes when significant.

Critical accounting policies

NN Group has identified the accounting policies that are most critical to its business operations and to the understanding of its results. These critical accounting policies are those which involve the most complex or subjective judgements and assumptions and relate to insurance contracts, acquisition accounting, deferred acquisition costs, the determination of the fair value of real estate and financial assets and liabilities and impairments. In each case, the determination of these items is fundamental to the financial condition and results of operations and requires management to make complex judgements based on information and financial data that may change in future periods. As a result, determinations regarding these items necessarily involve the use of assumptions and subjective judgements as to future events and are subject to change, as the use of different assumptions or data could produce significantly different results. All valuation techniques used are subject to internal review and approval. For a further discussion of the application of these accounting policies, reference is made to the applicable notes to the Consolidated annual accounts and the information below.

Reference is made to Note 49 'Risk management' for a sensitivity analysis of certain assumptions as listed below.

Acquisition accounting, goodwill and other intangible assets

NN Group's acquisitions are accounted for using the acquisition method of accounting. The consideration for each acquisition is measured at the aggregate of the fair value (at the date of acquisition) of assets acquired, liabilities incurred or assumed and equity instruments issued in exchange for control of the acquiree. Assets acquired include intangible assets such as brand names, client relationships and distribution channels. Where applicable, the consideration for the acquisition includes any asset or liability resulting from a contingent consideration arrangement, measured at its acquisition-date fair value. Goodwill, being the positive difference between the cost of the acquisition (including assumed debt) and NN Group's interest in the fair value of the acquired assets, liabilities and contingent liabilities as at the date of acquisition, is capitalised as an intangible asset. In case there is a negative difference between the cost of the acquisition (including assumed debt) and NN Group's interest in the fair value of the acquired assets, liabilities and contingent liabilities as at the date of acquisition, this is referred to as negative goodwill and is recognised in profit and loss in the reporting period the acquisition is finalised. Acquisition-related costs are recognised in the profit and loss account as incurred and presented in the profit and loss account as 'Other operating expenses'.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

The initial accounting for the fair value of the net assets of the companies acquired during the year may be determined only provisionally as the determination of the fair value can be complex and the time between the acquisition and the preparation of the annual accounts can be limited. The initial accounting shall be completed within a year after acquisition.

Valuation techniques are subjective in nature and significant judgement is involved in establishing the fair value for certain financial assets and liabilities. Valuation techniques involve various assumptions. The use of different valuation techniques and assumptions could produce significantly different estimates of the fair value.

Goodwill is allocated to cash generating units (reporting units) for the purpose of impairment testing of goodwill and other intangible assets. These cash generating units (reporting units) represent the lowest level at which goodwill is monitored for internal management purposes, which is either at the segment level or at a level below. This test is performed annually or more frequently if there are indicators of impairment. Under the impairment tests, the carrying value of the cash generating units (reporting units including goodwill) is compared to its recoverable amount which is the higher of its fair value less costs to sell and its value in use.

The identification of cash generating units and impairments is an inherently uncertain process involving various assumptions and factors, including expected future cash flows, discount rates, etc. Estimates and assumptions are based on management's judgement and other information available. Significantly different results can occur as circumstances change and additional information becomes known.

Insurance liabilities and deferred acquisition costs (DAC)

The determination of insurance liabilities and DAC is an inherently uncertain process, involving assumptions about factors such as social, economic and demographic trends, inflation, investment returns, policyholder behaviour, court decisions, changes in laws and other factors and, in the life insurance business, assumptions concerning mortality and morbidity trends. Specifically, assumptions that could have a significant impact on financial results include interest rates, mortality, morbidity, property and casualty claims, investment yields on equity and real estate and foreign currency exchange rates.

Insurance liabilities also include the impact of minimum guarantees which are contained within certain products. This impact is dependent upon the difference between the potential minimum benefits payable and the total account balance, expected mortality and surrender rates. The determination of the potential minimum benefits payable also involves the use of assumptions about factors such as inflation, investment returns, policyholder behaviour, mortality and morbidity trends and other factors.

The use of different assumptions could have a significant effect on insurance liabilities, DAC and underwriting expenditure. Changes in assumptions may lead to changes in insurance liabilities over time.

The adequacy of the insurance liabilities, net of DAC, is evaluated each reporting period by each business unit for the business originated in that business unit. The test involves comparing the established insurance liability with current best estimate actuarial assumptions. The use of different assumptions in this test could lead to a different outcome.

Fair value of real estate

Real estate investments are reported at fair value. The fair value of real estate investments is based on regular appraisals by independent, qualified valuers. The fair value is established using valuation methods such as comparable market transactions, capitalisation of income methods or discounted cash flow calculations. The underlying assumption used in the valuation is that the properties are let or sold to third parties based on the actual letting status. The discounted cash flow analysis and capitalisation of income method are based on calculations of the future rental income in accordance with the terms in existing leases and estimations of the rental values for new leases when leases expire and incentives like rent-free periods. The cash flows are discounted using market-based interest rates that appropriately reflect the risk characteristics of real estate investments.

Reference is made to Note 34 'Fair value of non-financial assets' for more disclosure on fair value of real estate investments at the balance sheet date.

The use of different assumptions and techniques could produce significantly different valuations.

Fair value of financial assets and liabilities

The fair value of financial assets and liabilities is based on unadjusted quoted market prices at the balance sheet date where available. Such quoted market prices are primarily obtained from exchange prices for listed instruments. Where an exchange price is not available, market prices may be obtained from independent market vendors, brokers or market makers. In general, positions are valued taking the bid price for a long position and the offer price for a short position. In some cases, positions are marked at mid-market prices.

When markets are less liquid there may be a range of prices for the same security from different price sources; selecting the most appropriate price requires judgement and could result in different estimates of the fair value.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

For certain financial assets and liabilities quoted market prices are not available. For these financial assets and liabilities, fair value is determined using valuation techniques, based on market conditions existing at each balance sheet date. These valuation techniques range from discounting of cash flows to valuation models, where relevant pricing factors including the market price of underlying reference instruments, market parameters (volatilities, correlations and credit ratings) and customer behaviour are taken into account.

Valuation techniques are subjective in nature and significant judgement is involved in establishing the fair value for certain financial assets and liabilities. Valuation techniques involve various assumptions regarding pricing factors. The use of different valuation techniques and assumptions could produce significantly different estimates of the fair value.

Reference is made to Note 33 'Fair value of financial assets and liabilities' for more disclosure on fair value of financial assets and liabilities at the balance sheet date.

Impairments

All debt and equity securities and loans (other than those carried at fair value through profit or loss) are subject to impairment testing every reporting period. The carrying value is reviewed in order to determine whether an impairment loss has been incurred. Evaluation for impairment includes both quantitative and qualitative considerations. For debt securities, such considerations include actual and estimated incurred credit losses indicated by payment default, market data on (estimated) incurred losses and other current evidence that the issuer may be unlikely to pay amounts when due. Equity securities are impaired when management believes that, based on a significant or prolonged decline of the fair value below the acquisition price, there is sufficient reason to believe that the acquisition cost may not be recovered. 'Significant' and 'prolonged' are interpreted on a case-by-case basis for specific equity securities. Generally, 25% and six months are used as triggers. Upon impairment of available-for-sale debt and equity securities, the full difference between the (acquisition) cost and fair value is removed from equity and recognised in net result. Impairments on debt securities may be reversed if there is a decrease in the amount of the impairment which can be objectively related to an observable event after the impairment. Impairments on equity securities cannot be reversed.

The identification of impairments is an inherently uncertain process involving various assumptions and factors, including financial condition of the counterparty, expected future cash flows, statistical loss data, discount rates, observable market prices, etc. Estimates and assumptions are based on management's judgement and other information available. Significantly different results can occur as circumstances change and additional information becomes known.

General accounting policies

Consolidation

NN Group comprises NN Group N.V. and all its subsidiaries. The Consolidated annual accounts of NN Group comprise the accounts of NN Group N.V. and all entities over which NN Group has control. NN Group has control over an entity when NN Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The assessment of control is based on the substance of the relationship between NN Group and the entity and considers existing and potential voting rights that are substantive. For a right to be substantive, the holder must have the practical ability to exercise that right.

For interests in investment entities, the existence of control is determined taking into account both NN Group's financial interests for own risk and its role as asset manager. Financial interests for risk of policyholders are not taken into account when the policyholders decide on the investment allocations of their insurance policies (i.e. the policyholder has the 'power') and assume all risks and benefits of these investments (i.e. the policyholder assumes the variable returns).

The results of the operations and the net assets of subsidiaries are included in the profit and loss account and the balance sheet from the date control is obtained until the date control is lost. Minority interests are initially measured at their proportionate share of the subsidiaries' identifiable net assets at the date of acquisition. On disposal, the difference between the sales proceeds, net of directly attributable transaction costs, and the net assets is included in net result.

A subsidiary which NN Group has agreed to sell but is still legally owned by NN Group may still be controlled by NN Group at the balance sheet date and, therefore, still be included in the consolidation. Such a subsidiary may be presented as held for sale if certain conditions are met.

All intercompany transactions, balances and unrealised gains and losses on transactions between group companies are eliminated. Where necessary, the accounting policies used by subsidiaries are changed to ensure consistency with NN Group policies. In general, the reporting dates of subsidiaries are the same as the reporting date of NN Group N.V.

A list of principal subsidiaries is included in Note 31 'Principal subsidiaries and geographical information'.

Foreign currency translation

Functional and presentation currency

Items included in the annual accounts of each NN Group entity are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The Consolidated annual accounts are presented in euros, which is NN Group's functional and presentation currency.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the date of the transactions. Exchange rate differences resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit and loss account, except when deferred in equity as part of qualifying cash flow hedges or qualifying net investment hedges.

Exchange rate differences on non-monetary items, measured at fair value through profit or loss, are reported as part of the 'Fair value gain or loss'. Exchange rate differences on non-monetary items measured at fair value through other comprehensive income (equity) are included in the 'Revaluation reserve' in equity.

Exchange rate differences in the profit and loss account are generally included in 'Foreign currency results and net trading income'. Exchange rate differences relating to the disposal of available-for-sale debt and equity securities are considered to be an inherent part of the capital gains and losses recognised in 'Investment income'. As mentioned below in Group companies, on disposal of group companies, any exchange rate difference deferred in equity is recognised in the profit and loss account in 'Result on disposals of group companies'.

Group companies

The results and financial positions of all group companies that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- Assets and liabilities included in each balance sheet are translated at the closing rate at the date of that balance sheet
- Income and expenses included in each profit and loss account are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions)
- All resulting exchange rate differences are recognised in a separate component of equity in 'Currency translation reserve'

On consolidation, exchange rate differences arising from the translation of a monetary item that forms part of the net investment in a foreign operation and of borrowings and other instruments designated as hedges of such investments are taken to shareholders' equity. When a foreign operation is sold the corresponding exchange rate differences are recognised in the profit and loss account as part of the gain or loss on sale.

Goodwill and fair value adjustments arising from the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the exchange rate prevailing at the balance sheet date.

Recognition and derecognition of financial instruments

Financial assets and liabilities are generally (de)recognised at trade date, which is the date on which NN Group commits to purchase or sell the asset. Loans and receivables are recognised at settlement date, which is the date on which NN Group receives or delivers the asset.

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where NN Group has transferred substantially all risks and rewards of ownership. If NN Group neither transfers nor retains substantially all the risks and rewards of ownership of a financial asset, it derecognises the financial asset if it no longer has control over the asset.

Realised gains and losses on investments are determined as the difference between the sales proceeds and (amortised) cost. For equity securities, the cost is determined using a weighted average per portfolio. For debt securities, the cost is determined by specific identification (generally FIFO).

Fair value of financial assets and liabilities

The fair values of financial instruments are based on unadjusted quoted market prices at the balance sheet date where available. The quoted market price used for financial assets held by NN Group is the current bid price; the quoted market price used for financial liabilities is the current offer price.

The fair values of financial instruments that are not traded in an active market are determined using valuation techniques, based on market conditions existing at each balance sheet date. An active market for the financial instrument is a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. Assessing whether a market is active requires judgement, considering factors specific to the financial instrument.

Reference is made to Note 33 'Fair value of financial assets and liabilities' for the basis of determination of the fair value of financial instruments.

Offsetting of financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount reported in the balance sheet when NN Group has a current legally enforceable right to set off the recognised amounts and intends to either settle on a net basis or to realise the asset and settle the liability at the same time.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Impairments of financial assets

NN Group assesses periodically and at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are recognised if, and only if, there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset, but before the balance sheet date, (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated. In the specific case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the assets are impaired. 'Significant' and 'prolonged' are interpreted on a case-by-case basis for specific equity securities; generally, 25% and six months are used as triggers.

In certain circumstances NN Group may grant borrowers postponement and/or reduction of loan principal and/or interest payments for a temporary period of time to maximise collection opportunities and, if possible, avoid default, foreclosure or repossession. When such postponement and/or reduction of loan principal and/or interest payments is executed based on credit concerns it is also referred to as 'forbearance'. In general, forbearance represents an impairment trigger under IFRS-EU. In such cases, the net present value of the postponement and/or reduction of loan principal and/or interest payments is taken into account in the determination of the appropriate level of loan loss provisioning as described below. If the forbearance results in a substantial modification of the terms of the loan, the original loan is derecognised and a new loan is recognised at its fair value at the modification date.

In determining the impairment loss, expected future cash flows are estimated on the basis of the contractual cash flows of the assets in the portfolio. NN Group first assesses whether objective evidence of impairment exists individually for financial assets that are individually significant and then individually or collectively for financial assets that are not individually significant.

If there is objective evidence that an impairment loss on an asset carried at amortised cost has occurred, the amount of the loss is measured as the difference between the asset's carrying value and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying value of the asset is reduced through the use of an allowance account (loan loss provisions) and the amount of the loss is recognised in the profit and loss account in 'Investment income'. If the asset has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. When a loan is uncollectable, it is written off against the related loan loss provision. Such loans are written off after all the necessary procedures have been completed and the amount of the loss has been determined.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the previously recognised impairment loss is reversed by adjusting the provision. The amount of the reversal is recognised in the profit and loss account.

If there is objective evidence that an impairment loss on available-for-sale debt and equity investments has occurred, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that asset previously recognised in net result – is removed from equity and recognised in the profit and loss account.

Impairment losses recognised on equity instruments can never be reversed. If, in a subsequent period, the impairment loss on a loan or a debt instrument classified as available-for-sale reverses, which can be objectively related to an event occurring after the impairment loss was recognised in the profit and loss account, the impairment loss is reversed through the profit and loss account.

Maximum credit risk exposure

The maximum credit risk exposure for items on the balance sheet is generally the carrying value for the relevant financial assets. For the off-balance sheet items, the maximum credit exposure is the maximum amount that could be required to be paid. Reference is made to Note 41 'Contingent liabilities and commitments' for these off-balance sheet items. Collateral received is not taken into account when determining the maximum credit risk exposure. The manner in which NN Group manages credit risk and determines credit risk exposures is explained in Note 49 'Risk management'.

Leases

The leases entered into by NN Group as a lessee are primarily operating leases. At inception of a contract, NN Group assesses whether a contract is, or contains, a lease. A contract is, or contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The net present value of operating lease commitments is recognised on the balance sheet as a 'right of use asset' under Property and equipment or Real estate investments and a lease liability is recognised under Other liabilities. NN Group does not recognise a right of use asset and a lease liability for short-term leases that have a lease term of 12 months or less and for leases of low value assets. The lease payments associated with these leases are recognised as an expense.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Taxation

Income tax on the result for the year comprises current and deferred tax. Income tax is generally recognised in the profit and loss account, but is recognised directly in equity if the tax relates to items that are recognised directly in equity.

Current tax consists of the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred tax is provided in full, using the liability method, on all temporary differences arising between the tax bases of assets and liabilities and their carrying values in the balance sheet. Deferred tax is determined using tax rates (and laws) applicable in the jurisdictions in which NN Group is liable to taxation, that have been enacted or substantively enacted at the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled. Deferred tax assets and liabilities are not discounted.

Deferred tax assets are recognised for all deductible temporary differences and unused tax losses carried forward where it is probable that future taxable profits will be available against which the temporary differences can be used. Unrecognised deferred tax assets are reassessed periodically and recognised to the extent that it has become probable that future taxable profits will be available against which they can be used. Deferred tax is provided on temporary differences arising from investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by NN Group and it is probable that the difference will not reverse in the foreseeable future. The tax effects of income tax losses available for carry forward are recognised as an asset where it is probable that future taxable profits will be available against which these losses can be used.

Offsetting deferred tax assets with deferred tax liabilities is allowed as long as there is a legally enforceable right to offset current tax assets against current tax liabilities and the deferred taxes relate to income taxes levied by the same taxation authority on the same entity or on the same fiscal unity.

Employee benefits

Defined benefit pension plans

The net defined benefit asset or liability recognised in the balance sheet in respect of defined benefit pension plans is the fair value of the plan assets less the present value of the defined benefit obligation at the balance sheet date. Plan assets are measured at fair value at the balance sheet date. For determining the pension expense, the expected return on plan assets is determined using a high quality corporate bond rate identical to the discount rate used in determining the defined benefit obligation.

Defined contribution pension plans

For defined contribution plans, NN Group pays contributions to publicly or privately administered pension plans on a mandatory, contractual or voluntary basis. NN Group has no further payment obligations once the contributions have been paid. The contributions are recognised as staff expenses in the profit and loss account when they are due.

Other post-employment obligations

Some NN Group companies provide post-employment benefits to certain employees and former employees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using an accounting methodology similar to that for defined benefit pension plans.

Share-based payments

Share-based payment expenses are recognised as staff expenses over the vesting period. A corresponding increase in equity is recognised for equity-settled share-based payment transactions. The fair value of equity-settled share-based payment transactions is measured at the grant date. For cash-settled share-based payment transactions, a liability is recognised at fair value; this fair value is remeasured at every balance sheet date.

Interest income and expenses

Interest income and expenses are recognised in the profit and loss account using the effective interest method. The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expenses over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash payments or receipts throughout the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying value of the financial asset or financial liability. When calculating the effective interest rate, NN Group estimates cash flows considering all contractual terms of the financial instrument (for example prepayment options) but does not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts. Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. All interest income and expenses from non-trading derivatives are classified as interest income and interest expenses in the profit and loss account. Changes in the 'clean fair value' are included in 'Valuation results on non-trading derivatives'.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Fiduciary activities

NN Group commonly acts as trustee and in other fiduciary capacities that result in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions when conducting asset management activities. The assets and income arising thereon are excluded from these annual accounts, as they are not assets or income of NN Group. Fees received acting as trustee and in other fiduciary capacities are recognised as income.

Statement of cash flows

The Consolidated statement of cash flows is prepared in accordance with the indirect method, classifying cash flows as cash flows from operating, investing and financing activities. In the net cash flow from operating activities, the result before tax is adjusted for those items in the profit and loss account and changes in balance sheet items, which do not result in actual cash flows during the year.

Cash and cash equivalents comprise balances with less than three months maturity from the date of acquisition. Investments qualify as a cash equivalent if they are readily convertible into a known amount of cash and are not subject to significant risk of changes in value.

Cash flows arising from foreign currency transactions are translated into the functional currency using the exchange rates at the date of the cash flows.

The difference between the net cash flow in accordance with the statement of cash flows and the change in 'Cash and cash equivalents' in the balance sheet is due to exchange rate differences and is accounted for separately as part of the reconciliation of the net cash flow and the balance sheet change in 'Cash and cash equivalents'.

Accounting policies for specific items

Financial assets and liabilities at fair value through profit or loss (Notes 3 and 18)

A financial asset or liability is classified as at fair value through profit or loss if it is acquired principally for the purpose of selling in the short-term or if designated by management as such. Management will make this designation only if this eliminates a measurement inconsistency or if the related assets and liabilities are managed on a fair value basis.

Transaction costs on initial recognition are expensed as incurred. Interest income from debt securities and loans and receivables classified as at fair value through profit or loss is recognised in the profit and loss account using the effective interest method. Dividend income from equity instruments classified as at fair value through profit or loss is recognised in the profit and loss account when the dividend has been declared.

Investments for risk of policyholders

Investments for risk of policyholders are investments against insurance liabilities for which all changes in the fair value of invested assets are offset by similar changes in insurance liabilities. Investments for risk of policyholders are recognised at fair value; changes in fair value are recognised in the profit and loss account.

Derivatives and hedge accounting

Derivatives are recognised at fair value. Derivatives are presented as assets when the fair value is positive and as liabilities when the fair value is negative.

The method of recognising the resulting fair value gain or loss depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. NN Group designates certain derivatives as hedges of highly probable future cash flows attributable to a recognised asset or liability or a forecast transaction (cash flow hedge), hedges of the fair value of recognised assets or liabilities or firm commitments (fair value hedge), or hedges of a net investment in a foreign operation. Hedge accounting is used for derivatives designated in this way provided certain criteria are met.

At the inception of the hedge transaction NN Group documents the relationship between hedging instruments and hedged items, its risk management objectives, together with the methods selected to assess hedge effectiveness. In addition, NN Group documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair value or cash flows of the hedged items. NN Group applies fair value hedge accounting to portfolio hedges of interest rate risk (macro hedging) under the EU 'carve out' of IFRS-EU. The EU 'carve-out' macro hedging enables a group of derivatives (or proportions) to be viewed in combination and jointly designated as the hedging instrument and removes some of the limitations in fair value hedge accounting relating to hedging deposits and under-hedging strategies. Under the IFRS-EU 'carve-out', hedge accounting may be applied to deposits and ineffectiveness only arises when the revised estimate of the amount of cash flows in scheduled time buckets falls below the designated amount of that bucket.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recognised in other comprehensive income (equity) in 'Cash flow hedge reserve'. The gain or loss relating to the ineffective portion is recognised immediately in the profit and loss account. Amounts accumulated in equity are recycled to the profit and loss account in the periods in which the hedged item affects Net result. When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the profit and loss account. When a forecast transaction is no longer expected to occur, the cumulative gain or loss previously reported in equity is transferred immediately to the profit and loss account.

Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in the profit and loss account, together with fair value adjustments to the hedged item attributable to the hedged risk. If the hedge relationship no longer meets the criteria for hedge accounting, the cumulative adjustment of the hedged item is, in the case of interest bearing instruments, amortised through the profit and loss account over the remaining term of the original hedge or recognised directly when the hedged item is derecognised. For non-interest bearing instruments, the cumulative adjustment of the hedged item is recognised in the profit and loss account only when the hedged item is derecognised.

Net investment hedges

Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income (equity) and the gain or loss relating to the ineffective portion is recognised immediately in the profit and loss account. Gains and losses in equity are included in the profit and loss account when the foreign operation is disposed.

Non-trading derivatives that do not qualify for hedge accounting

Derivatives that are used by NN Group as part of its risk management strategies, that do not qualify for hedge accounting under NN Group's accounting policies, are presented as non-trading derivatives. Non-trading derivatives are measured at fair value with changes in the fair value taken to 'Valuation results on non-trading derivatives' in the profit and loss account.

Certain derivatives embedded in other contracts are measured as separate derivatives if:

- Their economic characteristics and risks are not closely related to those of the host contract
- The host contract is not carried at fair value through profit or loss
- A separate instrument with the same terms as the embedded derivative would meet the definition of a derivative (unless the embedded derivative meets the definition of an insurance contract)

These embedded derivatives are measured at fair value with changes in fair value recognised in the profit and loss account. An assessment is carried out when NN Group first becomes party to the contract. A reassessment is carried out only when there is a change in the terms of the contract that significantly modifies the expected cash flows.

Available-for-sale investments (Note 4)

Available-for-sale financial assets include available-for-sale debt securities and available-for-sale equity securities. Available-for-sale financial assets are initially recognised at fair value plus transaction costs. For available-for-sale debt securities, the difference between cost and redemption value is amortised. Interest income is recognised using the effective interest method. Available-for-sale financial assets are subsequently measured at fair value. Interest income from debt securities classified as available-for-sale is recognised in the profit and loss account in 'Investment income'. Dividend income from equity instruments classified as available-for-sale is recognised in the profit and loss account in 'Investment income' when the dividend has been declared.

Unrealised gains and losses arising from changes in the fair value are recognised in other comprehensive income (equity). On disposal, the related accumulated fair value adjustments are included in the profit and loss account as 'Investment income'. For impairments of available-for-sale financial assets reference is made to the section 'Impairments of financial assets'.

Loans (Note 5)

Loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially recognised at fair value plus transaction costs. Subsequently, they are carried at amortised cost using the effective interest method less any impairment losses. Interest income from loans is recognised in the profit and loss account in 'Investment income' using the effective interest method.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Associates and joint ventures (Note 6)

Associates are all entities over which NN Group has significant influence but not control. Significant influence generally results from a shareholding of 20% or more of the voting rights, but also the ability to participate in the financial and operating policies through situations including, but not limited to, one or more of the following:

- Representation on the board of directors
- Participation in the policy making process
- Interchange of managerial personnel

Joint ventures are all entities in which NN Group has joint control.

Associates and joint ventures are initially recognised at cost (including goodwill) and subsequently accounted for using the equity method of accounting.

Subsequently, NN Group's share of profits or losses is recognised in the profit and loss account and its share of changes in reserves is recognised in other comprehensive income (equity). The cumulative changes are adjusted against the carrying value of the investment. When NN Group's share of losses in an associate or joint venture equals or exceeds the book value of the associate or joint venture, NN Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Unrealised gains and losses on transactions between NN Group and its associates and joint ventures are eliminated to the extent of NN Group's interest. Accounting policies of associates and joint ventures have been changed where necessary to ensure consistency with the policies of NN Group. The reporting dates of all significant associates and joint ventures are consistent with the reporting date of NN Group.

For interests in investment entities the existence of significant influence is determined taking into account both NN Group's financial interests for own risk and its role as asset manager.

Associates include interests in real estate funds and private equity funds. The underlying assets of both the real estate and the private equity funds are measured at fair value through profit or loss (i.e. no revaluations in other comprehensive income). The fair value of underlying real estate in real estate funds is determined as set out below for Real estate investments. The fair value of underlying private equity investments in private equity funds is generally based on a forward-looking market approach. This approach uses a combination of company financials and quoted market multiples. In the absence of quoted prices in an active market, fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects, price, earnings comparisons and by reference to market valuations for similar entities quoted in an active market. Valuations of private equity investments are mainly based on an 'adjusted multiple of earnings' methodology on the following basis:

- Earnings: reported earnings are adjusted for non-recurring items, such as restructuring expenses, for significant corporate actions and, in exceptional cases, for run-rate adjustments to arrive at maintainable earnings. The most common measure is earnings before interest, tax, depreciation and amortisation (EBITDA). Earnings used are usually management forecasts for the current year, unless data from management accounts for the 12 months preceding the reporting period or the latest audited annual accounts provide a more reliable estimate of maintainable earnings.
- Earnings multiples: earnings multiples are derived from comparable listed companies or relevant market transaction multiples for companies in the same industry and, where possible, with a similar business model and profile in terms of size, products, services and customers, growth rates and geographic focus. Adjustments are made for differences in the relative performance in the group of comparable companies.
- Adjustments: a marketability or liquidity discount is applied based on factors such as alignment with management and other investors and NN Group's investment rights in the deal structure.

Real estate investments (Note 7)

Real estate investments under construction are included in 'Real estate investments'. Real estate investments are held for long-term rental yields and are not occupied by NN Group. Real estate investments are initially measured at cost, including transaction cost and are subsequently measured at fair value. Changes in the carrying value resulting from revaluations are recognised in the profit and loss account. On disposal the difference between the sales proceeds and carrying value is recognised in the profit and loss account. The fair value of real estate investments is based on regular appraisals by independent qualified valuers. For each reporting period every property is valued either by an independent valuer or internally. Market transactions and disposals made by NN Group are monitored as part of the validation procedures to test the valuations. Valuations performed earlier in the year are updated if necessary to reflect the situation at the year-end. All real estate investments are appraised externally at least annually.

The fair value represents the estimated amount for which the property could be exchanged on the date of valuation between a willing buyer and willing seller in an at-arm's-length transaction after proper marketing wherein the parties each acted knowledgeably, prudently and without compulsion. The fair value is based on appraisals using valuation methods such as comparable market transactions, capitalisation of income methods or discounted cash flow calculations. The underlying assumption used in the valuation is that the properties are let or sold to third parties based on the actual letting status. The discounted cash flow analysis and capitalisation of income method are based on calculations of the future rental income in accordance with the terms in existing leases and estimations of the rental values for new leases when leases expire and incentives like rent-free periods. The cash flows are discounted using market-based interest rates that reflect appropriately the risk characteristics of real estate. The valuation of real estate investments takes (expected) vacancies into account.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Occupancy rates differ significantly from investment to investment. For real estate investments held through (minority shares in) real estate investment funds, the valuations are performed under the responsibility of the funds' asset manager.

Subsequent expenditures are recognised as part of the asset's carrying value only when it is probable that future economic benefits associated with the item will flow to NN Group and the cost of an item can be measured reliably. All other repairs and maintenance costs are recognised immediately in the profit and loss account. Borrowing costs on real estate investments under construction are capitalised until completion.

Property and equipment (Note 8)

Land and buildings held for own use are stated at fair value at the balance sheet date. Increases in the carrying value are recognised in other comprehensive income (equity). Decreases in the carrying value that offset previous increases of the same asset are charged against other comprehensive income (equity); all other decreases are recognised in the profit and loss account. Increases that reverse a revaluation decrease on the same asset previously recognised in net result are recognised in the profit and loss account. Depreciation is recognised based on the fair value and the estimated useful life (in general 20-50 years). On disposal, the related revaluation reserve in equity is transferred within equity to 'Retained earnings'.

The fair value of land and buildings is based on regular appraisals by independent, qualified valuers or internally, similar to appraisals of real estate investments. All significant holdings of land and buildings are appraised at least annually. Subsequent expenditure is included in the asset's carrying value when it is probable that future economic benefits associated with the item will flow to NN Group and the cost of the item can be measured reliably.

Equipment is stated at cost less accumulated depreciation and any impairment losses. The estimated useful lives are generally as follows: two to five years for data processing equipment and four to ten years for fixtures and fittings. Expenditure incurred on maintenance and repairs is recognised in the profit and loss account as incurred. Expenditure incurred on major improvements is capitalised and depreciated. The difference between the proceeds on disposal and net carrying value is recognised in the profit and loss account in 'Other income'.

Methods of depreciation and amortisation

Items of property and equipment are depreciated, intangible assets with finite useful lives are amortised. The carrying values of the assets are depreciated/amortised on a straight-line basis over the estimated useful lives. Methods of depreciation and amortisation, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

Intangible assets (Note 9)

Goodwill

NN Group's acquisitions are accounted for using the acquisition method of accounting. The consideration for each acquisition is measured at the aggregate of the fair value (at the date of acquisition) of assets given, liabilities incurred or assumed and equity instruments issued in exchange for control of the acquiree. Where applicable, the consideration for the acquisition includes any asset or liability resulting from a contingent consideration arrangement, measured at its acquisition-date fair value. Goodwill, being the positive difference between the cost of the acquisition (including assumed debt) and NN Group's interest in the fair value of the acquired assets, liabilities and contingent liabilities as at the date of acquisition, is capitalised as an intangible asset. Negative goodwill is recognised immediately in the profit and loss account as income. The results of the operations of the acquired companies are included in the profit and loss account from the date control is obtained.

Where a business combination is achieved in stages, NN Group's previously held interests in the assets and liabilities of the acquired entity are remeasured to fair value at the acquisition date (i.e. the date NN Group obtains control) and the resulting gain or loss, if any, is recognised in the profit and loss account. Amounts arising from interests in the acquiree before the acquisition date that have previously been recognised in other comprehensive income (equity) are reclassified to the profit and loss account, where such treatment would be appropriate if that interest were disposed of.

Acquisition-related costs are recognised in the profit and loss account as incurred and presented in the profit and loss account as 'Other operating expenses'.

Until 2009, before IFRS 3 'Business Combinations' was revised, the accounting of previously held interests in the assets and liabilities of the acquired entity were not remeasured at the acquisition date and the acquisition-related costs were considered to be part of the total consideration. Goodwill is only capitalised on acquisitions after the implementation date of IFRS-EU (1 January 2004). Accounting for acquisitions before that date has not been restated; goodwill and internally generated intangibles on these acquisitions were recognised directly in shareholders' equity.

The initial accounting for the fair value of the net assets of the companies acquired during the year may be determined only provisionally as the determination of the fair value can be complex and the time between the acquisition and the preparation of the annual accounts can be limited. The initial accounting shall be completed within a year after acquisition.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Goodwill is allocated to cash generating units (reporting units) for the purpose of impairment testing. These cash generating units (reporting units) represent the lowest level at which goodwill is monitored for internal management purposes, which is either at the segment level or at a level below. This test is performed annually or more frequently if there are indicators of impairment. Under the impairment tests, the carrying value of the cash generating units (reporting units including goodwill) is compared to its recoverable amount which is the higher of its fair value less costs to sell and its value in use.

Computer software

Computer software that has been purchased or generated internally for own use is stated at cost less amortisation and any impairment losses. The expected useful life of computer software will generally not exceed three years. Amortisation is included in 'Other operating expenses'.

Value of business acquired (VOBA)

VOBA is an asset that represents the present value of estimated net cash flows embedded in the insurance contracts of an acquired company, which exists at the time the company was acquired. It represents the difference between the fair value of insurance liabilities and their carrying value. VOBA is amortised in a similar manner to the amortisation of the deferred acquisition costs as described in the section 'Deferred acquisition costs'.

Other intangible assets

Other intangible assets include brand names, client relationships and distribution channels. These assets are stated at cost less amortisation and any impairment losses. The expected useful life is between two and 17 years.

Impairment

Impairment reviews with respect to goodwill and intangible assets are performed at least annually and more frequently if events indicate that impairments may have occurred. Goodwill is tested for impairment by comparing the carrying value of the cash generating unit (reporting unit) to which the goodwill was allocated to the best estimate of the recoverable amount of that cash generating unit (reporting unit). The carrying value is determined as the IFRS-EU net asset value including goodwill and acquisition intangibles. The recoverable amount is estimated as the higher of fair value less cost to sell and value in use. Several methodologies are applied to arrive at the best estimate of the recoverable amount. A cash generating unit (reporting unit) is the lowest level at which goodwill is monitored. Other intangible assets are tested for impairment by comparing the carrying value with the best estimate of the recoverable amount of the individual intangible asset.

Deferred acquisition costs (Note 10)

Deferred acquisition costs (DAC) represent costs of acquiring insurance and investment contracts that are deferred and amortised. The deferred costs, all of which vary with (and are primarily related to) the production of new and renewal business, consist principally of commissions, certain underwriting and contract issuance expenses and certain agency expenses.

For traditional life insurance contracts, certain types of flexible life insurance contracts and non-life contracts, DAC is amortised over the premium payment period in proportion to the premium revenue recognised.

For other types of flexible life insurance contracts DAC is amortised over the lives of the policies in relation to the emergence of estimated profits. Amortisation is adjusted when estimates of current or future profits, to be realised from a group of products, are revised.

DAC amortisation is included in the Underwriting expenditure in the profit and loss account.

DAC is evaluated for recoverability at issue. Subsequently it is tested on a regular basis together with the life insurance liabilities. The test for recoverability is described in the section 'Insurance and investment contracts, reinsurance contracts'.

For certain products DAC is adjusted for the impact of unrealised results on allocated investments through equity.

Subordinated debt, debt securities issued and other borrowed funds (Notes 13, 14 and 15)

Subordinated debt, debt securities issued and other borrowed funds are recognised initially at their issue proceeds (fair value of consideration received) net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between proceeds, net of transaction costs and the redemption value is recognised in the profit and loss account over the period of the borrowings using the effective interest method.

If NN Group purchases its own debt, it is derecognised from the balance sheet and the difference between the carrying value of the liability and the consideration paid is recognised in the profit and loss account.

Financial liabilities include only instruments of which the terms and conditions represent a contractual obligation to pay interest and/or principal. Instruments that are similar in substance, but of which the terms and conditions do not include a contractual obligation to pay interest and principal are classified as equity.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Insurance and investment contracts, reinsurance contracts (Note 16)

Insurance liabilities are established in accordance with IFRS 4 'Insurance Contracts'. Under IFRS 4, an insurer may continue its existing pre-IFRS accounting policies for insurance contracts, provided that certain minimum requirements are met. Upon adoption of IFRS-EU in 2005, NN Group decided to continue the then existing accounting principles for insurance contracts under IFRS-EU. NN Group operates in many different countries and the accounting principles for insurance contracts follow local practice in these countries. For NN Group's businesses in the Netherlands, NN Group applies accounting standards generally accepted in the Netherlands (Dutch GAAP) for its insurance contracts. Changes in those local accounting standards (including Dutch GAAP) subsequent to the adoption of IFRS-EU are considered for adoption on a case-by-case basis. If adopted, the impact thereof is accounted for as a change in accounting policies under IFRS-EU.

In addition, for certain specific products or components thereof, NN Group applies the option in IFRS 4 to measure (components of) insurance liabilities using market consistent interest rates and other current estimates and assumptions. This relates mainly to certain guarantees embedded in insurance contracts in Japan.

Insurance contracts

Insurance policies which bear significant insurance risk and/or contain discretionary participation features (including investment contracts with discretionary participation features) are presented as insurance contracts. Insurance liabilities represent estimates of future pay-outs that will be required for life and non-life insurance claims, including expenses relating to such claims. For some insurance contracts the measurement reflects current market assumptions. Unless indicated otherwise below, changes in the insurance liabilities are recognised in the profit and loss account.

Life insurance liabilities

The life insurance liabilities are generally calculated on the basis of a prudent prospective actuarial method. Specific methodologies may differ between business units as they may reflect local regulatory requirements and local practices for specific product features in the local markets.

Insurance liabilities on traditional life policies are calculated using various assumptions, including assumptions on mortality, morbidity, expenses, investment returns and surrenders. Assumptions for insurance liabilities for traditional life insurance contracts, including traditional whole-life and term-life insurance contracts, are based on best estimate assumptions including margins for adverse deviations. Generally, these assumptions are set initially at the policy issue date and remain constant throughout the life of the policy. For the insurance liabilities that were taken over in the Delta Lloyd acquisition, these assumptions are set as at the date of acquisition, 1 April 2017.

Insurance liabilities for universal life, variable life and annuity contracts, unit-linked contracts, etc. are generally set equal to the balance that accrues to the benefit of the policyholders.

Certain contracts contain minimum (interest) guarantees on the amounts payable upon death and/or maturity. The insurance liabilities include the impact of these minimum (interest) guarantees, taking into account the difference between the potential minimum benefit payable and the total account balance, expected mortality and surrender rates.

Unamortised interest rate rebates on periodic and single premium contracts are deducted from the life insurance contract liabilities. Interest rate rebates granted during the year are amortised in conformity with the anticipated recovery pattern and are recognised in the profit and loss account.

Liabilities for unearned premiums and unexpired insurance risks

The liabilities are calculated in proportion to the unexpired periods of risk. For insurance policies covering a risk increasing during the term of the policy at premium rates independent of age, this risk is taken into account when determining the liability. Further liabilities are formed to cover claims under unexpired insurance contracts, which may exceed the unearned premiums and the premiums due in respect of these contracts.

Claims liabilities

Claims liabilities are calculated either on a case-by-case basis or by approximation on the basis of experience. Liabilities have also been recognised for claims incurred but not reported (IBNR) and for future claims handling expenses. IBNR liabilities are set to recognise the estimated cost of losses that have occurred but which have not yet been notified to NN Group. The adequacy of the claims liabilities is evaluated each year using standard actuarial techniques.

Deferred interest credited to policyholders

For insurance contracts and investment contracts with discretionary participation features, 'Deferred interest credited to policyholders' is recognised for the full amount of the unrealised revaluations on allocated investments. Upon realisation, the 'Deferred interest credited to policyholders' regarding unrealised revaluations is reversed and a deferred profit sharing amount is recognised for the share of realised results on allocated investments that is expected to be shared with policyholders. The amount of deferred profit sharing is reduced by the actual allocation to individual policyholders. The change in the amount of 'Deferred interest credited to policyholders' on unrealised revaluations (net of tax) is recognised in the 'Revaluation reserve' in other comprehensive income (equity).

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Liabilities for life insurance for risk of policyholders

Liabilities for life insurance for risk of policyholders are generally shown at the balance sheet value of the related investments.

Reinsurance contracts

Reinsurance premiums, commissions and claim settlements, as well as the reinsurance element of insurance contracts are accounted for in the same way as the original contracts for which the reinsurance was concluded. If the reinsurers are unable to meet their obligations, NN Group remains liable to its policyholders for the portion reinsured. Consequently, provisions are recognised for receivables on reinsurance contracts which are deemed uncollectable. Both reinsurance premiums and reinsurance recoveries are included in 'Underwriting expenditure' in the profit and loss account.

Adequacy test

The adequacy of the insurance liabilities, net of DAC, is evaluated at each reporting period by each business unit for the business originated in that business unit. The test involves comparing the established net insurance liability to a liability based on current best estimate actuarial assumptions. The assumed investment returns are a combination of the run-off of current portfolio yields on existing assets and reinvestment rates in relation to maturing assets and anticipated new premiums, as a result (part of) the revaluation reserve in shareholders equity is taken into account in assessing the adequacy of insurance liabilities.

If, for any business unit, the established insurance liability is lower than the liability based on current best estimate actuarial assumptions the shortfall is recognised immediately in the profit and loss account.

If the net insurance liabilities are determined to be more than adequate no reduction in the net insurance liabilities is recognised.

Investment contracts

Insurance policies without discretionary participation features which do not bear significant insurance risk are presented as Investment contracts. Investment contract liabilities are determined at amortised cost, using the effective interest method (including certain initial acquisition expenses), or at fair value.

Other liabilities (Note 19)

Provisions

Other liabilities include reorganisation provisions, litigation provisions and other provisions. Reorganisation provisions include employee termination benefits when NN Group is demonstrably committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal, or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Provisions are discounted when the effect of the time value of money is significant, using a before tax discount rate. The determination of provisions is an inherently uncertain process involving estimates regarding amounts and timing of cash flows.

Gross premium income (Note 20)

Premiums from insurance policies are recognised as income when due from the policyholder. Receipts under investment contracts are not recognised as gross premium income; instead deposit accounting is applied. When applying deposit accounting, the amounts contributed by policyholders are recognised as direct increases in the provision for investment contracts, not as premium income and payments are deducted directly from the provision.

Net fee and commission income (Note 22)

Fees and commissions are generally recognised as the service is provided. Portfolio and other management advisory and service fees are recognised based on the applicable service contracts as the service is provided. Asset management fees related to investment funds and investment contract fees are recognised on a pro-rata basis over the period the service is provided. The same principle is applied for wealth management, financial planning and custody services that are continuously provided over an extended period of time.

Earnings per ordinary share (Note 29)

Earnings per ordinary share is calculated on the basis of the weighted average number of ordinary shares outstanding. In calculating the weighted average number of ordinary shares outstanding, own shares held by group companies are deducted from the total number of ordinary shares in issue.

Changes in the number of ordinary shares outstanding without a corresponding change in resources are taken into account, including if these changes occurred after the reporting date but before the annual accounts are authorised for issue.

Diluted earnings per share data are computed as if all convertible instruments outstanding at the year-end were exercised at the beginning of the period. It is also assumed that NN Group uses the assumed proceeds received to buy its own shares against the average market price in the financial year. The net increase in the number of shares resulting from the exercise is added to the average number of shares used to calculate diluted earnings per share.

Notes to the Consolidated annual accounts continued

1 Accounting policies continued

Segments and Principal subsidiaries and geographical information (Notes 30 and 31)

A segment is a distinguishable component of NN Group, engaged in providing products or services, subject to risks and returns that are different from those of other segments. A geographical area is a distinguishable component of NN Group engaged in providing products or services within a particular economic environment that is subject to risks and returns that are different from those of segments operating in other economic environments. The geographical analysis is based on the location of the business unit from which the transactions are originated.

2 Cash and cash equivalents

Cash and cash equivalents

	2019	2018
Cash and bank balances	4,900	4,435
Money market funds	1,362	2,386
Short-term deposits	174	2,065
Cash and cash equivalents	6,436	8,886

As at 31 December 2019, NN Group held EUR 1,660 million (31 December 2018: EUR 1,320 million) at central banks.

NN Group invests in several types of money market funds, some qualifying as cash equivalents and some as investments. Short-term investments in money market funds are presented as cash equivalents only if these are highly liquid and quoted in an active market and have low investment risk.

3 Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss

	2019	2018
Investments for risk of policyholders	34,433	30,230
Non-trading derivatives	10,189	5,096
Designated as at fair value through profit or loss	1,184	722
Financial assets at fair value through profit or loss	45,806	36,048

Investments for risk of policyholders

	2019	2018
Equity securities	31,534	27,373
Debt securities	1,695	1,443
Loans and receivables	1,204	1,414
Investments for risk of policyholders	34,433	30,230

Investments in investment funds (with underlying investments in debt and equity securities, real estate and derivatives) are included in equity securities.

Non-trading derivatives

	2019	2018
Derivatives used in:		
– fair value hedges	52	47
– cash flow hedges	7,365	3,219
Other non-trading derivatives	2,772	1,830
Non-trading derivatives	10,189	5,096

Other non-trading derivatives includes derivatives for which no hedge accounting is applied.

Designated as at fair value through profit or loss

	2019	2018
Equity securities	333	259
Debt securities	31	12
Money market funds	820	451
Designated as at fair value through profit or loss	1,184	722

Notes to the Consolidated annual accounts continued

4 Available-for-sale investments

Available-for-sale investments

	2019	2018
Equity securities:		
– shares in NN Group managed investment funds	2,096	2,101
– shares in third-party managed investment funds	1,552	1,279
– other	4,430	3,354
Equity securities	8,078	6,734
Debt securities	109,566	97,595
Available-for-sale investments	117,644	104,329

Changes in available-for-sale investments

	Equity securities		Debt securities		Total	
	2019	2018	2019	2018	2019	2018
Available-for-sale investments – opening balance	6,734	7,980	97,595	97,002	104,329	104,982
Additions	1,582	979	24,855	11,725	26,437	12,704
Amortisation			-485	-504	-485	-504
Transfers and reclassifications	-29	-277	-1	24	-30	-253
Changes in unrealised revaluations	976	-230	5,780	-168	6,756	-398
Impairments	-93	-91			-93	-91
Disposals and redemptions	-1,099	-1,767	-18,651	-11,499	-19,750	-13,266
Changes in the composition of the group and other changes		110	51		51	110
Exchange rate differences	7	30	422	1,015	429	1,045
Available-for-sale investments – closing balance	8,078	6,734	109,566	97,595	117,644	104,329

Transfers and reclassifications mainly relate to the transfer of certain investments in real estate funds to associates and joint ventures due to an increase in level of influence.

Reference is made to Note 21 'Investment income' for details on impairments by segment.

NN Group's total exposure to debt securities is included in the following balance sheet lines:

Total exposure to debt securities

	2019	2018
Available-for-sale investments	109,566	97,595
Loans	1,251	1,365
Available-for-sale investments and loans	110,817	98,960
Investments for risk of policyholders	1,695	1,443
Designated as at fair value through profit or loss	31	12
Financial assets at fair value through profit or loss	1,726	1,455
Total exposure to debt securities	112,543	100,415

NN Group's total exposure to debt securities included in 'Available-for-sale investments' and 'Loans' is specified as follows by type of exposure:

Notes to the Consolidated annual accounts continued

4 Available-for-sale investments continued

Debt securities by type

	Available-for-sale investments		Loans			Total
	2019	2018	2019	2018	2019	2018
Government bonds	74,271	69,303			74,271	69,303
Corporate bonds	19,024	16,154			19,024	16,154
Financial institution and Covered bonds	13,318	10,242			13,318	10,242
Bond portfolio (excluding ABS)	106,613	95,699	0	0	106,613	95,699
US RMBS	552	531			552	531
Non-US RMBS	1,987	1,164	1,138	1,211	3,125	2,375
CDO/CLO	6	11			6	11
Other ABS	408	190	113	154	521	344
ABS portfolio	2,953	1,896	1,251	1,365	4,204	3,261
Debt securities – Available-for-sale investments and Loans	109,566	97,595	1,251	1,365	110,817	98,960

Reference is made to Note 49 'Risk management'.

Available-for-sale equity securities

	2019	2018
Listed	5,354	4,256
Unlisted	2,724	2,478
Available-for-sale equity securities	8,078	6,734

5 Loans

Loans

	2019	2018
Loans secured by mortgages	47,750	44,875
Unsecured loans	10,543	9,917
Asset-backed securities	1,251	1,365
Loans related to savings mortgages	1,672	1,841
Deposits		422
Policy loans	666	636
Other	8	14
Loans – before loan loss provisions	61,890	59,070
Loan loss provisions	-122	-167
Loans	61,768	58,903

Changes in Loans secured by mortgages

	2019	2018
Loans secured by mortgages – opening balance	44,875	42,820
Additions/origination	6,312	6,073
Amortisation	-199	-263
Redemption	-3,699	-3,916
Impairments and write-offs	-2	-4
Fair value changes recognised on hedged items	402	107
Changes in the composition of the group and other changes	61	58
Loans secured by mortgages – closing balance	47,750	44,875

NN Group has sold mortgage loans to securitisation entities that, in turn, issued notes to investors that are collateralised by the purchased assets. These mortgage loans continue to be recognised on NN Group's balance sheet as NN Group retained all or substantially all of the risks and rewards of the mortgage loans. Reference is made to Note 44 'Structured entities'.

Notes to the Consolidated annual accounts continued

5 Loans continued

Changes in Loan loss provisions

	2019	2018
Loan loss provisions – opening balance	167	179
Write-offs	-52	-5
Increase/decrease in loan loss provisions	11	-18
Changes in the composition of the group and other changes	-4	11
Loan loss provisions – closing balance	122	167

NN Group applies an interest rate pricing system for mortgage loans based on risk-based pricing with multiple risk premium categories, whereby the interest rate for a mortgage loan is set depending on the loan-to-valuation (LTV) ratio. In the past, mortgage loans were eligible to move into another risk premium category only on the interest reset date. In the second quarter of 2018 a change to this pricing system was announced, under which a mortgage loan can move into another (lower) risk premium category during the fixed interest rate term if the LTV has decreased due to an increase of the value of the house and/or repayment of the mortgage loan. The amended pricing system allows for the adjustment of the mortgage interest rate by moving to a lower risk premium category automatically following (partial) repayment of the loan principal, also taking into account (p)repayments that have already been made, and/or upon request following a proven revaluation of the relevant mortgaged asset. This amended pricing system represents a modification of the outstanding mortgage loans under IFRS and the related impact on the balance sheet value of outstanding mortgage loans of EUR 59 million was recognised as a charge in the profit and loss account in 2018.

6 Associates and joint ventures

Associates and joint ventures (2019)

	Interest held	Balance sheet value	Total assets	Total liabilities	Total income	Total expenses
Vesteda Residential Fund FGR	24%	1,467	7,333	1,313	955	103
CBRE Dutch Office Fund FGR	19%	361	2,664	720	405	61
CBRE Retail Property Fund Iberica L.P.	50%	265	616	84	78	33
CBRE Dutch Retail Fund FGR	20%	218	1,601	529	60	40
Lazora S.I.I. S.A.	22%	205	1,435	508	154	42
CBRE Dutch Residential Fund FGR	10%	200	2,024	56	255	29
NRP Nordic Logistic Fund AS	42%	190	454	2	58	10
CBRE UK Property Fund PAIF	10%	182	1,890		27	
CBRE European Industrial Fund FGR	19%	151	1,145	370	169	33
Allee center Kft	50%	129	277	20	37	8
Achmea Dutch Health Care Property Fund	27%	119	446	10	50	5
DPE Deutschland II B GmbH & Co KG	35%	117	378	47	16	
Dutch Student and Young Professional Housing Fund FGR	49%	113	296	68	43	9
Robeco Bedrijfsleningen FGR	26%	112	434		11	1
Fiumaranuova s.r.l.	50%	101	238	36	17	9
Siresa House S.L.	49%	96	512	314	56	53
Parcom Buy-Out Fund V CV	21%	96	481	26	18	5
Boccaccio – Closed-end Real Estate Mutual Investment Fund	50%	93	249	64	17	4
Parcom Investment Fund III B.V.	100%	91	91		15	1
Parcom Buy Out Fund IV B.V.	100%	89	89		18	8
the Fizz Student Housing Fund SCS	50%	83	227	59	18	6
CBRE Dutch Retail Fund II FGR	10%	74	759	15	18	11
Dutch Urban Living Venture FGR	42%	71	221	50	17	1
CBRE Property Fund Central and Eastern Europe FGR	50%	62	170	46	36	8
Delta Mainlog Holding GmbH & Co. KG	50%	61	122	1	16	2
DPE Deutschland III (Parallel) GmbH & Co	17%	56	341	1	18	1
Parquest Capital II B FPCI	29%	53	190	5	1	7
Other		602				
Associates and joint ventures		5,457				

The above associates and joint ventures mainly consist of non-listed investment entities investing in real estate and private equity.

Notes to the Consolidated annual accounts continued

6 Associates and joint ventures continued

Significant influence exists for certain associates in which the interest held is below 20%, based on the combination of NN Group's financial interest for own risk and other arrangements, such as participation in the relevant boards.

NN Group holds associates over which it cannot exercise control despite holding more than 50% of the share capital. For this reason, these are classified as associates and are not consolidated.

Other includes EUR 417 million of associates and joint ventures with an individual balance sheet value of less than EUR 50 million and EUR 185 million of receivables from associates and joint ventures.

The amounts presented in the table above could differ from the individual annual accounts of the associates due to the fact that the individual amounts have been brought in line with NN Group's accounting principles.

The reporting dates of all significant associates and joint ventures are consistent with the reporting date of NN Group.

The associates and joint ventures of NN Group are subject to legal and regulatory restrictions regarding the amount of dividends that can be paid to NN Group. These restrictions are, for example, dependent on the laws in the country of incorporation for declaring dividends or as a result of minimum capital requirements imposed by industry regulators in the countries in which the associates and joint ventures operate. In addition, the associates and joint ventures also consider other factors in determining the appropriate levels of equity needed. These factors and limitations include, but are not limited to, rating agency and regulatory views, which can change over time.

Associates and joint ventures (2018)

	Interest held	Balance sheet value	Total assets	Total liabilities	Total income	Total expenses
Vesteda Residential Fund FGR	27%	1,473	7,333	1,818	1,132	103
CBRE Dutch Office Fund FGR	28%	456	1,883	249	333	49
CBRE Retail Property Fund Iberica L.P.	33%	281	977	138	163	41
CBRE Dutch Retail Fund FGR	20%	223	1,591	495	77	36
CBRE Dutch Residential Fund FGR	10%	182	1,804	14	279	28
CBRE UK Property Fund PAIF	10%	176	1,838		145	19
Lazora S.I.I. S.A.	22%	164	1,083	343	88	26
CBRE European Industrial Fund FGR	19%	138	1,058	350	126	29
Allee center Kft	50%	121	260	19	36	8
Fiumaranuova s.r.l.	50%	102	239	35	21	9
Dutch Student and Young Professional Housing Fund FGR	49%	96	253	60	25	5
DPE Deutschland II B GmbH & Co KG	35%	92	293	32	28	
Boccaccio – Closed-end Real Estate Mutual Investment Fund	50%	89	242	65	12	4
Achmea Dutch Health Care Property Fund	25%	84	339		40	5
Robeco Bedrijfsleningen FGR	25%	80	324		9	1
Siresa House S.L.	49%	78	389	228	50	54
the Fizz Student Housing Fund SCS	50%	78	224	66	7	6
CBRE Dutch Retail Fund II FGR	10%	76	774	13	29	13
Parcom Investment Fund III B.V.	100%	76	80	3	-2	
Parcom Investment Fund II B.V.	100%	69	69		79	
CBRE Property Fund Central and Eastern Europe FGR	50%	67	197	64	123	14
Delta Mainlog Holding GmbH & Co. KG	50%	56	113	1	9	1
Parcom Buy-Out Fund V CV	21%	54	260	9	12	2
Parcom Buy Out Fund IV B.V.	100%	50	50		65	1
Other		639				
Associates and joint ventures		5,000				

In 2018, NN Group sold a Dutch residential real estate portfolio to Vesteda for a total consideration of EUR 1,427 million. The purchase price was paid approximately 75% in participation rights in the Vesteda fund and 25% in cash. As a result of the transaction, NN Group's existing participation in the Vesteda fund of EUR 340 million is now classified under Associates (previously classified under Available-for-sale investments). Consequently, a capital gain of EUR 108 million was recognised in the profit and loss account.

Notes to the Consolidated annual accounts continued

6 Associates and joint ventures continued

Changes in Associates and joint ventures

	2019	2018
Associates and joint ventures – opening balance	5,000	3,450
Additions	531	1,406
Transfers to/from available-for-sale investments	14	344
Share in changes in equity (Revaluations)	-4	
Share of result	619	500
Dividends received	-212	-429
Disposals	-497	-262
Changes in the composition of the group and other changes		-7
Exchange rate differences	6	-2
Associates and joint ventures – closing balance	5,457	5,000

Transfers to/from available-for-sale investments mainly relate to the transfer of certain investments in real estate funds to associates and joint ventures due to an increase in level of influence.

Disposals mainly relate to the sale of investments in real estate funds.

7 Real estate investments

Changes in Real estate investments

	2019	2018
Real estate investments – opening balance	2,374	3,582
Additions	158	206
Transfers to/from property in own use		15
Transfers to/from other assets	3	3
Fair value gains/losses	42	200
Disposals	-6	-1,632
Real estate investments – closing balance	2,571	2,374

The total amount of rental income recognised in the profit and loss account for the year ended 31 December 2019 is EUR 146 million (2018: EUR 177 million). The Real estate investments include properties that are leased (ground lease). At 31 December 2019, the corresponding right of use assets amount to EUR 38 million.

The total amount of direct operating expenses (including repairs and maintenance) in relation to real estate investments recognised in rental income for the year ended 31 December 2019 is EUR 46 million (2018: EUR 57 million).

Real estate investments by year of most recent appraisal

	2019	2018
Most recent appraisal in current year	100%	100%
	100%	100%

NN Group's total exposure to real estate is included in the following balance sheet lines:

Real estate exposure

	2019	2018
Real estate investments	2,571	2,374
Available-for-sale investments	1,116	779
Associates and joint ventures	4,631	4,383
Property and equipment – property in own use	82	75
Other assets – property obtained from foreclosures		1
Real estate exposure	8,400	7,612

Furthermore, the exposure is impacted by third-party interests, leverage in funds and off-balance commitments, resulting in an overall exposure at 31 December 2019 of EUR 9,453 million (2018: EUR 9,384 million). Reference is made to Note 49 'Risk management'.

Notes to the Consolidated annual accounts continued

8 Property and equipment

Property and equipment

	2019	2018
Property in own use	82	75
Equipment	79	76
Property and equipment owned	161	151
Right of use assets	304	
Property and equipment total	465	151

Changes in Property in own use

	2019	2018
Property in own use – opening balance	75	82
Additions	4	2
Transfers to/from real estate investments		-15
Revaluations	4	9
Disposals		-2
Depreciation	-2	-2
Reversal of impairments	1	1
Property in own use – closing balance	82	75
Gross carrying value	120	116
Accumulated depreciation, revaluations and (reversal of) impairments	-38	-41
Net carrying value	82	75
Revaluation surplus – opening balance	12	3
Revaluation in year	4	9
Revaluation surplus – closing balance	16	12

Changes in Equipment

	Data processing equipment		Fixtures and fittings and other equipment		Total	
	2019	2018	2019	2018	2019	2018
Equipment – opening balance	23	20	53	48	76	68
Additions	17	12	14	26	31	38
Disposals			-1	-1	-1	-1
Depreciation	-12	-11	-15	-20	-27	-31
Changes in the composition of the group and other changes		2			0	2
Equipment – closing balance	28	23	51	53	79	76
Gross carrying value	137	120	194	181	331	301
Accumulated depreciation	-109	-97	-143	-128	-252	-225
Net carrying value	28	23	51	53	79	76

Changes in Right of use assets (2019)

	Property	Equipment	Total
Right of use assets – opening balance			0
Additions	321	36	357
Depreciation	-39	-13	-52
Exchange rate differences	-1		-1
Right of use assets – closing balance	281	23	304
Gross carrying value	320	36	356
Accumulated depreciation	-39	-13	-52
Net carrying value	281	23	304

Notes to the Consolidated annual accounts continued

9 Intangible assets

Intangible assets (2019)

	Goodwill	Value of business acquired	Software	Other	Total
Intangible assets – opening balance	532		73	258	863
Additions	8		37	5	50
Amortisation		-30	-33	-33	-96
Changes in the composition of the group and other changes		178	2	-2	178
Exchange rate differences	-1	1			0
Intangible assets – closing balance	539	149	79	228	995
Gross carrying value	1,512	179	853	643	3,187
Accumulated amortisation		-30	-708	-367	-1,105
Accumulated impairments	-973		-66	-48	-1,087
Net carrying value	539	149	79	228	995

Intangible assets (2018)

	Goodwill	Value of business acquired	Software	Other	Total
Intangible assets – opening balance	1,392		53	396	1,841
Additions			44		44
Amortisation			-28	-134	-162
Impairments	-852				-852
Changes in the composition of the group and other changes			4	-4	0
Exchange rate differences	-8				-8
Intangible assets – closing balance	532	0	73	258	863
Gross carrying value	1,505		814	640	2,959
Accumulated amortisation			-675	-334	-1,009
Accumulated impairments	-973		-66	-48	-1,087
Net carrying value	532	0	73	258	863

Other intangible assets include the remaining part of the intangibles recognised in 2017 on the acquisition of Delta Lloyd. The acquisition intangibles comprise:

- Brand names – with an average expected remaining useful life at the acquisition date of approximately 10 years
- Client relationships – with an average expected remaining useful life at the acquisition date of approximately 9 years
- Distribution channels/agreements – with an average expected remaining useful life at the acquisition date of approximately 17 years
- Software – with an average expected remaining useful life at the acquisition date of approximately 3 years

The increase in 2019 in Value of business acquired includes the impact of the acquisitions in Czech Republic and Slovakia. Reference is made to Note 43 'Companies and businesses acquired and divested'.

Amortisation of software and other intangible assets is included in the profit and loss account in 'Other operating expenses' and 'Intangible amortisation and other impairments' respectively.

Goodwill by cash generating unit (reporting unit)

	2019	2018
Netherlands Non-life	90	86
Insurance Europe	76	77
Asset Management	311	307
Bank	62	62
Goodwill	539	532

Reference is made to Note 43 'Companies and businesses acquired and divested'.

Notes to the Consolidated annual accounts continued

9 Intangible assets continued

Goodwill impairment

Goodwill is tested for impairment at the lowest level at which it is monitored for internal management purposes. This level is defined as the cash generating unit (reporting unit) as set out above. Goodwill is tested for impairment by comparing the carrying value of the cash generating unit (reporting unit) to the best estimate of the recoverable amount of that cash generating unit (reporting unit). The carrying value is determined as the IFRS-EU book value including goodwill and certain acquisition intangibles. The recoverable amount is estimated as the higher of fair value less cost to sell and value in use. Several methodologies are applied to arrive at the best estimate of the recoverable amount.

The identification of impairment is an inherently uncertain process involving various assumptions and factors. Estimates and assumptions (including unobservable Level 3 inputs) are based on management's judgement and other information available.

As a result of the further integration of Delta Lloyd entities in the Netherlands, as evidenced by the approval of the legal mergers of Delta Lloyd Levensverzekering N.V. (Delta Lloyd Life) into Nationale-Nederlanden Levensverzekering Maatschappij N.V. (NN Life) and Delta Lloyd Schadeverzekering N.V. (Delta Lloyd Non-life) into Nationale-Nederlanden Schadeverzekering Maatschappij N.V. (NN Non-life) at the end of 2018, the life and non-life businesses in the Netherlands are now combined in one cash generating unit for Life and one cash generating unit for Non-life, for the purpose of goodwill impairment testing. These cash generating units are equal to the segment Netherlands Life and Netherlands Non-life. The IFRS equity of Delta Lloyd Life at the acquisition date reflected assets and liabilities at fair value. Whilst most assets in the combined Netherlands Life segment are also reflected at fair value, most of the NN Life insurance liabilities are recognised at historical locked-in assumptions in IFRS. Consequently, the IFRS book value of the combined Netherlands Life segment is higher than the fair value of its assets and liabilities. The impairment test, based on a recoverable amount for the segment using a 10% discount rate, resulted in an impairment of the goodwill for Delta Lloyd Life of EUR 852 million through a charge in the IFRS profit and loss account of NN Group in 2018. There was no impact for Netherlands Non-life.

For the goodwill other than Netherlands Life there is a significant excess of recoverable amount over book value for the cash generating units (reporting units) to which goodwill is allocated.

There was no impairment of goodwill in 2019.

10 Deferred acquisition costs

Changes in Deferred acquisition costs

	Life insurance		Non-life insurance		Total	
	2019	2018	2019	2018	2019	2018
Deferred acquisition costs – opening balance	1,766	1,601	77	90	1,843	1,691
Capitalised expenses	497	491	478	461	975	952
Amortisation and unlocking	-424	-402	-480	-474	-904	-876
Changes in the composition of the group and other changes	4				4	0
Exchange rate differences	-5	76			-5	76
Deferred acquisition costs – closing balance	1,838	1,766	75	77	1,913	1,843

11 Other assets

Other assets

	2019	2018
Insurance and reinsurance receivables	824	1,038
Income tax receivables	29	110
Accrued interest and rents	1,512	1,597
Other accrued assets	258	301
Cash collateral amounts paid	1,326	1,190
Other	521	472
Other assets	4,470	4,708

Notes to the Consolidated annual accounts continued

11 Other assets continued

Insurance and reinsurance receivables

	2019	2018
Receivables on account of direct insurance from:		
– policyholders	566	732
– intermediaries	161	168
Reinsurance receivables	97	138
Insurance and reinsurance receivables	824	1,038

The allowance for uncollectable insurance and reinsurance receivables amounts to EUR 25 million as at 31 December 2019 (2018: EUR 23 million). The receivable is presented net of this allowance.

12 Equity

Total equity

	2019	2018
Share capital	41	41
Share premium	12,572	12,572
Revaluation reserve	15,269	8,198
Currency translation reserve	3	-34
Net defined benefit asset/liability remeasurement reserve	-144	-106
Other reserves	3,027	2,179
Shareholders' equity (parent)	30,768	22,850
Minority interests	260	234
Undated subordinated notes	1,764	1,764
Total equity	32,792	24,848

Changes in equity (2019)

	Share capital	Share premium	Reserves	Total shareholders' equity (parent)
Equity – opening balance	41	12,572	10,237	22,850
Total amount recognised directly in equity (Other comprehensive income)			7,077	7,077
Net result for the period			1,962	1,962
Dividend			-387	-387
Purchase/sale of treasury shares			-707	-707
Employee stock option and share plans			2	2
Coupon on undated subordinated notes			-59	-59
Changes in the composition of the group and other changes			30	30
Equity – closing balance	41	12,572	18,155	30,768

Purchase/sale of treasury shares (2019)

In 2019, 20,996,349 ordinary shares for a total amount of EUR 712 million were repurchased under an open market share buyback programme, including repurchases to neutralise the dilutive effect of stock dividends. Treasury shares for an amount of EUR 5 million were delivered under Employee share plans. The repurchased shares are held by NN Group and the amount was deducted from Other reserves (Purchase/sale of treasury shares).

In 2019, 5,850,000 NN Group treasury shares were cancelled.

As at 31 December 2019, 21,485,285 treasury shares were held by NN Group.

Issue of ordinary shares (2019)

In 2019, 4,807,859 NN Group shares (for the shareholders that opted to receive a stock dividend) were issued for the final dividend and 3,539,191 NN Group shares were issued for the interim dividend.

Notes to the Consolidated annual accounts continued

12 Equity continued

Coupon paid on undated subordinated notes (2019)

The undated subordinated notes have optional annual coupon payments in June and July. The annual coupons resulted in a deduction of EUR 59 million (net of tax) from equity.

Changes in the composition of the group and other (2019)

In 2018 NN Group reached an agreement to strengthen the long-term partnership between NN Investment Partners (NNIP) and ING Bank Śląski in Poland. Under this agreement, ING Bank Śląski acquired a 45% stake in NNIP Poland and will distribute NNIP investment funds to the Polish retail market. This transaction closed in July 2019. NN Group continues to consolidate NNIP Poland with a minority interest. The positive difference between the transaction price and the related share in the book value of NNIP Poland of EUR 30 million is recognised directly in retained earnings in equity.

Changes in equity (2018)

	Share capital	Share premium	Reserves	Total shareholders' equity (parent)
Equity – opening balance	41	12,572	10,105	22,718
Total amount recognised directly in equity (Other comprehensive income)			-290	-290
Net result for the period			1,117	1,117
Dividend			-332	-332
Purchase/sale of treasury shares			-231	-231
Employee stock option and share plans			2	2
Coupon on undated subordinated notes			-58	-58
Changes in the composition of the group and other changes			-76	-76
Equity – closing balance	41	12,572	10,237	22,850

Purchase/sale of treasury shares (2018)

In 2018, 6,375,646 ordinary shares for a total amount of EUR 237 million were repurchased under open market share buyback programmes to neutralise the dilutive effect of stock dividends and treasury shares for an amount of EUR 6 million were delivered under Employee share plans. The repurchased shares are held by NN Group and the amount was deducted from Other reserves (Purchase/sale of treasury shares).

In 2018, 6,176,884 NN Group treasury shares were cancelled.

As at 31 December 2018, 6,554,128 treasury shares were held by NN Group.

Issue of ordinary shares (2018)

In 2018, 3,918,712 NN Group shares (for the shareholders that opted to receive a stock dividend) were issued for the final dividend and 2,566,901 NN Group shares were issued for the interim dividend.

Coupon paid on undated subordinated notes (2018)

The undated subordinated notes have optional annual coupon payments in June and July. The annual coupons resulted in a deduction of EUR 58 million (net of tax) from equity.

Shareholders' equity (parent)

Share capital

	Ordinary shares (in number)		Ordinary shares (amounts in millions of euros)	
	2019	2018	2019	2018
Authorised share capital	700,000,000	700,000,000	84	84
Unissued share capital	356,443,879	358,940,929	43	43
Issued share capital	343,556,121	341,059,071	41	41

Ordinary shares

The authorised ordinary share capital consists of 700,000,000 ordinary shares with a par value of EUR 0.12 per share. At 31 December 2019 issued and fully paid ordinary share capital consists of 343,556,121 ordinary shares with a par value of EUR 0.12 per share.

Notes to the Consolidated annual accounts continued

12 Equity continued

Distributable reserves

NN Group N.V. is subject to legal restrictions regarding the amount of dividends it can pay to its shareholders. The Dutch Civil Code contains the restriction that dividends can only be paid up to an amount equal to total shareholders' equity less the paid-up and called share capital and less the reserves required pursuant to law or the Articles of Association. In case of negative balances for individual reserves legally to be retained, no distributions can be made out of retained earnings to the level of these negative amounts.

In addition, NN Group's ability to pay dividends is dependent on the dividend payment ability of its subsidiaries, associates and joint ventures. NN Group is legally required to create a non-distributable reserve insofar profits of its subsidiaries, associates and joint ventures are subject to dividend payment restrictions. Such restrictions may among others be of a similar nature as the restrictions which apply to NN Group.

Legally distributable reserves, determined in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code, from NN Group's subsidiaries, associates and joint ventures are as follows:

Distributable reserves based on the Dutch Civil Code

	2019	2019	2018	2018
Total shareholders' equity		30,768		22,850
– share capital	41		41	
– revaluation reserve	15,269		8,198	
– currency translation reserve	3			
– share of associates reserve	1,271		747	
– other non-distributable reserves	198		118	
Total non-distributable part of shareholders' equity:		16,782		9,104
Distributable reserves based on the Dutch Civil Code		13,986		13,746

The Dutch supervisory rules and regulations stemming from the Dutch Financial Supervision Act (Wet op het financieel toezicht) provide a second restriction on the possibility to distribute dividends. Total freely distributable reserves is the minimum of freely distributable capital on the basis of solvency requirements and freely distributable capital on the basis of capital protection.

Freely distributable reserves

	2019	2019	2018	2018
Solvency requirement under the Financial Supervision Act	8,154		7,274	
Reserves available for financial supervision purposes	17,792		16,727	
Total freely distributable reserves on the basis of solvency requirements		9,638		9,453
Total freely distributable reserves on the basis of the Dutch Civil Code		13,986		13,746
Total freely distributable reserves (lower of the values above)		9,638		9,453

Reference is made to Note 50 'Capital and liquidity management' for more information on solvency requirements.

Other restrictions

There are other restrictions to the ability of subsidiaries, associates and joint ventures to distribute reserves to NN Group as a result of minimum capital requirements that are imposed by industry regulators in the countries in which the group companies operate. Reference is made to Note 50 'Capital and liquidity management' for the minimum capital requirements.

In addition to the legal and regulatory restrictions on distributing dividends from subsidiaries, associates and joint ventures to NN Group there are various other considerations and limitations that are taken into account in determining the appropriate levels of equity in the Group's subsidiaries, associates and joint ventures. These considerations and limitations include, but are not restricted to, rating agency and regulatory views, which can change over time; it is not possible to disclose a reliable quantification of these limitations.

Without prejudice to the authority of the Executive Board to allocate profits to reserves and to the fact that the ordinary shares are the most junior securities issued by NN Group, no specific dividend payment restrictions with respect to ordinary shares exist.

Furthermore, NN Group is subject to legal restrictions with respect to repayment of nominal share capital to holders of ordinary shares. Nominal share capital may be repaid to the holders of ordinary shares pursuant to an amendment of NN Group's Articles of Association whereby the ordinary shares are written down. Pursuant to the Dutch Civil Code, capital may only be repaid if none of NN Group's creditors opposes such a repayment within two months following the announcement of a resolution to that effect.

Notes to the Consolidated annual accounts continued

12 Equity continued

Preference shares

As at 31 December 2019, none of the preference shares had been issued. The authorised number of preference shares is 700,000,000 shares.

Warrants

On 15 November 2018, NN Group repurchased its warrants that were issued to ING Group on 10 June 2014 in connection with the Initial Public Offering of NN Group, for a consideration of EUR 76 million. All outstanding warrants were cancelled. The amount paid was deducted from Other reserves and is presented as Changes in composition of the group and other changes.

Changes in Revaluation reserve (2019)

	Property revaluation reserve	Available-for-sale reserve	Cash flow hedge reserve	Total
Revaluation reserve – opening balance	9	3,675	4,514	8,198
Unrealised revaluations	3	4,473		4,476
Realised gains/losses transferred to the profit and loss account		-286		-286
Changes in cash flow hedge reserve			4,284	4,284
Deferred interest credited to policyholders		-1,403		-1,403
Revaluation reserve – closing balance	12	6,459	8,798	15,269

Changes in Revaluation reserve (2018)

	Property revaluation reserve	Available-for-sale reserve	Cash flow hedge reserve	Total
Revaluation reserve – opening balance	2	4,874	3,721	8,597
Unrealised revaluations	7	-338		-331
Realised gains/losses transferred to the profit and loss account		-823		-823
Changes in cash flow hedge reserve			793	793
Deferred interest credited to policyholders		-38		-38
Revaluation reserve – closing balance	9	3,675	4,514	8,198

Deferred interest credited to policyholders reflects the change in the deferred profit sharing liabilities (net of deferred tax). Reference is made to Note 16 'Insurance and investment contracts, reinsurance contracts'.

Changes in Currency translation reserve

	2019	2018
Currency translation reserve – opening balance	-34	-139
Unrealised revaluations after taxation	-16	12
Exchange rate differences for the period	53	93
Currency translation reserve – closing balance	3	-34

Unrealised revaluations relate to changes in the value of hedging instruments that are designated as net investment hedges.

Changes in Other reserves (2019)

	Retained earnings	Share of associates reserve	Total
Other reserves – opening balance	1,432	747	2,179
Net result for the period	1,962		1,962
Transfers to/from share of associates reserve	-524	524	0
Dividend	-387		-387
Purchase/sale of treasury shares	-707		-707
Employee stock option and share plans	2		2
Coupon on subordinated notes	-59		-59
Changes in the composition of the group and other changes	37		37
Other reserves – closing balance	1,756	1,271	3,027

Notes to the Consolidated annual accounts continued

12 Equity continued

Changes in Other reserves (2018)

	Retained earnings	Share of associates reserve	Total
Other reserves – opening balance	1,056	697	1,753
Net result for the period	1,117		1,117
Transfers to/from share of associates reserve	-50	50	0
Dividend	-332		-332
Purchase/sale of treasury shares	-231		-231
Employee stock option and share plans	2		2
Coupon on subordinated notes	-58		-58
Changes in the composition of the group and other changes	-72		-72
Other reserves – closing balance	1,432	747	2,179

Dividends

	2019	2018
Dividend distributed from Other reserves:		
Dividend paid in cash (interim current year)	144	127
Dividend paid in cash (final previous year)	243	205
Stock dividend (interim current year)	106	95
Stock dividend (final previous year)	172	143
Total dividend	665	570

Interim dividend 2019

In September 2019, NN Group paid a 2019 interim dividend of EUR 0.76 per ordinary share, or approximately EUR 250 million in total. The 2019 interim dividend was paid either in cash, after deduction of withholding tax if applicable, or ordinary shares at the election of the shareholder. As a result, an amount of EUR 144 million was distributed out of Other reserves (cash dividend) and 3,539,191 ordinary shares, with a par value of EUR 0.12 per share, were issued (EUR 106 million stock dividend). To neutralise the dilutive effect of the interim stock dividend, NN Group repurchased ordinary shares for an amount equivalent to the stock dividend.

Proposed final dividend 2019

At the annual general meeting on 28 May 2020, a final dividend will be proposed of EUR 1.40 per ordinary share, or approximately EUR 448 million in total based on the current number of outstanding shares (net of treasury shares). Together with the 2019 interim dividend of EUR 0.76 per ordinary share paid in September 2019, NN Group's total dividend over 2019 will be EUR 698 million, or EUR 2.16 per ordinary share which is equivalent to a dividend pay-out ratio of 50% of NN Group's full-year 2019 net operating result. The final dividend will be paid in cash, after deduction of withholding tax if applicable, or ordinary shares from the share premium reserve, at the election of the shareholder. To neutralise the dilutive effect of the stock dividend, NN Group will repurchase ordinary shares for an amount equivalent to the stock dividend. If the proposed dividend is approved by the shareholders, NN Group ordinary shares will be quoted ex-dividend on 1 June 2020. The record date for the dividend will be 2 June 2020. The election period will run from 3 June up to and including 17 June 2020. The stock fraction for the stock dividend will be based on the volume weighted average price of NN Group ordinary shares on Euronext Amsterdam for the five trading days from 11 June through 17 June 2020. The dividend will be payable on 24 June 2020.

Interim dividend 2018

In September 2018, NN Group paid a 2018 interim dividend of EUR 0.66 per ordinary share, or approximately EUR 222 million in total. The 2018 interim dividend was paid either in cash, after deduction of withholding tax if applicable, or ordinary shares at the election of the shareholder. As a result, an amount of EUR 127 million was distributed out of Other reserves (cash dividend) and 2,566,901 ordinary shares, with a par value of EUR 0.12 per share, were issued (EUR 95 million stock dividend). To neutralise the dilutive effect of the interim stock dividend, NN Group repurchased ordinary shares for an amount equivalent to the stock dividend.

Notes to the Consolidated annual accounts continued

12 Equity continued

Final dividend 2018

On 29 May 2019, the annual general meeting adopted the proposed final dividend of EUR 1.24 per ordinary share, or approximately EUR 415 million in total based on the current number of outstanding shares (net of treasury shares). Together with the 2018 interim dividend of EUR 0.66 per ordinary share paid in September 2018, NN Group's total dividend for 2018 was EUR 637 million, or EUR 1.90 per ordinary share which is equivalent to a dividend pay-out ratio of 50% of NN Group's full-year 2018 net operating result. The final dividend was paid in cash, after deduction of withholding tax if applicable, or ordinary shares from the share premium reserve, at the election of the shareholder. As a result, an amount of EUR 243 million was distributed out of Other reserves (cash dividend) and 4,807,859 ordinary shares, with a par value of EUR 0.12 per share, were issued EUR 172 million stock dividend). To neutralise the dilutive effect of the stock dividend, NN Group repurchases ordinary shares for an amount equivalent to the stock dividend. The dividend was paid on 25 June 2019.

Proposed appropriation of result

The result is appropriated pursuant to Article 34 of the Articles of Association of NN Group N.V., of which the relevant provisions state that the appropriation of result shall be determined by the General Meeting, on the proposal of the Executive Board, as approved by the Supervisory Board. It is proposed to add the 2019 net result of EUR 1,962 million less the (interim and final) cash dividends to the retained earnings.

Minority interest

Through the acquisition of Delta Lloyd, NN Group owns 51% of the shares of ABN AMRO Verzekeringen Holding B.V. (ABN AMRO Verzekeringen). ABN AMRO Verzekeringen's principal place of business is Zwolle, the Netherlands. ABN AMRO Verzekeringen is fully consolidated by NN Group, with a minority interest recognised of 49%.

At 31 December 2019, the minority interest relating to ABN AMRO Verzekeringen recognised in equity was EUR 241 million.

Summarised information ABN AMRO Verzekeringen¹

	2019	2018
Total assets	4,867	4,889
Total liabilities	4,375	4,436
Total income	561	559
Total expenses	503	527
Net result recognised in period	42	32
Other comprehensive income recognised in period	46	-13
Dividends paid	49	183

¹ All on 100% basis.

Undated subordinated notes

In July 2014, NN Group N.V. issued fixed to floating rate undated subordinated notes with a par value of EUR 1,000 million. The notes are undated, but are callable after 11.5 years and every quarter thereafter (subject to regulatory approval). The coupon is fixed at 4.5% per annum for the first 11.5 years and will be floating thereafter. As these notes are undated and include optional deferral of interest at the discretion of NN Group, these are classified under IFRS-EU as equity. Coupon payments are distributed out of equity if and when paid or contractually due. The discount to the par value and certain issue costs were deducted from equity at issue, resulting in a balance sheet value equal to the net proceeds of EUR 986 million.

In June 2014, fixed to floating rate undated subordinated notes with a par value of EUR 750 million were originally issued by Delta Lloyd which are classified as equity under IFRS-EU. The notes are undated, but are callable as from 13 June 2024 and every quarter thereafter (subject to regulatory approval). The coupon is fixed at 4.375% per annum until 13 June 2024 and will be floating thereafter. Coupon payments are distributed out of equity if and when paid or contractually due. These notes were recognised upon acquisition of Delta Lloyd for an amount of EUR 778 million.

Notes to the Consolidated annual accounts continued

13 Subordinated debt

Subordinated debt

Interest rate	Year of issue	Due date	First call date	Notional amount		Balance Sheet Value	
				2019	2018	2019	2018
4.625%	2017	13 January 2048	13 January 2028	850	850	839	838
9.000%	2017	29 August 2042	29 August 2022	500	500	577	604
6.000%	2017	13 July 2019	13 July 2019		12		12
4.625%	2014	8 April 2044	8 April 2024	1,000	1,000	993	991
Subordinated debt						2,409	2,445

The above subordinated debt instruments have been issued to raise hybrid capital. Under IFRS-EU these debt instruments are classified as liabilities. They are considered capital for regulatory purposes. All subordinated debt is euro denominated.

14 Debt securities issued

Debt securities issued

Interest rate	Year of issue	Due date	First call date	Notional amount		Balance Sheet Value	
				2019	2018	2019	2018
1.000%	2015	18 March 2022	Not applicable	600	600	599	599
0.875%	2017	13 January 2023	13 October 2022	500	500	497	497
0.250%	2017	1 June 2020	1 March 2020	300	300	300	299
1.625%	2017	1 June 2027	1 March 2027	600	600	596	595
Debt securities issued						1,992	1,990

15 Other borrowed funds

Other borrowed funds

	2019	2018
Credit institutions	1,556	1,050
Other	6,058	4,667
Other borrowed funds	7,614	5,717

Other borrowed funds includes the funding of the consolidated securitisation programmes as disclosed in Note 44 'Structured entities' and unsecured Debt Issuance.

During 2019, NN Bank issued EUR 1.1 billion bonds under its Conditional Pass-Through Covered Bond Programme, backed by Dutch prime residential mortgage loans (2018 EUR 1 billion) and EUR 1.6 billion under its Debt Issuance Programme.

Notes to the Consolidated annual accounts continued

16 Insurance and investment contracts, reinsurance contracts

Insurance and investment contracts, reinsurance contracts

	Liabilities net of reinsurance		Reinsurance contracts		Insurance and investment contracts	
	2019	2018	2019	2018	2019	2018
Non-participating life policy liabilities	57,376	56,937	225	132	57,601	57,069
Participating life policy liabilities	54,114	52,961	454	561	54,568	53,522
Investment contracts with discretionary participation features	6,073	6,754			6,073	6,754
Liabilities for (deferred) profit sharing and rebates	8,526	6,591			8,526	6,591
Life insurance liabilities excluding liabilities for risk of policyholders	126,089	123,243	679	693	126,768	123,936
Liabilities for life insurance for risk of policyholders	32,979	28,971	34	45	33,013	29,016
Investment contract with discretionary participation features for risk of policyholders	245	215			245	215
Life insurance liabilities	159,313	152,429	713	738	160,026	153,167
Liabilities for unearned premiums and unexpired risks	390	401	15	13	405	414
Reported claims liabilities	3,991	3,980	203	209	4,194	4,189
Claims incurred but not reported (IBNR)	1,409	1,302	57	50	1,466	1,352
Claims liabilities	5,400	5,282	260	259	5,660	5,541
Insurance liabilities and investment contracts with discretionary participation features	165,103	158,112	988	1,010	166,091	159,122
Investment contracts	1,025	1,078			1,025	1,078
Investment contracts for risk of policyholders	1,135	918			1,135	918
Investment contracts liabilities	2,160	1,996	0	0	2,160	1,996
Insurance and investment contracts, reinsurance contracts	167,263	160,108	988	1,010	168,251	161,118

The liabilities for insurance and investment contracts are presented gross in the balance sheet as 'Insurance and investment contracts'. The related reinsurance is presented as 'Reinsurance contracts' under Assets in the balance sheet.

Deferred interest credited to policyholders is included in the 'Liabilities for (deferred) profit sharing and rebates' and amounts to EUR 8,245 million as at 31 December 2019 (2018: EUR 6,341 million).

Notes to the Consolidated annual accounts continued

16 Insurance and investment contracts, reinsurance contracts continued

Changes in Life insurance liabilities (2019)

	Net life insurance liabilities ¹	Net liabilities for risk of policyholders ²	Reinsurance contracts	Life insurance liabilities
Life insurance liabilities – opening balance	123,243	29,186	738	153,167
Deferred interest credited to policyholders	1,905			1,905
Current year liabilities	7,092	2,207	16	9,315
Prior years liabilities:				
– benefit payments to policyholders	-9,347	-2,910	-45	-12,302
– interest accrual and changes in fair value of liabilities	2,525		7	2,532
– valuation changes for risk of policyholders		4,792		4,792
– effect of changes in discount rate assumptions	-4		1	-3
– effect of changes in other assumptions	-97	-31		-128
Changes in the composition of the group and other changes	328	-66	-8	254
Exchange rate differences	444	46	4	494
Life insurance liabilities – closing balance	126,089	33,224	713	160,026

1 Net of reinsurance and liabilities for risk of policyholders.

2 Net of reinsurance.

Changes in Life insurance liabilities (2018)

	Net life insurance liabilities ¹	Net liabilities for risk of policyholders ²	Reinsurance contracts	Life insurance liabilities
Life insurance liabilities – opening balance	122,838	32,526	666	156,030
Deferred interest credited to policyholders	-279			-279
Current year liabilities	6,205	2,302	14	8,521
Prior years liabilities:				
– benefit payments to policyholders	-8,962	-4,459	49	-13,372
– interest accrual and changes in fair value of liabilities	2,530		8	2,538
– valuation changes for risk of policyholders		-1,254		-1,254
– effect of changes in discount rate assumptions	6		-1	5
– effect of changes in other assumptions	-174	45		-129
Changes in the composition of the group and other changes	13	-181	-4	-172
Exchange rate differences	1,066	207	6	1,279
Life insurance liabilities – closing balance	123,243	29,186	738	153,167

1 Net of reinsurance and liabilities for risk of policyholders.

2 Net of reinsurance.

Where discounting is used in the calculation of life insurance liabilities, the rate for the Dutch portfolios is within the range of 1.0% to 4.0% (2018: 1.0% to 4.0%). The rate for the foreign portfolios is within the range of 0.0% to 6.0% (2018: 0.0% to 6.0%).

Changes in the composition of the group and other changes includes insurance contracts for risk of policyholders with guarantees that were extended as general account contracts and the transfer of certain insurance contracts.

Changes in Liabilities for unearned premiums and unexpired risks

	Liabilities net of reinsurance		Reinsurance contracts		Liabilities for unearned premiums and unexpired risk	
	2019	2018	2019	2018	2019	2018
Liabilities for unearned premiums and unexpired risks – opening balance	401	473	13	10	414	483
Premiums written	2,990	2,941	164	195	3,154	3,136
Premiums earned during the year	-3,001	-3,009	-162	-192	-3,163	-3,201
Changes in the composition of the group and other changes		-4			0	-4
Liabilities for unearned premiums and unexpired risks – closing balance	390	401	15	13	405	414

Notes to the Consolidated annual accounts continued

16 Insurance and investment contracts, reinsurance contracts continued

Changes in Claims liabilities

	Liabilities net of reinsurance		Reinsurance contracts		Claims liabilities	
	2019	2018	2019	2018	2019	2018
Claims liabilities – opening balance	5,282	5,085	259	204	5,541	5,289
Additions:						
– for the current year	2,071	2,252	35	34	2,106	2,286
– for prior years	-126	-118	7	42	-119	-76
– interest accrual of liabilities	70	66	-8		62	66
Additions	2,015	2,200	34	76	2,049	2,276
Claim settlements and claim settlement costs:						
– for the current year	-805	-939	20	21	-785	-918
– for prior years	-1,093	-1,066	-53	-38	-1,146	-1,104
Claim settlements and claim settlement cost	-1,898	-2,005	-33	-17	-1,931	-2,022
Changes in the composition of the group and other changes		1		-4	0	-3
Exchange rate differences	1	1			1	1
Claims liabilities – closing balance	5,400	5,282	260	259	5,660	5,541

Where discounting is used in the calculation of the claims liabilities the rate is within the range of 1.0% to 4.0% (2018: 1.0% to 4.0%).

Changes in Investment contracts

	2019	2018
Investment contracts – opening balance	1,996	1,837
Current year liabilities	268	331
Prior years liabilities:		
– payments to contract holders	-261	-178
– interest accrual	27	21
– valuation changes investments	130	-62
Changes in the composition of the group and other changes		47
Investment contracts – closing balance	2,160	1,996

Notes to the Consolidated annual accounts continued

16 Insurance and investment contracts, reinsurance contracts continued

Gross claims development table

	Accident year										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Estimate of cumulative claims											
At the end of accident year	2,165	2,220	2,400	2,250	2,094	2,092	2,250	2,161	2,358	2,192	
1 year later	2,209	2,358	2,331	2,313	2,158	2,131	2,273	2,184	2,328		
2 years later	2,179	2,301	2,285	2,279	2,131	2,165	2,265	2,136			
3 years later	2,178	2,260	2,241	2,257	2,153	2,161	2,277				
4 years later	2,166	2,231	2,229	2,228	2,129	2,123					
5 years later	2,144	2,215	2,228	2,210	2,122						
6 years later	2,143	2,204	2,236	2,211							
7 years later	2,130	2,207	2,224								
8 years later	2,144	2,194									
9 years later	2,153										
Estimate of cumulative claims	2,153	2,194	2,224	2,211	2,122	2,123	2,277	2,136	2,328	2,192	21,960
Cumulative payments	-1,998	-1,986	-1,957	-1,910	-1,761	-1,686	-1,743	-1,490	-1,407	-785	-16,723
	155	208	267	301	361	437	534	646	921	1,407	5,237
Effect of discounting	-17	-25	-31	-31	-30	-38	-42	-46	-57	-60	-377
Liabilities recognised	138	183	236	270	331	399	492	600	864	1,347	4,860
Liabilities relating to accident years prior to 2010											800
Gross claims											5,660

Gross claims in the claims development table include the claims in the Delta Lloyd entities as from the original date of the claim.

To the extent that the assuming reinsurers are unable to meet their obligations, NN Group is liable to its policyholders for the portion reinsured. Consequently, provisions are made for receivables on reinsurance contracts if and when they are deemed uncollectable.

As at 31 December 2019, the total reinsurance exposure including reinsurance contracts and receivables from reinsurers (presented in Note 11 'Other assets') amounts to EUR 1,085 million (2018: EUR 1,148 million).

17 Customer deposits and other funds on deposit

Customer deposits and other funds on deposit

	2019	2018
Savings	6,718	6,699
Bank annuities	8,443	8,030
Customer deposits and other funds on deposit	15,161	14,729

Customers have not entrusted any funds to NN Group on terms other than those prevailing in the normal course of business. All customer deposits and other funds on deposit are interest bearing.

Changes in Customer deposits and other funds on deposit

	2019	2018
Customer deposits and other funds on deposit – opening balance	14,729	14,434
Deposits received	3,877	3,821
Withdrawals	-3,413	-3,491
Amortisation	-32	-35
Customer deposits and other funds on deposit – closing balance	15,161	14,729

Notes to the Consolidated annual accounts continued

18 Financial liabilities at fair value through profit or loss

Non-trading derivatives

	2019	2018
Derivatives used in:		
– fair value hedges	691	698
– cash flow hedges	375	189
– hedges of net investments in foreign operations	3	
Other non-trading derivatives	2,163	1,276
Non-trading derivatives	3,232	2,163

Other non-trading derivatives includes derivatives for which no hedge accounting is applied.

19 Other liabilities

Other liabilities

	2019	2018
Income tax payable	83	16
Net defined benefit liability	175	124
Other post-employment benefits	17	18
Other staff-related liabilities	106	122
Other taxation and social security contributions	133	123
Deposits from reinsurers	321	336
Lease liabilities	345	
Accrued interest	245	238
Costs payable	289	449
Amounts payable to policyholders	1,052	898
Provisions	292	293
Amounts to be settled	1,290	1,954
Cash collateral amounts received	7,978	4,086
Other	790	770
Other liabilities	13,116	9,427

Other staff-related liabilities include vacation leave provisions, variable compensation provisions, jubilee provisions and disability/illness provisions.

Other mainly relates to year-end accruals in the normal course of business.

Net defined benefit liability

	2019	2018
Fair value of plan assets	26	30
Defined benefit obligation	201	154
Net defined benefit liability recognised in the balance sheet (funded status)	175	124

Changes in Provisions

	2019	2018
Provisions – opening balance	293	319
Additions	97	137
Releases	-16	-21
Charges	-82	-139
Exchange rate differences		-3
Provisions – closing balance	292	293

Notes to the Consolidated annual accounts continued

19 Other liabilities continued

Provisions relate to reorganisation provisions, litigation provisions and other provisions. Provisions in 2019 and 2018 include EUR 134 million relating to ING Australia Holdings. The remainder mainly relates to reorganisations. Reorganisation provisions were recognised for operations in the Netherlands for the cost of workforce reductions. Additions to the reorganisation provision were recognised in 2019 and 2018 due to additional initiatives announced during the year. During 2019 EUR 76 million was charged to the reorganisation provision for the cost of workforce reductions (2018: EUR 130 million). For litigation provisions reference is made to Note 42 'Legal proceedings'.

20 Gross premium income

Gross premium income

	2019	2018
Gross premium income from life insurance policies	11,354	10,136
Gross premium income from non-life insurance policies	3,154	3,136
Gross premium income	14,508	13,272

Gross premium income is presented before deduction of reinsurance and retrocession premiums. Gross premium income excludes premium received for investment contracts, for which deposit accounting is applied.

Premiums written – net of reinsurance

	Life		Non-life		Total	
	2019	2018	2019	2018	2019	2018
Direct gross premiums written	11,320	10,099	3,152	3,135	14,472	13,234
Reinsurance assumed gross premiums written	34	37	2	1	36	38
Gross premiums written	11,354	10,136	3,154	3,136	14,508	13,272
Reinsurance ceded	-298	-284	-164	-195	-462	-479
Premiums written net of reinsurance	11,056	9,852	2,990	2,941	14,046	12,793

Non-life premiums earned – net of reinsurance

	2019	2018
Direct gross premiums earned	3,162	3,200
Reinsurance assumed gross premiums earned	1	1
Gross premiums earned	3,163	3,201
Reinsurance ceded	-162	-192
Non-life premiums earned – net of reinsurance	3,001	3,009

Reinsurance ceded is included in Underwriting expenditure. Reference is made to Note 24 'Underwriting expenditure'.

Notes to the Consolidated annual accounts continued

21 Investment income

Investment income

	2019	2018
Interest income from investments in debt securities	1,781	1,829
Interest income from loans:		
– mortgage loans	1,266	1,218
– unsecured loans	197	211
– policy loans	10	10
– other	121	40
Interest income from investments in debt securities and loans	3,375	3,308
Realised gains/losses on disposal of available-for-sale debt securities	330	775
Realised gains/losses and impairments of available-for-sale debt securities	330	775
Realised gains/losses on disposal of available-for-sale equity securities	109	348
Impairments of available-for-sale equity securities	-93	-91
Realised gains/losses and impairments of available-for-sale equity securities	16	257
Interest income on non-trading derivatives	221	219
Increase/decrease in loan loss provisions	-11	18
Income from real estate investments	100	120
Dividend income	300	272
Change in fair value of real estate investments	42	200
Investment income	4,373	5,169

Impairments on investments by segment

	2019	2018
Netherlands Life	-73	-68
Netherlands Non-life	-9	-1
Insurance Europe	-7	-21
Japan Life	-3	
Other	-1	-1
Impairments on investments	-93	-91

22 Net fee and commission income

Net fee and commission income

	2019	2018
Asset management fees	764	807
Insurance brokerage and advisory fees	118	124
Other	155	156
Gross fee and commission income	1,037	1,087
Trailer fees	175	199
Asset management fees	43	47
Commission expenses and other	110	86
Fee and commission expenses	328	332
Net fee and commission income	709	755

Notes to the Consolidated annual accounts continued

23 Valuation results on non-trading derivatives

Valuation results on non-trading derivatives

	2019	2018
Change in fair value of derivatives relating to:		
– fair value hedges	-1,395	-452
– cash flow hedges (ineffective portion)	11	15
– other non-trading derivatives	163	262
Net result on non-trading derivatives	-1,221	-175
Change in fair value of assets and liabilities (hedged items)	1,385	448
Valuation results on assets and liabilities designated as at fair value through profit or loss	2	10
Valuation results on non-trading derivatives	166	283

Included in 'Valuation results on non-trading derivatives' are the fair value movements on derivatives used to economically hedge exposures, but for which no hedge accounting is applied. These derivatives hedge exposures in insurance contract liabilities. The fair value movements on the derivatives are influenced by changes in the market conditions, such as share prices, interest rates and currency exchange rates. The change in fair value of the derivatives is largely offset by changes in insurance contract liabilities, which are included in 'Underwriting expenditure'. Reference is made to Note 24 'Underwriting expenditure'.

Valuation results on non-trading derivatives are reflected in the Consolidated statement of cash flows in the section 'Result before tax', in the line item 'Adjusted for: other'.

Reference is made to Note 35 'Derivatives and hedge accounting'.

24 Underwriting expenditure

Underwriting expenditure

	2019	2018
Gross underwriting expenditure:		
– before effect of investment result for risk of policyholders	15,230	14,507
– effect of investment result for risk of policyholders	4,794	-1,258
Gross underwriting expenditure	20,024	13,249
Investment result for risk of policyholders	-4,794	1,258
Reinsurance recoveries	-237	-192
Underwriting expenditure	14,993	14,315

The investment income and valuation results regarding investments for risk of policyholders is EUR 4,794 million (2018: EUR -1,258 million). This amount is recognised in 'Underwriting expenditure'. As a result, it is shown together with the equal amount of related change in insurance liabilities for risk of policyholders.

Notes to the Consolidated annual accounts continued

24 Underwriting expenditure continued

Underwriting expenditure by class

	2019	2018
Expenditure from life underwriting:		
– reinsurance and retrocession premiums	298	284
– gross benefits	11,973	13,176
– reinsurance recoveries	-157	-130
– change in life insurance liabilities	-597	-2,547
– costs of acquiring insurance business	445	459
– other underwriting expenditure	278	163
– profit sharing and rebates	70	86
Expenditure from life underwriting	12,310	11,491
Expenditure from non-life underwriting:		
– reinsurance and retrocession premiums	164	195
– gross claims	1,934	1,995
– reinsurance recoveries	-80	-62
– changes in the liabilities for unearned premiums	-11	-68
– changes in claims liabilities	118	196
– costs of acquiring insurance business	552	563
– other underwriting expenditure	-23	-16
Expenditure from non-life underwriting	2,654	2,803
Expenditure from investment contracts:		
– costs of acquiring investment contracts	1	
– other changes in investment contract liabilities	28	21
Expenditure from investment contracts	29	21
Underwriting expenditure	14,993	14,315

Profit sharing and rebates

	2019	2018
Distributions on account of interest or underwriting results	8	26
Bonuses added to policies	62	60
Profit sharing and rebates	70	86

The total costs of acquiring insurance business (life and non-life) and investment contracts amounted to EUR 998 million (2018: EUR 1,022 million). This includes amortisation and unlocking of DAC of EUR 904 million (2018: EUR 876 million) and the net amount of commissions paid of EUR 1,069 million (2018: EUR 1,098 million) and commissions capitalised in DAC of EUR 975 million (2018: EUR 952 million).

The total amount of commission paid and commission payable amounted to EUR 1,294 million (2018: EUR 1,281 million). This includes the commissions recognised in 'costs of acquiring insurance business' of EUR 1,069 million (2018: EUR 1,097 million) referred to above and commissions recognised in 'other underwriting expenditure' of EUR 225 million (2018: EUR 184 million). Other underwriting expenditure also includes reinsurance commissions received of EUR 63 million (2018: EUR 63 million).

As set out in the section 'Accounting policies for specific items – Insurance and investment contracts, reinsurance contracts', NN Group applies, for certain specific products or components thereof, the option in IFRS 4 to measure (components of) the liabilities for insurance contracts using market-consistent interest rates and other current estimates and assumptions. This relates mainly to certain guarantees embedded in insurance contracts in Japan. The impact of these market-consistent assumptions is reflected in 'Underwriting expenditure – change in life insurance liabilities'.

This impact is largely offset by the impact of related hedging derivatives. As disclosed in Note 23 'Valuation results on non-trading derivatives', the valuation results on non-trading derivatives include the fair value movements on derivatives used to economically hedge exposures, but for which no hedge accounting is applied. For insurance operations, these derivatives hedge mainly exposures in Insurance contract liabilities. The fair value movements on the derivatives are influenced by changes in the market conditions, such as stock prices, interest rates and currency exchange rates. The change in fair value of the derivatives is largely offset by changes in insurance contract liabilities, which are included in 'Underwriting expenditure'.

Notes to the Consolidated annual accounts continued

25 Intangible amortisation and other impairments

Intangible amortisation and other impairments

	2019	2018
Goodwill		852
Property and equipment	-1	-1
Other intangible assets		1
Other impairments and reversals of other impairments	-1	852
Amortisation of other intangible assets	33	134
Intangible amortisation and other impairments	32	986

Impairment on debt securities, equity securities and loans are included in Note 21 'Investment income'.

Reference is made to Note 9 'Intangible assets' for impairment on Goodwill.

26 Staff expenses

Staff expenses

	2019	2018
Salaries	831	818
Variable salaries	78	81
Pension costs	126	125
Social security costs	144	127
Share-based compensation arrangements	12	13
External staff costs	301	301
Education	19	22
Other staff costs	53	34
Staff expenses	1,564	1,521

Pension costs

	2019	2018
Current service cost	7	8
Net interest cost	-3	-4
Defined benefit plans	4	4
Defined contribution plans	122	121
Pension costs	126	125

Defined contribution plans

Certain group companies sponsor defined contribution pension plans. The assets of all NN Group's defined contribution plans are held in independently administered funds. Contributions are generally determined as a percentage of pay. These plans do not give rise to balance sheet provisions, other than relating to short-term timing differences included in 'Other assets' or 'Other liabilities'.

Number of employees

Reference is made to Note 31 'Principal subsidiaries and geographical information' for information on the average number of employees.

Remuneration of Executive Board, Management Board and Supervisory Board

Reference is made to Note 46 'Key management personnel compensation'.

Share plans

NN Group has granted shares to a number of senior executives (members of the Management Board, general managers and other officers nominated by the Management Board) and to a considerable number of employees. The purpose of the share schemes is to attract, retain and motivate senior executives and staff.

Share awards comprise upfront shares and deferred shares. The entitlement to the deferred shares is granted conditionally. If the participant remains in employment for an uninterrupted period between the grant date and the vesting date, the entitlement becomes unconditional. A retention period applies from the moment of vesting these awards (five years for Management Board and one year for Identified Staff).

Notes to the Consolidated annual accounts continued

26 Staff expenses continued

Share awards

Changes in Share awards outstanding

	Share awards (in number)		Weighted average grant date fair value (in euros)	
	2019	2018	2019	2018
Share awards outstanding – opening balance	613,118	662,580	33.38	29.62
Granted	267,338	408,323	38.96	36.11
Vested	-362,048	-441,194	34.00	30.39
Forfeited	-40,350	-16,591	29.35	30.04
Share awards outstanding – closing balance	478,058	613,118	36.38	33.38

In 2019, 30,801 (2018: 33,458) share awards on NN Group shares were granted to the members of the Executive and Management Board. In 2019, 236,537 (2018: 374,865) share awards on NN Group shares were granted to senior management and other employees.

As at 31 December 2019, the share awards on NN Group shares consist of 449,781 (2018: 587,593) share awards relating to equity-settled share-based payment arrangements and 28,277 (2018: 25,525) share awards relating to cash-settled share-based payment arrangements.

The fair value of share awards granted is allocated over the vesting period of the share awards as an expense under staff expenses.

As at 31 December 2019, total unrecognised compensation costs related to share awards amount to EUR 6 million (2018: EUR 8 million). These costs are expected to be recognised over a weighted average period of 1.5 years (2018: 1.4 years).

27 Interest expenses

Interest expenses

	2019	2018
Interest expenses on non-trading derivatives	177	151
Other interest expenses	342	324
Interest expenses	519	475

In 2019, total interest income and total interest expenses for items not valued at fair value through profit or loss were EUR 3,375 million (2018: EUR 3,308 million) and EUR 342 million (2018: EUR 324 million) respectively.

Interest income and expenses are included in the following profit and loss account lines.

Total net interest income

	2019	2018
Investment income	3,596	3,527
Interest expenses on non-trading derivatives	-177	-151
Other interest expenses	-342	-324
Total net interest income	3,077	3,052

28 Other operating expenses

Other operating expenses

	2019	2018
Depreciation of property and equipment	81	33
Amortisation of software	33	27
Computer costs	309	313
Office expenses	68	125
Travel and accommodation expenses	21	20
Advertising and public relations	87	90
External advisory fees	175	180
Addition/(releases) of provisions for reorganisation and relocations	55	115
Other	92	193
Other operating expenses	921	1,096

Due to the introduction of IFRS 16 (refer to note 1 'Accounting policies') lease amounts that were included in the line 'other' in 2018, were recognised in 2019 in the line 'Depreciation of property and equipment'.

Notes to the Consolidated annual accounts continued

29 Earnings per ordinary share

Earnings per ordinary share shows earnings per share amounts for profit or loss attributable to shareholders of the parent. Earnings per ordinary share is calculated on the basis of the weighted average number of ordinary shares outstanding. In calculating the weighted average number of ordinary shares outstanding, own shares held by group companies are deducted from the total number of ordinary shares in issue.

Changes in the number of ordinary shares outstanding without a corresponding change in resources are taken into account, including if these changes occurred after the reporting date but before the annual accounts are authorised for issue.

Earnings per ordinary share

	Amounts (in millions of euros)		Weighted average number of ordinary shares (in millions)		Per ordinary share (in euros)	
	2019	2018	2019	2018	2019	2018
Net result	1,962	1,117				
Coupon on undated subordinated notes	-59	-58				
Basic earnings per ordinary share	1,903	1,059	330.5	335.5	5.76	3.15
Dilutive instruments:						
– Share plans			0.5	0.6		
Dilutive instruments			0.5	0.6		
Diluted earnings per ordinary share	1,903	1,059	331.0	336.1	5.75	3.15

Diluted earnings per share is calculated as if the share plans had been exercised at the beginning of the period and assuming that the cash received from exercised share plans and warrants was used to buy own shares against the average market price during the period. The net increase in the number of shares resulting from exercising share plans and warrants is added to the average number of shares used for the calculation of diluted earnings per share.

30 Segments

As of 2019, Banking, previously included in the segment 'Other', is reported as a separate segment. At the same time, the segment Japan Closed Block VA is no longer reported separately, but is included in the segment 'Other'. There is no impact on the total Net result. The comparative figures have been amended in line with the new segmentation.

As a result, the reporting segments for NN Group, based on the internal reporting structure, are as follows:

- Netherlands Life (Group life and individual life insurance products in the Netherlands)
- Netherlands Non-life (Non-life insurance in the Netherlands including disability and accident, fire, motor and transport insurance)
- Insurance Europe (Life insurance, pension products and to a small extent non-life insurance and retirement services in Central and Rest of Europe)
- Japan Life (Life insurance primarily Corporate Owned Life Insurance (COLI) business)
- Asset Management (Asset management activities)
- Banking
- Other (Operating segments that have been aggregated due to their respective size; including Japan Closed Block VA (Closed block single premium variable annuity individual life insurance portfolio in Japan, including the internally reinsured minimum guarantee risk, which has been closed to new business and which is being managed in run-off), reinsurance and items related to capital management and the head office)

The Executive Board and the Management Board set the performance targets and approve and monitor the budgets prepared by the reporting segments. The segments formulate strategic, commercial and financial policies in conformity with the strategy and performance targets set by the Executive Board and the Management Board.

The accounting policies of the segments are the same as those described in Note 1 'Accounting policies'. Transfer prices for inter-segment transactions are set at arm's length. Corporate expenses are allocated to segments based on time spent by head office personnel, the relative number of staff, or on the basis of income and/or assets of the segment. Intercompany loans that qualify as equity instruments under IFRS-EU are presented in the segment reporting as debt; related coupon payments are presented as income and expenses in the respective segments.

Notes to the Consolidated annual accounts continued

30 Segments continued

Operating result (before tax) is used by NN Group to evaluate the financial performance of its segments.

The operating result for the life insurance business is analysed through a margin analysis, which includes the investment margin, fees and premium-based revenues and the technical margin. Disclosures on comparative years also reflect the impact of current year's divestments. Operating result as presented below is an Alternative Performance Measure (non-GAAP financial measure) and is not a measure of financial performance under IFRS-EU. Because it is not determined in accordance with IFRS-EU, operating result as presented by NN Group may not be comparable to other similarly titled measures of performance of other companies. The net result on transactions between segments is eliminated in the net result of the relevant segment. Operating result is calculated as explained below in the section Alternative Performance Measures.

Segments (2019)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Investment margin	844		102	-16	1			931
Fees and premium-based revenues	412		737	659	443			2,251
Technical margin	161		239	24				425
Operating income non-modelled life business			1					1
Operating income	1,417	0	1,080	667	444	0	0	3,607
Administrative expenses	462		419	148	283			1,311
DAC amortisation and trail commissions	33		386	302				721
Expenses	495	0	805	449	283	0	0	2,032
Operating result non-life		203	8					211
Operating result banking						152		152
Operating result other							-144	-144
Operating result	922	203	283	218	161	152	-144	1,794
Non-operating items:								
- gains/losses and impairments	205	48	73	-6		7	8	335
- revaluations	864	12	-20	-28			-1	827
- market & other impacts	-237	1	-2			-21	-16	-275
Special items before tax	-57	-67	-35	-4	-15	-15	-69	-262
Acquisition intangibles and goodwill			33				-32	1
Result on divestments	5						4	8
Result before tax	1,703	197	331	180	146	123	-251	2,429
Taxation	308	42	73	48	35	30	-92	444
Minority interests	8	13			2			23
Net result	1,386	143	259	131	108	93	-158	1,962

Special items in 2019 reflect restructuring expenses incurred in respect of the cost reduction target and other project related expenses, such as the implementation of IFRS 17. Acquisition intangibles and goodwill in Insurance Europe includes negative goodwill on the acquisitions in the Czech Republic and Slovakia in 2019. Reference is made to Note 43 'Companies and businesses acquired and divested'.

Notes to the Consolidated annual accounts continued

30 Segments continued

Segments (2018)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Investment margin	872		93	-9	-1			955
Fees and premium-based revenues	444		703	605	454			2,206
Technical margin	188		207	-1				394
Operating income non-modelled life business			1					1
Operating income	1,504	0	1,005	594	453	0	0	3,556
Administrative expenses	494		398	140	298			1,330
DAC amortisation and trail commissions	38		328	287				653
Expenses	532	0	725	427	298	0	0	1,982
Operating result non-life		94	-8					86
Operating result banking						130		130
Operating result other							-164	-164
Operating result	972	94	271	167	155	130	-164	1,626
Non-operating items:								
- gains/losses and impairments	1,022	11	-2	-3			7	1,034
- revaluations	428	2	22	-22			-3	427
- market & other impacts	-140	-15	-16			-15	1	-185
Special items before tax	-63	-91	-28	-3	-31	-17	-87	-321
Acquisition intangibles and goodwill							-984	-984
Result on divestments	56						4	60
Result before tax	2,275	1	247	139	123	99	-1,226	1,657
Taxation	430	-2	55	41	29	32	-63	524
Minority interests	10	6						16
Net result	1,835	-3	191	97	94	66	-1,163	1,117

Special items in 2018 reflect restructuring expenses incurred in respect of the cost reduction target for Netherlands Life, Netherlands Non-life, Belgium, Asset Management, the banking business and Corporate/Holding entities as well as costs for other projects.

The result on divestments of EUR 56 million reflects the recognition of an additional divestment result (before tax) related to the sale of NN Group's former insurance subsidiary ING Life Korea.

Gross premium income and investment income by segment (2019)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Gross premium income	4,373	3,097	3,073	3,939			26	14,508
Investment income	2,858	173	525	173	2	660	-18	4,373

Gross premium income and investment income by segment (2018)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Gross premium income	3,603	3,083	2,931	3,628			27	13,272
Investment income	3,762	148	476	170		630	-17	5,169

Interest income and interest expenses by segment (2019)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Interest income	2,257	109	436	173	2	652	-33	3,596
Interest expenses	-204	-10	-16	-2	-1	-320	34	-519
Interest income and interest expenses	2,053	99	420	171	1	332	1	3,077

Notes to the Consolidated annual accounts continued

30 Segments continued

Interest income and interest expenses by segment (2018)

	Netherlands Life	Netherlands Non-life	Insurance Europe	Japan Life	Asset Management	Banking	Other	Total segments
Interest income	2,199	122	449	164		623	-30	3,527
Interest expenses	-128	-10	-18	-2	-1	-340	24	-475
Interest income and interest expenses	2,071	112	431	162	-1	283	-6	3,052

Total assets and Total liabilities by segment

	Total assets 2019	Total liabilities 2019	Total assets 2018	Total liabilities 2018
Netherlands Life	155,358	130,164	139,507	121,610
Netherlands Non-life	7,523	6,449	7,340	6,429
Insurance Europe	31,231	28,515	28,692	26,463
Japan Life	21,259	18,617	18,971	16,602
Asset management	570	239	637	265
Banking	24,569	23,793	21,616	20,827
Other	51,695	18,871	36,859	11,899
Total segments	292,205	226,648	253,622	204,095
Eliminations	-43,608	-10,843	-29,376	-4,697
Total assets and Total liabilities	248,597	215,805	224,246	199,398

Alternative Performance Measures (Non-GAAP measures)

NN Group uses three Alternative Performance Measures (APMs, also referred to as Non-GAAP measures) in its external financial reporting: Operating result, Adjusted allocated equity and Administrative expenses.

Operating result

Operating result (before tax) is used by NN Group to evaluate the financial performance of its segments. Each segment's operating result is calculated by adjusting the reported result before tax for the following items:

- Non-operating items: related to (general account) investments that are held for own risk (net of policyholder profit sharing):
 - Gains/losses and impairments: realised gains and losses as well as impairments on financial assets that are classified as Available-for-sale and debt securities that are classified as loans. These investments include debt and equity securities (including fixed income and equity funds), private equity (< 20% ownership), real estate funds and loans quoted in active markets.
 - Revaluations: revaluations on assets marked-to-market through the Consolidated profit and loss account. These investments include private equity (associates), real estate (property and associates), derivatives unrelated to product hedging programmes (i.e. interest rate swaps, foreign exchange hedges) and direct equity hedges.
 - Market & other impacts: these impacts mainly include movements in the liability for guarantees on separate account pension contracts and unit-linked guarantee provisions in the Netherlands and related hedges, the accounting volatility related to the reinsurance of minimum guaranteed benefits of Japan Closed Block VA and the changes in valuation of certain inflation linked liabilities and related derivatives.
- Special items: items of income or expense before tax that are significant and arise from events or transactions that are clearly distinct from the ordinary business activities and therefore are not expected to recur frequently or regularly. This includes, for example, restructuring expenses, rebranding costs, results related to early redemption of debt, and gains/losses from employee pension plan amendments or curtailments.
- Acquisition intangibles and goodwill: At the acquisition date, all assets and liabilities (including investments, loans and funding liabilities) of Delta Lloyd were remeasured to fair value. Acquisition related intangible assets (mainly brand names, distribution agreements and client relationships) were recognised and will be amortised through the profit and loss account over their useful life. Goodwill on acquisition was also recognised; goodwill is not amortised but tested annually for impairment. Any amortisation and goodwill impairment is recognised in the line 'Amortisation of acquisition intangibles and other impairments'.
- Result on divestments: result before tax related to divested operations.

The operating result for the life insurance business is analysed through a margin analysis, which includes the investment margin, fees and premium-based revenues and the technical margin. Disclosures on comparative years also reflect the impact of current year's divestments. Operating result as presented below is an Alternative Performance Measure (non-GAAP financial measure) and is not a measure of financial performance under IFRS-EU. Because it is not determined in accordance with IFRS-EU, operating result as presented by NN Group may not be comparable to other similarly titled measures of performance of other companies. The net result on transactions between segments is eliminated in the net result of the relevant segment.

Notes to the Consolidated annual accounts continued

30 Segments continued

Adjusted allocated equity

NN Group evaluates the efficiency of the operational deployment of its equity by calculating Return On Equity (ROE). The net operating ROE is calculated using Net operating result in the numerator and average Adjusted allocated equity in the denominator. Net operating result of NN Group is the Net operating result, adjusted to reflect the deduction of the accrued coupon on undated subordinated notes classified in equity. Adjusted allocated equity is derived from IFRS equity by adjusting for:

- Revaluation reserves
- Undated subordinated notes classified as equity under IFRS
- Goodwill and Intangible assets recognised upon the acquisition of Delta Lloyd

Allocated equity per segment represents the part of equity that is economically deployed by the segments. This allocation does not impact equity in total for NN Group. Adjusted allocated equity is an Alternative Performance Measure that is not a measure under IFRS-EU. Adjusted allocated equity as applied by NN Group may not be comparable to other similarly titled measures of other companies. Adjusted allocated equity is reconciled to IFRS Total equity as follows:

Adjusted allocated equity

	2019	2018
IFRS Total equity	32,792	24,848
Revaluation reserves, Goodwill and Intangible assets recognised upon the acquisition of Delta Lloyd	-15,742	-8,668
Undated subordinated notes	-1,764	-1,764
Adjusted allocated equity	15,286	14,416

Administrative expenses

NN Group monitors the level of expenses and assesses cost savings through the Administrative expenses. Administrative expenses are the expenses included in operating result, unless already included in the technical margin or the investment margin in the margin analysis of the operating result.

Administrative expenses

	2019
Staff expenses	1,564
Other operating expenses	923
IFRS operating expenses	2,487
Presented in non-operating items (including special items)	-277
Presented in the Technical margin (claims handling expenses)	-102
Presented in the Investment margin (investment expenses)	-19
Other	-13
Administrative expenses	2,076

Administrative expenses are calculated as the total of IFRS Staff expenses and IFRS Other operating expenses, adjusted for expenses already recognised in the technical margin and the investment margin and for expenses that are not included in operating result (non-operating expenses and special items). From the total administrative expenses of EUR 2,076 million, EUR 1,311 million relates to the segments Netherlands Life, Insurance Europe Life, Japan Life and Asset Management. The remainder of EUR 765 million is included in the operating result non-life, banking and other.

In addition, NN Group discloses a number of other metrics (that are not defined in IFRS and/or not defined in regulatory capital legislation). As these are not derived from comparable metrics under IFRS, these cannot be reconciled to an IFRS equivalent. These include the following:

- Annual Premium Equivalent (APE): the total of the IFRS annual recurring premiums and 10% of the IFRS single premiums received in a given period
- Assets under Management (AuM): the total market value of all investments being managed by NN Group's asset management segment on behalf of NN Group entities and clients
- Combined ratio: the sum of the claims ratio (claims incurred, net of reinsurance, excluding unwind of interest accrual, divided by net earned premiums) and the expense ratio (sum of acquisition costs and administrative expenses, divided by net earned premiums)
- Financial leverage ratio: the percentage of financial leverage in the total of financial leverage and equity
- Fixed cost coverage ratio: the ability of Earnings Before Interest and Tax (EBIT) to cover funding costs on financial leverage; calculated on a last 12-months basis
- Free cash flow: the change in the cash capital position at the holding company over the period, excluding acquisitions and capital transactions with shareholders and debtholders
- Cash capital position at the holding company: net current assets available at the holding company
- Net interest margin (NIM): interest result of the banking operations divided by the average total interest bearing assets of the banking operations

Notes to the Consolidated annual accounts continued

30 Segments continued

- Net operating ROE: the (annualised) net operating result, adjusted to reflect the deduction of the accrued coupon on undated subordinated notes classified in equity, divided by (average) adjusted allocated equity
- Value of New Business (VNB): the additional economic value created through writing new business during the period

31 Principal subsidiaries and geographical information

The table below provides additional information on principal subsidiaries, the nature of the main activities and employees by country. Information on guarantees issued by NN Group N.V. to subsidiaries under article 403 of Book 2 of the Dutch Civil Code is filed with the Chamber of Commerce.

Principal subsidiaries and geographical information (2019)

Country/Name of principal subsidiaries	Main activity	Average number of employees ¹	Total income	Total assets	Result before tax	Taxation ²	Income tax paid
Nationale-Nederlanden Levensverzekering Maatschappij N.V.	Life insurance						
Nationale-Nederlanden Bank N.V.	Banking						
Nationale-Nederlanden Schadeverzekering Maatschappij N.V.	General insurance						
REI Investment I B.V.	Real estate						
NN Re (Netherlands) N.V.	Reinsurance						
ABN AMRO Levensverzekering N.V.	Life insurance						
The Netherlands		8,344	12,319	192,195	1,793	283	-26
NN Life Insurance Company, Ltd.	Life insurance						
Japan		900	4,088	22,708	170	46	-64
NN Insurance Belgium nv	Life insurance						
Belgium		672	1,361	17,480	114	29	5
Nationale Nederlanden Vida, Compania de Seguros y Reaseguros. S.A.	Life insurance						
Nationale Nederlanden Generales, Compania de Seguros y Reaseguros, S.A.	General insurance						
Spain		525	676	5,054	40	13	6
Nationale-Nederlanden Towarzystwo Ubezpieczeń na Życie S.A.	Life insurance						
Nationale-Nederlanden Powszechnie Towarzystwo Emerytalne S.A.	Pensions						
Poland		961	497	2,281	97	21	12
NN Hellenic Life Insurance Co. S.A.	Life insurance						
Greece		415	444	2,010	8	6	
NN Životní pojišťovna N.V. (pobočka pro Českou republiku)	Life insurance						
Czech Republic		572	232	1,447	24	4	5
NN Biztosító Zártkörűen Működő Részvénytársaság	Life insurance						
Hungary		351	263	1,325	12	3	3
NN Asigurari de Viata S.A.	Life insurance						
Romania		448	206	985	23	4	4
NN Životná poisťovna, a.s.	Life insurance						
Slovak Republic		291	166	788	15	3	4
Germany		10	38	718	37	7	2
France		9	69	697	54	16	
Italy		6	5	259	9	3	2
United Kingdom		10	3	226	16	4	4
Denmark			12	194	11	1	
Bulgaria		134	24	99	2		
Turkey		503	51	84	-6	-1	
Ireland				21			

Notes to the Consolidated annual accounts continued

31 Principal subsidiaries and geographical information continued

Country/Name of principal subsidiaries	Main activity	Average number of employees ¹	Total income	Total assets	Result before tax	Taxation ²	Income tax paid
Singapore		31	1	12	4	1	1
United States		13		6	4	1	2
Mexico		1	1	4	-1		
Switzerland		11	1	3	1		1
Argentina		2		1			
Luxembourg		20	1				2
Uruguay		1			2		
Total		14,230	20,458	248,597	2,429	444	-37

1 The average number of employees is on a full-time equivalent basis.

2 Taxation is the taxation amount charged to the profit and loss account.

Principal subsidiaries and geographical information (2018)

Country/Name of principal subsidiaries	Main activity	Average number of employees ¹	Total income	Total assets	Result before tax	Taxation ²	Income tax paid
Nationale-Nederlanden Levensverzekering Maatschappij N.V.	Life insurance						
Delta Lloyd Levensverzekering N.V.	Life insurance						
Nationale-Nederlanden Bank N.V.	Banking						
Nationale-Nederlanden Schadeverzekering Maatschappij N.V.	General insurance						
Delta Lloyd Schadeverzekering N.V.	General insurance						
REI Investment I B.V.	Real estate						
NN Re (Netherlands) N.V.	Reinsurance						
The Netherlands		8,613	12,075	170,922	1,023	380	-4
NN Life Insurance Company, Ltd.	Life insurance						
Japan		901	3,779	21,463	138	41	-33
NN Insurance Belgium nv	Life insurance						
Belgium		693	1,328	16,510	87	11	21
Nationale Nederlanden Vida, Compania de Seguros y Reaseguros. S.A.	Life insurance						
Nationale Nederlanden Generales, Compania de Seguros y Reaseguros, S.A.	General insurance						
Spain		509	680	4,917	45	6	6
Nationale-Nederlanden Towarzystwo Ubezpieczeń na Życie S.A.	Life insurance						
Nationale-Nederlanden Powszechnie Towarzystwo Emerytalne S.A.	Pensions						
Poland		883	506	2,313	109	22	37
NN Hellenic Life Insurance Co. S.A.	Life insurance						
Greece		417	448	1,687	3	14	
NN Biztosító Zártkörűen Működő Részvénytársaság	Life insurance						
Hungary		349	277	1,337	24	2	2
NN Životní pojišťovna N.V. (pobočka pro Českou republiku)	Life insurance						
Czech Republic		499	183	1,166	32	7	3
NN Asigurari de Viata S.A.	Life insurance						
Romania		470	196	874	19	3	5
NN Životná poisťovňa, a.s.	Life insurance						
Slovak Republic		214	94	502	10	3	
Germany		9	35	682	33	9	1
France		8	42	549	28	4	1

Notes to the Consolidated annual accounts continued

31 Principal subsidiaries and geographical information continued

Country/Name of principal subsidiaries	Main activity	Average number of employees ¹	Total income	Total assets	Result before tax	Taxation ²	Income tax paid
Italy		6	-1	464	2	3	3
United Kingdom		10	15	393	31	9	7
Denmark			18	178	15		
Turkey		501	45	82	5		
Bulgaria		126	24	81	3		
Luxembourg		41	303	73	38	6	3
Ireland				21			
Singapore		33		10	3	1	1
Hong Kong				7	2	1	
United States		15		5	4	1	1
Switzerland		12	1	5	4	1	1
Mexico		1	1	4	-1		
Argentina		2	1	1			
Total		14,312	20,050	224,246	1,657	524	55

1 The average number of employees is on a full-time equivalent basis.

2 Taxation is the taxation amount charged to the profit and loss account.

Notes to the Consolidated annual accounts continued

32 Taxation

Deferred tax (2019)

	Net liability 2018	Changes through equity	Changes through net result	Changes in the composition of the group and other changes	Exchange rate differences	Net liability 2019
Investments	2,884	646	-85	-77	10	3,378
Real estate investments	709		69	-1		777
Financial assets and liabilities at fair value through profit or loss	21			1		22
Deferred acquisition costs	387		13	13	9	422
Fiscal reserves	10					10
Depreciation	-2		25			23
Insurance liabilities	-2,646	-500	-63	54		-3,155
Cash flow hedges	1,170	1,303				2,473
Pension and post-employment benefits	20	-11		-4		5
Other provisions	-51	1	-22	28		-44
Receivables	-25		1			-24
Loans	-8	2	-14			-20
Unused tax losses carried forward	-915		832	6		-77
Other	124	4	25	1	2	156
Deferred tax	1,678	1,445	781	21	21	3,946
Presented in the balance sheet as:						
Deferred tax liabilities	1,809					4,030
Deferred tax assets	-131					-84
Deferred tax	1,678					3,946

Notes to the Consolidated annual accounts continued

32 Taxation continued

Deferred tax (2018)

	Net liability 2017	Changes through equity	Changes through net result	Changes in the composition of the group and other changes	Exchange rate differences	Net liability 2018
Investments	3,942	-634	-162	-280	18	2,884
Real estate investments	277		20	412		709
Financial assets and liabilities at fair value through profit or loss	36		-15			21
Deferred acquisition costs	349		12	4	22	387
Fiscal reserves	12		-2			10
Depreciation	-2					-2
Insurance liabilities	-4,134	319	1,164	4	1	-2,646
Cash flow hedges	1,241	-71				1,170
Pension and post-employment benefits	14	3	5		-2	20
Other provisions	-26	1	-26			-51
Receivables	-30		4	-1	2	-25
Loans	-7		-1			-8
Unused tax losses carried forward	-113		-810	8		-915
Other	146	-10	-7	-10	5	124
Deferred tax	1,705	-392	182	137	46	1,678

Presented in the balance sheet as:

Deferred tax liabilities	1,830	1,809
Deferred tax assets	-125	-131
Deferred tax	1,705	1,678

In 2018 and 2019, changes to the tax valuation of certain insurance liabilities in the Netherlands were implemented. These changes impacted the deferred tax on insurance liabilities and the (deferred tax on) tax losses carried forward. There was no impact on total deferred tax.

Deferred tax on unused tax losses carried forward

	2019	2018
Total unused tax losses carried forward	566	4,024
Unused tax losses carried forward not recognised as a deferred tax asset	-252	-260
Unused tax losses carried forward recognised as a deferred tax asset	314	3,764
Average tax rate	24.6%	24.3%
Deferred tax asset	77	915

Tax losses carried forward will expire as follows as at 31 December:

Total unused tax losses carried forward analysed by term of expiration

	No deferred tax asset recognised		Deferred tax asset recognised	
	2019	2018	2019	2018
Within 1 year	13	22	11	
More than 1 year but less than 5 years	56	68	1	16
More than 5 years but less than 10 years	16	37	7	3,026
Unlimited	167	133	295	722
Total unused tax losses carried forward	252	260	314	3,764

Deferred tax assets are recognised for temporary deductible differences, for tax losses carried forward and unused tax credits only to the extent that realisation of the related tax benefit is probable.

Notes to the Consolidated annual accounts continued

32 Taxation continued

Taxation on result

	2019	2018
Current tax	-337	342
Deferred tax	781	182
Taxation on result	444	524

NN Group N.V., together with certain of its subsidiaries, is a part of a fiscal unity for Dutch income tax purposes. The members of the fiscal unity are jointly and severally liable for any income taxes payable by the Dutch fiscal unity.

Reference is made to Note 31 'Principal subsidiaries and geographical information' for more information on the taxation per country.

Reconciliation of the weighted average statutory tax rate to NN Group's effective tax rate

	2019	2018
Result before tax	2,429	1,657
Weighted average statutory tax rate	24.8%	24.4%
Weighted average statutory tax amount	602	404
Participation exemption	-100	-106
Other income not subject to tax and other	-5	-19
Expenses not deductible for tax purposes	3	225
Impact on deferred tax from change in tax rates	-39	21
Deferred tax benefit for previously not unrecognised amounts	5	-5
Tax for non-recognised losses	1	-6
Write-off/reversal of deferred tax assets		7
Adjustments to prior periods	-23	3
Effective tax amount	444	524
Effective tax rate	18.3%	31.6%

In 2019, the effective tax rate of 18.3% was lower than the weighted average statutory tax rate of 24.8%. This is mainly a result of tax exempt results of associates and participations. In 2018, the effective tax rate of 31.6% was higher than the weighted average statutory tax rate of 24.4%. This was mainly caused by the non-tax deductible costs of the goodwill impairment (included in 'Expenses not deductible for tax purposes').

In 2018, the Dutch corporate income tax rates were reduced. This implied that the corporate tax rate in 2019 would remain 25%, but that the tax rate for 2020 would become 22.55% and for 2021 and subsequent years 20.5%. As a result, the deferred tax assets and liabilities of NN Group were remeasured in 2018 to the expected new tax rates. As most of NN Group's deferred tax assets and liabilities are expected to materialise over a long period, the largest part of the deferred tax position was remeasured to the 20.5% rate that would apply as of 2021. The net impact of the tax rate change in 2018 was EUR 218 million (positive), of which EUR 25 million (negative) was recognised in the profit and loss account.

In 2019, these enacted corporate tax rates have been amended, so that the tax rate for 2020 will remain at 25% (instead of 22.55%) and for 2021 21.7% (instead of 20.5%). The impact of this amendment is recognised in 2019. In addition, the 2019 tax charge is impacted by the difference between the estimated realisation in future years (with different tax rates) that was used in 2018 versus the updated actual/estimated realisation in 2019. The combined impact related to the 2018 and 2019 tax rate changes in the 2019 profit and loss account was EUR 34 million positive.

Notes to the Consolidated annual accounts continued

32 Taxation continued

Taxation on components of other comprehensive income

	2019	2018
Unrealised revaluations property in own use	-1	-2
Unrealised revaluations available-for-sale investments and other	-1,203	418
Realised gains/losses transferred to the profit and loss account	61	208
Changes in cash flow hedge reserve	-1,303	71
Deferred interest credited to policyholders	501	-319
Remeasurement of the net defined benefit asset/liability	10	
Income tax	-1,935	376

33 Fair value of financial assets and liabilities

The following table presents the estimated fair value of NN Group's financial assets and liabilities. Certain balance sheet items are not included in the table, as they do not meet the definition of a financial asset or liability. The aggregation of the fair value presented below does not represent and should not be construed as representing, the underlying value of NN Group.

Fair value of financial assets and liabilities

	Estimated fair value		Balance sheet value	
	2019	2018	2019	2018
Financial assets				
Cash and cash equivalents	6,436	8,886	6,436	8,886
Financial assets at fair value through profit or loss:				
– investments for risk of policyholders	34,433	30,230	34,433	30,230
– non-trading derivatives	10,189	5,096	10,189	5,096
– designated as at fair value through profit or loss	1,184	722	1,184	722
Available-for-sale investments	117,644	104,329	117,644	104,329
Loans	66,018	60,264	61,768	58,903
Total financial assets	235,904	209,527	231,654	208,166
Financial liabilities				
Subordinated debt	2,807	2,568	2,409	2,445
Debt securities issued	2,079	2,003	1,992	1,990
Other borrowed funds	7,725	5,774	7,614	5,717
Investment contracts with discretionary participation features for risk of policyholders	245	215	245	215
Investment contracts for risk of company	1,063	1,092	1,025	1,078
Investment contracts for risk of policyholders	1,135	918	1,135	918
Customer deposits and other funds on deposit	15,799	15,001	15,161	14,729
Financial liabilities at fair value through profit or loss:				
– non-trading derivatives	3,232	2,163	3,232	2,163
Total financial liabilities	34,085	29,734	32,813	29,255

For the other financial assets and financial liabilities not included in the table above, including short-term receivables and payables, the carrying amount is a reasonable approximation of fair value.

Reference is made to Note 1 'Accounting policies' for the upcoming changes as a result of IFRS 9 'Financial instruments'. One of the requirements in IFRS 9 is to assess whether investments in debt securities and loans meet the definition of 'Solely Payments of Principal and Interest', also referred to as 'SPPI assets'. SPPI assets are financial assets with contractual terms that give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding (as defined in IFRS 9), excluding assets that are held for trading and/or that are managed and whose performance is evaluated on a fair value basis. The table below provides a split of the fair value of financial assets into three categories: SPPI assessment applicable under IFRS 9 and conditions met (SPPI compliant assets), SPPI assessment applicable under IFRS 9 and conditions not met (SPPI non-compliant assets), and SPPI assessment not applicable. Whilst IFRS 9 becomes effective for NN Group on the same date as IFRS 17, the information in the table below is based on the assets held, and business models in place, on 31 December 2019.

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Fair value of financial assets – SPPI assessment

	SPPI compliant assets		SPPI non-compliant assets		SPPI assessment not applicable	
	2019	2018	2019	2018	2019	2018
Cash and cash equivalents					6,436	8,886
Financial assets at fair value through profit or loss:						
– investments for risk of policyholders					34,433	30,230
– non-trading derivatives					10,189	5,096
– designated as at fair value through profit or loss					1,184	722
Available-for-sale investments	108,174	95,477	4,858	3,974	4,612	4,878
Loans	65,110	59,419	219	215	689	630
Financial assets	173,284	154,896	5,077	4,189	57,543	50,442

The estimated fair value represents the price at which an orderly transaction to sell the financial asset or to transfer the financial liability would take place between market participants at the balance sheet date (exit price). The fair value of financial assets and liabilities is based on unadjusted quoted market prices, where available. Such quoted market prices are primarily obtained from exchange prices for listed instruments. Where an exchange price is not available market prices are obtained from independent market vendors, brokers or market makers. Because substantial trading markets do not exist for all financial instruments, various techniques have been developed to estimate the approximate fair value of financial assets and liabilities that are not actively traded. The fair value presented may not be indicative of the net realisable value. In addition, the calculation of the estimated fair value is based on market conditions at a specific point in time and may not be indicative of the future fair value.

The following methods and assumptions were used by NN Group to estimate the fair value of the financial instruments:

Cash and cash equivalents

Cash and cash equivalents are recognised at their nominal value which approximates the fair value.

Financial assets and liabilities at fair value through profit or loss**Derivatives**

Derivative contracts can either be exchange-traded or over the counter (OTC). The fair value of exchange-traded derivatives is determined using quoted market prices in an active market and those derivatives are classified in Level 1 of the fair value hierarchy. For those instruments that are not actively traded, the fair value is estimated based on valuation techniques. OTC derivatives and derivatives trading in an inactive market are valued using valuation techniques because quoted market prices in an active market are not available for such instruments. The valuation techniques and inputs depend on the type of derivative and the nature of the underlying instruments. The principal techniques used to value these instruments are based on discounted cash flows, Black-Scholes option models and Monte Carlo simulation. These valuation models calculate the present value of expected future cash flows, based on 'no arbitrage' principles. These models are commonly used in the financial industry. Inputs to valuation models are determined from observable market data where possible. Certain inputs may not be observable in the market directly, but can be determined from observable prices via valuation model calibration procedures. The inputs used include prices available from exchanges, dealers, brokers or providers of pricing, yield curves, credit spreads, default rates, recovery rates, dividend rates, volatility of underlying interest rates, equity prices and foreign currency exchange rates. These inputs are determined with reference to quoted prices, recently executed trades, independent market quotes and consensus data, where available.

Available-for-sale investments**Equity securities**

The fair value of publicly traded equity securities is determined using quoted market prices when available. Where no quoted market prices are available, fair value is determined based on quoted prices for similar securities or other valuation techniques. The fair value of private equity is based on quoted market prices, if available. In the absence of quoted prices in an active market, fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects, price, earnings comparisons and revenue multiples and by reference to market valuations for similar entities quoted in an active market.

Debt securities

The fair value for debt securities is based on quoted market prices, where available. Quoted market prices may be obtained from an exchange, dealer, broker, industry group, pricing service or regulatory service. If quoted prices in an active market are not available, fair value is based on an analysis of available market inputs, which may include values obtained from one or more pricing services or by a valuation technique that discounts expected future cash flows using market interest rate curves, referenced credit spreads, maturity of the investment and estimated prepayment rates where applicable.

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Loans

For loans and advances that are repriced frequently and have had no significant changes in credit risk, carrying values represent a reasonable estimate of the fair value. The fair value of other loans is estimated by discounting expected future cash flows using a discount rate that reflects credit risk, liquidity and other current market conditions. The fair value of mortgage loans is estimated by taking into account prepayment behaviour. Loans with similar characteristics are aggregated for calculation purposes.

Subordinated debt and debt securities issued

The fair value of subordinated debt and debt securities issued is estimated using discounted cash flows based on interest rates and credit spreads that apply to similar instruments.

Other borrowed funds

The fair value of other borrowed funds is generally based on quoted market prices or, if not available, on estimated prices by discounting expected future cash flows using a current market interest rate and credit spreads applicable to the yield, credit quality and maturity.

Investment contracts

For investment contracts for risk of the company the fair value has been estimated using a discounted cash flow approach based on interest rates currently being offered for similar contracts with maturities consistent with those remaining for the contracts being valued. For investment contracts for risk of policyholders the fair value generally equals the fair value of the underlying assets. For other investment-type contracts, the fair value is estimated based on the cash surrender values.

Customer deposits and other funds on deposit

The carrying values of customer deposits and other funds on deposit with no stated maturity approximate their fair value. The fair values of deposits with stated maturities have been estimated based on discounting future cash flows using a discount rate that reflects credit risk, liquidity and other current market conditions.

Financial assets and liabilities at fair value

The fair value of the financial instruments carried at fair value was determined as follows:

Methods applied in determining the fair value of financial assets and liabilities at fair value (2019)

	Level 1	Level 2	Level 3	Total
Financial assets				
Investments for risk of policyholders	33,406	225	802	34,433
Non-trading derivatives	18	10,121	50	10,189
Financial assets designated as at fair value through profit or loss	1,045	139		1,184
Available-for-sale investments	77,468	38,842	1,334	117,644
Financial assets	111,937	49,327	2,186	163,450
Financial liabilities				
Investment contracts with discretionary participation features for risk of policyholders		245		245
Investment contracts (for contracts at fair value)	1,135			1,135
Non-trading derivatives	11	3,162	59	3,232
Financial liabilities	1,146	3,407	59	4,612

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Methods applied in determining the fair value of financial assets and liabilities at fair value (2018)

	Level 1	Level 2	Level 3	Total
Financial assets				
Investments for risk of policyholders	29,339	103	788	30,230
Non-trading derivatives	68	4,943	85	5,096
Financial assets designated as at fair value through profit or loss	609	113		722
Available-for-sale investments	69,762	33,480	1,087	104,329
Financial assets	99,778	38,639	1,960	140,377
Financial liabilities				
Investment contracts with discretionary participation features for risk of policyholders		215		215
Investment contracts (for contracts at fair value)	918			918
Non-trading derivatives	16	2,048	99	2,163
Financial liabilities	934	2,263	99	3,296

NN Group has categorised its financial instruments that are either measured in the balance sheet at fair value or for which the fair value is disclosed, into a three level hierarchy based on the priority of the inputs to the valuation. The fair value hierarchy gives the highest priority to (unadjusted) quoted prices in active markets for identical assets or liabilities and the lowest priority to valuation techniques supported by unobservable inputs. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide reliable pricing information on an ongoing basis.

The fair value hierarchy consists of three levels, depending on whether the fair value is determined based on (unadjusted) quoted prices in an active market (Level 1), valuation techniques with observable inputs (Level 2) or valuation techniques that incorporate inputs which are unobservable and which have a more than insignificant impact on the fair value of the instrument (Level 3). Financial assets in Level 3 include, for example, illiquid debt securities, complex OTC and credit derivatives, certain complex loans (for which current market information about similar assets to use as observable, corroborated data for all significant inputs into a valuation model is not available), mortgage loans and consumer lending, private equity instruments and investments in real estate funds.

Observable inputs reflect market data obtained from independent sources. Unobservable inputs are inputs which are based on NN Group's own assumptions about the factors that market participants would use in pricing an asset or liability, developed based on the best information available in the circumstances. Unobservable inputs may include volatility, correlation, spreads to discount rates, default rates and recovery rates, prepayment rates and certain credit spreads. Transfers into and transfers out of levels in the fair value hierarchy are recognised on the date of the event or change of circumstances that caused the transfer.

Level 1 – (Unadjusted) Quoted prices in active markets

This category includes financial instruments whose fair value is determined directly by reference to published quotes in an active market that NN Group can access. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency and those prices represent actual and regularly occurring market transactions with sufficient frequency and volume to provide reliable pricing information on an ongoing basis.

Level 2 – Valuation technique supported by observable inputs

This category includes financial instruments whose fair value is determined using a valuation technique (e.g. a model), where inputs in the model are taken from an active market or are observable. If certain inputs in the model are unobservable the instrument is still classified in this category, provided that the impact of those unobservable inputs elements on the overall valuation is insignificant. Included in this category are items whose value is derived from quoted prices of similar instruments, but for which the prices are modified based on other market observable external data and items whose value is derived from quoted prices but for which there was insufficient evidence of an active market.

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Level 3 – Valuation technique supported by unobservable inputs

This category includes financial instruments whose fair value is determined using a valuation technique (e.g. a model) for which more than an insignificant part of the inputs in terms of the overall valuation are not market observable. This category also includes financial assets and liabilities whose fair value is determined by reference to price quotes but for which the market is considered inactive. An instrument is classified in its entirety as Level 3 if a significant portion of the instrument's fair value is driven by unobservable inputs. Unobservable in this context means that there is little or no current market data available from which the price at which an orderly transaction would likely occur can be derived.

Changes in Level 3 Financial assets (2019)

	Investments for risk of policyholders	Non-trading derivatives	Available-for-sale investments	Total
Level 3 Financial assets – opening balance	788	85	1,087	1,960
Amounts recognised in the profit and loss account	21	-35	-55	-69
Revaluations recognised in other comprehensive income (equity)			-2	-2
Purchase			334	334
Sale	-7		-9	-16
Maturity/settlement			-15	-15
Exchange rate differences			-6	-6
Level 3 Financial assets – closing balance	802	50	1,334	2,186

Changes in Level 3 Financial assets (2018)

	Investments for risk of policyholders	Non-trading derivatives	Available-for-sale investments	Total
Level 3 Financial assets – opening balance	803	148	1,348	2,299
Amounts recognised in the profit and loss account	-4	-62	90	24
Revaluations recognised in other comprehensive income (equity)			-90	-90
Purchase			69	69
Sale	-11	-1	-57	-69
Maturity/settlement			-94	-94
Other transfers and reclassifications			-272	-272
Transfers into Level 3			96	96
Transfers out of Level 3			-3	-3
Level 3 Financial assets – closing balance	788	85	1,087	1,960

Other transfers and reclassifications

In 2018, Other transfers and reclassifications mainly relate to the transfer of investments in real estate funds to associates and joint ventures, relating to Vesteda.

Transfers into Level 3

In 2018, Transfers into Level 3 reflect certain Asset-backed securities for which market liquidity has decreased and as a result are classified as Level 3.

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Changes in Level 3 Financial liabilities (2019)

	Non-trading derivatives
Level 3 Financial liabilities – opening balance	99
Amounts recognised in the profit and loss account	-29
Sale	-11
Level 3 Financial liabilities – closing balance	59

Changes in Level 3 Financial liabilities (2018)

	Non-trading derivatives
Level 3 Financial liabilities – opening balance	150
Amounts recognised in the profit and loss account	-51
Level 3 Financial liabilities – closing balance	99

Level 3 – Amounts recognised in the profit and loss account during the year (2019)

	Held at balance sheet date	Derecognised during the period	Total
Financial assets			
Investments for risk of policyholders	21		21
Non-trading derivatives	-35		-35
Available-for-sale investments	-55		-55
Financial assets	-69	0	-69
Financial liabilities			
Non-trading derivatives	-29		-29
Financial liabilities	-29	0	-29

Level 3 – Amounts recognised in the profit and loss account during the year (2018)

	Held at balance sheet date	Derecognised during the period	Total
Financial assets			
Investments for risk of policyholders	-4		-4
Non-trading derivatives	-62		-62
Available-for-sale investments	-5	95	90
Financial assets	-71	95	24
Financial liabilities			
Non-trading derivatives	-51		-51
Financial liabilities	-51	0	-51

Level 3 Financial assets at fair value

Financial assets measured at fair value in the balance sheet as at 31 December 2019 of EUR 163,450 million (2018: EUR 140,377 million) include an amount of EUR 2,186 million (1.3%) that is classified as Level 3 (2018: EUR 1,960 million (1.4%)). Changes in Level 3 are disclosed above in the table 'Level 3 Financial assets'.

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Financial assets in Level 3 include both assets for which the fair value was determined using valuation techniques that incorporate unobservable inputs and assets for which the fair value was determined using quoted prices, but for which the market was not actively trading at or around the balance sheet date. Unobservable inputs are inputs which are based on NN Group's own assumptions about the factors that market participants would use in pricing an asset, developed based on the best information available in the circumstances. Unobservable inputs may include volatility, correlation, spreads to discount rates, default rates and recovery rates, prepayment rates and certain credit spreads. Fair values that are determined using valuation techniques using unobservable inputs are sensitive to the inputs used. Fair values that are determined using quoted prices are not sensitive to unobservable inputs, as the valuation is based on unadjusted external price quotes. These are classified in Level 3 as a result of the illiquidity in the relevant market, but are not significantly sensitive to NN Group's own unobservable inputs.

Unrealised gains and losses that relate to 'Level 3 Financial assets' are included in the profit and loss account as follows:

- Those relating to Investments for risk of policyholders are included in 'Underwriting expenditure'
- Those relating to Non-trading derivatives are included in 'Valuation results on non-trading derivatives'
- Those relating to financial assets designated as at fair value through profit or loss are included in 'Valuation results on non-trading derivatives – Valuation results on assets and liabilities designated as at fair value through profit or loss (excluding trading)'

Unrealised gains and losses that relate to available-for-sale investments are recognised in other comprehensive income (equity) and included in reserves in 'Unrealised revaluations available-for-sale investments and other'.

Investments for risk of policyholders

Investments for risk of policyholders classified as 'Level 3 Financial assets' amounted EUR 802 million as at 31 December 2019 (2018: EUR 788 million). Net result is unaffected when reasonable possible alternative assumptions would have been used in measuring these investments.

Non-trading derivatives

Non-trading derivatives classified as 'Level 3 Financial assets' are mainly used to hedge the fair value risk of the mortgage loan portfolio at NN Bank. These derivatives classified as Level 3 amounted EUR 50 million as at 31 December 2019 (2018: EUR 85 million).

Available-for-sale investments

The available-for-sale investments classified as 'Level 3 Financial assets' amounted EUR 1,334 million as at 31 December 2019 (2018: EUR 1,087 million) mainly consists of investments in debt securities and shares in real estate investment funds and private equity investment funds of which the fair value is determined using (unadjusted) quoted prices in inactive markets for the securities or quoted prices obtained from the asset managers of the funds. It is estimated that a 10% change in valuation of these investments would have no significant impact on net result but would increase or reduce shareholders' equity by EUR 133 million (2018: EUR 109 million), being approximately 0.4% (before tax) (2018: 0.5% (before tax)), of total equity.

Level 3 Financial liabilities at fair value

Non-trading derivatives

The total amount of financial liabilities classified as Level 3 at 31 December 2019 of EUR 59 million (2018: EUR 99 million) relates to non-trading derivative positions. In 2019, EUR 50 million (2018: EUR 85 million) relates to derivatives used to hedge the interest rate risk associated with the funding position of NN Bank. EUR 9 million (2018: EUR 15 million) relates to longevity hedges closed by NN Group. It is estimated that a 5% increase in mortality assumptions for these longevity hedges reduces result and equity before tax by EUR 17 million (2018: EUR 16 million) and a 5% decrease in mortality assumptions increases result and equity before tax by EUR 16 million (2018: EUR 14 million).

Notes to the Consolidated annual accounts continued

33 Fair value of financial assets and liabilities continued

Financial assets and liabilities at amortised cost

The fair value of the financial instruments carried at amortised cost in the balance sheet (where fair value is disclosed) was determined as follows:

Methods applied in determining the fair value of financial assets and liabilities at amortised cost (2019)

	Level 1	Level 2	Level 3	Total
Financial assets				
Cash and cash equivalents	6,436			6,436
Loans	5	5,038	60,975	66,018
Financial assets	6,441	5,038	60,975	72,454
Financial liabilities				
Subordinated debt	2,807			2,807
Debt securities issued	2,079			2,079
Other borrowed funds	4,242	3,481	2	7,725
Investment contracts for risk of company	43		1,020	1,063
Customer deposits and other funds on deposit	9,136	6,663		15,799
Financial liabilities	18,307	10,144	1,022	29,473

Methods applied in determining the fair value of financial assets and liabilities at amortised cost (2018)

	Level 1	Level 2	Level 3	Total
Financial assets				
Cash and cash equivalents	8,886			8,886
Loans	421	5,601	54,242	60,264
Financial assets	9,307	5,601	54,242	69,150
Financial liabilities				
Subordinated debt	2,555	13		2,568
Debt securities issued	2,003			2,003
Other borrowed funds	1,497	4,274	3	5,774
Investment contracts for risk of company	49		1,043	1,092
Customer deposits and other funds on deposit	8,822	6,179		15,001
Financial liabilities	14,926	10,466	1,046	26,438

Notes to the Consolidated annual accounts continued

34 Fair value of non-financial assets

The following table presents the estimated fair value of NN Group's non-financial assets that are measured at fair value in the balance sheet. Reference is made to Note 1 'Accounting policies' in the sections 'Real estate investments' and 'Property and equipment' for the methods and assumptions used by NN Group to estimate the fair value of the non-financial assets.

Fair value of non-financial assets

	Estimated fair value		Balance sheet value	
	2019	2018	2019	2018
Real estate investments	2,571	2,374	2,571	2,374
Property in own use	82	75	82	75
Fair value of non-financial assets	2,653	2,449	2,653	2,449

The fair value of the non-financial assets were determined as follows:

Methods applied in determining the fair value of non-financial assets at fair value (2019)

	Level 1	Level 2	Level 3	Total
Real estate investments			2,571	2,571
Property in own use			82	82
Non-financial assets	0	0	2,653	2,653

Methods applied in determining the fair value of non-financial assets at fair value (2018)

	Level 1	Level 2	Level 3	Total
Real estate investments			2,374	2,374
Property in own use			75	75
Non-financial assets	0	0	2,449	2,449

Changes in Level 3 non-financial assets (2019)

	Real estate investments	Property in own use
Level 3 non-financial assets – opening balance	2,374	75
Amounts recognised in the profit and loss account during the year	42	-2
Purchase	158	4
Revaluation recognised in equity during the year		4
Sale	-6	
Changes in the composition of the group and other changes	3	1
Level 3 non-financial assets – closing balance	2,571	82

Changes in Level 3 non-financial assets (2018)

	Real estate investments	Property in own use
Level 3 non-financial assets – opening balance	3,582	82
Amounts recognised in the profit and loss account during the year	201	1
Purchase	206	2
Revaluation recognised in equity during the year		8
Sale	-1,631	-2
Changes in the composition of the group and other changes	16	-16
Level 3 non-financial assets – closing balance	2,374	75

Notes to the Consolidated annual accounts continued

34 Fair value of non-financial assets continued

Level 3 – Amounts recognised in the profit and loss account during the year on non-financial assets (2019)

	Held at balance sheet date	Derecognised during the year	Total
Real estate investments	52	-10	42
Property in own use	-2		-2
Level 3 Amounts recognised in the profit and loss account during the year on non-financial assets	50	-10	40

Level 3 – Amounts recognised in the profit and loss account during the year on non-financial assets (2018)

	Held at balance sheet date	Derecognised during the year	Total
Real estate investments	59	142	201
Property in own use		1	1
Level 3 Amounts recognised in the profit and loss account during the year on non-financial assets	59	143	202

Real estate investments and Property in own use

Valuation methodology

The fair value of real estate is based on regular appraisals by independent, qualified valuers. The fair value is established using valuation methods that take into account recent comparable market transactions (CMT), capitalisation of income (CI) methods and/or discounted cash flow (DCF) calculations.

The underlying assumption used in the valuation is that the properties are let or sold to third parties based on the actual letting status. Future rental income is taken into account in accordance with the terms in existing leases, (expected) vacancies, estimations of the rental values for new leases when leases expire and incentives like rent-free periods. These estimated cash flows are discounted using market-based discount rates that reflect appropriately the risk characteristics of the real estate investments.

Notes to the Consolidated annual accounts continued

34 Fair value of non-financial assets continued

Key assumptions

Key assumptions in the valuation of real estate include the estimated current rental value per square metre, the estimated future rental value per square metre (ERV), the net initial yield and the vacancy rate. These assumptions were in the following ranges:

Significant assumptions

	Fair value	Valuation technique	Current rent/m ²	ERV/m ²	Net initial yield %	Vacancy %	Average lease term in years
The Netherlands							
Office	152	DCF	324-334	330-340	4.0	5	7.25
Industrial	64	DCF	51-53	51-54	4.3-4.4		6.0
Germany							
Retail	288	DCF	173-351	171-327	4.3-4.8		6.8
Industrial	212	DCF	45-105	42-81	4.5-7.4	8	3.6
France							
Office	194	DCF	501-615	498-608	0.0-4.0	67	8.7
Residential	123	Comparison	253-273	253-273	4.5-5.0	3	
Industrial	143	DCF	41-84	42-67	0.0-7.4	6	2.2
Industrial	116	Income Capitalisation	35-51	34-56	1.7-5.4	3	4.4
Spain							
Retail	265	DCF	192-257	202-254	5.7-7.4	4	4.5
Industrial	140	DCF	27-89	24-85	1.0-7.6	10	1.5
Italy							
Retail	250	DCF	170-814	170-800	-8.9-6.7	3	7.3
Belgium							
Retail	130	DCF	54-362	97-357	3.6-7.5	4	3.4
Industrial	27	DCF	45	43	6.0		1.0
Office	4	Income Capitalisation	227	196	7.0		2.0
Denmark							
Residential	166	DCF	207-231	275-287	3.9-4.0	1	
Industrial	20	DCF	153	114	5.5		20.0
Poland							
Retail	94	DCF	163	164	7.3	4.1	2.8
Real estate under construction and other	183						
Total real estate	2,571						

Sensitivities

Significant increases (decreases) in the estimated rental value and rent growth in isolation would result in a significantly higher (lower) fair value of the real estate investments. Significant increases (decreases) in the long-term vacancy rate and discount rate in isolation would result in a significantly lower (higher) fair value of the real estate investments.

Notes to the Consolidated annual accounts continued

35 Derivatives and hedge accounting

Use of derivatives and hedge accounting

NN Group uses derivatives for effective portfolio management and the management of its asset and liability portfolios. The objective of economic hedging is to enter into positions with an opposite risk profile to an identified exposure to reduce that exposure.

The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies under the IFRS-EU hedge accounting rules. Derivatives that qualify for hedge accounting under IFRS-EU are classified and reported in accordance with the nature of the hedged item and the type of IFRS-EU hedge model that is applicable. The three models applicable under IFRS-EU are: cash flow hedge accounting, fair value hedge accounting and net investment hedge accounting. The company's detailed accounting policies for these three hedge models are set out in Note 1 'Accounting policies' in the section on 'Accounting policies for specific items'.

To qualify for hedge accounting under IFRS-EU, strict criteria must be met. Certain hedges that are economically effective from a risk management perspective do not qualify for hedge accounting under IFRS-EU. The fair value changes of derivatives relating to such non-qualifying hedges are taken to the profit and loss account. However, in certain cases, NN Group mitigates the profit and loss account volatility by designating hedged assets and liabilities at fair value through profit or loss. If hedge accounting is applied under IFRS-EU, it is possible that a hedge relationship no longer qualifies for hedge accounting and hedge accounting cannot be continued, even if the hedge remains economically effective. As a result, the volatility arising from undertaking economic hedging in the profit and loss account may be higher than would be expected from an economic point of view.

With respect to exchange rate and interest rate derivative contracts, the notional or contractual amount of these instruments is indicative of the nominal value of transactions outstanding at the balance sheet date; however, they do not represent amounts at risk.

In 2017, NN Group entered into a longevity hedge, based on a general index of Dutch mortality. The maximum pay-out of the hedge amounts to EUR 100 million, payable after 20 years. The hedge is financed by annual premium payments to the counterparty. The longevity hedge is accounted for as derivative. The hedge reduces the impact of longevity trend scenarios implying more improvement in life expectancy. The regulator gave approval to include the effects of this specific hedge on the SCR. The purpose of the hedge is to reduce the longevity risk.

Cash flow hedge accounting

NN Group's hedge accounting consists mainly of cash flow hedge accounting. NN Group's cash flow hedges principally consist of Euribor based (forward) interest rate swaps and cross-currency interest rate swaps that are used to protect against its exposure to variability in future interest cash flows on assets and liabilities that bear interest at variable rates or are expected to be refunded or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities, based on contractual terms and other relevant factors including estimates of prepayments and defaults.

Gains and losses on the effective portions of derivatives designated under cash flow hedge accounting are recognised in Shareholders' equity. Interest income and expenses on these derivatives are recognised in the profit and loss account consistent with the manner in which the forecast cash flows affect Net result. The gains and losses on ineffective portions of such derivatives are recognised immediately in the profit and loss account.

For the year ended 31 December 2019, NN Group recognised EUR 4,284 million (2018: EUR 793 million) in equity as effective fair value changes on derivatives under cash flow hedge accounting. The balance of the cash flow hedge reserve in equity as at 31 December 2019 is EUR 11,272 million (2018: EUR 5,684 million) gross and EUR 8,798 million (2018: EUR 4,514 million) after deferred tax. This cash flow hedge reserve will fluctuate with the fair value of the underlying derivatives and will be reflected in the profit and loss account under Interest income/ expenses over the remaining term of the underlying hedged items. The cash flow hedge reserve relates to a large number of derivatives and hedged items with varying maturities up to 50 years with the largest concentrations in the range 1 year to 12 years. Accounting ineffectiveness on derivatives designated under cash flow hedge accounting resulted in EUR 11 million income (2018: EUR 15 million income) which was recognised in the profit and loss account.

As at 31 December 2019, the fair value of outstanding derivatives designated under cash flow hedge accounting was EUR 6,990 million (2018: EUR 3,030 million), presented in the balance sheet as EUR 7,365 million (2018: EUR 3,219 million) positive fair value under assets and EUR 375 million (2018: EUR 189 million) negative fair value under liabilities.

As at 31 December 2019 and 2018, there were no non-derivatives designated as hedging instruments for cash flow hedge accounting purposes.

Included in 'Interest income and Interest expenses on non-trading derivatives' is EUR 179 million (2018: EUR 161 million) and EUR 50 million (2018: EUR 8 million), respectively, relating to derivatives used in cash flow hedges.

Notes to the Consolidated annual accounts continued

35 Derivatives and hedge accounting continued

Fair value hedge accounting

NN Group's fair value hedges principally consist of interest rate swaps and cross-currency interest rate swaps that are used to protect against changes in the fair value of fixed-rate instruments due to movements in market interest rates.

Gains and losses on derivatives designated under fair value hedge accounting are recognised in the profit and loss account. The effective portion of the fair value change on the hedged item is also recognised in the profit and loss account. As a result, only the net accounting ineffectiveness has an impact on the net result.

For the year ended 31 December 2019, NN Group recognised EUR -1,395 million (2018: EUR -452 million) of fair value changes on derivatives designated under fair value hedge accounting in the profit and loss account. This amount was offset by EUR 1,385 million (2018: EUR 448 million) fair value changes recognised on hedged items. This resulted in EUR -10 million (2018: EUR -4 million) net accounting ineffectiveness recognised in the profit and loss account. As at 31 December 2019, the fair value of outstanding derivatives designated under fair value hedge accounting was EUR -639 million (2018: EUR -651 million), presented in the balance sheet as EUR 52 million (2018: EUR 47 million) positive fair value under assets and EUR 691 million (2018: EUR 698 million) negative fair value under liabilities.

NN Group applies fair value hedge accounting for portfolio hedges of interest rate risk (macro hedging) under the EU 'carve out' of IFRS-EU. The EU 'carve-out' for macro hedging enables a group of derivatives (or proportions) to be viewed in combination and jointly designated as the hedging instrument and removes some of the limitations in fair value hedge accounting relating to hedging core deposits and under-hedging strategies. Under the IFRS-EU 'carve-out', hedge accounting may be applied to core deposits and ineffectiveness only arises when the revised estimate of the amount of cash flows in scheduled time buckets falls below the designated amount of that bucket. NN Group applies the IFRS-EU 'carve-out' to hedge the interest rate risk of mortgage loans. The hedging activities are designated under a portfolio fair value hedge on the mortgages, under IFRS-EU.

36 Assets by contractual maturity

Amounts presented in these tables by contractual maturity are the amounts as presented in the balance sheet.

Assets by contractual maturity (2019)

	Less than 1 month ¹	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Total
Assets							
Cash and cash equivalents	5,305	1,131					6,436
Financial assets at fair value through profit or loss:							
– investments for risk of policyholders ²						34,433	34,433
– non-trading derivatives	3	69	77	336	9,704		10,189
– designated as at fair value through profit or loss	821		1	3		359	1,184
Available-for-sale investments	1,254	2,075	6,300	26,196	73,739	8,080	117,644
Loans	176	169	1,064	4,685	55,534	140	61,768
Reinsurance contracts	19	49	89	160	590	81	988
Intangible assets	6	13	58	241	138	539	995
Deferred acquisition costs	40	18	90	386	1,379		1,913
Deferred tax assets		5	14	35	27	3	84
Other assets	2,424	1,283	484	101	158	20	4,470
Remaining assets (for which maturities are not applicable) ³						8,493	8,493
Total assets	10,048	4,812	8,177	32,143	141,269	52,148	248,597

1 Includes assets on demand.

2 Investments for risk of policyholders are managed on behalf of policyholders on a fair value basis. Although individual instruments may (or may not) have a maturity depending on their nature, this does not impact the liquidity position of NN Group.

3 Included in remaining assets for which maturities are not applicable are Property and equipment, Real estate investments and Associates and joint ventures. Due to their nature remaining assets consist mainly of assets expected to be recovered after more than 12 months.

Notes to the Consolidated annual accounts continued

36 Assets by contractual maturity continued

Assets by contractual maturity (2018)

	Less than 1 month ¹	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Total
Assets							
Cash and cash equivalents	7,154	1,732					8,886
Financial assets at fair value through profit or loss:							
– investments for risk of policyholders ²						30,230	30,230
– non-trading derivatives	16	89	128	285	4,578		5,096
– designated as at fair value through profit or loss	453		7	12	1	249	722
Available-for-sale investments	473	1,225	2,954	21,341	71,602	6,734	104,329
Loans	239	128	1,442	6,639	50,386	69	58,903
Reinsurance contracts	14	53	113	171	577	82	1,010
Intangible assets	2	2	41	261	24	533	863
Deferred acquisition costs	29	15	90	247	1,462		1,843
Deferred tax assets	1	5	8	42	51	24	131
Other assets	3,034	704	727	89	115	39	4,708
Remaining assets (for which maturities are not applicable) ³						7,525	7,525
Total assets	11,415	3,953	5,510	29,087	128,796	45,485	224,246

1 Includes assets on demand.

2 Investments for risk of policyholders are managed on behalf of policyholders on a fair value basis. Although individual instruments may (or may not) have a maturity depending on their nature, this does not impact the liquidity position of NN Group.

3 Included in remaining assets for which maturities are not applicable are Property and equipment, Real estate investments and Associates and joint ventures. Due to their nature remaining assets consist mainly of assets expected to be recovered after more than 12 months.

37 Liabilities by maturity

The tables below include all financial liabilities by maturity based on contractual, undiscounted cash flows. Furthermore, the undiscounted future coupon interest on financial liabilities payable is included in a separate line and in the relevant maturity bucket. Derivative liabilities are included on a net basis if cash flows are settled net. For other derivative liabilities the contractual gross cash flow payable is included.

Non-financial liabilities, including insurance and investment contracts, are included based on a breakdown of the (discounted) balance sheet amounts by expected maturity. Reference is made to the Liquidity Risk paragraph in Note 49 'Risk management' for a description on how liquidity risk is managed.

Liabilities by maturity (2019)

	Less than 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Adjustment ¹	Total
Liabilities								
Subordinated debt ²				1,500	850		59	2,409
Debt securities issued			300	1,100	600		-8	1,992
Other borrowed funds	65	273	1,618	3,447	2,211			7,614
Customer deposits and other funds on deposit	9,238	137	586	2,333	2,867			15,161
Financial liabilities at fair value through profit or loss:								
– non-trading derivatives	19	270	212	1,552	4,445		-3,266	3,232
Financial liabilities	9,322	680	2,716	9,932	10,973	0	-3,215	30,408
Insurance and investment contracts	830	1,154	4,927	17,647	110,278	33,415		168,251
Deferred tax liabilities	13	30		140	3,599	248		4,030
Other liabilities	10,741	481	608	328	899	59		13,116
Non-financial liabilities	11,584	1,665	5,535	18,115	114,776	33,722	0	185,397
Total liabilities	20,906	2,345	8,251	28,047	125,749	33,722	-3,215	215,805
Coupon interest due on financial liabilities	58	28	169	747	2,118			3,120

1 This column reconciles the contractual undiscounted cash flow on financial liabilities to the balance sheet values. The adjustments mainly relate to valuation differences, the impact of discounting and, for derivatives, to the fact that the contractual cash flows are presented on a gross basis (unless the cash flows are actually settled net).

2 Subordinated debt maturities are presented based on the first call date. For the legal date of maturity reference is made to Note 13 'Subordinated debt'.

Notes to the Consolidated annual accounts continued

37 Liabilities by maturity continued

Liabilities by maturity (2018)

	Less than 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Adjustment ¹	Total
Liabilities								
Subordinated debt ²			12	500	1,850		83	2,445
Debt securities issued				1,411	592		-13	1,990
Other borrowed funds		126	814	2,819	1,958			5,717
Customer deposits and other funds on deposit	8,941	126	536	2,178	2,948			14,729
Financial liabilities at fair value through profit or loss:								
– non-trading derivatives	36	634	279	604	1,771		-1,161	2,163
Financial liabilities	8,977	886	1,641	7,512	9,119	0	-1,091	27,044
Insurance and investment contracts	1,546	1,231	4,849	19,028	105,069	29,395		161,118
Deferred tax liabilities	10	16	-5	150	1,481	157		1,809
Other liabilities	7,222	395	486	245	931	148		9,427
Non-financial liabilities	8,778	1,642	5,330	19,423	107,481	29,700	0	172,354
Total liabilities	17,755	2,528	6,971	26,935	116,600	29,700	-1,091	199,398
Coupon interest due on financial liabilities	26	33	147	840	2,237			3,283

¹ This column reconciles the contractual undiscounted cash flow on financial liabilities to the balance sheet values. The adjustments mainly relate to the impact of discounting and, for derivatives, to the fact that the contractual cash flows are presented on a gross basis (unless the cash flows are actually settled net).

² Subordinated debt maturities are presented based on the first call date. For the legal date of maturity reference is made to Note 13 'Subordinated debt'.

38 Assets not freely disposable

Assets not freely disposable of EUR 196 million (2018: EUR 223 million) relates to the mandatory reserve deposit at De Nederlandsche Bank and cash balances held at BNG Bank regarding the structured entities Arena NHG, Hypenn RMBS entities and the Covered Bond companies.

Assets relating to securities lending are disclosed in Note 39 'Transferred, but not derecognised financial assets'. Assets in securitisation programmes originated by NN Bank are disclosed in Note 44 'Structured entities'.

39 Transferred, but not derecognised financial assets

The majority of NN Group's financial assets that have been transferred, but do not qualify for derecognition, are debt instruments used in securities lending. NN Group retains substantially all risks and rewards of those transferred assets. The assets are transferred in return for cash collateral or other financial assets. Non-cash collateral is not recognised in the balance sheet. Cash collateral is recognised as an asset and an offsetting liability is established for the same amount as NN Group is obligated to return this amount upon termination of the lending arrangement.

Transfer of financial assets not qualifying for derecognition

	2019	2018
Transferred assets at carrying value		
Available-for-sale investments	12,582	12,366
Associated liabilities at carrying value		
Other borrowed funds	247	247

The table above does not include assets transferred to consolidated securitisation entities, as these related assets are not transferred from a consolidated perspective. Reference is made to Note 44 'Structured entities'.

Notes to the Consolidated annual accounts continued

40 Offsetting of financial assets and liabilities

The following tables include information about rights to offset and the related arrangements. The amounts included consist of all recognised financial instruments that are presented net in the balance sheet under the IFRS-EU offsetting requirements (legal right to offset and intention to settle on a net basis) and amounts presented gross in the balance sheet but subject to enforceable master netting arrangements or similar arrangement.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements (2019)

Balance sheet line item	Financial instrument	Related amounts not offset in the balance sheet					Net amount
		Gross financial assets	Gross financial liabilities offset in the balance sheet	Net financial assets in the balance sheet	Financial instruments	Cash and financial instruments collateral	
Non-trading derivatives	Derivatives	10,124		10,124	-2,180	-7,774	170
Financial assets at fair value through profit or loss		10,124	0	10,124	-2,180	-7,774	170
Other items where offsetting is applied in the balance sheet		144		144	-60	-81	3
Total financial assets		10,268	0	10,268	-2,240	-7,855	173

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements (2018)

Balance sheet line item	Financial instrument	Related amounts not offset in the balance sheet					Net amount
		Gross financial assets	Gross financial liabilities offset in the balance sheet	Net financial assets in the balance sheet	Financial instruments	Cash and financial instruments collateral	
Non-trading derivatives	Derivatives	4,987		4,987	-1,069	-3,793	125
Financial assets at fair value through profit or loss		4,987	0	4,987	-1,069	-3,793	125
Other items where offsetting is applied in the balance sheet		156		156	-40	-114	2
Total financial assets		5,143	0	5,143	-1,109	-3,907	127

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements (2019)

Balance sheet line item	Financial instrument	Related amounts not offset in the balance sheet					Net amount
		Gross financial liabilities	Gross financial assets offset in the balance sheet	Net financial liabilities in the balance sheet	Financial instruments	Cash and financial instruments collateral	
Non-trading derivatives	Derivatives	2,764		2,764	-2,180	-577	7
Financial liabilities at fair value through profit or loss		2,764	0	2,764	-2,180	-577	7
Other items where offsetting is applied in the balance sheet		85		85	-60	-23	2
Total financial liabilities		2,849	0	2,849	-2,240	-600	9

Notes to the Consolidated annual accounts continued

40 Offsetting of financial assets and liabilities continued

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements (2018)

Balance sheet line item	Financial instrument	Gross financial liabilities	Related amounts not offset in the balance sheet				Net amount
			Gross financial assets offset in the balance sheet	Net financial liabilities in the balance sheet	Financial instruments	Cash and financial instruments collateral	
Non-trading derivatives	Derivatives	1,801		1,801	-1,069	-730	2
Financial liabilities at fair value through profit or loss		1,801	0	1,801	-1,069	-730	2
Other items where offsetting is applied in the balance sheet		133		133	-40	-92	1
Total financial liabilities		1,934	0	1,934	-1,109	-822	3

41 Contingent liabilities and commitments

In the normal course of business NN Group is party to activities whose risks are not reflected in whole or in part in the Consolidated annual accounts. In response to the needs of its customers, NN Group offers financial products related to loans. These products include traditional off-balance sheet credit-related financial instruments.

Contingent liabilities and commitments (2019)

	Less than 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Total
Commitments	615	1,220	1,927	1,732	272	403	6,169
Guarantees			40	1			41
Contingent liabilities and commitments	615	1,220	1,967	1,733	272	403	6,210

Contingent liabilities and commitments (2018)

	Less than 1 month	1-3 months	3-12 months	1-5 years	Over 5 years	Maturity not applicable	Total
Commitments	865	765	1,708	857	42	593	4,830
Guarantees			20	1			21
Contingent liabilities and commitments	865	765	1,728	858	42	593	4,851

NN Group has issued certain guarantees, other than those included in 'Insurance contracts', which are expected to expire without being drawn on and therefore does not necessarily represent future net cash outflows. In addition to the items included in 'Contingent liabilities', NN Group has issued guarantees as a participant in collective arrangements of national industry bodies and as a participant in government required collective guarantee schemes which apply in different countries.

ING Group

During 2016, ING Group, NN Group's former parent company, sold its remaining stake in NN Group. Therefore, ING Group has ceased to be a related party of NN Group in the course of 2016. The following agreements with ING Group are still relevant:

Master claim agreement

In 2012, ING Groep N.V., Voya Financial Inc. (formerly ING U.S., Inc.) and ING Insurance Eurasia N.V. entered into a master claim agreement to (a) allocate existing claims between these three parties and (b) agree on criteria for how to allocate future claims between the three parties. The master claim agreement contains further details on claim handling, conduct of litigation and dispute resolution.

Indemnification and allocation agreement

ING Groep N.V. and NN Group N.V. have entered into an indemnification and allocation agreement, in which ING Group has agreed to indemnify NN Group for certain liabilities that relate to the business of or control over certain (former) U.S. and Latin American subsidiaries of NN Group in the period until 30 September 2013 or, if the relevant subsidiary was divested by NN Group after 30 September 2013, such later date of divestment. These liabilities mainly include contingent liabilities that may arise as a result of the initial public offering of ING U.S. (such as prospectus liability), the sales of the Latin American businesses (such as claims under warranties and other buyer protection clauses) and the liabilities for the claims concerning the performance of certain interest-sensitive products that were sold by a former subsidiary of NN Group in Mexico.

Notes to the Consolidated annual accounts continued

41 Contingent liabilities and commitments continued

Other agreements

In connection with the initial public offering of NN Group N.V., ING Groep N.V. entered in 2014 into several other agreements with NN Group N.V. which are currently, partly or wholly, in force, such as a joinder agreement, an equity administration agreement, a Risk Management Programme (RMP) indemnity agreement and a warrant agreement (warrants repurchased on 15 November 2018, refer to Note 12 'Equity'). In 2015, NN Group N.V. and ING Groep N.V. entered into an agreement providing amongst others for allocation between them of insurance payments under the public offering securities insurance taken out by ING Groep N.V. with respect to the IPO of NN Group N.V.

42 Legal proceedings

General

NN Group is involved in litigation and arbitration proceedings in the Netherlands and in a number of foreign jurisdictions, involving claims by and against NN Group which arise in the ordinary course of its business, including in connection with its activities as insurer, lender, seller, broker-dealer, underwriter, issuer of securities and investor and its position as employer and taxpayer. In certain of such proceedings, very large or indeterminate amounts are sought, including punitive and other damages. While it is not feasible to predict or determine the ultimate outcome of all pending or threatened legal and regulatory proceedings, NN Group believes that some of the proceedings set out below may have, or have in the recent past had, a significant effect on the financial condition, profitability or reputation of NN Group.

Because of the geographic spread of its business, NN Group may be subject to tax audits in numerous jurisdictions at any point in time. Although NN Group believes that it has adequately provided for its tax positions, the ultimate outcome of these audits may result in liabilities that are different from the amounts recognised.

Unit-linked products in the Netherlands

Since the end of 2006, unit-linked products (commonly referred to in Dutch as 'beleggingsverzekeringen') have received negative attention in the Dutch media, from the Dutch Parliament, the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten) and consumer protection organisations. Costs of unit-linked products sold in the past are perceived as too high and Dutch insurers are in general being accused of being less transparent in their offering of such unit-linked products. The criticism on unit-linked products led to the introduction of compensation schemes by Dutch insurance companies that have offered unit-linked products. In 2008 and 2010, Nationale-Nederlanden and Delta Lloyd (and ABN AMRO Levensverzekering in 2010) reached agreements with consumer protection organisations to offer compensation to unit-linked policyholders. The agreements with the consumer protection organisations are not binding to policyholders, and consequently, do not prevent individual policyholders from initiating legal proceedings against NN Group's Dutch insurance subsidiaries.

On 29 April 2015, the European Court of Justice issued its ruling on preliminary questions submitted by the District Court in Rotterdam, upon request of parties, including Nationale-Nederlanden, to obtain clarity on principal legal questions with respect to cost transparency in relation to unit-linked products. The main preliminary question considered by the European Court of Justice was whether European law permits the application of information requirements based on general principles of Dutch law that extend beyond information requirements as explicitly prescribed by laws and regulations in force at the time the policy was written. The European Court of Justice ruled that the information requirements prescribed by the applicable European directive may be extended by additional information requirements included in national law, provided that these requirements are necessary for a policyholder to understand the essential characteristics of the commitment and are clear, accurate and foreseeable. Although the European Court does not decide on the applicable standards in specific cases and solely provides clarification on the interpretation of the applicable European directive, the ruling of the European Court of Justice has given clarification on this question of legal principle which is also the subject of other legal proceedings in the Netherlands. Dutch courts will need to take the interpretation of the European Court of Justice into account in relevant proceedings.

In 2013 Woekerpolis.nl and in 2017 Consumentenbond and Wakkerpolis, all associations representing the interests of policyholders of Nationale-Nederlanden, individually initiated so-called 'collective actions' against Nationale-Nederlanden. These claims are all based on similar grounds and have been rejected by Nationale-Nederlanden and Nationale-Nederlanden defends itself in these legal proceedings.

Woekerpolis.nl requested the District Court in Rotterdam to declare that Nationale-Nederlanden sold products which are defective in various respects. Woekerpolis.nl alleges that Nationale-Nederlanden failed to meet the required level of transparency regarding, cost charges and other product characteristics, failed to warn policyholders of certain product related risks, such as considerable stock depreciations, the inability to realise the projected final policy value, unrealistic capital projections due to differences in geometric versus arithmetic returns and that certain general terms and conditions regarding costs were unfair. On 19 July 2017, the District Court in Rotterdam rejected all claims of Woekerpolis.nl and ruled that Nationale-Nederlanden has generally provided sufficient information on costs and premiums. Woekerpolis.nl has lodged an appeal with the Court of Appeal in The Hague against the ruling of the District Court in Rotterdam. A ruling from the Court of Appeal in The Hague is expected in the course of the first half of 2020.

Notes to the Consolidated annual accounts continued

42 Legal proceedings continued

Consumentenbond alleges that Nationale-Nederlanden failed to adequately inform policyholders on cost charges, risk premium for life insurance cover and the leverage and capital consumption effect and that Nationale-Nederlanden provided misleading capital projections. Consumentenbond requests the District Court in Rotterdam to order a recalculation of certain types of unit-linked insurance products and to declare that Nationale-Nederlanden is liable for any damage caused by a lack of information and misleading capital projections. On 27 March 2019, the District Court in Rotterdam issued an interim ruling in first instance. The District Court concluded that Nationale-Nederlanden has complied with information requirements prescribed by law and regulations applicable at the time, but also considered that this does not necessarily mean that the costs are agreed upon (wilsovereenstemming) with the customer. As such, the District Court requested Nationale-Nederlanden to provide further information on certain cost components and the agreement thereon. A ruling from the District Court in Rotterdam is expected in the course of the first half of 2020.

The claim from Wakkerpolis primarily concentrates on the recovery of initial costs for policyholders and refers to a ruling of the Kifid in an individual case against Nationale-Nederlanden. In this case, the Kifid's Committee of Appeal ruled that there is no contractual basis for charging initial costs and that the insurer is obliged to warn against the leverage and capital consumption effect. In its ruling of 22 June 2017, the Appeals Committee concluded that Nationale-Nederlanden, at the time of selling the unit-linked insurance product, should have provided more information to this individual customer than was prescribed by the laws and regulations applicable at that time. In the ruling in the collective action initiated by Woekerpolis.nl, the District Court in Rotterdam reached a different conclusion than the Appeals Committee of the Kifid. The Court's judgment is in line with Nationale-Nederlanden's view, that the provision of information needs to be assessed against the laws and regulations and norms applicable at the time of concluding the unit-linked insurance policy. A ruling from the District Court in Rotterdam is expected in the course of the first half of 2020.

There has been for some time and there continues to be political, regulatory and public attention focused on the unit-linked issue in general. Elements of unit-linked policies are being challenged or may be challenged on multiple legal grounds in current and future legal proceedings. There is a risk that one or more of those legal challenges will succeed.

Customers of NN Group's Dutch insurance subsidiaries have claimed, among others, that (a) the investment risk, costs charged or the risk premium was not, or not sufficiently, made clear to the customer, (b) the product costs charged on initial sale and on an ongoing basis were so high that the expected return on investment was not realistically achievable, (c) the product sold to the customer contained specific risks that were not, or not sufficiently, made clear to the customer (such as the leverage capital consumption risk) or was not suited to the customer's personal circumstances, (d) the insurer owed the customer a duty of care which the insurer has breached, (e) the insurer failed to warn of the risk of not realising the projected policy values, (f) the policy conditions were unfair, or (g) the costs charged or the risk premium had no contractual basis. These claims may be based on general standards of contract or securities law, such as reasonableness and fairness, error, duty of care, or standards for proper customer treatment or due diligence, such as relating to the fairness of terms in consumer contracts and may be made by customers, or on behalf of customers, holding active policies or whose policies have lapsed, matured or been surrendered. There is no assurance that further proceedings for damages based on aforementioned legal grounds or other grounds will not be brought. The timing of reaching any finality in last instance on these pending legal claims and proceedings is uncertain and such uncertainty is likely to continue for some time.

Rulings or announcements made by courts or decision-making bodies or actions taken by regulators or governmental authorities against NN Group's Dutch insurance subsidiaries or other Dutch insurance companies in respect of unit-linked products, or settlements or any other actions to the benefit of customers (including product improvements or repairs) by other Dutch insurance companies towards consumers, consumer protection organisations, regulatory or governmental authorities or other decision-making bodies in respect of the unit-linked products, may affect the (legal) position of NN Group's Dutch insurance subsidiaries and may force such subsidiaries to take (financial) measures that could have a substantial impact on the financial condition, results of operations, solvency or reputation of NN Group and its subsidiaries. As a result of the public and political attention the unit-linked issue has received, it is also possible that sector-wide measures may be imposed by governmental authorities or regulators in relation to unit-linked products in the Netherlands. The impact on NN Group's Dutch insurance subsidiaries of rulings made by courts or decision-making bodies, actions taken by regulators or governmental bodies against other Dutch insurance companies in respect of unit-linked products, or settlements or any other actions to the benefit of customers (including product improvements or repairs), may be determined not only by market share but also by portfolio composition, product features, terms and conditions and other factors. Adverse decisions or the occurrence of any of the developments as described above could result in outcomes materially different than if NN Group's Dutch insurance subsidiaries or its products had been judged or negotiated solely on their own merits.

The book of policies of NN Group's Dutch insurance subsidiaries dates back many years, and in some cases several decades. Over time, the regulatory requirements and expectations of various stakeholders, including customers, regulators and the public at large, as well as standards and market practice, have developed and changed, increasing customer protection. As a result, policyholders and consumer protection organisations have initiated and may in the future initiate proceedings against NN Group's Dutch insurance subsidiaries alleging that products sold in the past fail to meet current requirements and expectations. In any such proceedings, it cannot be excluded that the relevant court, regulator, governmental authority or other decision-making body will apply current norms, requirements, expectations, standards and market practices on laws and regulations to products sold, issued or advised on by NN Group's Dutch insurance subsidiaries.

Notes to the Consolidated annual accounts continued

42 Legal proceedings continued

Although the financial consequences of any of these factors or a combination thereof could be substantial for the Dutch insurance business of NN Group and, as a result, may have a material adverse effect on NN Group's business, reputation, revenues, results of operations, solvency, financial condition and prospects, it is not possible to reliably estimate or quantify NN Group's exposures at this time.

Dispute on reinsurance agreement

NN Group has reinsured with another insurance company part of the exposure on certain insured pension obligations. Although the reinsurance agreement was never signed by parties, NN Group's counterparty performed under the agreement for many years. The counterparty acknowledged the existence of a reinsurance arrangement, but disputes the applicability of fundamental aspects of the reinsurance agreement. NN Group started legal proceedings in 2019, which are ongoing. The potential outcome of the legal proceedings is uncertain. A provision was recognised in 2019 for the current best estimate of the potential negative impact to NN Group.

Argentina

On 10 April 2019, NN Group filed a claim with the International Centre for Settlement of Investment Disputes (ICSID) under the Bilateral Investment Treaty between Argentina and the Netherlands, in order to resolve a dispute with the Argentine Republic. The dispute relates to the nationalisation of Orígenes – NN Group's former pension fund manager in Argentina – by the Argentine Government in 2008. These proceedings may last for several years. As the case is still pending, it is unclear at this stage whether and to what extent any compensation will be granted to NN Group and therefore no compensation has been recognised.

Australia

In April 2015, the Australian Taxation Office (ATO) commenced a Tax Audit on ING Australia Holdings Ltd. The Tax Audit concerns the years 2007-2013 and focused on the currency denomination of and interest on intercompany loans which resulted from the transfer of the insurance and asset management businesses in Australia. ING Australia Holdings was transferred by NN Group to ING Group in 2013 as part of which it was agreed that NN Group remains liable for any damages resulting from tax claims. An Independent Review of the Tax Audit was completed by the ATO in July 2017. In 2017, NN Group recognised a provision on the IFRS and Solvency II balance sheets for an amount of AUD 279 million (EUR 185 million) to cover the costs of the expected ATO claim including penalties, interest and related expenses. In November 2017, ING Australia Holdings lodged notices of objections against the final assessments with the ATO. Following payment of part of the claim, the provision amounts to EUR 134 million at 31 December 2019. This does not reflect that the final assessments will be subject to appeal by ING Australia Holdings which may be successful, and also that NN Group may be able to recover part of the amount in its Dutch tax return. The Tax Audit concerns a former subsidiary of NN Group and, therefore, does not impact NN Group's business or strategy going forward.

43 Companies and businesses acquired and divested

Acquisitions (2019)

Aegon's Life Insurance business in the Czech Republic and Aegon's Life Insurance and Pension businesses in Slovakia

In the first quarter of 2019, NN Group acquired all issued and outstanding ordinary shares of Aegon's Life Insurance business in the Czech Republic and Aegon's Life Insurance and Pension businesses in Slovakia for a total consideration of EUR 155 million. NN Group acquired multiple legal entities. As these legal entities are individually and in aggregate not material to NN Group, the disclosures contained in this note are on an aggregated basis, unless specifically indicated.

Included below is an overview of the transaction, the rationale for the transaction, the accounting at the acquisition date and certain additional disclosures on the acquisition.

Overview of transaction

In August 2018, NN Group announced that it had reached an agreement to acquire Aegon's Life Insurance business in the Czech Republic and Aegon's Life Insurance and Pension businesses in Slovakia (the businesses acquired) for a total consideration of EUR 155 million. The transaction was closed on 8 January 2019.

This transaction is in line with NN Group's strategy to achieve profitable growth and value creation. This bolt-on acquisition is expected to strengthen NN Group's position in the Life insurance market and its distribution network in the Czech Republic and Slovakia and is expected to further strengthen NN Group's leading position in the Slovak pension market.

Accounting at the acquisition date

The acquisition date for the acquired businesses by NN Group for acquisition accounting under IFRS is 8 January 2019. On this date, NN Group acquired 100% of the ordinary shares of the relevant entities and thus obtained control. NN Group used 1 January 2019 as a proxy for the acquisition date for practical reasons. As a result, the businesses are included in the NN Group consolidation as of 1 January 2019.

Notes to the Consolidated annual accounts continued

43 Companies and businesses acquired and divested continued

The values of certain assets and liabilities acquired as at 1 January 2019 as disclosed below differ from the values of the assets and liabilities in the balance sheet of the businesses immediately before the acquisition by NN Group. This results from differences between the accounting previously applied and the acquisition accounting at fair value as required under IFRS. The difference relates mainly to the valuation of insurance liabilities.

At the acquisition date, the fair value as defined by IFRS of the Insurance liabilities was calculated. The fair value of insurance liabilities differs from the book value as previously reported. The fair value of the insurance liabilities was determined based on the estimated price that a market participant would charge to assume the insurance liabilities of the businesses in an orderly transaction at the measurement date. In arriving at the fair value of the insurance liabilities, future cash flows were estimated using current best estimate actuarial assumptions. Relevant observable input data was used as far as possible. These estimated future cash flows were discounted using a current market rate to reflect the time value of money. Subsequently, a risk margin was added for the compensation that a market participant would require for assuming the risks and uncertainties relating to these insurance liabilities. This compensation was calculated using the cost of capital approach.

Whilst the determination of the fair value of the insurance liabilities involved estimates and expert judgement, there are no elements in the valuation where using reasonably supportable alternative assumptions would have had a material impact on NN Group.

In accordance with IFRS 4 and in line with NN Group's accounting policies, NN Group opted to recognise the difference between the fair value and the existing book value of the insurance liabilities as an asset (Value of Business Acquired, or 'VOBA') and to report the Liabilities for insurance contracts in the balance sheet at the existing book values.

No significant acquisition intangibles (other than VOBA) were recognised and no significant adjustments were made to the valuation of assets and liabilities other than insurance liabilities.

The fair value of the total purchase consideration was EUR 155 million. This was fully paid in cash.

Cash flow on acquisition

	Acquisition date
Cash paid to acquire shares	-155
Cash in company acquired	32
Cash flow on acquisition	-123

Acquisition date fair values of the assets and liabilities acquired

	Acquisition date
Assets	
Cash and cash equivalents	32
Financial assets at fair value through profit or loss:	
– investments for risk of policyholders	193
Available-for-sale investments	51
Intangible assets	181
Other	13
Total assets	470
Liabilities	
Insurance and investment contracts	239
Other	44
Total liabilities	283
Net assets acquired	187
Fair value of purchase consideration	155
Fair value of net assets acquired	187
Difference	-32

In the second quarter 2019, the presentation of certain amounts in the acquisition balance sheet was updated. There was no net impact on Net assets acquired.

Notes to the Consolidated annual accounts continued

43 Companies and businesses acquired and divested continued

For the pension business in Slovakia the purchase consideration paid was EUR 1 million higher than the net assets acquired; the difference represents goodwill. This goodwill is capitalised in the NN Group balance sheet; it is not amortised but will be tested for impairment at least annually going forward.

For the business in the Czech Republic and the life insurance business in Slovakia the purchase consideration paid was in total EUR 33 million lower than the net assets acquired; the difference represents negative goodwill. This negative goodwill is recognised in Other income in the profit and loss account immediately (presented in the segment Insurance Europe).

The (negative) goodwill is not taxable.

Other information

	Acquisition date
Total income recognised in profit and loss since date of acquisition	112
Net profit recognised in profit and loss since date of acquisition	2

No significant acquisition-related costs were recognised on this transaction.

As 1 January 2019 is used as the date of acquisition and, therefore, the results of the acquired businesses are included in the NN Group consolidation for the full period, no separate disclosure is relevant for the amounts that would have been recognised if the transaction had occurred at the start of the year.

The financial assets acquired do not include any significant receivables, other than investments in debt securities.

There were no significant contingent liabilities related to the businesses that were recognised at the date of acquisition.

Acquisition announced in 2019

On 7 June 2019, NN Group announced to acquire VIVAT Schadeverzekeringen N.V. (VIVAT Non-life) for a consideration of EUR 416 million. NN Group will acquire VIVAT Non-life from Athora, following the acquisition of the VIVAT Group (VIVAT) by Athora. In addition, NN Group will acquire the intercompany Tier 2 loans granted by VIVAT to VIVAT Non-life for a consideration of EUR 150 million. The completion of the acquisition is subject to the closing of the acquisition of VIVAT by Athora and customary closing conditions, including antitrust clearance, declarations of no-objection from the Dutch Central Bank and consultation of the works council of VIVAT. The approvals for the acquisition are expected to be received in the first quarter of 2020.

44 Structured entities

NN Group's activities involve transactions with structured entities in the normal course of business. A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only and the relevant activities are directed through contractual arrangements. NN Group's involvement in these entities varies and includes both debt financing and equity financing of these entities as well as other relationships. Based on its accounting policies, as disclosed in Note 1 'Accounting policies', NN Group establishes whether these involvements result in no significant influence, significant influence, joint control or control over the structured entity.

The structured entities over which NN Group can exercise control are consolidated. NN Group may provide support to these consolidated structured entities as and when appropriate, however, this is fully reflected in the Consolidated annual accounts of NN Group as all assets and liabilities of these entities are included in the Consolidated balance sheet and off-balance sheet commitments are disclosed.

NN Group's activities involving structured entities are explained below in the following categories:

- Consolidated NN Group originated liquidity management securitisation and covered bond programmes
- Investments – NN Group managed investment funds
- Investments – Third-party managed structured entities

Notes to the Consolidated annual accounts continued

44 Structured entities continued

Consolidated NN Group originated liquidity management securitisation and covered bond programmes

Mortgage loans issued are partly funded by issuing residential mortgage-backed securities under NN Group's Dutch residential mortgage-backed securities programmes (Hypenn and Arena) and covered bonds. The mortgage loans transferred to these securitisation vehicles continue to be recognised in the balance sheet of NN Group. Total amounts of mortgage loans securitised (notes issued) and notes held by third parties as at 31 December is as follows:

Mortgage loans securitised

	Maturity year	Related mortgage loans		RMBS issued and held by third parties	
		2019	2018	2019	2018
Hypenn RMBS I	2020	1,304	1,448		400
Hypenn RMBS II	2019		378		223
Hypenn RMBS IV	2020	401	444	341	390
Hypenn RMBS V	2021	378	424	334	383
Hypenn RMBS VI	2022	700	770	440	494
Arena NHG 2014-I	2019		462		385
Arena NHG 2014-II	2020	448	488	335	401
Arena NHG 2016-I	2021	413	463	289	350
NN Conditional Pass-Through Covered Bond Company	2024-2039	2,963	1,791	2,585	1,488
Total		6,607	6,668	4,324	4,514

NN Group companies hold the remaining notes.

NN Group managed investment funds

NN Group originates investment funds. NN Group may hold investments in these funds for its own account through the general account investment portfolio of the insurance operations. Other investments in these funds may be held for the risk of policyholders or by third parties. For the majority of these funds, NN Group also acts as the fund manager. NN Group considers both NN Group's financial interests for own risk and its role as asset manager to establish whether control exists and whether the fund is consolidated. In general, NN Group maintains a minority interest in these funds and NN Group receives a fixed fee over assets under management, at arm's length basis, for its asset management activities. These funds are generally not consolidated by NN Group. Financial interests for risk of policyholders are not taken into account when the policyholders decide on the investment allocations of their insurance policies (i.e. the policyholder has the 'power') and assume all risks and benefits on these investments (i.e. the policyholder assumes the variable returns).

Reference is made to Note 4 'Available-for-sale investments' in which investments in equity securities are specified by NN Group managed investment funds and Third-party managed investment funds. The maximum exposure to loss for NN Group is equal to the reported carrying value of the investment recognised in the balance sheet of NN Group.

Third-party managed structured entities

As part of its investment activities, NN Group invests both in debt and equity instruments of structured entities originated by third parties.

Most of the investments in debt instruments of third-party managed structured entities relate to Asset-backed securities (ABS), classified as loans. Reference is made to Note 4 'Available-for-sale investments' where the ABS portfolio is disclosed.

The majority of the investments in equity instruments of third-party managed structured entities relate to interests in investment funds that are not originated or managed by NN Group. Reference is made to Note 4 'Available-for-sale investments' in which investments in equity securities are specified by NN Group managed investment funds and Third-party managed investment funds.

NN Group has significant influence for some of its real estate investment funds as disclosed in Note 6 'Associates and joint ventures'.

The maximum exposure to loss for NN Group is equal to the reported carrying value of the investment recognised in the balance sheet of NN Group.

Notes to the Consolidated annual accounts continued

45 Related parties

In the normal course of business, NN Group enters into various transactions with related parties. Parties are considered to be related if one party has the ability to control or exercise significant influence over the other party in making financial or operating decisions. Related parties of NN Group include, among others, associates, joint ventures, key management personnel and the defined benefit and defined contribution plans. Transactions between related parties have taken place on an arm's length basis and include distribution agreements, sourcing and procurement agreements, human resources-related arrangements, and rendering and receiving of services.

There are no significant provisions for doubtful debts or individually significant bad debt expenses recognised on outstanding balances with related parties.

NN Group identifies the following (groups of) related party transactions:

Transactions with key management personnel

Transactions with members of NN Group's Executive Board, Management Board and Supervisory Board are considered to be transactions with key management personnel. Reference is made to Note 46 'Key management personnel compensation' for more information on these transactions.

Transactions with consolidated entities

Entities over which NN Group can exercise control are considered to be related parties of NN Group. These entities are consolidated by NN Group. Transactions with or between entities controlled by NN Group are eliminated in the Consolidated annual accounts. More information on the NN Group originated liquidity management securitisation programmes is disclosed in Note 44 'Structured entities'.

Transactions with associates and joint ventures

Associates and joint ventures of NN Group are related parties of NN Group. The transactions with associates and joint ventures can be summarised as follows:

	2019	2018
Assets	186	193
Income	5	6

Transactions with post-employment benefit plans

Entities administering or executing post-employment benefit plans of the employees of NN Group are considered to be related parties of NN Group. This relates to NN Group's pensions funds, i.e. the ING Group DB pension fund (joint with ING Bank), the Stichting Pensioenfond Delta Lloyd, the NN CDC pension fund in the Netherlands and Instelling voor Bedrijfspensioenvoorziening Delta Lloyd Life OFP in Belgium. For more information on the post-employment benefit plans, reference is made to Note 26 'Staff expenses'.

Transactions with other related parties

Investment funds

Other related parties include NN Group managed investment funds. Reference is made to Note 44 'Structured entities' for more information.

Pension entities

NN Group operates several pension entities in the Netherlands, including BeFrank PPI N.V. and De Nationale Algemeen Pensioenfond. For these entities all asset management and other services are provided by NN Group entities on an arm's length basis. NN Group has no financial interest in the pension schemes that are executed by these entities. These entities are considered related parties.

46 Key management personnel compensation

Transactions with key management personnel (Executive Board, Management Board and Supervisory Board) are transactions with related parties. These transactions are disclosed in more detail as required by Part 9 Book 2 of the Dutch Civil Code in sections II and III in the remuneration report in the financial report. These sections of the remuneration report are therefore part of the annual accounts.

Notes to the Consolidated annual accounts continued

46 Key management personnel compensation continued

2019

Executive Board and Management Board (2019)

amounts in thousands of euros	Executive Board ³	Management Board ⁴	Total
Fixed compensation:			
- base salary (cash)	2,341	3,604	5,945
- base salary (fixed shares)	585		585
- pension costs ¹	49	175	224
- individual saving allowance	710	747	1,457
Variable compensation:			
- upfront cash	71	322	393
- upfront shares	71	322	393
- deferred cash	106	405	511
- deferred shares	106	483	589
Other ²		78	78
Fixed and variable compensation	4,039	6,136	10,175
Other benefits	367	616	983
Employer cost social security ⁵	125	225	350
Total compensation	4,531	6,977	11,508

1 The pension costs consist of an amount of employer contribution (EUR 224 thousand) and an individual savings allowance (EUR 1,457 thousand, which is 28.4% of the amount of base salary above EUR 107,593 for the period between January and June and 23.3% of the amount of base salary above EUR 107,593 for the period between July and December).

2 For the NN Investment Partners business, 50% of deferred awards are made in a deferred investment in funds managed by the business instead of awarding deferred cash. In this way, alignment of interests is achieved between staff working in the NN Investment Partners business and the clients who invest in funds managed by that business.

3 Mr Knibbe was appointed by the Supervisory Board as member and chair of the Executive Board and CEO of NN Group on 1 October 2019. He succeeded Mr Friese, who stepped down as member and chair of the Executive Board and CEO of NN Group as of 12 August 2019.

4 As per 30 September 2019, Mr Knibbe stepped down from his position as CEO of NN Netherlands. As per 31 December 2019, Mr Erasmus stepped down from his position in the Management Board.

5 The employer cost social security do not impact the overall remuneration received by the Executive Board and Management Board members.

In the table above, 'Executive Board' refers to the two members of the Executive Board as at 31 December 2019. The two members of the Executive Board are also members of the Management Board. In the table above, 'Management Board' refers to the six members of the Management Board as at 31 December 2019, i.e. those members that are not also member of the Executive Board. In the table above 'Total' refers to all members of the Management Board during 2019.

Remuneration of the members of the Executive Board and the Management Board is recognised in the profit and loss account in 'Staff expenses' as part of 'Total expenses'. The total remuneration as disclosed in the table above (for 2019: EUR 11.5 million) includes all variable remuneration related to the performance year 2019. Under IFRS-EU, certain components of variable remuneration are not recognised in the profit and loss account directly, but are allocated over the vesting period of the award. The comparable amount recognised in staff expenses in 2019 and therefore included in 'Total expenses' in 2019, relating to the fixed expenses of 2019 and the vesting of variable remuneration of 2019 and earlier performance years, is EUR 11.8 million.

As at 31 December 2019, members of the Executive Board and Management Board held a total of 120,559 NN Group N.V. shares.

In 2019, 30,801 share awards on NN Group N.V. (both deferred and upfront) were granted to the Executive Board and Management Board.

Supervisory Board (2019)

amounts in thousands of euros	Supervisory Board
Fixed fees	794
Expense allowances	69
International attendance fees	160
Compensation Supervisory Board	1,023

Notes to the Consolidated annual accounts continued

46 Key management personnel compensation continued

The above mentioned amounts include VAT of EUR 177 thousand for 2019. NN Group does not provide for any pension arrangement, termination arrangements (including termination or retirement benefits) or variable remuneration, for members of the Supervisory Board.

As at 31 December 2019, members of the Supervisory Board held no NN Group N.V. shares.

Loans and advances to members of the Executive Board and Supervisory Board (2019)

amounts in thousands of euros	Amount outstanding 31 December	Average interest rate	Repayments
Executive Board members	415	5.09%	80
Supervisory Board members	427	3.68%	
Loans and advances	842		80

2018

Executive Board and Management Board (2018)

amounts in thousands of euros	Executive Board	Management Board ³	Total
Fixed compensation:			
– base salary (cash)	2,372	3,190	5,562
– base salary (fixed shares)	592		592
– pension costs ¹	54	147	201
– individual saving allowance	749	711	1,460
Variable compensation:			
– upfront cash	119	350	469
– upfront shares	119	350	469
– deferred cash	177	441	618
– deferred shares	177	524	701
Other ²		83	83
Fixed and variable compensation	4,359	5,796	10,155
Other benefits	211	490	701
Employer cost social security ⁴	156	191	347
Total compensation	4,726	6,477	11,203

1 The pension costs consist of an amount of employer contribution (EUR 201 thousand) and an individual savings allowance (EUR 1,460 thousand which is in 2018 27.2% of the amount of base salary above EUR 105,075).

2 For the NN Investment Partners business, 50% of deferred awards are made in a deferred investment in funds managed by the business instead of awarding deferred cash. In this way, alignment of interests is achieved between staff working in the NN Investment Partners business and the clients who invest in funds managed by that business.

3 As per 31 May 2018, Mr Spencer stepped down from his position in the Management Board and as per 30 September 2018, Ms Van Vredenburg stepped down from her position in the Management Board. In the table above, fixed and variable compensation of Mr Spencer up to 31 May 2018 is included and for Ms Van Vredenburg up to 30 September 2018 is included. As per 1 September 2018, Ms Nihot and Ms Stuijt as well as Messrs Rupprecht and Bosklopper joined the Management Board. In the table above, fixed and variable compensation of Ms Nihot, Ms Stuijt, Mr Rupprecht and Mr Bosklopper as from 1 September 2018 are included.

4 The employer cost social security do not impact the overall remuneration received by the Executive Board and Management Board members.

In the table above, 'Executive Board' refers to the two members of the Executive Board as at 31 December 2018. The two members of the Executive Board are also members of the Management Board. In the table above, 'Management Board' refers to the seven members of the Management Board as at 31 December 2018, i.e. those members that are not also member of the Executive Board. In the table above 'Total' refers to all members of the Management Board during 2018.

Remuneration of the members of the Executive Board and the Management Board is recognised in the profit and loss account in 'Staff expenses' as part of 'Total expenses'. The total remuneration as disclosed in the table above (for 2018: EUR 11.2 million) includes all variable remuneration related to the performance year 2018. Under IFRS-EU, certain components of variable remuneration are not recognised in the profit and loss account directly, but are allocated over the vesting period of the award. The comparable amount recognised in staff expenses in 2018 and therefore included in 'Total expenses' in 2018, relating to the fixed expenses of 2018 and the vesting of variable remuneration of 2018 and earlier performance years, is EUR 11.5 million.

As at 31 December 2018, members of the Executive Board and Management Board held a total of 140,376 NN Group N.V. shares.

In 2018, 33,458 share awards on NN Group N.V. (both deferred and upfront) were granted to the Executive Board and Management Board.

Notes to the Consolidated annual accounts continued

46 Key management personnel compensation continued

Supervisory Board (2018)

amounts in thousands of euros	Supervisory Board
Fixed fees	799
Expense allowances	70
International attendance fees	126
Compensation Supervisory Board	995

The above mentioned amounts include VAT of EUR 173 thousand for 2018. NN Group does not provide for any pension arrangement, termination arrangements (including termination or retirement benefits) or variable remuneration, for members of the Supervisory Board.

As at 31 December 2018, members of the Supervisory Board held a total of 13,560 NN Group N.V. shares.

Loans and advances to members of the Management Board and Supervisory Board (2018)

amounts in thousands of euros	Amount outstanding 31 December	Average interest rate	Repayments
Management Board members	495	5.02%	83
Supervisory Board members	427	4.43%	
Loans and advances	922		83

As at 31 December 2018, no loans and advances were provided to members of the Executive Board.

47 Fees of auditors

Fees of auditors

	2019	2018
Audit fees	17	18
Audit related fees	1	1
Fees of auditors	18	19

Fees as disclosed above relate to the network of the NN Group's auditors and are the amounts related to the respective years, i.e. on an accrual basis (excluding VAT).

The audit related fees include the services in relation to prospectuses, internal control reports provided to external parties and reporting to regulators.

Auditor fees are included in 'External advisory fees' as part of the Other operating expense.

Notes to the Consolidated annual accounts continued

48 Subsequent events

On 13 February, 2020 NN Group announced an open market share buyback programme for an amount up to EUR 250 million over a period of 12 months commencing 2 March 2020. The share buyback will be deducted from Solvency II Own Funds in full in the first quarter of 2020, whilst it will be deducted from IFRS shareholders' equity when the actual buyback transactions occur. NN Group intends to cancel all of the shares acquired under the programme.

49 Risk management

Introduction

Risk management is fundamental to insurance, banking and investment management. Appropriate risk management enables NN Group to meet obligations towards clients, regulators and other stakeholders. Accepting and managing risk is an integral part of NN Group's business: having the right functions and systems in place to manage risks is important.

NN Group's risk management structure and governance follows the 'three lines of defence' concept, which outlines the decision-making, execution and oversight responsibilities for NN Group's risk management. This structure and governance system is embedded in each of NN Group's organisational layers, from the holding level to the individual business units.

NN Group's risk management system includes its integration into NN Group's strategic planning cycle, the management information generated and a granular risk assessment. NN Group has defined and categorised its generic inherent risk types in a mutually exclusive and collectively exhaustive risk taxonomy and subsequently expressed its appetite for these risk types in three key risk appetite statements.

Risk Management Structure and Governance system

In order to have effective and integrated risk management, NN Group's risk management structure and governance are implemented in the NN Group Operating Model. In the NN Group's Operating Model, NN Group is organised in a Head Office and Business Unit structure. In each such organisation layer, risk governance and the three lines of defence concept are implemented.

Risk Management Governance

Executive Board and Management Board

The Executive Board is responsible for ensuring that the company has adequate internal risk management and control system in place so that it is aware, in good time, of any material risks run by the company and that these risks can be managed properly. While the Executive Board retains responsibility for NN Group's risk management, it has entrusted the day-to-day management and the overall strategic direction of the company, including the management of the structure, operation and effectiveness of NN Group's internal risk-management and control systems, to the Management Board. The Executive Board has designated a chief risk officer (CRO) from among the members of the Management Board, who is entrusted with the day-to-day execution of these tasks that are vested in the domain of the Risk Function. The Executive Board has designated day-to-day execution of tasks that are vested within the Legal and Compliance domain to the General Counsel.

Supervisory Board and its committees

The Supervisory Board is responsible for supervising the management of the Executive Board and the general course of affairs of NN Group and the business affiliated with it. The Supervisory Board also assists the Executive Board with advice. For supervising, advising and monitoring the Executive Board with respect to the design, operation and effectiveness of the internal risk-management and control systems, the Supervisory Board is assisted by two committees.

The Risk Committee assists the Supervisory Board in the performance of its duties in respect of, amongst others, NN Group's risk appetite, risk strategy and policies, risk exposures resulting from the business strategies and plans of NN Group and its affiliated business, the design, operation and effectiveness of the internal risk management and control systems of the group and NN Group's public disclosures on risk and risk management.

The Audit Committee assists the Supervisory Board in the performance of its duties in respect of, amongst others, the design, operation and effectiveness of the internal risk management and control systems related to financial reporting; the integrity and quality of the financial reporting process; the periodic financial reports and any ad hoc financial information; and the findings and outcome of the audit work (e.g. those contained in the quarterly audit reports and management letter).

For more details on these two committees, read more in the section 'Report of the Supervisory Board' of this Annual Report.

Risk Policy framework

NN Group's risk policy framework ensures that all risks are managed consistently and that NN Group as a whole operates within set risk tolerances. The policies and minimum standards focus on risk measurement, risk management and risk governance. Policies and standards or any potential waivers to the policies and standards have to be approved by the Management Board of NN Group.

Notes to the Consolidated annual accounts continued

49 Risk management continued

NN Operating Model

NN Group consists of a Head Office and its Business Units. In the NN Group Operating Model, the business units may independently perform all activities that are consistent with the strategy of NN Group and the approved (three year) business plan (the 'Business Plan') and as long as they are consistent with the internal management and risk/control frameworks, applicable laws and regulations, applicable collective agreements, NN Group's risk appetite, NN Group Values, and provided that these activities are not under the decision-making authority of the Management Board. Each business unit is expected to operate transparently and must provide all relevant information to the relevant Management Board members and Support Function Head(s) at Head Office. Particularly when a business unit wishes to deviate from applicable policies or standards, its Business Plan or when there is reason to believe that NN Group's financial position and/or reputation may be materially impacted.

The business unit CEOs are responsible for:

- The financial performance, as well as the business and operational activities, and as such the risk and control, in their respective areas
- The execution in their respective areas of any strategies that conform to the strategic framework of NN Group
- Ensuring that the business is run in compliance with laws and regulations, NN Group policies and standards and internal controls
- Fulfilling their statutory responsibilities
- Operating a sound control framework and operating in accordance with NN Group's values
- Sustainability of the corresponding business unit in the long term
- Sharing best practices across NN Group

Regular interaction between Head Office and business units risk functions takes place with respect to, amongst others, product approval, mandate approval, risk limit setting, risk reporting, Own Risk and Solvency Assessment (ORSA), policy setting and implementation monitoring, model and assumption review and validation.

Ad-hoc interactions also take place when a Business Unit proposes a material business initiative for which any Management Board member has the right to initiate a risk review. A risk review may also be initiated to investigate a significant incident or unexpected significant adverse business performance in and by Business Units. A risk review is an in-depth risk analysis of the object in scope concluded with a risk opinion and advice when and where relevant. The NN Group CRO is ultimately responsible for the risk review and opinion in the domain of the Risk Function. The General Counsel is ultimately responsible for risk reviews in the Legal and Compliance domain.

Three lines of defence concept

The three lines of defence concept, which is implemented throughout NN Group's risk management structure and governance, defines three risk management levels, each with distinct roles, decision authorities, execution responsibilities and oversight responsibilities. This concept helps to ensure that risk is managed in line with the risk appetite as defined by the Executive Board, ratified by the Supervisory Board and cascaded throughout NN Group.

- **First line of defence:** CEO of NN Group and the CEOs of the Business Units, as well as their management board members that collectively make business decisions, with primary accountability for the performance, sales, operations, investments, compliance and related risks affecting their businesses. They underwrite the (insurance) products that reflect local needs and thus know their customers and are well-positioned to act in both the customer's and NN Group's best interest.
- **Second line of defence:** Independent oversight functions at the Head Office and at the business units with a major role for the risk management, model validation, actuarial, compliance and legal functions. The CRO manages a functional, independent risk organisation and the General Counsel manages a functional independent legal function and Compliance Function, which supports the commercial departments in their decision-making, but which also has sufficient countervailing power to prevent risk concentrations and other forms of unwanted or excessive risks. These oversight functions have the following responsibilities:
 - Developing the policies, standards, guidance and charters for their specific risk and control area
 - Encouraging and objectively challenging/monitoring sound risk management throughout the organisation and coordinate the reporting of risks
 - Supporting the first line of defence in making proper risk-return trade-offs
 - Escalation power in relation to business activities that are judged to present unacceptable risks to NN Group
- **Third line of defence:** Corporate Audit Services (CAS) provides independent assurance on the effectiveness of NN Group's business and support processes, including governance, quality of risk management and quality of internal controls. They assess first line of defence activities as well as second line of defence activities.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Control and Support Functions – Second line of defence

Risk Management Function:

The NN Group CRO steers an independent risk organisation which supports the first line in their decision-making, but which also has sufficient countervailing power to prevent excessive risk taking. The NN Group CRO is also responsible for the organisation of Group Risk at Head Office level. Each business unit has its own CRO, who reports (directly or indirectly) to the NN Group CRO. The NN Group CRO must ensure that both the Management Board and the Supervisory Board are at all times informed of, and understand the material risks to which NN Group is exposed. As from 1 January 2020, the CFO of NN Group has assumed the responsibilities of the CRO portfolio on an ad-interim basis until a suitable successor is appointed. Appropriate arrangements to ensure continued second line of defence independence have been made.

Responsibilities of the Risk Management Function include:

- Setting and monitoring compliance with NN Group's overall risk policies issued by the Risk Function
- Formulating NN Group's risk management strategy and ensuring that it is implemented throughout NN Group
- Supervising the operation of NN Group's risk management and business control systems
- Reporting of NN Group's risks, as well as the processes and internal business controls
- Making risk management decisions with regard to matters which may have an impact on the financial results of NN Group or its reputation, without limiting the responsibility of each individual member of the Management Board in relation to risk management

Group Risk supports the NN Group CRO in the execution of his duties and responsibilities. To ensure solid understanding, oversight, and support to the business units, the span of control of the NN Group CRO is strengthened by a Risk Oversight department at Group level. Risk governance and frameworks, as well as internal and external risk reporting, is supported by the Enterprise Risk Management (ERM) team. Specialised Financial Risk Management and Operational Risk Management teams provide extra emphasis to the management of those risk types.

Model Validation Function:

NN Group's Model Validation aims to ensure that NN Group's models are fit for their intended purpose. For this purpose, Model Validation carries out validations of risk and valuation models in particular those related to Solvency II. Any changes to models that have an impact larger than certain pre-set materiality thresholds require approval from either the Group CRO and CFO, or the NN Group Management Board.

Model validation is not a one-off assessment of a model, but an ongoing process whereby the reliability of the model is verified at different stages during its life cycle: at initiation, before approval, when the model has been redeveloped or modified, and on a regular basis, based on a planning discussed and agreed with Model Development. It is not only a verification of the mathematics and/or statistics of the model, but encompasses both a quantitative and qualitative assessment of the model. Accordingly, the validation process covers a mix of developmental evidence assessment, process verification and outcome analysis.

The validation cycle determines the maximum period between two model validations. This means that each model in scope will be independently validated at least once within the validation cycle. In general, the length of the validation cycle relates to the relative materiality of the models in scope.

Compliance Function:

To effectively manage business conduct risk, NN Group has a Compliance Function attributed to the General Counsel, member of the Management Board, who has delegated the responsibility for day-to-day management of the Compliance Function to the Chief Compliance Officer. The Compliance Function is positioned independently from the business it supervises. This independent position is, amongst others, warranted by independent reporting, unrestricted access to senior management as well as structural, periodic meetings with the CEO and the Chairman of the Risk Committee of the Supervisory Board. Within NN Group's broader risk framework, the purpose of the Compliance Function is to:

- Understand and advocate integrity-related rules, regulations and laws for the effective management of Business conduct risk; proactively work with and advise the business to manage Business conduct risk throughout our products' life cycle and our business' activities to meet stakeholder expectations
- Develop and enhance tools to strengthen the three lines of defence to detect, communicate, manage and to report on Business conduct risks
- Support NN Group's strategy by establishing clear roles and responsibilities to help embed good compliance practices throughout the business by using a risk-based approach to align business outcomes with NN Group's risk appetite
- Deepen the culture of compliance by partnering with the business to increase the culture of trust, accountability, transparency and integrity in evaluating, managing and in reporting on Business conduct risk

At the business unit level, management establishes and maintains a Compliance Function and appoints a Local Compliance Officer (LCO). The LCO hierarchically reports to the CEO or the business unit Head of Legal & Compliance or in exceptional cases the CRO.

The LCOs have a functional reporting line to the Chief Compliance Officer. If business unit management wants to deviate from the Compliance charter management must first obtain a waiver from the Chief Compliance Officer who will first consult the General Counsel.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Actuarial Function:

The primary objective of the Actuarial Function, that reports to the Group CFO and has a functional reporting line to the Group CRO, is to reduce the risk of unreliable and inadequate technical provisions with regard to both Solvency II and IFRS reporting. This contributes to an enhanced perception of customers, regulators and investors of the financial solidity of NN Group.

Representatives of the Actuarial Function are involved in daily actuarial and risk management operations. They will supply their expertise pro-actively where and when deemed relevant and when asked for. Particularly the Corporate Chief Actuary and the Actuarial Function Holders in the business units will provide an objective challenge in the review of the technical provisions as well as quality assurance on the underwriting policy and reinsurance arrangements. The Actuarial Function informs management and the supervisory board on its opinion on the adequacy and the reliability of the technical provisions, the adequacy of reinsurance arrangements and the underwriting policy at least on an annual basis through the Actuarial Function Report.

The Actuarial Function operates within the context of NN Group's broader risk management system. Within this system, the role of the Actuarial Function is to:

- Understand and advocate the rules, regulations and laws for effective management of the calculation process of technical provisions, underwriting and reinsurance arrangements; proactively advise the business to manage the risk of unreliable and inadequate technical provisions
- Develop and enhance tools to strengthen the three lines of defence to detect, communicate, manage and to report on risks related to unreliable or inadequate technical provisions
- Support NN Group's strategy by establishing clear roles and responsibilities to help embed good (actuarial) practices throughout the organisation by using a risk-based approach to align insights with NN Group's risk appetite
- Strengthen the culture of professional risk management by challenging management and experts to increase the culture of trust, accountability, transparency and integrity in evaluating, managing and reporting on risks to unreliable or inadequate technical provisions

Control and Support Functions – Third line of defence

Internal Audit Function:

Corporate Audit Services NN Group, the internal audit department within NN Group, is an independent assurance function and its responsibilities are established by the Executive Board of NN Group, pre-discussed with the Audit Committee and approved by the Supervisory Board of NN Group. CAS independently assesses the effectiveness of the design of the organisation and the quality of procedures and control measures. CAS is an essential part of the corporate governance structure of NN Group.

CAS keeps in close contact with home and local supervisors and regulators as well as with the external auditor via regular meetings in which current (audit) issues are discussed as well as internal and external developments and their impact on NN Group and CAS. CAS also exchanges information like risk assessments and relevant (audit) reports.

The General Manager and staff of CAS are authorised to:

- Obtain without delay, from General Managers within NN Group, information on any significant incident concerning NN Group's operations including but not limited to security, reputation and/or compliance with regulations and procedures
- Obtain without delay, from responsible managers within NN Group, a copy of all letters and reports received from external review agencies (e.g. external auditor, supervisors, regulators and other agencies providing assurance related services)
- Have free, full, unrestricted and unfettered access at any time deemed appropriate to all NN Group departments, offices, activities, books, accounts, records, files, information. CAS must respect the confidentiality of (personal) information acquired
- Require all NN Group staff and business management to supply such information and explanations, as may be needed for the performance of assessments, within a reasonable period of time
- Allocate resources, set frequencies, select subjects, determine scope of work and apply appropriate techniques required to accomplish the CAS's objectives
- Obtain the necessary assistance of personnel in various departments/offices of NN Group where CAS performs audits, as well as other specialised/professional services where considered necessary from within or outside NN Group. CAS should exercise its authority with the minimum possible disruption to the day-to-day activities of the area being assessed

In compliance with the Dutch Corporate Governance Code, the Executive Board is responsible for the role and functioning of CAS, supervised by the Supervisory Board, supported by the Audit Committee. The General Manager of CAS is accountable to the CEO and functionally to the chair of the Audit Committee. On a day-to-day basis the General Manager of CAS reports to the CEO.

Risk Management System

The risk management system is not intended to be a sequential process but has instead been designed as a dynamic and integrated system. The system comprises of three important and interrelated components:

- A **risk control cycle**, embedded in
- An appropriate **organisation**, with
- A comprehensive **risk appetite framework**

Notes to the Consolidated annual accounts continued

49 Risk management continued

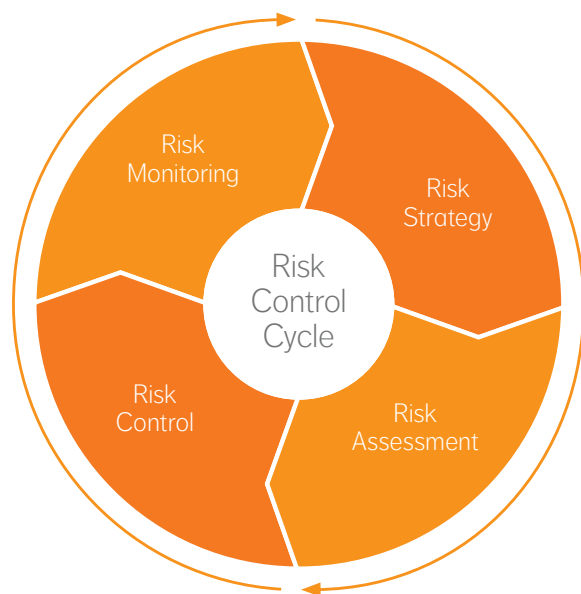
NN Group’s business environment exposes NN Group to inherent risks and obligations. As such, the environment determines the playing field and rules against which to calibrate risk management activities. These activities are carried out within NN Group’s risk appetite and framework.

Every employee has a role in identifying risk in their area of responsibility and the role of management is to decide how to manage risk. It is paramount to know which risks we take and why, to be aware of large existing and emerging risks and to ensure an adequate return for the risk assumed in the business. With risk management, we do not try to predict the future but instead prepare pro-actively for a wide range of scenarios.

Risk control cycle

NN Group’s risk control cycle consists of four steps. The cycle starts with business processes that support the setting and realisation of business and risk objectives. The latter results in a risk strategy: risk appetite, policies and standards. The next steps of the cycle is to identify and assess the risks that need to be managed, followed by effective mitigation through controls and continuous monitoring effectiveness of controls, including reporting of risk levels.

The risk control cycle, combined with the Business Plan/financial control cycle and performance management/HR cycle, enables realisation of business objectives through ensuring BUs and NN Group operate within the risk appetite.



Risk Strategy – Risk Appetite Framework

Risk appetite is the key link between NN Group’s strategy, capital plan and regular risk management as part of business plan execution. Accordingly, NN Group’s risk appetite, and the corresponding risk tolerances (limits and thresholds), is established in conjunction with the business strategy, both aligned to the overall ambitions.

The Risk Appetite Statements define how NN Group weighs strategic decisions and communicates its strategy to key stakeholders and BU CEOs with respect to accepting risk. The statements are not hard limits, but inform risk tolerances, contributing to avoiding unwanted or excessive risk taking, and aim to optimise use of capital. Risk tolerances are the qualitative and quantitative boundaries (limits and thresholds) consistent with the risk appetite statements.

NN Group expresses its risk appetite via three key risk appetite statements, which are then internally detailed further into nine sub-statements, relevant risk tolerances, controls and reporting. These three statements are intended to also be aligned with the NN Group’s four Strategic priorities focused on creating long-term value for the company:

NN Group’s Strategic priorities	Risk Appetite Statement	Description
Disciplined Capital Allocation	Strong Balance Sheet (Running the business – financially)	We would like to avoid having to raise equity capital after a 1-in-20 year event and do not want to be a forced seller of assets when markets are distressed.
Innovate our business and industry	Strategic Challenges (Shaping the business)	We manage our portfolio of businesses on a risk-return basis to meet our strategic objectives whilst considering the interests of all stakeholders.
Value-added products and services		
Agile and cost-efficient operating model	Sound Business Performance (Running the business – operationally)	We conduct our business with the NN Group Values at heart and treat our customers fairly. We aim to avoid human or process errors in our operations and to limit the impact of any errors.

Risk Taxonomy

NN Group has defined and categorised its generic risk landscape in a mutually exclusive and collectively exhaustive risk taxonomy as outlined below. The risk taxonomy consists of approximately 50 main risk types clustered in six risk types mapped to NN Group Risk Appetite Statements. For the use in day-to-day risk management, the main risk types are further split into approximately 150 sub risk types.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk Appetite Statement	Risk Types	Description
Strategic Challenges (Shaping the business)	Emerging Risks	Risks related to future external uncertainties that could pose a threat to the businesses of NN Group
	Strategic Risks	Risks related to unexpected changes to the business profile and the general business cycle as envisaged during strategic decision-making
Strong Balance Sheet (Running the business – financially)	Market Risks	Risks related to (the volatility of) financial and real estate markets. This includes liquidity risk
	Counterparty Default Risks	Risk related to the failure to meet contractual debt obligations
	Non-Market Risks	Risks related to the products NN Group markets
Sound Business Performance (Running the business – operationally)	Non-Financial Risks	Risks related to people and inadequate or failed internal processes, including information technology and communication systems and/or external events.

Key Risk Tolerances

Risk appetite statements are implemented within the business through the use of risk tolerances and limits. Risk policies and procedures provide specific risk tolerances and limits within all relevant risk categories in line with the risk appetite statements.

Risk Appetite Statement	Primary Impact Area	Key Risk Tolerances
Strategic Challenges (Shaping the business)	License to operate	Various metrics related to the Business Plan. Restricted List: to prevent investments in securities that are not in line with NN Group's values and/or applicable laws and regulations, NN Group has a Restricted List in place. This list is also leveraged for the risk analysis related to client acceptance for the provision of financial products and services throughout NN Group.
Strong Balance Sheet (Running the business – financially)	Financial	Solvency II ratio: the ratio of Eligible Own Funds (EOF) to Solvency Capital Requirement (SCR). NN Group aims to capitalise its operating units adequately at all times. To ensure adequate capitalisation, they are managed to their commercial capital levels (on the Solvency II ratio) in accordance with the risk associated with the business activities. Solvency II ratio sensitivities: assess the changes for both EOF and SCR under various scenarios decided by NN Group MB. Cash capital position at the holding company: cash capital is defined as net current assets available at the holding company. NN Group holds a cash capital position in the holding company to cover stress events and to fund holding company expenses and interest expenses. It is NN Group's aim for the cash capital position at the holding company to be in a target range between EUR 0.5 billion and EUR 1.5 billion. Sensitivities of Own Funds: NN Group monitors the impact of moderate stress events at business units and the required level of capital at the holding level in relation to this. Interest Rate Risk limits: NN Group has implemented limits and tolerances for interest rate risk exposures at NN Group level. Concentration Risk limits: in order to prevent excessive concentration risk, NN Group has a concentration risk limit framework. The framework sets a risk appetite and concentration limits on issuer category (corporate and sovereign), asset type and country of risk. Bank capitalisation: amount of capital NN Bank has to hold as required by the regulator as part of Basel III framework, expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets.
Sound Business Performance (Running the business – operationally)	Reputation, Operations	Annual Loss Tolerance and materiality: Tolerances on potential yearly loss, reputation impact and financial reporting accuracy.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk Assessment & Control

Risk assessments are regularly performed throughout NN Group. For market, counterparty default and non-market risk, NN Group's internal and associated models are leading in risk assessments/measurement. Risks that do not directly impact the balance sheet generally require professional judgement in identification and quantification: risk footprints (non-financial risks) and scenario analysis (strategic/emerging risks) are used to assess (report and follow up on) identified risks.

Risk Appetite Statement	Risk Class	Risk Assessment and main mitigation technique
Strategic Challenges (Shaping the business)	Emerging Risks	Scenario analysis and contingency planning
	Strategic Risks	Scenario analysis and business planning
Strong Balance Sheet (Running the business – financially)	Market Risks	NN Internal Model; NACA, ALM studies, SAA, Limit structure, Derivatives
	Counterparty Default Risks	NN Partial Internal Model; Limit structure
	Non-Market Risks	NN Partial Internal Model; PARP, Limit structure, reinsurance
Sound Business Performance (Running the business – operationally)	Non-Financial Risks	Risk footprints; Business and key controls, control testing, incident management

As part of the regular ORSA, a bottom-up full scope risk assessment is performed at least annually. Risk control activities are proportional to the risks arising from the activities and processes to be controlled. It is management's responsibility to promote appropriate risk control activities, based on risk identification and risk appetite, by ensuring that all employees are aware of their role in the risk management system.

Own Risk and Solvency Assessment (ORSA)

NN Group (and each of its regulated (re)insurance subsidiaries) prepares an ORSA at least once a year. In the ORSA, NN Group articulates its strategy and risk appetite, describes its key risks and how they are managed, analyses whether its risks and capital are appropriately modelled, and evaluates how susceptible the capital position is to shocks through stress and scenario testing. Stress testing examines the effect of exceptional but plausible scenarios on the capital position of NN Group. Stress testing can also be initiated outside the ORSA, either internally or by external parties such as De Nederlandsche Bank (DNB) and European Insurance and Occupational Pensions Authority (EIOPA). The ORSA includes a forward-looking overall assessment of NN Group's solvency position in light of the risks it holds.

Internal Capital Adequacy Assessment (ICAAP) and Internal Liquidity Adequacy assessment (ILAAP)

At least once a year, NN Group's banking and asset management operations run a process for ICAAP and the bank also for ILAAP in conformity with Basel III requirements. ICAAP and ILAAP test whether current capital and liquidity positions, respectively, are adequate for the risks that the relevant NN Group entities bear.

Product approval and review process (PARP)

The PARP has been developed to enable effective design, underwriting, and pricing of all products as well as to ensure that they can be managed throughout their lifetime. This process establishes requirements to the product risk profile features to ensure that products are aligned with NN Group's strategy. The PARP takes into account customer benefits and product suitability, expected sales volumes, value-oriented pricing metrics and relevant policies. It includes requirements and standards to assess risks as per the risk categories, as well as the assessment of the administration and accounting aspects of the product.

New asset class assessment (NACA) and investment mandate process

NN Group maintains a NACA for approving investments in new asset classes. At the group level, NN Group establishes a global list of asset classes in which the business units may invest. Each business unit also maintains a local asset list that is a subset of the global asset list prescribing in which asset classes the relevant business unit may invest. The investments in these asset classes are governed through investment mandates given to the asset manager.

Non-financial risks

Business conduct, operations, continuity & security risks and related second order potential reputation impact are monitored in their mutual relationship as 'Non-Financial Risk' (NFR). NFRs are identified, assessed, mitigated, monitored and reported in the overall risk control cycle within NN Group. Key NFRs are included into the quarterly risk reporting.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Responsible Investment Framework policy and Restricted List

NN Group has a policy framework in place to ensure that our assets are invested responsibly. Amongst others, the policy includes requirements to systematically incorporate Environmental, social and governance (ESG) factors into the investment process. Furthermore, the implementation of a Restricted List should prevent investments in securities that are not in line with NN Group's values, and/or applicable laws and regulations.

Risk Monitoring

The risk profile is monitored against the risk appetite, risk assessments and the risk limits derived from the risk appetite. Results, including deficiencies, conclusions and advices, are to be reported regularly to the applicable management boards. Action shall be taken by management when monitoring indicates that risks are not adequately controlled.

Risk Appetite Statement	Risk Reporting and Monitoring
Strategic Challenges (Shaping the business)	We actively monitor and manage our products, distribution channels and organisation, as well as key performance and risk drivers of our business. We monitor alignment of investments with the Restricted List. This function is performed by Corporate Citizenship.
Strong Balance Sheet (Running the business – financially)	We monitor financial risks on our balance sheet via our Solvency II capital position. We monitor our capacity to meet our payment and collateral obligations, even under severe liquidity stress scenarios.
Sound Business Performance (Running the business – operationally)	We monitor alignment with applicable laws and regulations, NN Group policies and standards. We actively monitor and manage employee conduct and foster a business culture demonstrating that we live the NN Group values. We accept but limit losses from non-financial risk and therefore manage to agreed tolerances.

Risk Reporting

On a quarterly basis, the Management Board and Supervisory Board of NN Group are presented with an Own Funds and Solvency Capital Requirement Report and an Enterprise Risk Management Report. The first report aims to provide an overview of the quarterly Solvency II capital position and development. The latter report is to provide one consistent, holistic overview of the risks of NN Group. It focuses on comparing current risk levels to our risk appetite and aims to encourage forward-looking risk management.

The Own Funds and Solvency Capital Requirement Report includes the Solvency II ratio sensitivities assessing the changes in various scenarios for both Eligible Own Funds and SCR at NN Group level. The size and type of the shocks applied for each sensitivity is decided by the Management Board. Solvency II Own Funds and SCR reporting is the NN Group equivalent to the Value at Risk. Solvency II ratio sensitivities are therefore the alternative analysis for market risk sensitivities versus IFRS sensitivities according to IFRS 7 Financial Instruments: Disclosures.

Recovery planning

NN Group has determined a set of measures for early detection of and potential response to a financial or non-financial crisis, should it occur. These include monitoring indicators which are expected to provide early-warning of emerging crises, advance preparation of options to raise or release capital, allocate roles and responsibilities in case of a crisis, and other practical arrangements that may be required depending on the type of crisis. The Management Board is responsible for the Preparatory Crisis Plan and the update of the report is performed by first line of defence – Finance.

Risk profile

Partial Internal Model

The SCR constitutes a risk-based capital buffer which is calculated based on actual risks on the balance sheet. Under Solvency II, the SCR is defined as the loss in basic own funds resulting from a 1-in-200 year adverse event over a one-year period. The internal risk capital framework is a combination of Internal Model and Standard Formula components. The largest component covering all major Dutch insurance entities uses internally developed methodologies for modelling the market, business and insurance risks to determine the solvency position for local reporting and Group consolidation purposes. For the EU-based international insurance businesses and some smaller insurance undertakings in the Netherlands, NN Group uses the Solvency II Standard Formula to calculate the SCR for local reporting and for Group consolidation.

Furthermore, the capital requirement for operational risk is based on the Standard Formula approach across the group. Finally, the non-insurance businesses and international insurance undertakings not based in the EU are consolidated in the group SCR based on the (local) applicable (sectorial) capital requirements under equivalence. The total group SCR is obtained from the Internal Model and Standard Formula capital requirements using EIOPA's integration technique 3.

Notes to the Consolidated annual accounts continued

49 Risk management continued

The choice for a Partial Internal Model is based on the conviction that an internal model better reflects the risk profile of the Dutch insurance entities and has additional benefits for risk management purposes, whilst the Standard Formula adequately captures the risk profile of the international businesses:

- An internal model approach can better reflect the specific assets and therefore the market risk in the portfolio of Life businesses e.g. sovereign and other credit spread risks. In addition, the approach used for most significant non-market risks within the Life businesses such as longevity (trend uncertainty) and expense risk (closed block treatment) can be better tailored to NN Group's specific portfolio characteristics.

An internal model approach better reflects the reinsured risks of NN Re. A significant proportion of the NN Re risks are a share of the NN Non-life risks where an internal model approach is applied. Variable Annuity risks are not adequately addressed by the Standard Formula, while the internal model captures the integrated market risks and hedging programmes more accurately.

Assumptions and limitations

Risk-free rate and volatility adjustment/Aligned Reference Portfolio:

The assumptions regarding the underlying risk-free curve are crucial in discounting future cash flows when calculating the market values of certain assets and liabilities. For liabilities, NN Group applies the methodology provided by EIOPA for the risk-free rate including the credit risk adjustment (CRA) and the ultimate forwards rate (UFR). Where approved by the regulator, the risk-free rate is adjusted with the volatility adjustment for the calculation of Own Funds.

Valuation assumptions – replicating portfolios:

NN Group uses replicating portfolio techniques to represent the product-related cash flows, options and guarantees by means of standard financial instruments in the risk calculations. The replications are used to determine and revalue insurance liabilities under a large number of Monte Carlo scenarios, this approach is also followed for mortgages.

Diversification and correlation assumptions:

As for any integrated financial services provider offering a variety of products across different business segments and geographic regions, diversification is key to NN Group's business model. The resulting diversification reflects the fact that not all potential worst-case losses are likely to materialise at the same time. The Internal Model takes diversification effects into account when aggregating results at Group level with correlations. Important diversification benefits include regions, business units and risk categories.

Where possible, correlation parameters are derived through statistical analysis based on historical data. In case historical data or other portfolio-specific observations are insufficient or not available, correlations are set by expert judgement via an established, well-defined and controlled process. Based on these correlations, industry-standard approaches such as Gaussian copula and VaR-CoVaR approach are used to determine the dependency structure of quantifiable risks.

Model limitations:

NN Group's PIM resulted from balancing between (1) an easy-to-communicate methodology and (2) efficient calculations with appropriate accuracy and granularity in the underlying risks. Despite several limitations stemming from this, the overall PIM is considered to be materially robust, appropriate and compliant with Solvency II.

As a result of the granular modelling approach and wide variety of NN Group's assets and liabilities, the PIM is more complex than the Standard Formula.

Inherent model limitations related to the calibration of a 1-in-200 year stress events for a full spectrum of market and non-market risks include the use of limited historical data to determine a distribution of forward-looking risk factor stresses as well as the use of modelling assumptions and expert judgement.

Non-quantifiable risks such as strategic, reputational and model risks, are managed through qualitative risk assessments. In addition, and as part of the ORSA, NN Group holistically assesses its risk exposure to both quantifiable and non-quantifiable risks in order to agree mitigating actions as required.

NN Group's Partial Internal Model has, in general, been developed centrally by Group Risk, with the inherent risk that the developed models have aspects which might be less appropriate for individual entities.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Solvency II ratio of NN Group

The following table shows the NN Group Solvency II ratio as at 31 December 2018 and 31 December 2019 respectively.

	2019	2018
Eligible Own Funds	17,792	16,727
Solvency Capital Requirement	8,154	7,274
NN Group Solvency II ratio (Eligible Own Funds/SCR)	218%	230%

The SCR is based on the Partial Internal Model. As at 31 December 2019, this comprises Internal Model calculation for NN Life, NN Non-life, NN Re, MOVIR and the portfolios owned by NN Group N.V., and Standard Formula calculation for ABN AMRO Life and ABN AMRO Non-life, NN Insurance Services and the international insurance entities of NN Group.

As NN Group is designated as a Financial Conglomerate, Solvency II Own Funds and SCR do not include NN Bank. NN Bank has a Capital Requirement Regulation (CRR) transitional Total capital ratio of 17.2% at the end of 2019 compared to 17.9% at the end of 2018, and a CRR transitional Common Equity Tier 1 (CET1) ratio of 15.8% at the end of 2019 compared to 16.3% at the end of 2018. NN Bank has a Liquidity Coverage ratio (LCR) of 173% at year-end 2019 compared to 171% at the end of 2018.

NN Life Japan is treated as 'equivalent' to calculate the Solvency Capital Requirement. The Solvency II concept of Equivalence is granted to capital frameworks that are deemed to have similarity with the Solvency II framework and/or principles and as such can be relied-upon to assess capital requirements.

Solvency Capital Requirement

The following table shows the NN Group Solvency Capital Requirement as at 31 December 2018 and 31 December 2019 respectively.

Solvency II Capital Requirements

	2019	2018
Market risk	4,558	4,055
Counterparty default risk	259	274
Non-market risk	6,745	5,883
Total BSCR (before diversification)	11,562	10,212
Diversification ¹	-2,910	-2,638
Total BSCR (after diversification)	8,652	7,574
Operational risk	704	659
LACDT	-1,732	-1,456
Other	-12	-10
Solvency II entities SCR	7,612	6,767
Non-Solvency II entities	542	507
Total SCR	8,154	7,274

¹ For 2019, non-market sub-risks for Standard Formula units are presented on diversified basis as part of Non-market risk; in 2018 these sub-risks were presented as a simple sum.

The Solvency II Basic Solvency Capital Requirements (BSCR) includes both the Internal Model businesses' BSCR and the Standard Formula businesses' BSCR. Together, these figures reflect the diversification benefits between the Internal Model and Standard Formula businesses.

The breakdown of specific SCR risk types and explanations for the most important changes in the risk profile over the year of 2019 are presented in the next sections.

The loss-absorbing capacity of deferred taxes (LACDT) benefit increased mainly due to an increase in LACDT benefit caused by a higher tax base and change in the Dutch corporate tax percentage. In the above table, 'Other' includes loss-absorbing capacity of technical provisions (LACTP), capital for non-modelled Solvency II entities and some minor non-modelled risks including those required by the regulator.

Non-Solvency II entities includes mainly NN Life Japan, Pension Funds and NN Investment Partners.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Solvency II ratio sensitivities

Along with the Solvency II Capital Requirement, NN Group regularly calculates the sensitivities of the Solvency II ratio under various scenarios, by assessing the changes for both Eligible Own Funds and SCR. The Solvency II ratio sensitivities are primarily designed to support the NN Group Management Board and the Risk Management functions in having a forward-looking view on the risks to solvency of the company, and to analyse the impacts of market or other events. The sensitivities are selected to reflect plausible, realistic scenarios that could materialise within the foreseeable future and are not calibrated on a pre-defined confidence interval.

The effect on the Solvency II ratio is calculated based on applying an instantaneous stress on the balance sheet, and on ceteris paribus basis. For all insurance entities including NN Life Japan, the after stress own funds are calculated for each of the sensitivity scenarios; the SCR impacts are recalculated for BSCR and Operational risk SCR. Other SCR components including the LACDT amount are kept constant.

Main types of risks

As outlined above in the table 'SII capital requirements', the following principal types of risk are associated with NN Group's business which are further discussed below:

Market, counterparty default and liquidity risk

- **Market risk:** is the risk of potential losses due to adverse movements in financial markets and includes: equity risk, real estate risk, interest rate risk, credit spread risk, foreign exchange risk, inflation risk, basis risk and concentration risk
- **Counterparty default risk:** is the risk of potential losses due to unexpected default or deterioration in the credit rating of NN Group's counterparties and debtors
- **Liquidity risk:** is the risk that one of NN Group's entities does not have sufficient liquid assets to meet its financial obligations when they become due and payable, at reasonable cost and in a timely manner. This risk is not part of the SCR Partial Internal Model

Market risk

Market risk comprises the risks related to the impact of changes in various financial markets indicators on NN Group's balance sheet. Market risks are taken in pursuit of returns for the benefit of customers and shareholders. These returns are used to fulfil policyholder obligations with any surplus return benefiting the shareholders. Accordingly, optimisation within the risk appetite is paramount to generate returns for both policyholder and shareholder. In general, market risks are managed through a well-diversified portfolio under a number of relevant policies within clearly defined and monitored limits. NN Group integrates Environmental, Social, and Governance (ESG) factors in the investment decision-making framework and reduce downside risk through various hedging programmes.

Market risk capital requirements

	2019	2018
Interest rate risk	3,817	3,036
Equity risk	2,800	2,065
Credit spread risk	3,706	3,632
Real estate risk	1,533	1,384
Foreign exchange risk	418	456
Inflation risk	120	233
Basis risk	115	104
Diversification market risk	-7,951	-6,855
Market risk	4,558	4,055

In 2019, the Market Risk SCR increased to EUR 4,558 million, driven by higher exposure to equities and lower interest rate levels. The lower interest rate level has resulted in higher valuations which led to a proportional increase in required capital. The table below sets out NN Group's market value of assets for each asset class as at the end of 2019 and 2018. The values in these tables may differ from those included in the consolidated IFRS balance sheet as derivatives are excluded and furthermore due to classification and valuation differences to reflect a risk management view.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Investment assets

	Market value	% of total	Market value	% of total
	2019	2019	2018	2018
Fixed income¹	164,272	85%	153,131	86%
Government bonds and loans	73,143	38%	71,580	40%
Financial bonds and loans	10,888	5%	9,157	5%
Corporate bonds and loans	24,787	13%	21,143	12%
Asset-backed securities	4,388	2%	3,478	2%
Mortgages ¹	49,472	26%	46,075	26%
Other retail loans	1,594	1%	1,698	1%
Non-fixed income	17,164	9%	15,031	9%
Common & preferred stock	4,435	2%	3,469	2%
Private equity	933	1%	689	0%
Real estate ²	9,257	5%	8,307	5%
Mutual funds (money market funds excluded) ³	2,539	1%	2,566	2%
Money market instruments (money market funds included)⁴	12,099	6%	9,464	5%
Total investments	193,535	100%	177,626	100%

1 Mortgages are on amortised cost value. The mortgage value on the consolidated IFRS balance sheet differs from the value in the current table due to the acquisition premium of mortgages. Mortgage values include mortgages underlying the mortgage structure vehicles.

2 The real estate values exclude the real estate forward commitments, since NN Group has no price risk related to them.

3 Fixed income mutual funds are included in mutual funds.

4 Money market mutual funds are included in the Money market instruments.

Total investment assets have increased from EUR 177,626 million at the end of 2018 to EUR 193,535 million at the end of 2019. Main developments in 2019 are explained by valuation changes. The lower interest rate level also led to additional cash collateral. In addition, there has also been additional investments in mortgage loans.

Interest rate risk

Interest rate risk is defined as the possibility of having losses in the Solvency II Own Funds due to adverse changes in the level or shape of the risk-free interest rate curve used for discounting assets and liabilities cash flows. Exposure to interest rate risk arises from asset or liability positions that are sensitive to changes in this risk-free interest rate curve. NN Group's Partial Internal Model SCR does not include the change in value of the risk margin due to interest rate shocks.

Risk profile

As shown in the 'Market risk capital requirements' table above, the interest rate risk SCR of NN Group increased from EUR 3,036 million in 2018 to EUR 3,817 million in 2019. The increase is mainly reflecting the change in market movements during the year, which includes a decrease in Volatility Adjustment and a decrease of the risk-free interest curve. The increase of interest rate risk SCR also contributes to the increase of the diversification across market risks.

Risk mitigation

The interest rate position indicates to what extent assets and liabilities are matched. NN Group manages its interest rate position by investing in long-term bonds and interest rate swaps. The interest rate risk management focuses on matching asset and liability cash flows for the durations for which the markets for fixed income instruments are sufficiently deep and liquid.

NN Group has implemented limits and tolerances for interest rate risk exposures at NN Group level as well as for a limited number of business units.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk measurement

For the purpose of discounting EUR-denominated asset cash flows, NN Group uses market swap curves to value assets. For the asset cash flows denominated in other currencies, the relevant swap or government curve is used for that specific currency.

For the purpose of discounting the EUR-denominated liability cash flows NN Group uses a swap curve less credit risk adjustment (CRA) plus Volatility Adjustment (VOLA) in line with definitions under the Solvency II. For the liability cash flows denominated in other currencies, the relevant swap or government curve is used where this curve is also lowered by the credit risk adjustment and adding the Volatility Adjustment specific for each currency. In line with Solvency II regulations, NN Group extrapolates the EUR swap curve starting from the last liquid point onwards to the Ultimate Forward Rate for each relevant currency in its portfolio. The last liquid point (LLP) used for EUR is 20 years. As such, the sensitivity of SCR for interest rate risk primarily depends on the level of cash flow matching between assets and liabilities up to the 20-year point, and the difference between the swap curve and the curve extrapolated to the UFR for longer cash flows.

The sensitivity of the Solvency II ratio to changes in interest rates is monitored on a quarterly basis. The table below presents the Eligible Own Funds, SCR and Solvency II ratio sensitivities to various changes in interest rates.

Solvency II Ratio sensitivities for interest rate comprise the following set of shocks, each of them is calculated independently as a standalone scenario: a parallel up and a parallel down shift of the discount curve, a steepening scenario for the interest rate used to discount asset cash flows after the last liquid point and a change of the ultimate forward rate.

NN Group's Solvency II ratio decreases when interest rates or the UFR decrease. As at the end of 2019, the EUR risk-free interest rate curve without the Volatility Adjustment was lower compared with the end of 2018 which decreases the Solvency II ratio of NN Group, in line with the interest parallel shock -50bps sensitivity shown in the table below. At the same time the EUR UFR level decreased from 4.05% to 3.90% as of 1 January 2019, which had a slightly negative effect on the Solvency II ratio of NN Group. The Volatility Adjustment decreased from 24bps at the end of 2018 to 7bps as at the end of 2019, which had a negative effect on the Solvency II ratio.

Solvency II ratio sensitivities: interest rate risk at 31 December 2019

	Own Funds impact	SCR impact	Solvency II ratio impact
Interest rate: Parallel shock +50 bps	-791	-587	6%
Interest rate: Parallel shock -50 bps	1,068	730	-6%
Interest rate: 10 bps steepening between 20y-30y	-665	-14	-8%
UFR: Downward adjustment of 15 bps (EUR UFR at 3.75%)	-272	40	-4%

Under the parallel shock scenarios, the base risk-free interest rate curves for each currency are shocked by +/-50 bps for all tenors up until the last liquid point. The other components of the basic risk-free interest rate curve – namely UFR, Credit Risk Adjustment, Volatility Adjustment and extrapolation technique towards UFR remain unchanged.

In the interest rate steepening scenario the EUR asset valuation curve is shocked after the last liquid point (the last liquid point for EUR is set at 20 years under Solvency II). The steepening is applied for interest rate curve tenors between 20 and 30 years (a linear increase from 0 to 10bps of 1bp per tenor). After the 30 years point, the shift in the interest rate curve remains constant at 10bps. The discount curve for liability cash flows is not adjusted in this scenario.

For 2019, the UFR for EUR under Solvency II is set at 3.90%. In April 2017, EIOPA published an updated methodology to derive the UFR. In line with the updated methodology, the calculated value of the UFR for EUR is 3.60%, but annual changes to the UFR will not be higher than 15 basis points. Therefore the UFR for EUR is expected to decrease from 3.90% to 3.75% on 1 January 2020. The UFR downward adjustment scenario provides the impact in Own Funds and SCR using the applicable UFR downward adjustment of 15bps for each currency. The other components of the basic risk-free interest rate curve – namely the Credit Risk Adjustment, Volatility Adjustment and extrapolation technique towards UFR – are kept constant in this sensitivity.

Equity risk

Equity risk is defined as the possibility of having losses in Solvency II Own Funds due to adverse changes in the level of equity market prices. Exposure to equity risk arises from direct or indirect asset or liability positions, including equity derivatives such as futures and options, that are sensitive to equity prices.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk profile

The table below sets out the market value of NN Group's equity assets as at the 31 December 2019 and 2018, respectively.

Equity assets

	2019	2018
Common & preferred stock	4,435	3,469
Private equity	933	689
Mutual funds (money market funds excluded, includes fixed income mutual funds)	2,539	2,566
Total	7,907	6,724

NN Group is mostly exposed to public listed equity, but also invests in private equity funds and equity exposures through mutual funds. The equity exposure is diversified mainly across the Netherlands (36%) and other European countries (63%), with some exposure also present in the United States and Asia. Note that mutual funds are classified as equity in the table above, but include predominantly fixed income funds. The slight decrease in mutual funds is largely driven by switches from emerging market fund investments to emerging market bonds. Changes in public and private equities are largely driven by market value movements.

As shown in the 'Market risk capital requirements' table above, the Equity Risk SCR of NN Group increased from EUR 2,065 million in 2018 to EUR 2,800 million in 2019. This reflects a higher equity exposure as well as higher equity valuations.

Risk mitigation

Exposure to equities provides additional diversification and up-side return potential in the asset portfolio of an insurance company with long-term illiquid liabilities. The concentration risk on individual issuers is mitigated under relevant investment mandates. There is no natural hedge for equity risk on the liability side of the balance sheet. NN Group has the possibility to protect the downside risk of the equity portfolio by buying put options and other hedge instruments.

Risk measurement

The sensitivity of the Solvency II ratio to changes in the value of equity is monitored on a quarterly basis. This scenario estimates the impact of an instantaneous shock of -25% applied to the value of direct equity and equity mutual funds. Derivatives like equity options or equity forwards which have equity as underlying are also revalued using the same shock applied to the underlying equities or equity indices.

The table below presents the Eligible Own Funds, SCR and Solvency II ratio sensitivity to a downward shock in equity prices.

Solvency II ratio sensitivities: equity risk at 31 December 2019

	Own Funds impact	SCR impact	Solvency II ratio impact
Equity Downward shock -25%	-1,503	-201	-13%

Credit spread risk

The credit spread risk is defined as the possibility of having losses in Solvency II Own Funds due to adverse movements in the credit spreads of fixed income assets. The credit spread widening (or narrowing) reflects market supply and demand, rating migration of the issuer and changes in expectation of default. Changes in liquidity and other risk premiums that are relevant to specific assets can play a role in the value changes.

In the calculation of the SCR for the Partial Internal Model entities, NN Group assumes no change to the volatility adjustment on the liability side of the balance sheet after a shock-event, but instead reflects the illiquidity of liabilities in the asset shocks to ensure appropriate solvency capital requirements. This approach ensures appropriate risk incentives and is approved by DNB. NN Group also shocks all government bonds and its mortgage portfolio in the calculation of spread risk capital requirements for the Partial Internal Model entities.

The main asset classes in scope of the credit spread risk module for Partial Internal Model entities are government and corporate bonds, mortgages and loans.

For the calculation of the SCR for credit spread risk of the Standard Formula insurance entities, the main asset classes in scope are corporate bonds and loans.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk profile

As shown in the 'Market risk capital requirements' table, the credit spread risk SCR of NN Group increased from EUR 3,632 million in 2018 to EUR 3,706 million in 2019. This increase is mainly driven by higher asset valuation caused by the drop in the interest rate level and mortgage exposure increases. Capital is also required to be held against spread risk arising from government bonds under the Partial Internal Model.

The table below shows the market value of NN Group's fixed-income bonds which are subject to credit spread risk SCR by type of issuer as at the 31 December 2019 and 31 December 2018, respectively. The European government bonds are not subject to credit spread risk SCR for Standard Formula entities.

Fixed-income bonds and loans by type of issuer

	Market value		Percentage	
	2019	2018	2019	2018
Government Bonds	73,143	71,580	64%	68%
Manufacturing	7,933	6,575	7%	6%
Finance and Insurance	10,888	9,157	9%	9%
Asset-backed securities	4,388	3,478	4%	3%
Utilities	2,937	2,824	3%	3%
Information	2,194	2,111	2%	2%
Transportation and Warehousing	2,981	1,754	3%	2%
Real Estate and Rental and Leasing	1,800	1,594	2%	1%
Other	6,942	6,285	6%	6%
Total	113,206	105,358	100%	100%

The table below sets out the market value of NN Group's assets invested in government bonds and loans by country and maturity.

Market value government bond and loans exposures (2019)

Market value of government bond and loans in 2019 by number of years to maturity ⁴											
	Rating ¹	Domestic exposure ²	0-1	1-2	2-3	3-5	5-10	10-20	20-30	30+	Total 2019
France	AA	0%	92	48	170	375	654	2,887	2,368	4,937	11,531
Japan	A+	98%	238	356	511	1,064	2,372	3,090	1,643	747	10,021
Germany	AAA	0%	86	24	163	1,112	1,459	4,529	2,223	0	9,596
Netherlands	AAA	99%	7	228	82	916	1,355	2,519	2,521	29	7,657
Belgium	AA-	33%	308	53	451	404	1,537	2,534	3,063	38	8,388
Austria	AA+	0%	189	185	191	223	1,684	1,690	1,078	1,259	6,499
Multilateral ³	AAA	0%	38	62	247	346	644	1,525	812	14	3,688
Spain	A-	26%	14	9	27	204	530	1,322	1,429	3	3,538
Finland	AA+	0%	158	39	5	2	559	11	997	0	1,771
United States	AAA	0%	1	1	1	0	1	58	2,156	0	2,218
Italy	BBB	0%	73	8	47	119	837	429	180	0	1,693
Other ⁵ – Above Investment Grade			354	221	546	522	2,129	1,815	214	19	5,820
Other ⁵ – Below Investment Grade			119	6	30	211	155	152	34	16	723
Total			1,677	1,240	2,471	5,498	13,916	22,561	18,718	7,062	73,143

1 NN Group uses the second best rating across Fitch, Moody's and S&P to determine the credit rating label of its bonds.

2 Percentage of the bonds held in the local unit, e.g. percentage of Dutch bonds held by entities registered in the Netherlands.

3 Includes EIB, ECB, EFSF, EU and ESM.

4 Based on legal maturity date.

5 Investment Grade reflects a rating of BBB or higher; Below Investment Grade reflects a rating below BBB.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Market value government bond and loans exposures (2018)

Market value of government bond and loans in 2018 by number of years to maturity ⁴											
	Rating ¹	Domestic exposure ²	0-1	1-2	2-3	3-5	5-10	10-20	20-30	30+	Total 2018
Japan	A+	98%	316	267	461	1,229	2,836	3,360	1,607	604	10,680
Germany	AAA	0%	77	107	89	480	2,437	3,586	3,777	0	10,553
France	AA	0%	93	100	67	467	749	2,803	2,006	4,016	10,301
Netherlands	AAA	98%	115	54	328	939	1,644	2,501	2,883	30	8,494
Belgium	AA-	33%	346	336	55	745	1,549	2,095	2,664	6	7,796
Austria	AA+	0%	149	211	223	292	2,062	1,873	964	1,058	6,832
European Union ³	AA-	0%	120	50	105	348	847	1,536	691	11	3,708
Spain	A-	27%	1	15	17	53	365	1,490	1,176	2	3,119
Finland	AA+	0%	92	164	59	69	646	15	979	0	2,024
Italy	BBB	0%	29	76	8	147	313	791	195	0	1,559
Ireland	A+	0%	0	10	0	127	361	333	142	0	973
Other ⁵ Investment Grade			238	376	269	707	1,789	1,391	226	0	4,996
Other ⁵ below Investment Grade			73	39	2	114	156	116	45	0	545
Total			1,649	1,805	1,683	5,717	15,754	21,890	17,355	5,727	71,580

1 NN Group uses the second best rating across Fitch, Moody's and S&P to determine the credit rating label of its bonds.

2 Percentage of the bonds held in the local unit, e.g. percentage of Dutch bonds held by entities registered in the Netherlands.

3 Includes EIB, ECB, EFSF, EU and ESM.

4 Based on legal maturity date.

5 Investment Grade reflects a rating of BBB or higher; Below Investment Grade reflects a rating below BBB.

Exposures to German, French and Japanese government bonds and loans represents 43% of NN Group total sovereign debt exposure. German and French government bonds and loans primarily held by Netherlands Life while Japanese government bonds are primarily held by NN Life Japan. Of the EUR 31 billion German, French and Japanese government bonds and loans held by NN Group, 72% will mature after year 10 and 38% after year 20. These long-term government bonds and loans are sensitive to sovereign credit spread movements versus EUR swap rates. A combination of Dutch, German and French government bonds, were included in the spread lock programme during 2019, which means that NN Group has forward sold the underlying bonds using derivatives. Some German and Dutch spread locks have been settled during the last quarter of 2019, although some French spread locks have been cash settled but the underlying bond have been kept in portfolio. With regard to Central and Eastern Europe, the government bond exposures are mainly domestically held. All relative exposures to the top 10 government exposures slightly increased. In the Partial Internal Model, all government bonds contribute to credit spread risk, including those rated AAA.

The tables below set out the market value of non-government fixed-income securities (excluding mortgages and derivatives) by rating and maturity.

Market value non-government bond securities and loans (2019)¹

Market value of non-government bond securities and loans in 2019 by number of years to maturity									
	0-1	1-2	2-3	3-5	5-10	10-20	20-30	30+	Total 2019
AAA	1,040	501	496	616	600	1,065	879	2,635	7,832
AA	391	812	595	546	1,014	411	229	108	4,106
A	1,031	1,319	1,746	2,962	3,633	775	497	91	12,054
BBB	1,098	1,357	1,480	3,974	3,367	909	638	119	12,942
BB	65	179	201	843	785	23	29	5	2,130
B	10	41	5	90	141	0	0	0	287
No rating available ¹	170	37	4	13	31	142	0	314	711
Total	3,805	4,246	4,527	9,044	9,571	3,325	2,272	3,272	40,062

1 This category also includes limited exposure in CCC or below rated instruments of around EUR 59 million and instruments with 'No Rating (NR)'.
 2 This category also includes limited exposure in CCC or below rated instruments of around EUR 59 million and instruments with 'No Rating (NR)'.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Market value non-government bond securities and loans (2018)

	Market value of non-government bond securities and loans in 2018 by number of years to maturity									Total 2018
	0-1	1-2	2-3	3-5	5-10	10-20	20-30	30+	N.A. ²	
AAA	615	455	286	464	424	426	812	1,903	0	5,385
AA	358	309	595	572	718	355	175	131	0	3,213
A	957	726	825	2,925	3,024	326	427	160	0	9,370
BBB	1,110	878	1,148	3,116	4,438	854	961	274	0	12,779
BB	109	123	265	858	825	11	6	31	0	2,228
B	0	0	25	29	99	0	0	7	0	160
No rating available ¹	285	2	44	3	4	48	135	113	9	643
Total	3,434	2,493	3,188	7,967	9,532	2,020	2,516	2,619	9	33,778

1 This category also includes limited exposure in CCC or below rated instruments of around EUR 59 million and instruments with 'No Rating (NR)'.
2 These included matured bonds in Delta Lloyd Life, Delta Lloyd Non-life and NN Belgium portfolios which were not repaid.

The table below sets out NN Group's holdings of loans and other debt securities as at the 31 December 2019 and 2018, respectively.

Market value all loans and other debt securities (per credit rating)

	2019	2018
AAA	29,950	27,456
AA	35,014	32,758
A	27,497	25,200
BBB	16,892	16,328
BB	2,769	2,471
B	356	483
No rating available ¹	566	662
Mortgages ²	49,472	46,075
Other Retail Loans	1,756	1,698
Total	164,272	153,131

1 This category includes limited exposure in CCC or below rated instruments and instruments with 'No Rating (NR)'.
2 Mortgages refer to all mortgages using the same criteria and is aligned with the Mortgages figure in Investment assets above.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Mortgages

The required capital for mortgages within entities under the Partial Internal Model is calculated in the credit spread risk module while the required capital for mortgages within entities under Standard Formula is calculated in the counterparty default risk module. The credit spread risk module within the Partial Internal Model captures the behaviour of Own Funds when the valuation of mortgages changes with market mortgage rates, while the counterparty default risk module within Standard Formula captures the behaviour of Own Funds as a result of unexpected loss or default of mortgages.

The Loan-to-Value (LTV) for residential mortgages (which is based on the net average loan to property indexed value) at NN Life, the Banking business and NN Non-life stood at 72%, 70% and 70% respectively at the end of December 2019. Increasing house prices resulted in a migration towards lower LTV buckets.

The inherent credit risk of mortgages is backed primarily by means of the underlying property, but also through the inclusion of mortgages guaranteed by the Nationale Hypotheek Garantie (NHG) and other secondary covers like savings, investments and life insurance policies. Mortgages with NHG accounted for 30%, 34% and 20% at NN Life, the Banking business and NN Non-life respectively at the end of 2019. Since the change in the Dutch tax regime in 2014 with regards to mortgage interest deductibility, a shift from interest-only mortgages to annuity and linear payment type mortgages is being observed.

Loan-to-Value on mortgage loans¹

	2019	2018
NHG	31%	31%
LTV <= 80%	47%	43%
LTV 80% – 90%	12%	13%
LTV 90% – 100%	8%	8%
LTV > 100%	2%	5%
Total NN Group	100%	100%

1 Risk figures and parameters do not include third-party originated mortgages, securitised and pooled mortgages although they are on the balance sheet of NN Group.

The mortgage portfolio is under regular review to ensure troubled assets are identified early and managed properly. The loan is categorised as a non-performing loan (NPL) if the loan is 90 days past due or the loan is classified as Unlikely To Pay (UTP) by the problem loans department. A loan is re-categorised as a performing loan again when the amount past due has been paid in full (and the UTP status is withdrawn). Provisions remained stable. The net exposure decreased because of increasing house prices and payments (contractual and prepayments) on mortgages.

Credit quality: NN Group mortgage portfolio, outstanding^{1,4}

	Life business		Banking business		Other ²	
	2019	2018	2019	2018	2019	2018
Performing mortgage loans that are not past due	23,016	21,992	18,738	17,458	4,375	3,244
Performing mortgage loans that are past due	184	261	236	237	22	26
Non-performing mortgage loans ³	91	160	79	155	18	36
Total	23,291	22,413	19,053	17,850	4,415	3,306
Provisions for performing mortgage loans	4	3	3	3	0	1
Provisions for non-performing mortgage loans	10	14	4	7	1	1
Total	14	17	7	10	1	2

1 Risk figures and parameters do not include third-party originated mortgages, securitised and pooled mortgages although they are on the balance sheet of NN Group.

2 'Other' column includes mortgages for the Non-life entities, Belgium business and other small entities.

3 The non-performing loans include 'unlikely to pay' mortgage loans, which may not be past due.

4 The total value for Mortgages is different in this table vs. Investment Assets Table mainly because of exclusion of mortgage structure vehicles of EUR 2.713 million in 2019 and EUR 2.506 million in 2018.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Collateral on mortgage loans

	Life business		Banking business		Other ¹	
	2019	2018	2019	2018	2019	2018
Carrying value	23,291	22,414	19,053	17,850	4,415	3,306
Indexed collateral value of real estate	36,084	33,327	30,963	27,415	6,542	5,127
Savings held ²	988	1,107	1,328	1,292	78	109
NHG guarantee value ³	5,830	5,541	5,314	5,161	1,005	726
Total cover value + including NHG guarantee capped at carrying value ⁴	23,239	22,309	19,003	17,764	4,407	3,303
Net exposure	52	105	50	86	8	3

1 Other¹ column includes mortgages for the Non-life entities, Belgium business and other small entities.

2 Savings held includes life policies and investment policies.

3 The NHG guarantee value follows an annuity scheme and is corrected for the 10% own risk (on the guaranteed NHG claim).

4 The cover value of the real estate does not include haircuts, which are applied in the determination of loan loss provisions.

Risk mitigation

NN Group aims to maintain a low-risk, well diversified fixed income portfolio. NN Group has a policy of maintaining a high quality investment grade portfolio while avoiding large risk concentrations. In order to diversify the credit spread risk, NN Group increased its investments in non-listed and own-originated assets. The concentration risk on individual issuers is managed using rating-based issuer limits on one (group of related) single name(s), effectively managing the default risk of the issuers.

Risk measurement

The sensitivity of the Solvency II ratio to changes in credit spreads is monitored on a quarterly basis. The table below presents the Eligible Own Funds, SCR and Solvency II ratio sensitivities to various changes in credit spreads.

Solvency II ratio sensitivities: credit spread risk at 31 December 2019

	Own Funds impact	SCR impact	Solvency II ratio impact
Credit spread: Parallel shock for AAA-rated government bonds +50 bps	-807	-23	-9%
Credit spread: Parallel shock for AA and lower-rated government bonds +50 bps	-799	-123	-7%
Credit spread: Parallel shock corporates +50 bps	158	-136	6%

NN Group has exposure to government and corporate and financial debt, and is exposed to spread changes for these instruments. Furthermore, the Volatility Adjustment in the valuation of liabilities introduces an offset to the valuation changes on the asset side. The Solvency II sensitivities for spread changes cover three possible scenarios – spread widening for AAA rated government bonds, spread widening for non-AAA rated government bonds and loans, and spread widening for corporates including mortgages. For all scenarios, a parallel widening of the spread curves of +50bps is assumed. There is a corresponding translation of the spread widening on asset valuations on the Volatility Adjustment in each of the scenarios.

Government bond shocks are applied to the following asset classes: government bonds and loans, government-linked instruments (sub-sovereigns and supranational). Corporate spread shocks are applied to the following asset classes: corporate bonds (financials and non-financials), mortgages, covered bonds, subordinated bonds, asset-backed securities and loans.

Real estate risk

Real estate risk is defined as the possibility of having losses in Solvency II Own Funds due to adverse changes in the value of real estate. Exposure to real estate risk arises from direct or indirect positions that are sensitive to real estate prices. With the long-term nature of the liabilities of NN Group, illiquid assets such as real estate play an important role in the asset allocation.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk profile

NN Group's real estate exposure (excluding forward commitments) increased from EUR 8,307 million at the end of 2018 to EUR 9,257 million at the end of 2019. The real estate exposure is mainly present in the portfolios of NN Life, NN Non-life and NN Belgium Life.

NN Group has various categories of real estate: investments in real estate funds and joint-ventures, real estate directly owned and investments in buildings occupied by NN Group. Several of the real estate funds, in which NN Group participates, include leverage, and therefore the actual real estate exposure is larger than NN Group's value of participation in real estate funds. The real estate portfolio is held for the long-term and is illiquid. Furthermore, there are no hedge instruments available in the market to effectively reduce the impact of market volatility.

The table below sets out NN Group's real estate exposure per category as at 31 December 2019 and 2018, respectively.

Real estate assets per category¹

	2019	2018
Investment Property	9,209	8,223
Mutual Funds – Property	11	13
Plant and equipment (for own use)	9	5
Property (for own use)	28	66
Total	9,257	8,307

¹ Excludes real estate forward commitments, since NN Group has no price risk related to them.

As shown in the 'Market risk capital requirements' table above, the real estate risk SCR of NN Group increased from EUR 1,384 million in 2018 to EUR 1,533 million in 2019. This increase is mainly due to an increase in property investment valuations.

Risk mitigation

Exposure to real estate provides for additional diversification for the asset portfolio. The concentration risk on individual assets is mitigated under the relevant investment mandates.

Risk measurement

The sensitivity of the Solvency II ratio to changes in the value of real estate is monitored on a quarterly basis. This scenario estimates the impact of an instantaneous shock of -10% to the value of direct real estate exposures and real estate within mutual funds. The table below presents the Eligible Own Funds, SCR and Solvency II ratio sensitivity to a downward shock in the value of real estate.

Solvency II ratio sensitivities: real estate risk at 31 December 2019

	Own Funds impact	SCR impact	Solvency II ratio impact
Real estate Downward shock -10%	-724	-22	-8%

Notes to the Consolidated annual accounts continued

49 Risk management continued

Foreign exchange risk

Foreign exchange (FX) risk measures the impact of losses related to changes in currency exchange rates.

Risk profile

FX transaction risk can occur on a local entity level, while FX translation risk can occur when non-Euro entities are consolidated at the level of NN Group and show a risk in regard to NN Group's reporting currency, the Euro.

The SCR for foreign exchange risk decreased from EUR 456 million in 2018, to EUR 418 million in 2019. This is mainly due to change in exposures to currencies such as JPY, USD and GBP as well as currency rate movements.

Risk mitigation

The FX risk at the local entity level is mitigated by limiting investment to the non-local currency assets. The exceptions are NN Life Japan, where USD and EUR assets are held to diversify the portfolio and the FX risk is managed through rolling FX forward contracts.

Inflation risk

Inflation risk is defined as the risk of adverse changes in inflation that result into decrease in Solvency II Own Funds. Inflation risk is calculated for the Dutch entities applying the Partial Internal Model for the SCR calculation.

Risk profile

The SCR for inflation risk decreased from EUR 233 million in 2018, to EUR 120 million in 2019, mostly originating from a lower inflation level that led to lower inflation linked liability and modelling improvements.

Risk mitigation

The inflation risk is managed through the use of inflation swaps and investments in inflation bonds.

Basis risk

The SCR Basis risk is defined as a risk that the underlying asset or liability behaves differently than the underlying hedge instrument, which results in the loss in the Solvency II balance sheet.

Risk profile

The SCR for basis risk remained stable from EUR 104 million in 2018, to EUR 115 million in 2019.

Risk mitigation

The Basis Risk is mitigated by fund mapping of the underlying funds to risk factors, and also by constant monitoring of the fund performance compared to the benchmark.

Concentration risk

The SCR for Concentration Risk is defined as a risk of loss in the Basic Own Funds as a result of the default of an issuer in which NN Group has a concentrated investment position.

Risk profile

The SCR for Concentration Risk remained at nil in 2019.

Risk mitigation

This Concentration Risk is mitigated by concentration risk limits aiming to have a well-diversified portfolio with credit risk concentrations in any particular issuer within the NN Group risk appetite.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Counterparty default risk

Counterparty default risk is the risk of loss due to default or deterioration in the credit standing of the counterparties and debtors (including reinsurers) of NN Group. The SCR for counterparty default risk is primarily based on the issuer's probability of default (PD) and the loss-given-default (LGD) of each individual position taking into account diversification across these positions.

The counterparty default risk module also covers any credit risk exposures which are not covered in the spread risk sub-module.

Risk profile

As shown in the 'Solvency Capital Requirements' table above, the Counterparty default risk SCR of NN Group decreased slightly from EUR 274 million at the end of 2018 to EUR 259 million at the end of 2019, due to a decrease in exposure to some counterparties. In the Partial Internal Model the mortgages does not get the capital charge under the Counterparty default risk and are under Credit Risk SCR sub module for these business units.

Risk mitigation

NN Group uses different credit risk mitigation techniques. For OTC derivatives, the exchange of collateral under the International Swaps and Derivatives Associations contracts accompanied with Credit Support Annexes is an important example of risk mitigation. Other forms of credit risk mitigation include reinsurance collateral exchange. For cash and money market funds, limits per counterparty are put in place.

Risk measurement

The Counterparty default risk module comprises two sub-modules:

- CDR Type I: applicable to exposures which might not be diversified and where the counterparty is likely to be (externally) rated, e.g. reinsurance contracts, derivatives and money market exposures. The underlying model is the Ter Berg model (which was also the basis for Standard Formula calibration under Solvency II)
- CDR Type II: applicable to exposures that are usually (well) diversified and where the counterparty is likely to be unrated, like retail loans, but also other forms of term lending not covered in Type I

The capital charges for CDR Type I and CDR Type II exposures are calculated separately and subsequently aggregated.

Market and credit risk: separate account businesses

The separate account businesses are those in which the policyholder bears the majority of the market and credit risk. NN Group's earnings from the separate account businesses are primarily driven by fee income. However, in the case of variable annuities and the guaranteed separate account pension business in the Netherlands, NN Group retains risk associated with the guarantees provided to its policyholders. Businesses in this separate account category are (i) the group pension business in the Netherlands for which guarantees are provided; (ii) the variable annuities (VA) portfolio; and (iii) other separate account business, primarily the unit-linked business. This section refers to separate account business only.

Separate account guaranteed group pension business in NN Life

Risk profile

In the Dutch separate account guaranteed group pension portfolio, investments are held in separate accounts on behalf of the sponsor employer who concluded their contract with a business unit of NN Group. Regardless of actual returns on these investments, pension benefits for the beneficiaries are guaranteed under the contract. The value of the provided guarantee is sensitive to interest rates, movements in the underlying funds and the volatility of those funds.

The Assets under Management for NN Life's portfolio increased from EUR 3.9 billion in 2018 to EUR 4.2 billion in 2019 mainly driven by interest rate changes. In general the materiality of the separate account business within NN Group has reduced in the past few years due to the runoff of the portfolio.

Risk mitigation

NN currently hedge the value of the guarantees it provided under group pension contracts in the Netherlands. For the purpose of hedging, the exposure under such guarantees is discounted at the swap curve without the extrapolation to the UFR. The hedge programme includes equity basket options, swaps and equity futures. Upon contract renewal, NN Group offers policyholders defined contribution products with investments in portfolios that NN Group can more easily hedge, thus reducing the risk to NN Group.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Variable annuity portfolio

Risk profile

From a risk management perspective, NN Group distinguishes three blocks of variable annuities, namely guaranteed minimum accumulation benefit (GMAB) products of Japan Closed Block VA, guaranteed minimum death benefit (GMDB) products of Japan Closed Block VA and VA products of Insurance Europe.

The account value for this portfolio decreased from EUR 3.5 billion in 2018 to EUR 3.2 billion in 2019, mainly driven by run-off of the Japan Closed Block VA.

Risk mitigation

NN Group has hedging programmes in place for the Japan Closed Block VA business and the European VA business. These hedging programmes target equity, interest rate and FX risks. The market risks that remain for the Japan Closed Block VA business increases with market volatility and basis risk. Basis risk is the difference in market movements between the benchmarks used for hedging and the underlying funds.

Other separate account businesses

Risk profile

The other separate account business primarily consists of unit-linked insurance policies, which provide policyholders with selected fund returns combined with an insurance cover. In a unit-linked policy, the investment risk is borne by the policyholder, although there are some unit-linked products where NN Group has provided guarantees on the performance of specific underlying funds. Unit-linked products without guarantees do not expose NN Group to market risk, except to the extent that the present value of future fees is affected by market movements of the underlying policyholder funds.

Risk mitigation

The market risks of the unit-linked and other separate account business are managed by the design of the product. Currently NN Group does not hedge the market risks related to the present value of future fee income derived from this business.

Risk measurement

NN Group determines eligible own funds for the market and credit risks of the separate account business through modelling the risks of the fee income and the guarantees including the impact of the hedge programmes.

Liquidity risk

Liquidity risk is the risk that one of NN Group's entities does not have sufficient liquid assets to meet its financial obligations when they become due and payable, at reasonable cost and in a timely manner. Liquidity in this context is the availability of funds, or certainty that funds will be available without significant losses, to honour all commitments when due. NN Group manages liquidity risk via a liquidity risk framework: ensuring that – even after shock – NN Group's businesses can meet immediate obligations. Liquidity stress events can be caused by a market-wide event or an idiosyncratic NN Group specific event. These events can be short-term or long-term and can both occur on a local, regional or global scale.

Subsidiaries that trade derivatives are responsible for maintaining sufficient liquidity levels to meet their collateral requirements. For this purpose liquidity buffers are set to ensure sufficient liquidity is available in an adverse scenario and to ensure the liquidity thresholds are being met.

Risk profile

Liquidity risk covers three areas of attention. Operational liquidity risk, is the risk that funds are unavailable to meet financial obligations when due. Market liquidity risk, is the risk that an asset cannot be sold on short-term without significant losses. Funding risk, is the risk related to not being able to refinance maturing debt instruments and may lead to higher funding costs. The connection between market and operational liquidity risk stems from the fact that when payments are due and not enough cash is available, investment positions need to be converted into cash; if market liquidity is low or an adverse market movement took place in this situation, this could lead to a loss.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk mitigation

NN Group aims to match day-to-day cash in- and outflows and at the same time wants to be able to have sufficient cash in case of a liquidity stress event. Daily liquidity management is separately managed based on cash flow projections.

NN Group Liquidity Management Principles defines three levels of Liquidity Management:

- Short-term liquidity (including operational liquidity) management covers the day-to-day cash requirements under normal business conditions
- Long-term liquidity management considers business conditions, in which market liquidity risk materialises
- Stress liquidity management looks at the company's ability to respond to a potential crisis situation

Risk measurement

The Liquidity Risk Management Standard measures liquidity risk through the gap between liquidity needs and liquidity sources compared to available liquid assets for sale. This is calculated for different time horizons and different levels of liquidity sources.

Non-market risk

Within the SCR Partial Internal Model a differentiation is made for the classification of non-market risks for different NN Group entities depending on the model applied.

For the business units applying Partial Internal Model, non-market risks are split between:

- **Insurance risk:** is the risk related to the events insured by NN Group and comprise actuarial and underwriting risks like Life risk (mortality, longevity), Morbidity risk and Property & Casualty risk which result from the pricing and acceptance of insurance contracts
- **Business risks:** are the risks related to the management and development of the insurance portfolio but exclude risks directly connected to insured events. Business risk includes policyholder behaviour risks, expense risk, persistency risk and premium re-rating risk. Business risks can occur because of internal, industry, regulatory/political or wider market factors. Policyholder behaviour risk is the risk that policyholders use options available in the insurance contracts in a way that is different from that expected by NN Group. Depending on the terms and conditions of the insurance policy, and the laws and regulations applicable to the policy, policyholders could have the option to surrender, change premiums, change investment fund selections, extend their contracts, take out policy loans, and make choices about how to continue their annuity and pension savings contracts after the accumulation phase, or even change contract details. Policyholder behaviour therefore affects the profitability of the insurance contracts. Changes in tax laws and regulations can affect policyholder behaviour, particularly when the tax treatment of their products affects the attractiveness of these products for customers

For the business units applying Standard Formula, non-market risks are split between:

- **Life risk:** the life portfolio is mainly attributed to the individual and group business in the international entities of NN Group (mainly Belgium, Spain Life, Poland) and ABN AMRO Life. This risk comprises the mortality, longevity, disability-morbidity, expense, lapse and life catastrophe risks
- **Health risk:** this covers the SLT Health portfolio risk, the NSLT Health portfolio risk and the Health Catastrophe risk. Within NN Group, the health risk stems from morbidity riders in Belgium, Czech, Poland, Slovakia and Romania, but also from the yearly renewable health insurance portfolio of Greece. This risk is split between the SLT Health risk (comprising mortality, longevity, disability-morbidity, expense and lapse risks), the NSLT Health risk (comprising premium and reserve risk and lapse risk) and the Health Catastrophe risk
- **Non-life risk:** this covers non-life portfolio mainly contributed by ABN AMRO Non-life and NN Insurance Services. This risk covers the premiums and reserve risk, non-life catastrophe risk and lapse risk

Risk profile

The table below presents the non-market risk SCR composition at the end of 2018 and at the end of 2019 respectively. The main changes in the risk profile are explained in the subsequent section of this document.

Notes to the Consolidated annual accounts continued

49 Risk management continued

Non-market risk capital requirements

	2019	2018
Insurance risk (IM entities)	5,339	4,318
Business risk (IM entities)	1,467	1,325
Life risk (SF entities)	879	866
Health risk (SF entities)	200	156
Non-life risk (SF entities)	113	104
Diversification non-market risk	-1,253	-886
Non-market risk¹	6,745	5,883

¹ For 2019, non-market sub-risks for Standard Formula units are presented on diversified basis as part of Non-market risk; in 2018 these sub-risks were presented as a simple sum.

The Insurance and Business risks for Internal Model entities increased and the Health and Non-life risk SCR for Standard Formula entities increased, mainly from lower interest rate level. Life risk SCR for standard formula entities decreased mainly due to improved diversification across SF entities, health risk has increased mainly due to the acquisition of Aegon Slovakia and Aegon Czech.

Risk mitigation

Proper pricing, underwriting, claims management and diversification are the main risk mitigating actions for insurance risks.

By expanding insurance liabilities to cover multiple geographies, product benefits, lengths of contract and both life and non-life risk, NN Group reduces the likelihood that a single risk event will have a material impact on NN Group's financial condition.

Management of the insurance risks is done by ensuring that the terms and conditions of the insurance policies that NN Group underwrites are correctly aligned with the intended policyholder benefits to mitigate the risk that unintended benefits are covered. This is achieved through NN Group's underwriting standards, product design requirements, and product approval and review processes – as referred to under Risk Management Policies, Standards and Processes.

Insurance risks are diversified between business units. Risk not sufficiently mitigated by diversification is managed through concentration and exposure limits and through reinsurance: retention limits for non-life insurance risks are set by line of business for catastrophic events and individual risk.

Insurance Risk

Insurance risk is the risk that the future insurance claims and other contractual benefits cannot be covered by premiums, policy fees and/or investment income or that insurance liabilities are not sufficient because claims and benefits might differ from the assumptions used in determining the best estimate liability. Insurance risk manifests itself in the life as well as in the non-life portfolio of NN Group.

The table below presents the Partial Internal Model insurance risk SCR for the Dutch NN insurance entities of NN Group (namely NN Life, NN Non-life, NN Re and MOVIR) as at 31 December 2018 and 31 December 2019 respectively.

Risk profile

Insurance risk capital requirements

	2019	2018
Mortality (including longevity) risk	5,267	4,232
Morbidity risk	517	441
Property & Casualty risk	517	560
Diversification insurance risk	-962	-915
Insurance risk (IM entities)	5,339	4,318

Notes to the Consolidated annual accounts continued

49 Risk management continued

The SCR for insurance risk is mostly driven by longevity risk which is included in mortality risk, for the Netherlands pension business.

Mortality risk occurs when claims are higher due to higher mortality experience (for instance in relation to term insurance). Longevity risk is the risk that insured persons live longer than expected due to mortality improvements like better living conditions, improved health care and medical breakthrough. While NN Group is exposed to both longevity and mortality risks, these risks do not fully offset one another as the impact of the longevity risks in the pension business in the Netherlands is significantly larger than the mortality risk in the other businesses, which is not only due to the size of the business but also due to the current low interest rate environment. Changes in mortality tables impact the future expected benefits to be paid and the present value of these future impacts is reflected directly in measures like Own Funds.

Morbidity risk is borne primarily by the health insurance portfolio which pays out a fixed amount benefit, reimburses losses (e.g. in the case of loss of income), or pays for expenses of medical treatment related to certain illness or disability events. The main exposures to morbidity risks within NN Group are the disability insurance policies underwritten in Netherlands Non-life, and the health and accidental death covers within the Corporate Owned Life Insurance (COLI) business in Japan Life.

The Netherlands Non-life portfolio includes Property & Casualty products covering risks such as fire damage, car accidents, personal and professional liability, windstorms, hail, and third-party liabilities. The Property & Casualty (P&C) risk is primarily underwritten by Netherlands Non-life and catastrophic losses are partially reinsured to external reinsurers through NN Re.

Risk mitigation

Insurance risk is mitigated through diversification between mortality and longevity risks within NN Group business units, appropriated pricing and underwriting policies and through risk transfer via reinsurance which are used to reduce the Own Funds volatility.

In November 2017, NN Life entered into an index-based longevity hedge based on the Dutch population. The hedge partially protects NN Group against longevity risk exposure from approximately EUR 3 billion of pension liabilities. NN Group remains exposed to the risk that the mortality of its own portfolio may differ from the mortality of the Dutch population. During 2019 NN Life also entered into a reinsurance contract to hedge longevity risk of a specific pension portfolio.

The risks that are not sufficiently mitigated by diversification are managed through concentration and exposure limits and through reinsurance:

- Retention limits for life insurance risks are set per insured life and significant mortality events affecting multiple lives such as pandemics
- Retention is used to manage risk levels (such as non-life reinsurance and risk morbidity reinsurance in the COLI business in Japan Life)
- Retention limits for non-life insurance risks are set by line of business for catastrophic events and individual risk

Reinsurance creates credit risk which is managed in line with the reinsurance credit risk policy of NN Group.

Risk measurement

Insurance risk increased from EUR 4,318 million at the end of 2018 to EUR 5,339 million at the end of 2019, mainly due to a decrease of interest rates and the Volatility Adjustment. Given the long-term nature of the liability portfolio of NN Group, the capital requirements underlying insurance risk are sensitive to interest rates and Volatility Adjustment changes due to the discounting impact.

Business risk

Business risk include risks related to the management and development of the insurance portfolio risk, policyholder behaviour risks, persistency risk and expense risks. These risks occur because of internal, industry, regulatory/political, or wider market factors.

Risk profile

Business risk capital requirements

	2019	2018
Persistency risk	342	305
Premium risk	13	9
Expense risk	1,354	1,220
Diversification business risk	-242	-209
Business risk (IM entities)	1,467	1,325

Notes to the Consolidated annual accounts continued

49 Risk management continued

The main contributors to persistency risk are Netherlands Life and the Japan Closed Block VA. Persistency risk increased slightly due to the decrease of the interest rate curve and the Volatility Adjustment, as well as the portfolio changes at NN Life.

The risk that policyholders maintain their contracts longer than NN Group has assumed is specific to the variable annuity business when guarantees are higher than the value of the underlying policyholder funds, the pension business in the Netherlands, and the older, higher interest rate guaranteed savings business in Europe. The risk that policyholders hold their contracts for a shorter period than NN Group has assumed relates to the life business in Japan and the unit-linked businesses in Central and Eastern Europe.

Total administrative expenses for NN Group for 2019 were EUR 2,076 million compared with EUR 2,178 million in 2018. Parts of these expenses are variable, depending on the size of the business and sales volumes, and parts are fixed and cannot immediately be adjusted to reflect changes in the size of the business.

Expense risk relates primarily to the variable part of NN Group's expenses, and is the risk that future actual expenses exceed the expenses assumed. Expense risk mainly comprises the expense level and expense inflation risks in NN Life.

A significant portion of the expense risk is incurred in the closed block operations of Netherlands Life, where NN Group is exposed to the risk that the expenses will not decrease in line with the gradual decrease of the in-force book, leading to a per policy expense increase. Furthermore, expense risk is also driven by the Group pension business in the Netherlands which includes long-term best estimate expense assumptions, discounted over a long period of time.

Risk mitigation

Policyholder behaviour risks, such as persistency and premium risk, are managed through the product development, product approval and review processes and by ensuring that appropriate advice is given to the customer, not only at the point of sale but also during the lifetime of the product. The policyholder behaviour experience of in-force policies is assessed at least annually.

As part of its strategy, NN Group has put several programmes in place to own and improve the customer experience. These programmes improve the match between customer needs and the benefits and options provided by NN Group's products. Over time, NN Group's understanding and anticipation of the choices policyholders are likely to make, will improve, thereby decreasing the risk of a mismatch between actual and assumed policyholder behaviour.

Ongoing initiatives are in place to manage expense risk throughout NN Group, especially in the Netherlands where company targets are in place to reduce expenses, thus, lowering expense risk going forward. These initiatives seek to reduce expenses through the number of underlying contracts in place. This is particularly relevant for the Dutch individual life closed-block business that can only reduce in number of contracts.

Besides the already described mitigating actions, proper pricing, underwriting, claims management, and diversification are also risk mitigating actions for business risk.

Life Risk

Life risk includes risks arising from the underwriting of life insurance, which includes mortality risk, longevity risk, disability/morbidity risk, persistency risk, expense risk, revision risk and catastrophic risk. These risks refer to the adverse deviation from the best estimate liabilities due to the perils covered, policyholder behaviour and the processes used in the conduct of business.

Risk profile

Life risk capital requirements

	2019	2018
Mortality risk	133	130
Longevity risk	112	94
Morbidity risk	10	9
Expense risk	340	310
Lapse risk	548	575
Catastrophe risk	112	100
Diversification life risk	-376	-352
Life risk (SF entities)	879	866

Notes to the Consolidated annual accounts continued

49 Risk management continued

As shown in the table above, the life risk SCR of the business units applying Standard Formula increased from EUR 866 million in 2018 to EUR 879 million in 2019. This slight increase is mainly due to an increase in longevity and expense risk which have been offset by a decrease in lapse risk and improved diversification across standard formula entities.

Risk mitigation

The majority of life risk is comprised of lapse, expense and mortality risks (in Standard Formula entities) mainly from the international NN Group entities (Belgium, Poland, Spain) as well as ABN AMRO Life.

The NN Group Standard Formula entities manage the expense risk through detailed budgeting and monitoring the costs using activity-based costing.

Lapse risk management serves an important objective for NN Group entities. When deviations from assumed lapse rates are observed over a prolonged period of time, a product review and further management actions will be taken to address the underlying reasons.

Health Risk

Health risk arises from issuing health insurance contracts, which is divided in Similar to Life Techniques (SLT) risk, Non-Similar to Life Techniques (NSLT) risk and catastrophe risk. SLT risk is associated to health obligations pursued on a similar technical basis to that of life insurance, while NSLT risk applies to health obligations not pursued on a similar technical basis to that of life insurance. These risks refer to the adverse deviation from the best estimate liabilities due to the perils covered, policyholder behaviour and the processes used in the conduct of business.

Risk profile

Health risk capital requirements

	2019	2018
SLT	184	142
NSLT	22	20
Catastrophe risk	13	11
Diversification health risk	-19	-17
Health risk (SF entities)	200	156

As shown in the table above, the health risk SCR of the business units applying Standard Formula increased from EUR 156 million in 2018 to EUR 200 million in 2019. This increase is mainly explained by acquisition of Aegon Czech and Aegon Slovakia as well as morbidity and lapse assumption changes for some standard formula entities.

Risk mitigation

The majority of Health Risk originates from international NN Group entities (Belgium, Czech, Poland, Slovakia, Romania, Greece) and they mitigate the risks by strict acceptance policies and stringent claims-handling procedures. An acceptance policy is developed for each product line maintained by those entities. Random checks are also carried out to check whether underwriters are following the rules and regulations.

Non-life Risk

Non-life risk involves risks arising from the underwriting of non-life insurance, which includes premium and reserve risk, persistency risk and catastrophic risk. These risks refer to the adverse deviation from the best estimate liabilities due to the perils covered, policyholder behaviour and the processes used in the conduct of business.

Risk profile

Non-life risk capital requirements

	2019	2018
Premium and reserve risk	101	91
Lapse risk	19	18
Catastrophe risk	28	29
Diversification non-life risk	-35	-34
Non-life risk (SF entities)	113	104

Notes to the Consolidated annual accounts continued

49 Risk management continued

As shown in the table above, the non-life risk SCR of the business units applying Standard Formula increased from EUR 104 million in 2018 to EUR 113 million in 2019. This increase is explained mainly by slightly higher earned premiums volumes and some standard formula entities requiring higher technical provisions.

Risk mitigation

Non-life risk is mitigated through appropriate pricing and underwriting policies and through risk transfer via reinsurance. Most of the non-life risk comes from ABN AMRO Non-life and NN Insurance Services, and they manage the risk using various reinsurance contracts.

Within our non-life business, weather-related risks are managed through the use of catastrophe risk modelling in underwriting and risk assessment. We use external vendor models to estimate the impact and damage caused by large natural catastrophes such as windstorms, considered to be the main natural peril for the NN portfolio. Reinsurance covers are placed with strongly capitalised external reinsurers. Natural catastrophic losses can be made worse by climate change. Although most of our non-life business is annually renewable, to accurately price our business it is essential that we monitor and understand linkages between natural disasters and climate change. NN therefore liaises with our external vendors and participates in industry initiatives to improve our knowledge, data and models to better prepare for changing weather patterns.

Non-financial risk

- **Business operations risk:** risks related to inadequate or failed internal processes, including information technology and communication systems
- **Business continuity & security risk:** risks of accidents or external events impacting continuation or security of (people or assets in) our business operations
- **Business conduct risk:** is the risks related to unethical or irresponsible corporate behaviour, inappropriate employee behaviour and customer suitability of products

Operational risk

Business operations and continuity & security risk

Risk profile

Business operations and continuity & security risks are non-financial risks that include direct or indirect losses resulting from inadequate or failed internal processes (including as a result of fraud and other misconduct), systems failure (including information technology and communications systems), human error, and certain external events.

The business operations risk management areas covered within NN Group are:

- **Operational control risk:** the risk of not (timely) detecting adverse deviations from strategy, policies, procedures, work instructions or authorised activities
- **Operational execution risk:** the risk of human errors during (transaction) processing
- **Financial accounting risk:** the risk of human errors during general ledger/risk systems processing and subsequent financial reporting
- **Information (technology) risk (including cyber-risk):** the risk of data (information) corruption, misuse or unavailability in IT systems, either through external causes (cybercrime) or internal causes. Cybersecurity is an integral part of NN Group's risk management strategy
- **Operational change risk:** the risk that actual results of changes to the organisation (this includes changes in processes, products, IT, methods and techniques) differs adversely from the envisaged results
- **Outsourcing risk:** the risk that outsourced activities or functions perform adversely as compared to performing them in-company. This includes the risk of unclear mutual expectations as documented in the outsourcing agreement, risk of unreliable outsourcing partner (both (un)intentional), operational control, information security and continuity risk of the outsourcing partner
- **Legal risk:** the risk that emerging laws and regulations, agreements, claims, regulatory inquiries or disclosures potentially result in damage to NN Group's brand and reputation, legal or regulatory sanctions or liability resulting in financial loss
- **External fraud risk:** the risk of intended acts by a third party to defraud, misappropriate property or circumvent the law

The business continuity & security risk management areas covered within NN Group are:

- **Continuity risk:** the risk of primary business processes being discontinued for a period beyond the maximum outage time
- **Personal & physical security risk:** the risk of criminal acts or environmental threats that could endanger NN Group employees' safety, NN Group's assets (including physically stored data/information) or NN Group's offices

Notes to the Consolidated annual accounts continued

49 Risk management continued

Risk mitigation

Non-financial risk assessments are done based on historic data as well as on a forward-looking basis in order to capture future risks. Once mitigating measures have been implemented and proven to be effective through monitoring and testing, the residual risk becomes the managed risk.

Mitigation of risks can be preventive in nature (e.g. training and education of employees, preventive controls, etc.) or can be implemented upon discovery of a risk (e.g. enforcement of controls, disciplinary measures against employees). Risk mitigating actions or controls are based on a balance between the expected cost of implementation and the expected benefits.

Business operations and continuity risks are mitigated through controls. For specific areas like financial reporting, outsourcing of activities, and business continuity, specific Policies and Standards apply. In the case of outsourcing, an appropriate outsourcing agreement is required between outsourcing parties and the performance under the outsourcing agreement is required to be monitored regularly. The Chief Information Officer (CIO) function ensures Business Continuity Management, Cyber risk management and Business Information Security via standardised, internationally accepted frameworks, norms and technical guidelines as the basis to manage information technology including Cyber & Cloud risk within NN Group.

NN Group conducts regular risk and control monitoring to measure and evaluate the effectiveness of key controls. It determines whether the risks are within the norms for risk appetite and in line with the ambition levels and policies and standards. The exposure of NN Group to non-financial risks is regularly assessed through risk assessments and monitoring. After identification of the risks, each quantifiable risk is assessed as to its likelihood of occurrence as well its potential impact, should it occur. Actions required to mitigate the risks are identified and tracked until the risk is either reduced, if such a reduction is possible, or accepted as a residual risk if the risk cannot be mitigated.

The business process owners are responsible for the actual execution of the controls and for assessing the adequacy of their internal controls. Operational risk management, as part of the second line of defence, is responsible for providing management with an objective assessment of the effectiveness and efficiency of NN Group risks and controls.

Business conduct risk

Risk profile

Through NN Group's retirement services, insurance, investments and banking products, NN Group is committed to help our customers secure their financial future. To fulfil this purpose, we base our work on three core values: care, clear, commit. Our values set the standard for conduct and provide a compass for decision-making. Further, NN Group is committed to the preservation of its reputation and integrity through compliance with applicable laws, regulations and ethical standards in each of the markets in which it operates. All employees are expected to adhere to these laws, regulations and ethical standards and management is responsible for ensuring such compliance. Compliance is therefore an essential ingredient of good corporate governance. NN Group continuously enhances its Business conduct risk management programme to ensure that NN Group complies with international standards and laws.

Risk mitigation

NN Group separates business conduct risk into three risk areas: corporate conduct (includes internal fraud), employee conduct and customer suitability. In addition to effective reporting systems, NN Group has also a whistle-blower policy and procedure which protects and encourages staff to speak up if they know of or suspect a breach of external regulations, internal policies or our values. NN Group also has policies and procedures regarding anti-money laundering, anti-terrorist financing, sanctions, anti-bribery and corruption, customer suitability, conflicts of interest and confidential and inside information, as well as a Code of Conduct for its personnel. Furthermore, NN Group designates specific countries as 'ultra-high risk' and prohibits client engagements and transactions (including payments of facilitation) involving those countries.

NN Group performs a product approval and review process when developing products and continuously invests in the maintenance of risk management, legal and compliance procedures to monitor current sales practices. Customer protection regulations as well as changes in interpretation and perception of acceptable market practices by both the public at large and governmental authorities might influence customer expectations. The risk of potential reputational and financial impact from products and sales practices exists because of the market situation, customer expectations, and regulatory activity. The Compliance Function and the business work closely together with the aim to anticipate changing customers' needs.

Risk measurement

NN Group's SCR for operational risk increased from EUR 659 million as at the end of 2018 to EUR 704 million at the end of 2019 respectively. The SCR is calculated based on the Standard Formula. As it is additive to the modelled SCR, it should be considered as net of diversification with other NN Group risks. Business conduct risk is considered to be part of the Operational Risk SCR and is therefore not specifically calculated.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management

Objectives, policies and processes

Objective

The goal of NN Group's capital and liquidity management is to adequately capitalise NN Group and its operating entities at all times to meet the interests of our stakeholders, including our customers and shareholders. The balance sheet is assessed in line with our capital management framework which is based on regulatory, economic and rating agency requirements. NN Group closely monitors and manages the following metrics: Own Funds/Solvency Capital Requirement (SCR), cash capital at the holding company, financial leverage, fixed cost coverage, capital generation and liquidity.

Governance

The NN Group Capital Management and Corporate Treasury Department reports to the NN Group CFO. Activities of the department are executed on the basis of established policies, guidelines and procedures.

Capital Management is responsible for the sufficient capitalisation of NN Group entities, which involves the management, planning and allocation of capital within NN Group. Corporate Treasury is responsible for the management and execution of debt capital market transactions, term (capital) funding, cash management and risk management transactions.

Capital management and framework

The capital framework takes into account regulatory, economic and rating agency requirements:

- As a first principle, NN Group aims to capitalise its operating entities adequately at all times. Operating entities have to comply with the local statutory capital frameworks that are under supervision of local regulators. To ensure adequate capitalisation, they are managed to commercial capital target levels which are set in accordance with the risk associated with the business activities, commercial requirements and other relevant factors. The commercial capital target levels are set in local legal entity capital policies and approved by the Management Board of NN Group. Capital adequacy is ensured through the capital planning process which starts with the annual budgeting process in which a capital plan is prepared for NN Group and its operating entities with a time horizon of 3-5 years. NN Group's risk appetite statements, as further described in Note 49 'Risk Management', drive the target setting and are cascaded down to the operating entities in line with NN Group's risk management strategy. Other important factors which are considered in the capital plan are efficient capital allocation, the cost of capital and capital generation. Capital positions of operating entities are closely monitored and, if necessary, measures are taken to ensure capital adequacy. At the end of 2019, all operating entities were capitalised above their local regulatory requirements.
- In addition, cash capital is held at the holding company. The cash capital position is available to cover capital needs of the entities after a stress event and to cover financial leverage costs and holding company expenses for a period of 12 months. Stress tests are based on 1-in-20 year scenarios and specific stress scenarios that might change from time to time. The free cash flow to the holding is the cash made available to NN Group, which can be distributed to shareholders, used to reduce debt or for other corporate purposes. The free cash flow to the holding is closely monitored and forecasted on a regular basis.
- NN Group assesses its funding mix via the financial leverage and fixed-cost coverage ratio. Financial leverage measures the amount of debt that NN Group issued to capitalise its operations. Debt used for funding or liquidity needs for the operating companies is not considered financial leverage. The fixed-cost coverage ratio measures the ability of NN Group to pay its fixed financing expenses and is defined as the earnings before interest and tax of ongoing business (EBIT) adjusted for special items divided by interest before tax on financial leverage.

Liquidity management

NN Group monitors and manages its liquidity risk based on certain severe stress scenarios, thereby following a bottom-up approach. Liquidity measures are periodically reported and monitored both on an individual entity and on a consolidated basis.

Liquidity risk is measured through the Required Sales Ratio, calculated as: (i) the gap between liquidity needs and liquidity sources in certain stress scenarios, divided by (ii) the available liquid assets for sale, in some cases subject to a haircut. This ratio is calculated for different time horizons and different levels of liquidity sources. The ratios of the entities should meet the predefined tolerance levels on a standalone entity basis. At 31 December 2019, the liquidity position of all entities was adequate and within the risk tolerance.

For the Banking business, DNB requires an annual Internal Capital and Liquidity Adequacy Assessment Process (ICLAAP) which it reviews in its annual Supervisory Review and Evaluation Process (SREP). The ICLAAP includes stress tests to verify capital and liquidity adequacy under conditions of severe but plausible stress. The ICLAAP and the SREP show that NN Bank has a robust capital and liquidity position.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Main events 2019

Significant events of 2019 are listed below in chronological order.

On 1 January 2019, the legal merger of Delta Lloyd Levensverzekering N.V. (DL Life) into Nationale-Nederlanden Levensverzekering Maatschappij N.V. (NN Life) became effective. As a result, DL Life ceased to exist as a separate legal entity and NN Life assumed all assets and liabilities of DL Life, including its subordinated notes of EUR 500 million, under universal title of succession.

On 1 January 2019, the legal merger of Delta Lloyd Schadeverzekering N.V. (DL Non-life) into Nationale-Nederlanden Schadeverzekering Maatschappij N.V. (NN Non-life) became effective. As a result, DL Non-life ceased to exist as a separate legal entity.

On 1 January 2019, all individual disability contracts of Delta Lloyd Schadeverzekering N.V. in the Netherlands (AOV individual portfolio) have been transferred to Movir N.V.

On 8 January 2019, NN Group announced that it had completed the acquisition of Aegon's Life Insurance business in the Czech Republic and Aegon's Life Insurance and Pension businesses in Slovakia.

On 14 February 2019, NN Group announced an open market share buyback programme for an amount up to EUR 500 million over a period of 12 months commencing 1 March 2019. This share buyback was executed by financial intermediaries under an open market share buyback programme which was completed on 28 February 2020.

On 7 June 2019, NN Group and Athora announced that they reached a binding agreement with Dajia Insurance, previously known as Anbang Group Holdings Co Ltd, in respect of the acquisition of all activities of VIVAT. As part of the announced transaction, NN Non-life is to acquire 100% of the shares in VIVAT Non-life activities (VIVAT Schadeverzekeringen N.V.) for a consideration of EUR 416 million, as well as the intercompany loans that VIVAT N.V. has granted to VIVAT Non-life, for a consideration of EUR 150 million. The approvals for the acquisition are expected to be received in the first quarter of 2020. There are no impacts on 2019.

On 25 June 2019, NN Group paid a 2018 final dividend of EUR 1.24 per ordinary share, equivalent to EUR 413 million in total. To neutralise the dilutive effect of the stock dividend on earnings per share, NN Group announced the repurchase of ordinary shares for a total amount of EUR 169 million. This share buyback was executed by financial intermediaries under an open market share buyback programme which was completed on 26 August 2019.

On 11 September 2019, NN Group paid a 2019 interim dividend of EUR 0.76 per ordinary share, equivalent to EUR 250 million in total. To neutralise the dilutive effect of the stock dividend on earnings per share, NN Group announced the repurchase of ordinary shares for a total amount of EUR 106 million. This share buyback was executed by financial intermediaries under an open market share buyback programme which was completed on 20 December 2019.

On 1 October 2019, the legal merger of Aegon Pojišťovna a.s. (Aegon Czech Life) into NN Life became effective. As a result, Aegon Czech ceased to exist as separate legal entity.

On 1 January 2020, the legal merger of NN Životná poisťovňa a.s. (Aegon Slovakia Life) into NN Slovakia Life became effective. As a result, Aegon Slovakia Life ceased to exist as a separate legal entity.

On 13 February 2020, NN Group announced a new share buyback programme of EUR 250 million, anticipated to commence on 2 March 2020, which will be completed within 12 months. Going forward NN Group intends to return excess capital to shareholders, with a recurring annual share buyback of at least EUR 250 million under normal circumstances.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Solvency II

Solvency II is the regulatory framework for (re-)insurance undertakings and groups domiciled in the EU.

Under the Solvency II regime, required capital (Solvency Capital Requirement) is risk-based and calculated as the post-tax value-at-risk at the confidence interval of 99.5% on a one-year horizon. Available capital (Own Funds) is determined as the excess of assets over liabilities, both based on economic valuations, plus qualifying subordinated debt. The EU Solvency II directive requires that (re-)insurance undertakings and groups hold sufficient Eligible Own Funds to cover the Solvency Capital Requirement.

NN Group is the holding company of licensed insurers, asset management and banking businesses. Regulated entities which from local regulatory perspective are not subject to the Solvency II regime (e.g. pension funds in Central Europe, NN Investment Partners, BeFrank and BeFrank PPI) are included in Own Funds based on their local available capital and in SCR based on required capital defined by sectoral supervisory rules. As from March 2016 NN Group is designated by the DNB as a mixed financial holding company, also known as a Financial Conglomerate (FICO). As NN Group is designated as FICO by DNB, NN Bank is excluded from the Group Solvency. NN Life Japan is included in Own Funds and SCR based on its available and required capital determined according to the local solvency regime recognised by the European Commission as provisionally equivalent.

NN Group uses the Partial Internal Model (PIM) to calculate capital requirements under Solvency II. The group capital model is named as such due to the fact that an Internal Model is used to calculate the capital requirements for the Dutch insurance entities (namely NN Life, NN Non-Life, Movir and NN Re in the Netherlands) while the Standard Formula is used to calculate capital requirements for operational risk (across the group) and capital requirements for the international insurance entities that fall under Solvency II and for ABN AMRO Life and ABN AMRO Non-life. Under the Internal Model, the Solvency Capital Requirement is calculated as the post-tax value-at-risk at the confidence interval of 99.5% on a one-year horizon.

Further details on the NN Group capital requirements at 31 December 2019 are provided in Note 49 'Risk Management'.

The Solvency II capital ratios of NN Group and its Dutch insurance entities do not include any contingent liability potentially arising from unit-linked products sold, issued or advised on by NN Group's insurance entities (including ABN AMRO Life) in the past, as this potential liability cannot be reliably estimated or quantified at this point. Reference is made to Note 42 'Legal proceedings' for more information.

NN Group was adequately capitalised at 31 December 2019 with a Solvency II ratio of 218% based on the Partial Internal Model.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Eligible Own Funds and Solvency Capital Requirement

	2019	2018
Shareholders' equity	30,768	22,850
Minority interest	260	234
Elimination of deferred acquisition costs and other intangible assets	-1,580	-1,441
Valuation differences on assets	2,888	833
Valuation differences on liabilities, including insurance and investment contracts	-18,577	-7,677
Deferred tax effect on valuation differences	3,622	1,571
Difference in treatment of non-Solvency II regulated entities	-1,240	-1,242
Excess assets/liabilities	16,141	15,129
Deduction of participation in Bank ^{1,2}	-930	-905
Qualifying subordinated debt	4,483	4,417
Foreseeable dividends and distributions	-651	-541
Basic Own Funds	19,043	18,100
Non-available Own Funds	1,252	1,373
Eligible Own Funds to cover Solvency Capital Requirements (a)	17,792	16,727
- of which Tier 1 unrestricted	11,388	10,513
- of which Tier 1 restricted	1,922	1,895
- of which Tier 2	2,474	2,433
- of which Tier 3	703	755
- of which non-Solvency II regulated entities	1,305	1,132
Solvency Capital Requirements (b)	8,154	7,274
- of which Solvency Capital Requirements calculated on the basis of consolidated data	7,612	6,767
- of which the capital requirements for investment firms, pension funds and credit institutions	249	226
- of which the capital requirements for undertakings included under the D&A method	294	281
NN Group Solvency II ratio (a/b)³	218%	230%

1 As from March 2016, NN Bank is excluded from the Group Solvency following the designation of NN Group as a Financial Conglomerate (FICO) by the Dutch Central Bank (DNB).

2 The Solvency II value of subordinated loans issued to NN Bank of EUR 87 million at 31 December 2019 (at 31 December 2018 EUR 89 million) is deducted from Tier 2 own funds.

3 The Solvency ratios are not final until filed with the regulators. SII ratios are based on the Partial Internal Model.

The final amount of the Solvency Capital Requirement is still subject to supervisory assessment.

The Solvency II ratio of NN Group decreased to 218% at the end of 2019 from 230% at the end of 2018. The decrease is mainly driven by capital flows to shareholders and market variance, partly offset by operating capital generation. Market variance reflects the impact of movements in credit spreads and the decrease of interest rates, partly offset by positive equity revaluations. Capital flows to shareholders reflect the 2019 interim dividend, the proposed 2019 final dividend and the EUR 500 million share buyback programme announced in February 2019.

Eligible Own Funds increased by EUR 1.1 billion from EUR 16.7 billion at 31 December 2018 to EUR 17.8 billion at 31 December 2019 mainly due to market variance and operating capital generation, partly offset by capital flows to shareholders. Market variance reflects the decrease of interest rates and positive equity revaluations, partly offset by the impact of movement in credit spreads.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

The Solvency Capital Requirement increased by EUR 0.9 billion, from EUR 7.3 billion at 31 December 2018 to EUR 8.2 billion at 31 December 2019. The increase is mainly driven by market variance reflecting the decrease of interest rates, positive equity revaluations and the impact of movements in credit spreads.

Structure, amount and quality of Own Funds

Subordinated liabilities included in NN Group Own Funds

Interest rate	Issue	Year of issue	Notional	Due date	First call date	Own Funds tier	Solvency II value	
							2019	2018
4.500%	NN Group N.V.	2014	1,000	Perpetual	15 January 2026	Tier 1	1,105	1,083
4.375%	NN Group N.V. ¹	2014	750	Perpetual	13 June 2024	Tier 1	818	812
4.625%	NN Group N.V.	2014	1,000	8 April 2044	8 April 2024	Tier 2	1,106	1,101
4.625%	NN Group N.V.	2017	850	13 January 2048	13 January 2028	Tier 2	920	883
9.000%	Nationale-Nederlanden Levensverzekering N.V. ²	2012	500	29 August 2042	29 August 2022	Tier 2	535	538

¹ These securities were originally issued by Delta Lloyd N.V. which was merged with NN Group Bidco B.V., which was merged into NN Group N.V. at the end of 2017.

² These securities were originally issued by Delta Lloyd Levensverzekering N.V. which was merged into Nationale-Nederlanden Levensverzekering Maatschappij N.V. (NN Life) on 1 January 2019.

The perpetual subordinated notes issued in 2014 with a notional amount of EUR 1 billion have a coupon of 4.50% and are fully paid in. NN Group N.V. has the right to redeem these notes on the first call date on 15 January 2026 or on any interest payment date thereafter. The subordinated notes are classified as Restricted Tier 1 capital based on the transitional provisions (grandfathering). These subordinated notes are grandfathered for a maximum period of 10 years until 1 January 2026.

The perpetual subordinated notes (originally issued by Delta Lloyd N.V. in 2014) with a notional amount of EUR 750 million have a coupon of 4.375% are fully paid in. NN Group N.V. has the right to redeem these notes on the first call date on 13 June 2024 or on any interest payment date thereafter. The subordinated notes are classified as Restricted Tier 1 capital based on the transitional provisions (grandfathering). These notes are grandfathered for a maximum period of 10 years until 1 January 2026.

The dated subordinated notes issued in 2014 with a notional amount of EUR 1 billion have a coupon of 4.625% and maturity date on 8 April 2044 and are fully paid in. NN Group N.V. has the right to redeem these notes on the first call date on 8 April 2024 or on any interest payment date thereafter. These subordinated notes are classified as Tier 2 capital based on the transitional provisions (grandfathering). The subordinated notes are grandfathered for a maximum period of 10 years until 1 January 2026.

The dated subordinated notes issued in 2017 with a notional amount of EUR 850 million have a coupon of 4.625% with maturity date on 13 January 2048 and are fully paid in. NN Group N.V. has the right to redeem these notes on the first call date on 13 January 2028 or on any interest payment date thereafter. These subordinated notes are classified as Tier 2 capital.

The dated subordinated notes, originally issued by Delta Lloyd Levensverzekering N.V. in 2012 and assumed by Nationale-Nederlanden Levensverzekering N.V. following the legal merger effective as of 1 January 2019, has a notional amount of EUR 500 million have a coupon of 9% and maturity date on 29 August 2042 and are fully paid in. Nationale-Nederlanden Levensverzekering N.V. has the right to redeem these notes on the first call date on 29 August 2022 or on any interest payment date thereafter. The subordinated notes are classified as Tier 2 capital based on the transitional provisions (grandfathering). These notes are grandfathered for a maximum period of 10 years until 1 January 2026.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Eligible Own Funds

NN Group own funds are classified into three tiers as follows:

- The excess of assets over liabilities on the basis of consolidated accounts excluding net Deferred Tax Asset is classified as Tier 1
- The proportional share in the Own Funds of NN Investment Partners, BeFrank, BeFrank PPI and pension funds in Central Europe is classified as Tier 1
- The proportional share in the Eligible Own Funds of NN Life Japan is classified as Tier 1 (European Commission recognised the solvency regime applied to the insurance undertakings in Japan as provisionally equivalent to Solvency II (Commission Delegated Decision (EU) 2016/310 of 26 November 2015))
- Perpetual subordinated debt is classified as Tier 1 based on the transitional provisions (grandfathering)
- Dated subordinated debt is classified as Tier 2 including that based on the transitional provisions (grandfathering)
- The Net Deferred Tax Asset (Deferred tax assets and liabilities are offset only where such assets and liabilities relate to taxes levied by the same tax authority on the same taxable undertaking) is classified as Tier 3

As at 31 December 2019 and 2018, NN Group had no ancillary Own Funds.

There are a number of regulatory restrictions on the amounts classified as Restricted Tier 1, Tier 2 and Tier 3 capital. The following restrictions have to be taken into account:

- Restricted Tier 1 capital cannot exceed 20% of the total Tier 1 amount
- The proportion of Tier 1 items in the Eligible Own Funds should be higher than one third of the total amount of Eligible Own Funds
- Tier 2 and Tier 3 capital together cannot exceed 50% of the Solvency Capital Requirements
- Tier 3 capital cannot exceed 15% of the Solvency Capital Requirements
- Tier 3 capital cannot exceed one third of the total amount of Eligible Own Funds

The application of the regulatory restrictions as at 31 December 2019 is reflected in the table below.

Eligible Own Funds to cover the Solvency Capital Requirement

	Available Own Funds	Eligibility restriction	Non-eligible Own Funds	Eligible Own Funds
Tier 1	13,310	More than one third of total EOF		13,310
Of which:				
– Unrestricted Tier 1	11,388	Not applicable		11,388
– Restricted Tier 1	1,922	Less than 20% of Tier 1		1,922
Tier 2 + Tier 3	3,176	Less than 50% of SCR		3,176
Tier 2	2,474			2,474
Tier 3	703	Less than 15% of SCR; Less than one third of total EOF		703
Non-Solvency II regulated entities	1,305			1,305
Total Own Funds	17,792			17,792

Transferability and fungibility of Own Funds

NN Group adjusts the group Own Funds taking into account the value of own fund items that cannot effectively be made available to cover the group SCR. These are the own fund items of related undertakings subject to legal and regulatory constraints that restrict the ability of those items to absorb all types of loss within the group and/or transferability of assets. Based on NN Group's assessment these own fund items mainly include:

- Differences between valuations of assets and liabilities based on Solvency II principles and according to principles that related undertakings use to prepare respective local annual accounts
- For NN Life Japan, own fund items according to local rules but which are not part of shareholders' equity
- The transitional measures on risk-free interest rates and technical provisions
- Legal reserves set up according to local company law
- Any minority interest in a related undertaking

These own fund items are included in NN Group Own Funds to the extent they are eligible for covering Solvency Capital Requirements of the respective related undertaking. On 31 December 2019 Excess non-available own funds amounted to EUR 1,252 million. On 31 December 2018 this amount was EUR 1,373 million.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Cash capital position at the holding company

NN Group holds a cash capital position in the holding company to cover stress events and to fund holding company expenses and interest expenses. Cash capital is defined as net current assets available at the holding company. It is NN Group's aim for the cash capital position at the holding company to be in a target range between EUR 0.5 billion and EUR 1.5 billion. Another related metric is the free cash flow at the holding which is defined as the change in the cash capital position at the holding company over the period, excluding acquisitions and capital transactions with shareholders and debtholders.

Cash capital position at the holding company

	2019	2018
Cash capital position – opening balance	2,005	1,434
Cash divestment proceeds	4	
Dividends from subsidiaries ¹	1,459	1,593
Capital injections into subsidiaries	-76	-78
Other ²	-200	-298
Free cash flow to the holding³	1,187	1,216
Acquisitions	-117	
Capital flow from/to shareholders	-1,085	-645
Cash capital position – closing balance	1,989	2,005

1 Includes interest on intragroup subordinated loans provided to subsidiaries by the holding company.

2 Includes interest on subordinated loans and debt with external debtholders, holding company expenses and other cash flows.

3 Free cash flow to the holding company is defined as the change in cash capital position of the holding company over the period, excluding acquisitions and capital transactions with shareholders and debtholders.

The cash capital position at the holding company decreased to EUR 1,989 million from EUR 2,005 million at 31 December 2018 due to capital flows to shareholders and the considerations paid for acquisitions, partly offset by the free cash flow to the holding. Capital flows to shareholders of EUR 1,085 million represents the cash part of the 2018 final dividend and the 2019 interim dividend for a total amount of EUR 387 million and the shares repurchased in 2019 for an amount of EUR 698 million. Free cash flow to the holding of EUR 1,187 million represents EUR 1,459 million of remittances from all segments, partly offset by EUR 76 million capital injection into subsidiaries and EUR 200 million other movements that include holding company expenses, interest on loans and debt and other holding company cash flows.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Financial leverage

The financial leverage and fixed-cost coverage ratio are managed in accordance with a single A financial strength rating target.

Financial leverage

	2019	2018
Shareholders' equity	30,768	22,850
Adjustment for revaluation reserves	-13,397	-7,097
Minority interests	260	234
Capital base for financial leverage (a)	17,632	15,988
- Undated subordinated notes ¹	1,764	1,764
- Subordinated debt	2,409	2,445
Total subordinated debt	4,172	4,209
Debt securities issued (financial leverage)	1,992	1,990
Financial leverage (b)	6,164	6,199
Total debt	6,164	6,199
Financial leverage ratio (b/(a+b))	25.9%	27.9%
Fixed-cost coverage ratio ^{1,2}	12.0x	13.8x

1 The undated subordinated notes classified as equity are considered financial leverage in the calculation of the financial leverage ratio. The related interest is included on an accrual basis in the calculation of the fixed-cost coverage ratio.

2 Measures the ability of earnings before interest and tax (EBIT) of ongoing business to cover funding costs on financial leverage.

The financial leverage ratio of NN Group decreased to 25.9 % at 31 December 2019 from 27.9% at 31 December 2018. The capital base for financial leverage increased by EUR 1,644 million mainly driven by the 2019 net results of EUR 1,962 million and positive equity revaluations of EUR 800 million, partly offset by capital flows to shareholders of EUR 1,085 million.

The fixed-cost coverage ratio decreased to 12.0x at the end of 2019 from 13.8x at the end of 2018.

Proposed 2019 final dividend

At the annual general meeting on 28 May 2020, a final dividend will be proposed of EUR 1.40 per ordinary share, or approximately EUR 448 million based on the current number of outstanding shares (net of treasury shares). Together with the 2019 interim dividend of EUR 0.76 per ordinary share paid in September 2019, NN Group's total dividend over 2019 will be EUR 698 million, or EUR 2.16 per ordinary share which is equivalent to a dividend pay-out ratio of 50% of NN Group's full-year 2019 net operating result. This represents an increase of 10% compared with the total 2018 dividend. The final dividend will be paid in cash, after deduction of withholding tax if applicable, or ordinary shares from the share premium reserve at the election of the shareholder. To neutralise the dilutive effect of the stock dividend, NN Group will repurchase ordinary shares for an amount equivalent to the stock dividend. If the proposed dividend is approved by the shareholders, NN Group ordinary shares will be quoted ex-dividend on 1 June 2020. The record date for the dividend will be 2 June 2020. The election period will run from 3 June up to and including 17 June 2020. The stock fraction for the stock dividend will be based on the volume weighted average price of NN Group ordinary shares on Euronext Amsterdam for the five trading days from 11 June through 17 June 2020. The dividend will be payable on 24 June 2020. (For more information: <https://www.nn-group.com/Investors>).

Going forward NN Group intends to pay a progressive ordinary dividend per share. Interim dividends will continue to be calculated as 40% of the prior year full-year dividend per share. NN Group also intends to execute a recurring annual share buyback of at least EUR 250 million under normal circumstances. These share buybacks are subject to yearly reassessment and confirmation. Additional excess capital is to be returned to shareholders unless it can be used for value creating opportunities.

Notes to the Consolidated annual accounts continued

50 Capital and liquidity management continued

Share buyback

On 13 February 2020, NN Group announced that it will execute an open market share buyback programme for an amount of EUR 250 million. The programme will be executed within 12 months and is anticipated to commence on 2 March 2020. NN Group intends to cancel the shares acquired under the programme. The share buyback will be deducted in full from Solvency II Own Funds in the first half of 2020, whilst it will be deducted from IFRS shareholders' equity when the actual buyback transactions occur. In addition, NN Group intends to repurchase shares to neutralise the dilutive effect of any stock dividends.

The share buyback programme will be executed within the limitations of the existing authority granted by the General Meeting on 29 May 2019 and such authority to be granted by the General Meeting on 28 May 2020. The shares will be repurchased at a price that does not exceed the last independent trade or the highest current independent bid on the relevant trading platform. The programme will be executed by financial intermediaries and will be performed in compliance with the safe harbour provisions for share buybacks.

On 14 February 2019, NN Group announced an open market share buyback programme for an amount up to EUR 500 million over a period of 12 months, commencing 1 March 2019. This share buyback was executed by financial intermediaries under an open market share buyback programme, which was completed on 28 February 2020. These share buybacks were executed within the limitations of the existing authority granted by the General Meeting on 31 May 2018 and reinforced by the General Meeting on 29 May 2019 and was performed in compliance with the safe harbour provisions for share buybacks.

Following payment of the 2018 final dividend, NN Group announced that it would repurchase ordinary shares for a total amount of EUR 169 million, equivalent to the value of the stock dividends, to neutralise the dilutive effect. This share buyback programme was completed on 26 August 2019.

Following payment of the 2019 interim dividend, NN Group announced that it would repurchase ordinary shares for a total amount of EUR 106 million, equivalent to the value of the stock dividends, to neutralise the dilutive effect. This share buyback programme was completed on 20 December 2019.

These share buyback programmes were executed within the limitations of the existing authority granted by the General Meeting on 29 May 2019 and were performed in compliance with the safe harbour provisions for share buybacks. The shares were repurchased under these programmes at a price that did not exceed the last independent trade or the highest current independent bid on the relevant trading platform. NN Group intends to cancel all of the shares acquired under the programmes (For more information: <https://www.nn-group.com/Investors>).

Share capital

In 2019, a total number of 20,996,349 ordinary shares for a total amount of EUR 698 million were repurchased.

The Executive Board of NN Group has decided to cancel 23,289,558 treasury shares representing shares that NN Group repurchased as part of the share buyback programmes. This cancellation is subject to a two-month creditor opposition period which will end on 11 May 2020. Assuming no opposition is made the cancellation of shares will take effect on 12 May 2020.

On 6 March 2020, the total number of NN Group shares outstanding (net 23,953,798 of treasury shares) was 319,602,323.

Credit ratings

On 10 March 2020, Fitch revised the outlook on NN Group's 'A+' financial strength rating and 'A' credit rating to 'Positive' from 'Stable'. Fitch has simultaneously affirmed all ratings.

On 18 September 2019, Standard & Poor's affirmed NN Group's 'A' financial strength rating and 'BBB+' credit rating with a stable outlook..

Credit ratings on NN Group N.V. on 11 March 2020

	Financial Strength Rating	NN Group N.V. Counterparty Credit Rating
Standard & Poor's	A	BBB+
	Stable	Stable
Fitch	A+	A
	Positive	Positive

Authorisation of the Consolidated annual accounts

The Consolidated annual accounts of NN Group N.V. for the year ended 31 December 2019 were authorised for issue in accordance with a resolution of the Executive Board on 11 March 2020. The Executive Board may decide to amend the Consolidated annual accounts as long as these are not adopted by the General Meeting.

The General Meeting may decide not to adopt the Consolidated annual accounts, but may not amend these during the meeting. The General Meeting can decide not to adopt the Consolidated annual accounts, propose amendments and then adopt the Consolidated annual accounts after a normal due process.

The Hague, 11 March 2020

The Supervisory Board

D.A. (David) Cole, chair
D.H. (Dick) Harryvan, vice-chair
H.J.G. (Heijo) Hauser
R.W. (Robert) Jenkins
R.A. (Robert) Ruijter
J.W. (Hans) Schoen
C.C.F.T. (Clara) Streit
H.M. (Hélène) Vletter-van Dort

The Executive Board

D.E. (David) Knibbe, CEO, chair
D. (Delfin) Rueda, CFO, vice-chair

Parent company balance sheet

Amounts in millions of euros, unless stated otherwise

Parent company balance sheet

As at 31 December before appropriation of result	notes	2019	2018
Assets			
Investments in group companies	2	32,234	24,194
Available-for-sale investments	3	6,238	988
Intangible assets	4	479	510
Other assets	5	4,147	5,313
Total assets		43,098	31,005
Equity			
Share capital	6	41	41
Share premium		12,572	12,572
Share of associates reserve		16,597	8,923
Retained earnings		-404	197
Unappropriated result		1,962	1,117
Shareholders' equity		30,768	22,850
Undated subordinated notes	6	1,764	1,764
Total equity		32,532	24,614
Liabilities			
Subordinated debt	7	1,832	1,829
Other liabilities	8	8,734	4,562
Total liabilities		10,566	6,391
Total equity and liabilities		43,098	31,005

References relate to the notes starting with Note 1 'Accounting policies for the Parent company annual accounts'. These form an integral part of the Parent company annual accounts.

Parent company profit and loss account

Parent company profit and loss account

For the year ended 31 December

	2019	2018
Result group companies	2,105	2,228
Other income	79	85
Total income	2,184	2,313
Intangible amortisation and other impairments	32	984
Interest expenses	107	104
Operating expenses	149	166
Total expenses	288	1,254
Result before tax	1,896	1,059
Taxation	-66	-58
Net result	1,962	1,117

Parent company statement of changes in equity

Parent company statement of changes in equity (2019)

	Share capital	Share premium	Share of associates reserve	Other reserves ¹	Shareholders' equity	Undated subordinated notes	Total equity
Balance at 1 January 2019	41	12,572	8,923	1,314	22,850	1,764	24,614
Unrealised revaluations available-for-sale investments and other			4,541	-73	4,468		4,468
Realised gains/losses transferred to the profit and loss account			-286		-286		-286
Changes in cash flow hedge reserve			4,284		4,284		4,284
Deferred interest credited to policyholders			-1,403		-1,403		-1,403
Share of other comprehensive income of associates and joint ventures			-4		-4		-4
Exchange rate differences			53		53		53
Remeasurement of the net defined benefit asset/liability			-38		-38		-38
Unrealised revaluations property in own use			3		3		3
Total amount recognised directly in equity (Other comprehensive income)	0	0	7,150	-73	7,077	0	7,077
Net result for the period				1,962	1,962		1,962
Total comprehensive income	0	0	7,150	1,889	9,039	0	9,039
Transfers to/from associates			524	-524	0		0
Dividend				-387	-387		-387
Purchase/sale of treasury shares				-707	-707		-707
Employee stock option and share plans				2	2		2
Coupon on undated subordinated notes				-59	-59		-59
Changes in composition of the group and other changes				30	30		30
Balance at 31 December 2019	41	12,572	16,597	1,558	30,768	1,764	32,532

¹ Other reserves include Retained earnings and Unappropriated result.

Parent company statement of changes in equity continued

Parent company statement of changes in equity (2018)

	Share capital	Share premium	Share of associates reserve	Other reserves ¹	Shareholders' equity	Undated subordinated notes	Total equity
Balance at 1 January 2018	41	12,572	9,185	920	22,718	1,764	24,482
Unrealised revaluations available-for-sale investments and other			-345	22	-323		-323
Realised gains/losses transferred to the profit and loss account			-823		-823		-823
Changes in cash flow hedge reserve			793		793		793
Deferred interest credited to policyholders			-38		-38		-38
Share of other comprehensive income of associates and joint ventures			1		1		1
Exchange rate differences			93		93		93
Unrealised revaluations property in own use			7		7		7
Total amount recognised directly in equity (Other comprehensive income)	0	0	-312	22	-290	0	-290
Net result for the period				1,117	1,117		1,117
Total comprehensive income	0	0	-312	1,139	827	0	827
Transfers to/from associates			50	-50	0		0
Dividend				-332	-332		-332
Purchase/sale of treasury shares				-231	-231		-231
Employee stock option and share plans				2	2		2
Coupon on undated subordinated notes				-58	-58		-58
Changes in composition of the group and other changes				-76	-76		-76
Balance at 31 December 2018	41	12,572	8,923	1,314	22,850	1,764	24,614

1 Other reserves include Retained earnings and Unappropriated result.

Notes to the Parent company annual accounts

1 Accounting policies for the Parent company annual accounts

The parent company accounts of NN Group N.V. are prepared in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code. The accounting policies applicable to presentation and disclosures are in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code. The principles of valuation and determination of results stated in connection with the Consolidated balance sheet and profit and loss account are also applicable to the parent company balance sheet and profit and loss account with the exception of investments in group companies and Associates and joint ventures which are recognised at net asset value with goodwill, if any, recorded under intangible assets.

A list containing the information referred to in Article 379 (1), Book 2 of the Dutch Civil Code has been filed with the Commercial Register of the Chamber of Commerce in Amsterdam in accordance with Article 379 (5), Book 2 of the Dutch Civil Code.

Changes in balance sheet values due to changes in the revaluation reserves of associates are reflected in the 'Share of associates reserve', which forms part of shareholders' equity. Changes in balance sheet values due to the results of these associates, accounted for in accordance with NN Group accounting policies, are included in the profit and loss account. Other changes in the balance sheet value of these associates, other than those due to changes in share capital, are included in the 'Share of associates reserve'.

A legal reserve is carried at an amount equal to the share in the results of associates since their first inclusion at net asset value less the amount of profit distributions to which rights have accrued in the interim. Profit distributions which can be repatriated to the Netherlands without restriction are likewise deducted from the 'Share of associates reserve'.

2 Investments in group companies

Investments in group companies

Name	Statutory seat	Interest held	Balance sheet value	Interest held	Balance sheet value
		2019	2019	2018	2018
NN Insurance Eurasia N.V.	Amsterdam, The Netherlands	100%	31,148	100%	23,081
Delta Lloyd Houdstermaatschappij Verzekeringen N.V.	Amsterdam, The Netherlands	100%	3	100%	23
Nationale-Nederlanden Bank N.V.	The Hague, The Netherlands	100%	776	100%	761
Nationale-Nederlanden ABN AMRO Verzekeringen Holding B.V.	Zwolle, The Netherlands	51%	251	51%	231
NN Insurance International B.V.	The Hague, The Netherlands	100%	56	100%	63
Other					35
Investments in group companies			32,234		24,194

Changes in Investments in group companies

	2019	2018
Investments in group companies – opening balance	24,194	23,633
Disposals of group companies	-4	
Revaluations	7,108	-277
Result of group companies	2,105	2,228
Capital contributions		1,559
Dividend and repayments	-1,170	-2,971
Changes in the composition of the group and other changes	1	22
Investments in group companies – closing balance	32,234	24,194

3 Debt securities Available-for-sale

Changes in Debt securities Available-for-sale

	2019	2018
Debt securities Available-for-sale – opening balance	988	998
Additions	13,430	3,392
Disposals and redemptions	-8,180	-3,402
Debt securities Available-for-sale – closing balance	6,238	988

Notes to the Parent company annual accounts continued

4 Intangible assets

Intangible assets

	2019	2018
Goodwill	294	294
Other intangible assets	185	216
Intangible assets	479	510

For the decrease of Goodwill and the accompanying change in the line Intangible amortisation and other impairments in the Parent company profit and loss account, reference is made to Note 9 'Intangible assets' of the Consolidated annual accounts.

5 Other assets

Other assets

	2019	2018
Receivables from group companies	2,308	1,835
Cash	1,005	2,447
Other receivables	834	1,031
Other assets	4,147	5,313

As at 31 December 2019, an amount of EUR 1,790 million (2018: EUR 1,475 million) is expected to be settled after more than one year from the balance sheet date.

6 Equity

Equity

	2019	2018
Share capital	41	41
Share premium	12,572	12,572
Share of associates reserve	16,597	8,923
Retained earnings and unappropriated result	1,558	1,314
Shareholders' equity	30,768	22,850
Undated subordinated notes	1,764	1,764
Total equity	32,532	24,614

As at 31 December 2019, share premium includes an amount of EUR 6,392 million (2018: EUR 6,393 million) exempt from Dutch withholding tax.

Share capital

	Ordinary shares (in number)		Ordinary shares (amounts in millions of euros)	
	2019	2018	2019	2018
Authorised share capital	700,000,000	700,000,000	84	84
Unissued share capital	356,443,879	358,940,929	43	43
Issued share capital	343,556,121	341,059,071	41	41

For details on the changes in share capital, share premium and warrants, reference is made to Note 12 'Equity' in the Consolidated annual accounts.

Notes to the Parent company annual accounts continued

6 Equity continued

Changes in Retained earnings and unappropriated result (2019)

	Retained earnings	Unappropriated result	Total
Retained earnings and unappropriated result – opening balance	197	1,117	1,314
Net result for the period		1,962	1,962
Unrealised revaluations	-73		-73
Transfer to/from share of associates reserve	-524		-524
Transfer to/from retained earnings	1,117	-1,117	0
Dividend	-387		-387
Purchase/sale of treasury shares	-707		-707
Employee stock option and share plans	2		2
Coupon on undated subordinated notes	-59		-59
Changes in the composition of the group and other changes	30		30
Retained earnings and unappropriated result – closing balance	-404	1,962	1,558

Changes in Retained earnings and unappropriated result (2018)

	Retained earnings	Unappropriated result	Total
Retained earnings and unappropriated result – opening balance	-1,190	2,110	920
Net result for the period		1,117	1,117
Unrealised revaluations	22		22
Transfer to/from share of associates reserve	-50		-50
Transfer to/from retained earnings	2,110	-2,110	0
Dividend	-332		-332
Purchase/sale of treasury shares	-231		-231
Employee stock option and share plans	2		2
Coupon on undated subordinated notes	-58		-58
Changes in the composition of the group and other changes	-76		-76
Retained earnings and unappropriated result – closing balance	197	1,117	1,314

The total amount of Equity in the Parent company annual accounts equals Shareholders' equity (parent) in the Consolidated annual accounts. Certain components within equity are different, as a result of the following presentation differences between the Parent company accounts and Consolidated accounts:

- Unrealised revaluations within consolidated group companies, presented in the 'Revaluation reserve' in the Consolidated annual accounts, are presented in the 'Share of associates reserve' in the Parent company annual accounts
- Foreign currency translation on consolidated group companies, presented in the 'Currency translation reserve' in the Consolidated annual accounts, is presented in the 'Share of associates reserve' in the Parent company annual accounts
- Remeasurement of the net defined benefit asset/liability within consolidated group companies presented in the 'Net defined benefit asset/liability remeasurement reserve' in the Consolidated annual accounts, are presented in the 'Share of associates reserve' in the Parent company annual accounts
- Non-distributable retained earnings of associates presented in 'Other reserves' in the Consolidated annual accounts, are presented in the 'Share of associates reserve' in the Parent company annual accounts
- Revaluations on real estate investments, capitalised software and certain participations recognised in income and consequently presented in 'Retained earnings' in the Consolidated annual accounts, are presented in the 'Share of associates reserve' in the Parent company annual accounts

Notes to the Parent company annual accounts continued

6 Equity continued

Share of associates reserve

	2019	2018
Unrealised revaluations within consolidated group companies	15,269	8,198
Currency translation reserve	3	-34
Net defined benefit asset/liability remeasurement reserve	-144	-106
Reserve for non-distributable retained earnings of associates	1,271	747
Revaluations on investment property and certain participations recognised in income	198	118
Share of associates reserve	16,597	8,923

Positive components of the Share of associate reserve of EUR 16,741 million (2018: EUR 9,063 million) cannot be freely distributed. The reserve for cash flow hedges is included in the Share of associates reserve on a net basis. Retained earnings can be freely distributed, except for an amount equal to the negative balance in each of the components in the Share of associates reserve.

Distributable reserves

NN Group N.V. is subject to legal restrictions regarding the amount of dividends it can pay to its shareholders. The Dutch Civil Code contains the restriction that dividends can only be paid up to an amount equal to total shareholders' equity less the issued and outstanding capital and less the reserves required by law. In case of negative balances for individual reserves legally to be retained, no distributions can be made out of retained earnings to the level of these negative amounts.

In addition, NN Group's ability to pay dividends is dependent on the dividend payment ability of its subsidiaries, associates and joint ventures. NN Group is legally required to create a non-distributable reserve insofar profits of its subsidiaries, associates and joint ventures are subject to dividend payment restrictions. Such restrictions may, among others, be of a similar nature as the restrictions which apply to NN Group.

Legally distributable reserves, determined in accordance with the financial reporting requirements included in Part 9 of Book 2 of the Dutch Civil Code, from NN Group's subsidiaries, associates and joint ventures are as follows:

Distributable reserves based on the Dutch Civil Code

	2019	2019	2018	2018
Total shareholders' equity		30,768		22,850
Share capital	41		41	
Positive components of Share of associates reserve	16,741		9,063	
Total non-distributable part of shareholders' equity:		16,782		9,104
Distributable reserves based on the Dutch Civil Code		13,986		13,746

The Dutch supervisory rules and regulations stemming from the Dutch Financial Supervision Act (Wet op het financieel toezicht) provide a second restriction on the possibility to distribute dividends. Total freely distributable reserves is the minimum of freely distributable capital on the basis of solvency requirements and freely distributable capital on the basis of capital protection.

Freely distributable reserves

	2019	2019	2018	2018
Solvency requirement under the Financial Supervision Act	8,154		7,274	
Reserves available for financial supervision purposes	17,792		16,727	
Total freely distributable reserves on the basis of solvency requirements		9,638		9,453
Total freely distributable reserves on the basis of the Dutch Civil Code		13,986		13,746
Total freely distributable reserves (lower of the values above)		9,638		9,453

Reference is made to Note 50 'Capital and liquidity management' for more information on solvency requirements.

Notes to the Parent company annual accounts continued

6 Equity continued

Other restrictions

There are other restrictions to the ability of subsidiaries, associates and joint ventures to distribute reserves to NN Group as a result of minimum capital requirements that are imposed by industry regulators in the countries in which the group companies operate. Reference is made to Note 50 'Capital and liquidity management' in the Consolidated annual accounts for the minimum capital requirements.

In addition to the legal and regulatory restrictions on distributing dividends from subsidiaries, associates and joint ventures to NN Group there are various other considerations and limitations that are taken into account in determining the appropriate levels of equity in the Group's subsidiaries, associates and joint ventures. These considerations and limitations include, but are not restricted to, rating agency and regulatory views, which can change over time; it is not possible to disclose a reliable quantification of these limitations.

Without prejudice to the authority of the Executive Board to allocate profits to reserves and to the fact that the ordinary shares are the most junior securities issued by NN Group, no specific dividend payment restrictions with respect to ordinary shares exist.

Furthermore, NN Group is subject to legal restrictions with respect to repayment of capital to holders of ordinary shares. Capital may be repaid to the holders of ordinary shares pursuant to an amendment of NN Group's Articles of Association whereby the ordinary shares are written down. Pursuant to the Dutch Civil Code, capital may only be repaid if none of NN Group's creditors opposes such a repayment within two months following the announcement of a resolution to that effect.

Undated subordinated notes

In July 2014, NN Group N.V. issued fixed to floating rate undated subordinated notes with a par value of EUR 1,000 million. The notes are undated, but are callable after 11.5 years and every quarter thereafter (subject to regulatory approval). The coupon is fixed at 4.50% per annum for the first 11.5 years and will be floating thereafter. As these notes are undated and include optional deferral of interest at the discretion of NN Group, these are classified under IFRS as equity. Coupon payments are deducted from equity if and when paid or contractually due. The discount to the par value and certain issue costs were deducted from equity at issue, resulting in a balance sheet value equal to the net proceeds of EUR 986 million.

In June 2014, fixed to floating rate undated subordinated notes with a par value of EUR 750 million were originally issued by Delta Lloyd which are classified as equity under IFRS. The notes are undated, but are callable as from 13 June 2024 and every quarter thereafter (subject to regulatory approval). The coupon is fixed at 4.375% per annum until 13 June 2024 and will be floating thereafter. Coupon payments are distributed out of equity if and when paid or contractually due. These notes were recognised upon acquisition of Delta Lloyd for an amount of EUR 778 million.

7 Subordinated debt

Subordinated debt

Interest rate	Year of issue	Due date	First call date	Notional amount		Balance Sheet Value	
				2019	2018	2019	2018
4.625%	2017	13 January 2048	13 January 2028	850	850	839	838
4.625%	2014	8 April 2044	8 April 2024	1,000	1,000	993	991
Subordinated debt						1,832	1,829

The above subordinated debt instruments have been issued to raise hybrid capital. Under IFRS-EU these debt instruments are classified as liabilities and are considered capital for regulatory purposes. All subordinated debt is euro denominated.

Notes to the Parent company annual accounts continued

8 Other liabilities

Other liabilities

	2019	2018
Debt securities issued	1,992	1,989
Amounts owed to group companies	6,524	2,440
Other amounts owed and accrued liabilities	218	133
Other liabilities	8,734	4,562

Amounts owed to group companies by remaining term

	2019	2018
Within 1 year	6,524	2,440
Amounts owed to group companies	6,524	2,440

9 Other

NN Group N.V. has issued statements of liability in connection with Article 403, Book 2 of the Dutch Civil Code and other guarantees (mainly funding and redemption guarantees) for group companies.

Reference is made to the Consolidated annual accounts for the number of employees, audit fees and remuneration of the Executive Board, the Management Board and the Supervisory Board.

Authorisation of the Parent company annual accounts

The Parent company annual accounts of NN Group N.V. for the year ended 31 December 2019 were authorised for issue in accordance with a resolution of the Executive Board on 11 March 2020. The Executive Board may decide to amend the Parent company annual accounts as long as these are not adopted by the General Meeting.

The General Meeting may decide not to adopt the Parent company annual accounts, but may not amend these during the meeting. The General Meeting can decide not to adopt the Parent company annual accounts, propose amendments and then adopt the Parent company annual accounts after a normal due process.

The Hague, 11 March 2020

The Supervisory Board

D.A. (David) Cole, chair
D.H. (Dick) Harryvan, vice-chair
H.J.G. (Heijo) Hauser
R.W. (Robert) Jenkins
R.A. (Robert) Ruijter
J.W. (Hans) Schoen
C.C.F.T. (Clara) Streit
H.M. (Hélène) Vletter-van Dort

The Executive Board

D.E. (David) Knibbe, CEO, chair
D. (Delfin) Rueda, CFO, vice-chair

Independent auditor's report



Independent auditor's report

To: the General Meeting of Shareholders and the Supervisory Board of NN Group N.V.

Report on the audit of the 2019 annual accounts included in the Financial Report

Our opinion

In our opinion:

- the accompanying consolidated annual accounts give a true and fair view of the financial position of NN Group N.V. ('the Group' or 'NN Group') as at 31 December 2019 and of its result and its cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code;
- the accompanying parent company annual accounts give a true and fair view of the financial position of NN Group N.V. as at 31 December 2019 and of its result for the year then ended in accordance with Part 9 of Book 2 of the Dutch Civil Code.

What we have audited

We have audited the 2019 annual accounts of NN Group N.V. based in Amsterdam and headquartered in The Hague, as set out on pages 40 to 178 of the Financial Report. The annual accounts include the consolidated annual accounts and the parent company annual accounts.

The consolidated annual accounts comprise:

- 1 the consolidated balance sheet as at 31 December 2019;
- 2 the following consolidated statements for 2019: the profit and loss account, the statements of comprehensive income, cash flows and changes in equity; and
- 3 the notes comprising a summary of the significant accounting policies and other explanatory information.

The parent company annual accounts comprise:

- 1 the parent company balance sheet as at 31 December 2019;
- 2 the parent company profit and loss account for 2019;
- 3 the parent company statement of changes in equity; and
- 4 the notes comprising a summary of the accounting policies and other explanatory information.

Independent auditor's report continued



Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the annual accounts' section of our report.

We are independent of NN Group N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Audit approach

Summary

Materiality

- IFRS materiality of EUR 140 million. This is in line with 2018.
- Based on core equity: shareholders' equity minus revaluation reserves (1%)

Group audit

- 97% of core equity
- 97% of total assets
- 89% of profit before tax

Key audit matters

- Valuation of insurance contract liabilities and Reserve Adequacy Test (RAT)
- Unit-linked exposure
- Solvency II disclosure
- IT general and cybersecurity controls

Opinion

Unqualified



Materiality

Based on our professional judgement we determined the materiality for the annual accounts as a whole at EUR 140 million (2018: EUR 140 million). The materiality is determined with reference to core equity (shareholders' equity minus revaluation reserves) and amounts to 1% (2018: 1%). We continue to consider core equity as the most appropriate benchmark based on our assessment of the general information needs of users of the annual accounts of financial institutions predominantly active in the life insurance business. We believe that core equity is a relevant metric for assessment of the financial performance of the Group. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the annual accounts for qualitative reasons.

We agreed with the Audit Committee of the Supervisory Board that misstatements in excess of EUR 7 million (2018: EUR 7 million) which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Scope of the group audit

NN Group is at the head of a group of entities ('components'). The financial information of this group is included in the consolidated annual accounts of NN Group. The Group is structured along 7 segments: Netherlands Life, Netherlands Non-Life, Insurance Europe, Japan Life, Asset Management, Bank and Other, each comprising of multiple legal entities and/or covering different countries.

Because we are ultimately responsible for the audit opinion, we are responsible for directing, supervising and performing the group audit. In this respect, we have determined the nature and extent of the audit procedures to be carried out for group entities.

Our group audit mainly focused on significant components. These significant components are either individually financially significant due to their relative size within the Group or because we assigned a significant risk of material misstatement to one or more account balances of the component. In addition, we included certain components in the scope of our group audit in order to arrive at a sufficient coverage over all relevant significant account balances.

This resulted in a full or specific scope audit for 28 components, in total covering 9 countries, and in a coverage of 97% of core equity, 97% of total assets and 89% of profit before tax. For the remaining 3% of core equity, 3% of total assets and 11% of profit before tax, procedures were performed at the group level including analytical procedures in order to corroborate our assessment that the risk of a material misstatement in the residual population is less than reasonably possible. This coverage is in line with our 2018 audit.

We sent audit instructions to all component auditors, covering significant areas including the relevant risks of material misstatement and set out the information required to be reported to the group audit team. All components in scope for group reporting purposes are audited by KPMG member firms.

Independent auditor's report continued



We visited locations in the Netherlands, Japan, Poland, Hungary, Czech Republic and Slovakia, where we discussed the audit work performed with the local audit teams and performed file reviews. For all components in the scope of the group audit we held conference calls and/or physical meetings with the auditors of the components. During these visits, meetings and calls, the planning, risk assessment, procedures performed, findings and observations reported to the group auditor were discussed in more detail and any additional work deemed necessary by the group audit team was then performed.

The group audit team has set component materiality levels, which ranged from EUR 4 million to EUR 100 million, based on the mix of size and risk profile of the components within the Group.

The consolidation of the Group, the disclosures in the annual accounts and certain accounting topics that are dealt with at group level are audited by the group audit team. The accounting matters on which audit procedures are performed by the group audit team include, but are not limited to, assessment of the use of the going concern assumption, companies and businesses acquired and divested, intangible assets including goodwill, equity, staff expenses in the Netherlands, other operating expenses in the Netherlands, certain elements of the risk and capital management disclosures, corporate income tax for the Dutch fiscal unity and legal proceedings.

By performing the procedures mentioned above at group components, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit evidence about the Group's financial information to provide an opinion about the annual accounts.

The audit coverage as stated in the section Summary can be further specified as follows:

Core equity

45%

Audit of the complete reporting package

52%

Audit of specific items

3%

Covered by additional procedures performed at group level

Total assets

89%

Audit of the complete reporting package

8%

Audit of specific items

3%

Covered by additional procedures performed at group level

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Independent auditor's report continued



Profit before tax

77%

Audit of the complete reporting package

12%

Audit of specific items

11%

Covered by additional procedures performed at group level

Audit scope in relation to fraud

In accordance with the Dutch Standards on Auditing we are responsible for obtaining a high (but not absolute) level of assurance that the annual accounts taken as a whole are free from material misstatement, whether caused by fraud or error.

In determining the audit procedures we use the evaluation of management in relation to fraud risk management (prevention, detection and response) including ethical standards to create a culture of honesty, and to compliance with laws and regulations.

As part of our risk assessment process we have evaluated events or conditions that indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud ('fraud risk factors') to determine whether fraud risks are relevant to our audit. During this risk assessment we made use of our own forensic specialist. We communicated the identified fraud risk throughout our team and remained alert to any indications of fraud throughout the audit.

In accordance with the auditing standards we evaluated the following fraud risk that is relevant to our audit:

— management override of controls (presumed risk).

The presumed fraud risk related to revenue recognition is not applicable for the Group.

Our audit procedures included an evaluation of the design, implementation as well as the operating effectiveness of internal controls relevant to mitigate this risk and substantive audit procedures, including detailed testing of high risk journal entries and evaluation of management bias. We noted that Group Operational Risk Management performed more explicit oversight over the fraud risk assessments performed by the business units and we encourage management to continue to perform such assessments with sufficient scepticism and rigor.

As part of our evaluation of any instances of fraud, we inspected the incident register and follow-up by management.

Our procedures to address fraud risk did not result in the identification of a key audit matter.

We do note that our audit is based on the procedures described in line with applicable auditing standards and is not primarily designed to detect fraud.



Audit scope in relation to non-compliance with laws and regulations

We have evaluated facts and circumstances in order to assess laws and regulations relevant to the Group.

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the annual accounts based on our general understanding and sector experience, through discussion with management and the Audit Committee of the Supervisory Board and evaluating the policies and procedures regarding compliance with these laws and regulations.

We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. The potential effect of these laws and regulations on the annual accounts varies considerably.

- Firstly, NN Group is subject to laws and regulations that directly impact the annual accounts, including financial reporting, Solvency II and taxation. We assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items. For Solvency II we refer to key audit matter 3, 'Solvency II disclosures'. Our procedures related to tax included the assessment of the appropriate accounting for the changes in future tax rates in the Netherlands.
- Secondly, NN Group is subject to many other laws and regulations where the consequences of non-compliance could have an indirect material effect on amounts recognised or disclosures provided in the annual accounts, or both, for instance through the imposition of fines or litigation.

We identified the following areas as most likely to have such an indirect effect:

- Wet financieel toezicht (wft);
- financial and economic crime (FEC) related regulation;
- data privacy regulation (GDPR).

Auditing standards limit the required audit procedures to identify non-compliance with laws and regulations that have an indirect effect to inquiry of relevant management and inspection of regulatory and legal correspondence. We have also read and discussed the reporting done by Group Compliance and Group Risk Management (ECF reports). Through these procedures, we did not identify any additional actual or suspected non-compliance, other than those previously identified by the Group in each of the above areas. We considered the effect of actual or suspected non-compliance as part of our procedures on the related annual account items.

Our procedures to address compliance with laws and regulations did not result in the identification of a key audit matter.

We do note that our audit is not primarily designed to detect non-compliance with laws and regulations and that management is responsible for such internal control as management determines is necessary to enable the preparation of the annual accounts that are free from material misstatement, whether due to errors or fraud, including compliance with laws and regulations.



The more distant non-compliance with indirect laws and regulations (irregularities) is from the events and transactions reflected in the annual accounts, the less likely the inherently limited procedures required by auditing standards would identify it. In addition, as with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

Our key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the annual accounts. We have communicated the key audit matters to the Executive Board and the Audit Committee of the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the annual accounts as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In comparison to our 2018 audit opinion, we no longer recognise a key audit matter for the integration of Delta Lloyd, given the progress of the integration and reduced risk profile compared to last year. Also we did no longer identify a key audit matter related to the valuation of Delta Lloyd goodwill, given the much lower amount of goodwill in the balance sheet. We do however identify one new key audit matter related to IT general and cybersecurity controls.

1. Valuation of insurance contract liabilities and Reserve Adequacy Test

Description

NN Group has insurance and investment contract liabilities of EUR 168 billion representing 78% of its total liabilities. The valuation of the insurance and investment contract liabilities involves judgement over uncertain future outcomes, mainly the ultimate settlement value of long-term liabilities, both in the insurance contract liabilities as reported in the balance sheet and in the Reserve Adequacy Test (RAT).

The RAT is performed in order to confirm that the insurance contract liabilities, net of deferred acquisition costs, are adequate in the context of the expected future cash flows. Based on relative size and risk profile, the RAT for NN Life is the most important one. The RAT for NN Life in respect of the individual and group pension business requires the application of significant management judgement in setting the assumptions related to longevity, expense and reinvestment rate.

Given the financial significance and the level of judgement required, we considered this a key audit matter.



Our response

Our audit approach included testing both the effectiveness of internal controls around determining insurance contract liabilities and the RAT, as well as substantive audit procedures. Our procedures over internal controls focused on controls around the adequacy of policyholder data, the governance and controls around assumption setting and the review procedures performed on the RAT by the Group Chief Actuary. In our audit we also considered the process around the internal validation and implementation of the models used to determine the valuation of the insurance contract liabilities and the RAT.

With the assistance of our own actuarial specialists, the substantive audit procedures we performed included:

- assessment of the appropriateness of assumptions used in the valuation of the insurance contract liabilities for significant business units (in particular NN Life) by reference to company and industry data and expectations of investment returns, future longevity and expense developments;
- assessment of the appropriateness of the data, assumptions and methodologies applied in the RAT. We performed specific procedures in response to the changes in market interest rates during 2019 and the implications for RAT testing;
- analysis of developments in actuarial results and movements in reserve adequacy during the year for each of the business units and corroborative inquiries with management and the Group Chief Actuary in that regard;
- evaluation of the robustness of management's substantiation that the insurance contract liabilities are adequate as at 31 December 2019.

Our observation

Overall we found that management estimated the valuation of the insurance contract liabilities, net of deferred acquisition costs, acceptably. We refer to Notes 10 and 16 of the annual accounts.

We note that the unrealised revaluations on available for sale investments backing the insurance contract liabilities are recorded in shareholders' equity and represent a significant part of the revaluation reserve. This unrealised revaluation reserve increased significantly in 2019 as a result of market interest rate movements during the year. To the extent that available for sale investments are being sold, the excess in reserve adequacy would decrease accordingly. If these unrealised revaluations were to be fully realised, the capital gains would only be partly available to shareholders, since a significant portion of the gains would be required to strengthen the insurance contract liabilities in order to remain adequate. We refer to Note 1 of the annual accounts.



2. Unit-linked exposure

Description

Holders of unit-linked products sold in the Netherlands, or consumer protection organisations on their behalf, have filed claims or initiated legal proceedings against NN Group and may continue to do so. A negative outcome of such claims and proceedings, settlements or any other actions to the benefit of the customers by other insurers or sector-wide measures, may affect the (legal) position of NN Group and could result in substantial financial losses for the Group relating to the compensation. Management assessed the financial consequences of these legal proceedings under both the EU-IFRS and the Solvency II reporting framework and concluded that these cannot be reliably measured, estimated or quantified at this point.

Due to the potential significance and management judgement that is required to assess the developments relevant to these claims and proceedings, we considered this a key audit matter.

Our response

Our audit procedures primarily consisted of the following:

- assessment of NN Group's governance, processes and internal controls with respect to the unit-linked exposures within its business units, in particular the Netherlands Life Segment;
- inspection of the documentation and a discussion about the unit-linked exposures with management and its internal legal advisors. These procedures took into account NN Group's specific developments as well as broader market developments in 2019;
- obtaining lawyers letters of the external lawyers that are engaged by NN Group in relation to the defence in the so-called collective cases (Woekerpolis.nl, Consumentenbond and Wakkerpolis). We assessed the professional competency, capability and objectivity of these external lawyers. We used the lawyers letters to obtain external confirmation over management's judgements in relation to the related (collective) exposures;
- assessment of the recognition and measurement requirements to establish provisions under NN Group's EU-IFRS accounting principles and the Solvency II framework for the calculation of the Solvency II ratio;
- evaluation of the unit-linked disclosure in Note 42 Legal proceedings of the annual accounts, where we focused on adequacy of the disclosure of the related risks and management's judgements.



Our observation

Overall we found that management's assessment that the financial consequences of the unit-linked exposure cannot be reliably measured and therefore the fact that no provision is recognised in the 31 December 2019 balance sheet (for both EU-IFRS and Solvency II) to be sufficiently substantiated.

We considered the disclosure of the exposure in Note 42, which describes the related risks and management judgements in compliance with the relevant accounting requirements, to be adequate.

3. Solvency II disclosure

Description

Solvency II information is considered to be an important addition to the information provided on an EU-IFRS basis. The Own Funds and Solvency Capital Requirement (SCR) are the main metrics of the Solvency II prudential reporting framework. The calculation of both metrics as well as the disclosed sensitivity of the Solvency II ratio is complex and highly judgemental and is based on assumptions which are affected by (future) economic, demographic and regulatory conditions. The assumptions used relate to risks regarding interest, mortality, longevity, morbidity, catastrophe, lapse and expense as well as the diversification between these risks. The calculations also take into consideration taxation after shock (loss absorbing capacity of deferred tax).

NN Group uses the approved Partial Internal Model (PIM) to calculate the capital requirements under Solvency II for NN Group and the insurance subsidiaries in the Netherlands. Disclosure of the determination of the metrics, changes in the model applied, assumptions and sensitivity applied (including the use of the Volatility Adjustment and Ultimate Forward Rate) are considered relevant information for understanding the Solvency II metrics.

Given the importance of this legislation for NN Group and complexity of the application and estimates to determine the Solvency II ratio, we determined the adequacy of the Solvency II disclosure to be a key audit matter.

Our response

We obtained an understanding of the Group's application and implementation of the Solvency II directive. In designing our audit approach we have set a separate materiality for the audit of the Solvency II capital position. The materiality level applied is EUR 180 million (2018: EUR 160 million).

We have assessed the design and operating effectiveness of the internal controls over the Solvency II Capital Requirement calculations, including the Group's methodology, model and assumption approval processes (including the follow up to the terms and conditions set by DNB in relation to the 2018 approval of the PIM-Major Model Change) and analytical controls.



These internal controls covered, among other things:

- whether the calculations of the market value balance sheet, Own Funds and SCR were accurate and prepared in accordance with the Solvency II directive and in accordance with the PIM as approved by DNB;
- the appropriateness of assumptions used for the calculations of the market value balance sheet, Own Funds and SCR, based on market observable data, company and industry data, comparison of judgements made to current and emerging market practice;
- the adequacy of the quantitative and qualitative disclosures of the Solvency II Capital Requirements including disclosure on interpretation of legislation and related uncertainty. In this context we also tested the design and operating effectiveness of internal controls over the preparation of the Solvency II sensitivity disclosures;
- the functioning of the Solvency II key functions on risk management and actuarial function. In this context we performed corroborative inquiry with the Group Chief Actuary on the Group Actuarial Function Holder report 2019, which sets out conclusions on the reliability and adequacy of the technical provisions as at 31 December 2019 under Solvency II.

Based on the outcome of our assessment of the effectiveness of the internal controls, we performed among other things the following substantive procedures:

- verifying the accuracy of the calculations of the market value balance sheet used to determine Own Funds for selected balance sheet items, using our own actuarial specialists and alternative actuarial methods, if applicable;
- assessing the appropriateness of evidence used and judgement applied in assumption setting by NN Group for both the best estimate liability and the SCR. This included the evaluation of the substantiation of the loss absorbing capacity of deferred tax in the NN Group recoverability test. We performed detailed procedures to verify that these calculations correctly took into account changes in the Dutch tax legislation that were enacted in December 2019;
- verifying the consolidation of the Solvency II reporting by the Group's components, taking into account the Solvency II specific requirements for consolidation that deviate from EU-IFRS;
- verifying that NN Life Japan was included on an equivalence basis, meaning that the capital position is based on the local reporting framework (Japanese GAAP);
- analysing the outcome of the internally prepared calculations and analysis of the movements in the Solvency II capital position during the year and sensitivities as at 31 December 2019 and discussing the outcome with the Group's actuaries and Group Chief Actuary;



- verifying the reconciliation between the disclosures in the annual accounts to the output of the internal reporting on Solvency II. This also includes reconciliation of input for the market value balance sheet used for Own Funds with other fair value disclosures in the annual accounts;
- verifying that the Solvency II disclosure refers to the fact that the Solvency II ratio is not final until filed with the Regulator, DNB. We refer to page 161.

Our observation

Overall we found that the calculation of the Solvency II Own Funds and SCR is in accordance with the Solvency II prudential reporting framework and is fairly presented in the capital and risk management disclosures of the annual accounts.

We refer to Notes 49 and 50 of the annual accounts.

4. IT general and cybersecurity controls

Description

NN Group is highly dependent on its IT infrastructure for the continuity of the operations. To meet clients' needs and business requirements in a digitising world, NN Group is continuously improving the efficiency (including the integration of the NN and former Delta Lloyd IT infrastructure) and effectiveness of its IT infrastructure and the reliability and continuity of its electronic data processing, including its defence against cyber-attacks.

In order to ensure the continuity and reliability of the electronic data processing, IT general and cybersecurity controls are an important cornerstone of the NN Group internal control framework. Therefore, also taking into account the increased frequency and severity of cyber incidents that are taking place in the environment in which NN Group operates and therefore societal attention for cybersecurity, we considered this a key audit matter.

Our response

- We tested IT general controls related to logical access, change management and computer operations and key application controls embedded in the IT systems that are relevant to the Group's financial reporting. As part of our risk assessment and design of the IT audit approach, we have also taken into account regulatory correspondence related to IT security risk management. We also performed test procedures to respond to specific risks such as data migrations (in particular at NN Life, NN Non-Life), implications of the progress of the decommissioning of the ex-Delta Lloyd environment and vendor management related to outsourced IT processes.



- In response to the increased frequency and severity of cyber incidents and heightened concerns from regulators and other stakeholders about cybersecurity attacks and breaches, we have evaluated cybersecurity risks as part of our audit of the annual accounts. We gained an understanding of the design and effectiveness of preventive and detective cybersecurity controls and responses, we obtained an understanding of the cybersecurity self-assessments performed by the business units and we performed procedures to test the resilience of the cybersecurity controls in place. We held corroborative inquiries with the personnel at the Security Operations Center and with the Group's Chief Information Security Officer (CISO). This work was performed together with our IT auditors that specialise in cyber risk management.

Our observation

Based on the testing of IT general controls, we obtained sufficient and appropriate audit evidence to support our IT driven audit approach.

The results of the procedures performed regarding cybersecurity controls were satisfactory in relation to our audit. Based on the procedures performed we noted points for improvement that we have shared with the Management Board and Audit Committee of the Supervisory Board.

We refer to the disclosure on Risk Management in Note 49.

Report on the other information included in the Annual Report

In addition to the annual accounts and our auditor's report thereon, the Financial Report also contains other information. Additionally, other information includes the Annual Review.

Based on the following procedures performed, we conclude that the other information:

- is consistent with the annual accounts and does not contain material misstatements; and
- contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the annual accounts or otherwise, we have considered whether the other information contains material misstatements.

By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the annual accounts.

The Executive Board is responsible for the preparation of the other information, including the information as required by Part 9 of Book 2 of the Dutch Civil Code.



Report on other legal and regulatory requirements

Engagement

We were engaged by the General Meeting of Shareholders as auditor of NN Group on 28 May 2015, as of the audit for the year 2016 and have operated as statutory auditor since the financial year 2016.

We have been reappointed by the General Meeting of Shareholders on 29 May 2019 to continue to serve NN Group as its external auditor for the financial years 2020–2022.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audits of public-interest entities.

Description of responsibilities regarding the annual accounts

Responsibilities of the Executive Board and the Supervisory Board for the annual accounts

The Executive Board is responsible for the preparation and fair presentation of the annual accounts in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, the Executive Board is responsible for such internal control as the Executive Board determines is necessary to enable the preparation of the annual accounts that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the annual accounts, the Executive Board is responsible for assessing NN Group's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the Executive Board should prepare the annual accounts using the going concern basis of accounting unless the Executive Board either intends to liquidate NN Group or to cease operations, or has no realistic alternative but to do so.

The Executive Board should disclose events and circumstances that may cast significant doubt on the Group's ability to continue as a going concern in the annual accounts.

The Supervisory Board is responsible for overseeing NN Group's financial reporting process.

Our responsibilities for the audit of the annual accounts

Our objective is to plan and perform the audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audit.

Independent auditor's report continued



Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A further description of our responsibilities for the audit of the annual accounts is located at the website of the Koninklijke Nederlandse Beroepsorganisatie van Accountants (NBA, Royal Netherlands Institute of Chartered Accountants) at: http://www.nba.nl/ENG_oob_01. This description forms part of our independent auditor's report.

Amstelveen, 11 March 2020

KPMG Accountants N.V.

P.A.M. de Wit RA

Appropriation of result

Appropriation of result

The result is appropriated pursuant to Article 34 of the Articles of Association of NN Group N.V., the relevant stipulations of which state that the appropriation of result shall be determined by the General Meeting, having heard the advice of the Executive Board. Reference is made to Note 12 'Equity' for the proposed appropriation of result.

Contact and legal information

Prepared by

NN Group Corporate Relations

Design and production

Radley Yeldar | ry.com

Contact us

NN Group N.V.
Schenkkade 65
2595 AS The Hague
The Netherlands
P.O. Box 90504, 2509 LM The Hague
The Netherlands
www.nn-group.com

Commercial register no. 52387534

For further information on NN Group, please visit our corporate website or contact us via external.communications@nn-group.com

For further information on NN Group's sustainability strategy, policies and performance, please visit www.nn-group.com/in-society.htm or contact us via sustainability@nn-group.com

Disclaimer

NN Group's 2019 Annual Report consists of two documents: the 2019 Annual Review and the 2019 Financial Report. More information – for example the Solvency and Financial Condition Report (SFCR) and the GRI Index Table – is available on the corporate website in the Investors/Annual Report section.

Small differences are possible in the tables due to rounding.

Certain of the statements in this 2019 Annual Report are not historical facts, including, without limitation, certain statements made of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Actual results, performance or events may differ materially from those in such statements due to, without limitation: (1) changes in general economic conditions, in particular economic conditions in NN Group's core markets, (2) changes in performance of financial markets, including developing markets, (3) consequences of a potential (partial) breakup of the euro or European Union countries leaving the European Union, (4) changes in the availability of, and costs associated with, sources of liquidity as well as conditions in the credit markets generally, (5) the frequency and severity of insured loss events, (6) changes affecting mortality and morbidity levels and trends, (7) changes affecting persistency levels, (8) changes affecting interest rate levels, (9) changes affecting currency exchange rates, (10) changes in investor, customer and policyholder behaviour, (11) changes in general competitive factors, (12) changes in laws and regulations and the interpretation and application thereof, (13) changes in the policies and actions of governments and/or regulatory authorities, (14) conclusions with regard to accounting assumptions and methodologies, (15) changes in ownership that could affect the future availability to NN Group of net operating loss, net capital and built-in loss carry forwards, (16) changes in credit and financial strength ratings, (17) NN Group's ability to achieve projected operational synergies, (18) catastrophes and terrorist-related events, (19) adverse developments in legal and other proceedings and (20) the other risks and uncertainties detailed in the Risk management section and/or contained in recent public disclosures made by NN Group and/or related to NN Group.

Any forward-looking statements made by or on behalf of NN Group in this Annual Report speak only as of the date they are made, and, NN Group assumes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or for any other reason.

This document does not constitute an offer to sell, or a solicitation of an offer to buy, any securities.

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NN Group N.V.
Schenkade 65
2595 AS The Hague
P.O. Box 90504, 2509 LM The Hague
The Netherlands
www.nn-group.com