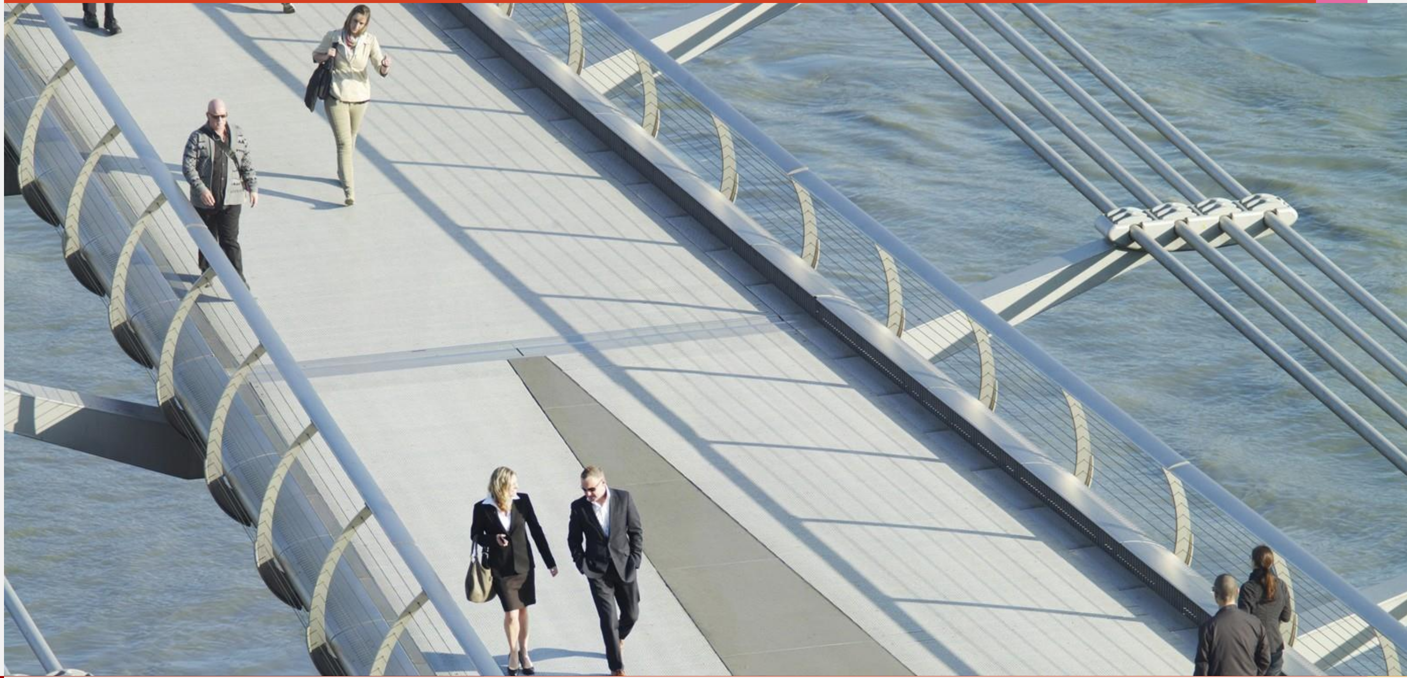
Solvency II
A comparison of the Dutch Life Insurance Market FY2016

September 2017



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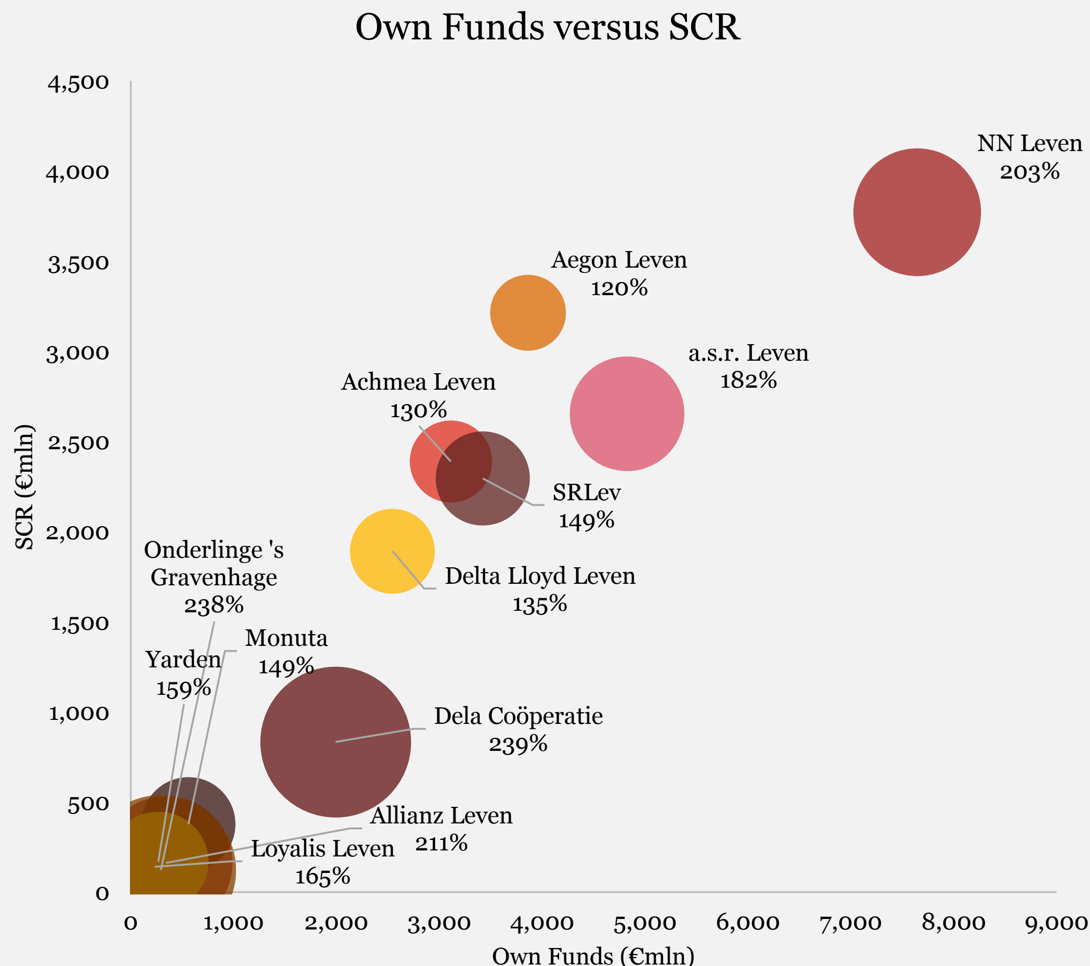
Solvency II – finally in place
Diverse position of major players



After many years of deliberations, 2016 was the first year in which insurance companies had to report their solvency on the Solvency II standard.

Although the regulations were provided a while ago, the details of all submissions and first independent reviews showed adjustments in several areas.

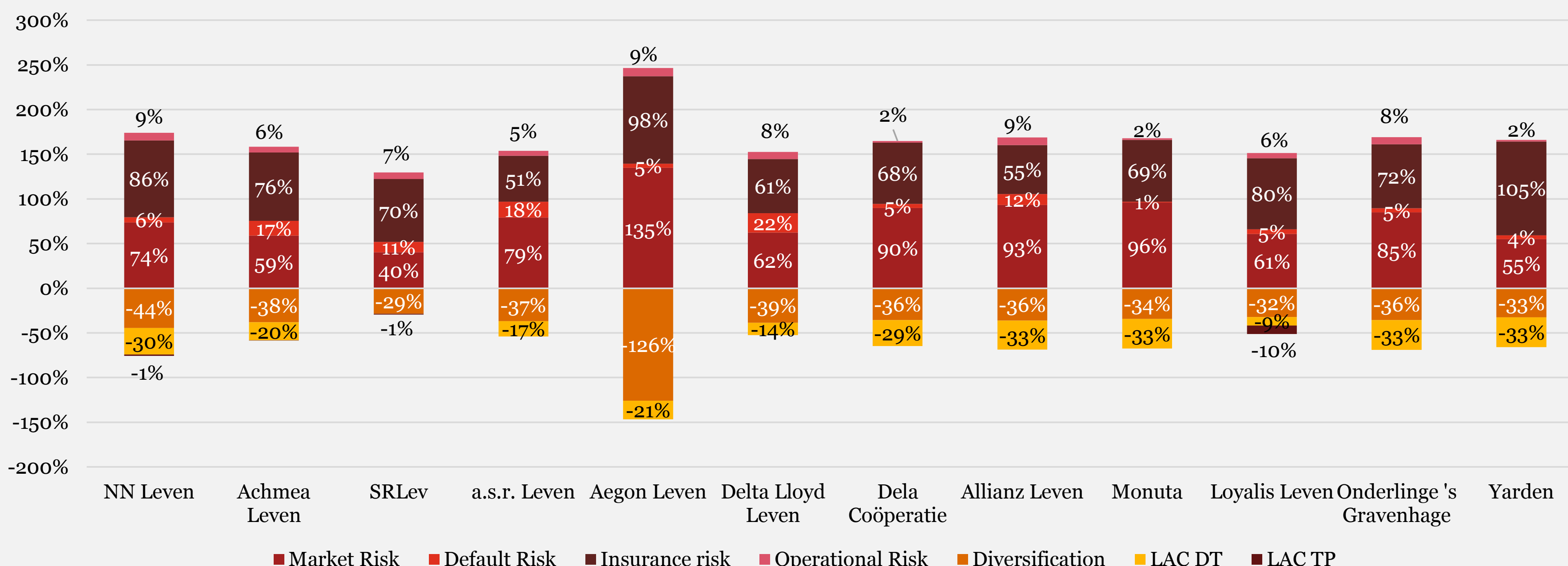
The main areas of attention and change related to:

- The offsetting effect of tax (LAC-DT) on required capital
- Treatment of intra-group and non-insurance operations
- Risk margins determinations
- Treatment of risk transfer solutions

NN NL Leven and AEGON NL Leven apply a Partial Internal Model – the other insurers apply the Standard Formula.

The size of the bubble represents the Solvency II ratio. The bigger the bubble, the higher the ratio.

SCR Components
Insurance companies: leveraged market risk takers?



The profile of solvency capital requirements (SCRs) of the life insurance companies show that on average market risk, although being the main component, is followed closely by insurance risks.

Zooming in on the gross components, one sees that SRLev, Yarden and Achmea have the least market risks. NN Leven and AEGON Leven report their market risks on an internal model and are therefore obliged to cover sovereign bond investments as well, of which the risk is partly offset by dynamic Volatility Adjustment.

* SCR components expressed as percentage of SCR

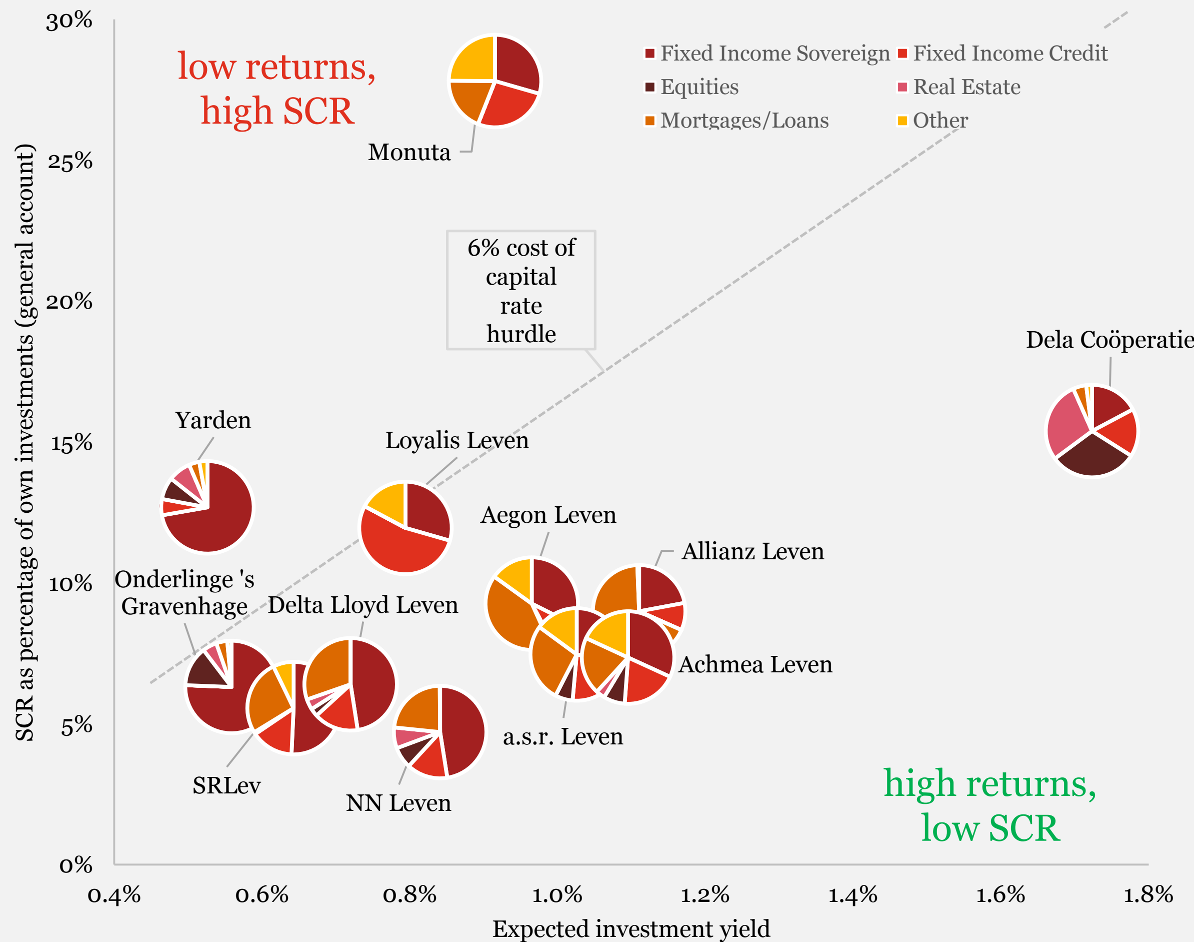
** diversification benefit is benefit of diversification between insurance risk, market risk and default risk, not within these modules

*** Aegon does not disclose diversification within the risk modules, e.g. SCR market risk is the sum of all underlying SCRs for individual market risk.

**** The SCR composition of DELA contains the net SCR of underwriting and market risk

The challenge of making a sound return on capital

Expected investment income versus SCR

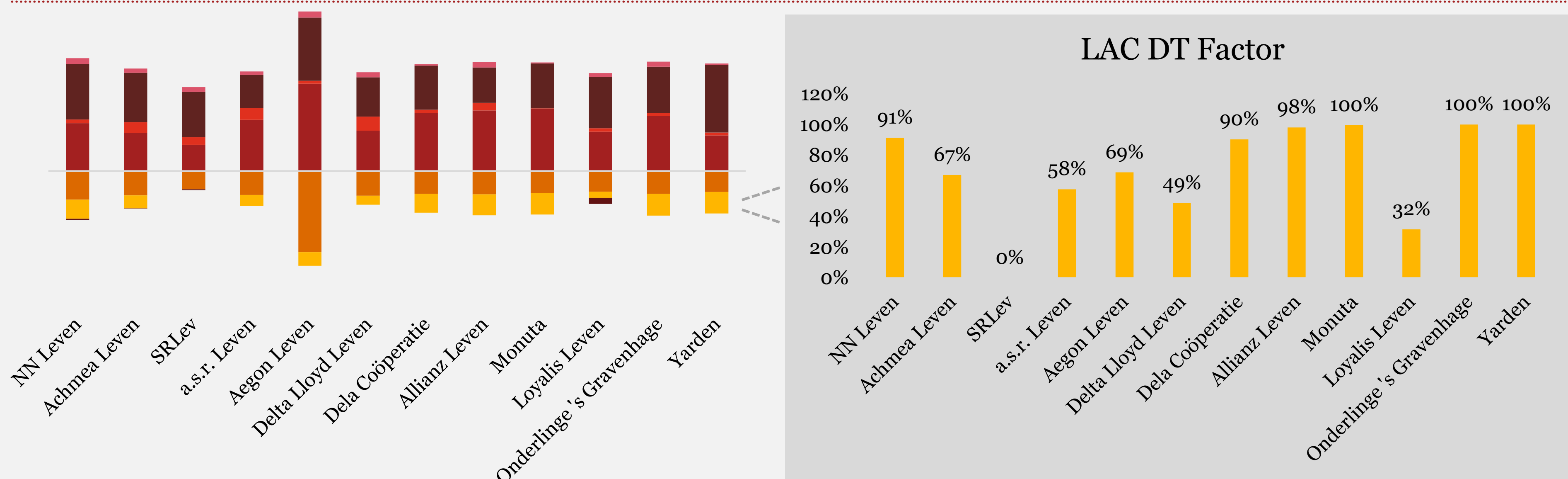


The SCR is quite a hurdle for insurance companies: it is roughly between 5% and 10% of their investments for general account. Under Solvency I, this was approximately 4%.

Based on the reported investment mix, an expected yield has been estimated (see yields below). This rate has been compared against the total SCR, expressed as a percentage of the investments for general account.

Expected yields
Fixed income sovereign: -0.1%, credit: 1%, equities: 3%, real estate: 2%, loans & mortgages: 1.5%, other (alternatives, derivatives, cash positions): 1.5%

LAC DT: moving target with large potential offsetting impact on SCR



LAC DT factor represents the percentage of tax recoverability (25% flat tax rate) which is used to offset the capital requirement. A full LAC DT factor of 100% represents a 25% deduction of the gross SCR (i.e. sum of basic SCR, SCR for operational risk and SCR adjustment for loss absorbing capacity of technical provisions).

LAC DT can be managed by identifying management actions that help recovering future profitability.

Guidance of DNB in February focused on:

- Ability to get to required solvency ratio after stress within reasonable time frame
- Ability to maintain expected taxable profits after a shock emerges
- Recoverability of DTA on the balance sheet

This has lead to several adjustments to the LAC DT methodologies and is still under review at several companies

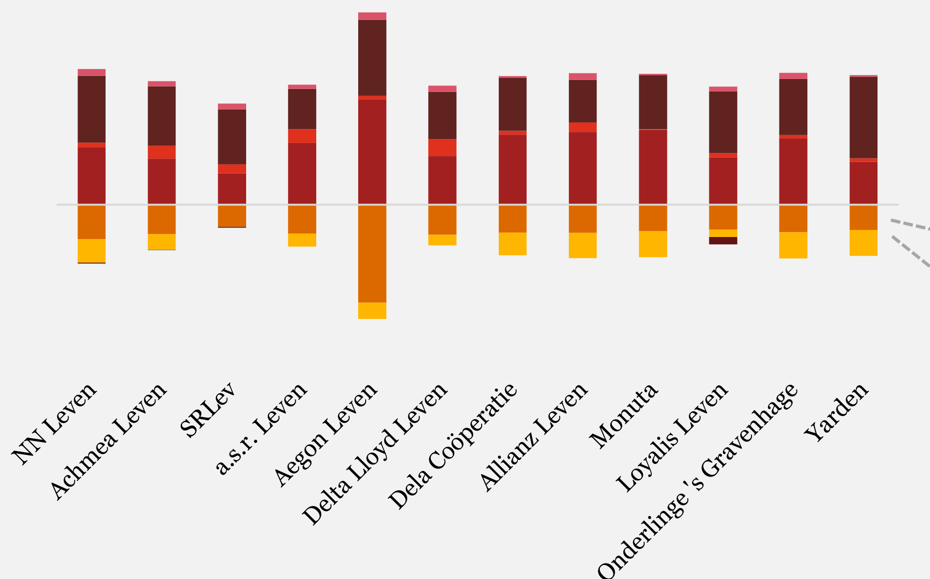
Diversification: measuring and managing

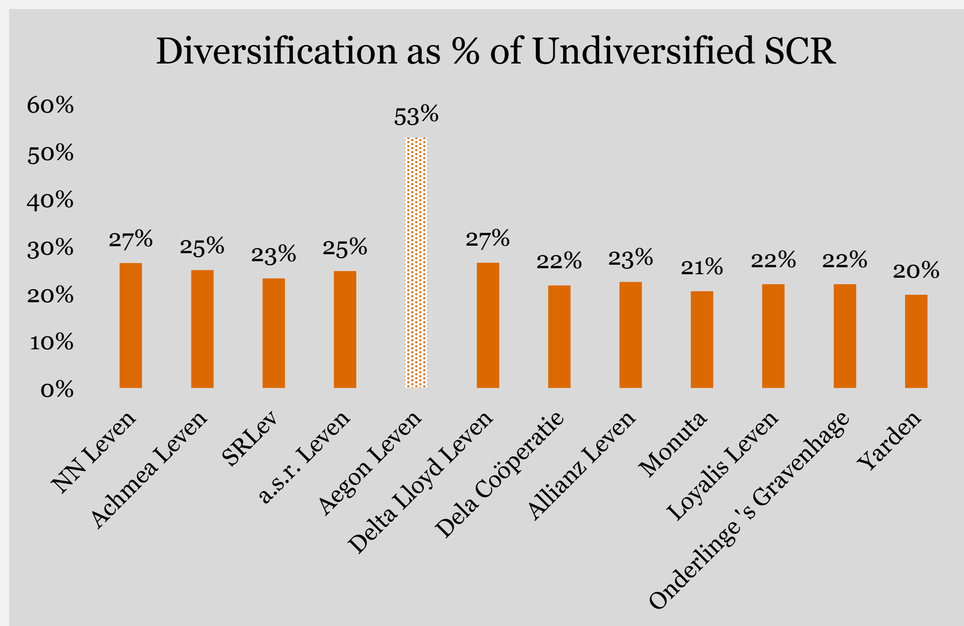
Another offsetting element on the SCR

Diversification effects emerge, at several levels in the Solvency II framework:

1. Diversification between market risk categories capital requirements (e.g. between credit risk and equity risk)
2. Diversification between insurance risk categories capital requirements (e.g. between lapse risk and mortality risk)
3. Diversification between combined market risk capital requirement, insurance risk capital requirements and default risk capital requirement.

This is based on the Standard Formula approach. Internal models can have more granular correlation matrices leading to an even wider diversification benefit.

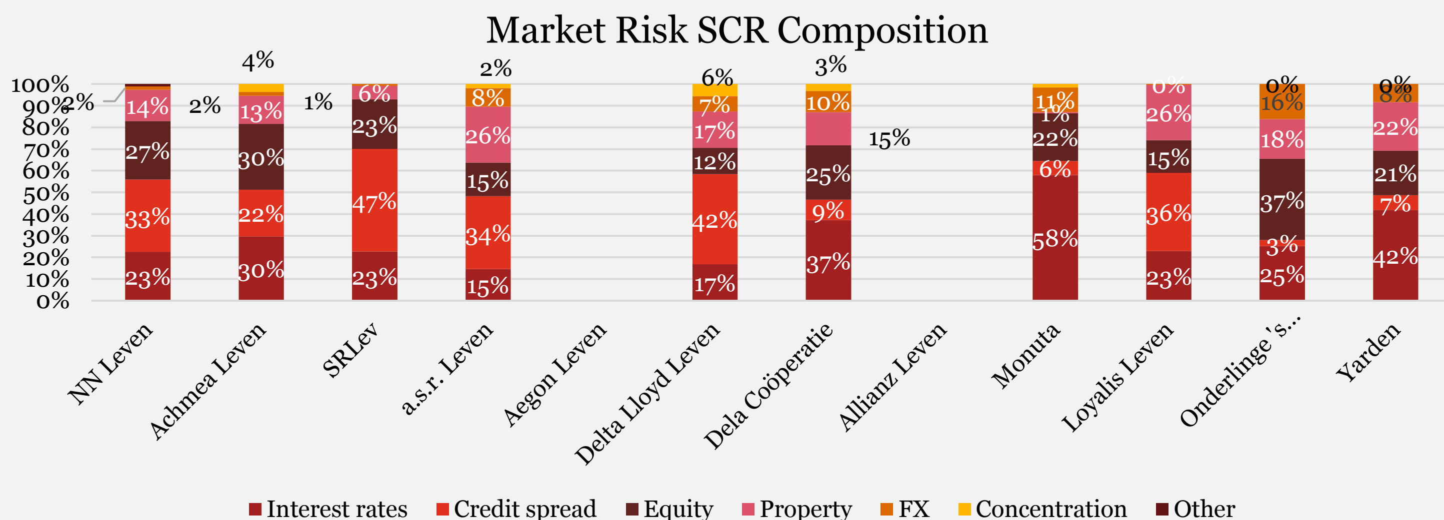


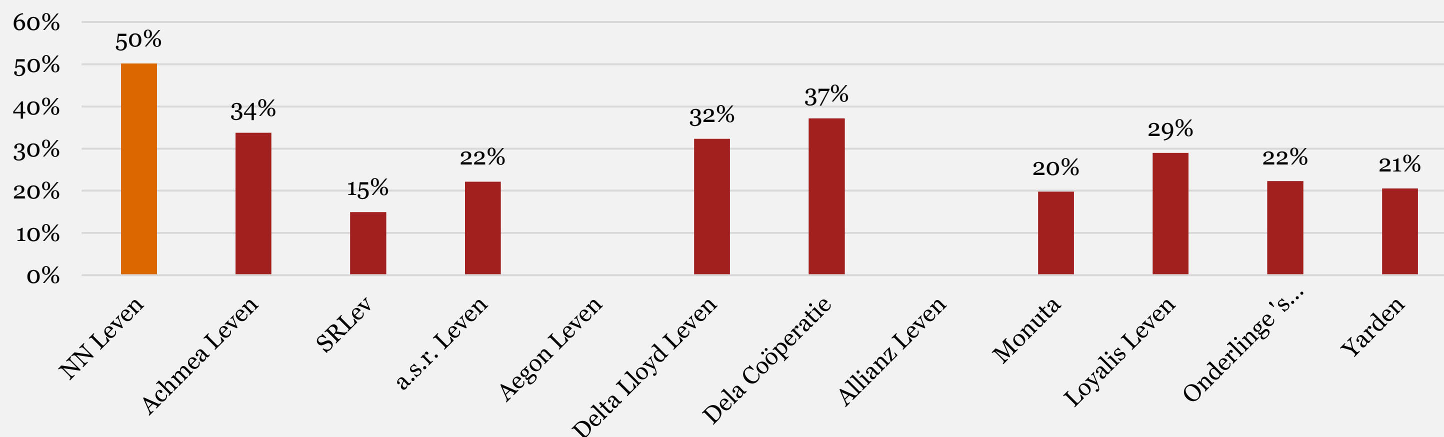


Diversification benefits range between 21-53%.

AEGON's diversification seems to be larger, as it also captures diversification within the modules market risk, default risk and insurance whereas the other ratios represent diversification between insurance risks, market risks and credit default risk.

Zooming in: diversification between market risks



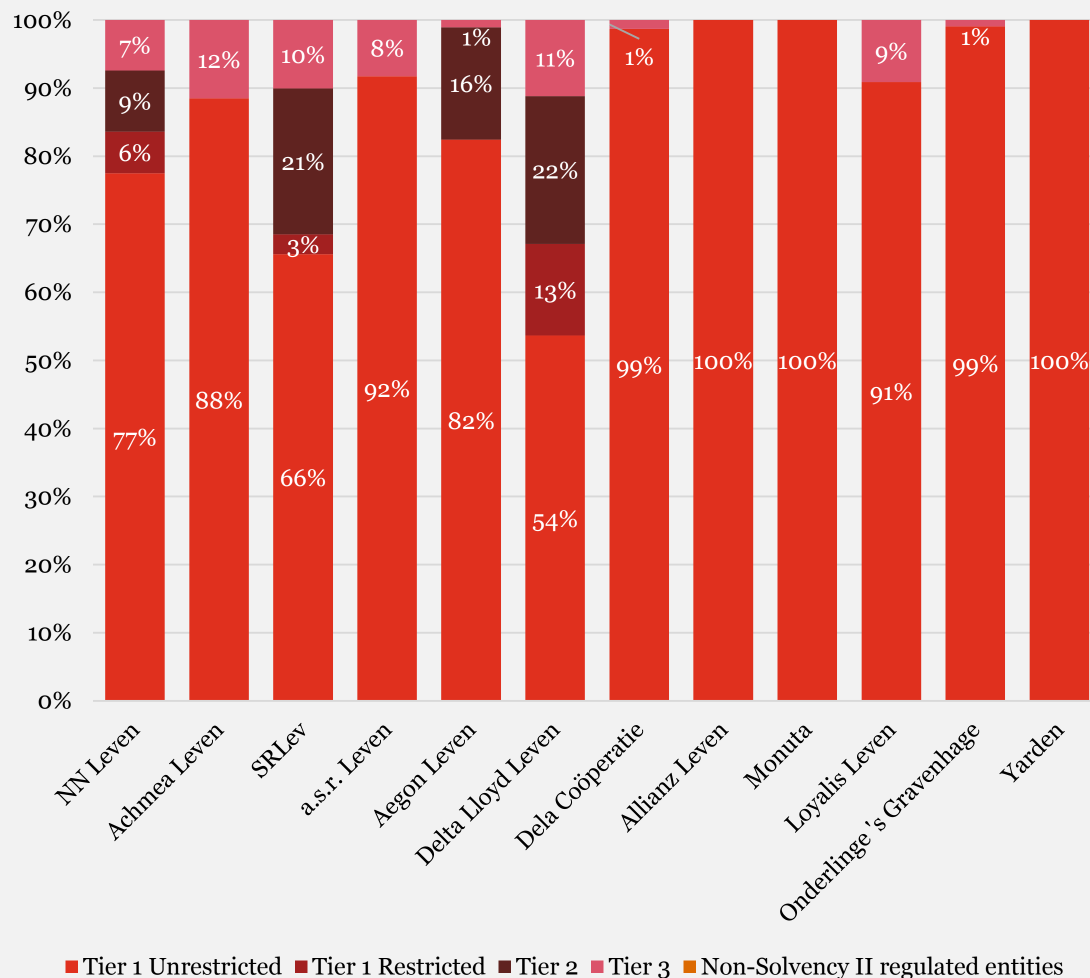


Overall the diversification benefit is between 15% and 50%.

NN Leven is the internal model user amongst these insurers (AEGON does not disclose diversification within risk modules). NN's 50% benefit indicates the internal model captures more diversification benefits than is possible under standard formula.

Allianz Leven's market risk decomposition is not available.

High quality of Solvency II capital

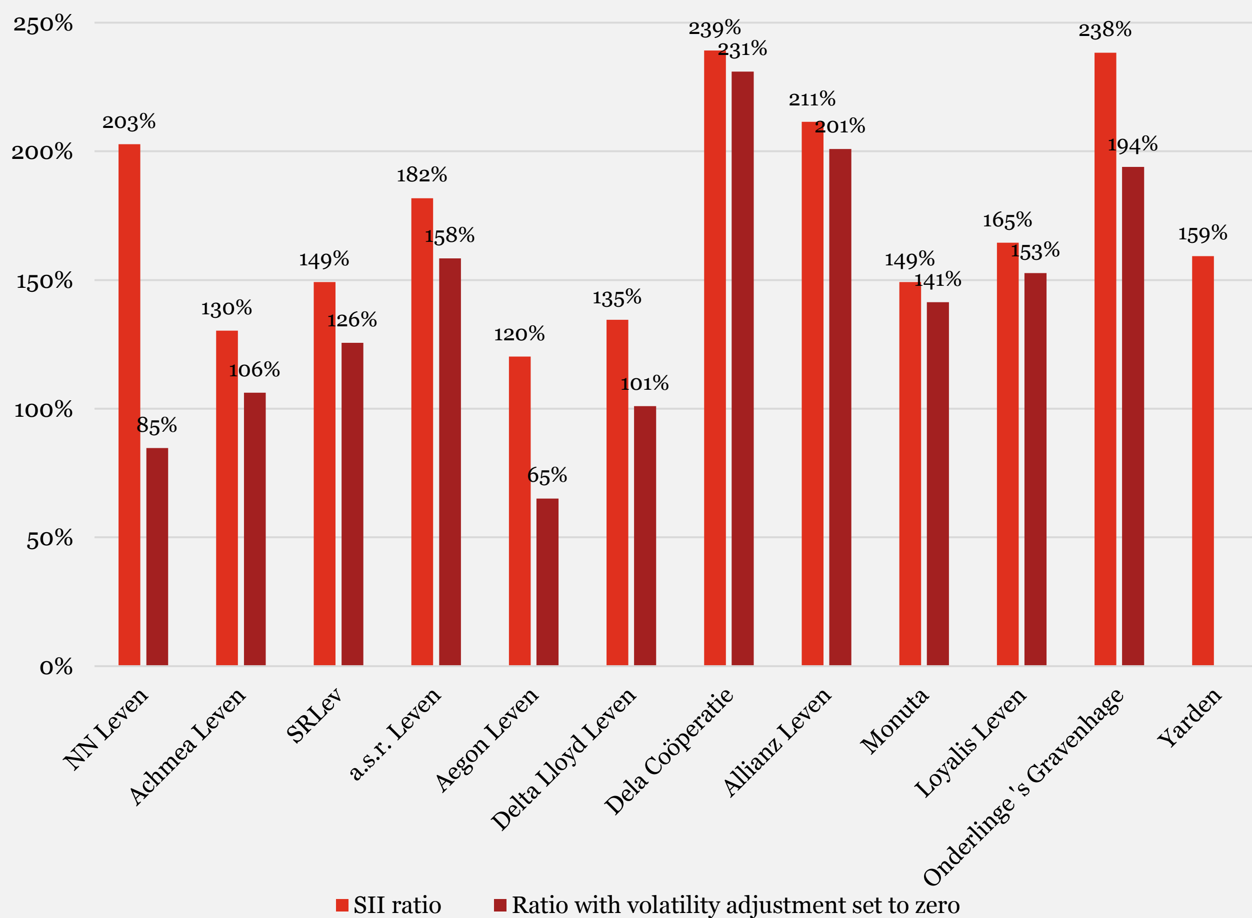


The quality of the own funds in general is high in the Netherlands – insurers tend to have a large portion of Tier 1 capital. An overview is provided in the graph.

However, still some insurers reached the quantitative limits set on the eligibility of Tier 2 en Tier 3 capital. This has an effect of more than 25% points on the Solvency II ratio of Achmea Leven and Aegon Leven.

	Non-eligible capital (EUR m)	SII ratio points
Achmea Leven	674	29%
Delta Lloyd Leven	33	1%
Loyalis Leven	35	24%
NN Leven	227	6%
SRLev	191	9%

Impact of volatility adjustment on SII ratio



The impact of setting the volatility adjustment can be significant.

NN Leven and Aegon Leven see their solvency ratio drop below 100%. This is a result of the dynamic VA in the SCR for spread risk. Without this non-dynamic assumption (and just assuming a zero volatility adjustment) would yield a smaller drop in ratio.

The information is not available for Yarden.

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