SUITABILITY OF VALUATION OF ASSET AND LIABILITIES UNDER INTERNATIONAL ACCOUNTING STANDARDS FOR SOLVENCY II PURPOSES

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Abstract

Solvency II is being introduced in response to escalating need on an effective allocation of capital across the EU and protection of policy holders. Its aim is to harmonise insurance supervision and to effect greater consistency across the measurement of capital. Concerning valuation of assets and liabilities, Solvency II is heavily reliant on international accounting principles, but for particular balance sheet items the requirement on market value approach may be in conflict with existing IFRS methodology. This paper identifies the Solvency II requirements on valuation of assets and liabilities and discusses the key differences between applicable valuation techniques. Through the research were identified particular items such as intangible assets, certain financial instruments, participations and technical provision that require special treatment in order to satisfy market value approach - need to be changed to fair value.

Key words

Solvency II, market value, fair value, IAS, regulation

JEL classification

B41, G22, M41

Introduction

Insurance and reinsurance undertakings play a key role in the local as well as global economy, they trade with enterprises and individuals on exchanging the risk of an uncertain and costly financial outcome for a fixed premium. Given such an important role in the economy, insurance undertakings need to be sufficiently well-capitalized and prudently managed so that they can withstand its obligations.

The regulation of insurance undertakings had been in effect since 1970´s in major European insurance markets known as so-called Solvency I regime. In view of economic and political development, the used metrics became no longer adequate and therefore at the beginning of this century was adopted the Directive 2009/138/EC known as Solvency II, which represents a crucial modernization of European insurance regulation, that came into force on the 1st January 2016.

Solvency II regime, within its Pillar I and Pillar III, is based on balance-sheet compiled on the principle of market-consistent valuation of the individual assets and liabilities. Thus any undertaking gets into a situation where next to the its own statutory accounting or reporting purposes is forced to establish and maintain the additional system with data reporting for regulatory needs. Whilst there is no linear requirement for consistency between financial and regulatory reporting, there are significant overlaps as well as the many of the potential data gaps in both the measurement and disclosure requirements between statutory accounting principles, IFRS and solvency regime. Therefore the undertaking need to improve their understanding of the differences and define solutions to support parallel reporting in order to establish a process using the synergies and effectively manage the business.

This paper identifies the Solvency II requirements on valuation of assets and liabilities and discusses the key differences compared to applicable measurement techniques under international accounting principles, so that the undertaking can identify the items that are measured on the same principle and items which need to be revaluated - changed to fair value.

Solvency II is recently a new topic which shall be deemed to be discussed from many sides, compared with other regulatory regimes such as Basel III, challenged for the appropriateness of the model, but above all must be well understood and with the smoothest possible way integrated into the current systems of the each undertaking, in order not to compel the undertaking to create additional subsystems, additional costly processes, on the contrary to be built on existing elements.

Irregularly are published some research papers related to the topic, but after the closer assessment it can be stated that both, headlines and abstracts might be misleading. Only a few studies are focused on the comparison of the rules related to the valuation of assets and liabilities under international accounting standards and Solvency II principles. The one of the researchers are Klumpes and Morgan (IAA, [2007]), who opened the topic of differences in measurement among statutory accounting principles in the UK, IFRS proposed in fair value and Solvency II, but most of their work is dedicated to research the estimation of the cost of capital for different types of economic activities. Another researcher, who was engaged in the interaction of IFRS and Solvency II is Flamée (Springer, 2008), whose paper is aimed to „analyse a number of fundamental elements for the valuation of technical provision", however, this paper does not concerns to other than Technical Provision balance-sheet items. The most valuable source of information for the research were the legal regulations papers, in particular the Final Report on public consultation No. 14/065 on Guidelines on recognition and valuation of assets and liabilities other than technical provisions (EC, 2015), published by European Insurance and Occupational Pensions Authority.

1. Solvency II rules relating to the valuation of assets, liabilities and technical provisions

The Directive 2009/138 (EC, 2009) in its Chapter VI, Section 1 and Section 2 and implementing measures Commission Delegated Regulation EU 2015/35 (EC, 2014) in its Articles 7 to 16, lay down the methods and assumptions to be used in the recognition and valuation of assets, technical provisions and other liabilities. By default the undertaking shall value assets and liabilities based on the assumption of going on concern and using quoted market prices in active markets and generally available data on underwriting risks. As an element of consistent harmonization, the regulations specify that undertaking shall recognise assets and liabilities in conformity with the international accounting standards and where international accounting standards[1] include valuation methods that are consistent with the market valuation approach than this shall be used, where international accounting standards are either temporarily or permanently inconsistent with the valuation approach or quoted market prices are not available, than alternative valuation methods are allowed to be used.

1.1. Valuation of assets and liabilities

Provisions of Article 75 - Valuation of assets and liabilities of Directive (EC, 2009), in its paragraph 1., point (a) defines that „Assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction“ and as well as in point (b) defines that „Liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction“, without taking into account any adjustment of the own credit standing of the insurance undertaking.

[1] Which are primarily issued „in order to simplify Community legislation on accounting standards, it is appropriate, for the sake of clarity and transparency“ (EC, 2002).

1.2. Valuation of technical provisions

In Article 76 and following of the Directive (EC, 2009) and Article 17 and following of Commission Delegated Regulation (EC, 2014) is given particular attention to rules relating to technical provisions, which „Value shall correspond to the current amount that undertakings would have to pay if they were to transfer their insurance and reinsurance obligations immediately to another undertaking". Technical provisions in general are the sectoral specifics to the insurance business and according to the rules lay down in the Directive shall be calculated as the sum of a best estimate and a risk margin.

The amount of best estimate shall correspond to the probability-weighted average of future cash-flows (all the cash in- and out-flows required to settle the insurance obligations over the lifetime), taking account of the time value of money and using relevant actuarial and statistical methods. The best estimate shall be calculated gross, without deduction of the amounts recoverable from reinsurance contracts and special purpose vehicles, as those amounts shall be calculated separately, considering time difference between recoveries and direct payments and adjustment taking into account the expected losses due to default of the counterparty (loss-given- default).

The amount of risk margin shall be such as to ensure that the value of the technical provisions is equivalent to the amount that insurance undertakings would be expected to require in order to take over and meet the insurance obligations, simply defined as the premium margin to compensate absence of an active market.

2. Suitability IAS / IFRS for Solvency II valuation purposes

The IFRS Standard 13 (IASB, 2011), in its paragraph 9 defines the fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date". This definition in its nature, scale and complexity meets the requirement of Article 75 of the Directive. This implies that any asset or liability measured in fair value under international accounting standards might being without any further revaluation adjustments account for solvency valuation purposes.

Based on the solvency valuation requirements outlined in Chapter one and definition stated above was done the comparison of consistency between the solvency regime requirements and international accounting standards requirements for the industry-specific, considerably high volume or solvency regime specific balance sheet items, such as intangible assets, property, financial instruments, participations and technical provision, including reinsurers' share.

Comparison of the requirements, rationale and the output itself is sorted in the text and summary table below.

2.1. Intangible assets

IAS 38 (IASB, 2010) prescribes the valuation method of intangible assets using either cost model set out in paragraph 74 or revaluation model as laid down in paragraph 75. Revalued amount shall be carried at its fair value as stated in paragraph 75 where "fair value shall be determined by reference to an active market" at the date of the revaluation less any subsequent accumulated amortisation and any subsequent accumulated impairment losses.

Solvency II in Article 12 of Commission Delegated Regulation (EC, 2014) prescribes the indisputable exception of valuation methods, where goodwill and other intangible assets, e.g. bespoke tailored computer software and licences, which cannot be sold separately, shall be valued at zero.

Revaluation model laid down in IAS 38 shall be taken into account as consistent option for Solvency II, considering the need of valuation goodwill to zero and the requirement to be proved that other assets can be sold separately and the insurance "undertaking can demonstrate that there is a value for the same or similar assets that has been derived from quoted market prices in active markets".

2.2. Financial Instruments

The measurement of financial assets and financial liabilities is laid down in paragraph 43 and following of IAS 39 (IASB, 2011). Where for initial recognised undertaking shall measure financial asset or financial liability at its fair value.

For the purpose of measuring a financial asset after initial recognition the undertaking is supposed to measure financial assets, including derivatives that are assets, at their fair values, except for the financial assets such as loans and receivables, held-to-maturity investments, which shall be measured at amortised cost using the effective interest method, and investments in equity instruments that do not have a quoted market price in an active market and derivatives that are linked to that investments, which shall be measured at cost. According to IAS 39 (IASB, 2011) paragraph 47 all liabilities, except for the listed in paragraph, are required to be measured at amortized cost using the effective interest method.

The valuation model of IAS 39 for financial assets and financial liabilities in the time of initial recognition and for particular financial assets and liabilities for subsequent measurement, if and only if, changes in own credit standing have not been taken into account[2], is a good representation of the economic value for Solvency II purposes.

For particular financial assets and liabilities that are measured at cost model it would be desirable to find a more appropriate valuation method, which is in line with valuation methodology and hierarchy given by Solvency II in Article 9 and 10 of Commission Delegated Regulation (EC, 2014).

2.3. Investments in Associates

IAS Standard 28 (IASB, 2009) defines the equity method as a technique how to determine the value of share of undertaking on its investment in an associate, except venture capital organisations or funds and similar entities including investment-linked insurance funds. The investor is applying the equity method based on the most recent available financial statements of the associate, prepared and presented in accordance with IAS 27 (IASB, 2009). With accounting for interests in joint ventures deals IAS 31 (IASB, 2011) which obliges using equity method and which further refers to the IAS 39, by which venture capital organisations or mutual funds, unit trusts and similar entities including investment-linked insurance funds shall be measured at fair value.

[2] While changes in own credit standing influence the value under IAS 39, they shall be eliminated in the SII.

Valuation methods for related undertakings prescribed by Solvency II are set up in Article 13 of Commission Delegated Regulation (EC, 2014) in the way that undertakings shall value its holdings in related undertakings in accordance with the hierarchy of methods[3]:

1. value assets and liabilities using quoted market prices in active markets;
2. using the adjusted equity method (value its holdings based on the share of the excess of assets over liabilities, it means to value the undertaking's individual assets, liabilities or technical provisions on fair value basis);
3. quoted market prices in active markets for similar assets and liabilities with adjustments to reflect differences (condition, location, extent to comparability, volume or level of activity in the markets);
4. equity method as prescribed in international accounting standards, considering that the value of goodwill and other intangible assets need to be valued at zero;
5. alternative valuation methods.

The measurement principles set up in IAS 27, IAS 28 and IAS 31 is not applicable for the solvency valuation purposes, since IAS principles do not reflect the market economic valuation. The economic value of holdings shall correspond to the quoted market price in an active market, if this is not available, then market instrument which constitutes the insurer’s holding in a related undertaking, that can be disposed for a price equal to the quoted price on that market.

However many related undertakings are not listed on securities markets, this is applies particularly to subsidiary and joint venture undertakings. In that case the adjusted equity method shall be applied to insurance and reinsurance related undertakings, so it represents insurer’s share of the excess of assets over liabilities valued in accordance with fair value approach. In case of non-insurance related undertakings the IFRS equity method, taking into account the need to deduct the value of goodwill and other intangible assets, shall be applied.

For associates it is also allowed, where an adjusted equity method or adjusted IFRS equity method is not possible, to use residual approach - alternative valuation method to be as much as possible in line with the valuation methods that are consistent with Article 75 of Directive.

[3] The decision tree for valuation methodology can be found in Final Report on public consultation No. 14/065, on page 20 (EC, 2015).

2.4. Property

The valuation of investment property and other properties is covered by IAS 40 - Investment Property (IASB, 2009) and IAS16 - Property, Plant and Equipment (IASB, 2009). Based on the Standard, the undertaking shall value its property either under the fair value model or the cost model and chosen approach shall be applied to all of its property. As set by the Standard, the undertaking is encouraged, but not required, to determine the fair value of property on the basis of a valuation by an independent valuer who holds a relevant professional qualification and recent experience.

As determined by Guideline (EIOPA, 2015), the undertaking shall provide the most representative valuation estimate within the range of estimates. And as undertakings shall calculate the Solvency Capital Requirement at least once a year or following any significant change in its risk profile, undertaking shall assess and monitor current prices on a regular basis.

The cost model permitted by IAS 40 or IAS 16 shall not be applied. The revaluation model set by IAS is not as such a fair value model, since the revaluation is not required to be made systematically at each reporting date, but due to its nature can be considered as appropriate other valuation methods that is deemed to be consistent with Article 75 of Directive.

2.5. Insurance Contracts

The technical provision, calculated under Standard IFRS 4 (IASB, 2009) for insurance contracts, comprises the actuarially estimated value of liabilities, including embedded options and guarantees under insurance contracts, based on historical experience and specific assumptions about future economic conditions. IFRS 4 is based on non-discounting approach of insurance liabilities and non-uniform accounting policies for insurance liabilities, in many cases with excessive prudence.

Solvency II established specific measurement principles, as described in above chapter related to valuation of technical provisions. The equivalent calculation method is concerning the reinsurers' share, defined more precisely concerning the recoverables from reinsurance contracts and special purpose vehicles, which shall take into account the adjustment of expected losses due to default of a counterparty, as laid down in Article 42 of Commission Delegated Regulation (EC, 2014).

Table No. 1 Consistency of IFRS valuation with Article 75 of the Directive

Balance-sheet item	IAS / IFRS	IAS / IFRS treatment	Consistent approach?
Property, plant and other equipment	IAS 16	Either cost model or revaluation model	Partly Yes, only revaluation model is consistent option.
Intangible assets	IAS 38	Either cost model or revaluation model	Partly Yes, only revaluation model is consistent option.
Financial Instruments	IS 39	Either fair value or transaction costs directly attributable or amortised cost using the effective interest method or at cost	FV measurement principle is consistent with Art. 75 of Directive. Partially Yes, FV valuation criteria met only for some items.
Investment Property	IAS 40	Either fair value model or the cost model	FV measurement principle is consistent with Art. 75 of Directive. Partially Yes, but cost model is not allowed.
Investments in Associates	IAS 28, IAS 31	Equity method	Rather not, only as the residual alternative method.
Insurance Contracts (Technical Provisions)	IFRS 4	Individual estimate of all contractual cash flows.	No.

Conclusion

The comparative assessment of measurement methods used by Solvency II, prepared by EIOPA and publishes by European Commission, and international accounting principles presented by the IASB allowed the detection of similarities and differences.

In the matter of recognition and valuation of the assets and liabilities, Solvency II is heavily reliant on international accounting principles, any insurance or reinsurance undertakings is expected to recognise assets and liabilities in conformity with the international accounting standards and use the market consistent valuation methods prescribed by these standards.

It can be estimated that the insurance undertaking has about 30 balance sheet items on the average, of which 6 were identified as industry-specific, considerably high volume or solvency regime specific balance sheet items. For these items was detected the valuation approach applied by international accounting standards and was assessed whether applied valuation technique is in line with the market consistent valuation approach.

Research output showed that the IAS valuation technique of items "Investments in Associates", certain financial instruments and "Insurance Contracts, i.e. Technical Provisions", is not at all consistent with valuation principles required by Solvency II, thus these items require special treatment in order to satisfy market value approach - they need to be item by item revalued to fair value.

With respect to remaining items in the sample, international accounting standards, in a predetermined situation, apply a fair value approach, meaning that these balance sheet items are valued in an appropriate way for Solvency II regime. Each separate assets and liability, which the IAS allows to measure in the fair value can be directly used in Solvency II regime. However, given that neither cost model nor amortized cost model are not permitted, the undertaking shall all remaining assets and liabilities revaluate in accordance with the hierarchy prescribed by Solvency II text, while always has to be payed attention to the items that are affected by such revaluation, especially subsequent update of deferred tax.

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