CEA
Insurers of Europe

Insurance: a unique sector

Why insurers differ from banks

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Executive summary

The impact of the financial crisis hit the financial sector and economies overall extremely hard. Asset writedowns and lower investment returns destroyed billions of euro in market capitalisation in just a few months, forcing governments — and hence taxpayers — into unprecedented bail-outs and triggering a spike in sovereign leverage.

In reaction, policymakers are pushing for fundamental reforms to the way the financial services sectors are regulated and supervised. Regulatory intentions are focussing not only on preventing or at least mitigating a further crisis, but also on avoiding government intervention to contain its effects. This is not surprising. During the recent crisis, G-20 governments and central banks provided more than $11 000bn of direct and indirect support to the financial services sector[1], although less than $10bn[2] went to the insurance sector.

It is, of course, vital to learn lessons after a crisis, especially one that sent such shockwaves through the entire interconnected global economy. Obviously the insurance industry has an interest in sound and stable financial markets.

After the crisis, policymakers generally started to develop reforms to address problems in the banking sector. A worrying trend has, however, emerged. Several regulatory initiatives ultimately read across into other financial sectors, and do not appropriately distinguish between the distinct business models of the different sectors.

For example, policymakers are considering more stringent micro-prudential regulation, such as higher capital requirements, and more onerous regulation of "systemically relevant institutions". In addition, the International Monetary Fund (IMF) published in April 2010 an interim report proposing taxes or levies be paid by all financial services institutions to recover the costs of repairing the banking system and to finance the future costs of winding up failing firms.

The assumption is that what is valid for banking must be valid for insurance.

This assumption is wrong.

Fundamentally different business models

Insurance was neither at the root of the crisis, nor the main recipients of the government support. Banks and insurers played quite different roles during the crisis because they operate on very distinct business models and therefore have very different risk profiles, both at micro-prudential level (ie, the stability of individual institutions) as well as at macro-prudential level (ie, the stability of the financial system overall and its impact on the economy).

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[1] OECD estimates: $1 500bn capital injections and capital facilities; $5 200bn asset purchases, guarantees and facilities; $4 600bn debt guarantees and debt guarantee facilities. OECD Journal "Financial Market Trends", 2009/2

[2] Excluding AIG Holding outlier, whose record-high intervention was triggered by massive losses in its financial units and derivative trading desk, unrelated to any of its core insurance business

The core activity of insurers is risk pooling and risk transformation, while that of banks is the collection of deposits and the issuing of loans, together with the provision of a variety of fee-based services.

At micro-prudential level, insurance companies usually have more stable, up-front and long-term funding, a simpler balance-sheet structure and significantly lower exposure to liquidity risk. Insurance assets and liabilities are generally linked, while banks often have to deal with a structural mismatch of assets and liabilities which makes the risk of excessive leverage significant. The ownership and transparency of risks assumed are similar in insurance and conventional retail or corporate banking, but are lower in some non-core banking activities. The interconnectivity between institutions is a core part of the banking business model (in particular due to interbank lending), whereas in insurance it is very low. On average, capital volatility is higher in banking. The investment approach in insurance is more long-term and driven by more predictable liability than the more short-term and asset-driven approach in banking.

Fundamentally different risk profiles

As a consequence, the risk profiles of insurance companies and banks differ fundamentally. The core of the insurance business model is the diversification of risk in the portfolio and over time. This determines insurers' long-term risk profile, in contrast to the more short-term risk profile of banks.

Insurance companies are mainly exposed to underwriting and market risk and relatively benign liquidity and credit default risk. Banks are mainly exposed to liquidity, market and credit default risk but have no exposure to insurance underwriting risk. The type of exposure to market risk varies. Market risk is severe for both banking and insurance, but fundamentally different in its components, such as the substantially lower asset-liability mismatch risk in insurance.

Fundamentally different role in the economy

Both banks and insurers are considered financial intermediaries. However, insurance companies and banks play quite different roles in relation to the efficient functioning of the whole economy.

Banks provide leverage to the economy and are part of the payment and settlement systems. As such, banks transmit to the economy the monetary policy of central banks.

Insurers, on the other hand, make an important contribution to economic growth by providing consumers and businesses with protection against negative events. However, while this role is critical for the functioning of the economy, insurers undertake their role as financial intermediaries in a far less directly connected manner with respect to the whole economy.

Fundamentally different systemic relevance

At macro-prudential level, based on the criteria for the identification of systemic risks drawn up by the Financial Stability Board (FSB) and the International Association of Insurance Supervisors (IAIS), the core insurance business model does not generate systemic risk that is directly transmitted to the economy. There is far lower contagion risk, higher substitutability and lower financial vulnerability than in banking. The financial position of insurers deteriorates at a much slower pace than that of banks, and the insurance regulatory framework sets two levels of capital requirements to ensure the early detection of financial problems and the application of progressive corrective action by management and supervisors. Even when an insurer does fail, an orderly wind-up is much easier, since insurers strive to match expected future claims by policyholders with sufficient assets (technical provisions), which facilitates the transfer or run-off of their portfolios.

However, some insurance companies may undertake a limited number of non-core activities that may be systemically relevant (eg, derivative trading or securities lending). These cases can be addressed by micro-prudential regulation. Finally, as large institutional investors, the insurance sector as a whole may transmit or — as demonstrated during the current crisis — absorb systemic shocks or risks generated by other parts of the financial system.

Exporting banking rules to insurance is wrong

The CEA, the European insurance and reinsurance federation, supports appropriate improvements to regulatory and supervisory standards for insurers that will maintain a sound and competitive insurance industry and foster consumer confidence. Exporting to the insurance sector the regulatory reforms and tax proposals under consideration post-crisis for the banking industry would be the wrong regulatory response to problems that in insurance are either non-existent or small. Imposing a banking regulatory and supervisory framework on the insurance sector would trigger "herd" behaviour; driving all financial services sectors to behave in the same way. This would result in a permanent weakening of the insurance business model, damaging the potentially stabilising role insurance plays for individual citizens, businesses and the economy.

The continuing existence of different business models, fostered by appropriate, tailor-made regulation and supervision, creates the market diversity that underpins overall financial stability. Concerns about regulatory arbitrage can be addressed effectively while still improving the supervisory and regulatory framework of the insurance industry in a sector-specific way.

CEA recommendations

Bearing in mind the distinctly different business models of insurers and banks, the CEA makes the following recommendations for a post-crisis regulatory reaction that would lead to the strengthening of insurance regulation and supervision to the benefit of the economy overall:

1. Global cooperation on regulatory and supervisory frameworks is essential. This will ensure the increasing convergence of the frameworks for financial services and will remove regulatory loopholes.
2. The unregulated entities and activities that played a crucial role in the crisis are the key issue to address. The regulatory response should be targeted, first and foremost, at closing regulatory gaps, thereby also addressing the risk of regulatory arbitrage.
3. Core insurance activities do not generate systemic stress, so they should not be considered systemically relevant. The limited number of non-core insurance activities that may be systemically relevant should be subject to appropriate supervision at an institutional (micro-prudential) level. Economic risk-based regulation, such as Solvency II, is crucial in this regard.
4. The insurance sector should nevertheless be adequately represented in financial stability fora. Insurers can both absorb and transmit systemic stress generated by other parts of the financial system, and should therefore have appropriate representation on systemic risk boards to ensure that they have insurance-specific expertise.
5. Systemic risks cannot be appropriately addressed by imposing additional prudential requirements on supposedly "systemically relevant" firms. At the macro-prudential level, what needs to be addressed is the aggregate impact of potentially systemically relevant activities, markets or products on the stability of the financial system.

   The listing of individual firms as systemically relevant has severe downsides, as it might miss the aggregate impact of non-listed institutions, increase moral hazard and cause market distortion. Furthermore, it could give a false sense of confidence to supervisory authorities, who might fail to detect changes in company risk profiles and market-wide trends that could generate systemic risks.
6. Whatever the supervisory structure for the insurance industry, the insurance business model must be appropriately recognised and the relevant supervisory expertise ensured. In many countries, government reaction to the crisis seems to be resulting in a reorganisation of supervisory structures, although so far no structure has proved its superiority.
7. Excessive regulatory reaction and inappropriate read-across of regulation from other sectors should be avoided. At the micro-prudential level, in Europe, the new Solvency II regime is the right regulatory framework tailored to the specific needs of the insurance industry. Solvency II already incorporates some of the overarching regulatory objectives of the recent Basel III banking discussions (such as higher capital requirements for riskier activities or group supervision). Merely transferring detailed implementation measures from Basel III to the insurance sector would impose a solution to a non-existent problem and would be at best ineffective and at worst costly and disruptive. Ultimately, regulatory over-reaction would have a negative impact on consumers and the economy, as it would lead both to increases in the price of insurance products and to the insurance industry becoming less attractive to investors.

8. **Insurers should have appropriate group supervision at a consolidated level by a group supervisor.** This should include all the risks arising from a group's regulated and non-regulated entities. For conglomerates, overall risks should be assessed, taking into account both the insurance and banking business models.

   Information-sharing and effective cooperation among all the supervisory authorities of a group are essential and should be facilitated by the creation of a college of supervisors, with the responsibilities of the group and solo supervisors clearly allocated. For the European insurance sector, such an approach has already been adopted under Solvency II.

9. **Products with similar risk profiles should have equivalent regulation irrespective of the provider.** Having tailored regulation that reflects the specific characteristics of different sectors does not mean that products with the same risk profile should be treated differently. Level regulatory playing field issues across all financial sectors should be addressed and equivalent protection levels for consumers should be guaranteed through equivalent means. This is particularly important with regard to the regulatory frameworks of insurance and pensions providers.

10. **Accounting regulation should reflect the nature of the insurance business model and be consistent across the balance sheet.** It should provide transparency on the effectiveness of insurance companies' asset-liability management (ALM). All standards applicable to insurance companies' assets and liabilities should be consistent. Both conditions are crucial to ensure that financial statements provide meaningful information about the risks, financial condition and profitability of insurance companies for investors and policyholders alike.

11. **Debates on financial services taxes should recognise the different risks posed by different types of financial institutions.** Any kind of cross-subsidisation between financial sectors is inappropriate, as it rewards riskier financial entities at the expense of less risky ones.

12. **The cumulative effect of macro- and micro-prudential measures, as well as tax measures, must be considered for each financial sector and between sectors.** Due to the variety of measures discussed, any cumulative effects that could harm the sector and its ability to provide coverage to consumers and businesses have to be carefully considered.

Differences between insurance and banking business models		
	Insurance	Banking
Scope of business	▪ Comparatively low variety of businesses (scope of products/portfolio), services and business models ▪ Essential role is risk pooling and risk transformation	▪ Large variety of businesses, services and business models ▪ Performs many different functions (eg, collecting deposits and extending loans, engaging in market-making activities, providing advisory services, etc.)
Funding	▪ Predominantly funded by policyholders and less reliant on shareholders' equity and debt ▪ Majority of funding is up-front and long-term, resulting in stable balance sheets ▪ Assets and liabilities are linked to a substantial degree; when policies are cancelled, both assets and liabilities are eliminated at the same time	▪ Broad variety of funding structures, eg, deposits, interbank borrowing, commercial paper, covered bonds, repo transactions, shareholders' equity, etc. ▪ Substantial share of funding usually of short duration ▪ Assets and liabilities are, in general, not strictly linked; repayment of a loan/sale of an asset has no immediate impact on funding structure
Balance-sheet structure	▪ Simple and economically stable balance sheet owing to fairly long-term policyholder and shareholder obligations ▪ Payout events influenced by economic cycles only to limited extent ▪ Generally low investment losses due to conservative investment portfolios ▪ Limited use of inter-company lending or borrowing ▪ Limited transfer of risk to capital markets	▪ Risks reside independently on both sides of the balance sheet as assets and liabilities are generally not linked ▪ Core risk lies in the value of the lending book ▪ Asset and liability values are significantly exposed to economic cycles ▪ Interbank lending and borrowing are part of core business model
Liquidity risk	▪ Limited exposure to liquidity risk ▪ Liability side: most policyholder funds either cannot be withdrawn at policyholder discretion or can only be withdrawn with a penalty. Large single claims usually have long, sometimes even multi-year, pay-out periods	▪ Liquidity is a key risk ▪ Average duration of assets usually longer than average duration of liabilities ▪ Reliance on short-term wholesale funding

	▪ Asset side: liquidity risk mainly driven by impairments of assets, which can be anticipated quarters ahead	
Risk ownership and transparency	▪ High incentive to assess and price risks properly as about 80% of non-life and 95% of life insurance risks are retained on own account (100% of liability retained vis-à-vis policyholders)	▪ Generally high incentive to assess and price risks properly. However, prior to the financial crisis, the offloading of assets through securitisation led to deteriorating underwriting standards, as the risks are not generally retained on the balance sheet
Interconnectivity	▪ Very little interconnectivity between companies ▪ Low likelihood of a single insurer causing systemic risk to the economy because of higher substitutability and lower financial vulnerability than banking	▪ High interconnectivity between companies ▪ Interbank funding and repo market ▪ Significant investment by some players in securitised assets issued by other banks ▪ Substantial trading and transaction activity between institutions ▪ Higher probability of a single bank failure transmitting systemic risk to the economy
Business volatility	▪ Long-term oriented business; many policies with a multi-year duration ▪ Short-term volatility has limited impact on business results and sustainability	▪ Higher earnings volatility due to shorter term nature of the business, particularly for banks with substantial trading activities ▪ Higher use of leverage
Asset-liability management (ALM) and investment management	▪ Liabilities typically have longer duration than assets, resulting in more stable funding position ▪ Conservative, liability-driven investment approach	▪ Liabilities have shorter duration than assets, posing risk that a bank cannot meet its obligations as the assets cannot be liquidated quickly enough ▪ Asset-driven investment approach

Introduction

Banks and insurers need differentiated and specific regulatory frameworks — both at micro-prudential and macro-prudential level — that fully reflect the profound differences between the business models and risk profiles of the two industries.

The CEA, the European insurance and reinsurance federation, sees the risk of over-simplification in recent suggestions by some policymakers and governmental institutions that banks and insurers should be subject to the same regulatory framework[3]. Such moves would have a material negative impact on the sector and on the whole economy.

This report is organised into five sections.

Section 1 provides an overview of banks' and insurers' business models, key activities, value drivers and risk factors. It sets out the different risk profiles and risk exposures of both types of institutions.

Section 2 assesses the key differences between banks and insurers in terms of funding and balance-sheet structure; liquidity risk; risk ownership and transparency; interconnectivity; business volatility; and asset-liability management (ALM) and investment management.

Section 3 outlines the implications of these key differences for the risk exposure of insurance companies and banks at both institutional and system-wide level.

Section 4 covers the resulting implications for the effective regulation of banks and insurers, calling for distinct approaches at institutional (micro-prudential) level and an activity-based approach at the macro-economic (macro-prudential) level.

Finally, section 5 draws conclusions from these considerations and makes recommendations for the further development of financial services regulation.

[3] The regulatory framework consists of guiding principles, policies, methods and instruments, irrespective of the organisational set-up of regulatory bodies.

1. Description of insurance and banking

At first glance there are many similarities between banks and insurers:

- both retain a margin (investment spread) on the money (bank deposits or insurance premiums) collected from their customers;
- both assume financial risks (market exposures) on top of their core business risks, eg corporate lending or insurance risk covers;
- for both, financial risk has grown in complexity and importance over the past decade; and,
- both support their investments with external funding and customer money (deposits and policyholder funds), exposing shareholder equity and risk-based capital to market fluctuations.

Yet, on closer examination, banks and insurers operate distinct business models and are exposed to quite different risks in different ways.

1.1 Insurance

The essential role of insurers is risk pooling and risk transformation (particularly in the non-life and health sectors) and support for long-term private wealth building (mainly in the life sector).

Insurers accept risks from policyholders (individuals or businesses) and provide them with protection against a future negative event. Through the pooling of a high number of risks and the application of the law of large numbers (see box), insurers play a crucial role in the economy by offering risk protection capacity through portfolio diversification. To achieve the necessary level of risk diversification, risk financing or mitigation of tail risks (low frequency/high intensity risks) and to stabilise their earnings, primary insurers transfer some of the risk to reinsurers, who further diversify the risks by pooling them on a more global scale or, to a much lesser extent, by transferring them to the capital markets via securitisation.

The law of large numbers

The law of large numbers lies at the core of insurance. The higher the number of independent, homogeneous exposures insured, the higher the likelihood that actual losses will be very close to expected and budgeted losses. Indeed, the run-off of technical provisions for personal lines business[1] shows a remarkable track record of stable results.

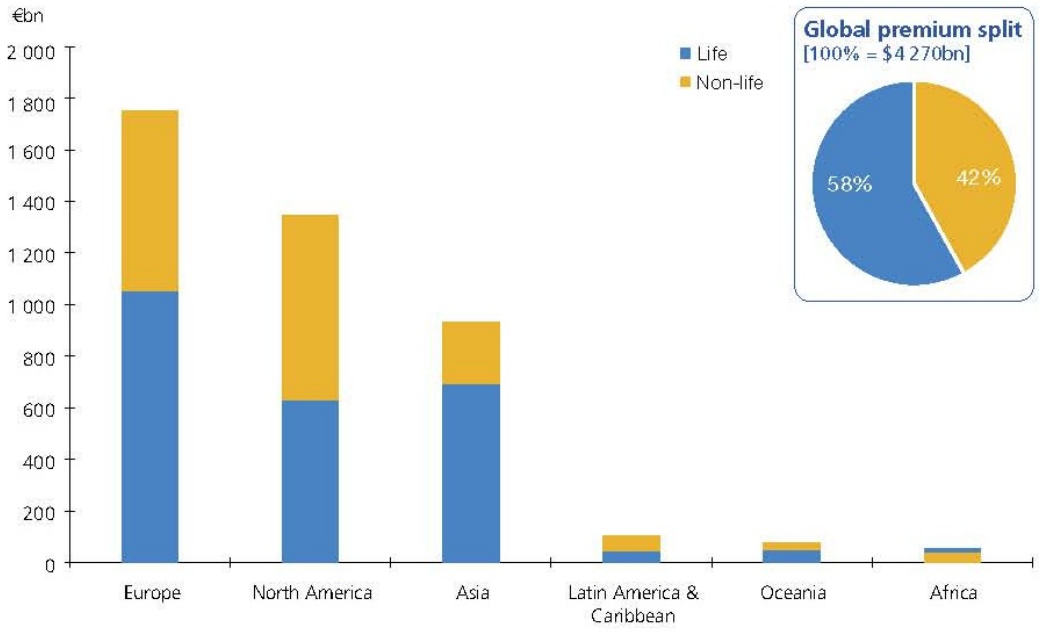
[1] For long-tail, less homogeneous lines with lower degrees of independence between policies (eg commercial liability), it is more difficult to robustly forecast ultimate losses

Insurers collect premiums up-front and invest them for the period between collection and the event that generates a claim (eg damage to insured property) or the expiration of the policy.

Insurers have large amounts of investments (normally much greater than annual premiums) to back future claims and are therefore large institutional investors. As insurance contracts are generally long term and claims outflows are relatively predictable in both time and amount, the investment horizon of insurers is generally long-term and quite stable over time.

There are relevant differences between life and non-life (property and casualty (P&C)) lines of business. Global insurance premiums are summarised in Chart 1.

Chart 1 | Global gross written insurance premiums – 2008 ($bn)



Source: Swiss Re Sigma

1.1.1 Non-life (property and casualty) insurance

Non-life insurance companies provide protection for individuals and institutions against the risk of adverse events with a negative financial consequence. The policyholder pays a premium in exchange for the promise to be indemnified later for the financial consequences of a covered event in the cases and under the conditions agreed in the contract, creating a favourable liquidity position for the insurer. This liquidity position is largely stable, as for the vast majority of non-life policies the actual cash pay-out from claims over subsequent weeks or months is generally foreseeable and there is no option to withdraw the premium that has been paid at short notice.

Non-life insurance contracts provide protection against the damages or losses of the insured policyholder (property lines), as well as against liability for damages that the policyholder causes to a third party's life or property (casualty lines). Insurers, thanks also to reinsurance market capacity, can often underwrite risks that individuals and businesses could not sustain on their own, as the occurrence of the negative event might cause bankruptcy if uninsured[4]. The absence of insurance would limit the entrepreneurial freedom of many businesses.

Insurance companies establish a price for risks by acting as an intermediary and risk pooler for different parties. Insurance prices are based on the expected cost of the claim, taking into account the expected frequency and severity of a homogeneous class of risks, the insurer's operating and distribution costs, as well as the cost of capital to support the risks underwritten.

The value of a non-life insurance company depends on its ability to segment and price appropriately the risks underwritten, to pool the risks to benefit from diversification, and to optimise operating costs. On the investment side, financial returns provide additional revenue sources, especially in long-tail lines such as general liability. However, the nature of P&C insurance investments (ie backing up future expected claims) is such that insurers adopt a relatively conservative asset allocation (mostly fixed income assets aligned to claims pay-out durations) and investment results are therefore a modest earnings component (especially when interest rates are low) compared to — and largely uncorrelated to — underwriting results.

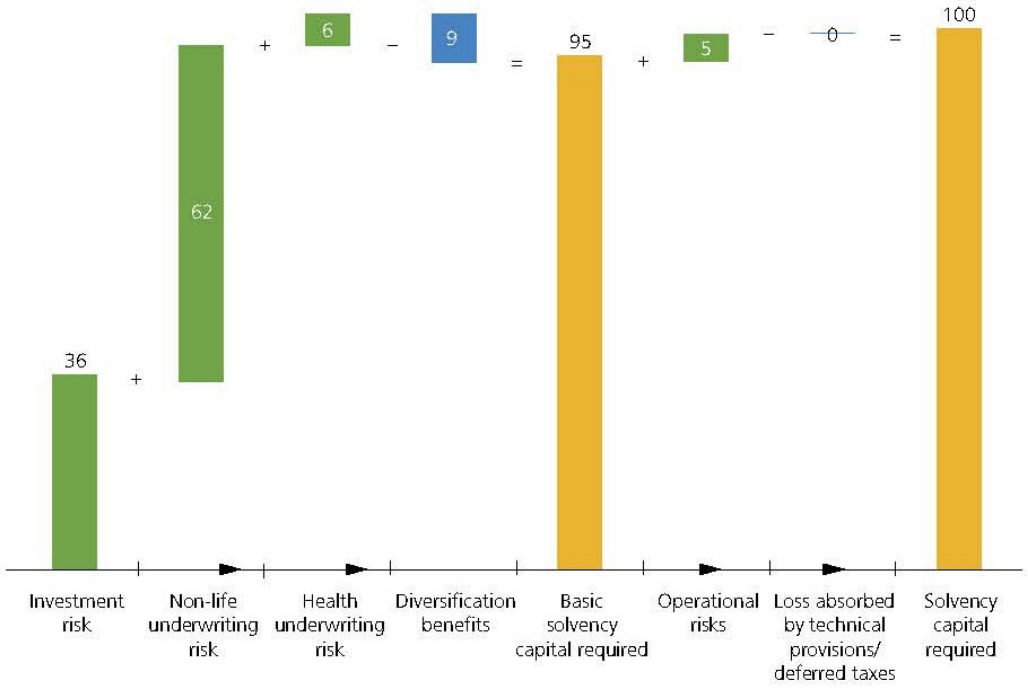
Risk exposures are found on average about two thirds in underwriting and one third in investments, as seen in Chart 2 from the results of the fourth quantitative impact study (QIS 4) carried out by the Committee of Insurance and Occupational Pensions Supervisors (Ceiops).

Investment risks can be mitigated through financial hedging and by synchronising the duration of assets and liabilities under different economic scenarios (eg by stochastic asset-liability matching). Underwriting risks, including tail risks, can be mitigated by transferring them to reinsurers, who can also transfer them to other reinsurers (retrocession) or, to a far lesser extent, to the capital markets through insurance-linked securities (ILS). Efficient use of

[4] Not all risks are insurable (see box on p33).

reinsurance also helps primary insurers to optimise equity or debt financing and to reduce the volatility in their earnings and balance sheet through reduced exposure to unpredictable events.

Chart 2 | Main components of Solvency Capital requirement (SCR) – non-life (%)



Source: QIS 4 Report, Ceiops

1.1.2 Life insurance (term life, endowment, unit-linked, pension annuity)

Life insurance companies provide products incorporating either or both of two risk components:

- Life risk: Protection against the financial consequences of death or disability for policyholders and beneficiaries. Insurers assume and pool significant biometric risk, to the benefit of households' wealth stability and preservation. They also assume longevity risk, helping policyholders to mitigate the risk of outliving their financial assets.
- Investment risk: Savings products in which the policyholder has the choice to either retain the full investment risk or have the insurer take over part or all of it (financial guarantee)[5]. There are two common forms of financial guarantees: capital protection or minimum yield. Guarantees can be offered compounded year on year or just at the time of policy maturity.

[5] There are significant regional differences in the extent to which such financial guarantees are used

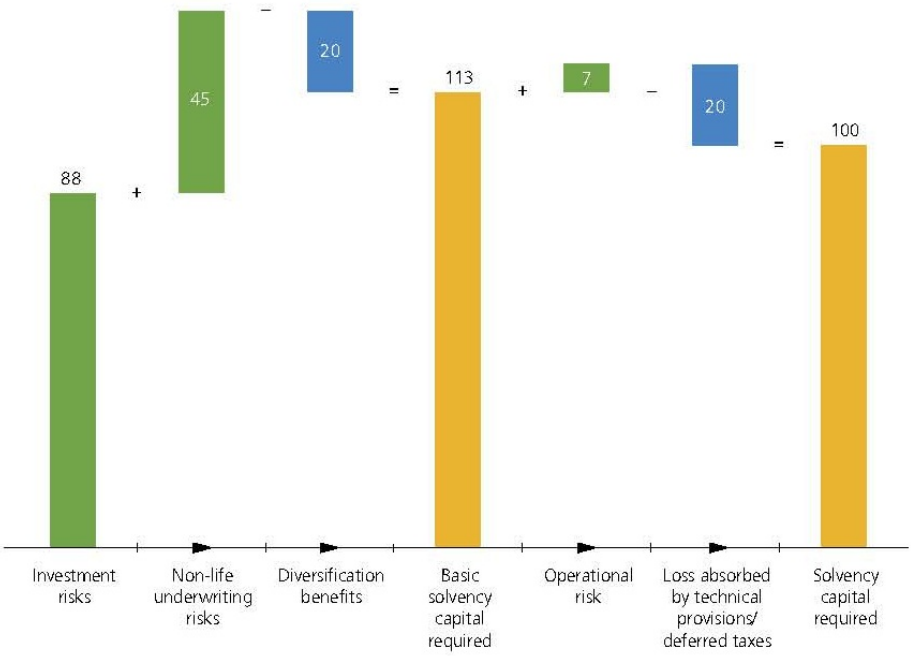
Life insurers help policyholders with the long-term management of their financial assets by offering a range of investment options with a controlled (or reduced) risk exposure. They thus play a social role by providing long-term financial stability and security for policyholders' savings, particularly in countries with a more limited welfare state or for citizens who are less reliant on it (eg self-employed people who do not participate in state pension schemes).

Life insurers' investments of policyholders' reserves are normally long-term. Policies typically cover periods from five to 30 years, and even longer for pension products. Therefore, a key element of the life insurance investment strategy is the duration of the liability, as insurers need to invest in assets that are adequate to cover their obligations to policyholders over time. This determines their asset-liability management (ALM) profile.

As with non-life insurers, the value of a life insurance company lies in the sensible risk pricing of the insurance (protection) components of policy covers written and a robust risk-driven investment policy that matches policyholders' liabilities and risk profiles.

Key risk exposures are investment risks (not in absolute terms, but with respect to their ALM profile) and, to a lesser extent, biometric risks. Investment risks can be mitigated through financial hedging. Life risks can be mitigated by transferring "excessive" risks to reinsurers but on biometric risks there are lower diversification benefits to be captured through cross-regional risk pooling, as (unlike non-life risks) they are more correlated across markets. Chart 3 illustrates the aggregate life insurance risk split according to the Ceiops report on QIS 4.

Chart 3 | Main components of Solvency Capital requirement (SCR) – life (%)



Source: QIS 4 Report, Ceiops

1.1.3 Reinsurance

As part of their own risk and solvency assessment, primary insurers determine to what extent they can retain the risks related to the policies they have issued. Parts of a single policy or a portfolio of policies that exceed their own risk-bearing capacity can be transferred to reinsurance companies for a premium. Depending on the type of contract underlying these transactions, reinsurance companies essentially provide either an efficient form of financing or protection against tail risks, thereby helping to improve the resilience of individual primary insurance companies. As reinsurance companies typically operate on a global scale, pooling risks from many countries, they perform an important macro-economic function as they help to diversify tail risks across regions and continents. In such a way, each individual reinsurer often retains a relatively small portion of risk deriving from any single negative event, and diversifies excess risks further to other reinsurers or the capital markets (ILS).

The reinsurance business model is in several respects similar to primary insurance. Reinsurance companies are predominantly funded by technical provisions and to a lesser extent by shareholders' equity and subordinated liabilities. Liquidity risk is modest; reinsurance contracts can usually be cancelled only with substantial notice, and claims payouts are spread over time, often consolidated on a quarterly basis. Reinsurance companies retain the vast majority of the business they write on their own balance sheets. Asset management and ALM approaches are similar to those of leading global insurance groups.

1.2 Banking

The banking industry has a greater variety of businesses, services and business models than the insurance industry because banks perform many different functions.

Whereas there are differences in banking models, with some banks focusing on retail clients and others on institutional and corporate clients, the core activity of a bank is the collection of deposits from private, corporate and institutional customers as well as other banks (which provide funding to the bank as liabilities) and the extension of loans to these customer groups (which are assets on the bank's balance sheet). Both deposits and loans come in various forms and durations (eg deposits as current account deposits, savings accounts, fixed term or interbank overnight deposits; loans as current account overdrafts, mortgages or investment loans). Generally, the average term of deposits tends to be shorter than loans as customers mostly demand flexibility to withdraw deposits, but seek longer term security on their loans.

Banks make money on these activities in two ways. Firstly, assuming the same term duration, they pay their customers less interest on deposits then they demand for a loan. Secondly, since the average term of deposits is usually lower than the average loan term and the short-term interest rate is usually lower than the long-term one, they benefit from

the so-called maturity transformation effect. Total amounts of deposits and loans rarely match. If banks have — as most do — a shortage of deposits, they cover the shortfall with wholesale funding in the form of commercial paper, bonds, covered bonds, interbank funding, central bank funding or repurchase agreements (repos). Some banks have very limited access to deposits and rely primarily on wholesale funding, eg specialised commercial real estate lenders or pure investment banks. If banks have excess deposits, they use these to fund other principal risk activities (see below) or invest the "deposit overhang" in non-customer-related assets such as government bonds or equities. Savings banks often have a deposit overhang or are at least relatively deposit rich.

Banks assume principal risks not only in their lending business but also, for example, through proprietary trading activities, market-making activities and the extension of derivatives for hedging purposes of the bank itself or the hedging or investment needs of customers. These activities can be funded through deposits or wholesale funding.

Banks also provide many fee-based services, for which they do not assume any principal risks. Examples include payment, brokerage and investment services (eg to manage discretionary accounts or mutual funds), investment advice and research, custody services or merger and acquisition (M&A) advice.

The extent to which a bank pursues these different services depends on its business model and regulatory environment. While "universal banks" offer many of these services, specialised banks exist in many business lines, eg in consumer lending, commercial real estate lending or custody.

Banks also engage in non-banking activities. Examples include the provision of IT services to other banks or customer groups or the operation of a trading venue that is open to the bank’s own and other banks' customers. The regulatory environment will determine the extent to which banks can operate many different banking services "under one roof" or are allowed to conduct non-banking activities.

2. Differences between insurance and banking

Despite high-level similarities, insurance and banking are fundamentally different in terms of their business models: funding, investment, core business and risk exposures.

2.1 Funding and balance-sheet structure

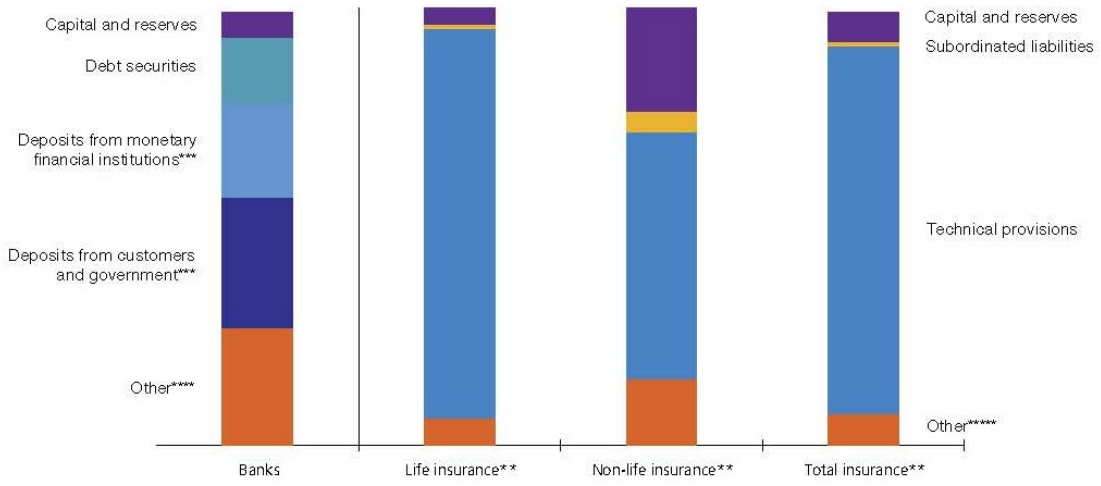
Banks and insurers differ in terms of funding sources and overall balance-sheet structure.

2.1.1 Funding

Insurance companies are predominantly funded by their policyholders (reflected in the technical provisions for non-life unearned premiums and claims and life mathematical reserves) and to a lesser extent by shareholders' equity and subordinated liabilities (eg hybrid forms of capital, typically only for larger groups).

Banks display a broad variety of funding structures. This is not only a reflection of the very varied business models but also of preferences, because bank regulation does not require that certain activities demand certain funding structures. Funding can take the form of customer deposits, interbank or insurance deposits, commercial paper, bonds, covered bonds, repo transactions and shareholders' equity and reserves (see Chart 4).

Chart 4 | Funding mix comparison – banking and insurance (% of total liabilities and equity)



* *Eurozone*
** *Percentages based on a sample of European countries (Austria, France, Germany, Italy, UK)*
*** *Amounts held by euro area residents*
**** *For example, money market fund shares, liabilities held by non-euro residents*
***** *For example, deferred tax liabilities, obligations to repurchase securities, etc.*

Source: European Central Bank

The average duration of funding of composite (life and non-life) insurance companies is about 8–10 years. Funding provided to banks is typically of a shorter duration and a

significant portion of short-term funding can be withdrawn at short or no notice. Therefore, insurance balance sheets are more stable, as they are less exposed to the short-term withdrawal of funds.

Insurance assets and liabilities are also linked to a substantial degree. When policies are cancelled, both assets and liabilities are eliminated at the same time, often with a profit for the insurer[6]. In contrast, when a bank loan is repaid or an asset sold, this has no immediate impact on the funding structure. Likewise, if deposits are withdrawn, none of the assets are automatically available to repay the depositor. As most banks' assets are on average longer-term than deposits and other sources of funding, most banks are not able to withstand a collective withdrawal of deposits (bank run) as this usually also immediately results in the elimination of access to other (wholesale) funding sources (see Section 2.2 on liquidity risk).

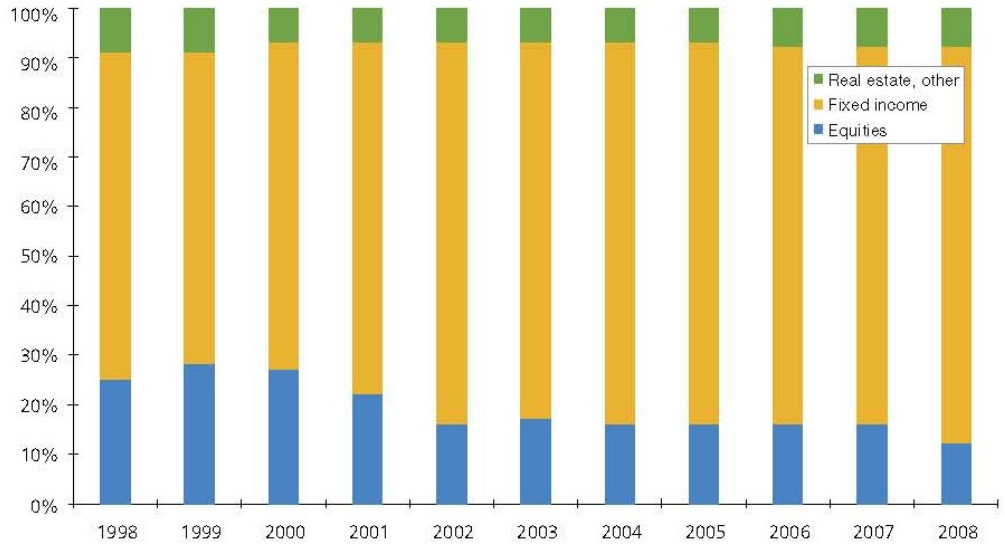
2.1.2 Balance-sheet structure

The balance-sheet structures of banks and insurance companies show some remarkable differences.

- The balance sheet of insurers is economically relatively stable: fairly long-term policyholders' and shareholders' obligations, complemented by a limited amount of subordinated or hybrid debt (liabilities), offset by corresponding shorter term invested assets. The risks of banks reside more independently on both sides of the balance sheet, as assets and liabilities are, in principle, not strictly "linked". Generally, more risks reside on the asset side as the core risk for banks lies in the value of their lending book, and expected losses for loans are not booked on the liability side of the balance sheet as reserves or provisions but deducted from the amount of the loan on the asset side.
- A core risk for both insurance companies and banks is the quality of their underwriting and the ability to anticipate future losses, be it for insurance companies as pay-outs to insurance policyholders or investment losses or for banks as loan losses or other reductions in bank asset values. Most bank failures are related to such losses, as the value of their assets is quite exposed to economic cycles, when, for example, aggregate loan losses can increase substantially or securities lose value rapidly.

[6] In many insurance products cancellation is restricted, penalised or not allowed

Chart 5 | European insurer investment breakdown – 1998-2008 (%)



1998–2007 figures based on 23 European insurers
2008 figures based on nine European insurers

Source: Company annual reports

- Insurance companies are less exposed in this respect because the pay-out events are only influenced to a limited degree by economic cycles and losses on investments tend to be less substantial due to their inherent purpose of matching liabilities, which leads to conservative and non-speculative portfolios. Some insurance companies were quite exposed to stock market falls after the dot-com bubble burst. Since then, insurance companies' investment portfolios have become much more conservative through a massive de-risking policy (see Chart 5). The EU's future Solvency II regulatory regime follows a risk-based economic approach and will thus guarantee that higher levels of regulatory capital are provided for higher risk.
- Insurance intercompany lending is incidental, rare and not part of the core business model. In contrast, banks regularly have short-term excess liquidity or borrowing needs and balance these through participation in the interbank funding market, often on an overnight basis.

2.1.3 Securitisation

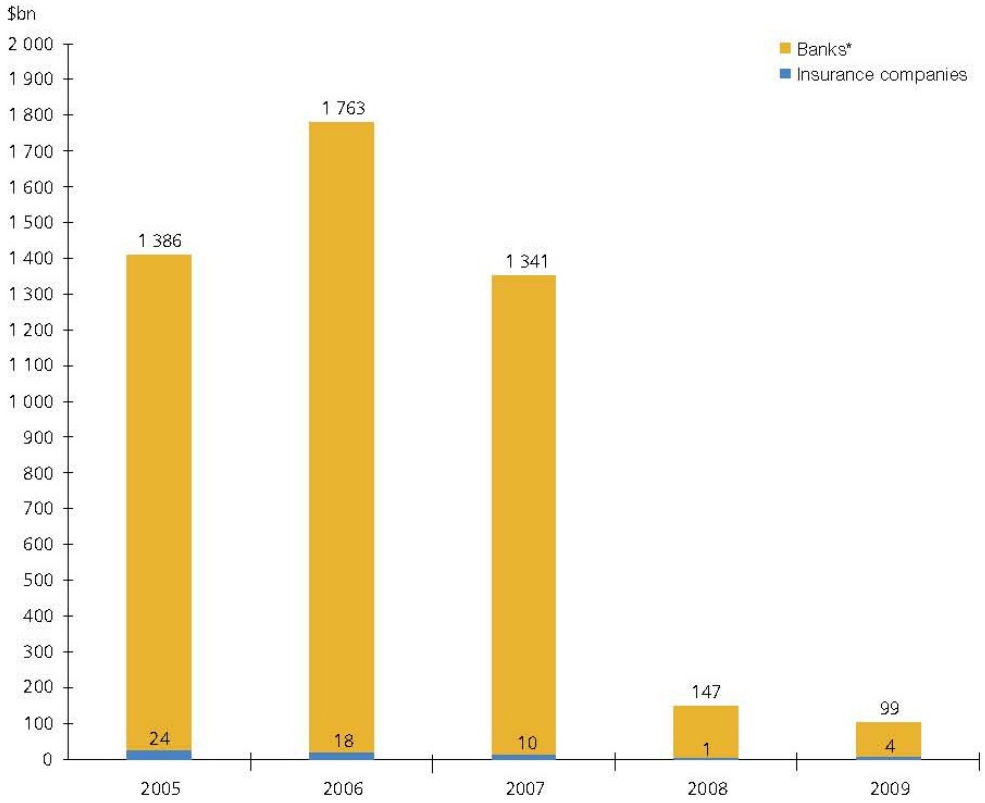
Some banks commonly use capital markets to offload assets via securitisation[7]. This is an important element in the management of a banks' balance sheets as it allows them to release regulatory capital in order to free up lending capacity or to reduce a perceived

[7] Securitisation has become an important element in the interconnectedness of the banking industry

overexposure to a particular asset class, customer group or geography. The total volume of securitised banking assets in 2005–2007 was over $4 000bn.

Securitisation plays a much smaller role in connecting insurance companies with capital markets as the total issuance volume of ILS was only about $50bn in the same period (see Chart 6). Unlike bank securitisations, ILS are typically only related to non-financial risks and do not take the risks out of a (re)insurer's balance sheet but provide a financial hedge. Furthermore, ILS typically require the issuer to retain a vertical and horizontal share of the risk, avoiding undesired disintermediation. There are also no long chains of ILS trading cascades (unlike, for example, collateralised debt obligations (CDO) in banking, where securitised assets were repackaged prior to the financial crisis in another securitisation).

Chart 6 | Issuance of asset-backed securities, mortage-backed securities and insurance-linked securities (2005-2009 ($bn)



** Commercial & savings banks, development banks, home equity loan banks, investment banks, building societies, municipal banks, provincial banks and savings & loan banks*

Source: Dealogic

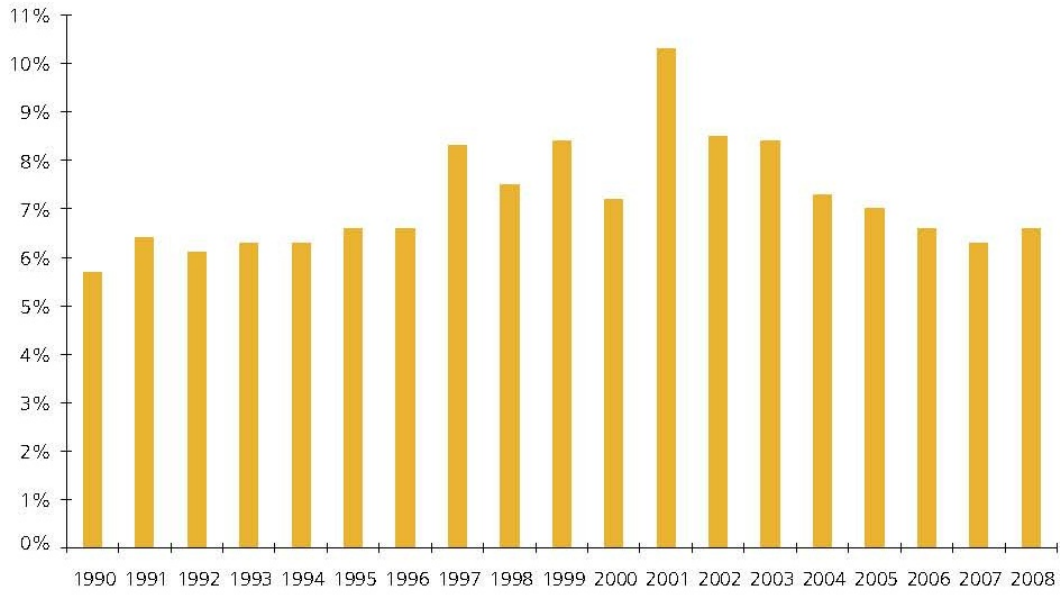
2.2 Liquidity risk

Liquidity risk can arise either from assets, through collateral calls or impairments, or from liabilities, through the withdrawal of funds (bank runs) or unexpected liabilities.

Insurers are generally exposed to limited liquidity risk[8]:

- On the liability side, policyholder funds either cannot be withdrawn at all (as in most non-life lines) or can only be withdrawn at a penalty (as is common in life) and subject to a cancellation period. As policyholder funds are usually protected by market-funded regimes, policyholders are typically less inclined to cancel their life policies if their insurance carrier becomes financially distressed (Chart 7 shows that even during the life insurance crisis in Japan, churn rates remained relatively stable). The insurance industry in Europe has a good track record in the adequacy of its technical provisions. The provisions are also subject to scrutiny by auditors and regulators.

Chart 7 | Japanese life insurance policy churn rates (% of policies)



Source: Insurance Research Institute, Japan

- On the asset side, liquidity risk is mainly driven by the impairment of assets (eg deferred acquisition costs, reinsurance recoverables, goodwill), which are monitored as part of the normal fair-value accounting process, and by collateral calls. These items do not change in value suddenly or unexpectedly and can often be anticipated one or two quarters in advance. There is only incidental exposure to collateral calls.
- European insurers are mostly diversified companies, and therefore benefit considerably from risk diversification within their portfolios, stabilising aggregate payouts (eg between life and non-life; within life between traditional and non-traditional products;

[8] The market-consistent valuation of assets and liabilities applied by Solvency II generally increases the volatility of excess capital and thereby increases the inherently limited liquidity risk to a certain extent. Anti-cyclical measures, such as dampeners or the illiquidity premium, have been developed as corrective measures to counter the pro-cyclicality of the market-consistent approach

and within non-life between motor and non-motor). Larger single claims usually have a longer, sometimes multi-year pay-out period.

- If one insurance company faces liquidity issues, this has little if any impact on the others due to the low degree of inter-company funding.

Liquidity risk has, however, proved to be a key risk for banks:

- The average duration of most banks' assets is longer than the average duration of their liabilities. While assets consist to a large degree of longer-term loans, which cannot be turned into cash instantly, most deposits can be withdrawn immediately or at short notice. Banks also rely on the wholesale funding market, often with short-term maturities.
- This structure not only accommodates customer needs, but also serves as an additional source of profits, as the long-term interest rate is usually higher than the short-term one. This so-called maturity transformation exposes banks to liquidity risks. For example, if a bank is not able to replace funding in a liquidity crisis, it might not be able to liquidate assets fast enough to compensate for a funding shortfall. This was one of the major drivers of several cases of financial distress during the crisis, eg Lehman Brothers and Hypo Real Estate. In order to protect themselves against liquidity risk, banks hold liquid assets such as cash, government bonds or cash equivalents. These can be liquidated quickly if deposits are withdrawn or if wholesale funding at maturity cannot be replaced with new funding.

2.3 Risk ownership and transparency

There are marked differences between the degrees to which insurance companies and banks retain risk.

Insurance companies typically retain 80% or more of the non-life and more than 93% of the life insurance risks[9] they assume and thus have a fairly high incentive to assess and price risks properly. Between 7% and 20% is therefore reinsured, and in addition up to 2% is transferred to capital markets via ILS[10]. In any case, insurance companies remain 100% liable to their policyholders and ceded risks stay on the balance sheet.

Some banks may display a high degree of risk ownership, as they do not transfer any part of the risk they underwrite. Prior to the financial crisis this was, however, not the case, since some banks used the so-called "originate to distribute model". Under this model, banks would make maximum use of securitisation and underwrite business with the intention of offloading it as soon as possible through a securitisation transaction. This model was particularly prevalent in the pre-crisis subprime mortgage market. Many believe that this practice resulted in inadequate underwriting standards and deteriorating asset quality, since banks no longer had to shoulder the effects of their own poor underwriting.

[9] Average EU15 cession rates 1998–2007, OECD Insurance Statistics Yearbook 2009
[10] Less than 2% of risks transferred by insurance companies goes to the capital markets

2.4 Interconnectivity

There is generally very little interconnectivity within the insurance industry. Inter-company funding is extremely low. The syndication of risks[11] or co-insurance is based on the concept of separate liability, ie one carrier defaulting does not require another to take over. The insurance industry has a good track record in managing the only two significant elements of potential interconnectivity:

- Reinsurance (about 20% of primary non-life premiums and 7% of primary life premiums in the EU are ceded to reinsurers)[12]: if one reinsurer defaults, it might trigger the default of those insurance companies that transferred risk to it but did not spread their reinsurance transactions sufficiently between a number of strong reinsurance companies. Typically the reinsurance recoverable represents a fairly large asset on insurance company balance sheets and hence needs to be prudently managed[13]. Widespread industry best practices, such as spreading the reinsurance ceded among a well diversified set of high quality reinsurance carriers or the use of so-called downgrade clauses, limit the severity of this risk. Importantly, and unlike banks, a reinsurer default would not trigger a domino effect as risk transfer and funding between insurance companies is extremely limited, limiting the impact of the default to the immediate contract partners of the reinsurer.
- External events affecting many insurers simultaneously (eg major natural catastrophes such as an earthquake in Tokyo): exposure to extreme, non-financial events is either spread across the global private insurance market through reinsurance and retrocession, which are particularly focussed on this type of low frequency/high intensity events; transferred to capital markets through ILS; or borne by government schemes (eg nuclear exposures, terrorism)[14].

Banks operate in a much more interconnected industry structure:

- They participate (as borrowers and lenders) in the inter-bank funding and repo markets.
- They share risks through joint ownership, eg in a loan syndicate or a securities underwriting consortium.
- They invest in the securitised assets of other banks to improve risk diversification or enhance investment returns. Many European banks were severely exposed to the US subprime mortgage market, despite having no business activities in the US.
- They have substantial trading and transaction activities with each other. While most of those activities are on a delivery versus payment basis, a large portion of the foreign

[11] Common practice in subscription markets or insurance pools, eg for large commercial risks
[12] Average EU15 cession rates 1998–2007, OECD Insurance Statistics Yearbook 2009
[13] In some jurisdictions, insurance companies withhold funds related to policyholder obligations
[14] Extreme financial events are mitigated by insurers' conservative investment approach

exchange market is settled in a way that makes banks exposed to settlement risk if the counterparty defaults.

- Lastly, and most fundamentally, one bank run might cause others if investors or depositors are concerned about resulting chain reactions or view the failure of one bank as a sign of the deteriorating asset quality of others too.

In summary, a single primary insurance company defaulting, even a large one, would not cause others to default. One reinsurance company failing might cause some financial distress to its primary insurance clients but would not start a domino effect. The situation is different in banking, where interconnectedness makes any significant bank failure critical, resulting in the "too big to fail" effect.

- There are, however, some activities conducted by insurers that could establish cross-sectoral links between insurance and banks: Insurance companies make significant use of exchange and over-the-counter (OTC) traded securities for investment purposes, and of derivative instruments to hedge risks embedded in policies sold (eg interest rate or currency risks). With substantial investments in securities issued by banks (eg bonds, equities), the financial strength of the insurance industry is connected to the performance of these instruments and their issuers.. Insurance companies could also be exposed to the failure of a bank that provided protection through derivatives if its exposure is not fully collateralised. As a result, an insurance company could be exposed to a bank failure and, hence, transmit (systemic) stresses originating in other financial institutions.

- Some insurance companies sell significant credit protection or enhancement to banks, including to systemically relevant institutions. This might result in the insurers becoming exposed to similar risks as banks, including stresses that could be systemically relevant[15].

2.5 Business volatility

Insurance business is, by its very nature, long-term oriented. On a pure economic basis, short-term volatility has a limited impact on business results and sustainability:

- Insurance revenues and payouts are relatively stable. Non-life policies typically have a one-year term. However, with the exception of motor contracts, high renewal rates in many countries and lines of business mean that policies have an average duration of 10 years or more. Life policies typically have a multi-year term (very often more than 10 years) with policyholder funds, including their share in future profits, absorbing much of the volatility arising from fluctuations in the value of assets or liabilities at any point in time.

[15] Insurance companies also provide conventional insurance protection to banks (eg tail operational risk, professional liability). As payments are subject to the occurrence of a covered event, this is a far smaller source of cross-sectoral interconnectivity.

- Insurance companies mitigate exogenous volatility by advanced asset-liability matching techniques, whereby the assets and liabilities flex up and down with a higher degree of synchronisation (see Section 2.6).

For banks, the earnings volatility differs quite substantially. The higher earnings volatility of banks often results from one or more of the following factors:

- The short-term nature of the business, particularly for banks with substantial trading activities.
- In a recession, customer defaults rise substantially and if banks have underestimated these effects, provisions do not fully cover the resulting losses, requiring additional write-offs.
- Higher use of leverage, maximising shareholders returns in boom times but also potential losses in more difficult periods.

2.6 ALM and investment management

The mismatch risk between assets and liabilities, ie the risk that the economic value of assets and liabilities develops differently over time, varies fundamentally in size and nature between insurance companies and banks.

The liabilities of insurance companies have, for the most part, a longer duration than their assets. Although this exposes insurance companies to re-investment risk, it results in a relatively stable and predictable funding position. Large insurance companies actively manage the mismatch risk to ensure that the value of the assets funded by technical provisions develops in sync with the value of the provisions. As part of this approach, a large portion of the asset allocation of insurance companies is driven by the cash-flow profile and risk characteristics (eg interest-rate or inflation risk) of the liabilities that fund them.

As explained, the liabilities of banks typically have a shorter duration than the assets, ie at any point in time a bank faces the risk that it cannot meet its obligations as the assets cannot be liquidated quickly enough.

Due to the business model, investment practices are in general fairly conservative in the insurance industry, with internal guideline-setting by each asset class ensuring high risk diversification on this side of the balance sheet too. In addition, insurance companies' investments are increasingly chosen to fund the expected payout patterns of claims. In banking, the asset composition is generally not restricted, as banks could otherwise not perform their core intermediary function.

2.7 Macro-economic role

Both banks and insurers are considered financial intermediaries. However, insurance companies and banks play quite different roles in relation to the efficient functioning of the whole economy.

Banks provide leverage to the economy to fund its further development, innovation and growth. Without the supply of various short- and long-term credit products, businesses of all sizes could not operate or maintain current growth rates. As banks finance part of their credit capacity with central banks (often short-term), they are key transmission channels for executing any monetary policy. In addition, lending rates are strictly linked to interbank rates set by central banks. Furthermore, banks are critical players in the payment systems (domestic and cross-border) which are crucial for the effective functioning of the financial system[16] and often play a critical role as market-makers in several financial market ("over the counter") products.

Insurance companies, on the other hand, undertake their role as financial intermediaries in a far less connected manner with respect to the whole economy. Insurers offer protection and saving products but are not interlinked with the functioning of the economy. In this role, insurance companies do also transmit monetary policy but at a lower and more indirect level, only by reflecting current interest rates in the prices and benefits offered to policyholders.

[16] "Core principles for systemically important payment systems", Committee on Payment and Settlement Systems, January 2001

3. Implications for the risk exposure of insurance companies and banks

In the recent crisis, the global financial system incurred an excess of market and liquidity risks. Re-establishing an effective flow of financing to the economy requires better risk management and a reduction of the excesses of past years. Such de-risking, however, needs to recognise the material differences between insurance companies and banks outlined in the previous section and the resulting distinct risk exposures at institutional level and different systemic risk exposures at industry level.

3.1 Risk exposure at institutional level

Analysing risk exposures category by category at institutional level demonstrates the distinct risk profiles of insurance companies and banks that regulators need to keep in mind when designing effective regulatory policies, methods and instruments. Indeed, we see that the differences in exposure per risk category strongly support distinctive, more customised regulatory approaches.

3.1.1 Market risk and ALM risk

The exposure to market risk is clearly relevant for banks and insurers alike, as their business models both rely on adequate returns on investments.

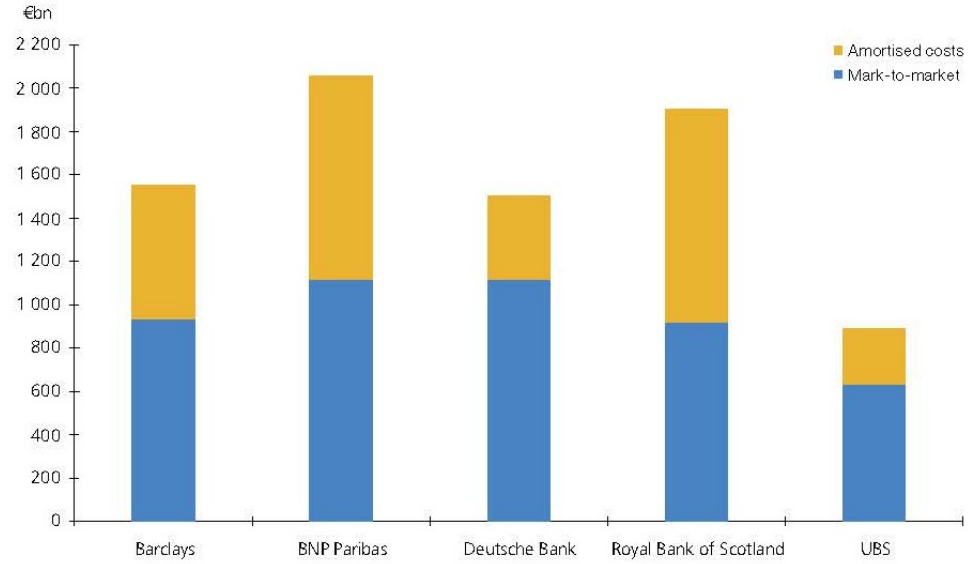
In terms of ALM risk, it comes with the inherent mismatches between asset and liability durations. Banks normally have liabilities with shorter durations than insurance liabilities so the time in which they can take action is much shorter.

In terms of market risk, both banks and insurers are exposed to asset price fluctuations on their balance sheets, and financial income is an important item in their profit and loss accounts. However, as banks report a large share of their assets at amortised cost under Basel II regulations (see Chart 8), the economic asset depreciation is not immediately visible in capital requirements and prudent regulation parameters. In contrast, under Solvency II, insurance companies are required to value all assets on a market-consistent basis, making impairments quickly transparent.

In addition, for life insurance the exposure to prolonged periods of interest rates below guaranteed rates is particularly worrying. Changes in the term structure of interest rates can have a significant short-term impact on the profitability of conventional life insurance.

Hence, while both banks and insurers are exposed to market and ALM risks, they take different forms and have different impacts on their capital positions. Therefore, while high-level principles of market risk management may be fairly aligned between banks and insurers, methods and instruments need to differ in practical terms to capture these sector-specific characteristics.

Chart 8 | Bank investments – 2009 ($bn)



Source: Annual reports

3.1.2 Credit default risk

Exposure to credit default risk is at the core of the banking business model, while for insurance companies[17] it is less severe and far less complex. The main credit default exposure for insurers is related to reinsurance and to issuers of securities (eg government and corporate bonds) and can be controlled with standard tools and practices. In contrast, addressing the size, variance and complexity of this exposure in banks requires high levels of skill, data, methods and instruments and is at the core of their management and regulation.

3.1.3 Insurance risk (property & casualty, mortality and longevity)

Only insurance companies are exposed to insurance risk. Just as for credit default risk in banking, dealing with insurance risk requires significant skill, data, methods and instruments and should be at the heart of management and regulation. This is particularly true for complex exposures such as:

- long-tail risks, which include longevity in life insurance and emerging risks (eg asbestosis) in non-life;
- windstorm, floods, etc., which have a high modelling risk; and,
- volatile lines such as professional indemnity, due to the reserving risk.

With the exception of natural and man-made catastrophe risks, which can be mitigated by through reinsurance, insurance risk diversifies well in sufficiently large, homogeneous

[17] Perhaps with the exception of financial guarantee and credit (re)insurers

portfolios. It is more easily diversified than credit default risk because credit risk (be it for corporates or private customers) is strongly correlated with the economic cycle. In a global recession, banks can only smooth the impact of credit risk through risk diversification to a limited degree. Hence, while risk diversification is important for both banks and insurers, it provides more significant stabilisation for insurance risk.

3.1.4 Operational risk

Both insurance companies and banks are exposed to operational risks. However, the sources, drivers and risk management methods differ substantially. For example, banks handle a high number of daily transactions in payment or securities services and mistakes or slow service can result in customer losses and claims. Insurance companies mainly suffer from infrequent but potentially costly mistakes in the estimation of technical provisions, product design and pricing, effective control of growth and delegated authorities, management of reinsurance credit risk and management of natural or man-made catastrophe risks. Hence the prime components of operational risk differ significantly between insurance and banking[18]. Overall, experience shows that insurers are less exposed to operational risk than banks due to the lower transaction numbers and to the fact that it takes years for the risk profile of an insurance company to change. In contrast, banks can shift their risk profile more quickly.

3.2 Systemic risk exposure

The differences between the systemic risk in the banking and insurance sectors are assessed on the basis of the definition and assessment criteria suggested by the Financial Stability Board (FSB)[19] and the International Association of Insurance Supervisors (IAIS)[20].

The FSB defines systemic risk as the risk of disruption to the flow of financial services that is:
(i) caused by an impairment of all or parts of the financial system; and,
(ii) has the potential to have serious negative consequences for the economy.

Fundamental to this definition is the notion that systemic risk is associated with negative externalities and/or market failure and that a financial institution's failure or malfunction may impair the operation of the financial system and/or the economy.

The FSB suggests three criteria for assessing the systemic importance of financial institutions, markets and instruments:

- Size: the volume of financial services provided by the individual component of the financial system.

[18] Exposure to reputational risk and fraud appear more similar for banks and insurers
[19] "Guidance to assess the systemic importance of financial institutions, markets and instruments: Initial considerations", FSB, International Monetary Fund and Bank for International Settlements, October 2009
[20] "Systemic risk and the insurance sector", IAIS, October 2009

- Lack of substitutability: the extent to which other components of the system can provide the same services in the event of a failure.
- Interconnectedness: linkages with other components of the system.

The IAIS proposes the addition of a fourth criterion:

- Speed of contagion to the economy: to recognise that potential systemic risks may not always generate immediate shock effects, but may materialise over a longer period.

Furthermore, it is generally recognised that the assessment needs to be complemented with an evaluation of:

- Financial vulnerabilities (leverage, liquidity risks, maturity mismatch, complexity of business model and group structure).
- Institutional framework to deal with failures (effectiveness of crisis management framework, including transfer of activities to other entities).

On the basis on these criteria and the previous analysis of the banking and insurance business models, the core insurance business model does not generate systemic risks that would significantly disrupt the financial system or the overall economy:

- Size is generally a positive factor: the scale of insurance operations is a mitigating factor (see also the law of large numbers, p12). As pointed out by the IAIS[21], size has a positive effect on most insurers by enabling greater diversification of risk and is therefore by itself not a particularly good measure for assessing systemic risk in insurance. Furthermore, insurance risk is generally not much correlated to the state of the financial system or the overall economy (eg natural catastrophes do not occur more frequently or have a more severe impact during a recession). Banks have a greater accumulation of risks that are strongly correlated to the overall economic cycle.
- Interconnectedness is limited: in contrast to banking, inter-company funding in insurance is rare and not part of the core business model (see Section 2.4). Although reinsurance is an effective way for the ceding insurer to mitigate their risk exposure, it inevitably increases the interconnectedness within the insurance industry. However, a reinsurer default would normally not trigger a domino effect[22]. The impact of a financially distressed reinsurance company is effectively contained by standard tools widely used in the insurance sector such as spreading the reinsurance ceded between a number of strong reinsurance companies or the use of so-called downgrade clauses.

[21] IAIS position statement on key financial stability issues, 4 June 2010

[22] A Group of Thirty Study in 2006 found that "even a loss of some 20% of global reinsurance capacity — a loss event many times greater than anything experienced in the past — would be unlikely to cause widespread insolvencies in the primary insurance market and would have only a limited effect on the financial system and real economy generally". See "Reinsurance and International Financial Markets", Group of Thirty, 2006.

Furthermore, only a modest share of premiums are generally ceded. As recognised by the IAIS[23], reinsurance risk exposures have been well managed and diversified.

- High degree of substitutability: as (re)insurers generally operate in competitive insurance markets, the degree of substitutability is high.

  However, exceptional events (such as the September 11 terrorist attacks) or changes in the regulatory environment (eg, the adoption of a US law introducing retroactive liability for US asbestos-related claims) may cause significant changes to the underwriting conditions of certain risks, leading to (temporary) reductions in available capacity or sharply increased prices.

  Obviously, the consequences of such actions could have a disruptive effect on parts of the economy, as consumers and business operators may have to pay higher insurance rates, postpone their activities or take on higher risks themselves. However, the insurance sector is not to blame in circumstances in which external events or regulatory changes mean that the conditions of insurability are no longer met (see box on p33). Furthermore, past experience has shown that such abrupt capacity shortages were short-lived, as fresh capacity was quickly built up by new entrants.

- Insurers face far lower liquidity risk: there is lower liquidity risk in insurance as any impact only occurs over time while a liquidity shortage in banking can materialise rather quickly. As also pointed out by the IAIS[24], there is no need for an immediate liquidation of an insurer's investment once it becomes insolvent.

- Much easier, more orderly wind-up procedures: since insurers match expected future claims by policyholders with sufficient assets and since most assets are long-term funded, an orderly wind-up is much easier than short-term fire sales caused by liquidity shortages. Insurance has a good track record of orderly wind-ups compared to the more complex dismantling in the banking industry.

- Low speed of contagion: Financial problems develop at a much slower pace in insurance than in banking. This, in combination with holistic and economic risk-based prudential regulatory frameworks (such as Solvency II and the Swiss Solvency Test) which set two levels of capital requirements, give management and supervisors the time to apply a progressive set of corrective measures. On top of the technical provisions, which generally cover policyholder claims, there is a minimum capital requirement (MCR) and a solvency capital requirement (SCR). The longer incubation time in the insurance sector allows the supervisory ladder of intervention to function effectively.

[23] IAIS position statement on key financial stability issues, 4 June 2010
[24] IAIS position statement on key financial stability issues, 4 June 2010

Criteria of insurability

By pooling risks, insurance shares the risks of individuals among a large group of insureds. However, insurance cannot bear all risks. While there are no fixed boundaries, the following criteria determine whether a risk is insurable.

Element	Criterion
Risk/uncertainty	*Measurable*: The insurer should be able to determine the average cost and frequency of the type of event insured.
Loss occurrences	*Independent*: The insured event should be accidental (out of control of the beneficiary) and risk portfolios should not be overly correlated with one another.
Maximum loss	*Manageable*: The total loss potential associated with a single insured event must be manageable.
Average loss Loss frequency	For the law of large numbers to apply and to make performance less variable and more predictable, events should be of *sufficiently low severity* and *high frequency*. High frequency/low severity events are ideally suited to insurance. Low frequency/high severity events are more difficult to insure.
Moral hazard/ adverse selection	*Not excessive*: The insured may know more about the risk than the insurer, resulting in moral hazard (whereby the insured's behaviour changes due to the presence of insurance) and adverse selection (the tendency of customers with high prospects of losses to buy more insurance than low-risk parties). Overly high risk of moral hazard or adverse selection could make certain risks uninsurable.
Market conditions	Firstly, the *premium level* should be *economically attractive* for both the insurer (return on capital) and the insured (affordable). Secondly, insurers must be able to set *acceptable coverage limitations* to cap the maximum loss at a level they can bear. Thirdly, insurers must be able to generate *sufficient capacity* to meet the demand for the risk coverage.

Different (re)insurers may come to different conclusions as to whether a particular risk can be insured or not, depending on their underwriting capacity, risk appetite and how well the risk diversifies from the other risks in their portfolio.

Source: Adapted from "Innovating to insure the uninsurable", Swiss Re Sigma No.4/2005

Although core insurance activities do not generate systemic risk, certain non-core insurance activities may be systemically relevant. A recent Geneva Association study[25] on systemic risk in insurance assessed the activities of (re)insurers and identified only two non-core insurance activities as potentially systemically relevant:

- derivatives trading on non-insurance balance sheets; and,
- short-term funding from commercial paper or securities lending if mismanaged.

It is therefore important that such activities are adequately captured in the (micro-) prudential supervisory framework (see Section 4.2).

In addition, as a major institutional investor, the insurance sector as a whole may transmit, or, as demonstrated during the current crisis, absorb shocks or risks of a systemic nature generated by other parts of the financial system. Due to advance premium collection to cover future claims, insurers generally have positive cashflows. This, together with insurers' long-term investment horizon, allows them to continue to make substantial investments even in times of economic downturn and thus to play a stabilising role.

[25] "Systemic Risk in Insurance — An analysis of insurance and financial stability, The Geneva Association, March 2010

4. Implications for the effective regulation of insurance companies

Both micro-prudential regulation (ie regulation of individual banks or insurance companies) and macro-prudential regulation (ie regulation of the financial sector as a whole) play an important role in the effective functioning of the financial system. Micro-prudential regulation focuses on the financial robustness of individual institutions, whereas macro-prudential regulation aims to control the effects of the interdependencies between institutions and their potential impact on the economy.

Given the distinct risk profiles of insurance companies and banks outlined above, micro-prudential regulation clearly needs to be tailored to the needs of each sector for it to be effective. At macro-prudential level, as insurers (generally a much smaller original source) may transmit or absorb systemic risk materialising in other parts of the financial system, a more common approach to ensure the stability of the financial system across all sectors appears to be most effective.

4.1 Micro-prudential regulation

As outlined in section 3.1, the risk profile of insurance companies and banks at institutional level is so different that they each require specialised management and adapted regulatory and supervisory approaches in line with their respective, distinct business models to ensure effective control.

The insurance industry has been tightly regulated for decades, with a very strong track record of resilience, especially in Europe. Following the last crisis in 2001, insurance companies took the initiative and significantly upgraded their risk management practices. In parallel, a modern risk-based regulatory approach was designed with Solvency II, codifying industry best practices after stakeholder consultation in order to address some of the known shortcomings of Solvency I and to better cope with the more complex current operating environment of insurance companies.

This work has been timely and successful. As testified by the De Larosière report in 2009[26], Solvency II will be the appropriate solution for the insurance industry to help prevent extreme financial crises. It is important to highlight that the future Solvency II regime is appropriately tailored to the specifics of insurance business. Of course, lessons from the current crisis will need to be properly reflected in the design of the implementation measures of Solvency II. However, great care should be taken to address any issues identified in a way that is consistent with the business model rather than automatically transferring new ideas for more effective banking regulation to insurance. Any new regulations, including those aimed at avoiding level-playing field challenges, should be

[26] Report by the High-Level Group on Financial Supervision in the EU, chaired by Jacques de Larosière, 24 February 2009 (http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf)

subject to the following test: are the relevant proposals fit for purpose and not detrimental to the robust insurance business model?

Based on sector-specific regulation for insurers and banks at the level of legal entities and groups, the supervision of financial conglomerates needs to minimise the likelihood of spill-over effects, which have harmed a number of strong insurance franchises during the current crisis.

4.1.1 Effective insurance regulation with Solvency II

The European insurance industry is convinced that the Solvency II Framework Directive is well designed to capture and regulate insurance-specific risk exposures:

- Solvency II takes a comprehensive view of all the risks arising from assets and liabilities, recognising the concentration and diversification effects that are crucial for the insurance business model. Under Solvency II, insurers are required to calculate their risk exposure using a total cross-balance-sheet view (also called "total balance sheet approach", strongly rewarding a proper matching of assets and liabilities.
- The market-consistent valuation approach ensures transparency in the definition of available and required capital. It also discourages any spread business, and should therefore limit the amount of investment risk-taking in specific business segments (eg pension buy-outs).
- It is a strong, principles-based regime: every insurer defines models and processes that best fit its own risk profile, given its business mix by lines of business, region and customer type.
- Solvency II reduces financial and operational vulnerabilities, for example by:
  - scrutinising the adequacy of technical provisions to meet all expected losses, encouraging the alignment of risk in investments to the financial characteristics of liabilities and to the capital available to the company;
  - establishing a basis for full risk-based pricing and for decision-making within the company; and,
  - stressing the importance of proper risk governance, up to board level (eg scenario analysis/stress testing, etc.).
- Given the known limitations of capital requirements as preventive regulatory tools, Solvency II instils much higher levels of governance and transparency in the insurance sector.
- Solvency II will introduce important quantitative and qualitative tools for the effective supervision of groups, which will complement the supervision of individual companies by addressing the overall risk profile of the group to which they belong.

Insurance companies and regulators have learned a lot from the current crisis and are debating a number of potential topics to incorporate into the implementation measures of the Solvency II Directive:

- Requiring the appropriate quality of capital to back regulatory requirements (eg by stepping up tier 1 coverage ratios).
- Implementing effective and reliable volatility dampeners reflecting the long-term nature of insurance business (to avoid artificially weakening this important risk-absorbing aspect of the insurance business model).
- Ensuring proper liquidity risk management (cross-balance sheet and including off-balance sheet instruments) to complement the capital requirements, as required in pillar 2 of the new regime.
- Adopting a multi-period and multi-parameter stress-testing of financial strength, profitability and liquidity.
- Inserting corrective measures to limit the pro-cyclical effects of supervisory reactions (pillar II dampener).

While the above solutions reflect the characteristics of the insurance business model, they likewise ensure a level playing field with the banking sector.

4.1.2 Effective supervision of pension products

When Solvency II, comes into force in 2012, insurers that provide pensions will be subject to more sophisticated, economic risk-based regulatory requirements than some other pension providers. This will create a damaging unlevel regulatory playing field between products in the European pensions market.

Pension products should be regulated according to the risks they represent, rather than the legal vehicles through which they are sold. While regulatory differentiation is important to reflect sector-specific characteristics, where products have a similar risk profile, irrespective of the sector that sells them, they should be subject to equivalent rules.

Solvency-II-type rules (financial, supervisory and disclosure) therefore need to be applied to institutions for occupational retirement provision (IORPs) that provide pensions with guarantees, which are currently subject to the minimum-harmonised Solvency I rules, as well as to mutual funds offering guaranteed benefits. This would address regulatory gaps and avoid regulatory arbitrage.

4.1.3 Elements of Basel III that are potentially harmful to the insurance sector

As a result of the financial crisis, regulators and policymakers are currently designing and implementing much stricter regulation for the global banking industry (Basel III), eg:

- Banks will be required to hold significantly higher quality capital and more capital (some estimate that capital requirements may rise by up to 40% or more).
- A strict liquidity management regime is currently being developed by the Basel Committee for Banking Supervision to provide for a more conservative portfolio of highly liquid assets and to limit the amount of maturity transformation that banks can pursue.
- Some countries have already implemented or are considering maximum leverage ratio restrictions.

At this juncture, there is no final decision on the extent to which these proposals will be adopted for banking. Before addressing level regulatory playing field issues by simply transferring any part of these ideas to insurance regulation or Solvency II, care should be taken to check whether the underlying rationale or the proposed policies, methods and instruments are efficient and not detrimental to a well-functioning, resilient insurance market. In fact:

- Solvency II is already raising capital requirements on riskier activities. Raising requirements further, in line with Basel III, may create strong distortions in insurance business models, with severe negative implications for policy pricing, policyholders' benefits and the industry's attractiveness to investors at large but no clear evidence of benefits[27].
- Both in relation to solo and group supervision, Solvency II, differently from current bank regulation, is based on a total balance sheet approach in which a capital charge is determined for all quantifiable risks at the asset and liability side. The introduction of a leverage ratio in this framework has the potential to constrain (re)insurers' business without adding value to supervisory tools. In addition, Solvency II implicitly restricts leverage ratios by requiring a high risk-absorbing quality of the available capital.

Therefore, the various limits and ratios discussed in the context of Basel III cannot be applied to the insurance sector due to the differences between capital, funding, valuation and risk profiles of insurance companies and banks, as outlined in the previous sections. Banks and insurance companies start from a quite different basis; full economic balance sheets under Solvency II versus more accounting-based balance sheets under Basel II, and the speed at which risks materialise and spread through an institution is very different. Basically none of the limits and ratios can sensibly be transferred from one sector to the other.

[27] See also "Why excessive capital requirements harm consumers, insurers and the economy", CEA, March 2010

4.1.4 Effective supervision of financial conglomerates

Given the spill-over effects from other group activities that have harmed a number of otherwise strong insurance franchises during the crisis, such as AIG, Fortis and KBC, there is a need to supplement the sector-specific micro-prudential regulation with more effective supervision of financial conglomerates:

- Transparency needs to be increased by considering all the entities of conglomerates, including unregulated parts such as offshore special purpose vehicles or non-financial services entities (see box on Quinn Insurance below), and their interdependencies. It is particularly important to monitor aggregated risks such as interest rate risks arising from both the insurance and banking arms of the conglomerate.
- The conditions for bailing out other parts of a conglomerate across various regions and regulatory regimes need to be clear.
- Loopholes or unjustified inconsistencies between sector-specific regulation need to be closed or at least addressed to avoid any undesired arbitrage (eg different risk-based capital definitions).
- Financial conglomerates should demonstrate sufficient available funds at group level to cover aggregated risks.

  Governance systems and management skills need to be adequate for the complexity of the integrated business profile.

Quinn Insurance's breach of solvency margins

Background	• Quinn Insurance is one of Ireland's largest financial institutions and part of the diversified business conglomerate Quinn Group. • The regulator has been closely watching Quinn Insurance since 2008, when it fined the company €3.25m for making unauthorised loans of €288m to Quinn family companies. • In December 2008 the founder agreed to inject €70m into the company to improve its solvency position, but Quinn fell short of meeting the regulator's minimum solvency margin of 150% and solvency ratio of 40%. • Throughout 2009 Quinn Insurance made unsuccessful attempts to improve its solvency position. • In March 2010 the company revealed that it had extended guarantees of €450m to other companies in the Quinn Group not accounted for on the company's balance sheet. • Discovery of the guarantees transformed Quinn Insurance's balance sheet from a perceived surplus of assets over liabilities of more than €200m to a €200m deficit.
Intervention	• Following an application by the Financial Regulator, the High Court put Quinn Insurance into administration on 30 March 2010 based on regulator's concerns that the company had significantly breached its solvency ratios. • The Financial Regulator cited that for months it had increasingly serious concerns about the management and the financial position of the company and that the insurer's assets were not enough to cover its liabilities. • Provisional administrators from Grand Thornton were appointed to run the company and reoganise the business. • The company remains open for business, but it is prohibited by the Financial Regulator to write new

	business in its loss-making UK arm. • The intervention has resulted in announced job cuts of 900 jobs in the 2 400 workforce.

AIG Holding bankruptcy caused by a financial product unit of the group

Background	• AIGFP, AIG Holding's financial product subsidiary, sold credit default swaps that offered loss protection to investors of assets like multi-sector CDOs. ▫ AIGFP sold swaps on $73bn of CDOs to counterparties without having sufficient reserves to pay any claims that could occur or liquidity to post collateral. ▫ Falling value of CDOs protected by AIGFP increased the collateral requirements for AIG Holding. • AIG Holding did not have enough liquidity to post the required collateral and was on the verge of defaulting on its payments to counterparties. • In September 2008, AIG Holding met Goldman Sachs, J.P Morgan and Federal Reserve Bank of New York to discuss the creation of a $75bn secured lending facility; S&P, Moody's and Fitch Ratings downgraded AIG's long-term debt rating.
Intervention	• In September 2008 the Federal Reserve extended credit facility to AIG to prevent systemic failure, offering a $85bn rescue package, giving the US government a 79.9% stake. • In November 2008 AIG received a lower interest rate from the government and three extra years to pay back the loan. • Rescue package grows to $150bn and includes a $60bn loan, a $40bn capital investment and about $50bn to buy mortgage-linked assets owned by AIG or guaranteed by the insurer through credit-default swaps. • In December 2008 AIG and the government reach an agreement to clear AIG of its obligations on about $53.5bn in toxic mortgage debt. The Federal Reserve has established two funds to hold mortgage assets linked to AIG. • In May 2009 the Treasury and the Federal Reserve announce a third new aid plan for AIG, putting $30bn more at its disposal, and easing the terms and conditions giving AIG a billion-dollar-a-year-break on interest and dividend payments.

4.2 Macro-prudential regulation

One of the lessons from the crisis is that individually sound companies do not necessarily make the financial system as a whole stable if one does not understands to where risks have been transferred. Therefore, it is clear that the financial regulatory framework needs to be strengthened by macro-prudential surveillance in addition to a strong micro-prudential framework.

Micro-prudential supervision and macro-prudential surveillance have equally important but complementary functions when it comes to addressing potential systemic risks. To avoid (re)insurers becoming subject to unnecessary duplicative or potentially even inconsistent requirements it is important that the distinct roles of micro- and macro-prudential supervision are appropriately recognised in the future framework, while establishing an appropriate interaction between both levels.

The design of the macro-prudential framework should meet the following criteria:

- Focus on the identification and assessment of systemic risks within the financial system as a whole, assessing the aggregate impact of activities, markets or products on

financial stability. To avoid the duplication of reporting requirements, the data that is relevant for the identification of potential future financial stability issues should be collected by micro-prudential supervisors and made available in an aggregated form to the relevant macro-prudential surveillance body.

- Develop early warning mechanisms and propose practical recommendations with concrete policy options to contain the risks before they destabilise the financial system. In respect of potential actions taken in relation to individual firms, it should be the responsibility of the relevant national micro-prudential supervisors to implement the necessary measures to address emerging risks identified by the macro-prudential oversight body.

- Respect the specific needs of, for example, the insurance and banking businesses, and ensure that the impact of any decisions, recommendations or measures on each sector is duly taken into account. This requires an adequate and balanced representation of the different sectors, including insurance, in the corresponding governing bodies.

- Establish appropriate cooperation and coordination between national, regional or international macro-prudential surveillance bodies to avoid duplication and potentially inconsistent layers of supervision.

In contrast, the identification and designation of individual firms as systemically important, and making them potentially subject to additional micro-prudential requirements, would inappropriately mix the distinct roles of micro- and macro-prudential supervision. The classification of individual firms as systemically relevant would have severe downsides. It might:

- Miss the aggregated impact of non-listed institutions. As pointed out by the FSB[28], "clusters of institutions can be individually small but collectively significant because they fall into distress at the same time".

- Give a false sense of confidence to supervisory authorities, as it may result in a failure to detect:

  – the dynamic evolution of companies' risk profiles; and,

  – market-wide trends that could generate systemic risks.

- Increase moral hazard (as systemically relevant companies have an incentive to take excessive risks to compensate for the costs of the more stringent regulation).

- Create market distortion.

Instead, micro-prudential supervision should remain focused on scrutinising the solvency position of individual firms and ensure that all activities that may be of systemic relevance are sufficiently covered within this framework. Indeed, this can be best achieved by

[28] "Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations", FSB, IMF and BIS, October 2009

ensuring that groups are subject to group supervision by their home supervisor at a consolidated level in both normal and stressed market conditions. Group supervision should cover both insurance and non-insurance balance sheets within a group and ensure that all regulated and non-regulated entities of the group are captured. This would, for example, tackle the issue of derivative trading on non-insurance balance sheets, which have been identified as a potential source of systemic risk (see section 3.2).

Cooperation among all supervisors of a group is essential and should be facilitated by the establishment of colleges of supervisors and based on a clear allocation of duties and responsibilities between the group and solo supervisors. In insurance, this is consistent with the approach taken under the EU's Solvency II and Financial Conglomerates Directives.

4.3 Financial services tax proposals

At international, European and national level, policymakers are considering ways to ensure that the financial services industry, rather than the taxpayer, pays for past and future economic crises. Some of these initiatives make clear that they are targeted only at banks, others refer to financial institutions and specifically include insurers, and still others simply refer to financial institutions without specifying which ones.

Debates on financial services tax issues should recognise that:

- There are differences in the type and level of risk posed to the economy by different financial institutions. The insurance industry was not the source of the recent economic crisis, nor the main recipient of any subsequent government support.
- Any kind of cross-subsidisation is inappropriate, as it would reward riskier financial entities at the expense of less risky ones.
- There are potentially negative cumulative effects that must be considered, due to the variety of tax measures discussed (tax levies on entities, financial transaction taxes and rescue funds).

4.4 Organisational of supervisory bodies

There is a lively ongoing debate about the most effective organisational set-up of regulatory authorities: integrated versus separate organisations for banking and insurance supervision?

We observe a trend in this area: in many countries, government reaction to the crisis seems to be resulting in a reorganisation of the supervisory structures. However, it is important to underline that, so far, no model has proven its superiority. In practical terms, however, there are growing concerns that the chair at the top of an integrated regulatory authority might feel inclined to focus on one sector and thus not consider all sectors in their own right and on the basis of their distinct business models. The resulting risk is an already observed tendency to encourage the transfer of methods and instruments from one sector to another without sufficient due diligence in terms of the efficiency and effectiveness for

the respective business model. The CEA therefore believes that whatever the "model" or the supervisory approach may be, it should ensure that the intrinsic insurance business model is appropriately addressed.

There also seems to be a trend to move insurance supervision to central banks, despite the lack of focus on insurance issues by central banks in the past.

We would also point out that the insurance sector is in the middle of the Solvency II process, with the implementing measures currently being discussed and drafted, and with the fifth quantitative impact study, QIS5, coming up. This requires clear guidance by national supervisors and thus a certain level of stability in the organisational structure of those supervisors. We need the full attention of all experts now to get banking and insurance regulation right and, hence, cannot afford any of the uncertainty-driven lack of performance that can typically be observed during periods of organisational change.

4.5 Financial information

Beyond micro-prudential regulation, the specific characteristics of the different business models should also be taken into account when developing the regulation and standards with which insurance companies have to comply when providing general purpose financial information.

In particular, International Financial Reporting Standards (IFRS) should provide accounting solutions consistent with the insurance business model. Even the standards that are not related to insurance operations should reflect, where appropriate and without questioning the need for cross-sector consistency, the specificities of insurance. For example, the standard on financial instruments should take into consideration the specific purpose and characteristics of insurance companies' investments.

In addition, it should be taken into account that the international accounting standard (IAS) for insurance contracts, which is relevant for most of the liability side of insurance companies, is still under preparation. It is therefore necessary to pay particular attention when setting the standards in order to provide insurance companies with a consistent accounting framework for all assets and liabilities. For example, it is critical that insurers must be allowed to revisit the classification of financial instruments when the new standard on insurance contracts is implemented (Phase II for insurance contracts). There may also be a need to revisit the standard for classification and measurement in light of the final model retained in the Phase II for insurance contracts. This is crucial to ensure meaningful information on companies' risk situation and profitability.

5. Conclusion

The inherent differences between the insurance and the banking business models, structures and risk profiles must be well understood and duly considered when designing supervisory structures and regulatory regimes. Consequently, when developing new regulatory initiatives as a response to the crisis, it is important that any such measures properly consider the specific implications for the various financial sectors and between sectors. Ensuring the adoption of tailored solutions will allow the insurance industry to effectively perform its potentially stabilising role in the financial system and the global economy.

As one of the key lessons to be learned from the crisis, the insurance industry agrees on the need to strengthen financial supervisory and regulatory structures. Global cooperation on regulatory and supervisory frameworks is also fundamental.

Against this background, the CEA proposes 12 **recommendations** to take into account when strengthening insurance regulation and supervision.

1. Global cooperation on regulatory and supervisory frameworks is essential. This will ensure the increasing convergence of the frameworks for financial services and will remove regulatory loopholes.
2. The unregulated entities and activities that played a crucial role in the crisis are the key issue to address. The regulatory response should be targeted, first and foremost, at closing regulatory gaps, thereby also addressing the risk of regulatory arbitrage.
3. Core insurance activities do not generate systemic stress, so they should not be considered systemically relevant. The limited number of non-core insurance activities that may be systemically relevant should be subject to appropriate supervision at an institutional (micro-prudential) level. Economic risk-based regulation, such as Solvency II, is crucial in this regard.
4. The insurance sector should nevertheless be adequately represented in financial stability fora. Insurers can both absorb and transmit systemic stress generated by other parts of the financial system, and should therefore have appropriate representation on systemic risk boards to ensure that they have insurance-specific expertise.
5. Systemic risks cannot be appropriately addressed by imposing additional prudential requirements on supposedly "systemically relevant" firms. At the macro-prudential level, what needs to be addressed is the aggregate impact of potentially systemically relevant activities, markets or products on the stability of the financial system.

   The listing of individual firms as systemically relevant has severe downsides, as it might miss the aggregate impact of non-listed institutions, increase moral hazard and cause market distortion. Furthermore, it could give a false sense of confidence to supervisory authorities, who might fail to detect changes in company risk profiles and market-wide trends that could generate systemic risks.

6. **Whatever the supervisory structure for the insurance industry, the insurance business model must be appropriately recognised and the relevant supervisory expertise ensured.** In many countries, government reaction to the crisis seems to be resulting in a reorganisation of supervisory structures, although so far no structure has proved its superiority.

7. **Excessive regulatory reaction and inappropriate read-across of regulation from other sectors should be avoided.** At the micro-prudential level, in Europe, the new Solvency II regime is the right regulatory framework tailored to the specific needs of the insurance industry. Solvency II already incorporates some of the overarching regulatory objectives of the recent Basel III banking discussions (such as higher capital requirements for riskier activities or group supervision). Merely transferring detailed implementation measures from Basel III to the insurance sector would impose a solution to a non-existent problem and would be at best ineffective and at worst costly and disruptive. Ultimately, regulatory over-reaction would have a negative impact on consumers and the economy, as it would lead both to increases in the price of insurance products and to the insurance industry becoming less attractive to investors.

8. **Insurers should have appropriate group supervision at a consolidated level by a group supervisor.** This should include all the risks arising from a group's regulated and non-regulated entities. For conglomerates, overall risks should be assessed, taking into account both the insurance and banking business models.

   Information-sharing and effective cooperation among all the supervisory authorities of a group are essential and should be facilitated by the creation of a college of supervisors, with the responsibilities of the group and solo supervisors clearly allocated. For the European insurance sector, such an approach has already been adopted under Solvency II.

9. **Products with similar risk profiles should have equivalent regulation irrespective of the provider.** Having tailored regulation that reflects the specific characteristics of different sectors does not mean that products with the same risk profile should be treated differently. Level regulatory playing field issues across all financial sectors should be addressed and equivalent protection levels for consumers should be guaranteed through equivalent means. This is particularly important with regard to the regulatory frameworks of insurance and pensions providers.

10. **Accounting regulation should reflect the nature of the insurance business model and be consistent across the balance sheet.** It should provide transparency on the effectiveness of insurance companies' asset-liability management (ALM). All standards applicable to insurance companies' assets and liabilities should be consistent. Both conditions are crucial to ensure that financial statements provide meaningful information about the risks, financial condition and profitability of insurance companies for investors and policyholders alike.

11. **Debates on financial services taxes should recognise the different risks posed by different types of financial institutions.** Any kind of cross-subsidisation between

financial sectors is inappropriate, as it rewards riskier financial entities at the expense of less risky ones.

12. **The cumulative effect of macro- and micro-prudential measures, as well as tax measures, must be considered for each financial sector and between sectors.** Due to the variety of measures discussed, any cumulative effects that could harm the sector and its ability to provide coverage to consumers and businesses have to be carefully considered.

Glossary[29]

Adverse selection

An imbalance in an exposure group created when persons who perceive a high probability of loss for themselves seek to buy insurance to a much greater degree than those who perceive a low probability of loss.

Asset-liability mismatch risk *or* asset-liability risk

Risk of a change in value from a deviation between asset and liability cash flows, prices or carrying amounts, caused by:
– a change in actual cash flows (for assets and/or liabilities)
– a change in the expectations on future cash flows (for assets and/or liabilities)
– accounting inconsistencies

Biometric risk

Underwriting risks covering all risks related to human life conditions, eg disability, longevity, but also birth, marital status, age, and number of children (eg in collective pension schemes).

Churn rate (attrition rate)

Measures policyholder attrition, ie the loss of existing customers. Usually given in percentage of policyholders cancelling or not renewing contracts. See also lapse rate.

Claims risk

An underwriting risk. A change in value caused by ultimate costs for full contractual obligations (claims without administration costs) varying from those assumed when these obligations were estimated.

Collateralised debt obligation (CDO)

Security backed by a mixed pool of bonds, loans and other assets, structured in various tranches with varying degrees of risk.

Commercial paper

An unsecured, short-term debt instrument issued by a bank or corporation, eg to meet short-term liabilities. As there is typically no collateral, the issuer needs to have a solid credit rating.

Contagion

The propagation of the effect of a failure or financial distress of an institution in a

[29] Sources:
CEA and Group Consultatif Solvency II Glossary, 2007;
SCOR Reinsurance Glossary: http://www.scor.fr/www/index.php?id=13&L=2;
RAA Glossary: http://www.reinsurance.org/i4a/pages/index.cfm?pageid=3477;
IRMI Glossary: http://www.irmi.com/online/insurance-glossary/default.aspx

sequential manner to other institutions, markets or systems, or to other parts of a financial group or financial conglomerate.

Covered bond
Security backed by a pool of public sector loans or mortgage loans.

Credit default swap
Transaction in which the exposure to credit default risk is transferred from the holder of a fixed income security to the seller of the swap.

Credit risk
The risk of a change in value due to actual credit losses deviating from expected credit losses due to the failure to meet contractual debt obligations.

Default risk
The risk of a change in value caused by the fact that actual default rates deviate from expected default rates with respect to non-payment of interest or principle.

Derivative
Financial instrument which derives its value from the value of some other financial instrument or variable, the so-called underlier.

Disability risk
A change of value caused by a deviation of the actual randomness in the rate of insured persons that are incapable of performing one or more duties of their occupation due to a physical or mental condition, compared to the expected randomness.

Diversification
Reduction in risks among assets and/or obligations of an institution by accumulating risks that are not fully correlated in an aggregated risk position, eg the aggregated amount of risks within a product portfolio or at a company level is smaller than the simple addition of the individual risks.

Downgrade clause
Allows the insurer to cancel reinsurance contracts in the case of a downgrade of the rating of the reinsurer

Fair value
The amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction [IAS 32, 11].

Hybrid capital
Capital that has the form of a combination of two or more different financial structures or instruments.

Insurance-linked securities

Financial instruments whose investment return depends on the performance of an underlying insurance portfolio or exposure. Used to transfer insurance risks, eg profitability of in-force life business or natural catastrophe risk to capital markets.

Interest rate risk

The risk of a change in value caused by a deviation of actual interest rates from expected interest rates.

Liquidity risk

The risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimise a loss.

Longevity risk

Type of biometric risk. A change in value caused by the actual mortality rate being lower than the one expected.

Market risk

The risk of changes in values caused by market prices or volatilities of market prices differing from their expected values.

Monoline

An arrangement with a single line of coverage; common with surety or financial guarantee insurance.

Moral hazard

A subjective hazard that tends to increase the probable frequency or severity of loss due to an insured peril. Moral hazard is measured by the character of the insured and the circumstances surrounding the subject of the insurance, especially the extent of potential loss or gain to the insured in case of loss.

Morbidity risk

Type of biometric risk. A change of value caused by the actual disability and illness rates of the persons insured deviating from the ones expected.

Mortality risk

Type of biometric risk. A change in value caused by the actual mortality rate being higher than the one expected.

Operational risk

Risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from external events (including legal risk), differ from expected losses.

Over-the-counter (OTC)
Trading of financial instruments directly between two parties, in contrast to exchange trading, which occurs via facilities constructed for the purpose of trading (ie exchanges), providing clearing mechanisms and higher transparency.

Procyclicality
The cumulative pressure on a larger number of institutions to sell assets or raise capital at the same time, due to solvency capital requirements, thereby potentially causing more extreme market movements than would otherwise be the case.

Provision
The amount needed under a certain measurement of a present obligation to meet that obligation adequately.

Reinsurance
Type of risk mitigation on the basis of an insurance contract between one insurer or pure reinsurer (the reinsurer) and another insurer or pure insurer (the cedant), to indemnify against losses, partially or fully, on one or more contracts issued by the cedant in exchange for a consideration (the premium).

Repo transaction (repurchase agreement)
Collateralised short-term loan in which the seller of a security agrees to buy it back at a defined price and specified future date.

Retrocession
A transaction in which a reinsurer transfers risks it has reinsured to another reinsurer.

Risk-based capital
A method used by insurance regulatory authorities to determine the minimum amount of capital required of an insurer to support its operations and write coverage. The insurer's risk profile (ie, the amount and classes of business it writes) is used to determine its risk-based capital requirement.

Run off
Halt to all underwriting of new business on a risk portfolio, as a result of which reserves are run off over time until their complete extinction. Run off may take up to several decades depending on the class of business.

Securitisation
In a securitisation transaction a portfolio of assets (eg mortgages or consumer loans) are sold to a special purpose vehicle which finances the acquisition of such assets through the issuance of tranches of debt, mezzanine and (quasi-)equity instruments.

Spread risk
The risk of a change in value due to a deviation of the actual market price of credit risk from the expected price of credit risk.

Subscription market
Practice whereby a single risk or treaty is underwritten by a number of insurance companies or syndicates, each subscribing percentage lines of the contract on a several, not joint, basis.

Tail
The period of time that elapses between either the writing of the applicable insurance or reinsurance policy or the loss event (or the insurer's or reinsurer''s knowledge of the loss event) and the payment in respect thereof. A "short-tail" product is one where ultimate losses are known comparatively quickly; ultimate losses under a "long-tail" product are sometimes not known for many years.

Tail risk
Risk of losses beyond a certain given loss threshold. Usually refers to the risk of events with high losses and low probability of occurrence.

Total balance sheet approach
Principle that states that the determination of an insurer's capital that is available and required for solvency purposes should be based on all assets and liabilities, as measured in the regulatory balance sheet, and the way that they interact.

Underwriting risk
The risk of a change in value due to a deviation of the actual claims payments from the expected amount of claims payments (including expenses).

Value at Risk (VaR)
Popular, but non-coherent risk measure showing an amount of loss that will not be exceeded with a given likelihood within a given timeframe. eg, capital requirements under Solvency II are calibrated to a 1-year 99.5% VaR, ie, companies need to maintain funds at least equal to the maximum loss they expect to experience within one year once in 200 years.

About the CEA

The CEA is the European insurance and reinsurance federation. Through its 33 member bodies — the national insurance associations — the CEA represents all types of insurance and reinsurance undertakings, eg pan-European companies, monoliners, mutuals and SMEs. The CEA represents undertakings that account for around 95% of total European premium income. Insurance makes a major contribution to Europe's economic growth and development. European insurers generate premium income of over €1 050bn, employ one million people and invest more than €6 800bn in the economy.

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