

The logo for The Infrastructure Forum, featuring the text "The Infrastructure Forum" in a green, sans-serif font. A vertical green line is positioned to the left of the text, starting from the top of the word "The" and extending downwards past the word "Forum".

The Infrastructure Forum

HM TREASURY - REVIEW OF SOLVENCY II CONSULTATION RESPONSE BY THE INFRASTRUCTURE FORUM JULY 2022

The Infrastructure Forum

1. The Infrastructure Forum (TIF) brings together the key players in infrastructure, whether investors, operators, contractors, economic regulators or professional advisors. It has become the meeting place for confidential and constructive discussion about ways to promote the development of infrastructure networks in the UK and to broaden the range of options available to policymakers and regulators.
2. The expertise of its team, the knowledge and experience of its specialised working groups, and its excellent trusted relationships with public authorities and agencies in the UK and internationally all contribute to its effectiveness.

Introduction

3. The infrastructure sector enjoys a close working relationship with the insurance sector, through its use of diverse insurance products and services, and through access to finance made available by insurance companies for infrastructure investments. Accordingly, the Infrastructure Forum welcomes this opportunity to contribute to the HM Treasury consultation on the future of Solvency II, insofar as it relates to areas of common interest between the insurance and infrastructure sectors.
4. The Government has described the current consultation on Solvency II as being intended to:
 - spur a vibrant, innovative and internationally competitive insurance market in the UK;
 - ensure policy holders remain protected and firms remain financially stable; and

- support insurance firms to invest in long-term capital such as infrastructure, to boost growth and support jobs.
5. It is principally in the relation to the last of these three objectives that TIF is responding to the consultation through this paper. Therefore, the comments made below relate to very few of the formal questions posed within the consultation document, so have not been structured to line-up with this numbering. That said, the comments made can be considered to align broadly with the topics addressed in question 4.1, viz: how might reforms increase the flow of investment capital into infrastructure and green assets more generally.

The Infrastructure Sector

6. For the purpose of this paper, the infrastructure sector is taken to include: (i) economic infrastructure within the transport, energy, digital and environmental (including water, sewerage and waste) sectors, which may be currently regarded as core infrastructure; and also (ii) those investments in green assets and emerging technologies which are likely to be regarded as core infrastructure in due course (for example, carbon capture and storage, and hydrogen-based technologies). The infrastructure assets are assumed to be privately financed, so that insurance companies investing through equity and debt (and related) instruments are exposed to the corporate and project risks associated with the development, construction, operation of infrastructure assets and associated markets. Insurance companies are also able to invest in debt instruments issued by public sector entities to finance their infrastructure (e.g. TfL). However, the potential impact of reforms in Solvency II on this aspect of infrastructure finance is not explicitly considered in this paper.

International Context

7. The UK has not been very successful in getting pensions and insurance investment into infrastructure. There are a number of reasons for this, some of them cultural, some of them due to the competition in the sector leading to many more participants and therefore not having the scale of others internationally. However, the regulatory barriers stopping these firms and organisations from investing in these assets are also very real.
8. Compared to Australia, Canada and the US there is significantly less infrastructure investment from this sector. Whilst a number of the big international pension and insurance players invest and own infrastructure within the UK, the number of UK players investing domestically is fewer than might be expected.
9. In all of these countries there is an expectation within regulation that infrastructure investment should be a significant part of a portfolio. In particular, we suggest that a good example is the private placement market in the United States, where insurance companies do participate in senior debt issues, including in the infrastructure and utility space. Quite a number of the UK insurers are participants in the US private placement market and there is a risk that without appropriate domestic reform, even more UK insurers could enter the US market.

10. The volume of private capital mobilised each year for investment in infrastructure globally is typically of the order \$100-200Bn pa, the vast majority through unlisted infrastructure funds. Renewable energy deals represent the largest segment (e.g. ~60% in Q1 2022). According to the consultation document Foreword (page 2), the proposed reforms could “unlock tens of billions of pounds for long term productive investment, including into infrastructure”. The numbers discussed are therefore highly unlikely to be transformative in international terms. However, they could be potentially significant in a UK context. In addition, reform should achieve an increase in competition, subsequently lowering prices and improving value for money to the end-users of the infrastructure and/or taxpayer.
11. Mobilisation of insurance capital can also increase the visibility of capital in the infrastructure space. This could provide an increase in stability, as more UK companies would become long-term financiers of these core infrastructure assets. It is important to note that there are many assets that insurers simply will not invest in, including new technologies where returns are uncertain, such as carbon capture and storage (absent a stabilising commercial structure, such as provided by a Regulated Asset Base (RAB) or Contract for Differences (CfD) regime). However, the extra money coming into the sector will free-up capital for traditional investors to focus on new and innovative infrastructure, if insurance money were focussed on more standard and tried and tested investments (see section 7).
12. Where the reform could mobilise more capital, will likely be from a relatively shortlist of institutions, many of which are already quite highly involved in the sector, such as: Aviva, Phoenix, L&G, M&G, Rothesay and PIC.

Product Potential - Eligibility

13. The increased investment by insurance companies in infrastructure assets, that is most likely to be enabled by the proposed reforms, is via (eligible) senior debt and to some extent subordinated debt instruments. Equity investments by insurance companies (especially life insurance) in infrastructure projects are expected to remain difficult, notwithstanding the proposed reforms, due to the lack of fixed cash flows needed to meet the Matching Adjustment eligibility requirements.
14. A key difference, which reform could enable, is the potential ability for insurers to be more flexible with their requirements, for example in terms of prepayment protection and the removal of the “cliff-edge” for sub-investment assets, which would substantially increase the investable universe from the relative position today.
15. Broadly, some of the key areas of potential reforms are:

Risk Margin (PV of future cost of holding unhedgeable risk capital):

- Potential for a significant reduction - around 60-70% for long-term life insurers.

- Reduction in pro-cyclicality, which is particularly pronounced in a low interest rate environment.
- The consultation claims that this will reduce incentives to reinsure longevity risk offshore.

Fundamental spread (allowance for default and downgrade risk):

- Reassessment of the fundamental spread to better reflect its sensitivity to credit risk (e.g. across asset classes and ratings).
- Such reforms should avoid introducing balance sheet volatility, e.g. fundamental spread should not be materially (or at all) impacted by short-term changes in market spreads. As currently proposed, the fundamental spread calculation would increase volatility and capital requirements by decreasing the matching adjustment benefit overall.

Matching adjustment (bond spread in excess of default and downgrade risk that is added to the liability discount rate):

- Broadening the range of assets eligible for matching adjustment, such as assets with construction phases and callable bonds, to allow more investment in long-term assets, such as infrastructure.
- Broadening the range of liabilities eligible for the matching adjustment (income protection and health insurance products).
- Easing the disproportionately severe treatment of matching adjustment breaches and assets that fall below BBB in matching adjustment portfolios.
- Faster assessment and approval of new asset types for inclusion in matching adjustment applications.

Reporting and administrative requirements:

- Easing reporting and administrative requirements that are derived from EU-SII regulations.

Relationship with other initiatives

16. The Pensions Infrastructure Platform (PIP) was set up with a target of raising £2bn in its first year under the auspices of the National Association of Pension Funds. It seemed that there were times when the PIP would achieve what it set out to, following investment in Thames Tideway through Dalmore Capital. But by 2014 three major UK pension funds, which have more than £65bn in investable assets, pulled out (BT, BAE, LPFA), with the LPFA citing that “as the PIP moved towards awarding its first mandate, it became clear the pricing and risk/return profile targeted by the PIP, as well as other aspects of the PIP cost structure, differed from those now required” (IPE Real Assets, 2014).

17. The PIPs first fund raised only £330m, and was placing the money in completed infrastructure rather than new schemes ([FT, 2014](#)). The PIP had therefore just added a further player into the already crowded secondary market, and reflected the absence of new opportunities in the infrastructure pipeline, an issue that insurers are once again likely to run into following Solvency reforms.
18. The PIP itself started with a confused model, with the whole idea behind the model being to drive down management fees via the conglomeration of asset managers activity, rather than specifically aiming to promote higher investment in infrastructure. The overall target of PIP was to raise £20 billion from the drop-in management fees and the value that would be created by the low-cost model.
19. However, by the time it had been created, as is often the case, the problem had moved on. The big issue was then not with the financing, but instead rested with the state of the UK's construction industry, with a lack of investment grade construction companies, nobody willing to take fixed price design build contracts and uncertainties around revenue streams and the subsidies required.
20. It is important to ensure that any reform of Solvency II does not suffer a similar fate. The reform needs to provide a significant shift in order to change the market and the assets insurers invest in, in order to meet the objectives of the reform as set out by the government.

Supply and Demand – Investment Pipeline

21. The primary constraint on investment by insurance companies in infrastructure assets is not so much the proposed reforms, which address demand-side capacity, but the lack of supply-side opportunities which would be eligible for investment, even if the proposed reforms are implemented – i.e. demand does not necessarily create its own supply opportunity.
22. Insurance companies investing Solvency II capital currently require assets that generate a running yield (or they must factor-in the cost of deferral) and are investment grade, such as are deployed within the capital plans for Regulated Asset Base (RAB) utilities. Eligible utility companies are typically multi-asset going concerns, but can be single assets under construction, such as the Thames Tideway Tunnel or the proposed Sizewell C Nuclear Power Station.
23. In order to really open-up insurance funding to the sector, one would need to consider how far to adapt the rules. For example:
 - A solvency regime which allowed firms to wholly own assets (debt+equity) more easily.
 - Allowing prepayment risk (i.e. not necessarily requiring make-whole (aka Spens) provisions, if the borrower wishes to repay the debt earlier than originally scheduled)

- Allowing more flexibility around construction risks such as:
 - Progressive draw-downs of finance (which insurance companies are already able to offer)
 - Construction delays
 - Final build size / capacity / output
24. Construction assets can present obstacles for insurance company investors where the funds are drawn down over time, rather than in a single tranche. If cash invested up-front is held on deposit, then when deposit rates were non-existent, there was a significant “cash-drag” on yields.
- More flexibility around market risk exposures (e.g. power prices).
 - Allowing firms to capture expected long term inflation where this is non-contractual (insurance companies can already allow for this, if it is included within the project contracts - such as power purchase agreement, or contracts for differences (CfDs)).
25. Clearly the government cannot provide all of the investment necessary to renew ageing infrastructure as well as build the new infrastructure required to meet demographic, technological and net zero challenges.
26. The issue is that the government has not yet decided how it will best involve private capital in new projects and has not yet therefore provided a visible near-term pipeline of investable infrastructure opportunities. Although the Infrastructure and Projects Authority produces such a list, it is not necessarily familiar to insurance businesses and it might be desirable to publish a pipeline specifically relevant to insurers.
27. Our expectation is that infrastructure investments supported by RAB or CfD systems would be suitable for insurers because they can include a number of relevant elements: equity and debt investment, public sector guarantees and regulatory undertakings to allow a fair return to investors over the medium and longer term.
28. One major project of national importance is the Sizewell C nuclear power station. Battery storage, hydrogen technology projects as well as the expansion of the EV charging grid may also be relevant. It is also possible that fibre broadband rollout, in which private equity has shown great interest, could be attractive. In addition, insurers have already started to invest significantly in wind farms, the needed expansion of these, alongside greater investment in solar power, are also areas that could benefit. Opportunities also exist for these reforms to stimulate the flow of capital from insurers into more niche and emerging opportunities within the infrastructure sector, for which current market capacity is limited.
29. For insurers and other institutional investors to engage easily with such projects, the government will need to play its part by clarifying its approach to financing structures and the types of RAB and CfD systems which it is prepared to facilitate.

30. Government guarantees could play an important part especially in the early construction phase of projects. These are now the responsibility of the UK Infrastructure Bank. UKIB could usefully open up its engagement with institutional investors and insurers to clarify its appetite for, and the likely scale of, government guarantees in different sectors

Net Zero and Transition Assets

31. There is a recognition that a funding gap is more likely to exist and more funding will be needed to meet infrastructure needs when taking into account the huge numbers required to finance the net zero transition. Environmental, social and governance (ESG) considerations are paramount in many insurers investment portfolios. The importance placed on ESG is only growing, particularly with regards to climate change. Infrastructure that supports the transition will therefore be particularly attractive to the sector.
32. Insofar as insurance companies naturally face increased risks arising directly or indirectly from climate change, there is greater synergistic logic in seeing the proposed reforms as enabling more investment in assets that counter climate change (eg. transition and net zero assets) rather than in “infrastructure” per se. Noting that circa 70% of the world’s current greenhouse gas emissions can be traced back to the infrastructure sector. In a July 2021 report on fiscal risks, the Office for Budget Responsibility estimated a net cost of the UK reaching net zero by 2050 to be **£321bn**, or just over £10bn per year. This is made up of around £1.4trn in costs, offset by around £1.1trn in savings. Any reform that can crowd greater investment into this space can only be a positive thing.

Sufficient Reforms

33. There remain a number of practical constraints on insurers' ability to invest in infrastructure assets: for example, the cumbersome process of adding an asset to matching adjustment portfolios, as these needed approval. Here, the PRA should have a record of approved assets and not expect every company to go through the same process.
34. The whole annuity industry is growing, so this is an opportunity to shape where this growth goes (i.e. into more productive assets, rather than corporate bonds/similar).
35. Flexibility is an important point, for example in relation to progressive drawdown during construction, prepayment (see above comments), or sub investment grade credit risk; and reform could create far more opportunity for insurers to invest. The availability of more flexible finance could similarly be of benefit to borrowers – thus representing an area of potential mutual benefit for the insurance and infrastructure sectors. However, it should be noted that least-cost finance is generally least flexible. Hence, insofar as sponsors of infrastructure assets are constrained by issues of affordability for the end-user of the infrastructure service, they will be driven towards deploying least-flexible finance.

36. In a similar way, the introduction of additional capacity into the market providing long-term finance will be welcomed by sponsors, to the extent that this increased competition exerts downward pressure on the cost of finance.
37. The reforms are likely to benefit larger insurers to a far greater extent than smaller organisations which lack functions such as in-house expertise. Some of the insurers - but only a handful of them - have shifted to be bank-like in the way they lend to projects.

Moving into Assets

38. Whether due to construction risks, market demand, operational etc risks inherent in infrastructure assets, a move into these assets potentially entailed insurance companies taking on more risk. Therefore, there is clearly a balance to be struck between allowing insurers to invest and the risk management but current rules are too restrictive. It is also worth noting that Solvency II has introduced a much more sophisticated risk management regime into insurers. The Pillar 2 parts of the regime are robust and provide a framework for how these assets and risks can be managed.
39. A more permissive regime would allow insurers to broaden the universe of assets in which they can invest, but only if this is not offset by an overly prudent view of the capital needed to be held. There has been concern amongst annuity providers that the current proposals would require them to hold too much (and too volatile) capital against assets.
40. The timelines to investment are also an area of concern. The current Matching Adjustment approval process is onerous and takes too long. The proposal to streamline this process is welcomed as a result.

Matching Adjustment

41. There are two key issues around the Matching Adjustment – the eligibility of assets that can be included and the calculation of the Fundamental Spread. On eligibility, it is clear that the direction is the right one. In particular, proposals for assets with prepayment risk and construction phases and the removal of the BBB cap will allow insurers to invest in assets like waste-to-energy plants or waste-water treatment facilities and in new start-ups and some net-zero technologies. In particular, proposals for assets with the removal of the BBB cap will allow insurers to invest in assets with nascent technology or less certain underlying cash flows not considered 'investment grade' by agencies today, but with a high likelihood once established. Investment impacted will be in areas such as retrofit in housing, energy efficiency, renewables and nuclear that are vital to hitting net zero targets.
42. However, this increase in eligibility will be pointless if the benefits of investing in such areas do not make economic sense. Other consultees will likely comment on the specific issues around the calculations, but it would be counterproductive to run an exercise to improve investment in infrastructure and then introduce a penalty for doing so. Investing in illiquids is a very legitimate part of an insurer's portfolio. In addition, the risk management processes

around taking on such assets are robust. Any suggestions and proposals to disadvantage these assets in the calculation on the matching adjustment are unnecessary and counterproductive.

43. One area where there are very obvious quick wins is around process. The PRA has made clear that it wants to speed-up approvals and make them much less onerous. One option to do that could be around ensuring that where insurers have made such investments, that it is clear to others that they meet the requirements of the matching adjustment. Requiring each firm to apply separately, only delays much needed investment and provides avoidable uncertainty. A simple fix is for the PRA to have a record of approved assets and not expect every company to go through the same process.

Conclusions

44. It is hard to underestimate the requirement for long-term investment in infrastructure, including energy transition and other net-zero directed assets, over the next 20-30 years. Accordingly, there is a clear opportunity as well as need for insurance companies to increase substantially their contribution to these sectors.
45. However, as presented, the reforms will not incentivise an increased flow of long-term capital from insurance companies into the infrastructure sector, particularly in relation to the way that the matching adjustment is proposed to be reduced for assets with a wider premium for illiquidity.
46. An expansion in market capacity for the long-term finance of infrastructure will increase competition and exert downward pressure on the cost of finance, to the benefit of sponsors of infrastructure assets who will be able to pass these lower-cost on to end-users.
47. Opportunities also exist for these reforms to stimulate the flow of capital from insurers into more niche and emerging opportunities within the infrastructure sector, for which current market capacity is limited.
48. Sponsors of infrastructure investments will welcome access to more flexible forms of senior debt which could be made available by insurance companies, where the eligibility requirements for the matching adjustment are relaxed in relatively modest ways.
49. The lack of a visible near-term pipeline of investable infrastructure opportunities is itself a constraint on the supply as much as on the demand for additional long-term finance from insurance companies.
50. The UK Infrastructure Bank could play a key role in supporting the flow of long-term finance from insurers into infrastructure assets by providing credit enhancement (such as through guarantee instruments).