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DWS

April 2024 | Regulatory insights

Solvency II Review and Long-Term Equity Investments: A New Era for Private Equity and Infrastructure Investments?

In January 2024 the final draft of Solvency II Review was agreed between EU Commission, EU Council and EU Parliament. The following analysis discusses the potential implications for public and private equity investments, focusing on capital-efficiency and ALM considerations.

Introduction

The January 2024 compromise between the EU Commission, EU Council and EU Parliament on the reform of the Solvency Directive ("Solvency II Review")[1] contains material changes in the way Continental insurers will be allowed to operate in coming years, particularly with regards to rules surrounding long-term equity investments (or "LTEI").

The latter has always been a "sore point" for EIOPA (the European Insurance and Occupational Pensions Authority). In a 2021 paper[2] the regulator highlighted how only 17 insurers (less than 4% of regulated insurers) were using LTEI, and infrastructure assets, in particular, have been singled out by the EU Commission as an area where insurer capital should be incentivized.

If we compare the average European insurer and pension fund exposures to equity and infrastructure funds, the difference is staggering: at the end of September 2023, only 3.4% of general account (i.e. non unit-linked) insurance assets were invested in equity strategies, vs 15.5% for defined benefit pension funds, and infrastructure funds represented only 1.5% of insurers allocation (vs 2.7% for pension funds)[3]. As a theoretical exercise, if insurers filled the equity and infrastructure allocation gap with pension funds, the potential money in motion would be a very large EUR 850bn.

This paper analyzes the two main changes affecting the insurance capital treatment of equity investments: amended criteria for the Long-Term Equity Investment (LTEI) classification, and tweaks to the "symmetric adjustment" (i.e. the regulatory capital add-on based on cyclical factors). This analysis also discusses the likely effect of these changes, and is structured as follows: initially touch on the regulatory capital treatment of equity investments under Solvency II and proposed changes; then analyze the capital-efficiency and ALM implications of the Solvency II LTEI reform. We will then conclude with some key takeaways for Life and Health, and Non-Life insurers.

[1] Proposal (published on 19th January 2024) for a Directive of the European Parliament and of the Council, amending Directives 2009/138/EC, 2002/87/EC and 2013/34/EU
[2] EIOPA: "Background document on the opinion on the 2020 Review of Solvency II" published in June 2021
[3] Based on EIOPA's SQ asset exposures for Q3 2023 for insurers (non-unit linked) and defined pension funds, using the following CIC4 categories: equity funds, private equity funds, infrastructure funds. Private equity differences are particularly large: only 0.5% of the insurer balance sheet is allocated to these strategies, vs 4.8% for pension funds.

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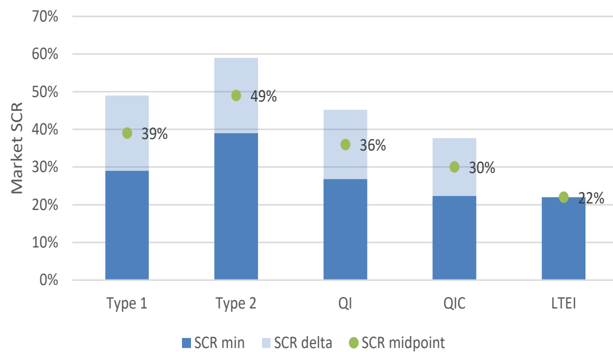
Regulatory background

Article 171a of the Solvency II Directive[4] defines five main equity capital treatments under the standard formula approach[5]:

— Type 1 & "qualifying unlisted" equities (simply defined as "Type 1" in this paper): EEA/OECD listed equities or funds/portfolios of EEA/OECD unlisted "low risk" equity characterized by sufficient diversification (e.g. max 10% issuer exposure);
— Type 2 Equities: private/unlisted equities that do not fulfil the above criteria, as well as non-OECD equities[6];
— Qualifying Infrastructure ("QI"): equity interests in SPVs whose sole purpose is to own, finance, develop or operate an EEA or OECD infrastructure asset;
— Qualifying Infrastructure Corporate ("QIC") equity: shares in corporates whose main revenue source is derived from infrastructure assets located in EEA/OECD countries; and
— Long-Term Equity Investments ("LTEI"): EEA[7] listed and unlisted equities that, among other things, need to be held for at least five years.

Standard formula capital consumption



Source: DWS International GmbH, EIOPA, as of March 2024

In addition, a symmetric adjustment is added to all but LTEI investments[8]. The Solvency II Review agreed text widens the symmetric adjustment corridor from a +/- 10% to a +/- 13% range. While this shift re-emphasizes the anti-cyclical nature of this capital add-on (e.g. the capital charge was negative during Covid, when equity valuations were depressed), we believe the overall implications of this change are rather small.

More importantly, depending on the equity type classification, specific Solvency Capital Ratio (SCR) charges apply to the market value of the investment, as highlighted by the above chart. Among all, the LTEI classification is clearly the most beneficial, envisaging the lowest capital charge (22%). Yet this capital treatment has not been widely adopted by Continental insurers, as a result of three main restrictions:

1. The requirement to ring-fencing the LTEI assets;
2. The requirement to identify and assign the LTEI assets to a corresponding pool of insurance obligations (thus requiring the insurer to restructure their insurance liabilities); and
3. Challenges in defining and testing LTEI under a "no forced sale" requirement (the legislator requires the investment to be held for a period of at least 10 years under not-universally agreed "stressed conditions").

The Solvency II Review revised text introduces an updated LTE definition (via the new article 105a), effectively addressing the above issues. The first two restrictions are being removed, allowing insurers to utilize LTEI irrespective of their liability structure. Meanwhile, the third "no forced sale" requirement is being eased by merely stipulating that "a policy for long-term investment management is set up for each long-term equity portfolio and reflects the undertaking's commitment to hold the global exposure to equity in the sub-set of equity investment for a period that exceeds five years on average."

[4] Commission Delegated Regulation (EU) 2015/35 of 10th October 2014, including amendments as of 30th September 2015, 8th June 2017 and 8th March 2019.
[5] Other equity types, such as strategic and duration-based equities, are not discussed in this article.
[6] This category also includes commodities and any equity fund not providing look-through to the underlying assets.
[7] Solvency II Review will broadens this to EEA or OECD countries, effectively aligning the LTEI definition to that of the other equity types.
[8] The symmetric adjustment is applied using a fully loaded (100%) factor for equity types 1 and 2, and partially loaded (92% and 77%, respectively) for QIC and QI investments

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Overall, DWS believes the Solvency II Review legal text provides ample potential for a wider adoption of LTEI across European insurers. However, the “devil is in the detail” of the legal text, and on the leeway given to national regulators when it comes to supervising LTEI investments:

— On the point about the legal text, we note that some crucial details have not been defined yet. For example, Solvency II Review allows the LTEI capital treatment to be applied to funds, as opposed to requiring that it be done at the single equity holdings (as is the case, for example, with QI and QIC investments), so long as the investment vehicle is “low risk”. Yet the definition of “low risk” is left to the Delegated Acts, that will be adopted after the Solvency II Review is enacted.
— The point about national regulators is a direct consequence of the previous point: the more clearly defined the legal text, the lower room for differing interpretations across borders. In this regard, we feel country-specific LTEI asset valuation and reporting requirements (e.g. in relation to private equity assets) could weigh on, or facilitate, a broader LTEI adoption.

Capital efficiency considerations

In the following analysis, DWS will mirror the equity solvency capital treatments currently in place (type 1, type 2, QI & QIC), and compare their current capital efficiency (i.e. pre-Solvency II Review, when the LTEI approach is not used) with their future potential (i.e. post-Solvency II Review, assuming LTEI is widely adopted in the industry). In all cases, we will assume that the investment is done via a sufficiently diversified portfolio or fund, whose holdings benefit from a uniform solvency capital treatment.

The analysis will examine the impact of the LTEI reform by comparing the pre- and post-reform capital efficiency of private equity investments compared to their equity and fixed income alternatives.

An equity perspective

The capital efficiency of equity alternatives is calculated as the ratio between expected return (as determined by the December 2023 DWS long term capital market assumptions) and the market SCR for each equity asset class.

Pre-Solvency II Review, we assume the market SCR for an investment in European, public infrastructure to be Type 1 in nature, Emerging Markets (“EM”) as Type 2, and infrastructure equity to be QI or QIC.

Post-reform, European, public infrastructure equity and QI/QIC investments are eligible for the LTEI treatment, and therefore attract a 22% market SCR, whereas an investment in an EM equity strategy continues to be classified as equity type 2, due to its non-EEA/OECD exposure. Moreover, since LTEI does not differentiate between QI and QIC, a unified “private infrastructure” equity can be considered.

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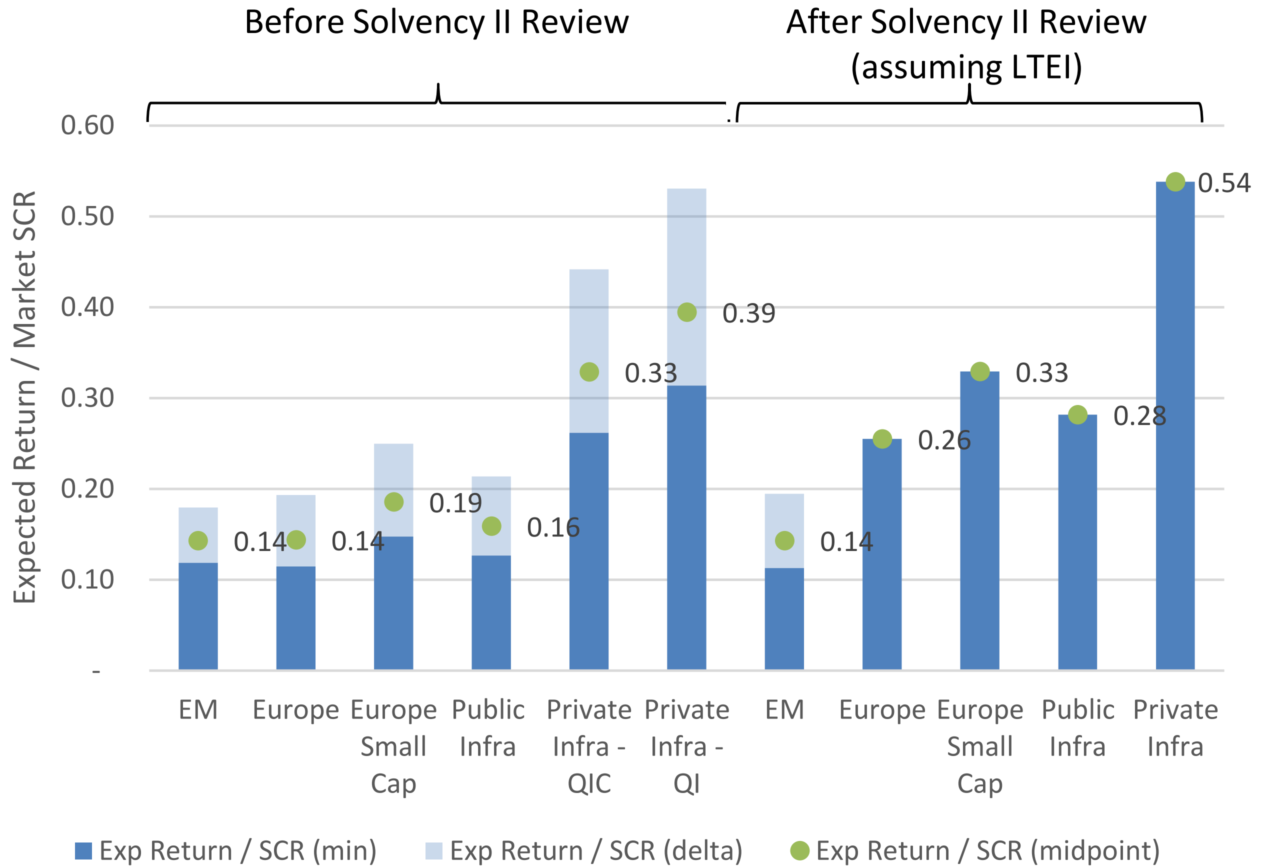
Solvency II capital efficiency, example



Source: DWS International GmbH, MSCI, EDHEC, Dow Jones, Bloomberg, as of February 2024
For illustrative purposes only.
The private infrastructure equity asset class is proxied by the EDHEC Infra 300 Unlisted Equity EW Index, public infrastructure equity is proxied by Dow Jones Brookfield Global Infrastructure index, the Europe equity asset class is proxied by the MSCI Europe index, and EM equity is proxied by the MSCI Emerging Markets index.

The Market SCR is derived from the standard formula (without look-through) assuming fully currency-hedged asset classes, using an equity risk-sub-module, and taking into account the applicable symmetric adjustment

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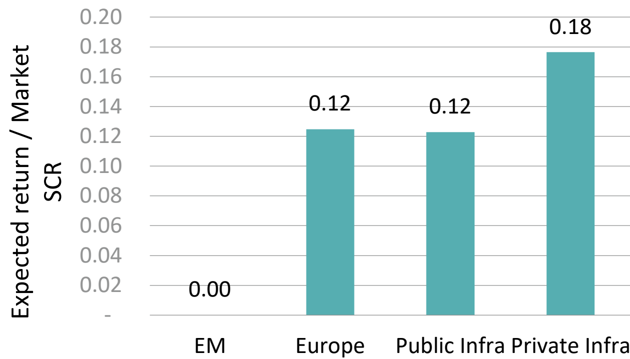
Capital efficiency improvement post LTEI reform



Source: DWS International GmbH, MSCI, EDHEC, Dow Jones
For illustrative purposes only.

The DWS analysis concludes the following:

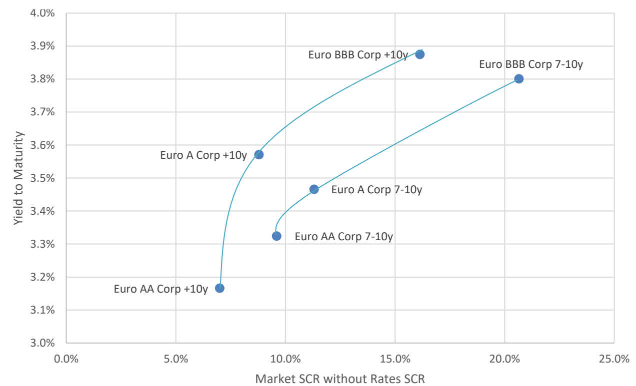
— EU Home bias: Solvency II Review increases the attractiveness of EEA/OECD investments: for every euro invested in listed European or infrastructure equity, the average insurer is able to extract 12 cents in additional capital-adjusted returns. By the same token, the reform decreases substantially the attractiveness of emerging market equity, thus potentially increasing a EU "home bias" among insurers;

— Liquidity premium multiplier effect: the advantage of a lower capital charge is associated with the requirement that LTEI assets be held for a minimum of five years. In this respect, LTEI essentially remunerates illiquidity: while there is an advantage in classifying listed equity as an LTEI, why not harvest some illiquidity premium in the process? For example, the already higher returns of private vs public infrastructure equity can be further amplified by LTEI. In this case substantially higher (18 cents for each euro invested) capital-adjusted returns are generated by both an illiquidity premium at the numerator, and by a lower SCR at the denominator (22% instead of 30% or 36%). More broadly for private equity[9] investments, if we assume a 2-3% equity illiquidity premium, the effect of a lower capital denominator (22% instead of 39%) is an increase in capital-adjusted returns of 5 cents;

A fixed income perspective

LTEI strategies that are meant to be held for a prolonged period of time (five years or more) and private equity investments are often used as an ALM substitute for long-dated, buy-and-maintain investment-grade corporate bonds.

Capital efficiency improvement post LTEI reform



Source : DWS International GmbH, ICE BofA ML indices, Bloomberg as of January 2024. For illustrative purposes only.
Market SCR is assumed to be equal to each index's Spread SCR

Within this framework, the capital efficiency of corporate bond indices can be expressed as the ratio between the prevailing yield to maturity and the market SCR: the fixed income segment closest to the upper left corner of the chart is the most capital-efficient. In our case, EUR A >10-year corporate bonds feature the highest capital efficiency ratio, equal to 25%.

To obtain the same level of capital efficiency, an equity strategy classified as equity type 1 would need to yield a 9.6% expected return (i.e. 25%*39%). This break-even drops to 5.4% when applying a LTEI treatment (i.e. 25%*22%).

As a result, the target return for LTEI-compliant investments do not need to "aim for the moon." For example, in the current market environment (1Q2024), a 5.4% IRR threshold is within reach of many "lower risk" (i.e. less opportunistic-driven) private equity funds. The "low risk" qualification is indeed an important element in the Solvency II Review legal text, thus suggesting EIOPA's intention to incentivize investments in this area of the market.

[9] It is difficult to include a more generic "private equity" asset class to the analysis, due to the heterogeneity of strategies in the market and consequently wide array of expected returns. The illiquidity premium estimate we provide in this article is based on the average delta between the returns of the Prequin buy-out index and those of the S&P 500 benchmark.

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Asset-Liability Matching (ALM) considerations

DWS believes Solvency II Review will likely affect ALM decision-making in two important aspects:

1. By explicitly requiring each insurer to set up their own liquidity plan;
2. By incentivizing the substitution of fixed income instruments with equity investments;

Barring a few notable exceptions, the first point is well understood in the insurance industry, although the regulation will introduce a stronger focus on cash-flow matching for short-duration liabilities. We do not expect this to significantly alter the prospects of LTEI adoption across the Continent, although, on the margin, it may skew interest towards more “bond-like” income-oriented LTEI-eligible assets (e.g. high dividend equity portfolios, or more cash-yield-oriented – as opposed to opportunistic - private equity strategies).

With regard to the second point, EIOPA[10] reports that the median European asset-liability duration gap is 5 years. This is an imperfect measure, as it is based on the modified duration of fixed income investments, and therefore does not fully capture the insurance investment universe[11]. DWS believes the LTEI reform will exacerbate this trend, to the extent that equity investments will be more broadly used as a substitute for fixed income, as discussed below for Life and Health and Non-life insurers.

Life & Health insurers

From an asset-liability matching perspective, long-term equity investments such as private equity appear to be a “natural fit” to Life and Health insurance portfolios (whose median duration is 11.9 years[12], similar to the tenor of many private equity funds). We believe the adoption of LTEI, though, will be differentiated across European national borders, based on cultural nuances towards equity investments, and the liability characteristics of each market:

— Swedish, Danish and Irish insurers, that have historically had a larger exposure to private equity investments, should benefit the most from the LTEI reform;

— Jurisdictions like Germany and the Netherlands, whose Life policies feature the highest surrender disincentives, have the potential to grow fastest, because the liquidity profile of their liabilities fits well with the long-term nature of LTEI investments; and

— The impact on French and Italian insurers will depend on developments around lapse rates, that have been relatively elevated recently. With market rates expected to peak in 2024, we see this risk as receding. Furthermore, the low PE exposure among Italian insurers presents an interesting untapped opportunity in the country.

Non-life insurers

For Non-life insurers (e.g. P&C), whose median liability duration is around 3.5 years[13], the LTEI classification has always been an unlikely outcome, due to the lack of long-enough liabilities that could be “assigned” to LTEI. Moreover, under the current system, LTEI requires each investment to be held for a period of at least five years, artificially annihilating each LTEI investment liquidity for a time horizon that is longer than the average Non-life liability duration.

— From an ALM perspective, DWS thinks Solvency II Review will affect LTEI adoption in two important ways: as anticipated in the regulatory paragraph to this paper, Solvency II Review is removing the requirement that specific liabilities be assigned to LTEI, effectively delinking LTEI considerations from specific liability requirements (in our view one of the tallest obstacles to overcome in order to reach a broader LTEI adoption across Non-life insurers); and

— The Solvency Review text softens the minimum five year holding period by applying it to the average exposure of all LTEI investments (as opposed to applying it to each one of them). This is a consequential change, in that it promotes the growth and diversification of long-term (e.g. private equity as well as listed equity) investments: the insurer will be able to more easily trade equities within the LTEI portfolio so as to access liquidity, realize gains/losses or simply allocate towards more promising opportunities.

With Non-life insurers entering the market, inflation considerations will also become more prominent: LTEI-eligible instruments with inflation-hedging characteristics (e.g.

[10] EIOPA Insurance Risk Dashboard, February 2024.
[11] The duration mismatch is calculated as the the modified duration of the fixed income assets minus that of the liabilities, and does not consider optionality such as future profit participation.
[12] EIOPA Financial Stability Indicators, duration of life (excluding unit-linked) technical provisions, 8th March 2023.
[13] EIOPA Financial Stability Indicators, duration of life (excluding unit-linked) technical provisions, 8th March 2023

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infrastructure and real estate) may play a role in protecting combined ratios, in case inflation-linked liabilities increases can no longer be absorbed via higher prices to customers.

Conclusion

Although the "devil is in the detail" of the legal text, and some uncertainty remains on the way national regulators will implement the Solvency II Review, DWS believes the reform has the potential to significantly increase adoption of LTEI across Continental insurers.

From a capital-efficiency standpoint, the LTEI reform has a multiplier effect on liquidity premia; the larger the expected return advantage of the illiquid asset class, the bigger the capital-adjusted return. For example, for each Euro invested in private infrastructure equity, the application of LTEI allows insurers to extract 18 cents more in capital-adjusted returns vs. a non-LTEI approach. In absolute terms, each percentage unit of LTEI solvency capital yields 0.54% in expected returns. On the other side, the reform also increases the EU "home bias" in SAAs, by making emerging market equity investments less palatable.

When looking at fixed income alternatives, LTEI investments with a target return of 5.4% or more are economically as efficient as A-rated, >10-year corporate bonds, thus creating a regulatory incentive for low target return / "low risk" (i.e. more income-oriented, as opposed to opportunistic) public and private equity strategies.

From an ALM perspective, LTEI-compliant equity investments are likely to contribute to a duration gap widening, as a result of fixed income substitution effects. Across clients, the LTEI reform should incentivize private equity investments by Life and Health, and favors Swedish, Danish and Irish insurers. Importantly, though, and different from the past, Non-life insurers appear to be empowered to use the LTEI regulatory capital tool, potentially creating additional demand for inflation-hedging LTEI products (e.g. infrastructure and real estate).

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