LIFE INSURANCE SECURITISATION IN EUROPE
An overview on the effects of alternative capital resources and its relation to regulator and IFRS guidelines

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Abstract
Recently Life Insurance Securitisation practices have been probed in dedicated areas to access the wider capital markets. These developments have shown a rising interest among leading insurers and reinsurers to start building experience with securitisation practices, either for risk transfer, raising additional capital or a combination of these. As these structures have proven to be cost effective and generally accepted in the banking segment it is foreseen that securitisation can become an accepted method in insurance environments too in the foreseeable future.

This paper provides an overview of recent practices in Life Insurance Securitisation and aims to demonstrate that Life Insurance Securitisation has viable potential for insurance companies in the future to reduce the cost of (regulatory) capital and transferring risk to the capital markets.

Keywords
Life Insurance Securitisation, risk transfer, capital raising

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Life Insurance Securitisation in Europe:  
Overview of the effects of alternative capital resources 
and the relation to regulator and IFRS guidelines

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The combination of low interests rates, the fall of stock values, combined with in 
general poor underwriting results, have severely influenced the EU insurance industry results. 
It has lead to the situation that some insurance companies in Germany, France, United 
Kingdom and to lesser extent companies in The Netherlands, Italy and Spain have increasing 
difficulties maintaining their solvency standards and favourable credit ratings. It is expected 
new regulatory solvency standards (Solvency II) will change the distribution of necessary 
allocation of regulatory capital in the EU insurance sector and standards will become 
comparable to the regulation practiced in Canada and Australia. The past years have shown the vulnerability of the insurance community to dramatic changes 
in market conditions in combination with an enduring increase in man made, nature made, life & health risks. The model whereby reinsurers effectively balance excess risks exclusively by 
retrocession has been under increasing pressure and securitisation practices have been probed 
in dedicated areas to access the wider capital markets to increase the industry capacity. Recent 
developments have shown a rising interest among leading insurers and reinsurers to start 
building experience with securitisation practices, either for risk transfer, raising additional 
capital or a combination of these. As these structures have proven to be cost effective and 
generally accepted in the banking segment it is foreseen that securitisation can become an 
accepted method in insurance environments too in the foreseeable future¹. This would 
reinforce the (re-)insurance sector to enable them to profit from an alternative deployment of 
capital and guarantee a continued prudential and competitive pricing for customers in the 
future.

This paper provides an overview of recent practices in Life Insurance Securitisation 
and aims to demonstrate that Life Insurance Securitisation has viable potential for insurance 
companies in the future to reduce the cost of (regulatory) capital and include transferring risk 
to the capital markets. Firstly a short overview of historic developments in and a rationale for 
securitisation will be discussed. In the second part the different securitisation options will be 
discussed. In the third part securitisation structures and effects of transferred risks and/or 
assets are described and put into perspective in relation to IFRS and expected regulator 
standards. The last part contains an example of effects on regulatory capital and the balance 
sheet by securitising in life insurance assets in relation to debt financing and equity financing. 
The paper concludes with some final remarks.

* Author, advisor to EU financial institutions. Opinions expressed and any omissions are the author’s sole 
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¹ One eye on the future, Reactions, Nov. 2004, John Coomber, Swiss Re
Overview

The Dutch regulator De Nederlandsche Bank defined securitisation in 2003 as:

*Securitisation is the process whereby non-tradable assets such as mortgage loans and corporate loans are pooled and converted into securities. Securitisation is mostly done through separate legal entities, often called special purpose vehicles (SPV’s), and involves the sale to the SPV of financial assets by their original owners, the originators. To fund their purchases, SPV’s issue asset backed securities (ABS) whose repayment and interest payments are made from cash flows generated by securitised assets.*

The securitisation market was first established for the financial services market in the USA. After the S&L crisis the US government decided to set up a central mortgage company called Fanny Mae (followed later by Freddy Mac and Ginny Mae). The idea behind this was that the bank environment would benefit from Fanny Mae as a stabilizing factor. In the mid 70s, Fanny Mae started to securitize its portfolios to the market as a standard practice. This provided the market since then with continuous good mortgage interest rates for customers and Fanny Mae and its peers became the main provider of mortgage loans to the retail banks. The Mortgage Backed Securitisation (“MBS”) market has now reached an annual volume of $1,500 bn.²

The past 15 years have shown that securitisation is practised also more frequently outside the US market. In the EU the use of securitisation for mortgages & consumer loans by banks and large corporates has developed into a mature and liquid market. More favourable Bank of International Settlements (“BIS”) solvency standards are currently applicable for MBS in the bank environment (for example 200:1 in stead of 25:1 in the UK)³ and can be used effectively to optimise capital allocation and clean up the balance sheets to ensure sufficient capacity for new business. It is now widely accepted that Mortgage Backed Securitisation has contributed to a mortgage market with competitive interest rates for customers and improved flexibility to manage balance sheet capacity for the banks.

Main barriers and rationales for securitisation

Securitisation is often seen as an anomaly or a one-off event, instead of an innovation for the longer term. On the other hand it is generally accepted in the past years in the mortgage market to apply these structures. At the same time some companies like Enron and others have used similar structures with SPV’s to transfer liabilities or raise cash through off-balance structures not transparent to regulators and shareholders. It is clear these structures cannot be placed in the same basket as the structures discussed in this paper, but it still is one explanation of the slow acceptance of securitisation in other sectors, like the insurance industry. Regulators therefore have a strong preference of overseeing securitisation transactions to ensure the prudential use of these transactions.

Regulators generally are seen to be open and supportive for the use of securitisation, especially in case this improves the market to become more transparent and helps companies to manage their future risk profiles better. Companies like Swiss Re, Barclays UK, Friends Provident and Aviva have led the way in 2004 by initiating their first Life Insurance Securitisation transactions. These will be described in more detail in this paper.

² More background information can be found in Securitization of Life Insurance Assets and Liabilities, April 2004, J. David Cummins, Wharton Financial Institutions Center
Life Insurance Securitisation has significant initiation costs, but as the transaction transfers a transparent and separately rated set of assets or liabilities to the market it can achieve a substantially lower overall cost of capital than the traditional structures. As an example: Friends Provident Life and Pensions (FPLP) in the UK raised £ 380 mio of Tier 1 regulatory capital at a cost of 20bp by securitising future cash flows (Value-of-In-Force) of its life portfolio. In total the cost of this regulatory capital amounted to 5.5%. The estimated cost for debt financing for FPLP, an A+ rated insurer, could have been 7%, and is not recognised as Tier 1 regulatory capital. The cost of regulatory capital by equity financing for FPLP may be estimated at 9-10%. This example shows that securitisation brought FPLP regulatory capital which can be used for financing future growth at a lower cost than traditional financing. FPLP stock prices increased by 1-2% in the weeks following the announcement and Merrill Lynch upgraded FPLP by 3%. Also it demonstrated that for FPLP there was no first mover disadvantage as was the case for first movers in the early days of MBS, but in fact turned into a first mover advantage. This phenomenon could mean that new extensions in securitisation such as Life Insurance Securitisation will not have the same disadvantages as the first movers had in the MBS markets. Another example is that regulatory reserves of insurance companies for instance may, under present accounting and regulatory reporting guidelines, be based on which the capital markets regard as over-conservative assumptions. For instance mortality risk may be regarded as an A-rated risk for investors, whereas regulators (or reinsurers) would be more conservative and classify it as a BB-rated risk. By transferring these risks, reserves are automatically released and the spread becomes available as free surplus capital for the company. Alternatively this also can lead to the possibility of raising capital, based on the estimated release of future surplus reserves to investors.

Credit rating assumptions for securitisation structures are often more favourable than credit rating of the issuing party (“originator”). This is achieved by transferring assets to an off-balance Special Purpose Vehicle (“SPV”) and/or applying credit enhancement to the ring-fenced block of business. Transferring assets (or liabilities or future cash flows) to an off-balance SPV is called a “True Sale” structure. In this case the SPV is bankruptcy remote from the originator and can be rated independently. As these structures are often not inflicted with any of the discussed barriers it is likely to receive more favourable rating. As a result the insurer will be able to raise capital at a lower cost. In many cases in the insurance sector a True Sale is not possible due to regulatory restrictions. In these cases credit enhancement is used to achieve a more favourable rating. This may be provided by specialised mono-line (re-) insurers who can provide a triple A guarantee on future cash flows. Next to these guarantees, a liquidity facility or collateral may be provided. In case of collateral only a percentage of the value is securitised and the remaining can serve as guarantee that any volatilities in future cash flows will not hurt investors payments of advanced capital. Collateral used in securitising the present value of future cash flows of a defined book of business (Value-of-In-Force) has often produced some misunderstandings. The main misunderstanding is that many understand that all future cash flow is secured and retained by investors and therefore only the agreed percentage is capitalised by the originating insurer. Naturally the originator will receive any remaining surplus after fulfilling the agreed obligations in principal payments and interests to the investors. But in communications it is still often seen to be communicated that Company XYZ has securitised XX% of its embedded value, thereby feeding the misperceptions in the market about this issue.
Also the increased complexity of (financial) institutions has increased the need for risk diversification by investors. Large insurance institutions have become very complex warehouses of wide spread risks in themselves and are increasingly difficult to assess by the investor community. Securitisation structures offer parts of the business and its associated assets and liabilities transparent to investors. Therefore it helps the investors to better model the risk profile and optimises any liability mismatches in the portfolio. This can also apply to the originating insurance company. Targeted liability mismatches can be wrapped in a dedicated transaction and transferred to an investor group optimising the originators own portfolio. For example, for the first time excess mortality has been placed to the capital markets in 2004. Swiss Re concluded its Vita Capital securitisation transaction early 2004 by transferring $400 mio of excess mortality risk in the USA, UK, France, Switzerland and Italy.

Moral hazard and the perceived gap in shared interests between shareholders and management of companies are an additional reason for the increased cost of capital. A ring-fenced business or set of asset classes transferred to a separated entity has no other function or interest than to fulfil agreed interest and principal payments. Therefore the combination of obtaining capital through general company equity, debt financing and securitising future cash flows of selected portfolios or specific liabilities can become a very effective way to achieve a lower cost of capital for insurers and reinsurers.

Investors have increasing difficulties in optimising their investment portfolios. Securitisation can model assets and/or liabilities into specific lines of securities fitting better to the investor communities needs. Investors are seen to be very keen in participating and for instance perceive selected securities to be more solid and transparent than actually rated for. Especially in the early stage, new types of securities are usually rated with greater conservatism by rating agencies thereby offering a better return to investors relative to the underlying portfolio. Another example is the recently increased demand for long term fixed rated notes. It is also common that transactions are rated in different classes or tranches, thus attracting a more diversified group of investors. The above factors lead to a better match to investors needs and often attract new investors with different risk preferences and hence improved conditions to attract capital. As a result, recent transactions have all been oversubscribed and have found great interest in the investor community.

A main remaining barrier is that the insurance industry has to date covered its capital and risk transfer needs predominantly by using the traditional capital raising instruments and re-insurance methods. It is commonly seen that the experience and knowledge in Asset and Liability Management is not yet as widely implemented in the insurance sector as for instance in the banking sector. Therefore it may take some time for insurers and reinsurers to adopt these new techniques to manage their capital resources in an alternative way.

Main motivations for securitisation

As mentioned, banks have led the way in building the expertise in securitisation. Mortgage Backed Securities (“MBS”) have created a very fluid market for investors, commoditised the applied structures to achieve large volumes at low cost pricing per transaction and convinced regulators to bring regulations in line to facilitate these practices further. Recently The Netherlands and Germany followed

\[4\] Swiss Re, Vita Capital transaction, Jan. 2004
the USA, UK and Belgium in adapting new and more favourable regulations to facilitate MBS. It is not surprising that the first large European Value of In Force Life Insurance Securitisation was conducted by a bancassurer.\(^5\) It is expected these types of transactions will be followed by other banks due to the unfavourable solvency guidelines for bancassurers in maintaining insurance portfolios on their books. Banks are seen progressively to optimise their regulatory capital position or divest their insurance activities due to the high capital allocation costs involved for their insurance activities.

In total six main reasons for using Life Insurance Securitisation in the future can be identified\(^6\). The first objective for using securitisation is to reduce the cost of funding; these structures usually have high credit ratings: after all, with an SPV’s assets not linked to their originator’s credit risk, traditional lenders or fixed income markets could demand lower risk premiums.

Secondly, it may be used as a risk management tool to manage the maturity mismatch between assets and liabilities or to reduce existing risks in a specific sector. Swiss Re used Life Insurance Securitisation as a risk management tool to transfer catastrophic mortality risk to the capital market. Although this did not effect its prudential capital requirements immediately, in extreme circumstances these structures will have a major positive impact on the market value of the company and reduce the overall risk profile to investors and credit rating agencies in the short term.

Thirdly, it can assist in achieving greater diversification in asset sources or to tap into new investor groups. The new investor groups interested in notes from Life Insurance Securitisation may be an important area of focus. Especially long term fixed rated notes or catastrophic risk transfer structures address an increasing demand on side of hedge funds and asset managers of life & pension insurers and reinsurers.

Fourthly, securitisation may be used for arbitrage, whereby securitisation helps to capitalise on return differences between securitisation structures and their underlying assets or liabilities. Arbitrage will become even more important to assess the fair value of the held assets and liabilities. Securitisation may provide with a secondary market and enable to recognise the fair value easier and more transparent to investors and regulators.

Fifthly, it may be used to attract cash, aimed at creating tradable securities or used to finance future new business generation or co-finance acquisitions. Raising capital at a lower cost is one main reason. Another important factor is to increase the capacity to underwrite risks of the insurance sector. So far the capacity of the insurance sector has been limited to resources inside the sector. By extending capacity resources to the capital market the insurance sector can increase and optimise its capital resources effectively.

Sixthly, securitisation can help to restructure the balance sheet and achieve solvency relief benefits. The regulator in the UK led the way in recognising the positive effects of securitisation. The first transactions have shown the regulator appreciates a transparent use of these structures. Several companies like Barclays UK and FPLP have benefited from an open dialogue with the regulator and alignment of the structures to regulator requirements.

It may be concluded that securitisation may serve a useful addition for insurers to lower their cost of capital. It may be of use to increase the quality of the

\(^6\) Statistical Bulletin, Quarter 4, 2003, De Nederlandsche Bank
regulatory capital, finance future growth, co-finance acquisitions, optimise intercompany capital resources or align new products better to future regulatory and capital market conditions. Securitisation is believed to improve long term return on capital and thereby increase the value to shareholders. This topic will be further researched in following papers.

**Different options for Life Insurance Securitisation**

In principle both the asset side and the liability side of the balance sheet can be reviewed for securitisation to the capital market. This section will highlight the different structures; give a short description of these structures and will conclude with an overview of anticipated effects of the different alternatives.

<table>
<thead>
<tr>
<th>Assets Liabilities</th>
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</thead>
<tbody>
<tr>
<td>1. VIF</td>
</tr>
<tr>
<td>2. Deferred Acquisition cost</td>
</tr>
<tr>
<td>3. Closed Block</td>
</tr>
<tr>
<td>Surplus assets</td>
</tr>
<tr>
<td>Designated Closed Block Assets</td>
</tr>
<tr>
<td>Surplus Margin</td>
</tr>
<tr>
<td>Market Value Margin</td>
</tr>
<tr>
<td>Closed Block Liabilities at Market Value</td>
</tr>
</tbody>
</table>

**Figure 1**

Figure 1 gives an overview of the most accepted items available for securitisation. As displayed both on the liability side and on the asset side recent transactions have shown the possible effects and structures.

**Asset side securitisation structures** On the asset side 3 main structures can be identified available for securitisation purposes. These are Value of In-Force (“VIF”) securitisation, securitisation of Deferred Acquisition Cost (DAC) and Closed Block securitisation. VIF securitisation advances future cash flows of expected net profits on the insurance portfolio. The VIF of a portfolio is calculated by the discounted NPV of future profits minus future cash outflows minus DAC. The VIF is part of the embedded value of the company, which includes the total of VIF plus shareholders’ net worth capital. The CFO forum lately defined embedded value as: *the present value of shareholders’ interests in the earnings distributable from assets allocated to the covered business after sufficient allowance for the aggregate risks in the covered business. The EV consists of the following components free surplus allocated to the covered business, required capital, less the cost of holding required capital and the present value of future shareholder cash flows from in-force covered business (VIF).*

The Barclays transaction, shown below in figure 2, was the first EU VIF transaction.

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7 European Embedded Value Principles, CFO Forum
It was aimed to restructure the capital within the group and release regulatory capital held by Barclays Bank for Barclays Life and Woolwich Life. In total £400 mio was raised based on a VIF of £750 mio. Collateral of £350 mio was offered to investors. This collateral later increased due to a increase of £150 mio in VIF to a total of £900 mio which was the result of the positive effects of a reduction of the expense risks due to a outsourcing of the administration to a third party administrator. The simplified structure of the transaction\(^8\) is displayed in figure 2. The transaction was rated AAA as it was enhanced by a guarantee of the insurance company AMBAC in addition to the offered collateral. A similar transaction was brought to the market by FPLP in December 2004. Early 2005, Swiss Re securitised 5 run-off portfolios from its Admin Re business. This transaction was the first VIF securitisation without a guarantee by a monoline insurer and to be defined in specific classes as indicated in Table 1\(^9\):

\[
\begin{array}{|c|c|c|}
\hline
 & Series A notes & Series B notes & Series C notes \\
\hline
\text{Securities sold} & \text{USD 175 m} & \text{USD 45 m} & \text{USD 25 m} \\
\hline
\text{Expected maturity} & 6 \text{ years} & 9 \text{ years} & 11 \text{ years} \\
\hline
\text{Rating} & A+ / A1 & BBB / Baa1 & BB / Ba1 \\
\hline
\end{array}
\]

Another transaction was conducted in the acquisition of Forethought. Forethought, a US based insurer mainly specialised in funeral insurance, was acquired by The Devlin Group for $ 280m. It was the first time a large part of the transaction was financed through a VIF securitisation. The company raised $150m from an AAA bond. The deal comprised a $50m three-year tranche that priced at 40 basis points (bp) over Libor and a $100m 10-year tranche that priced at 55bp over Libor. Securitisation of Deferred Acquisition Cost has been more widely discussed in recent years as one of the potential areas of future focus for Life Insurance Securitisation.

\(^8\) Gracechurch, Pre Sale Report, Oct. 2003, Standard & Poors
Upfront acquisition costs are capitalised in GAAP accounting as a Deferred Acquisition Cost and written off over the lifetime of the policy. DAC securitisation structures release the invested capital by the insurer for acquiring new business back to the insurer. This provides the insurer with a separate financing structure for new business, the financial conditions of which will be related closely to the rating of the underlying portfolio. DAC securitisation in the AVIVA case was a private transaction of £200 mio and details were not made public so far. In the third section the changes in recognition of DAC under IFRS and its possible effects will be discussed further.

Closed Block securitisation was mainly seen in the USA during demutualization processes. The structure separates a ring-fenced and full block of business in a separate legal entity to be securitised. These structures transfer all assets and liabilities related to the block of business. Based on the agreed market value of the liabilities, including a market value margin, the surplus assets will be available for securitisation. Figure 3 shows an example of the Prudential Closed Block structure\textsuperscript{10}.

All asset related securitisation structures have in common that they can be classified as Asset Backed Securities (ABS). The main characteristic of ABS’s are that they may provide a better rating than applies to the originating insurer, thereby providing them with possibly improved financing conditions than equity financing, subordinated debt or financial reinsurance. A general overview of three types of asset related transactions are displayed in figure 4.

\textsuperscript{10} Issues Paper on Life Insurance Securitisation, Oct. 2003, IAIS
<table>
<thead>
<tr>
<th>Value in Force (embedded value)</th>
<th>Deferred Acquisition Cost</th>
<th>Closed block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Raise regulatory capital</td>
<td>Re-finance Acquisition costs</td>
</tr>
<tr>
<td>Structure</td>
<td>Provide capital based on a % of VIF</td>
<td>Provide capital based on a % of DAC</td>
</tr>
<tr>
<td>Enhancement</td>
<td>Collateral &amp; Guarantee</td>
<td>Collateral &amp; Guarantee</td>
</tr>
<tr>
<td>Regulatory</td>
<td>No restrictions or relief</td>
<td>No restrictions or relief</td>
</tr>
<tr>
<td>Rating effect</td>
<td>All capital raised &gt;50% of VIF will improve rating conditions</td>
<td>All capital raised &gt;50% of VIF will improve rating conditions</td>
</tr>
</tbody>
</table>

**Liability side securitisation structures** Over the past 10 years the market for catastrophic risks in non-life insurance (CAT bonds) have developed steadily\(^{11}\) (figure 5).

**Figure 4**

**Figure 5**

It is an accepted market for insurers and re-insurers to obtain additional capacity directly from the capital market.

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\(^{11}\) The Picture of ART, Sigma 1/2003, Swiss Re and Issues Paper on Non-Life Securitisation, Oct. 2003, IAIS
In 2004 Swiss Re securitised for the 1st time a catastrophic risk in life insurance to the capital market. The risk transferred in the VITA Capital transaction was excess mortality risk in different countries. Figure 6 shows the structure and transferred risks. In principal the risks accepted by the investors can be indicated as a catastrophic rise in mortality due to for instance a re-occurrence of an epidemic disease like the Spanish Flew.

Based on this successful Swiss Re Vita Capital transaction and transfer of short tailed life risks to the capital market, the increased liabilities for Guaranteed Minimum Death Benefits (“GMDB”) in unit linked portfolios (due to reviewed estimated of future fund performances) and the enduring accumulation of long tailed life risks like longevity at insurers and pension funds, it is likely that more of these structures will be developed and used by (re-)insurers to optimise their portfolio and hence their risk profile. The innovation for reinsurers is that traditionally reinsurers transfer risks between each other through retrocession. Securitisation enables Swiss Re to transfer risks to the capital market at market value. Alternatively, risk transfer capital market structures have in general a AAA credit risk, thereby improving the overall risk profile of the issuing party.

Unit Linked investment products are extended with a “guarantee of principal” feature, which guarantees the policyholder of a minimum return of principal paid, regardless of its value or performance. This is called GMDB. Due to the fall in the stock markets, this liability has become very visible in the balance sheet. These long-term liabilities are very dependent on interest rates and stock markets. Due to this, regulators enforce increased regulatory capital to cover for this increased liability whereas over the longer-term this liability may decrease considerably when stock markets and interest rates recover. Therefore it is expected that some insurers might want to securitise GMDB to the capital market in order to reduce this type of volatility in its balance sheet.

The longevity risk is included in the pension and annuity portfolios. It is regarded as the most difficult liability insurers have on their books. The life expectation of the policyholder and the included rights in the pension plan or annuity are principal to

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12 Securitization of Life Insurance Assets and Liabilities, April 2004, J. David Cummins, Wharton Financial Institutions Center
determine the size of the risk. As the life expectancy has been rising the past years, the calculated prudential reserves are becoming smaller or even insufficient to pay the pensioners in the future. This combined with the decreasing performances on the asset side due low interest rates and fall in stock values, regulators are becoming more alert. Transferring the longevity risk can put a cap on the liabilities for the pension funds and life insurers and possibly reduce the amount regulatory reserves required to hold these liabilities.

Early 2005 several conceptual structures have been introduced in the market to transfer longevity risks. The structures are still in an early stage and will not be discussed in this paper but subject to further review.

**Analysis of interaction between securitisation, IFRS & Regulatory Risk Based Capital guidelines**

In 2005 the IFRS 4 Insurance Phase 1 will be applicable for all listed EU insurers. At the same time in different EU countries new regulatory standards are proposed in anticipation of the expected Solvency II guidelines. These new regulatory guidelines in for instance the United Kingdom and The Netherlands are all based on risk sensitive desired capital reporting guidelines instead of the pro rata solvency requirements insurers were used to in the past. This section will describe the relevant highlights of the new guidelines in relation to the discussed Life Insurance Securitisation structures.

**Underlying principles for the new guidelines**

For the insurance (and banking sector) regulators and accounting standards play a vital role in communicating the status of the stability and reliability of the financial system. In general the perceived main difference between the banking sector and the life insurance sector is the duration and availability of assets and liabilities managed on behalf of its customers. In life insurance typically assets & liabilities are held for longer terms, whereas banks assume financial responsibilities with a shorter horizon and assets remain available for the use of its customers.

IFRS aims to disclose the fair value of a company to the market. This means that insurers will have to disclose volatility in their balance sheets and profit & losses which in the past where balanced on the longer term through equalisation reserves, catastrophe reserves and the release of prudent reserves based on the experience ratings available to each insurer.

The EU commission is working towards the finalisation of the Solvency II guidelines. To comply with the new standards, insurers must change their internal reporting structures and systems to be able to calculate on a structural basis the estimated values of assets and liabilities to comply with the new guidelines.

This currently leads to the situation that:

- The listed “Group” company will have to comply with the IFRS, the local companies of the Group can apply local GAAP on which basis they will be taxed
- The local insurance companies of the Group will comply with new local regulator guidelines, Group companies are not regulated in case these Group companies do not undertake direct insurance activities

As these IFRS and regulator guidelines do not have similar views or simultaneous implementation schedules it will be difficult to oversee the necessary timelines and
investments to implement these guidelines\textsuperscript{14}, let alone the possible adverse effects that might result from this process in the unforeseen effects of so-called accounting mismatches.

**IFRS 4 Insurance Phase 1 and 2** The International Accounting Standards Board (“IASB”) has foreseen a separate introduction of IFRS for insurance companies. IFRS implementation is now scheduled in 2 phases, of which phase 1 will be operational in 2005 and phase 2 is aimed to become operational in 2007-9 at the earliest.

The most important changes for phase 1 will be the altered definition of an insurance contract, the limitation on the use of equalisation reserves and catastrophe reserves, unbundling the insurance contracts as regard to embedded derivatives and the changed treatment of investments\textsuperscript{15}.

Another important change in phase 1 is the treatment of investments. Investments which the insurer intends to hold to maturity and fixed income investments (like fixed income securities) are exempted for measurement to fair value.

For phase 2 it is the objective of the IASB to fully transfer the accounting of results of an insurance company to an ALM approach instead of the present cost based profit and loss approach. This will mean that from phase 2 onwards, the investments and also the liabilities will have to be accounted for on a (discounted) fair value basis every quarter. At the same time the revenue recognition may change to a VIF approach where future discounted Net Present Value of the contract issued is accounted for and not the premium collected and cost incurred. The IASB Steering Committee has presented in March 2002 their views and expected effects on the income statement, which should reflect the fair value of the insurer’s results. This can be displayed in the following table:

<table>
<thead>
<tr>
<th>Traditional insurance reporting model:</th>
<th>IASB Steering Committee model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premiums earned xxx</td>
<td>EPV of premiums xxx</td>
</tr>
<tr>
<td>Claims incurred (xxx)</td>
<td>EPV of claims (xxx)</td>
</tr>
<tr>
<td>Amortisation of acquisition costs (xxx)</td>
<td>Provision for risk and uncertainty xxx</td>
</tr>
<tr>
<td>Maintenance costs xxx</td>
<td>EPV of maintenance costs (xxx)</td>
</tr>
<tr>
<td>Profit (loss) - underwriting business xxx</td>
<td>Acquisition costs (xxx)</td>
</tr>
<tr>
<td>Investing and financing activities:</td>
<td>Profit (loss) - new business xxx</td>
</tr>
<tr>
<td>Investment income xxx</td>
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</tr>
<tr>
<td>Net profit (loss) xxx</td>
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<td></td>
<td><strong>Previous years’ business:</strong></td>
</tr>
<tr>
<td></td>
<td>Changes in estimates/assumptions xxx</td>
</tr>
<tr>
<td></td>
<td>Release of risk xxx</td>
</tr>
<tr>
<td></td>
<td>Change in adjustment for risk and uncertainty xxx</td>
</tr>
<tr>
<td></td>
<td>Profit (loss) - insurance business xxx</td>
</tr>
<tr>
<td></td>
<td><strong>Investing and financing activities:</strong></td>
</tr>
<tr>
<td></td>
<td>Unwinding of discount - insurance provisions (xxx)</td>
</tr>
<tr>
<td></td>
<td>Effect of changes in discount rate xxx</td>
</tr>
<tr>
<td></td>
<td>Return on investments xxx</td>
</tr>
<tr>
<td></td>
<td>Profit (loss) - investing and financing activities xxx</td>
</tr>
<tr>
<td></td>
<td>Net profit (loss) xxx</td>
</tr>
</tbody>
</table>

In the traditional model the income and claims are recognised in the year they incur. The model proposed by IASB under IFRS Phase 2 will include the fair value (Expected Present Value, EPV) of premiums, claims and costs for new business written. Acquisition costs are recognised in full in the year the associated business is

\textsuperscript{14} Impact of Insurance Accounting on Business Reality and Financial Stability, Geneva Papers, Jan 2004, Jonathan Bloomer, Prudential Plc

\textsuperscript{15} Mind the GAAP: Fitch’s view on Insurance IFRS, may 2004, Fitch
acquired. Based on the experienced variations on the fair value assumptions the business in previous years is adjusted.

Next to these proposed changes also financial reinsurance recognition will be changed in phase 2 primarily to be recognised primarily as a financing instrument without its present positive effects on liabilities held by the insurer. As a consequence the VIF and DAC will move to the profit and loss; the equalisation and catastrophe reserves will disappear and these liabilities will have to be assessed at fair value. In absence of a real secondary market for liabilities a provision is proposed to add a Market Value Margin to the estimated fair value of the liabilities. To conclude, it is likely that the following effects related to securitisation can be anticipated:

- Increased demand for fixed income investments, which will reinforce the securitisation markets
- A secondary market through securitisation for parts of liabilities like mortality, GMBD and possibly longevity can gain more acceptance and its effect on the insurers balance sheet will be more visible
- VIF and DAC are not affected as such, but VIF and DAC may become more a focus of attention. This might lead to specialised conduits or warehouses, which accumulate smaller VIF & DAC transactions and thereby enable also smaller insurers to access the capital market in this way.
- The foreseen changed treatment in Phase 2 of financial reinsurance will increase the capital need of insurers to replace the existing financial reinsurance arrangements. It is expected that reinsurers will become more active to provide securitisation-based solutions to the market in order to be able to substitute existing financial reinsurance agreements.

New regulatory guidelines based on risk sensitive capital requirements Already new guidelines have been proposed in different EU countries. In principle these new guidelines entail a shift to manage and disclose liabilities based on more precise estimates of the fair values of these liabilities in specific portfolios. These changes will have significant impact on the processes of the local insurers. They may also have unexpected solvency effects based upon the newly estimated liabilities and adapted regulatory capital. From this point of view it is still difficult to project which effects these guidelines, once implemented, will have on the free surplus capital position of the insurance groups. It may be the case that an increased need for capital will arise at different groups resulting from the changes in regulatory capital. As at the same time reinsurance capacity is still limited, the stock markets have not regained their expected levels and interest rates remain low, securitisation can provide with an attractive alternative solution in terms of raising capital or risk transfer to improve insurers (regulatory) capital position.

Example: Life Insurance Securitisation in relation to subordinated debt and equity financing

As an example an insurer would need to raise capital in case of strengthening its regulatory capital, financing new business or financing acquisitions. In these cases usually equity financing or debt financing was used. Life Insurance Securitisation offers another alternative option to consider. To show the effects, 2004 balance sheets of Friends Provident and 5 leading European insurers were analysed and a model balance sheet and a model regulatory...
capital statement was generated to use in this example. The example may demonstrate the effects of securitisation related to debt financing and equity financing on the balance sheet of an A+ insurer with total assets of € 40 bn, a DAC of € 2bn and a VIF of € 1.5bn. The model balance sheet was derived for explanatory purposes. The insurer raises € 500 mio:

**Raising 500mio capital**

<table>
<thead>
<tr>
<th>Assets</th>
<th>Before</th>
<th>After DAC</th>
<th>Debt</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>36.700</td>
<td>36.700</td>
<td>36.700</td>
<td>36.700</td>
</tr>
<tr>
<td>Deferred Acquisition cost</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>Other intangible assets</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Cash</td>
<td>1.000</td>
<td>1.500</td>
<td>1.500</td>
<td>1.500</td>
</tr>
<tr>
<td>Other tangible assets</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Total Assets</td>
<td>40.000</td>
<td>40.500</td>
<td>40.500</td>
<td>40.500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Before</th>
<th>After DAC</th>
<th>Debt</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital and reserves</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
</tr>
<tr>
<td>Subordinated Liabilities</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.500</td>
</tr>
<tr>
<td>Technical Provisions</td>
<td>34.000</td>
<td>34.000</td>
<td>34.000</td>
<td>34.000</td>
</tr>
<tr>
<td>SPV loans</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other creditors</td>
<td>3.000</td>
<td>3.000</td>
<td>3.000</td>
<td>3.000</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>40.000</td>
<td>40.500</td>
<td>40.500</td>
<td>40.500</td>
</tr>
</tbody>
</table>

A 10yr term fixed rated debt financing structure costs the insurer f.i. 225 basis points plus 25 basis points of commission costs. The debt financing is not recognised as regulatory capital.

Alternatively an issue is done by equity financing. The cost of raising € 500 mio equity is estimated at 500 basis points. The capital raised is regarded as regulatory capital.

In securitising an AAA 10yr Floating Rate Note of € 500 mio of the existing Value of In Force or Deferred Acquisition Costs the costs are estimated at f.i. 25 basis points and 125 basis points of initiation costs incl. the monoline insurer guarantee and interest swap arrangement. Due to the transferred risk of future cash flows the regulator recognises it as Tier 1 regulatory capital. The accounts under IFRS will recognise the financing as a loan. This leads to the following capital requirement table from the regulator perspective:

<table>
<thead>
<tr>
<th>Capital requirement</th>
<th>Before</th>
<th>After DAC</th>
<th>Debt</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder funds</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>2.500</td>
</tr>
<tr>
<td>Other regulatory capital</td>
<td>300</td>
<td>800</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Total available capital</td>
<td>2.300</td>
<td>2.800</td>
<td>2.300</td>
<td>2.800</td>
</tr>
<tr>
<td>Capital requirement</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Overall surplus capital</td>
<td>1.600</td>
<td>2.100</td>
<td>1.600</td>
<td>2.100</td>
</tr>
<tr>
<td>Increase</td>
<td>500</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>31%</td>
<td>31%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Under the conditions of this example, the securitisation option increases the available surplus of the company from € 1,6 bn to € 2,1 bn (+31%) comparable to equity financing at substantial lower cost.

Clearly securitisation expands the capacity to increase the surplus and solvency position, without having to ask for new funds of its shareholders. The capital is raised at a lower cost, which may increase the future profitability of the insurer or ensure the insurer the ability to maintain its profitability while competing at lower margins.
Concluding comments

Life Insurance Securitisation offers insurers and reinsurers a promising opportunity to reduce their cost of capital and tap into the wider capital markets. Leading European insurance and reinsurance companies have opened the way to show the different applications of Life Insurance Securitisation. It shows a strong commitment to use the capital markets in a broader sense to improve shareholder returns, reinforce policyholder interests, open up new ways of optimising capital resources and introducing new products aligned to these new possibilities. In the light of remaining difficult market conditions concerning risks and asset management, these companies will be able to tap into the broader capital markets. It can make their companies more attractive to policyholders and shareholders and enable them to react more adequately to dramatic changes in the market.

Regulators monitor these movements closely. So far close cooperation with regulators has shown to be very beneficial to insurers wanting to engage in Life Insurance Securitisation. In light of changing accounting and regulatory guidelines, the principle of transferring identified assets or liabilities at fair value to the capital market can be regarded as a logical extension to the new guidelines. The coming years will show if Life Insurance Securitisation will stay an instrument for a few leading insurance groups or that it may become of wider use to the insurance sector. For capital raising purposes, the VIF securitisation has provided with some successful benchmark structures. DAC securitisation and risk securitisation the structures are still to become wider available or to be developed in the coming years. So far the transactions of the past 2 years have shown that more and more insurers and reinsurers believe in the use of Life Insurance Securitisation as an efficient long-term capital resource.
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