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Size Doesn't Matter

Materiality is about more than just **market value**

Solvency II Pillar 3 obliges insurance companies to disclose material information about their balance sheets – this helps enforce market discipline by providing stakeholders with the information required to understand a company's risk exposures. What the regulations do not prescribe, however, is exactly how insurers should decide what makes an asset material. There is more to materiality than market value. Insurers need to start paying more attention to capital requirements than market value when it comes to setting materiality thresholds… because risky dynamite often comes in seemingly insignificant packages…

Common sense would have us believe that the most material assets on our balance sheets are those with the most zeros behind them. But this kind of thinking may lead insurance companies to overlook risks posed by some of their most capital-intensive assets. Companies should really be looking at the capital impact, or riskiness, of each asset on their books when setting materiality limits.

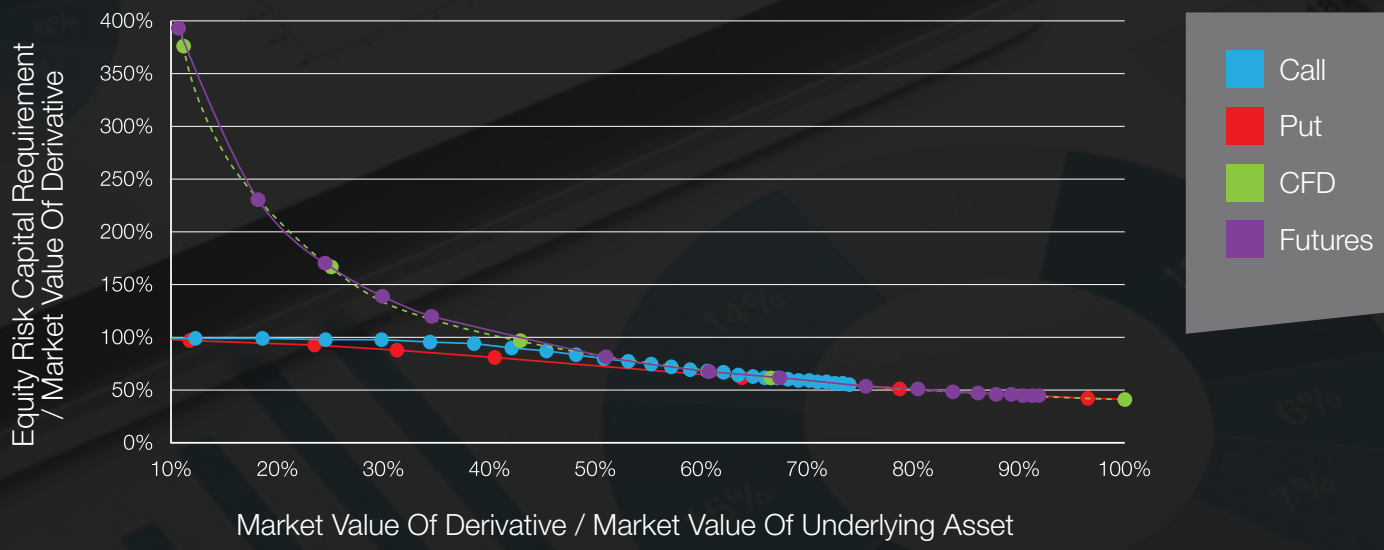
When it comes to official guidance on materiality for Pillar 3 reporting, EIOPA and the PRA pass the responsibility back to insurance companies. Short of Article 305 of the Delegated Acts (*"…the information submitted to supervisors shall be considered as material where its omission or misstatement could influence the decision-making or judgement of the supervisory authorities…"*), the regulators do not say much about how thoroughly the asset look-through requirement should be applied – it is up to the insurers themselves to define their materiality thresholds.

Given these parameters, it is tempting to focus on the chunkier, more obvious assets – the equities and bonds that generally make up the majority of insurers' investment portfolios. Naturally, size does contribute to materiality. This is convenient, because performing a look-through analysis and capital calculation for these conventional asset types is usually straightforward enough. What insurers should be shifting their focus towards, however, are the smaller, more obscure assets, which may look like lightweights on the balance sheet, but pack a hefty punch in the Solvency Capital Requirement (SCR) arena.

Derivatives of various types are often used by asset managers to manage the risk profile within their unit-linked funds. These derivatives are the most obvious examples of assets whose (typically) small balance sheet values belie their inherent riskiness. Although liabilities are perfectly matched by assets under Solvency II, the present value of future profits (i.e. Value In Force) underlying these funds is classified as Tier I capital, and is required to be stressed under a total balance sheet approach as dictated by Solvency II regulations. All the more reason to pay attention to the capital impact of derivatives.

We looked into the relationships between market value, underlying asset market value and capital requirement for four types of equity-driven derivatives: call options, put options[1], contracts for difference and futures. Our findings are shown on the graph on the next page.

[1] For put options, an upward equity stress has been assumed for illustrative purposes (even though this stress is not prescribed as part of the Solvency II Standard Formula)



The X-axis of the graph above shows the market value of the derivative divided by the market value of the underlying asset. As the market value of the derivative tends towards the market value of the underlying asset (100% on the X-axis), the capital requirement as a percentage of market value tends towards the Standard Formula equity stress (around 40% on the Y-axis). In other words, the behaviour of options that are heavily in the money (and likely to be exercised) will be similar to that of the underlying asset, and could be treated as such.

On the other hand, as the market value of the derivative decreases relative to the market value of the underlying asset (moving towards the left hand side of the graph), the capital requirement of the derivative becomes very large relative to its market value, however small that market value may be. For put and call options, this ratio may be up to 100% (seen on the Y-axis of the graph). For contracts for difference and futures, this ratio increases hyperbolically, tending to infinity (around 400% where the derivative market value is 10% of that of the underlying asset). On this side of the graph, it becomes necessary to consider the risk to the portfolio of the underlying asset, instead of just stressing the (relatively small) market value of the derivative as one would an equity.

The graph shows just some examples of this phenomenon – any time a company is exposed to assets where the market exposure is significantly different from the market value reflected on balance sheet, it is important to take a closer look in order to understand the risks to which they are truly exposed, and make sure they are accounted for. Assets with embedded options, e.g. convertible bonds, give rise to similar issues, albeit to a lesser extent.

Materiality is one of the areas in the Solvency II regime where participants are still trying to find a balance between accuracy and pragmatism. However, as data becomes more accessible and insurers gain a better understanding of where their risks lie, there is no reason not to have both.

If you would like to find out more about data, capital planning and how MBE can best support asset manager/insurer relationships, please visit our website or email info@mbe-intl.com.

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Beukes
Edvardsen

www.mbe-intl.com

MBE, Castle Court, 41 London Road, Reigate RH2 9RJ
info@mbe-intl.com T: +44 (0) 1737 735563

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