

Solvency II and IORP II

Implications for real estate

Updated 6th January 2016



Solvency II and IORP II

Implications for real estate

| | |
|----------------------------------|----|
| Contents | |
| Background | 3 |
| Treatment of investments | 5 |
| Treatment of real estate | 6 |
| Treatment of real estate funds | 7 |
| Treatment of real estate lending | 8 |
| IORP II | 10 |
| For more information | 12 |



Background

Solvency II, which has just come into force, was voted through the EU Parliament on 11 March 2014. It is the much delayed but fundamental reform of the capital adequacy regime for the European insurance industry. It aims to establish a revised set of EU-wide capital requirements and risk management standards for the insurance industry and replaces an array of related Directives introduced since 1973.

Although it governs all types of insurance businesses, the interest to the real estate industry lies primarily with the treatment of life insurance companies, and in particular the way in which they treat their investments under pillar I. The introduction of Solvency II has replaced a Directive introduced in 2002 for European life insurance companies which consolidated a large number of earlier provisions. It will have a major impact on the way in which insurers consider real estate as an asset class.

The impact will potentially extend with the introduction of equivalent regulations for pension schemes in the form of the updated Institutions for Occupational Retirement Provisions (IORP) Directive (IORP II).

Timetable

The introduction of both Solvency II and IORP had become embroiled in delay and confusion. It was originally intended that Solvency II would be introduced with effect from 1st January 2013. This was delayed under a "quick fix Directive" until 1st January 2014. On 2 October 2013 the European Commission published proposals for another "second and final quick-fix" Directive changing the application date of Solvency II to 1

January 2016. Despite continuing muddle and against the expectations of many, including us, Solvency II has come into effect on 1st January 2016.



West Wycombe House

The Solvency II framework consist of three pillars:

- Pillar I, quantitative requirements
- Pillar II, governance and risk management
- Pillar III, disclosure and transparency



The timetable and scope for the introduction of IORP II is more uncertain. The current best guess for it coming into force is 1st January 2018.

Impact of Solvency II and IORP II

The most immediate effect of the regulations will be as insurance companies prepare themselves to be regulated by Solvency II. This is discussed more below. Beyond that, the impact will be broadened as IORP II is introduced for pension schemes.. Although the real estate industry focus has been on the quantitative aspects of Pillar I in respect of investments (discussed on page 6 of this paper), the Pillar II requirements in respect of governance and risk management and the Pillar III requirements in respect of disclosure and transparency will also need to be addressed.

Looking further out, the long-term effect is likely to be even more far-reaching.; The potentially onerous treatment of investments that so concerns the real estate industry, and indeed many others, only applies to products where the market risk of investment performance is not passed on to policy holders. It could therefore be expected that the regulations would help to accelerate the demise of traditional retirement products. Unit-linked life products, defined contribution pension schemes and other new products will increase their dominance as more primitive defined benefit species face extinction, although the updated IORP II provisions published on 27th March 2014 move away from Solvency II type capital requirements. The real estate industry is not yet well adapted to the new environment.

Between the vote on Omnibus II and the formal entry into full force of Solvency II, there has been a transitional period, plans for which were covered in the latest EIOPA round of consultation on Solvency II that closed on 19th June 2013. The industry has therefore been in a process of phased implementation for two and a half years. January 2016 has not therefore seen anything dramatic.



Treatment of investments

Market shock

Under Solvency II, insurance companies are required to calculate market shock provisions to ensure that they have the balance sheet capacity to deal with future falls in the value of their investment assets. Insurers can either use a “standard formula” for which the risk factors are set down by EIOPA or seek approval from their own national regulator to use their own internally generated risk model. The key market shocks under the standard formula are:

- Real estate, 25% of the gross value of the property asset;
- Listed entities, 39% of the value of the equity. The market shock is adjusted up or down by up to 10% depending on the state of the market as determined by the regulator giving a range of 29% to 49%.
- Unlisted entities, 49% with the same dampener provisions as for listed entities.
- Corporate debt, formula based on rating of the bond, duration etc.
- Government debt, no shock, assumed to be risk free.

Much of the real estate industry attention has focused on the amount of capital which insurers need to hold to cover the potential fall in the value of their real estate investment assets under these “standard formula” provisions i.e. that the shock to be applied to direct real estate investments is 25%. This means that insurers should hold capital equivalent to a write down in the book value of their real estate investments by 25%, from a starting point that the assets are carried in the books at market value.

The impact of this is discussed in more detail in the following section of this paper.

Correlation

The total market shock for investments is adjusted for the level of correlation between investments using the following table:

| | Interest | Equity | Property | Spread | Concentration | Currency |
|---------------|----------|--------|----------|--------|---------------|----------|
| Interest | 1 | 0.5/0* | 0.5/0* | 0.5/0* | 0 | 0.25 |
| Equity | 0.5/0* | 1 | 0.75 | 0.75 | 0 | 0.25 |
| Property | 0.5/0* | 0.75 | 1 | 0.5 | 0 | 0.25 |
| Spread | 0.5/0* | 0.75 | 0.5 | 1 | 0 | 0.25 |
| Concentration | 0 | 0 | 0 | 0 | 1 | 0 |
| Currency | 0.25 | 0.25 | 0.25 | 0.25 | 0 | 1 |

* 0.5 for an interest rate decrease, 0 for an interest rate increase.



Treatment of real estate

The key concern for the real estate industry has been how insurers and possibly pension funds will view real estate as an investment asset once Solvency II and IORP are in force, and in particular, the impact of the capital cost of investing in real estate relative to other asset classes. Key to this is how they will be required to model the capital that they will need to hold in respect of potential future falls in value of their investments.

As indicated in the previous section, the proposal for the Standard Model is that the shock to be applied to direct real estate investments is 25%, i.e. insurers should hold capital equivalent to a write down in the gross book value of their real estate investments by 25%, from a starting point that the assets are carried in the books at market value.

In April 2011, the Investment Property Databank (IPD) published a study focusing specifically upon real estate. (https://www.inrev.org/attachments/article/184/IPD_Solvency_II_Review_20110415.pdf) This study was funded by a consortium of seven key real estate trade bodies led by INREV. It identified a number of areas of concern, but specifically in respect of the property shock, the report suggested that 15% was a more accurate reflection of pan-European volatility than the 25% suggested by the regulator. Since publication, the IPD has updated its analysis (https://www.inrev.org/attachments/article/184/IPD_Solvency_II_Update_20110902.pdf) continuing to support the view that the currently proposed property shock is excessive. Despite the best efforts of INREV, the IPF and other industry bodies rallying around the effort, the EU Commission was not swayed by the lobbying and that the 25% market shock remained.

Most large insurers have sought approval for their own internally generated models and it would therefore appear that the industry is better served by concentrating on insurers' own internally generated models and on areas of detail such as the treatment of real estate funds and real estate lending.

For insurers to use a different volatility adjustment from that enshrined in the standard model, they would need to provide compelling evidence that the mix of assets in which they have invested has a volatility that is different from that under the Standard Model. This poses a particular challenge for insurers investing in UK real estate. The 25% market shock set out in the current draft regulation is derived from the IPD UK Monthly Index and is therefore a measure of UK real estate volatility

Showing a demonstrably different historic volatility is likely to be challenging for UK insurers. There is, however, the possibility to go for an option that allows a model that uses some aspects of the standard formula within an internally generated model. It would appear that at least some UK insurers will use this for real estate.

As mentioned in the introduction to this paper, although the intention to move forward with some aspects of IORP II, the Solvency Capital Requirement elements have been abandoned. This is discussed later in this paper.



Treatment of real estate funds

Although there had initially been some uncertainty, clarification has provided greater certainty over the treatment of funds. The treatment now adopted is that the default is that funds are treated as transparent (i.e. for a real estate fund, the 25% shock is applied to the gross value of the real estate) unless this is not possible. Some clarification is still needed as to who decides what is “not possible” and the criteria to be used. Generally, however, the outcome seems to be a pragmatic one.

In the case of funds where it is not possible to treat them as transparent, a market shock of 49% for unlisted equity (subject to the adjustment for the “dampener” discussed earlier in this paper) is applied to the net value of the equity. At 50% gearing with a 50% shock, the overall market shock is therefore the same for real estate under either a transparent or opaque treatment.

This also has reporting implications. As indicated above, the assumption is that funds will be treated as transparent so reporting will need to be at the level of the investments of the funds, although as also discussed above, some real estate funds may well end up being treated under the equity shock method, which would imply less granularity of reporting at the asset level.

Many of the larger insurers will be using their own internally generated models rather than the standard model. The level of detail that they require will be determined not by the minimum standards set by the regulator to model under the standard formulae, but by the specific inputs required for the insurer's own

modelling, the assumption being that this will be more sophisticated and therefore more data-hungry. In a fund situation, a manager will in many cases need to assume a mixture of the two.

Under Solvency II, insurers will have to demonstrate to their supervisors that the data they use is sufficiently complete, accurate and appropriate for their specific needs. External data, including information from fund managers, will need to meet the same standards of quality, detail and verification as internally sourced information. The key word is ‘demonstrate’. Insurers will expect documented assurances and other evidence from their fund managers that the quality control procedures that underpin this, are up to scratch, that the consistency and reliability of the risk information they supply, and the governance and control procedures that underpin this are up to a satisfactory standard. The use of external audit of controls environment is already gaining more traction in the real estate investment management industry. The requirements of Solvency II provide another reason to follow this path



Treatment of real estate lending

General treatment of real estate lending

The final provisions for lending treat real estate lending, other than residential mortgages, in the same way as general lending. The Solvency Capital Requirement is based on the credit rating. For unrated bonds, the SCR is as follows:

| Duration | risk factor |
|---------------------------|---------------------------------|
| up to 5 | 3% * (duration) |
| More than 5 and up to 10 | 15% + 1.7% * (duration -5) |
| More than 10 and up to 20 | 23.5% + 1.2% * (duration -10) |
| More than 20 | 35.5% + 0.50 % * (duration -20) |

The proposed treatment of real estate lending changed significantly between drafts of the Solvency II regulations. The treatment of real estate lending under Solvency II, which had been potentially very attractive under the original provisions, was changed to something significantly less appealing and less logical. The draft implementing measures for Solvency II dated 31st October 2011, which were

widely circulated but never formally published, introduced a significant change to the proposed treatment of commercial real estate lending under the standard market shock formula. In earlier draft provisions, a specific treatment of property loans was included that took account of the value of collateral, using the property shock to adjust the value the collateral. This provision was then restricted to residential mortgages. Under the 31st October 2011 draft, commercial real estate lending was moved to the general provisions for corporate bonds. The starting point under this provision is a credit rating by a nominated credit rating agency. Bonds and loans for which a credit rating is not available are assigned a risk factor, in an example of presumably unintended humour, termed by the regulator “F-up”. This relates to lending other than securitisation. Securitisation has a much harsher treatment dealt with overleaf.

This does not reflect practice in property lending as individual commercial real estate mortgage loans are generally not rated. Furthermore, it was not clear how collateral should be taken into account. In the absence of any clear provision that would allow collateral to be taken into account, the assumption is that it should be ignored, which would seem to be an odd place for the regulation to end up. There had been a suggestion that this would be subject to further consultation after Omnibus II was passed but this was at a time when this was scheduled for July 2012. With the multiple delays to the EU Parliament vote, the consultation never happened and the final provisions were as set out in the table on the left.



Securitisation

Lobbying efforts to remedy the punitive treatment of securitisation under the October 2011 draft has not had the desired effect. The EU regulator's consultation on the treatment of long-term assets, published

on 19th December 2013, split securitisation into Type 1 (good) and Type 2 (bad). This made the treatment of Commercial Mortgage Backed Securities (which are Type 2) worse rather than better.. The final version improved the treatment of Type 1, but left Type 2 unchanged.

The table shows the calibration under the October 2011 and final provisions. Under the latter, CMBS will be a "Type 2" securitisation.

The "F-Up"s are per annum of the duration of the note. This gives a disproportionately high charge for any securitisation, and an extreme one for Type 2. As such a Type 2 AAA note will have a capital charge 4 times higher than an unrated corporate loan.

The capital cost of participating in a securitisation for an insurer using the standard model is crippling.

| Risk factor F-up | Credit quality step | | | | | | |
|---------------------|---------------------|-------|-------|-------|-----|------|------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | AAA | AA | A | BBB | BB | B | <B |
| Original | 7% | 16% | 19% | 20% | 82% | 100% | 100% |
| Final type 1 | 2.1% | 3% | 3% | 3% | 3% | 3% | 3% |
| Final type 2 | 12.5% | 13.4% | 16.6% | 19.7% | 82% | 100% | 100% |

Matching adjustments

It is possible for insurers to achieve a more attractive Solvency II treatment by matching a pool of long term assets with guaranteed cash flows with a specific pool of liabilities with the same characteristics. The advantage arises because the insurer is allowed to adjust the discount rate in calculating obligations. The conditions are strict, the assets must deliver a guaranteed income without

prepayment risk. As such, it will generally be fixed rate, fixed term debt with make good provisions on prepayment, or some form of packaged product that achieves the same end. Use of the Matching Adjustment requires advance approval from the insurers local regulator. In the UK, this is the Prudential Regulation Authority (PRA). The PRA has already indicated dissatisfaction with the quality of some applications received.



IORP II

As mentioned in the introduction to this paper, there are proposals for a Solvency II type regulation for pension schemes, the IORP Directive. In April 2011 the European Commission asked EIOPA for advice on the EU wide legislative framework for occupational pension schemes. The publication of EIOPA Final Advice in February 2012 followed a period of consultation, the final stage of which ran until 2 January 2012 and was commented upon by 170 stakeholders from 14 Member States and 20 European and international organisations.

Although the recommendation of EIOPA is that any amended IORP should also cover defined contribution schemes, the main impact for the real estate industry would arise if defined benefit schemes changed their investment preferences as a result of the regulatory changes. For pure defined contribution schemes, investment risk is passed through to the member. The immediate challenge for the real estate industry would arise if a market shock approach as adopted for insurance companies was also adopted for pension funds and as a result discouraged defined benefit pension funds from investing in real estate.

Although there are some very large pension schemes, across Europe occupational schemes are typically smaller and less sophisticated than insurance companies and would struggle to produce the internally generated models anticipated for insurance companies.

EIOPA is also the regulator responsible for insurance and there are many similarities between the Solvency II rules for insurance companies and the IORP provisions that were proposed to apply to

pension schemes, in particular, the property shock provisions used in Solvency II that assume a 25% fall in real estate values are replicated in the new proposals for pension schemes. The application of this level of market shock would be as unappealing to defined benefit pension schemes as it is to life insurance companies. Both groups are major investors in real estate as an asset class.

However, as previously mentioned, In a statement on 23 May 2013 Internal Market and Services Commissioner Michel Barnier indicated a change of direction. Whilst it remains the intention to move forward with some aspects of IORP, the Solvency Capital Requirement elements are being deferred, probably indefinitely

Commissioner Barnier stated that he intended "to come forward with a proposal for a Directive to improve the governance and transparency of occupational pension funds in the autumn of 2013. At this stage, and as long as more comprehensive data is needed and Solvency II is not in force, the proposal for a Directive will not cover the issue of the solvency of pension funds. In light of the differing situations in Member States regarding retirement products and pension funds, it is necessary to continue technical work on the issue of solvency."

This appeared in the form of updated proposals of 27th March 2014 which were for a Solvency II type regulation for pension schemes, but a lot less like Solvency II than it was a year previously.



In line with Commissioner Barnier's comments in 2013 whilst it remains the intention to move forward with some aspects of IORP, the Solvency Capital Requirement elements are being deferred. This change of direction, and others, are reflected in the updated draft. The most notable shifts are:

- i) The emphasis has moved from defined benefit pension schemes to defined contribution. This recognises at least the futility of introducing extensive regulation for something that is becoming largely irrelevant. This change of emphasis has implications for the rest of the Directive as the Solvency Capital Requirements as originally envisaged and as feature in Solvency II are only relevant for defined benefit schemes.
- ii) As indicated above, the previous draft had incorporated the Solvency Capital Requirements from the Solvency II draft level 2 regulations although slightly bizarrely from an out-of-date Solvency II draft. Last year, it was announced that these were being delayed for IORP. The current draft drops entirely the idea of an EU wide capital requirement, instead leaving this to local regulators. The wording does imply that this might be revisited again by the regulator later.

- iii) Provisions are introduced to encourage pension funds to participate in long-term financing, particularly cross-border.

Commissioner Barnier's suggested in his comments last May, that he intended "to come forward with a proposal for a Directive to improve the governance and transparency of occupational pension funds". This does indeed seem to be the focus of the current draft. The Directive does include governance and risk management requirements that will have a knock on effect on service providers.

The most likely date for implementation of IORP II is 1st January 2016.



For more information

For more information about John Forbes Consulting, visit our website:

www.johnforbesconsulting.co.uk

For contact details:

<http://www.johnforbesconsulting.co.uk/contact/>

For recent publications:

<http://www.johnforbesconsulting.co.uk/insight/>

To join our mailing list:

<http://www.johnforbesconsulting.co.uk/mailling-list/>



www.johnforbesconsulting.co.uk

This presentation has been prepared for general guidance and does not constitute professional advice. You should not act upon the information contained in this presentation without obtaining professional advice. No representation or warranty is given as to the accuracy or completeness of the information contained in this presentation. To the extent permitted by law, John Forbes Consulting LLP and its members do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this presentation or for any decision based on it.

© 2016 John Forbes Consulting LLP.

John Forbes

CONSULTING LLP

