

The IPD Solvency II Review Summary

Informing a new regulatory framework for real estate

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Executive Summary

This report offers a detailed review of the Solvency II risk based regulatory framework proposed for defining insurance company capital adequacy. The study focuses specifically upon real estate, and was funded by a consortium of seven key trade bodies, each supporting an aspect of insurance company investment in property and more broadly. The main findings of the study are as follows:

The complex and deeply embedded nature of property return delivery explains many of the problems of perfectly comparable risk documentation, and thus of risk based regulation. Industry successes in the face of these difficulties should not blind us to the genuine and major differences between real estate assets, portfolio structures and markets.

Our survey of 18 major European insurance businesses has demonstrated a widely shared commitment to property, both as a risk diversifier across assets, sectors and territories, and as a key source of secure income delivery.

A close review of the new EIOPA proposals shows that they have brought a meticulous and novel risk perspective to bear upon a more prudent approach to capital adequacy.

However, adopting the longest and most frequent property return history available (that of the IPD UK Monthly Index) as the baseline for all European portfolios no matter what their mix of market exposures, appears to us as an intermediate position which can be refined without sacrificing or even diluting the prudential aims of Solvency II.

EIOPA's reported asset class correlations also proved tricky to interpret, but property scores computed using IPD data never exceeded 0.5 for equities, and were more commonly negatively related to interest rates.

To better inform the new regulations, we created 10-year quarterly indices for all the main European property markets, enabling more effective correlation and cluster analyses. These showed how, in the deepest and most closely synchronised of global economic upheavals, those markets tracked three clearly distinct patterns of property investment response.

Adjusting the quarterly valuation based indices one step further, to allow for the transaction driven volatility intrinsic to illiquid real estate markets, revealed clear patterns of extra volatility, and thus tail values at risk above valuation determined levels. But again these varied markedly by country and by region.

IPD's recommendation on the basis of this work is therefore to add force to the principles which underpin Solvency II by refining the detail of the regulation in a way which is sensitive to the documented and complex diversity of property investment practice and performance across Europe.

If, for the sake of simplicity however, the broadest available pan-European property shock factor was requested of IPD, to be based on the best evidence of tail values at risk currently available, this would be no higher than 15%, but preferably allowing modest company model flexibility around this figure.

Rolling 12 month returns	Valuation Based Index		Transaction Linked Index	
	Standard Deviation	.5% VAR	Standard Deviation	.5% VAR
To December 2009				
Euro-zone only				
France	6.9	-2.3	9.7	-8.9
Netherlands	4.1	-2.5	7.7	-8.1
All Euro-zone	3.1	-0.1	7.8	-10.4
To December 2010				
UK only				
All Assets	14.2	-23.3	14.3	-23.2
To December 2009				
Pan-European				
UK + Euro-zone	5.8	-7.1	9.0	-13.3

Table 1: Headline 0.5% Tail Values at Risk from Dec-02 through Dec-09/10

Research and Results Overview

To help promote a prudential, risk aware and well informed approach to asset allocation, IPD has produced an overview of the proposed regulatory framework as it will apply to insurance based real estate portfolios; has surveyed major European insurance businesses on their responses so far to these proposals; and has undertaken a series of property market reporting enhancements to support the refinement of the regulations. Some of the headline findings in each of the research areas are summarised below.

Review of the regulatory framework

- The calculation of the property capital requirement given in SEC 40-10 is less robust than for other asset classes. Most obviously, the supporting data is confined to the UK market, in contrast to the global coverage of the interest rate and equity market analyses.
- The lack of clarity in QIS 5 over the treatment of both indirect vehicles and leverage is puzzling.
- There is a counter-intuitive suggestion that the use of the total return index is “conservative” because it assumes re-investment of rental yield into the same pool. This ignores the preservation of aggregate income in downturns by diversified lease structures.
- A modification to the real estate dampener would encourage more counter cyclical real estate investment strategies. Such counter cyclical investment would enhance investment returns by directing increased investment at low points in the real estate cycle and to disposing of real estate assets at high points in the real estate cycle.
- A property SCR based on an international portfolio would give equality of treatment with equities. It would also reflect the reality of increased cross-border investment in property portfolios over the last 20 years.
- The absence of a detailed description of the typical insurer and specific method makes it difficult to comment on the SEC 40-10 figures. Against the evidence of generally moderate correlations in annual property returns with equities and negative correlation with interest rates, the SEC 40-10 recommendations appear high.

Survey of initial insurance industry responses

- The Euro-zone domiciled insurers who responded to the survey almost unanimously consider the current 25% capital charge for property under the Standard Formula to be too high.
- In contrast, most UK respondents (and some respondents with domiciles outside the Euro-zone) were comfortable with the Standard Formula treatment and found it not dissimilar to their own analysis for the preponderance of their exposures.
- The respondents - regardless of firm domicile - believe the correlations used in the QIS 5 matrix are considerably higher than justifiable. Those who offered the results of their in-house analyses reported equity correlations of between 0.39 and 0.5. The fixed income correlations ranged into the negative.
- There is wide agreement among the respondents that a CRE portfolio benefits from geographic diversification.
- More than half of the respondents judge the Standard Formula in QIS 5 to be pro-cyclical. However, there is considerable disagreement as to how – or indeed if – this can be fixed. An interesting suggestion was that CRE should be allowed a 24 month time horizon to adjust solvency capital to compensate for the illiquidity of the assets.
- For a small but important number of respondents, Solvency II has already frozen all acquisition activity in real estate, pending a clearer view of the final regulatory framework.
- Almost all Euro-zone respondents are counting on being able to use an internal model and thus avoid what they feel will be punitive capital requirements on low risk assets. Nearly 30% of those intending to use an internal model have not commenced work yet or are still in the earliest stages of development.

- There is profound confusion regarding the treatment of indirect real estate under the Standard Formula – possibly due to obscure drafting in QIS 5. Some respondents think that a ‘look through approach’ means they can treat the real estate holdings in an unlisted vehicle in the same way as they treat direct real estate. Others think the vehicle immediately attracts a 49% capital charge.
- All of the respondents bemoaned the lack of adequate data. The problems are even more intractable for modelling non-UK markets. The limited data frequency - often only annual - and the absence of long time series data in many markets renders estimating the 0.5 percentile an exercise in spurious accuracy.

Improving the information base for Solvency Modelling

The aim of the third part of the project was to offer a constructive and comprehensive response by researching the possibilities of a broader, longer, more “market-sensitive” and frequently refreshed information base of European real estate investment returns and values.

A pan-European quarterly property index

- The development of quarterly performance estimation procedures on the back of IPD’s main European database has enabled us to produce consistent histories for total returns, together with income and capital components, for all 15 IPD covered European markets, in most cases back a full 10 years.
- This new dataset facilitated the construction of a 12 market correlation matrix of performance over the decade to December 2009. A set of clustering procedures applied to this matrix demonstrated significantly varying patterns of response to the dominant global economic cycle, with three basic market clusters emerging.

The residential sector in European portfolio diversification

- The UK quarterly return series differs from the dominant European pattern in many ways, including the absence of any significant residential component.
- To address this difference the project team blended the IPD UK residential Index series into the main quarterly return pattern, and over a 10 year period to December 2009. When typical European residential weights are applied to UK residential returns, the recombined market pattern exhibits a noticeably reduced standard deviation.
- Removing residential returns from the pan-European series over the same period increases volatility, but only by a small margin.

Risk adjusting European indices using transactions evidence

- To address the much discussed smoothing effect observed in valuation based property indices, IPD, working with the University of Aberdeen, have developed a Transaction Linked Index (TLI) methodology that blends achieved sale prices with valuation histories.
- This method, applied separately to the UK and most recently to key European markets, offers an evidence based way of establishing the volatility of such markets and market groups. The work is fraught with operational difficulties and is far from complete, depending as it does upon large volumes of transaction data linked to a valuation history.
- Nonetheless, adjusting valuation based indices for the added volatility intrinsic to the lumpiness and illiquidity of real estate investment markets has already revealed clearly varying patterns of underlying transaction market instability, and thus significant differences in the implied tail values at risk across Europe.

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