

MILLIMAN RESEARCH REPORT

Analysis of Dutch insurers' Solvency and Financial Condition Reports

Year-end 2017

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Peter Franken, Drs, AAG
Kamiel van Langen, MSc, AAG
Wouter van Goudoever
Rens IJsendijk



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Management summary

In May 2018 European insurers have reported the Solvency and Financial Condition Reports (SFCRs) for the second year since introduction of Solvency II at the beginning of 2016. The SFCRs contain a significant amount of information, including details of a company's performance over the reporting period, systems of governance, risk profile, valuation basis and capital requirements.

This report provides a summary of the key solvency information of the largest Dutch consolidated insurance groups and their main underlying life and non-life insurance entities in the Netherlands, based on the SFCRs as per year-end 2017. This report also compares the key solvency figures per year-end 2016 and 2017 of these Dutch insurance entities.

We included in this report an overview of the composition of both the Solvency Capital Requirement (SCR) and the own funds of the insurance entities included in our sample, as well as an analysis of the SCR ratio.¹ This report mainly focusses on the comparison between year-end 2016 and 2017 and the financial state the Dutch insurance market is in. For life insurers 79% of the Dutch market in terms of gross written premiums, in 2017, is covered, and for non-life insurers 68% of the Dutch market is covered.

Our analysis shows that the Dutch life insurance entities in our sample are better capitalised at year-end 2017 compared to the previous year, having an average SCR ratio of 174%, as opposed to 153% in 2016. At year-end 2017, on an aggregate level, the sample of life insurers has €26.8 billion eligible own funds to cover €15.0 billion of Solvency II required capital. In comparison, at year-end 2016 the same life insurance entities had €25.4 billion eligible own funds to cover €16.2 billion of Solvency II required capital.

The Dutch non-life insurance entities in our sample are also well capitalised, with an average solvency ratio of 156%, in 2017, opposed to 149% in 2016. On aggregate, our sample of non-life insurance entities had €4.7 billion of eligible own funds covering €3.0 billion of Solvency II required capital. This compares to €4.6 billion eligible own funds to cover €3.0 billion of Solvency II required capital at year-end 2016.

In order to provide more insights into the stability of Dutch insurers, the assets and technical provisions are also taken into consideration in this report. At year-end 2017 the life insurers from our sample had €367.8 billion in assets over €315.8 billion in technical provisions. The non-life entities had €22.3 billion in assets to cover €16.1 billion in technical provisions at year-end 2017. The analysed entities show a preference towards an asset allocation containing approximately 50% government bonds and approximately 20% corporate bonds of the total investments.

The assets, liabilities and underwriting for life and non-life business in the Netherlands are also considered in this report, providing further insight into the solvency positions and stability of the Dutch insurance entities considered.

The analysis of the underwriting performance of the non-life lines of business shows that three lines of business had a negative operating margin in 2017: 'Motor vehicle liability' (-24%), 'General liability' (-6%) and 'Income protection' (-0.5%).

We hope you enjoy reading this report.

¹ The SCR ratio (or also solvency ratio in this report) refers to the Solvency Capital Requirement ratio, the ratio of eligible own funds to SCR.

Introduction

BACKGROUND

Solvency II came into effect on 1 January 2016 and introduced a number of disclosure requirements for European insurers. Under the new requirements, the majority of European insurers were required to publish detailed Solvency and Financial Condition Reports (SFCRs) for the first time in May 2017. The SFCRs contain a significant amount of information on the insurance companies, including details on their business performances, risk profiles, balance sheets and capital positions, amongst other things. Insurers are also required to publish a great deal of quantitative information in the public Quantitative Reporting Templates (QRTs).

In 2018 the European insurers have published their SFCRs for the second time, as per year-end 2017. This enables us to have a more detailed comparison between insurers over the last two years.

This report provides a detailed view of the largest insurance groups (by premium volume in Dutch entities) and the main insurance entities that are part of these groups, with a split between their life and non-life business. For readability purposes we have simplified the names of the entities in this report. The simplified names and the full legal name of the entities can be found in Appendix A. In this report, the solvency positions of the insurance entities in our sample are presented, with a split between the Solvency Capital Requirement (SCR) and the eligible own funds to meet the SCR. Next to the solvency positions, our analysis also includes a more general view on the Dutch insurance entities and the groups they belong to. This analysis includes the market positions of the insurers with respect to their gross written premiums and the technical provisions of each insurance entity.

DUTCH MARKET COVERAGE

In selecting the companies included in this analysis, we focussed on a subset of insurers in the Dutch market. Our focus was the legal entities of the six largest insurance groups based on premium volume written by the Dutch insurance entities. In total, six solo life insurance entities and seven solo non-life insurance entities are included. The entities and groups selected ensure significant coverage of the Dutch life and non-life markets. Our sample of solo companies pursuing primarily life business in the Netherlands represents 78% of the total gross written premiums (GWP) of the Dutch life market in 2016, and 79% for 2017.² For non-life business, our sample represents 69% of the GWP of the Dutch non-life market in 2016, while it represents 68% in 2017. Appendix A contains a list of all the Dutch solo entities and groups that are included in our analysis.

UNDERLYING DATA

For this report, we have used the data that is available via the Solvency II Wire license data.³ For the analysis of the market share within the Dutch insurers market we have used the data that had been made available by the Dutch Central Bank, De Nederlandsche Bank (DNB). The analysis underlying this report focusses on the quantitative information contained in the public QRTs. Where relevant we have also studied the SFCRs to gain additional insights into the developments at some companies. In particular if they displayed characteristics that differed from the other insurance companies in the market.

² We derived the total GWP for the Dutch market from the QRT data published by DNB here: <https://statistiek.api.dnb.nl/api/dataset/resourcefile?id=20d6e445-050e-4a75-a220-cd7e5e7aa647>.

³ The data used in this report are drawn from the Solvency II Wire database licenced by Milliman with data captured as per 30 October 2018.

Analysis of Dutch insurance market

MAIN DESCRIPTIVES OF ENTITIES IN OUR SAMPLE

The largest insurance groups in the Netherlands write both life and non-life business. Dutch regulation requires that insurance groups write life and non-life business in different legal entities. In our analysis we have covered the largest insurance groups in the Netherlands, of which all but one (Univé) write both life and non-life business. We will start by giving an overview of the Dutch insurance market (see the table in Figure 1) at year-end 2017. This overview provides insight into the size of the insurance groups included in our analysis.

FIGURE 1: GROSS WRITTEN PREMIUMS YEAR-END 2017 FOR LIFE AND NON-LIFE NETHERLANDS-BASED LEGAL ENTITIES (EXCLUDING MEDICAL EXPENSES/ZORG) OF THE LARGEST INSURANCE GROUPS IN THE NETHERLANDS (€ MILLIONS)⁴

INSURANCE GROUP	LIFE	NON-LIFE ⁵	TOTAL LIFE AND NON-LIFE
ACHMEA	1,675	3,307	4,983
AEGON	1,917	357	2,273
ASR	1,453	1,909	3,362
NN (INCL. DELTA LLOYD)	4,344	3,133	7,476
VIVAT	2,248	639	2,887
COÖPERATIE UNIVÉ	0	419	419
OTHER ⁶	1,932	3,446	5,378
ALL	13,569	13,210	26,779

Figure 1 shows that NN (including Delta Lloyd Leven) is the largest insurance group in the Netherlands in terms of gross written premiums in the life business (€4.3 billion). It is followed by Vivat which consists of one life entity, Vivat Life, with gross written premiums of €2.2 billion.

In the non-life business, Achmea is the largest insurance group in the Netherlands in terms of gross written premiums (€3.3 billion). NN (including Delta Lloyd Schade) is the second-largest group in the non-life business (€3.1 billion).

Some of the non-life entities write premiums in the income protection insurance line of business. By regulations of the European Insurance and Occupational Pensions Authority (EIOPA) these long-term insurance contracts are to be assumed to be life insurance contracts. However, in order to have a complete overview of the allocation between the life and non-life business within the insurance groups these contracts are included in the non-life business. The rest of this report assumes these contracts to be non-life contracts. In this report we use the gross values for the premiums, thus not adjusted for reinsurance, unless stated otherwise.

Figure 2 shows the gross written premiums (GWP) of the main insurance entities within the insurance groups included in our analysis. In recent years most of the insurance groups have consolidated different entities of, respectively, life and non-life business into one legal entity. Analysing the largest life and non-life legal entities of the Dutch insurance groups gives therefore a reasonable view on their overall performance and strength.⁷

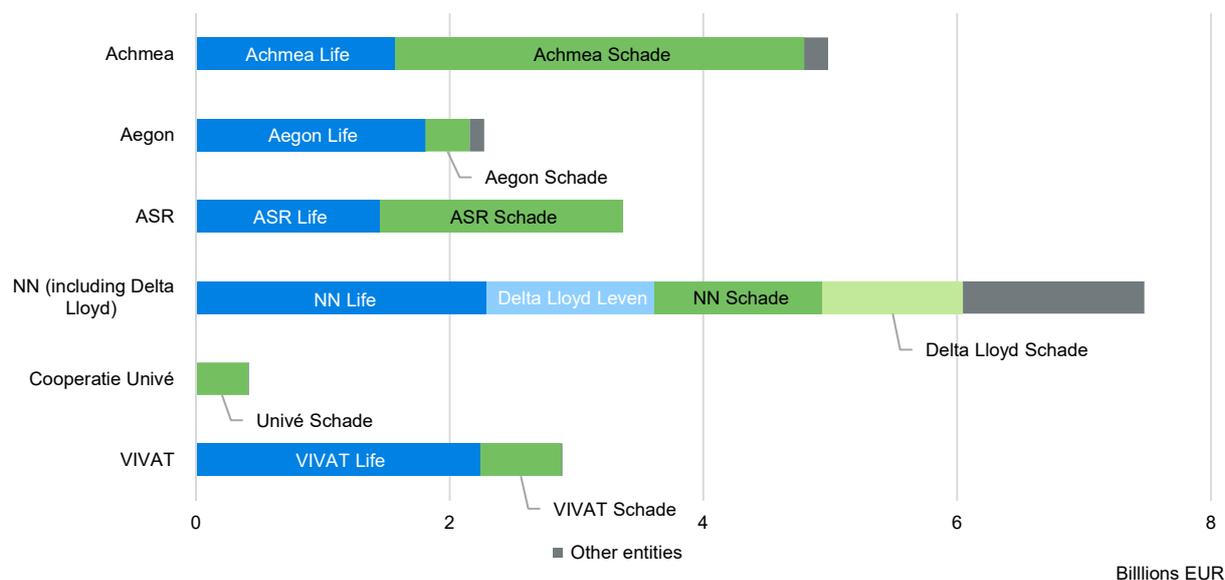
⁴ The numbers in this table are derived from the DNB data of all the Dutch solo entities within the insurance groups included in our analysis.

⁵ GWP non-life excludes the written premiums from medical expenses (zorg) and also excludes the written premiums from indirect non-life business. The non-life business includes also all health business written in the life entities.

⁶ Other includes the GWP for all Dutch insurance entities which are not part of the insurance groups included in our analysis.

⁷ For example, Movir (part of NN Group) is therefore not taken into account.

FIGURE 2: GROSS WRITTEN PREMIUMS FOR LIFE AND NON-LIFE NETHERLANDS-BASED LEGAL ENTITIES (EXCLUDING MEDICAL EXPENSES/ZORG) OF THE LARGEST INSURANCE GROUPS IN THE NETHERLANDS, SPLIT BY THE LARGEST DUTCH ENTITIES WITHIN THE GROUPS⁸



LIFE AND NON-LIFE MARKET

In the analysis of the solo entities in the Dutch market, we have chosen to only analyse the largest entities within the insurance groups in the scope of this report. As a result of this, our sample consist of six life entities and seven non-life entities. An overview of the mapping between the solo insurance entities and the groups is provided in Appendix A.

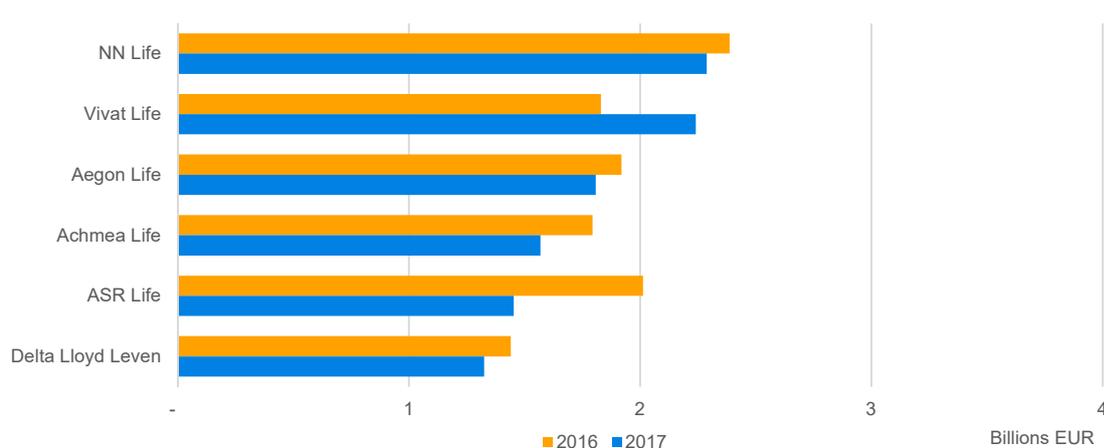
In Figure 3 and Figure 4 an overview is given of the gross written premiums (GWP) per entity for the life and non-life entities in our sample. These figures show that NN Life is the largest life insurance entity in the Netherlands with a GWP of €2.3 billion in 2017 (representing a 16.9% market share). This is excluding Delta Lloyd Leven, which was acquired by NN Group in 2017. The two entities combined have a GWP of €3.6 billion, increasing the life business market share of NN Life to 26.7%.

The second-largest life insurer in terms of GWP is Vivat Life. Vivat Life has increased its premium volume to €2.2 billion, corresponding with an increase in market share from 12.6% to 16.5% per year-end 2017. This increase in GWP of Vivat Life is the result of the acquisition of a pension fund worth €0.4 billion in GWP, as is described in its financial report of 2017. With this increase of Vivat Life it became the second-largest Dutch life insurer, overtaking ASR Life in terms of GWP. The decline in GWP (-28%) of ASR Life resulted in a drop from second to fifth in terms of market share.⁹

⁸ The category 'Other entities' consists of all Dutch insurance entities within the groups, both life and non-life, not otherwise specified in the graph.

⁹ ASR gives the following reason for the decline in GWP in its SFCR report: 'This decrease in premiums is mainly caused by a substantial transfer price by Funeral and a substantial collective value transfer at Pensions.'

FIGURE 3: GROSS WRITTEN PREMIUMS PER LIFE INSURER



For the non-life entities, Achmea Schade is the largest insurance entity with a GWP of €3.2 billion in 2017, representing a market share of 24.4%.¹⁰

The acquisition of Delta Lloyd by NN Group, in which Delta Lloyd Schade becomes part of NN Schade, increases the market share of NN Schade significantly. The combined portfolio of NN Schade and Delta Lloyd Schade has a GWP of €2.4 billion with a market share of 18.4%, which is still below the GWP of Achmea Schade (€3.2 billion).

FIGURE 4: GROSS WRITTEN PREMIUMS PER NON-LIFE INSURER

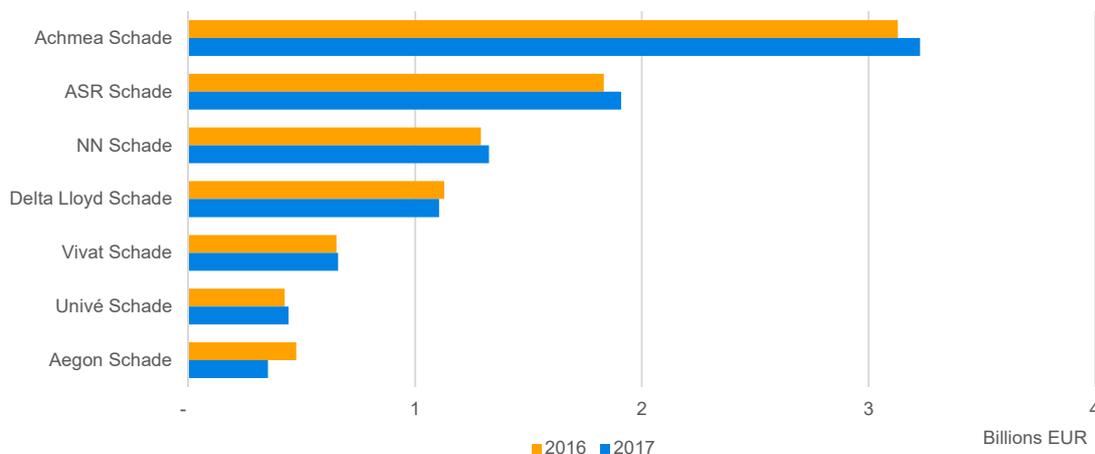


Figure 5 and Figure 6 show an overview of the assets compared to the technical provisions for the life and non-life insurance entities in our sample.¹¹

The two largest life insurance entities in terms of total assets are NN Life and Aegon Life. Even though total assets of NN Life make it currently bigger than Aegon Life, the difference in assets is much more prominent if we take the Delta Lloyd Leven portfolio as a part of NN Life, considering the purchase.

The two insurance groups with the largest Dutch non-life entities in terms of total assets are Achmea and NN, where NN as per year-end 2017 includes the entities NN Schade and Delta Lloyd Schade. Portfolio size in terms of assets is still slightly larger for Achmea.

In terms of solo entities Achmea Schade is followed by ASR Schade in both technical provisions and assets.

¹⁰ GWP non-life excludes the written premiums from medical expenses (zorg) and also excludes the written premiums from indirect business.

¹¹ The used technical provisions of the life insurers do only relate to their life business and do not include the technical provisions held for their health business.

It is noteworthy that the level of assets compared to premium volume differs significantly between the entities within the sample. Especially the non-life entities with a high share of health business similar to life (i.e., disability products) have relatively high technical provisions, compared to their premium levels. In addition, as expected, non-life insurers typically have higher premium volumes relative to their total assets compared to life insurers. Due to the large durations of the products of life insurers, the assets for life insurers are much higher compared to non-life insurers.

Within our life sample we note that Vivat Life has relatively low technical provisions and assets compared to its gross written premiums and therefore has lower market share in terms of assets and technical provisions than it has in terms of gross written premiums.

In our non-life sample, we notice the same for Univé Schade. Its market share in terms of assets and technical provisions is lower as opposed to its market share in terms of gross written premiums, which is explained by a relatively large portion of the Univé portfolio consisting of short-tail business.

FIGURE 5: GROSS TECHNICAL PROVISIONS AND TOTAL ASSETS PER LIFE INSURER YEAR-END 2017

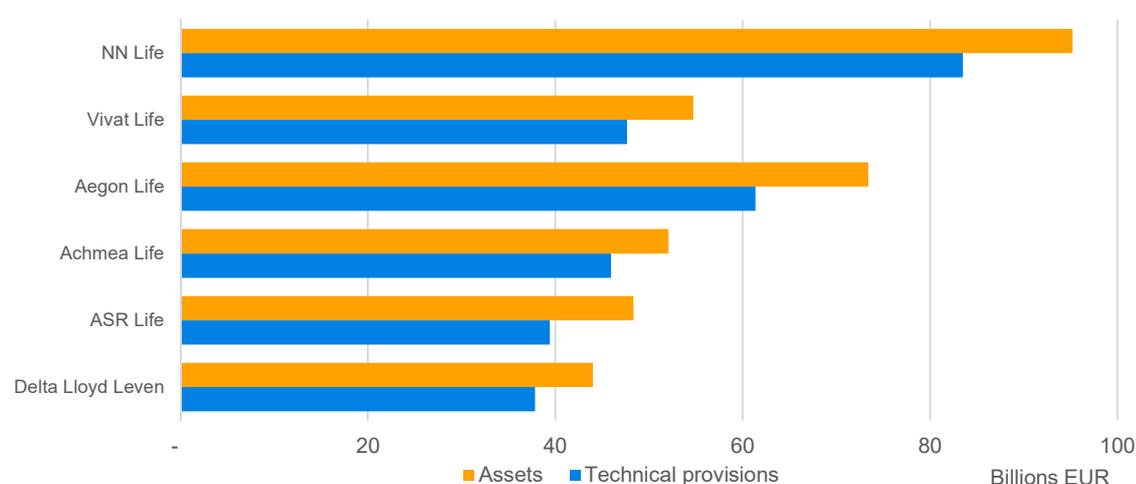
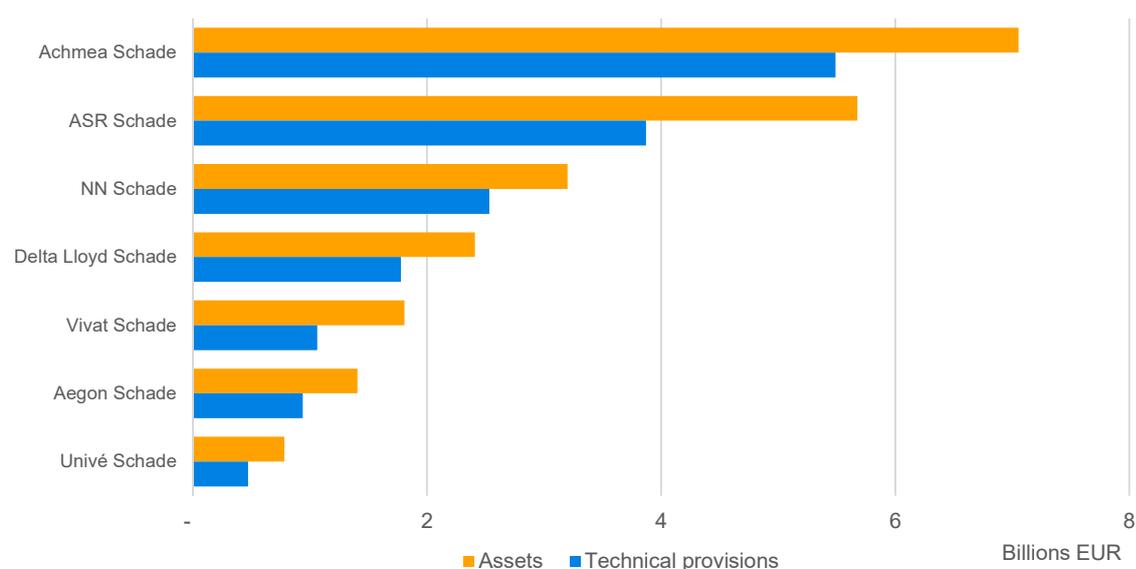


FIGURE 6: GROSS TECHNICAL PROVISIONS AND TOTAL ASSETS PER NON-LIFE INSURER YEAR-END 2017



Analysis of SCR and own funds

ANALYSIS OF SOLVENCY (SCR) RATIOS

In this section we provide insight into the Solvency (SCR) ratios of the solo insurance entities and the insurance groups that are in the scope of this report.

Solvency (SCR) ratios insurance groups

Of the Dutch insurance groups, the average solvency ratio (Eligible Own Funds / Solvency II Capital Requirement) is equal to 215% and the average Minimal Capital Requirement (MCR) ratio 430%. All insurance groups are well capitalised with solvency ratios of above 150%. The insurance groups with the highest capitalisation are Univé (348%), Aegon (201%) and NN (199%). Of the insurance groups in our analysis, Vivat has the lowest solvency ratio with 162%. The group solvency ratios presented in this section include all insurance entities of the group, i.e., including medical expenses (zorg) and foreign entities.

It is notable that the group solvency ratios are generally higher than the solvency ratios of the corresponding solo entities (seen in the tables in Figure 7, Figure 8 and Figure 9). Reasons for this include that groups benefit from diversification between life and non-life business, caused by the aggregation of different entities, and own funds directly related to the group. Besides this, other differences between the solvency ratios of the entities and the ratios of their group can be the effect of group entities outside the Netherlands, the exclusion of health insurance entities in our analysis and a possible double-leverage effect.¹²

Note that there are some insurance groups and entities that use a partial internal model (PIM) to calculate the SCR instead of using the Standard Formula (SF) of the Solvency II regulations, which makes a direct comparison of the SCR and solvency ratios less obvious.

FIGURE 7: THE CAPITAL REQUIREMENTS OF DUTCH INSURANCE GROUPS AT YEAR-END 2017, AS SET BY SOLVENCY II REQUIREMENTS (€ MILLIONS)

INSURANCE GROUP	ELIGIBLE OWN FUNDS TO SCR ¹³	SCR	SCR RATIO	MCR RATIO	RANK SCR RATIO	CAPITAL MODEL
ACHMEA	8,386	4,555	184%	287%	5	PIM
AEGON	15,628	7,774	201%	319%	2	PIM
ASR	6,914	3,550	195%	418%	4	SF
NN ¹⁴	15,412	7,731	199%	334%	3	PIM
UNIVÉ	698	201	348%	956%	1	SF
VIVAT	3,780	2,327	162%	266%	6	SF
ALL	50,818	26,139	215%	430%		

Solvency (SCR) ratios life entities

On an aggregate level, life insurance entities from our sample are well capitalised, with an average solvency ratio (Eligible Own Funds / Solvency II Capital Requirement) equal to 174% and an average Minimum Capital Requirement (MCR) ratio of 349% (see the table in Figure 8). None of the life insurance entities has a solvency ratio below 100%. Based on these numbers, NN Life (217%), ASR Life (186%) and Aegon Life (186%) have the highest solvency ratios among the life insurers in our sample, compared to Vivat Life (158%), Delta Lloyd Leven (153%) and Achmea Life (142%), which have the lowest solvency ratios.

¹² For example, where a group provides a subordinated loan to one of its subsidiary entities, increasing the eligible own funds of that subsidiary.

¹³ The presented eligible own funds to SCR are the total eligible own funds to meet the group SCR including own funds from other financial sectors and from the undertakings included via D&A.

¹⁴ The reported figures for Nationale-Nederlanden Group include the recent acquisition of Delta Lloyd (both Leven and Schade).

FIGURE 8: SOLVENCY II FIGURES, DUTCH LIFE INSURERS AT YEAR-END 2017 (€ MILLIONS)

ENTITY	ELIGIBLE OWN FUNDS TO SCR	SCR	SCR RATIO	MCR RATIO	RANK SCR RATIO	CAPITAL MODEL
NN LIFE	7,670	3,540	217%	426%	1	PIM
VIVAT LIFE	3,246	2,060	158%	260%	4	SF
AEGON LIFE	4,938	2,657	186%	364%	2	PIM
ACHMEA LIFE	3,194	2,255	142%	290%	6	SF
ASR LIFE	5,101	2,741	186%	484%	3	SF
DELTA LLOYD LEVEN	2,606	1,709	153%	269%	5	SF
ALL	26,755	14,962	174%	349%		

Solvency (SCR) ratios non-life entities

The average solvency ratio of the non-life insurers (see the table in Figure 9) is equal to 156%. The average MCR ratio is 389%. Of the non-life insurers, ASR Schade (185%) and Aegon Schade (176%) have the highest solvency ratios. NN Schade (133%) and Delta Lloyd Schade (132%) have the lowest solvency ratios.

FIGURE 9: SOLVENCY II FIGURES, DUTCH NON-LIFE INSURERS AT YEAR-END 2017 (€ MILLIONS)

ENTITY	ELIGIBLE OWN FUNDS TO SCR	SCR	SCR RATIO	MCR RATIO	RANK SCR RATIO	CAPITAL MODEL
ACHMEA SCHADE	1,054	754	140%	310%	5	PIM
ASR SCHADE	1,478	800	185%	410%	1	SF
NN SCHADE	513	386	133%	295%	6	PIM
DELTA LLOYD SCHADE	421	319	132%	257%	7	SF
VIVAT SCHADE	570	351	162%	384%	4	SF
AEGON SCHADE	387	220	176%	703%	2	SF
UNIVÉ SCHADE	241	146	165%	367%	3	SF
ALL	4,664	2,978	156%	389%		

ANALYSIS OF SCR: WHERE IS THE RISK?

Entities are required to cover all risks affecting their balance sheets, i.e., their solvency positions. In Figure 10, the breakdown of the SCR is shown on an aggregate basis for the non-life entities in our sample using the Standard Formula (i.e., SF entities).¹⁵ Figure 10 shows that health underwriting risk is the highest risk before diversification (71%) within the composition of the SCR. Note that the entities in our analysis have a relatively high health underwriting risk compared to the Dutch market as a whole.¹⁶ Second comes the non-life underwriting risk, composing 58% of the SCR, which is expected to be high for the non-life insurers. The diversification benefits are -50% of the SCR, whereas market risk accounts for 30% (before diversification).

Figure 11 shows the various risk modules corresponding to the life insurers in our sample. Obviously, the largest difference between the two business lines is that the life business does not show any form of non-life or health underwriting risk, whereas the non-life business has no life underwriting risk component. The two lines of business are independent from the perspective of those risk modules. The impact of market risk differs between the two lines of business as well, for the life business market risk accounts for more than double the percentage (61%) of the non-life business (30%). The diversification benefits are much higher in the non-life business (-50%) compared to the life business (-36%).

¹⁵ The values for each risk module (including the diversification effect) used in the breakdown are calculated as the sum of the values for each risk module (including the diversification effect) of the individual solo entities.

¹⁶ The whole market is analysed in our European SFCR reports, which are available on the Milliman website at <http://www.milliman.com/insight/>.

FIGURE 10: BREAKDOWN OF SCR BY RISK MODULE ON AN AGGREGATE BASIS (FOR SOLO NON-LIFE ENTITIES IN OUR SAMPLE USING THE STANDARD FORMULA)

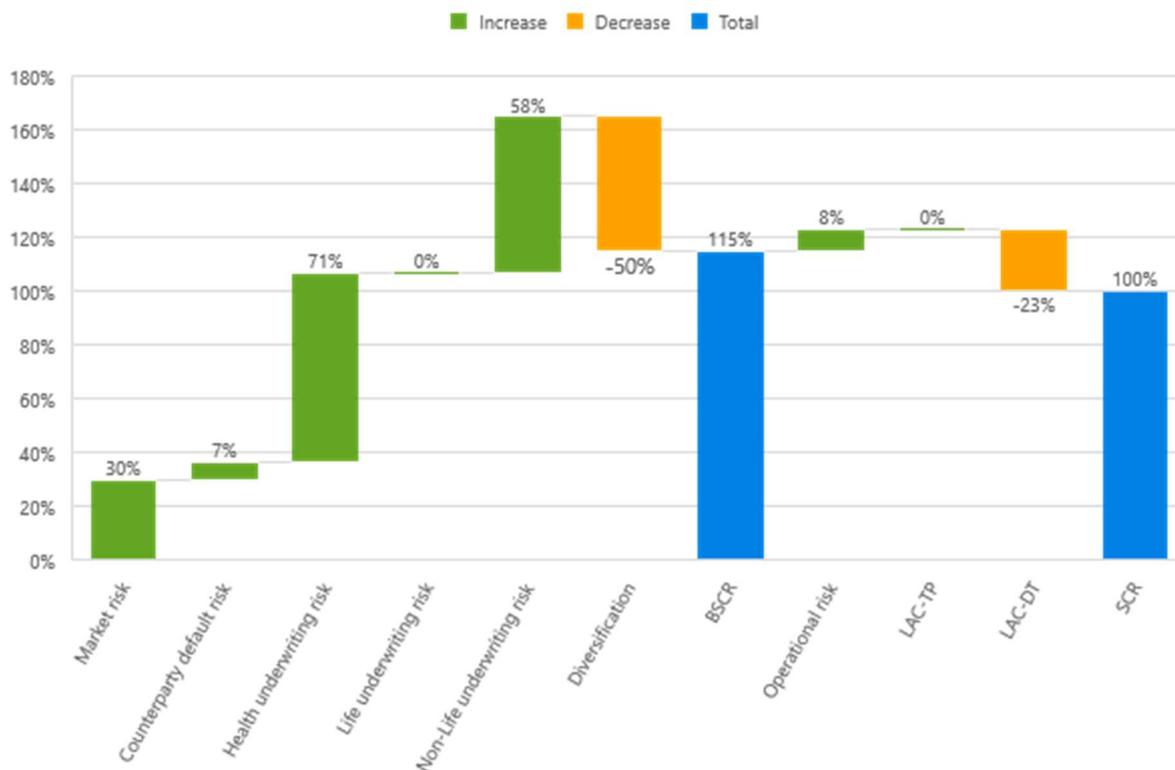
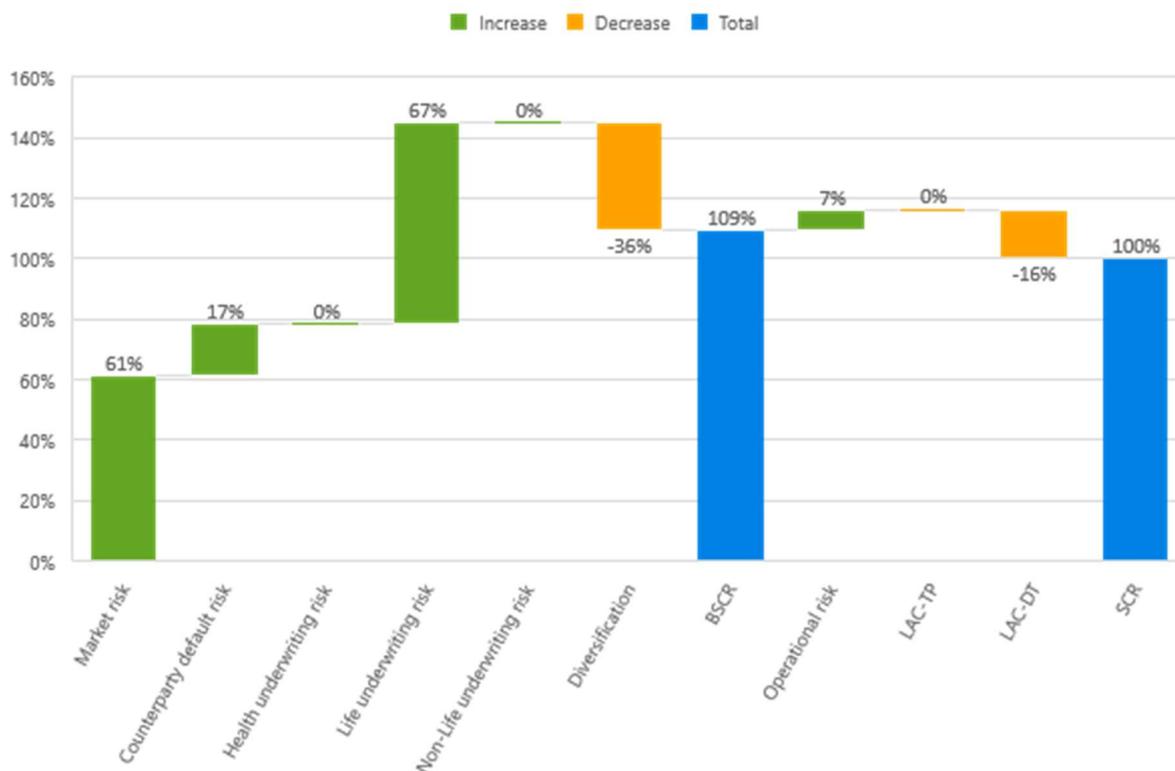


FIGURE 11: BREAKDOWN OF SCR BY RISK MODULE ON AN AGGREGATE BASIS (FOR SOLO LIFE ENTITIES IN OUR SAMPLE USING THE STANDARD FORMULA)

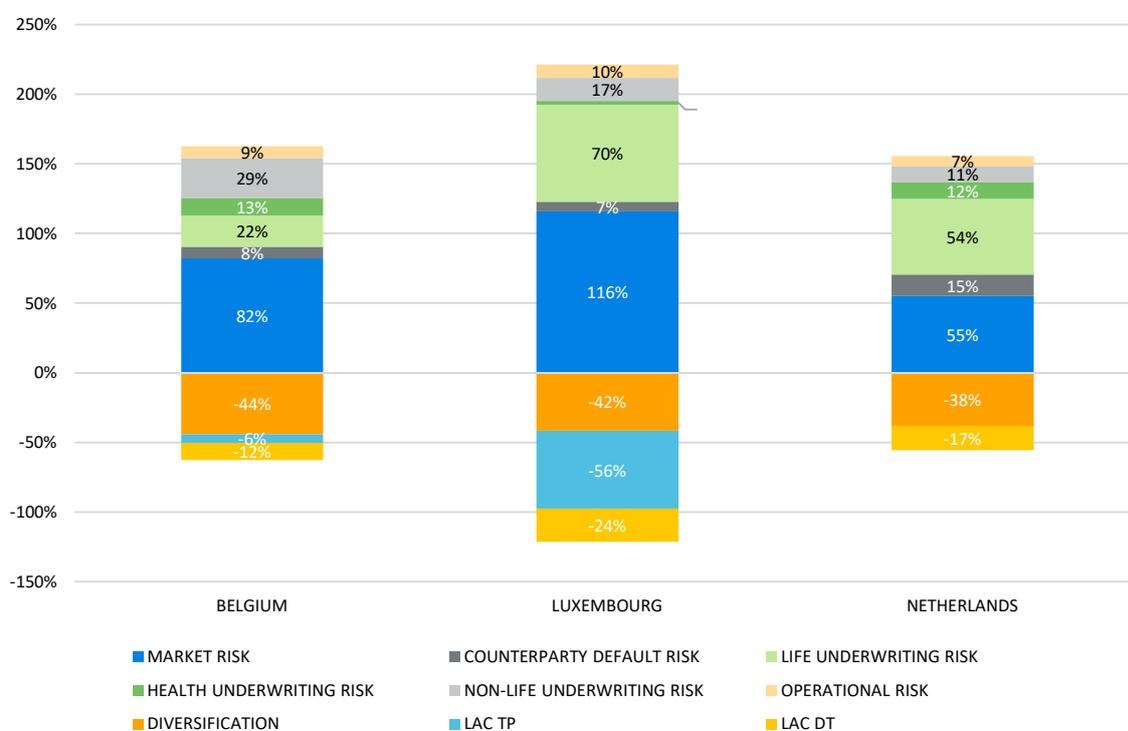


Comparison SCR breakdown to Belgium and Luxembourg

To get a view on the differences in breakdown of risks of Dutch entities compared to other European countries we made a comparison within the Benelux Union (Belgium, Luxembourg and the Netherlands). Note that this comparison is made for the combined life and non-life market, because in Belgium insurers are allowed to write both life and non-life business in the same legal entity. This comparison of the Dutch insurance market with the markets in Belgium and Luxembourg (as presented in Figure 12) provides the following insights:

- Market risk is the highest risk contributing to the SCR for all countries. However, the Netherlands has the lowest portion of market risk (55%). The market risk is far higher for Luxembourg insurers (116%) and Belgian insurers (82%) included in our sample. The SFCRs don't provide a breakdown of market risks into sub-risks so it is difficult to draw any conclusions as to the reasons behind these differences. However, it is noteworthy that market risk indicates investments in more risky assets with upward potential for an insurer in terms of results.
- In the Netherlands (and Luxembourg), we observe that the non-life underwriting risk is significantly lower than the life underwriting risk in terms of the proportion of the SCR. The life underwriting risks are relatively large in both the Netherlands and Luxembourg due to the large portion of savings business in these countries.
- Diversification represents approximately 45% of the SCR for Belgium and Luxembourg while it is approximately 6% lower in the Netherlands. The higher effects of diversification on the SCR for Belgian insurers can be explained by the possibility for Belgian insurers to write both life and non-life business within the same legal entity. In addition, both for Belgium and Luxembourg the higher portion of market risks allows for diversification between market risk and total underwriting risk.
- The high loss-absorbing capacity of deferred taxes (LACDT) in Luxembourg is caused by a higher deferred tax liability position compared to Belgian and Dutch insurers. The loss-absorbing capacity of technical provisions (LACTP) in Luxembourg is quite high, as would be expected, due to a large amount of discretionary profit sharing partly offsetting the high market risk exposure.

FIGURE 12: SCR BREAKDOWN BY RISK MODULE FOR ENTITIES USING THE STANDARD FORMULA IN THE BENELUX¹⁷

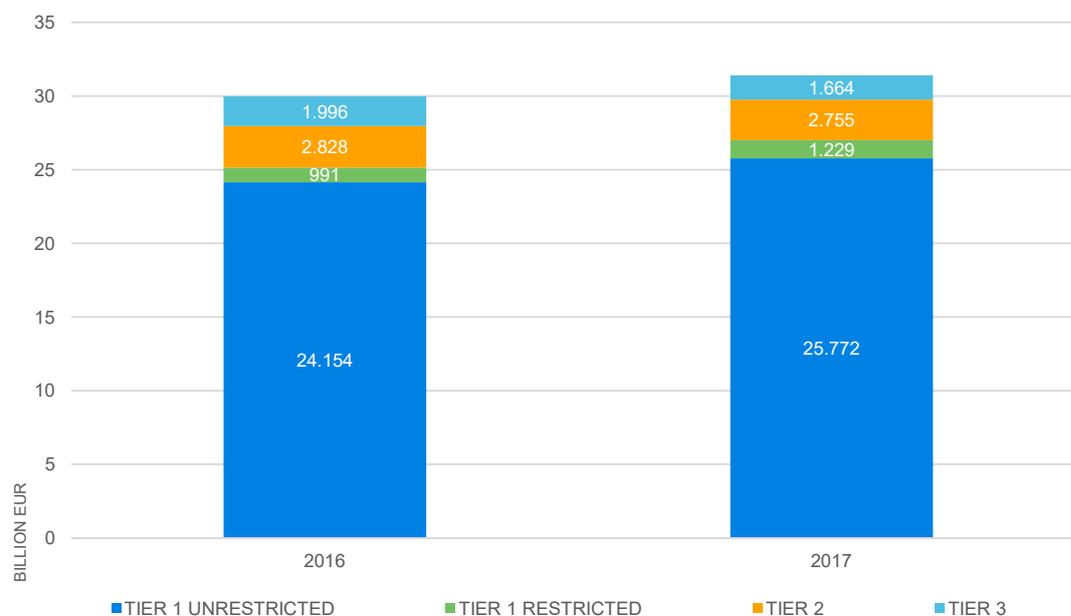


¹⁷ The comparison between the three countries in the Benelux is based on a subset of the largest life and non-life insurers in the Belgian and the Luxembourgish markets. For Belgium, the sample includes the 12 largest insurance entities, of which three insurers make use of either a PIM or FIM. For Luxembourg the companies selected are the 13 largest life entities, and the 8 largest non-life entities, of which one uses a FIM.

ANALYSIS OF OWN FUNDS AND TIERING

Own funds are divided into three tiers based on their quality. Tier 1 capital is the highest ranking with the greatest loss-absorbing capacity, such as equity and bonds. Tier 2 capital is composed of hybrid debt, while Tier 3 is made up of other capital. As shown in Figure 13, Dutch insurers' own funds are considered of good quality, with over 80% classified in Tier 1 in the last two years. We can see a slight increase in the total eligible own funds to meet the SCR during 2017, together with a small net move from Tier 3 to Tier 1 capital. Note that all insurers in our sample follow the Solvency II restrictions related to the tiering of own funds towards the SCR.¹⁸

FIGURE 13: TIERING OF ELIGIBLE OWN FUNDS TO MEET THE SCR FOR BOTH LIFE AND NON-LIFE



In the table in Figure 14 the breakdown of own funds by tier is provided for each of the Dutch insurance groups at year-end 2017. Univé own funds consist of only reconciliation reserve, which leads to the highest percentage of Tier 1 unrestricted capital (100%) of the insurance groups included in our analysis. Tier 1 restricted capital is highest at Aegon and NN (16% and 12%, respectively). Univé has no Tier 1 restricted capital. Tier 2 capital is highest at Vivat (25%) and Achmea (16%) and lowest at Univé (0%), whereas Tier 3 capital is highest at Achmea (8%) and NN (7%) and lowest again at 0% at Univé.

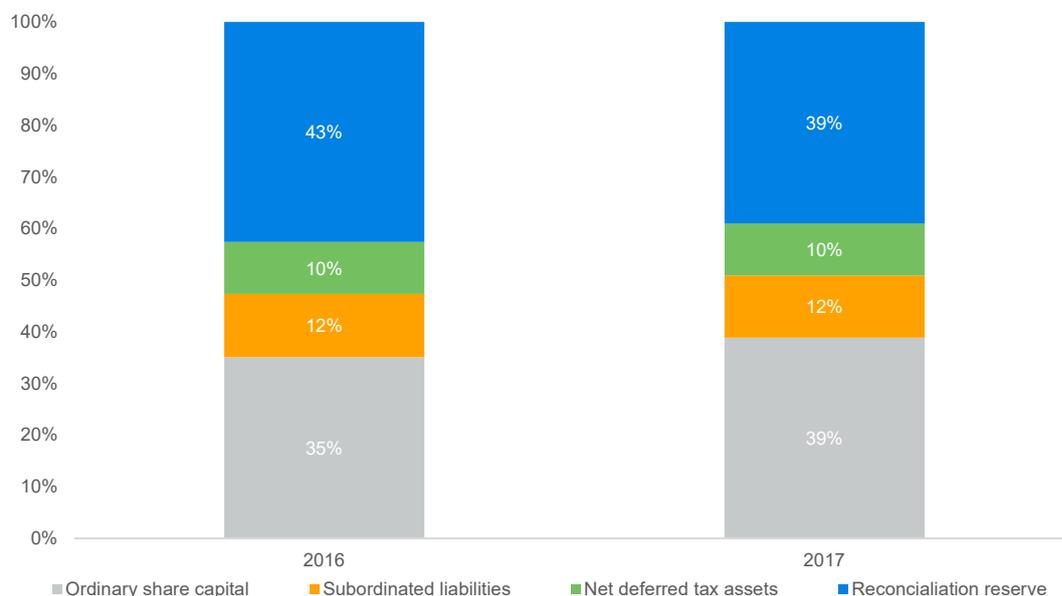
FIGURE 14: COMPOSITION OF ELIGIBLE OWN FUNDS TO MEET THE SCR FOR INSURANCE GROUPS (€ MILLIONS)

INSURANCE GROUP	ELIGIBLE OWN FUNDS	TIER 1 - UNRESTRICTED	TIER 1 - RESTRICTED	TIER 2	TIER 3
ACHMEA	8,386	65%	11%	16%	8%
AEGON	15,628	67%	16%	15%	3%
ASR	6,914	78%	7%	15%	0%
NN	15,412	65%	12%	16%	7%
UNIVÉ	698	100%	0%	0%	0%
VIVAT	3,780	67%	2%	25%	5%

¹⁸ At least 50% Tier 1, of which at most 20% is restricted Tier 1. No more than 50% Tier 2 and no more than 15% Tier 3 own funds.

Figure 15 provides insight into the origin of own funds. The largest two components of the basic own funds relate to the reconciliation reserve (39%) and ordinary share capital (39%). Deferred tax assets (DTA), at 10%, and subordinated liabilities (12%) make up the smallest two components within the basic own funds. Over the last year there is an increase of 6% (from €31.1 billion to €33.1 billion) of the basic own funds for the insurers in our sample, of which the distribution is shown in Figure 15.

FIGURE 15: DISTRIBUTION OF BASIC OWN FUNDS OF BOTH THE LIFE AND THE NON-LIFE SOLO ENTITIES IN OUR SAMPLE



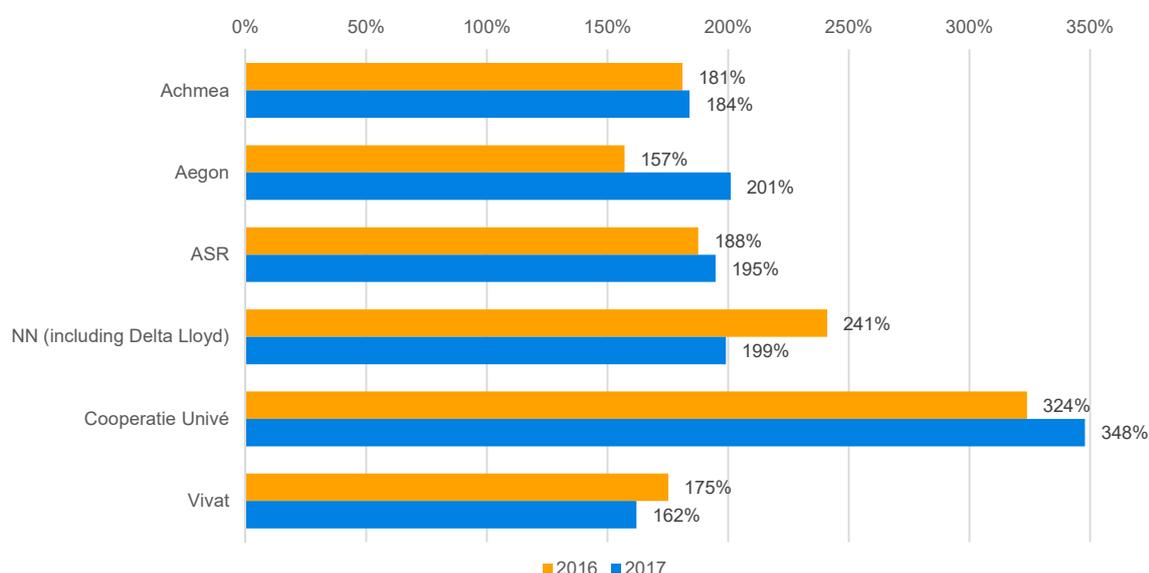
COMPARISON SCR RATIOS 2016 AND 2017

In this section we will compare the SCR ratios of 2016 and 2017 for the solo insurance entities and the insurance groups that are in the scope of this report.

SCR ratio comparison insurance groups

As opposed to the solo entities, two of the six analysed insurance groups have seen a decrease in SCR ratio in 2017. Most notable is the decrease for NN, which is caused by the acquisition of Delta Lloyd and its assets. During 2017 Aegon Group got approval from the supervisor to use a revised partial internal model (PIM). This contributed to the increase of its SCR ratio in 2017 (+44%).

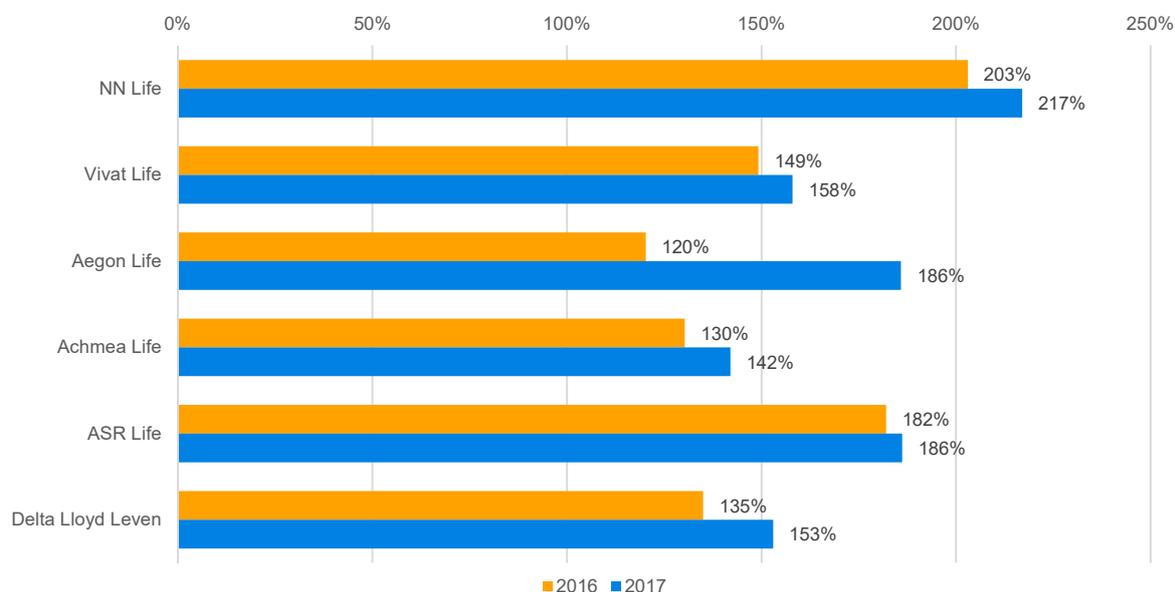
FIGURE 16: SCR RATIO FOR THE INSURANCE GROUPS IN OUR SAMPLE FOR 2016 AND 2017



SCR ratio comparison life entities

Figure 17 shows that for all life entities in our sample the SCR ratio has increased compared to last year. One company that stands out is Aegon Life, as its SCR ratio increased from 120% to 186% over the past year. Aegon Life has received a capital injection of €1.05 billion, which is the main cause for this increase in SCR ratio.

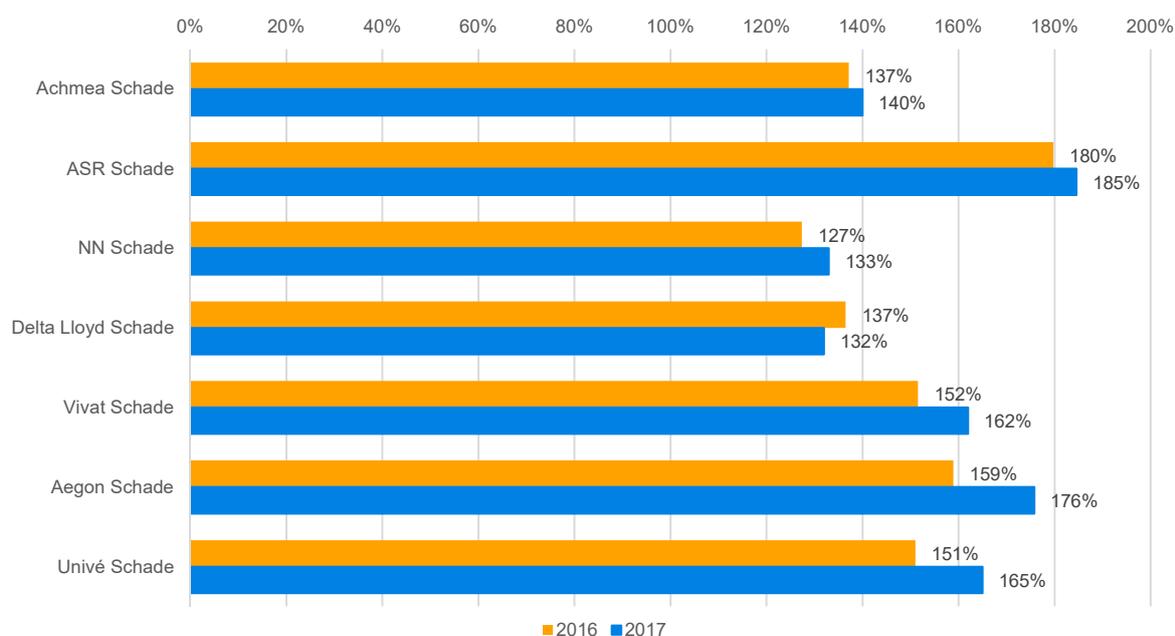
FIGURE 17: SCR RATIO FOR THE LIFE INSURERS IN OUR SAMPLE FOR 2016 AND 2017



SCR ratio comparison non-life entities

The SCR ratios for the non-life insurers can be seen in Figure 18. All insurers but Delta Lloyd Schade have seen increases in their SCR ratios over 2017. The largest change in SCR ratio is realised by Aegon Schade (+17%), which is caused by the disposal of part of its business to Allianz, resulting in reduced solvency capital requirements.

FIGURE 18: SCR RATIO FOR THE NON-LIFE INSURERS IN OUR SAMPLE FOR 2016 AND 2017



Analysis of balance sheet

In this section we provide insight into the balance sheet of the solo insurance entities and the insurance groups that are in the scope of this report. The assets will be mostly shown on the basis of investments and the liabilities on the basis of the technical provisions.¹⁹

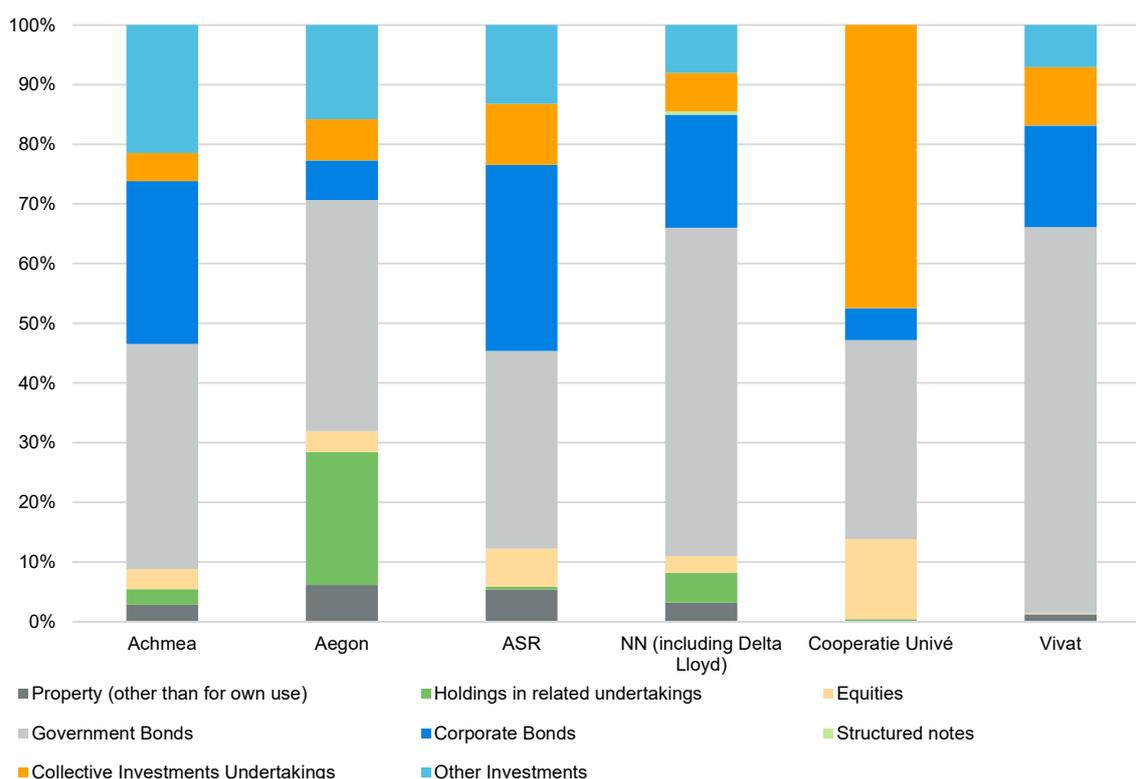
ANALYSIS OF ASSET ALLOCATION

In this section we provide insight into the asset allocation of the solo insurance entities and the insurance groups that are in the scope of this report.

Asset allocation insurance groups

The investment strategy of Dutch insurance groups is clearly distinguished by a preference for government bonds, as shown in Figure 19, which shows the breakdown of investments for insurance groups. Government bonds account for 48% of total investments, while corporate bonds account for 19%. The one insurance group that stands out with a different strategy is Univé, which has 47% of its assets invested in externally managed collective investments undertakings, and has the largest investment allocation in equities (13%). Aegon shows a different allocation as opposed to its peers, with a relatively large amount of its investments allocated in 'holdings in related entities'. This investment class consists of either a participation in financial and credit institutions, or a strategic participation. For the guidelines and identification of these two subclasses of investments we refer to the guidelines set by EIOPA.²⁰ Furthermore, Vivat shows the 'safest' investment allocation, meaning that it invests most of its assets in relatively low-risk classes.

FIGURE 19: INVESTMENT BREAKDOWN BY ASSET CLASS FOR INSURANCE GROUPS



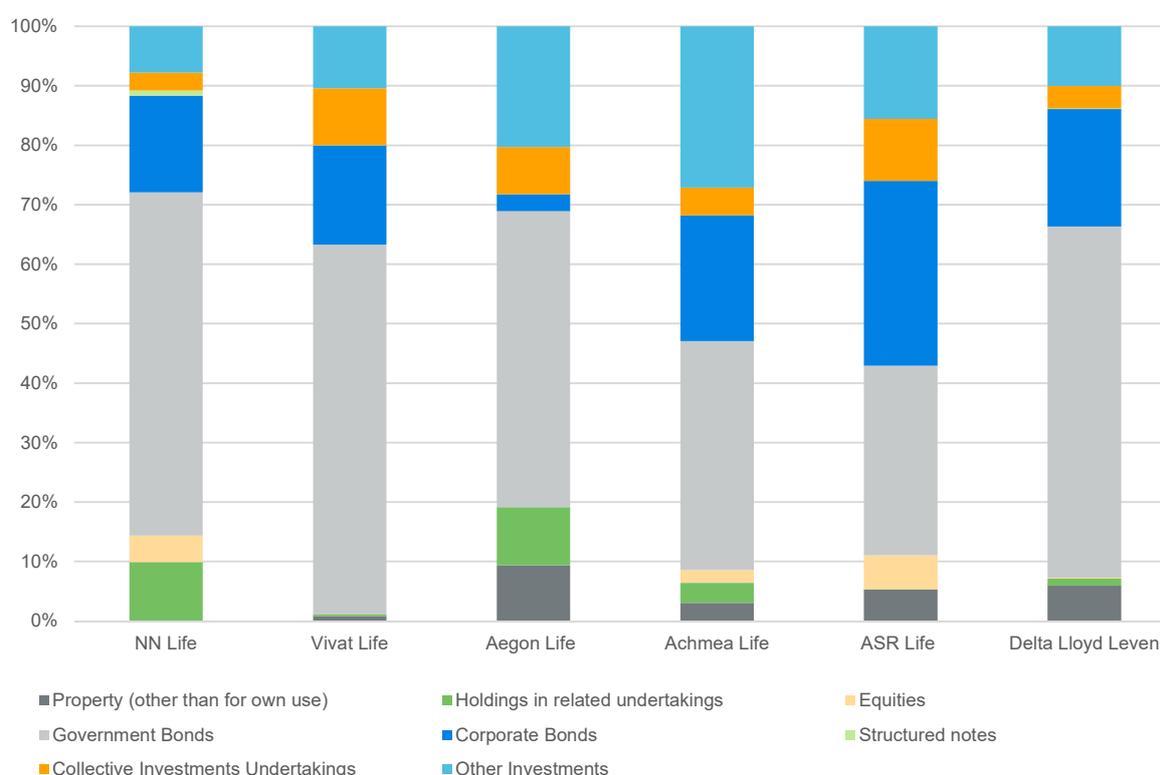
¹⁹ The investments as reported here only consist of investments that are being used for other purposes than holding for index-linked and unit linked contracts and do not include loans and mortgages, cash and cash equivalents and property for own use, which are separate asset classes in the Solvency II reporting.

²⁰ EIOPA (2 February 2015). Guidelines on Treatment of Related Undertakings, Including Participations. Retrieved 5 March 2019 from <https://eiopa.europa.eu/publications/eiopa-guidelines/guidelines-on-treatment-of-related-undertakings>.

Asset allocation life entities

Figure 20 shows the breakdown of the investments for the life entities of our sample. This information is then summarised in Figure 21. The black lines in Figure 21 represent the range of the different asset classes for the insurers within our sample, with the grey box representing the 25th to 75th percentiles of the range and the blue dot the median of the range. At life market level, government bonds amount to 51% of the total investments. Corporate bonds account for 18%. Thus, bonds largely dominate the life insurers' portfolios, with 69% of the total investments.²¹ Bonds provide a future return pattern that is stable and predictable, thus making them more suitable for backing fixed future liabilities (as opposed to equities). DNB's policy regarding capital requirements may have driven this as well to some extent.²² Looking at equity and property as being risky assets, we can say that ASR Life has the most exposure to market risk within its investment portfolio, with over 11% allocated in these asset classes and a relatively significant part of its assets invested in corporate bonds compared to its peers.

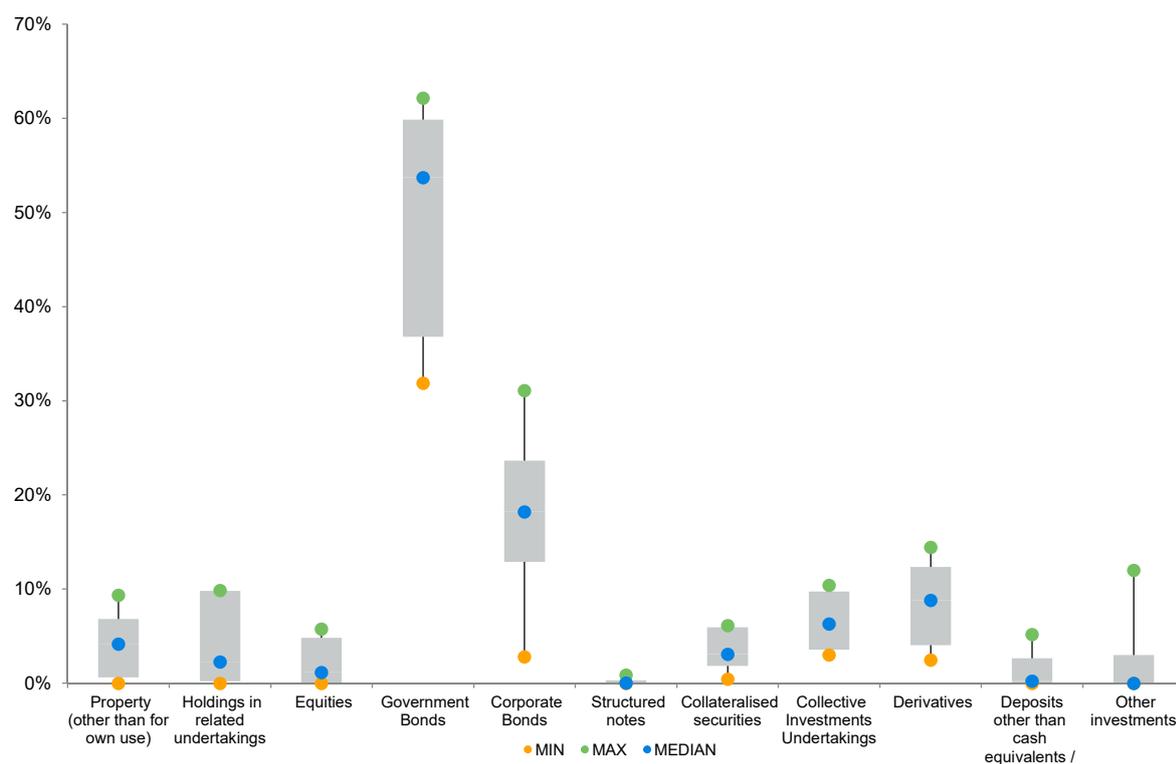
FIGURE 20: INVESTMENT BREAKDOWN BY ASSET CLASS FOR LIFE ENTITIES



²¹ In this report, the asset class bonds consists only of government bonds and corporate bonds and does not include structured notes and collateralised securities, which are reported under bonds in the Solvency II reporting.

²² DNB (30 November 2016). Capital Management Policy – Principles and Expectations. Retrieved 5 March 2019 from <http://www.toezicht.dnb.nl/en/binaries/51-235837.pdf>.

FIGURE 21: DISTRIBUTION OF INVESTMENTS BY ASSET CLASS FOR LIFE ENTITIES



Asset allocation non-life entities

Figure 22 shows the breakdown of investments for the non-life entities in our sample. This information is then summarised in Figure 23. At a non-life market level, government bonds amount to 46% of the total investments. Corporate bonds account for 34%. Thus, bonds largely dominate the non-life insurers' portfolios, with 80% of the total investments of the non-life insurers.

Note that the proportion of corporate bonds within the investment strategies significantly varies from one entity to another. Indeed, where Univé Schade has only around 10% invested in corporate bonds, Delta Lloyd Schade put almost half of its total investments in corporate bonds.

FIGURE 22: INVESTMENT BREAKDOWN BY ASSET CLASS FOR NON-LIFE ENTITIES

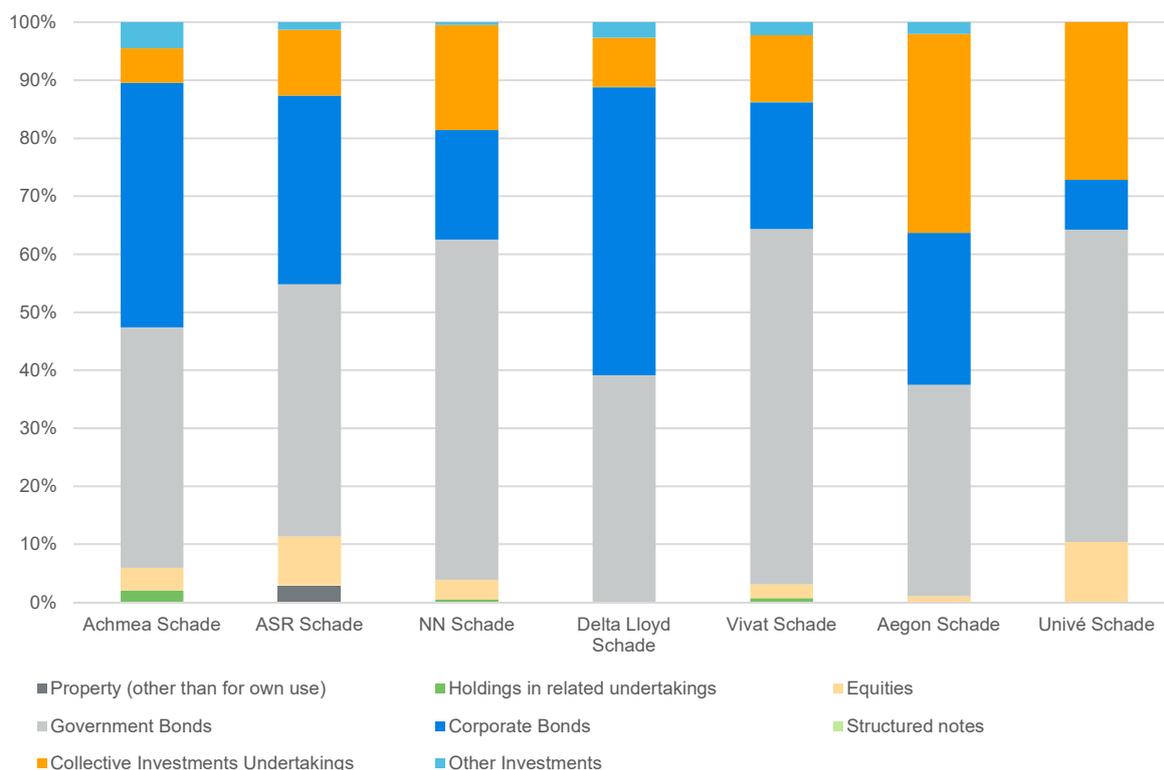
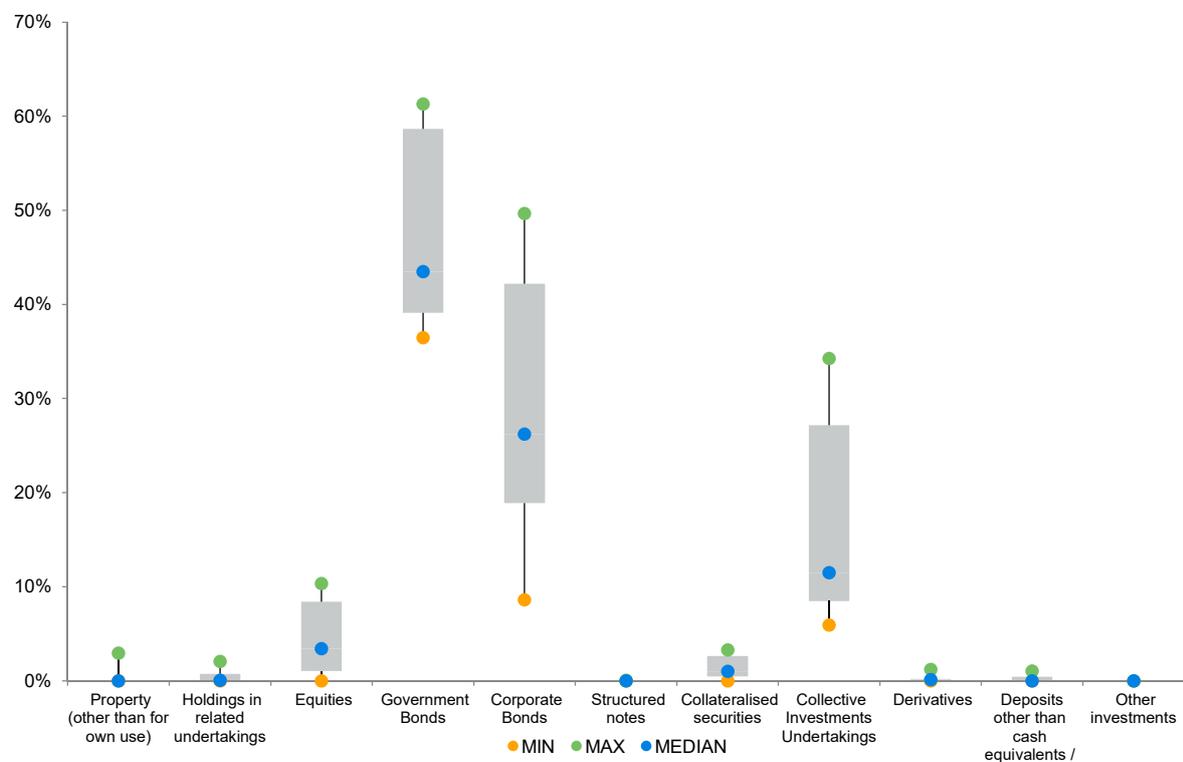


FIGURE 23: DISTRIBUTION OF INVESTMENTS BY ASSET CLASS FOR NON-LIFE ENTITIES



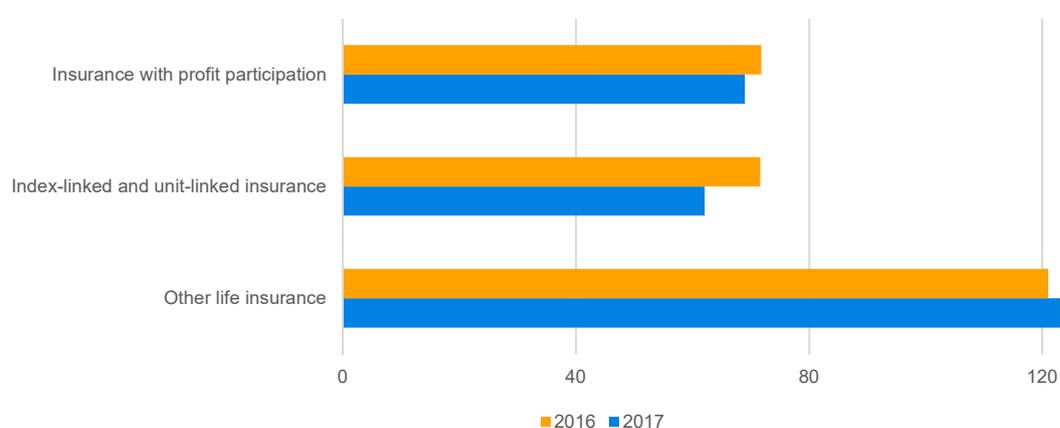
ANALYSIS OF LIABILITIES AND UNDERWRITING

In this section we provide insight into the breakdown of technical provisions and gross written premiums per line of business of the solo insurance entities that are in the scope of this report. For the non-life entities, we also provide insight into their underwriting results.

Liabilities life entities²³

Figure 24 and Figure 25 show the technical provisions and the gross written premiums by line of business for the life insurers in our sample. Except for the other life insurance line of business, the other two lines of business ('Index-linked and unit-linked insurance' and 'Insurance with profit participation') have decreased in size with respect to both technical provisions and premium volumes. Furthermore, we observe a change in the technical provisions in the life insurance market from €264 billion at year-end 2016 to €254 billion at year-end 2017. 'Other life insurance' is the largest line of business for the Dutch life insurers in both 2016 and 2017, accounting for 46% and 48%, in terms of technical provisions, respectively. 'Index-linked and unit-linked insurance' represents 27% and 24% in 2016 and 2017. 'Insurance with profit participation' has a small decrease in amount of technical provisions. However, the share of technical provisions as a part of all technical provisions of life entities within our sample stays the same, with 27% in both 2016 and 2017.

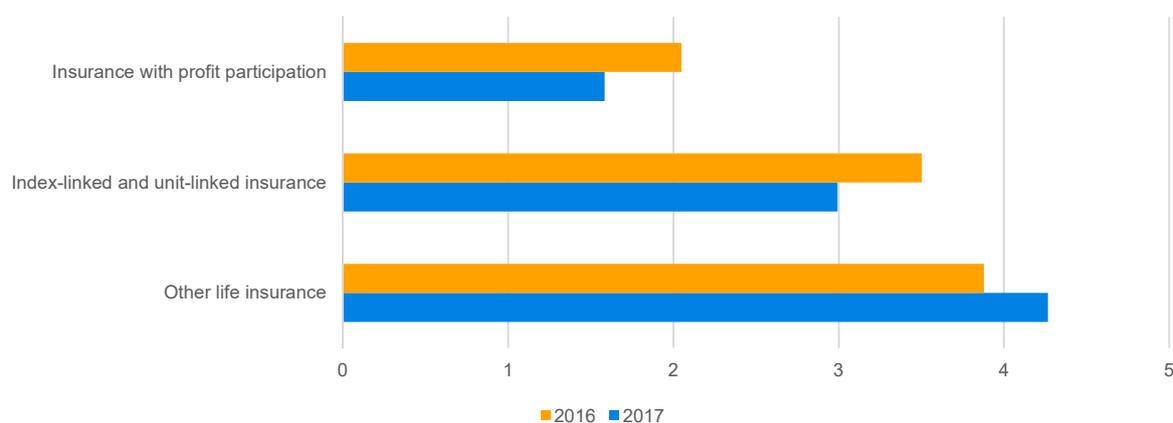
FIGURE 24: TECHNICAL PROVISIONS LIFE BY LINE OF BUSINESS



The gross written premiums for Dutch life insurers also decreased from 2016 to 2017. Besides the drop in gross written premiums in the line of business 'Index-linked and unit-linked insurance', the share of the total life insurance premiums written in this line of business dropped, from 37% (€3.5 billion) in 2016 to 34% (€3.0 billion) in 2017. ASR has seen the most substantial decrease in gross written premiums in this line of business (-€0.3 billion).

²³ Aegon Life is not taken into account in the analysis of the liabilities of the life entities because of inconsistencies between the 2016 data and that of 2017.

FIGURE 25: GROSS WRITTEN PREMIUMS LIFE BY LINE OF BUSINESS

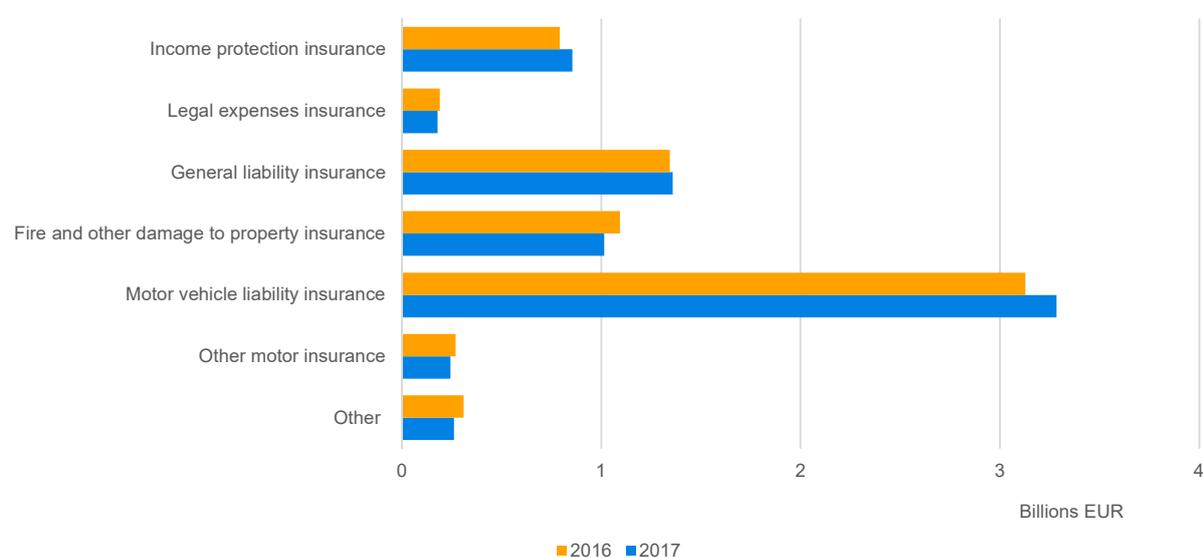


Liabilities and underwriting results non-life entities

The non-life entities included in our sample have reserved almost €7.2 billion, in 2017, and €7.1 billion in 2016 of technical provisions gross of reinsurance. Note that we have excluded the medical expenses (zorg) business and the health similar to life (long-term disability) business in the analyses in this section. Net of reinsurance the technical provisions for 2017 and 2016 are, respectively, €6.9 billion and €6.8 billion.

Figure 26 shows the composition of gross technical provisions in the non-life lines of business (as categorised under Solvency II) at year-end 2016 and 2017 for the non-life insurers in our sample.²⁴

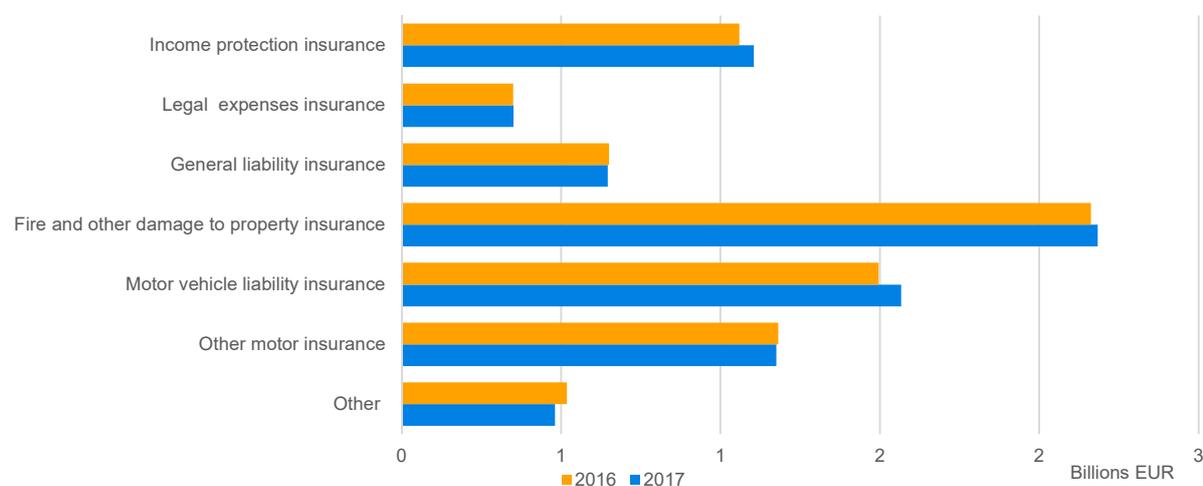
FIGURE 26: GROSS TECHNICAL PROVISIONS NON-LIFE BY LINE OF BUSINESS



²⁴ Note that these analyses by non-life lines of business are excluding the health similar to life business (long-term disability) written by the non-life insurers in our sample. Therefore, the line of business Income protection relates mainly to short-term disability insurance.

Figure 27 shows the composition of gross written premiums in the non-life lines of business at year-end 2016 and 2017.

FIGURE 27: GROSS WRITTEN PREMIUMS NON-LIFE BY LINE OF BUSINESS



The non-life technical provisions are for a large part concentrated in the long-tail lines of business, general liability and motor vehicle liability. At year-end 2017 they accounted for around 65% of total technical provisions compared to 63% at year-end 2016. The gross written premiums for these same long-tail lines of business were, respectively, 30% in 2017 and 29% in 2016 of the total gross written premiums. Although the share in terms of gross written premiums of these lines of business dropped, there has been an increase in gross written premiums for motor vehicle liability (+4.7%). This could be an indication that insurers manage to increase premiums trying to improve underwriting results.

The non-life insurers in our sample have written approximately €7.5 billion in gross premiums in 2017, compared to €7.4 billion in 2016 in direct business. This excludes the medical expenses (zorg) business and the long-term disability business (categorised as health similar to life). Of this €7.5 billion, over €2.1 billion (29%) in 2017, and just under €2.2 billion (29%) in 2016, is related to 'Fire and other damages'. Furthermore, the liability lines of business motor vehicle and general liability jointly account for €2.2 billion (30%) of gross written premiums in 2017, compared to €2.1 billion (29%) in 2016.

Loss ratios by line of business

Figure 28 shows statistics of the five largest lines of business, in terms of gross earned premiums, regarding the volatility in net loss ratios by line of business. The line of business 'Fire and other damages to property' represents 29% of the total gross earned premiums. 'Motor vehicle liability' (21%) and 'Other motor insurance' (16%), the second-largest and third-largest in gross earned premiums, make up the three largest lines of business for Dutch non-life insurers. Most lines of business show a large range in which the net loss ratios of the entities incurred. The maximum net loss ratio in the line of business 'Fire and other damages' stands out, as it is much higher than the average net loss ratio in this line of business. This maximum is caused by Univé Schade, which shows a net loss ratio of 135% in this line of business. However, Univé Schade has a very limited 'Fire' portfolio, just over €1.2 million gross written premiums, as most of its fire business written through the regional branches is accounted for in the separate legal entities of these branches.

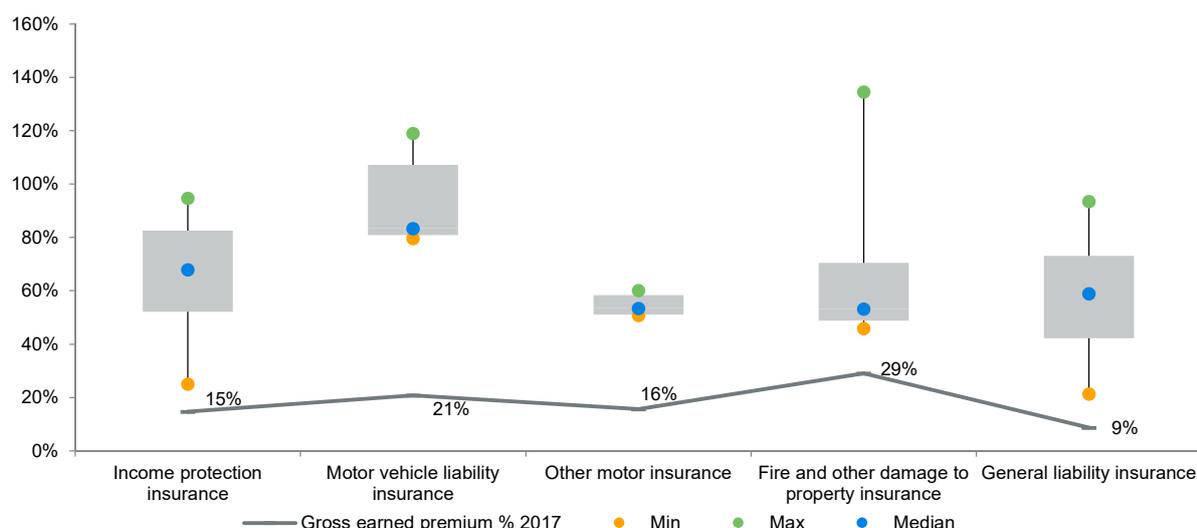
FIGURE 28: DISTRIBUTION OF NET LOSS RATIOS FOR 2017 BY LINE OF BUSINESS, FOR THE FIVE LARGEST LINES IN TERMS OF GROSS EARNED PREMIUMS

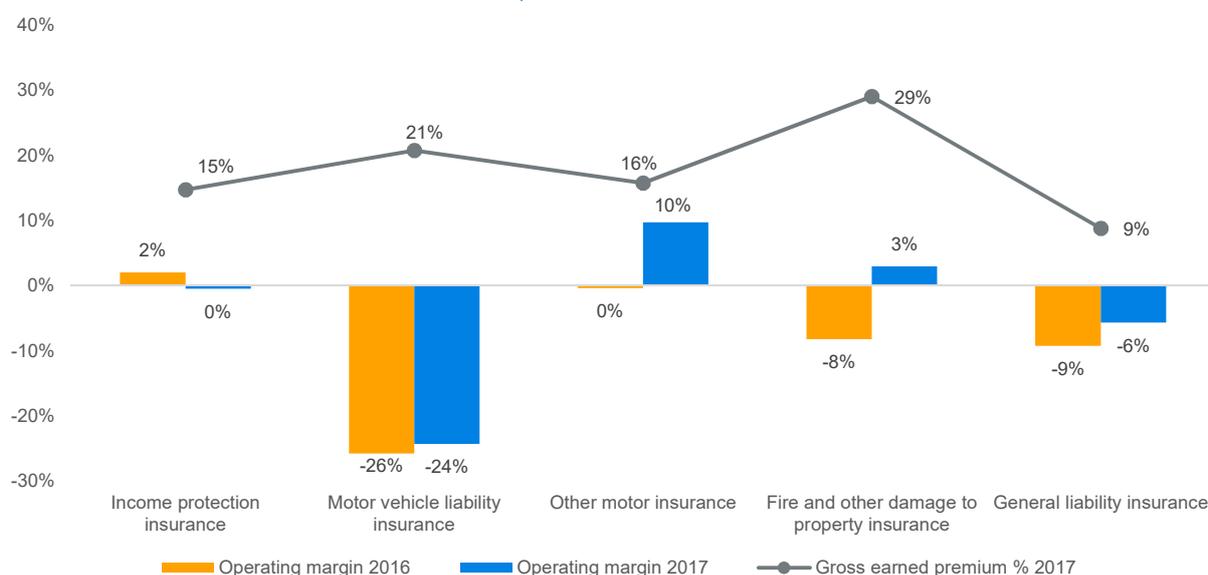
Figure 28 shows that the net loss ratios of the five presented lines of business have some differences with regard to their distributions. This is an indication that there are lines of business with a more volatile nature.

Operating margins by line of business

In Figure 29, the technical results for the same lines of business described in the section above are shown on an aggregate basis for the entities included in the sample. The operating margin is defined (and derived) as:

$$(\text{net earned premiums} - \text{net claims incurred} - \text{expenses incurred}) / (\text{gross earned premiums}).$$

The operating margin, as defined, includes movements in prior year reserves (part of the net incurred claims) but does not include investment income. Figure 29 indicates that, in 2017, three lines of business exhibit a negative operating margin, namely 'Motor vehicle liability' (-24.3%), 'General liability' (-5.7%) and 'Income protection insurance' (-0.5%). In 2016, there were four lines of business with negative operating margins, namely 'Motor vehicle liability' (-25.8%), 'General liability' (-9.3%), 'Fire and other damages' (-8.2%) and 'Other motor insurance' (-0.4%). Comparing 2017 with the previous year shows a clear increase in operating margin for four of these five lines of business, which is caused by both a decrease in net incurred claims and a decrease in net incurred expenses, as we have already seen that the gross written premiums did not significantly increase. The negative operating margin of 'Motor vehicle liability' is consistent with the market trends and the earlier findings of the DNB.

FIGURE 29: OPERATING MARGIN BY LINE OF BUSINESS, FOR THE FIVE LARGEST LINES IN TERMS OF GROSS EARNED PREMIUMS

Reliance and limitations

For those who have read our 2016 SFCR reports concerning the Benelux and European market, the values which we present in this report for year-end 2016 are different as opposed to those reports. The cause mainly lies within the selection of insurance companies for our analysis. There have been several mergers and acquisitions in the Dutch insurance market in 2017.

In carrying out our analysis and producing this research report, we relied on the data and information provided in the SFCRs and QRTs of our sample companies. We have not audited or verified this data or other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. It should be noted that in some cases errors were spotted in the underlying data. We made minor adjustments to the data to correct known errors such as inconsistencies across QRTs in order to improve our analysis. However, we have not made any material changes to the underlying data. We have not made any changes to the data to reflect additional information or changes following the reporting date.

This research report is intended solely for educational purposes and presents information of a general nature. The underlying data and analysis have been reviewed on this basis. This report is not intended to guide or determine any specific individual situation and persons should consult qualified professionals before taking specific actions following this report.

Appendix A: List of the Dutch entities and groups analysed

FIGURE 30: DUTCH INSURANCE SOLO ENTITIES ANALYSED, AT YEAR-END 2017

INSURANCE ENTITY	NAME USED IN REPORT	INSURANCE GROUP	LIFE OR NON-LIFE	SCR RATIO
NATIONALE-NEDERLANDEN LEVENSVZERZEKERING MAATSCHAPPIJ N.V.	NN LIFE	NN	LIFE	217%
ASR LEVENSVZERZEKERING N.V.	ASR LIFE	ASR	LIFE	186%
AEGON LEVENSVZERZEKERING N.V.	AEGON LIFE	AEGON	LIFE	186%
SRLEV N.V.	VIVAT LIFE	VIVAT	LIFE	158%
ACHMEA PENSIOEN- EN LEVENSVZERZEKERINGEN N.V.	ACHMEA LIFE	ACHMEA	LIFE	142%
DELTA LLOYD LEVENSVZERZEKERING N.V.	DELTA LLOYD LEVEN	NN	LIFE	153%
ACHMEA SCHADEVZERZEKERINGEN N.V.	ACHMEA SCHADE	ACHMEA	NON-LIFE	140%
ASR SCHADEVZERZEKERING N.V.	ASR SCHADE	ASR	NON-LIFE	185%
NATIONALE-NEDERLANDEN SCHADEVZERZEKERING MAATSCHAPPIJ N.V.	NN SCHADE	NN	NON-LIFE	133%
DELTA LLOYD SCHADEVZERZEKERING N.V.	DELTA LLOYD SCHADE	NN	NON-LIFE	132%
VIVAT SCHADEVZERZEKERINGEN N.V.	VIVAT SCHADE	VIVAT	NON-LIFE	162%
AEGON SCHADEVZERZEKERING N.V.	AEGON SCHADE	AEGON	NON-LIFE	176%
N.V. UNIVÉ SCHADE	UNIVÉ SCHADE	UNIVE	NON-LIFE	165%

FIGURE 31: DUTCH INSURANCE GROUPS ANALYSED

INSURANCE GROUP	SCR RATIO YE 2017
ACHMEA	184%
AEGON	201%
ASR	195%
NN	199%
UNIVE	348%
VIVAT	162%



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CONTACT

Peter Franken
peter.franken@milliman.com

Kamiel van Langen
kamiel.vanlangen@milliman.com