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Symmetric adjustment of the equity capital charge under Solvency II–Analysis and forecast for 2019 and 2020

The Solvency II capital charge is an important aspect in portfolio construction and asset allocation for insurance companies. For equities a capital charge with a variable component – the symmetric adjustment – is used. This article explains the calculation of the symmetric adjustment and also makes a projection for the remainder of 2019 and 2020.[1] This projection shows that the symmetric adjustment may well remain negative in the coming period, making equities – ceteris paribus – relatively attractive from a capital point of view.

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Solvency II is the regulatory framework for European insurance companies since January 1, 2016. The solvency capital requirement (SCR) is a crucial element under Solvency II. Because Solvency II is a risk-based framework, riskier assets are typically charged with a higher SCR than less risky assets. An example is given below for different asset classes.

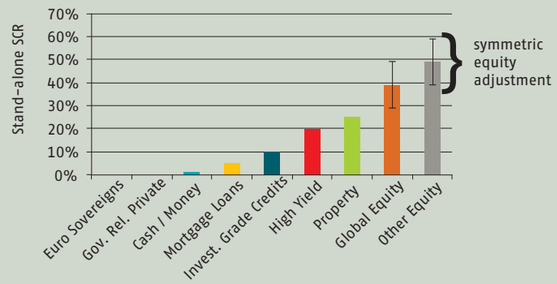

Figure 1: Overview of the solvency capital requirement (SCR) under Solvency II for a range of asset classes.
Source: Aegon Asset Management.

We consider the stand-alone SCR here, so before diversification and tax effects. We also assume that interest rate and currency risk are hedged on the overall balance sheet. This figure shows that the SCR is zero for euro sovereign bonds (and euro government related bonds) and very low for cash or money market investments. The SCR increases for bonds with longer maturities or lower ratings.

For more risky categories (like equities), the SCR is not fixed but changes over time. The maximum deviation in SCR from the base value is 10%-points. In simple terms, the SCR for equities goes up in a bull market, while the SCR goes down in a bear market. This mechanism – known as the symmetric equity adjustment – makes equities more capital expensive (i.e. less attractive) under Solvency II in an upward market and vice versa. This is done to suppress procyclical investment behavior of insurance companies.

DEFINITION OF THE SYMMETRIC ADJUSTMENT

The symmetric adjustment (SA) is described by the following formula:[2]

$$SA = \left[\frac{1}{2} \left(\frac{CI - AI}{AI} - 8\% \right) \right]^{+10\%}_{-10\%}$$

with:
AI = average value over 3 years of the global equity index
CI = current value of the global equity index

The global equity index should represent the average composition of European insurers' equity portfolios. The 8% term of this formula accounts for the long-term return in equity markets. This means that the expected growth for the ratio between the current index and the average index is +8%.

To illustrate this, we searched for the level of equity performance where the symmetric adjustment would be exactly 0%. It turns out that the equity market would need to grow at a constant annual rate of +5.34% in order to reach a value of zero for the symmetric adjustment. To maintain the upper limit of 10%, equity markets would need to rise by at least 18.76% per year. They would need to fall by at least -8.01% per year to maintain the lower limit of -10% for the symmetric adjustment.

HISTORICAL DEVELOPMENT OF THE SYMMETRIC ADJUSTMENT

The following figure presents the official level of the symmetric adjustment as published by EIOPA.

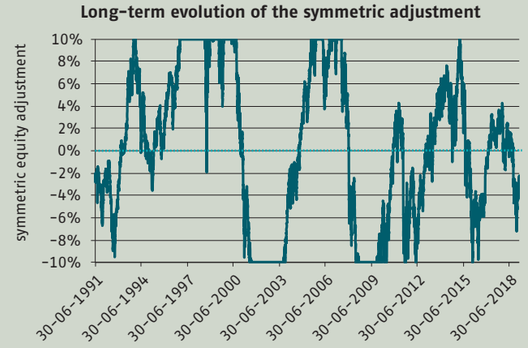

Figure 2: Evolution of the symmetric adjustment over a long historical period. Source: EIOPA, as of February 28, 2019.

This adjustment is very volatile, as is shown in the figure. It can go from one extreme point to another in only one year, as was the case in 2000-2001 and in 2007-2008. In order words, the amount of capital that an investor needs to set aside for equity investments can vary significantly from one year to the next. In relative terms, the capital charge for equity can vary by almost 70% for equity type I (50% for equity type II).

PROJECTION FOR 2019 AND 2020

At the end of February 2019, the symmetric adjustment is equal to -2.45%. From this starting point, we have made a forecast for the remainder of 2019 and 2020. We find that the strongly negative equity performance at the end of 2018 tends to lower the capital charge for equity in the upcoming period, see the figure below.

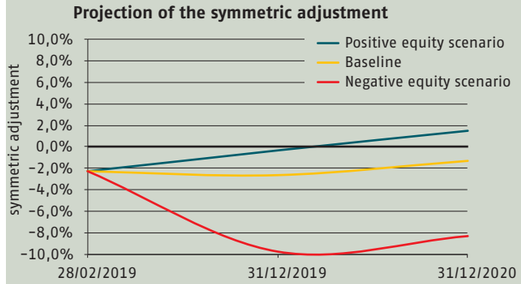

Figure 3: Projected evolution of the symmetric equity adjustment during 2019 and 2020. Equity growth projections are based on current market views by Aegon Asset Management Netherlands. Source: Bloomberg; Aegon Asset Management calculations as of February 28, 2019.

The yellow line, for instance, shows the level of the symmetric adjustment for our baseline growth expectation for the equity markets. The decrease of the equity markets at the end of 2018 clearly creates negative pressure on the symmetric adjustment, leading to relatively low projected values for the rest of 2019 and 2020.

CONCLUSIONS

After strong fluctuations over the last two years, the symmetric adjustment is now negative. This means that the capital charge for equities is currently relatively low under Solvency II. The symmetric adjustment can change rapidly, depending on the evolution of the underlying basket of equities. However, in our projections for 2019 and 2020 we mainly see a negative symmetric adjustment, except in our positive equity scenario. This is due to the negative equity performance at the end of 2018, which creates a negative drag on the symmetric adjustment for 2019 and 2020. Thus, all other things being equal, the equity asset class continues to present an opportunity in terms of asset allocation, as the capital charge for equity may well stay below its base level in the coming period. ■

1 – An extended version of this article is available at https://www.aegonassetmanagement.com/globalassets/asset-management/netherlands/news-insights/documents/2019/symmetric-adjustment-of-the-equity-capital-charge-under-solvency-ii.pdf

2 – See https://eiopa.europa.eu/Publications/Reports/EIOPA-BoS-15-120_Final_report_ITS_Equity_dampener.pdf.