

Funding the future

Insurers' role as institutional investors

June 2013

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Executive summary

Insurers receive premiums in return for a promise to pay policyholders when specified events occur. To be able to honour these commitments, insurers invest the premiums they receive. Insurers are the largest institutional investors in Europe, with €8.5trn of assets under management as of 31 December 2012. In 2011, 64% of these assets were government or high-rated corporate bonds and 15% were equities.

There are three main drivers of insurers' investment strategies: the profile of their liabilities (duration and predictability), the risk/return profiles of available assets and a range of framework conditions, such as prudential regulation and taxation. Depending on the type of products that insurers write, they adopt different investment strategies and asset allocations.

Because most insurance policies create predictable and long-term liabilities for insurers, they can invest in long-term and illiquid assets. Insurers are ideal sources of the long-term funding for businesses that policymakers hope will stimulate renewed economic growth in Europe. At the same time, the continual flow of premiums, even in periods of market downturn, enables insurers to be a source of liquidity and to buy assets that are undervalued during downturns when many other market players sell. Therefore, insurers can have a counter-cyclical and stabilising effect on financial markets and the economy.

Banks have lending assets of approximately €46trn, but are not considered institutional investors. Their role is different from, as well as complementary to, the role of insurers. The new banking rules will force banks to reduce the risks associated with maturity and liquidity transformation. Together with the estimated amounts required to support economic growth in Europe, these new banking rules will generate a funding gap of at least €4trn to €5trn between 2012 and 2016. Insurers' provision of long-term funding will therefore become increasingly important for the European economy.

A range of regulatory developments have the potential to create framework conditions that affect insurers' ability to continue providing long-term funding to the economy.



Concerns arise principally in three areas of policy: prudential regulation, taxation and collateral requirements for derivatives, as well as in overall macroeconomic policy.

 Prudential regulation Good regulation is important for a healthy industry and the move to modern, risk-based regulation of the type proposed by Solvency II is strongly supported by the European insurance industry.

The Solvency II rules will specify the amount of capital insurers must hold as a buffer against losses on their assets. However, at the time of publication, the original version of these rules was based on the assumption that all insurers trade their assets and failed to recognise that often insurers have the ability and the willingness to hold the assets long-term or until maturity. As a result, in many cases, the risks that long-term assets present to insurers are overstated.

Consequently, the amount of capital that prudent insurers need to hold against those assets is unnecessarily increased. Not only will Solvency II potentially increase insurers' capital cost when making long-term investments, but it will also result in the reporting of excessive volatility. This may cause both a reduction and a misallocation of long-term investment, unless adequate measures are introduced

• **Taxation** The flow of premiums to insurers and hence to businesses with long-term funding needs depends in part on tax incentives for the long-term savings or pension products offered by insurers.

However, many European governments are responding to their fiscal problems by removing these tax incentives. This risks not only restricting the availability of long-term funding for businesses but also worsening governments' fiscal situations as it reduces economic growth and, hence, the tax base. In addition, it reduces individuals' savings to fund their retirement.

 Collateral rules for derivatives New derivative rules are likely to affect insurers' approach to liquidity management. This will force them to hold suboptimally large amounts of cash, to monetise assets via the repo market or to simply stop offering products for which the use of derivatives for asset/liability management is vital.

There are other policy obstacles to insurers' long-term investing. For example, policies aimed at "ring-fencing" risks can also prevent insurers from benefiting from the structural advantages their business presents. Moreover, the prolonged low interest rate environment that central banks are encouraging in the economic downturn pushes down yields on long-term debt instruments and drives up insurers' liability values.

Policymakers rightly aim to make the financial system more secure. They are beginning to recognise that regulatory and other changes could have unintended consequences for long-term investment. However, they have not yet reached the point at which their proposals — in addition to ensuring security — also recognise the distinctive and naturally stabilising features of insurers' investment activity.

The policy agenda affecting insurers is currently erring on the side of unnecessary caution, with potentially damaging effects for the health of the European economy. The effects that regulatory changes can have on insurers' investment behaviour and thus on the wider economy must be recognised and addressed.



Long-term investments

Long-term investment is the provision of long-dated funds that pay for capital-intensive activities that have a multi-year development and payback period. Such long-dated funds can be provided in various forms, including a very wide range of assets and asset classes.

For example, they can include liquid assets with defined maturity dates (such as corporate bonds), liquid assets without a specific maturity date (such as listed equities), as well as highly illiquid assets (such as infrastructure or private equity investments).

Long-term investors

Long-term investors are investors that have the ability, the willingness and the patience to hold assets for a long period of time or until maturity. They are also able to withstand short-term volatility and continue to hold the assets through periods of low value when their analysis indicates such periods are likely to be temporary.

Long-term investors whose assets' profiles are meant to match their liability profiles are generally not faced with forced sales of assets, although they may still decide to sell assets for other reasons, such as to match changes in their liability profile or where their analysis indicates that long-term performance is likely to deviate substantially from initial expectations.

Introduction

The European Commission's "Europe 2020" initiative seeks to deliver a smart and sustainable strategy for growth that will create a competitive economy with higher employment¹. To facilitate this strategy, the financial system must work effectively to bring together households' long-term savings needs with businesses' and governments' long-term financing needs. Policymakers and commentators look to the financial sector to increase its lending and stimulate economic recovery.

However, we have just experienced a financial crisis. As a result, regulators are introducing new rules aimed at making financial institutions safer, but that may unavoidably increase the cost of lending. So financial firms must either charge borrowers more, dampening demand, or restrict their supply of funds. In short, policymakers are simultaneously pulling financial firms in opposite directions.

These challenges are well-recognised. For example, the European Commission's Green Paper on long-term financing² was published to launch a Europe-wide debate on the financial system's ability to channel savings towards long-term investment. It considers the role of intermediaries (such as banks, insurers and pension funds) and capital markets in fostering the supply of long-term financing and looks at how to improve and diversify the system of financial intermediation for long-term investment in Europe.

In these debates, it is important that the distinctive characteristics of the insurance business and the role that insurers play in the capital markets are recognised. The protection and long-term savings products supplied by life insurers typically give them predictable long-term liabilities. The stream of payments they will make to policyholders can be estimated with a high degree of certainty over relatively long periods. This means they can make the long-term investments required to pay future benefits without incurring liquidity risk³. This characteristic of insurers' business models is one of the main reasons why insurers have

¹ http://ec.europa.eu/europe2020/index en.htm

² Green Paper, "Long-Term Financing of the European Economy", European Commission, March 2013

³ Liquidity risk stems from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimise a loss



coped better with the financial crisis than, for example, banks, which are significantly more exposed to liquidity risks.

Most policyholders keep paying their premiums even during an economic downturn. This enables insurers to keep investing when others withdraw. Indeed, the existence of a continual flow of premiums enables insurers to provide liquidity to the market and to act as natural buyers of assets that are undervalued during a downturn. Their investment strategies, especially for long-term business, allow them to play a stabilising role in the economy.

In short, insurers provide an ideal source of the long-term funding the European economy so desperately needs. Insurers are concerned about the various policy trends that could reduce the flow of premiums available and create disincentives to long-term investing. These concerns arise in a range of policy areas, such as prudential regulation, taxation, derivative rules and macroeconomic policy.

This report aims to explain why this is so. First we describe what drives insurers' investment decisions and the distinctive characteristics that make insurers natural, low-risk and long-term investors. Then we explain the benefits this provides to policyholders and the broader economy. Finally we identify the relevant policy developments and how they may affect those benefits.

I. Europe's largest institutional investor

Insurers' primary role is to provide protection ...

Insurers are in the business of providing protection from risks. In exchange for premiums, insurers promise to compensate policyholders should uncertain events occur, such as their car being stolen, their house burning down or their spouse dying prematurely. This protection is provided by a range of life, health and non-life insurance products.

The unpredictable losses of individual policyholders become more predictable or measurable when aggregated or pooled. Individuals do not know if their car will be stolen this year, but the insurer is able to estimate with a high degree of accuracy how many claims will be made on its car insurance policies. This means that pooling makes it cheaper for insurers to hold risks than for individuals, and premiums can therefore represent a good deal for both parties.

Some risks, such as damage caused by an earthquake, are too rare to make losses predictable or measurable by pooling them. In such cases, insurers pass the risk to reinsurers with global reach and special skills in assessing particular risks, in return for a premium. An insurer may also decide to pass risks to a reinsurer for other reasons, such as reducing an over-concentration of exposure to a particular type of risk.

Insurance therefore promotes economic activity by giving policyholders risk coverage and implicit confidence to make investments or engage in business that they might otherwise deem too risky. When policyholders suffer misfortune, the payments made by insurers help them to recover — for example, to repair damaged plant and equipment and resume production.

... as well as long-term savings and pension products

Insurers are important suppliers of long-term savings and pension products that — usually in combination with life or longevity protection — provide people with an income in retirement. These products are of increasing importance as state pension schemes come under strain from ageing populations.

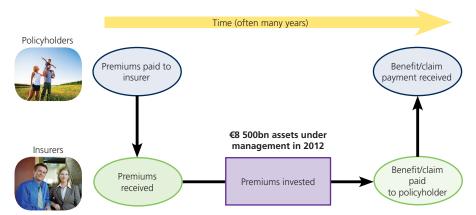
Insurers must invest the premiums they collect from policyholders to pay claims and benefits on their policies and to cover their operating and capital costs. In some cases,



particularly life insurance and pension products, there can be many years between an insurer receiving premiums and paying related claims (see Figure 1). Investment returns represent a core component of insurance products:

- Protection products Investment returns allow insurers to charge lower premiums and offset the effect of inflation in cases where the claim amount is not immediately known.
- **Life products with investment features** Investment returns are an integral part of the product itself.
- Annuities and other products where the pay-outs to the policyholder are
 fixed and guaranteed Investment returns available when the customer buys the
 annuity will, together with life expectancy, dictate the level of annuity that the
 insurer is able to provide to the customer.
- **Products with profit-sharing provisions** The level of guarantee that can be offered on new policies is directly affected by the available investments, while the level of profit-sharing on existing policies depends on the actual and prospective performance of investments.

Figure 1: Insurers invest pooled premiums until benefits are payable



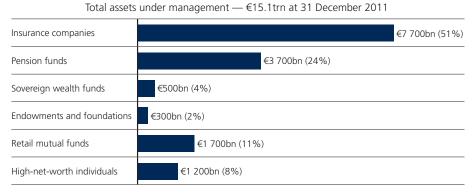
Investment is core to the provision of insurance products

The largest institutional investor in Europe

As a consequence of their primary role of providing protection and long-term savings and pension products, insurers play a significant role as institutional investors. In 2012 European insurers had an estimated €8.5trn of assets under management⁴.

The large inflow of new premiums and the accumulation of assets backing insurers' long-term products have made the insurance industry the largest institutional investor in Europe, with more than 50% of all European institutional assets under management in 2011 (see Figure 2).

Figure 2: Insurers are the largest institutional investors in Europe



Sources: OECD; IMF; EFAMA; Insurance Europe; Philanthropy in Europe; Foundation Center; ECB; FSB; Oliver Wyman analysis

Banks had lending assets of approximately €46trn but are not considered institutional investors⁵. Their role is different from, as well as complementary to, the role of insurers. We expand on this in section III.3.

^{4 &}quot;Insurance Europe Annual Report 2012–2013", June 2013

⁵ The Organisation for Economic Co-operation and Development statistical yearbook identifies institutional investors as pension funds, insurance companies and investment companies, such as sovereign wealth funds



II. How insurers invest

II.1 Drivers of investment strategy

An insurer's investment strategy is generally driven by three main variables:

- the profile of liabilities
- the asset universe and associated risk-return profiles
- the framework conditions created by regulatory decisions

Insurers' investment strategies are primarily determined by the duration and predictability of their liabilities. Duration determines the time horizon over which the insurer can invest, while predictability (which depends on the type of risk insured and the policyholder options built into the contract) determines the required liquidity of investments.

Where insurers provide products with guarantees, the guarantee typically sets a minimum investment performance. Insurers will therefore build their investment strategies in such a way that expected returns exceed what is guaranteed (see Figure 3).

Figure 3: Illustration of a long-term guarantee product

At sale At maturity • Insurer promises policyholder at least Bond matures after 3% performance per year for 10 10 years paying €1 000 nominal and Insurer buys a 10-year fixed coupon €400 interest bond to cover a liability that needs to be paid in 10 years' time 10 years Market value of bond = €1000 Yield = 4%During this 10-year period, insurers are not exposed to changes (volatility) in the market value of the Interest bond, only to defaults (as long as €300 guaranteed they are not forced to sell the bond before maturity) €100 additional Amount invested from policyholder's premium €1 000 Nominal €1 000

Insurers' investment strategies depend on three main drivers

1: The profile of liabilities

Figure 4: Liability characteristics define insurers' investment strategies

Liability category	2011 liabilities (€bn)	Duration of liabilities	Required liquidity	Target returns/ guarantees	Typical investment strategy
Non-life	890	Typically 1–5 years (although can be longer)	Medium ie, policyholder can lapse but policies have no surrender value	Typically no return promises	Short-term, liquid
Life where insurer takes investment risk eg, annuities, traditional life business	2 820	Typically >8 years	Low ie, policyholder either cannot lapse or lapse/ surrenders carry a penalty	Investment guarantees often built into products	Asset/liability management; often long-term strategies; yield orientated to meet any built-in investment guarantees; derivatives sometimes used
Life where policyholder takes the investment risk eg, unit-linked	1 670	Typically 5-8 years	High ie, policyholder has option to switch fund allocation and full policy value is paid on surrender	Target benchmark fund returns	Flexible, focused on maximising return given policyholder's ability and willingness to take risk

Notes:

Liability categories as defined by EIOPA. Depending on the jurisdiction, health liabilities can be treated as either life or non-life Composite liabilities, ie those that the entity cannot split into life and non-life, are excluded Source: "Statistical Annex Insurance 2011", EIOPA

Insurance liabilities are generally illiquid. For example, annuities entail predictable, long-term payments to policyholders against which insurers can make illiquid, long-term investments. However, some lines of insurance expose insurers to less predictable claims. For example, house catastrophe insurance combines a portfolio of diversified predictable claims arising from thefts, fire and other random events, together with infrequent, large and unpredictable claims from catastrophes such as windstorms or floods. The latter grouping requires liquid investment portfolios. However, insurance companies often buy reinsurance to provide cover for the large unpredictable claims, while keeping on their books the more predictable liabilities.

Figure 4 illustrates the relationship between the products an insurer offers and the resulting investment strategy.

2: The asset universe and associated risk-return profiles

There is a broad range of assets in which insurance companies invest. The asset classes they invest in will largely depend on the duration and type of liabilities that they hold, as well as on their appetite for risk. For example, it is only sensible to invest in some asset classes



such as infrastructure (see box on p16) and other real assets if a long-term investment strategy is adopted. This is likely to be because the insurer has long-term liabilities such as annuities or other pension-related and long-term savings products. Other asset classes such as public equities may be used by insurers as part of a long-term investment strategy, particularly for products with an element of profit-sharing. Given that these assets are reasonably liquid, they can also be adopted as part of a short-term strategy if the risk/ return profile is attractive, if the risk appetite for the asset class is sufficient and if the nature of the company's liabilities allow for it.

Where different asset classes can meet an insurer's "liability matching" needs (see Figure 4), one asset may deliver a better return for the same risk or the same return for less risk. This asset will be favoured by insurers as they always seek the optimal trade-off between risk and return within the duration, liquidity and return constraints created by their liabilities

The full range of assets shown in Figure 5 is available only in theory. In practice, insurers face barriers to investing that render some of these assets unavailable to them. An insurer may lack the expertise required to invest in specific assets requiring specific capabilities or the required assets may simply not be available for sale at the time of investment. For example, in some markets, long-dated bonds that would serve insurers' purposes for liability matching are unavailable. Insurers therefore use other assets, including derivatives, that can replicate the desired pay-off to match liabilities, or they accept a certain level of mismatch risk.

The **prudential regulation** of insurers aims to ensure that they hold enough capital to cover the risks they face and that they act in the interests of their policyholders. Such regulations can affect insurers' investment behaviour, making some assets less attractive than others in cases where, for example, capital rules might apply a high capital charge to certain assets, creating a disincentive to invest in them.

The prudential rules for insurance undertakings will be defined by the European Union's new Solvency II regulatory framework. One outcome of Solvency II should be to replace the current patchwork of national regulations in the EU, many of which are highly prescriptive

3: Framework conditions

Infrastructure

The Organisation for Economic Co-operation and Development defines infrastructure as "The system of public works in a country, state or region, including roads, utility lines and public buildings". Infrastructure is therefore a broad asset class that covers different types of projects, either undertaken directly by the private sector or in the form of public/private partnerships.

Investors can gain exposure to infrastructure projects either in the form of debt capital or equity capital. Both can be accessed either via the public market, eg, in the form of infrastructure bonds and infrastructure funds, or via private placements, eg, direct loans and direct investment in infrastructure.

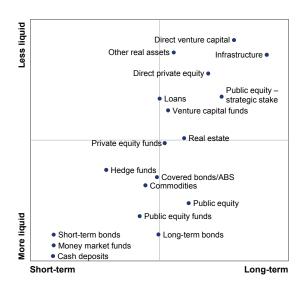
The long-term nature of infrastructure equity and debt makes infrastructure an attractive asset class for insurers. Furthermore, the long-term, cash flows provided by infrastructure debt are highly suitable for matching insurers' long-term liability cash flows particularly in markets where issuance of long-term bonds is limited. In addition, infrastructure investments often provide portfolio diversification benefits.

The volume of infrastructure investments on insurers' balance sheets is currently limited and it varies between countries and companies. In our survey of 13 insurance companies (see footnote 7, p19), infrastructure investments accounted for €12bn. Due to the positive characteristics of such investments there is, however, a strong interest in the industry increasing investments in infrastructure significantly. Also, schemes such as the project bond initiative launched by the EC and the European Investment Bank in 2012 are likely to help to increase insurers' investments in infrastructure. The EC estimates the bond initiative will attract €1–5bn a year at the beginning of the initiative and €10–20bn by 2020.

Insurers' appetite for providing funding to this sector is also demonstrated by our survey of European insurance companies, in which 11 out of 13 of those surveyed confirmed they wish to increase investment in this asset class.



Figure 5: Asset liquidity v. asset duration



Note: Liquidity in this context means assets that can quickly be converted to cash with minimal impact on the price received Sources: "The Future of Long-term Investing", WEF in collaboration with Oliver Wyman, 2011; Oliver Wyman analysis

about insurers' asset allocations⁶, with a Europe-wide framework. Not only will this harmonise European insurance regulation but it will replace it with a risk-based approach to capital adequacy. This will be coupled with strong governance, risk management and reporting requirements. If implemented in the right way, Solvency II will give insurers more freedom in their asset allocation by eliminating national restrictions (subject to their liabilities), while ensuring that they have sufficient capital and risk management to protect them against the risks to which they are exposed. At the time of publication there are some vital issues to resolve (see section IV.1) but the insurance industry supports a risk-based approach as the best way to allow optimal product design and investments while ensuring high levels of customer protection.

⁶ For example, while the EU Life Insurance Directive defines a clear list of eligible assets and maximum limits for investment in any asset class, EU member states may place more stringent restrictions on asset admissibility resulting in a complex asset-by-asset regulatory picture across Europe

Taxation has the potential to affect the flow of policy premiums and hence the investment strategy an insurer will adopt. Insurers' liability profiles and investment strategies are strongly influenced by personal taxation rules, as their products are often designed to be tax-efficient for policyholders. Therefore, personal tax rules relating to insurance products and, especially, retirement savings may affect the flow of funds to the insurance industry.

The taxation of investment gains also affects insurers' allocation of funds to specific asset classes and/or to specific securities. Whether returns are treated as capital gains or as income can make a big difference to the appeal of an asset class. In addition, any tax benefits associated with specific asset characteristics (eg, tax benefits for long-term assets) will have the potential to affect insurers' investment decisions.

Proposed **derivative reforms** will affect insurers because derivatives are often a key part of their risk management strategies, especially for long-term business, where derivatives are used to hedge risk exposures by matching the profile of liabilities or securing a payoff promise made to policyholders. Any additional costs incurred in derivative operations would thus translate into extra cost hedging risks and would have the potential to discourage the provision of a range of insurance products for which derivatives are vital. As recognised by the EC's Green Paper on long-term financing, the need for liquidity is a significant challenge to long-term investing which "may discourage investments in less liquid assets and hence block channels for long-term investment".

The **macroeconomic policies** of governments and central banks can have a major effect on insurers' investments. For example, the current low interest rate environment is prompting investment managers to reconsider their asset allocation and asset/liability strategies to compensate for the low underlying yields. In addition, for reasons of politics or economic policy, governments may seek to influence insurers' investment decisions by regulatory interventions that increase or decrease the attractiveness of investing in certain sectors or types of assets.



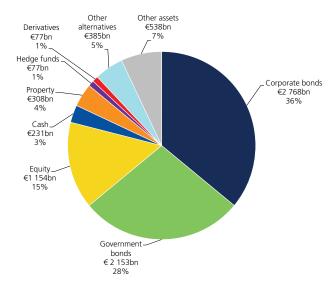
II.2 Asset allocation

Insurers invest in a wide range of assets to meet the needs created by the variety of insurance products they provide.

Insurers invest in a broad range of assets

More than three-quarters of insurers' assets are represented by equities and corporate and government bonds (see Figure 6). Insurers generally favour these asset types because their risk and term profiles satisfy the demands created by their liabilities.

Figure 6: European insurers' asset allocation — end 2011



Sources: Economist Intelligence Unit; Insurance Europe; Oliver Wyman analysis

The investment mix varies considerably between companies and countries within Europe to meet local requirements and conditions. At company level, it typically depends on the types of insurance products sold: that is, on the mix of protection products, life unit-linked and life guarantee-type products. For example, our survey of 13 European insurance companies⁷ confirmed that insurers with a higher proportion of traditional life business

⁷ Thirteen of the largest European insurance companies, with around 40% (€3trn) of total European insurers' assets under management in 2011, were surveyed as part of this study

also held a higher proportion of bonds than insurers who had a high proportion of unitlinked business.

The risk appetite of a company and its areas of investment expertise will also affect its investment mix. For example, companies seeking to invest in green energy might form a team of analysts and experts that surveys the market and analyses these types of investments.

Variations in investment mix between countries typically reflect differences in national product features, product and prudential regulation, government policy and taxes.



III. The benefits of insurers' investment approach

Insurers are extremely valuable as investors due to their position as the largest institutional investors in Europe, the fact that the nature of their liabilities can enable them to be natural long-term and steady investors, and some other distinctive features of their business. They directly benefit policyholders and society as a whole through their role as financial intermediaries.

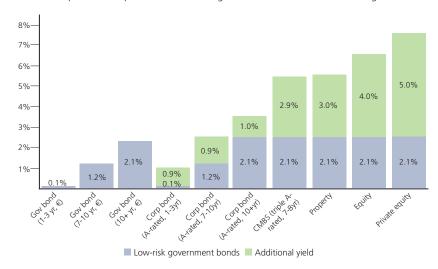
III.1 Benefits for policyholders

Insurers have "structural" investment advantages from which their policyholders can benefit. As illustrated in Figure 7, investing long-term gives policyholders access to the risk premium and implicitly to the higher yields embedded in a wide range of investments

Access to insurers' structural investment advantages

Figure 7: Investment in long-term assets provides access to additional yield

Illustrative comparison of expected returns on long-term assets v. returns on low-risk government bonds



CMBS = commercial mortgage-backed securities

Sources: Bank of America Merrill Lynch government index; MSCI EMU corporate bond index; JP Morgan CMBS index; Morgan Stanley; Oliver Wyman analysis

(eg, credit, equities and property), which compensate for the risk of holding assets with longer maturities.

Where insurers hold long-term and illiquid liabilities they have the ability to hold assets over the long-term, allowing for diversification of risks across time as well as across asset categories. This is different to banks, whose liquidity risks restrict their ability to invest long-term. In addition, a long-term illiquid perspective allows insurers to have great flexibility over which assets they sell at a given time and enables them to avoid "forced sales" during periods of price volatility. This implicitly gives policyholders access to the risk premium from assets whose volatility would otherwise prevent many of them from investing.

Insurers can invest in illiquid assets where they have long-term, predictable liabilities and ready access to liquidity for paying claims (including that from a steady stream of premiums). This gives policyholders access to the illiquidity premium⁸ embedded in long-term assets; ie, the higher rate borrowers are willing to pay for funds committed over a long period and for which there is only a limited or no secondary market.

Access to investment expertise

Insurers have investment expertise and information services that individual investors cannot feasibly have themselves. This means that individuals can improve their investment decisions by "outsourcing" them to insurers. The insurer will then take responsibility for carefully researched investment decisions and for managing the trade-off between risk and return.

There is a wealth of academic literature showing that, firstly, most policyholders do not want to take responsibility for constantly monitoring their own investments and the markets and for making regular investment decisions. Secondly, as investors, policyholders suffer from behavioural biases that often cause them to make poor investment choices. Specifically, they are inclined to over-react to short-term price fluctuations and, as

⁸ A range of academic literature supports the existence of illiquidity premia, eg, "Corporate Bond Default Risk: A 150-Year Perspective", K. Giesecke, F. Longstaff, S. Schaefer, I. Strebulaev, Journal of Financial Economics, Vol.102/2, November 2011 and "Exploring the Relationship between Credit Spreads and Default Probabilities", Bank of England Working Paper No.225, 2004



a result, end up buying high and selling low⁹. In contrast, insurers' long-term investment philosophy means they can overcome many of these biases.

Policyholders can also reduce the cost¹⁰ of investing by outsourcing their investment decisions to insurers. More specifically, the pooling of assets — for example through the "general account" approach used by many insurers — allows a greater scale than would be possible if investments were split into many sub-portfolios. This reduces the number of funds and administration costs. Moreover, the large-scale pooling of assets, the significant liquidity created by asset returns and premium inflows, and the long-term and predictable nature of many insurance liabilities mean that insurers can ride out asset-price volatility and are "forced" to transact less often than many other investors. This can reduce both direct and indirect investing costs.

Finally, by pooling the funds of many investors, insurers give them access to assets in which they would otherwise not be able to invest, such as private placements and "big ticket" investments

Insurers' long-term view means they can provide policyholders with a range of options for the investment-related element of their insurance products: from unit-linked exposure for those able to withstand full market volatility themselves, through profit-sharing products where the risk is shared (and there is usually a capital protection or a minimum return guarantee), to fully guaranteed annuity-type products where there is no market risk for the policyholder.

The combination of benefits described above is unique to insurers and is what allows them to offer long-term products at a cost that is acceptable to both policyholders and to those who provide the capital to back the risks.

Choice of investment risk

Cost reduction

⁹ See "Irrational Exuberance", Shiller (2005); "Nudge: improving decisions about health, wealth and happiness", Thaler and Sunstein (2009); "The effect of myopia and loss aversion on risk taking: an experimental test", Thaler, Tversky, Kahneman, Schwartz (1997)

¹⁰ Costs can be grouped into four categories: 1) annual management charges, 2) administration costs charged to each fund of assets, 3) direct and explicit costs of investing and 4) indirect costs

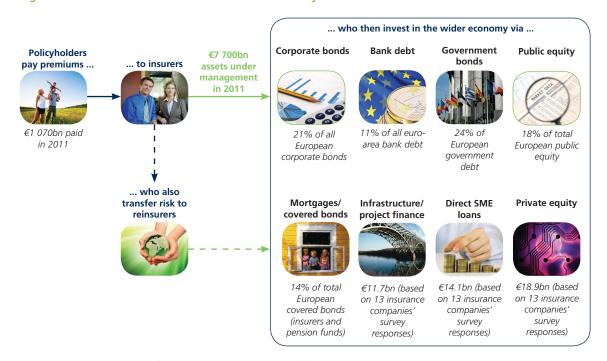
III.2 Benefits for the wider economy

Insurers provide stable funding for economic growth

After paying claims, insurers have significant net flows of cash available to invest, coming from new premiums, maturing assets or investment income. This constant ability and need to invest makes insurers important providers of stable funding for governments, businesses and, to a lesser extent, households.

Insurers most commonly provide long-term funding via the capital markets. This includes significant investment in government and corporate bonds, covered bonds (see box p36) and equity (see Figure 8). Around 60% of European insurers' assets are government and corporate bonds (including covered bonds), which are often favoured by insurers as

Figure 8: Insurers' investments in the wider economy



Sources: "Insurance companies and the financial crisis", OECD, March 2010; Bank for International Settlements; EIOPA; Eurostat; Economist Intelligence Unit; ECBC; Insurance Europe and Oliver Wyman analysis



Securitisation

The Organisation for Economic Co-operation and Development defines securitisation as "the process of issuing new negotiable securities backed by existing assets such as loans, mortgages, credit card debt, or other assets".

There are many sub-categories of securitisations, including asset-backed securities (ABS, a general term used for bonds or notes backed by a pool of assets), mortgage-backed securities (MBS, whose cash flows are backed by mortgage loans), collateralised debt obligations (CDO), collateralised loan obligations (CLO), etc.

Securitisations have acquired a bad reputation and new issuance has declined dramatically after being blamed, at least in part, for the credit crisis. This reputation is largely unjustified for European securitisations. For example, a Fitch Ratings report (April 2012), showed that at end-July 2007 total losses were 6.5% for their triple-A-rated US residential mortgage-backed securities, but only 0.8% for triple-A European, Middle Eastern and African securities.

While insurers are currently invested in a range of securitisations (of the 13 companies surveyed, securitisations accounted for around €53bn), the most common types are ABS and MBS. Insurers tend to invest in the least risky tranches of these assets, giving them additional returns without significantly increasing the riskiness of their portfolio.

Some market commentators are optimistic that the securitisation market will start to grow again. For example, the Prime Collateralised Securities (PCS) label may help support growth by promoting quality, transparency, simplicity and standardisation of securitisations. Our survey revealed that eight of the 13 insurers would like to increase investment in securitisations, but seven of those highlighted Solvency II as a significant potential barrier. This is mainly due to what is considered unnecessarily high capital requirements. For example, the standard formula capital requirement for triple-A ABS with three-year duration is 21%.

instruments able to provide cash flow or duration-matching of their assets and liabilities. Via these investments, insurers play a significant role in supplying the funding needs of governments and businesses. In addition, insurers hold 18% of their assets in public equities, which are a core source of corporate financing through the capital markets and which play an important and not easily replaced role in society. As asset allocation is highly dependent on the profile of liabilities, the percentage share of the various assets can vary significantly between companies, depending on the business they write.

However, these are not the only means by which insurers provide long-term funding. They also fund businesses through securitisations (see box on p25), direct lending to small and medium enterprises (SMEs), investments in infrastructure, mortgages, real estate, private equity and venture capital (see box below). While investment in these alternative asset classes currently makes up a small proportion of insurers' portfolios, our survey of 13

Private equity

Private equity is an asset class consisting of equity in operating companies that are not publicly traded on a stock exchange. Capital for private equity is raised from retail and institutional investors, such as insurers. Private equity capital has a continuing claim on corporate earnings, therefore it can be used to finance projects with uncertain and long-term returns such as research and product development. Consequently, private equity plays a special role in funding new and innovative business ventures that have an uncertain outcome and form the very basis for economic growth.

Insurers' willingness to invest in private equity depends on a range of factors that influence the relative risk-adjusted return on equity compared to other investment opportunities. However, the current treatment of private equity under Solvency II could make it unattractive to investors. Of the 13 insurance companies we surveyed, private equity amounted to €19bn at the end of 2012. In addition, 10 of them indicated that although they would like to increase their exposure to private equity, Solvency II is a significant barrier.

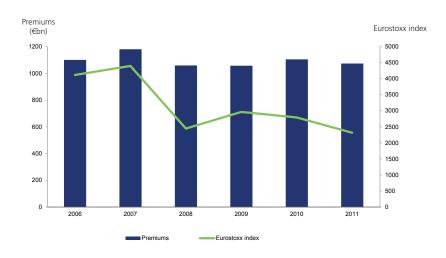


insurance companies confirmed that the aggregated level of investment is still significant and that there is considerable appetite for increasing investment in such illiquid assets.

The long-term commitment of funds is important to the economy because it allows businesses and governments to engage in large projects that take many years to complete or to become profitable. Without committed funding, the risk that short-term funding might not be "rolled over" would make many such projects unviable.

Insurers are long-term investors, therefore their buying and selling of assets is inclined to be counter-cyclical. As illustrated in Figure 9, even in periods of market stress with significant market volatility (as indicated by the evolution of the Eurostoxx equity index), insurers have a continual flow of premiums which, together with predictable liability outflows, can enable them to hold or even buy assets that are temporarily undervalued during a downturn and to sell or avoid assets that are temporarily overvalued during a boom. Insurers can therefore play a counter-cyclical role in times of market stress, provided that their investments match their liabilities and they have access to a continual flow of premiums.

Figure 9: Premiums provide a stable source of funding even during downturns



Source: "Insurance Europe Statistics №46: European Insurance in Figures", January 2013

III.3 Benefits as financial intermediaries

Insurers' liabilities allow them to be long-term investors

One of the financial services industry's roles is to intermediate between policyholders' long-term savings and governments' and businesses' long-term funding needs. There are currently insufficient long-term assets in the financial system to meet long-term funding needs. Historically, banks have filled this gap.

Banks specialise in assessing the credit-worthiness of borrowers and monitoring to ensure borrowers meet their obligations. They are rewarded for these services by the spread between the rates they offer to the accumulated pool of savers and the rates they offer to potential borrowers. Banks provide a depository for savings and then transform them into illiquid assets such as housing loans and lending to businesses. This "maturity transformation" exposes banks to considerable liquidity risk if an asset cannot be sold or bought quickly enough to prevent or minimise a loss.

Banks = €46 000bn Insurers = €7 700bn 100% Other Composite 90% Other Other 14% liabilities 26% 22% 18% 80% Equity and P&C liabilities property 19% Bonds 14% Equity and property 6% 70% 12% 60% 50% Maturity transformation: Matching principle: callable deposits used to Long-term liabilities 40% back long-term loans matched with long-term assets 30% Deposits Loans/debt Bonds Life liabilities 66% 68% 20% 64% 10% Deposits 3% 0%

Figure 10: How insurer and bank balance sheets differ

Note: Total European assets and liabilities, end 2011 Sources: ECB; Bank of England; Oliver Wyman analysis



Banks fund a large portion of their medium- and long-term lending with callable retail deposits¹¹ and short-term wholesale borrowing (see Figure 10). This "maturity transformation" allows banks to intermediate short-term lenders and long-term borrowers and thereby generally promotes economic activity. Historically, some insurers have been performing a reverse maturity transformation (ie, collecting long-term premiums/liabilities and investing shorter than the duration of liabilities) and have not made full use of their structural advantage as providers of long-term funding. However, insurers' long-term liabilities mean that they can provide businesses and governments with long-term funding, naturally matching the long-term maturity of liabilities and thus avoiding the liquidity risk that arises from maturity transformation.

The financial services industry is undergoing significant change as policymakers seek to impose new regulation to avoid a reoccurrence of the financial crisis and to enhance the stability of the sector. At the heart of the changes is the wish to ensure that financial firms are properly accounting for the risks inherent in their balance sheets.

The introduction of the net stable funding ratio¹² and liquidity coverage ratio (LCR)¹³ under the Basel III international regulatory framework for banks will penalise banks that maintain levels of maturity mismatching and liquidity risk that were common pre-crisis.

Based on 2010 year-end figures, Oliver Wyman estimates that European banks were €2 700bn short of the long-term funding required to comply with the new net stable funding requirements. This estimate is corroborated by the International Monetary Fund (IMF), which estimates deleveraging of European banks to be US\$2 600bn (with a worst-case estimate of US\$3 800bn)¹⁴. Many European banks that cannot raise stable long-term funding will have to reduce their long-term lending.

There is a growing funding gap in Europe

¹¹ Although retail deposits are contractually callable, where deposits are covered by dependable guarantees or deposit insurance, they can in fact be a stable source of funding for banks. Note, however, that western banks typically fund about half of their assets with short-term wholesale instruments.

¹² The net stable funding ratio calculates the proportion of long-term assets that are funded by long-term stable funding. This ratio must be above 100%.

¹³ The LCR requires banks to set aside enough liquid assets to cover a one-month interruption in their ability to access funding

^{14 &}quot;Global Financial Stability Report", IMF, October 2012

The European Banking Authority (EBA) estimates that the LCR will eliminate €1 000bn of funding from the real European economy¹⁵. Adding this to the expected deleveraging, we estimate that the total funding gap resulting from new banking regulation will be at least €3 000bn¹⁶.

On top of the gap created by the introduction of new banking regulation, additional funding will also be required if Europe is to return to a period of economic growth. Standard & Poor's estimates that \le 1 600bn to \le 1 900bn is required to support any kind of growth between 2012 and 2016¹⁷. It is therefore easy to believe that in total Europe is facing a funding gap of at least \le 4 000bn to \le 5 000bn.

The EC¹⁸ believes that this diminished role of banks in long-term lending opens up new needs and opportunities for other financial institutions and market-based intermediation to channel financing to long-term investments, either directly or through the bank sector under the right circumstances. Therefore, insurers' provision of long-term funding will become increasingly important for the European economy.

Some commentators have applied the term shadow banking (see box opposite) to any involvement of insurers in areas of financing previously funded by banks. However, where used to back long-term liabilities, such activities are only extensions to the existing normal investment activity of insurers and are not shadow banking.

In addition, as the largest purchasers of bank bonds¹⁹, insurers play a key role in bank funding. By continuing to invest in banks, insurers will indirectly help banks to continue to lend under their new regulatory constraints.

^{15 &}quot;New Bank Liquidity Rules: Dangers Ahead", EBA Banking Stakeholder Group position paper, October 2012

¹⁶ This allows for a reduction in the LCR impact as a result of new rules introduced in January 2013

^{17 &}quot;The Credit Overhang — Is a \$46trn perfect storm brewing?", Standard and Poor's, May 2012

¹⁸ Green Paper, "Long-Term Financing of the European Economy", EC, March 2013

¹⁹ Oliver Wyman analysis shows that insurers own 11% of European bank debt



Shadow banking

The Financial Stability Board (FSB) defines shadow banking as: "A system of credit intermediation that involves entities and activities outside the regular banking system, and raises i) systemic risk concerns, in particular by maturity/ liquidity transformation, leverage and flawed credit risk transfer, and/or ii) regulatory arbitrage concerns." ("Shadow Banking: Strengthening Oversight and Regulation," FSB, October 2011)

As banks deleverage by reducing lending, shadow banking has grown and policymakers are increasingly concerned about the systemic risk the sector presents. In this debate, there is growing confusion about the status of insurers' lending activities.

Insurers' lending is not a kind of shadow banking. Shadow banks raise short-term funds in the financial markets in order to provide long-term lending. Shadow banks thus carry considerable liquidity risk and they are also unregulated entities. In contrast, insurers perform no maturity transformation, do not raise the funds they use for long-term investment in the capital markets and are highly regulated entities that provide long-term funding as a natural match to their long-term liabilities.

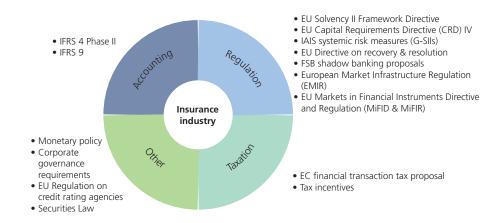
IV. How changing framework conditions affect insurers' ability to invest long-term

Insurers are grappling with many framework changes

Although insurers were generally bystanders during the financial crisis (with the notable exception of US insurer AIG, whose problems were triggered by non-insurance activity), they must now adapt to a wide range of post-crisis regulatory changes (see Figure 11). These framework conditions include changes to the industry's prudential regulation, accounting rules, tax law and other structural factors, including monetary policy.

Some of these framework changes, such as the Solvency II regulatory framework, apply directly to insurers. Others apply to other participants in the financial market, such as banks, but can nevertheless affect the investment behaviour of insurers.

Figure 11: A raft of regulatory changes are affecting insurers



The objectives of current frameworks and the intended changes are generally welcomed by the insurance industry. Good regulation is important for a healthy industry. However, if frameworks do not take proper account of the distinctive characteristics of the insurance industry, they may have a negative impact on policyholders and the wider economy.



IV.1 Prudential regulation

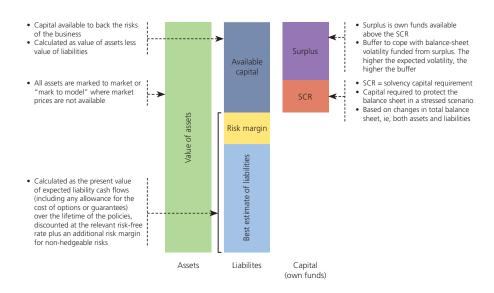
The industry continues to support the original aims of Solvency II, which are to:

- ensure policyholder protection
- encourage transparency and high standards of risk management
- harmonise regulations
- support a strong and efficient European insurance industry

However, if left unaltered, aspects of Solvency II, as currently envisaged, may adversely affect insurers' investment decisions.

As illustrated in Figure 12, Solvency II sets the capital insurers must hold as a solvency capital requirement (SCR). In addition, as a matter of good risk management practice, insurers need to hold capital in excess of the SCR as a buffer. One of the key drivers of this buffer will be balance sheet volatility. Both the SCR and the capital insurers decide

Figure 12: Solvency II balance sheet



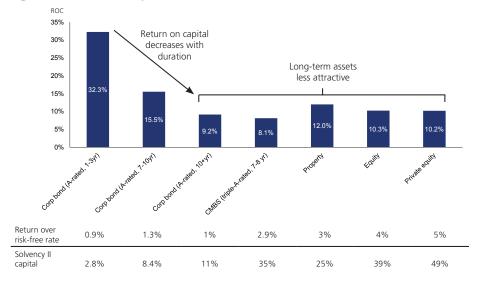
to hold on top of it can affect insurers' investment decisions, in particular in the case of long-term (life) business.

Calibration of capital requirements may disincentivise certain investments

The Solvency II capital regime sets capital requirements for each asset class based on shocks to its economic value. This encourages insurers to invest only in assets that are still attractive when capital requirements are accounted for. However, setting a pan-European shock level for each asset class is difficult as European countries' capital markets often vary significantly; for example, property markets and the volatility of property prices vary greatly.

Asset classes that are typically included in long-term investment strategies — equity, property and long-term bonds — provide the lowest expected return on capital (see Figure 13) on a Solvency II standard formula capital basis. This analysis ignores the impact

Figure 13: Return on capital (ROC) as a measure of assets' attractiveness



Notes:

Return on capital is calculated as the expected spread over the relevant risk-free rate (ie, expected yield minus corresponding government bond yield) divided by the Solvency II standard formula solvency capital requirement.

Capital requirement is based on the Solvency II standard formula provided in "Draft implementing measures Solvency II", EC, October 2011, excluding any allowance for diversification

Sources: Bank of America Merrill Lynch government index; MSCI EMU corporate bond index; JP Morgan CMBS index; Morgan Stanley; Oliver Wyman analysis



of balance sheet volatility, which tends to be quite significant for these specific assets and therefore creates additional disincentives.

Given the scale of insurers' investments, any shift in their asset allocation caused by Solvency II could have a distorting effect on financial markets and the economy. If insurers face a higher cost for holding long-term assets, they will demand higher returns or move away from these assets, potentially driving up the cost of funding for corporates and governments.

Moreover, capital charges should reflect the real risks not only in absolute terms but also in relative terms. Different capital charges should reflect different levels of risk. For example, covered bonds (see box on p36) pose lower risks than corporate bonds, and capital charges should reflect this for all covered bonds, regardless of the rating.

A partial solution allows insurers to use internal models to estimate shocks in a way that reflects their particular business environments. However, given the currently high costs of having internal models approved and of maintaining them, this alternative will be possible only for large insurers, leaving small and medium insurers having to cope with a standard approach. In addition, the internal model does not cope with balance sheet volatility issues (which need to be dealt with separately through appropriate measures — see box on p41).

Regulators and policymakers recognise the need to review the current Solvency II calibrations to ensure that they do not artificially restrict long-term investing. For example, the EC asked the European Insurance and Occupational Pensions Authority (EIOPA) in September 2012 to examine whether current economic conditions require the regulatory capital for insurers' long-term investments under Solvency II to be reduced (without jeopardising the prudential nature of the regime)²⁰.

²⁰ http://ec.europa.eu/internal_market/insurance/docs/solvency/20120926-letter-faull_en.pdf. In April 2013 EIOPA published its initial position regarding the concerns highlighted by the EC ("Discussion Paper on Standard Formula Design and Calibration for Certain Long-Term Investments")

Covered bonds

The International Monetary Fund (IMF) defines covered bonds as "A debt obligation on which the investor has first recourse to a pool of assets that secures the bond. Unlike asset-backed securities, collateral assets underlying covered bonds remain on the issuer's consolidated balance sheet, thereby providing creditors with a second level of protection (dual recourse). ("Global Financial Stability report", IMF, 2009)

Covered bonds are similar to corporate bonds in terms of cash flows. However, in the case of default, the bond holder has the added protection of a privileged claim on a specified pool of assets. Most commonly these assets are mortgage-related. According to the European Covered Bond Council (ECBC), 75% of European covered bonds are mortgage assets.

Covered bonds are frequently used by some insurers as an alternative to government bonds because they can provide similar long-term cash flows to match insurers' liabilities and they are superior to corporate bonds in terms of credit risk as they have embedded in them a second level of protection. At the 13 insurance companies we surveyed, covered bonds amounted to €296bn at the end of 2012, which equates to an average of nearly 10% of their total assets. The ECBC says insurers' and pension funds' combined share of the European covered bond market currently stands at 14%.

A difference between trading bonds and holding them long-term or until maturity A significant proportion of insurers' investments are in bond and bond-like assets with fixed maturity values. Where insurers have long-term liabilities and they can hold assets to maturity, they are not exposed to volatility in current market value due to changes in credit spreads and are only exposed to actual defaults. This is very different to a situation where assets are traded or may have to be sold at any time.

However, Solvency II currently treats all assets as if they were traded; ie, as if the insurer were not in a position to "ride out" market volatility. It thereby ignores a defining feature



of the traditional life insurance business model, which is the ability to invest with a long-term perspective.

This is of particular concern to investors who are able to buy and hold and therefore face different risks²¹ to investors who may have to sell their assets at any time. The latter are fully exposed to changes in market value, while the former (most insurers writing traditional life business) are exposed only to actual defaults. Therefore, where insurers have the ability to hold a bond until maturity, market value movements during the life of the bond have no economic impact.

Ignoring this difference has three effects, all of which can create disincentives to investing in long-term bond-type assets:

- Firstly, the volatility due to spread movements is greater than the volatility due to defaults. As a result, the capital requirement will be set at a level higher than necessary when calibrated by taking into account the exposure to credit spread risk and not the actual "economic" exposure to default risk.
- Secondly, all changes in the market values of the bond will translate into volatility in the company's own funds (their assets minus liabilities) and, because the liabilities remain constant²², the volatility of own funds will be amplified. Where market movements have no economic impact on the company as long-term assets are there to match long-term liabilities such volatility in own funds is artificial and excessive, as it is created by the measurement system and not by the economics of the business.
- Thirdly, these effects on the capital requirements and on own funds will increase with the maturity of the bond; the longer the duration of the bond, the greater the disincentive to invest in it.

²¹ A bond investor faces two types of credit risk: default and credit spread risk. Default risk reflects the fact that the issuer might default on its payments to the investor. Credit spread risk deals with changes in the spread of a bond over the risk-free (government) rate. For example, if a five-year government bond trades at 3% and a five-year corporate bond trades at 5%, then the spread is 2% and the credit spread risk is the risk that the spread between corporate and government bonds will move above or below 2%.

²² We assume that only credit spreads move and this only affects the discount rate of assets. Therefore assets will move, while liabilities will remain constant.

Solvency II capital requirements Solvency II own funds following a 100bps shock to credit spreads 20% 110 18% 16% 90 Capital requirements 14% under Solvency II increase significantly 70 12% with duration 10% Volatility of Solvency II 50 8% own funds increases significantly with 6% duration 30 4% 2% 0% 2.5yr 25yr 1.5yr 5yr 1.5yr 2.5yr 5yr 10yr -10 inception -30 -50 Maturity of bond portfolio Maturity of bond portfolio

Figure 14: How Solvency II could cause problems for long-term investment

Notes:

All based on zero-coupon, A-rated corporate bonds

Capital requirements are based on the Solvency II standard formula provided in "Draft implementing measures Solvency II", EC, October 2011

Source: Insurance Europe analysis

These effects are illustrated in Figure 14, which is based on a simplified insurance company where assets and liabilities are perfectly cash-flow matched (so there is no interest rate risk). Therefore, the only risk affecting the balance sheet and the company's own funds is credit risk on the asset side.

While care needs to be taken when comparing capital regimes, a comparison of different capital models, namely Solvency II and Standard & Poor's (S&P), shows the dramatic difference that taking a "hold-to-maturity" view (S&P) versus a "mark to market" (trading) view (currently used by Solvency II) makes to the capital requirements and balance-sheet volatility for investors in long-term assets.



The S&P capital model recognises that insurers can hold bond-like assets over the long-term and, moreover, when their assets are matched with their liabilities, they are "economically" exposed to default risk rather than spread risk. The S&P capital requirements for credit risk are based on default risk²³ (ie, the risk that the issuer of the bond will default on its payments) and are therefore significantly lower for long-term corporate bonds than the Solvency II capital requirements. For example, a 10-year, single-A-rated corporate bond would receive a capital charge of 1.4% under S&P versus a capital charge of 10.5% under the latest Solvency II standard formula.

Furthermore, the S&P approach recognises the balance-sheet stability created where bonds are used to back long-term liabilities and it does not expose the balance sheet to full spread volatility. By contrast, Solvency II valuations are currently based on spread risk and measurement of own funds will include all market volatility irrespective of whether the bond is traded or held long-term or to maturity, resulting in excessive volatility of own funds.

Figure 15 shows how the solvency ratio²⁴ of a simplified insurance company would have been affected by the market movements over recent years if the measurement ignores the ability of the company to hold assets over the long-term. The insurer has a portfolio of long-term liabilities that are fully cash-flow matched by a well-diversified portfolio of AA corporate bond liabilities (we include three scenarios with AA bond portfolios of 5, 10 or 15 year durations). Since there is full cash-flow matching, any interest rate changes would have little or no impact on the solvency ratio because, under Solvency II, they will impact the value of assets and liabilities in the same way. However, changes in the market price for credit risk (credit spreads) will impact only the value of the assets. The figure shows that the volatility in assets caused by the significant changes in credit spreads during this period would translate into volatility in the solvency ratio, even though the company would only be exposed to actual defaults not to spread movements. Even relatively small movements in the market price for credit risk have a significant effect, while large movements can create unmanageable volatility.

²³ S&P does also have a capital charge for spread risk but it only applies over the period of time where a mismatch between assets and liabilities exists, which for many insurers is relatively small 24 Ratio of available capital (own funds) to required capital (the SCR)

Solvency 300% Temporary very high credit spreads lead to unmanageble volatility in 250% solvency ratios 200% 150% 100% 50% 0% 2007 2008 2003 2004 2005 2006 2010 2011 -50% Solvency ratios improve -100% Unusually low credit spreads lead to dramatically as soon as spreads increase in Solvency Ratio change again -150% -200% -250% 5-year duration

Figure 15: Example showing unmanageable volatility, especially for insurers holding long-term assets

Source: Insurance Europe analysis

Insurers wanting to continue to invest in long-term bonds would need to hold large additional capital buffers to cope with this artificial balance-sheet volatility. Combined with over-stated required capital, this would make it difficult for insurers to continue investing in long-term assets and offer the long-term guarantee products that require such investment, even where the strategy is inherently correct from an economic and risk/return perspective. At the very least, there is the danger of increasing costs unnecessarily for policyholders, who will need to pay for the additional capital requirements. This is not in the best interest of policyholders or the wider economy.

To avoid or mitigate such effects, EIOPA, together with the industry, tested a package of measures in early 2013 (see box on p41).



Solvency II long-term guarantee package

The long-term guarantee package contains measures being considered by policymakers and EIOPA in an attempt to address the concerns regarding the treatment of long-term insurance business. Specifically, the package aims to better reflect the way in which insurers manage their long-term business, to ensure that the risks to which their balance sheets are exposed are not overstated and that artificial balance sheet volatility is avoided.

The package includes three main elements:

The **counter-cyclical premium** is designed to allow insurers to cope with balance sheet volatility during distressed market conditions. It will probably take the form of a single adjustment applied across the full term of the Solvency II risk-free discount rate and would be specified by EIOPA in periods of stress.

This counter-cyclical premium must be predictable and sufficiently prescriptive to allow insurers to use it in their forecasting. It must also include sufficient discretion and control for EIOPA to react to unexpected situations.

The **matching adjustment** is a mechanism designed to recognise the benefits of insurers' long-term investment strategies in mitigating the effects of spread movements. It is likely to take the form of a discount-rate adjustment, calculated based on the assigned asset portfolio, which will be applied when valuing relevant liability cash flows. The industry welcomes a risk-based approach to the matching adjustment. This ensures that its application is not artificially limited to only a few products and that "cliff-edge" effects (see footnote 25 on p42) are avoided.

Extrapolation methodology is required where markets are insufficiently deep, liquid or transparent to determine the long-end of the interest rate curve from market data. The extrapolation method adopted must avoid the creation of volatility in the value of long-term liabilities.

Regulation should avoid restrictions on asset classes and cliff-edge risk effects One of the features of Solvency II is to remove the distortionary effects of overly prescriptive regulation. While the majority of Solvency II remains risk-based, unnecessary asset restrictions have the potential to creep in if policymakers try to find political compromises rather than technical solutions where changes to the framework are needed. For example, any proposal that requires insurers to hold only bonds that are above a certain credit rating can distort the market price of bonds. It would artificially depress investment in bonds with ratings below the threshold, while at the same time artificially increasing investment in those with ratings above the threshold. In certain currencies and markets the supply of bonds above the threshold can be very limited, and therefore credit quality restrictions can significantly reduce the range of investments available to the insurance company, deprive policyholders of the yield available on such investments and reduce access to funding for all but the largest companies. Finally, if such restrictions create immediate and significant capital penalties for the insurance company as soon as a threshold is reached, they create pro-cyclical, "cliffedge" effects²⁵. During an economic downturn, when a higher than normal number of companies are downgraded, the rule will turn otherwise stable investors into pro-cyclical forced sellers, thereby reducing the value of the distressed bonds even further.

Thresholds that can create these cliff-edge effects and other unintended consequences should be avoided. Instead, capital requirements should be set in line with the core Solvency II approach, ie, the higher the risk, the higher the capital requirement.

IV.2 Taxation

Taxation laws can encourage individuals and investors to adopt a long-term investment philosophy. Policymakers can encourage households to invest their long-term savings in the economy via the financial services sector by providing tax incentives on insurance and pension products. Tax incentives encourage individuals to plan for retirement, locking their savings in for the long-term. This results in a flow of long-term liabilities to the financial system which insurers can invest in long-term assets, thus helping to fund

²⁵ Cliff-edge effects relate to decisions by a rating agency to downgrade an issuer, which can trigger massive sales of the issuer's bonds and increases in the cost of funding, driving the borrower further into difficulty



economic growth. The removal of tax incentives associated with investment in insurance products is likely to result in a reduction in the flow of premiums to long-term investments. This would be contrary to policymakers' goal of encouraging insurers to fund the real economy. In addition, the short-term gains in tax revenues may be more than offset by slowed economic growth and a consequent reduction of the tax base. Ultimately, reduced levels of private savings will also only increase governments' pension liabilities.

The EC's proposed financial transaction tax (FTT) is another initiative that, as currently formulated, may be damaging. The FTT does not differentiate between speculative transactions and long-term investing. Because of this it will fail to achieve some of its stated goals, which include discouraging transactions that do not enhance the efficiency of financial markets and avoiding future crises. In fact, the effect could actually be the opposite, as the FTT would render low-margin transactions unprofitable, which could in turn encourage high-risk, high-margin transactions, thereby increasing the general level of risk in the markets.

Based on the Commission's proposal, the FTT will have a significant cost because it will cover almost all types of transactions on any financial instrument and will be levied every time assets are acquired or redistributed. This cost will ultimately be borne by consumers through higher prices for products and services or lower returns on investments. As a result, certain products, including those offered by insurers, will become less affordable for consumers. This, in turn, may damage the real economy as protection, savings and investment decline. Given the Europe-wide aim of increasing financial provision for old age, any additional burdens must be avoided. At the very least, transactions related to retirement products should therefore be excluded from the scope of the FTT.

IV.3 Collateral requirements on derivatives

Reform of over-the-counter (OTC) derivative trading is another example of regulation that is developed for the right reasons but that fails to take account of the nature of insurance business. Derivatives are often vital for hedging insurers' long-term liabilities and, hence, for the provision of long-term products.

Financial transaction tax

For example, when assets of the duration required to match projected claims are unavailable, an insurer will often buy a long-term swap²⁶ to hedge the promised pay-off on a long-term guarantee product. This reduces the insurer's exposure to interest rate movements. The derivatives rules that have been developed will require the insurer to cover short-term daily volatility in the value of the derivative with highly liquid collateral. In practice, this will usually need to be cash, since this is the only collateral accepted by the central counterparties that the regulators want insurance companies to use for the majority of their derivative transactions. This will force insurers either to hold excessive amounts of cash or to monetise assets via the repo market²⁷.

In future, the ability to monetise the assets for covering cash needs may be further challenged by regulatory developments in the shadow-banking discussions, where the introduction of controls and limits on the use of cash generated via repos is foreseen. If these alternatives are deemed too costly, or if additional barriers and limits are created by regulatory developments (eg a prohibition of the use of repo for covering derivative collateral needs), the new derivative rules could drive insurers away from derivatives and limit the provision of long-term products for which derivatives are vital.

These emerging derivative requirements also threaten the role that insurers' continual flow of premiums and low liquidity needs have traditionally allowed them to play in stabilising the capital markets. Where derivatives are bought by insurance companies to reduce risk and improve asset/liability management, the economic risk to the counterparty is very different from the risk created by other buyers. This justifies a different approach for insurers; one that would not require them to bear the cost of holding unnecessarily large amounts of cash as collateral.

²⁶ A swap reflects an exchange of one thing for another. An interest rate swap could, for example, reflect two parties agreeing to exchange periodic interest payments based on the same notional amount, one payment being a fixed rate and the other a variable rate (eg, a reference rate such as LIBOR).

²⁷ A repo or repurchase agreement is a money market instrument in which one party sells securities to another, while also agreeing to repurchase them in the future



IV.4 Other framework changes

Three further framework trends are worth noting for the effect they could have on insurers' long-term investing.

A suitable **accounting framework** for long-term investments must recognise that an insurer's investment behaviour and asset allocation are closely linked to the liabilities it holds. Different accounting treatments for the assets and the underlying insurance liabilities may distort long-term economic decisions.

Accounting requirements that deal with individual components in isolation — separate from the overall asset/liability management strategy — can result in different measurement and presentation requirements for the various components of the strategy that do not adequately reflect the insurance business models. Only a robust, principles-based accounting framework, which allows for transparent and consistent performance reporting, can ensure useful information for users and does not drive investment decisions by themselves.

While developments such as the replacement of international accounting standard (IAS) 39 by international financial reporting standard (IFRS) 9 for financial instruments and IFRS 4 Phase II for insurance contracts have the potential to allow meaningful performance reporting, it is vital that changes to IFRS principles fully reflect the long-term nature of most insurance businesses and the important interaction between managing assets and liabilities.

Although insurers generally acknowledge that the measurement of assets and liabilities in the balance sheet presents useful information to investors — depending on the nature of the insurance product and related assets — there is a specific need for useful, transparent, robust and consistent measurement and presentation approaches to the way that changes in those values are reflected in performance statements.

The critical issue for the International Accounting Standard Board (IASB), which is in charge of setting the IFRS principles, is to address appropriately the presentation of current value changes in the performance reporting. The insurance industry believes that the IASB will

Accounting framework

only be successful if the final IFRS 9 and IFRS 4 interact on an inherently consistent basis and result in appropriately representative profit information.

If suitable accounting solutions are not found, the financial statements could distort insurers' true performance and affect their cost of capital. Moreover, partial and inherently inconsistent solutions could even worsen the distortion or create new problems.

Ring-fencing

The flexibility created by pooling assets and liabilities in an open-ended fund, such as a **general account**, is one of the special features of many insurers. The existence of a general account provides investment diversification benefits among policyholders and across time, acting as a "natural hedge" within the portfolio and limiting the need to hedge outside it. However, developments in Solvency II and a number of other framework changes appear to discourage this approach by restricting certain advantages to ring-fenced funds or by creating requirements to ring-fence.

Besides it being difficult or impossible to impose this feature on existing fund structures, this could significantly reduce the flexibility, liquidity and diversification that allow insurers to optimise investment strategies and maximise long-term returns to policyholders by limiting the forced selling of assets at times when the market value is depressed.

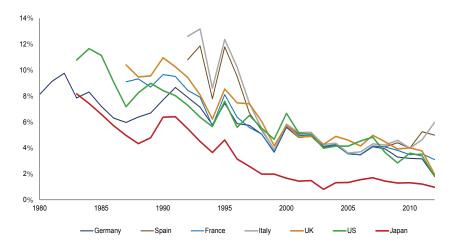
Ring-fencing rules are often introduced to ensure that assets can be identified and that controls over how they are managed can be established. Yet these goals can be achieved by defining high-level governance principles relating to those assets and without imposing strict ring-fencing that damages insurers' business model and the benefits policyholders derive from it.

Macroeconomic policy

Interest rates have been kept low for a number of years as a **macroeconomic policy** response to the financial and debt crisis (see Figure 16). Politicians and central bankers hope that lower rates will not only support the value of long-term assets (such as property and equities), but also stimulate economic growth by encouraging borrowing and investment. However, prolonged periods of low interest rates can also cause significant problems that will counteract the intended benefits. For example, a persistently low interest rate environment can drive up inflation, create asset bubbles as investors search



Figure 16: 10-year government bond rates



Source: Oliver Wyman analysis

for yield, and encourage companies to take a highly leveraged position as the cost of debt falls. Nor is a persistently low interest rate environment in the interest of insurers or of policyholders, who find it more difficult to save enough to meet their need for financial security in retirement as real returns are driven down.

Insurers can generally withstand fairly long periods of low interest rates because of the long-term nature of their investments. However, as low interest rates lead to higher liability valuations and lower returns, even if these are expected to last only a few years, a low interest rate policy has a major effect on insurers' investment strategy. It forces them to re-evaluate their investment strategy for policyholders, while still achieving minimum returns acceptable for shareholders. This inevitably involves some combination of: increasing investment risk to meet target returns; adjusting the balance of risk sharing between the insurer and the policyholder; or requiring policyholders to increase their premium payments. And, of course, any increase in risk will require the company to hold more solvency capital.

In addition, uncertainty regarding the future macroeconomic environment may lead to households being reluctant to invest in long-term insurance contracts, which will affect the flow of premiums. This can also result in some households being underinsured, especially if it affects private pension plans, which are a basic component of optimal old-age insurance cover in many countries. Furthermore, current monetary policy brings with it the risk of rising inflation in the medium term, threatening the net wealth of households.

In such circumstances, it is more than usually important that the true risks facing insurers are correctly assessed, that unnecessary investment restrictions are avoided and that the genuine advantages created by the long-term nature of insurers' business are recognised. If not artificially restricted by framework conditions, insurers seeking better returns for policyholders can invest more in the real economy and help to stimulate the growth that will end the need for the low interest rate policy.



Conclusion

The insurance sector has the largest pool of investment funds in the EU. It is a key source of the investment needed to restore growth to the economy and the funds needed to pay for the present working generation's retirement. The sector is therefore a major asset for the EU as it faces the challenges of the next two decades.

Policymakers are increasingly aware of the important role insurers can play in aiding economic recovery by providing long-term funding to businesses and households. However, certain policy developments could inadvertently threaten insurers' ability to continue providing this long-term funding.

As policymakers seek to make the financial system more secure, boosting the confidence of investors to encourage long-term investment must remain a central objective. This will not be easy in the current economic climate. Regulatory uncertainty plays a major role in creating unease about the future and therefore has an impact on the ability of investors to make long-term investment decisions. Allowing new regulation time to bed down will help, as the actual effects of the regulation on long-term investment then become apparent, can be assessed and can be addressed where inefficiencies are found.

The implications of new regulation and other framework changes — and the indirect effect of regulation generally on long-term investment — must be better understood to avoid the economic benefits provided by the insurance business being irreversibly damaged. The role of insurers as long-term investors should be carefully taken into account when framing and developing new regulatory plans. EU and global policies should foster the stability of the assets in which insurers are invested, and encourage new classes of sustainable assets. Policymakers should also seek to encourage policies that stimulate a savings habit in citizens and households, to ensure that this pool of long-term investment is maintained.

We hope this report helps improve the general understanding of why and how insurers invest and makes a useful contribution to the debates on the provision of long-term finance. The insurance industry will continue to support efforts to ensure that regulation and other framework conditions work as intended.

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Insurance Europe aisbl rue Montoyer 51 B-1000 Brussels Belgium Tel: +32 2 894 30 00

Fax: +32 2 894 30 01 www.insuranceeurope.eu

Oliver Wyman 55 Baker Street London, W1U 8EW United Kingdom Tel: +44 20 7333 8333

Fax: +44 20 7333 8334 www.oliverwyman.com