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## Executive summary

The recent crisis sent shockwaves through world economies and has had a disturbing effect on the lives of many. The CEA, the European insurance and reinsurance federation, fully supports measures that will avoid any repeat of such a damaging crisis.

It is now important to examine the crisis with a view to learning the right lessons. To the ultimate benefit of its policyholders, but also to the benefit of the economy at large, the European insurance sector's positive role as a risk-taker and risk-absorber, and as a long-term investor, needs to be ensured by putting it in the best position possible to withstand any future severe disruptions to the global economy.


European insurers required  
a fraction of government  
interventions during the crisis

Asset writedowns and lower investment returns destroyed billions of euro of market capitalisation in just a few months. However, the European insurance sector arguably weathered the storm of the financial crisis remarkably well and, in fact, required just a small fraction of government and central bank interventions. Why was this?

Firstly, the business model of insurance is fundamentally different from banks and intrinsically more resilient to short-term financial turmoil.

Secondly, the insurance industry had learned lessons from the crisis of 2001/02 and had introduced far more robust risk and capital management systems. The industry had already moved beyond the requirements of the current solvency regime (so-called Solvency I), and this helped it to withstand the latest crisis.

Those improvements were, however, made at company level and mostly on a national basis, creating divergent approaches throughout Europe. EU



regulators therefore embarked on a major transformation — Solvency II — to promote best practices in insurance risk and capital management and to upgrade and harmonise the solvency framework with a more holistic view of all company risks across assets and liabilities, including their interdependencies.

One of the key lessons learnt from the 2001/2002 crisis was that reliance on capital requirements alone is insufficient. Indeed, analysis of the history of insurance company insolvencies has shown that the vast majority of insolvencies were preceded by either internal management or governance shortcomings or some external trigger events.

Reliance on capital requirements alone is insufficient to prevent insolvencies

In both instances, however — unlike in banking — in insurance there was a period of incubation between the cause and the final insolvency. During this incubation period, the management of the company and/or a properly informed supervisor (with the relevant tools), could have prevented the insolvency. Key in the Solvency II regulatory reform, therefore, is the high level of importance that is placed on the qualitative supervisory review process.

From the beginning, the CEA has strongly endorsed and fully supported the development of the Solvency II regulatory regime. Solvency II is seen by the insurance industry as a positive step forward in insurance sector regulation that moves away from a Solvency I approach of simply imposing crude capital requirements towards enhancing policyholder protection through a more sophisticated approach that combines both quantitative and qualitative elements of supervision. As it also promotes greater transparency to boost investor and consumer confidence, it fosters overall cost-effective and capital-effective product and service innovation.



An appropriately prudent calibration of the Solvency II framework and standard models — currently underway under the leadership of the European Commission — is a crucial step in achieving Solvency II's objectives and promoting the development of the industry.

However, overly prudent or excessive capital requirements — as suggested by the advice papers issued by Ceiops during 2009 — might not only mismatch regulatory expectations of higher policyholder protection but also bring a quite worrying downside for policyholders, the overall economy and insurers.

#### Excessive capital requirements bring worrying downsides

Industry practitioners believe that current Ceiops advice papers may lead to a quite heavy toll for the insurance sector. According to some recent estimates<sup>1,2</sup>, the required solvency capital under Solvency II could be as much as 65–75% higher than the standard model calibration under the fourth industry-wide quantitative impact study (QIS 4), while available sources of capital may suffer a reduction of up to 20-50%. According to other, more conservative, estimates, the new Solvency II requirements would represent an additional capital burden of 30–50% on the sector.

Clearly, a balance is required between protecting the consumer by raising capital requirements and guaranteeing the consumer a wide choice of competitively priced insurance products by supporting a healthy and competitive insurance market.

The CEA believes that placing excessive capital requirements on the insurance industry would have widespread detrimental effects.

At the **individual insurance company** level, additional and potentially excessive capital charges may trigger a wave of reactions that would probably include an increase in the price of more capital-intensive products (such as

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<sup>1</sup> "Solvency II: a potential game changer", J.P. Morgan, January 2010

<sup>2</sup> "European Insurers Eye Solvency II With Trepidation", Standard & Poor's, February 2010

annuities and capital guarantees in the life insurance market, and motor third party liability and general liability in the non-life market), the reduction of policyholder coverage and benefits (eg, reduction of pensions payouts) and possibly even the reduction of underwriting capacity in the most affected lines (eg, natural catastrophe covers).


At the **insurance industry** level, substantially higher capital charges may reduce investor returns, which may trigger a reduction in new capital investments in the industry (in equity and/or debt), reducing in turn the underwriting capacity of the industry, and increasing funding costs. Additionally, a more conservative European approach than that in the US and Asia may put European insurers at a disadvantage in global market segments (eg, large commercial lines) and, in general, create an unlevel playing field with foreign competitors, reduce qualified employment opportunities in Europe in favour of the US and Asia, and reduce the overall growth of the industry in the years to come. Small and medium-sized players, which are more affected by higher capital charges in the absence of sufficient scale and diversification effects, might be forced to consolidate with larger groups or exit the business.

**Policyholders**, both private households and commercial buyers, would suffer the most from overly prudent capital requirements.

The price of many life products would go up by up to 20–30% due to higher capital requirements, higher funding costs and reduced investment income. As a consequence, there would be a reduced supply of traditional life policies with minimum guaranteed returns, leaving significant consumer demand unsatisfied. Customers would be unable or unwilling to retain the investment risks themselves, potentially resulting in severe underinsurance of retirement funding needs. At the same time, retirements funds

Excessive capital would reduce investment and underwriting capacity





Private households and commercial buyers would suffer the most

may go down by as much as 30–50%, depending on the country and the product, to compensate for the costs of the increased capital requirements outlined above<sup>3</sup>. Consequently, policyholders would have to reduce current spending and increase their annual saving accumulation by up to 50% to maintain their target wealth level at retirement.

Likewise, non-life product prices would increase on average by 5–20% for more capital-intensive products such as the ones with greater exposure to natural catastrophe risks (eg, homeowners' insurance in regions with high risk of windstorm, floods) or those with a long claim tail (eg, general liability, but also motor third party liability) due to higher capital costs, higher funding costs and the increased cost of risk transfer. As a direct result, products would be redesigned by, for example, limiting the scope, amount or period of cover, or forcing policyholders to retain more of the capital-intensive risks that used to be covered.

Finally, at the **macro-economic level**, more conservative capital requirements would restrict the role of the insurance sector not only as a risk-absorber, but also as an institutional investor and as a provider of risk and venture capital to finance long-term economic development, with a direct negative impact on GDP growth. Both large companies and small and medium-sized enterprises (SMEs) would suffer from higher insurance rates, mainly driven by reduced capacity. As the supply of commercial-line products would be likely to shrink, due to their volatility-induced high capital intensity, the low price elasticity of supply in this segment would significantly increase prices. As a result of these inflated price levels, companies would decide to retain more risk, reducing the funds available for the production of goods and services.

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<sup>3</sup> Assumptions: annuity business with saving period of 30 years; payout of accrued capital over 20 years for which investment returns are reduced by 2% due to more conservative asset allocation; non-life business consuming capital of 10–20% of gross written premiums, with a capital increase of 50–100%

In summary, we believe that overly prudent capital requirements do not help insurers and regulators in further reducing the risk of financial distress in the insurance sector but could have a severe downside that needs to be carefully assessed in the final round of Solvency II calibration, particularly ahead of the next industry-wide quantitative impact study (QIS 5).





## Introduction

The CEA, the European insurance and reinsurance federation, has strongly supported the Solvency II project and remains committed to a proper and effective implementation of the Solvency II Framework Directive.

Solvency II can be a “state of the art” regime

Solvency II has the potential to deliver a “state of the art” prudential regime for insurance activity which would enhance policyholder protection while improving the competitiveness of the European industry and deepening the European single market.

However, the highly conservative Solvency II financial requirements emerging from recent advice papers issued by the Committee of European Insurance and Occupational Pensions Supervisors (Ceios)<sup>4</sup> would, on balance, result in a negative net effect on the European insurance industry and the economy overall that would have to be borne by policyholders, shareholders and, ultimately, society.

Recent Ceios advice papers argue in favour of more stringent Solvency II financial requirements — demanding up to 65–75%<sup>5,6</sup> more capital than in the last industry-wide quantitative impact study, QIS 4. The cumulative effects of more prudent methodologies for measuring assets and liabilities, more conservative standard capital requirement calibrations and more restrictive treatment of eligible own funds would result in an even higher capital increase of 80–100%.

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<sup>4</sup> Ceios advice for Level 2 Implementing Measures ([www.ceios.eu](http://www.ceios.eu))

<sup>5</sup> “Solvency II: a potential game changer”, J.P. Morgan, January 2010

<sup>6</sup> “European Insurers Eye Solvency II With Trepidation”, Standard & Poor’s, February 2010

It is the CEA's firm belief that placing overly prudent financial requirements on insurers (applying the so called "prudence on top of prudence" approach) would not just help supervisors to prevent insurers' distress but may in fact lead to substantial negative impacts on the European insurance industry and on the European economy overall, which in turn ultimately harm policyholders' interests.

As the legislative process for the Level 2 Solvency II implementation measures and the model calibrations for the final quantitative impact study, QIS 5, are currently underway, the CEA, in this report, intends to make these negative effects fully clear to all stakeholders to foster an informed decision-making process.

The first part of the report sets the context and considers, in the light of the implementation of the Solvency II regime, the role of financial requirements as a supervisory tool. This is done against the background of the lessons learned from the recent financial crisis. The second part outlines the costs and risks arising from excessive financial requirements.

To get a complete overview of the CEA's views on Solvency II, this report should be read in conjunction with the publications listed in the appendix.

"Prudence on top of prudence" would have a negative effect on the economy





## 1. Financial requirements under Solvency II


### 1.1 Effectiveness of financial requirements as a regulatory tool

The ultimate purpose of regulation is to protect policyholders' interests — be it their long-term savings or their right to be reimbursed for a valid claim — from the risk of insurer insolvency. Financial stability and fair and stable markets are further objectives of (re)insurance regulation and supervision, which should also be taken into account but should not undermine the aforementioned main objective. Furthermore, regulation should also aim to maintain a level playing field and enhance innovation through competition.

Following the financial crisis of 2001/02, the current insurance regulatory regimes (so-called Solvency I) across Europe were supplemented by enhanced risk and capital management requirements, albeit in a piecemeal fashion at national level. As a result, the insurance sector proved to be quite resilient during the most recent financial crisis and it has also managed the structural risks of its business, such as the impact of natural catastrophes, and even dramatic clash events, such as September 11, that involve extreme events on both the asset and liability sides of its balance sheets.

Insurers weathered recent storms with their own resources

Unlike the banking sector, insurers weathered the recent storms with their own resources, without widespread recourse to government interventions and without creating a burden for taxpayers. Corrective action to avoid insolvencies and protect policyholders has been necessary only in a few very special cases. Notably, the few cases of distress that occurred were mostly triggered by risks that were not well captured by the present solvency regime (eg, operational risks such as errors in product development or fraud), by the non-insurance activities of insurers (eg, derivative trading), or by excessive financial risk-taking.



All in all, even with the lesser sophistication of the Solvency I regime, policyholders and other beneficiaries have fared remarkably well in Europe. Nevertheless, it is fair to say that the Solvency I regime is a dated framework with substantial limitations in the context of today's markets and risks and that any enhancements that have been made to it at national level need to be made consistent and convergent at European level.

### **Key limitations of Solvency I**

There are several limitations to the Solvency I framework that need to be addressed with the introduction of Solvency II:

- Solvency I capital requirements are based on simplistic algorithmic formulae (liability-focused and size-driven), which disregard the actual risk profile of the business. Besides being ineffective, this leads to perverse incentives, as lower reserves imply lower capital requirements, and to uneven treatment of policyholders, as protection provided for similar risks can differ across Europe.
- Due to the accounting-based approach (predominantly based on book value or historical cost) to the valuation of assets and liabilities and the rather limited recognition of diversification and mitigation benefits, Solvency I lacks a fair and forward-looking view of the economic situation and risk capacity of insurance companies.
- Under Solvency I there are only marginal requirements and no good incentives to fit and proper governance and risk management practices, largely ignoring these instruments for enhancing companies' resilience.
- Solvency I is predominantly a solo-company regulation and lacks a more precise supervision of groups based on their consolidated risk exposure.
- Finally, Solvency I requirements on risk disclosure both to regulators and to the public are limited, resulting in a significant lack of transparency for external stakeholders.

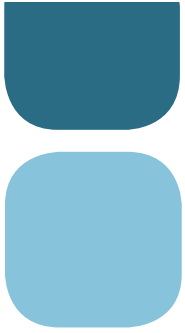
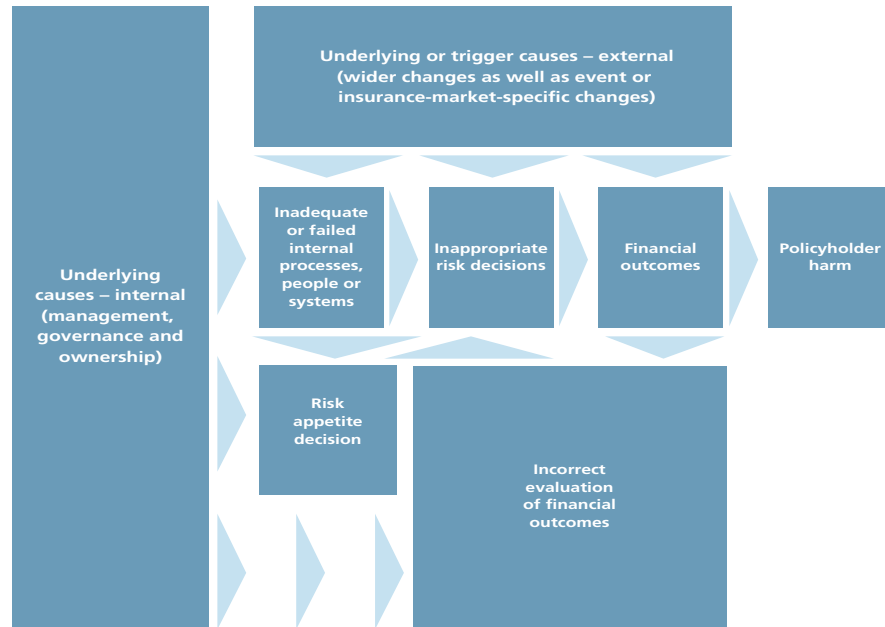


Chart 1 | Risk map overview



The recommendations of the so-called Sharma report<sup>7</sup>, which paved the way for the Solvency II project, were clear in defining the approach to be taken in revising the Solvency I regime. Through root-cause analysis of the recent history of insurance company insolvencies in Europe (see Chart 1), the report showed that the vast majority of insolvencies were preceded by internal management or governance shortcomings or some external trigger events. Importantly, between those internal or external root causes and the resulting insolvency there was

<sup>7</sup> "Prudential Supervision of Insurance Undertakings", EU Insurance Supervisors Conference, December 2002



a period of incubation during which the management of the company — or a regulator with the proper information and tools — could have prevented the insolvency: “... in a significant number of cases, problems can be identified and even resolved long before solvency thresholds are breached”.

As the quantitative consequences of financial distress typically show up rather late in the causal chain, the prudential regulatory framework needs to include tools, such as governance and risk management audits and adequate risk disclosure practices, that allow supervisors to step in much earlier.

Similarly, research<sup>8</sup> on the predictive quality of financial strength ratings suggests that capital requirements are effective early-warning tools for risks such as pricing or reserve inadequacy, whereas for other risks (eg, operational risks) qualitative approaches such as governance and quality assurance work better.

Against this background, the Solvency II Framework Directive was designed to further improve the protection of policyholders and beneficiaries by the combined effect of the well known three-pillar approach, including all the quantitative and qualitative aspects that could affect the solvency situation of the undertaking and giving due attention to governance and risk management issues:

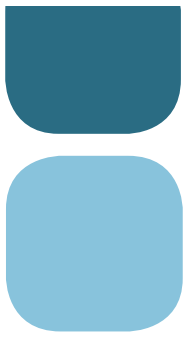
1. Quantitative requirements — asset and liability measurement, including adequacy of technical provisions, and capital requirements.
2. Qualitative requirements — adequacy of organisation and governance and definition of the supervisory review process.
3. Disclosure and reporting — enabling greater transparency and market discipline.

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<sup>8</sup> “A New Look at Evaluating the Financial Condition of Property and Casualty Insurance and Reinsurance Companies”, Thomas M. Redman and Christopher E. Scudellari, 1992



Regulatory tools should focus on governance and risk management audits



The essence of the Solvency II Directive, reflecting the spirit of the Sharma report, is:

- To promote a robust, forward-looking risk management framework to guide both insurance company management and regulators — based on a new ladder of interventions — in order to identify and anticipate the material risks to the business and to take the necessary actions to prevent or mitigate their negative impact.
- To require the implementation of risk practices that are fit for purpose and proportional to the size, nature and complexity of the risks related to the business. To this end, Solvency II is not a rule-based, but a principle-based regime, requiring insurance companies to reflect on their specific risk profiles and business models.
- To reduce reliance on capital requirements as an exclusive early warning tool by complementing it with additional effective instruments such as governance and disclosure.

All these elements will further strengthen the protection of policyholders' interests and promote the healthy development of the insurance sector in Europe. It should be acknowledged that Solvency II requires a step-up in the risk management capabilities and the staffing of insurance companies, not only to comply with the new norm but also to take full advantage of its benefits.

Similarly, regulators will also need to enhance their supervisory processes and schemes to include a broader set of indicators on top of financial requirements. Solvency II will entail a change not only in regulation but also in supervisory behaviour; it will require highly trained supervisors familiar with the specifics of the insurance business model who are capable of using the increased discretion of judgment characteristic of the new regime appropriately.

## Advantages of Solvency II

Solvency II offers several fundamental improvements:


- Market-consistent valuation of assets and liabilities and explicit measurement of risk capital.
- A holistic, cross-balance sheet approach covering all quantifiable risk types and their interdependencies.
- Higher risk transparency that requires a greater risk awareness among managers to be embedded in key decision-making processes.
- Risk management focus — tackling the source of problems, not symptoms (regulation as reinforcement of risk management best practices).
- Ladder of interventions — starting at an upper threshold (solvency capital requirement) requiring companies to submit a plan for prompt corrective actions and ending at a lower threshold at which the regulator takes over (minimum capital requirement).
- Group supervision — considering the real aggregated economic profile of groups, yet in conjunction with supervision at legal entity level.
- Market discipline driven by full disclosure of the risk profile.

Financial requirements, therefore, do not represent the sole, mechanical reference for supervisory review, but are just one, albeit fundamental, tool to monitor and assess the risk situation of the company and detect any threat to its solvency.

## 1.2 Lessons learned from the financial crisis

The recent financial crisis has reminded us in the harshest possible way how severe the impact of financial market conditions on the solidity of the financial sector can be. The sequence of real estate bubble bust, credit





crunch, liquidity shortage and equities collapse hit all enterprises very hard, despite the unprecedented rapidity and aligned intervention of central banks and governments around the globe.

Clearly, this crisis had its main origin in commercial banking and in credit-linked derivative businesses. G20 governments and central banks have intervened with more than \$11 000bn of direct and indirect support in the financial services sector<sup>9</sup>, of which less than \$10bn<sup>10</sup> went to the insurance sector. With some notable exceptions — mainly driven by spillover effects from non-insurance business or single-line credit-based business models — insurers have so far weathered the storm in much better shape than banks, measured by financial results.

Yet the insurance industry has not remained immune to the crisis and can easily learn from what has worked well and what has worked less well for the banking industry and its regulatory system. Here are five key lessons that will, in our view, influence the current debate over the implementation of Solvency II:

1. Each insurance company must review its risk management processes and tools to include a more analytically robust assessment of the true risks affecting its business. Insurers have learned the importance of adopting a total balance sheet view (integrating assets and liabilities) of their capital position as well as a careful definition of assumptions, including their correlation matrix to compute the diversification benefits. Multi-period and multi-parameter stress testing of financial strength, profitability, liquidity and scenario planning have become the buzz words of the changes required in risk practices.

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<sup>9</sup> 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

<sup>10</sup> Excluding AIG outlier, whose record-high intervention was triggered by massive losses in its financial units and derivative trading desk, far remote from the its core insurance business

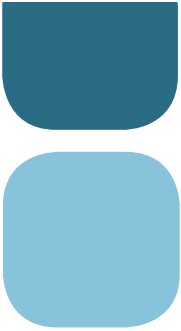
2. More generally, insurance companies must actually implement effective risk governance, based on transparent and timely risk disclosure and reporting, and a risk culture spread throughout the organisation that considers the monitoring and mitigation of risks as a key factor in the decision-making process.
3. The crisis has highlighted the importance of group supervision, also for financial conglomerates. Spillover effects from non-insurance operations have hit some European groups. What was missing was the proper transparency and assessment of the group-wide aggregated risk profile, including any off-balance sheet exposures or unregulated vehicles.
4. At the level of the entire financial system, the severity of the crisis (more than \$3.4trn<sup>11</sup> of cumulative losses in 2008 in the financial sector globally) sends a clear message: capital requirements cannot be the only protection against the “next storm”, as they do not capture the interdependencies between various financial institutions. Systemic risks across the financial system need to be better assessed and managed. Protecting policyholders’ interests in the light of such a dramatic dislocation of asset prices and volatility and preventing spillover effects to the financial system and the real economy requires a much more structured and disciplined approach to risk that will enable companies (and regulators) to anticipate the risk of distress.
5. At industry level, the recent financial crisis has highlighted the risks of procyclicality in risk-based capital requirement regimes based on the extrapolation of recent loss history. In fact, calibrating capital requirements on recent volatility creates, by definition, a vicious spiral whereby capital requirements are higher after the last crisis has passed and lower just before the next one. This should not lead to a departure from the Solvency II measurement framework, but highlights the need to introduce mechanisms that prevent



The crisis has shown the need for group supervision

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<sup>11</sup> “Global Financial Stability Report”, IMF, October 2009



Solvency II must be implemented in line with the spirit of the Directive

pro-cyclical supervisory reactions. Instruments to reduce pro-cyclical effects have been considered in the Solvency II Framework Directive from the outset and need proper implementation (eg, an extended period to re-establish capital adequacy, a symmetric adjustment mechanism for equity risk).

### 1.3 Implications for the development of Solvency II

Against the background of the recent financial crisis, the CEA believes that it is of the utmost importance that the Solvency II regime is implemented as soon as possible and in line with the philosophy and principles set out in the Framework Directive, as it includes all the necessary elements to react properly to the shortcomings the crisis highlighted.

Recent advice papers by Ceiops, instead, still seem to focus mainly on more stringent methodologies to evaluate assets and liabilities, including more conservative technical provisions, on higher capital requirements (up to 80–100% for components such as marine, aviation and transport (MAT) and non-proportional reinsurance) and on stricter criteria for the eligibility of own funds. The combined effect of these individually more conservative elements would lead to decreases in solvency coverage ratios of 30–50% for many insurance companies.

We strongly believe that this degree of conservatism, besides going beyond the calibration principle set out in the Directive<sup>12</sup>, is excessive and unjustified. Any effective prudential regime, in our opinion, should balance the level of financial requirements with the costs of compliance and, taking into account

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<sup>12</sup> Article 101, paragraph 3: “[t]he Solvency Capital Requirement shall be calibrated so as to ensure that all quantifiable risks to which an insurance or reinsurance undertaking is exposed are taken into account. [...] It shall correspond to the Value-at-Risk of the basic own funds of an insurance or reinsurance undertaking subject to a confidence level of 99.5 % over a one-year period.”

these costs, should optimise the level of policyholder protection by using all the tools provided by the regime.

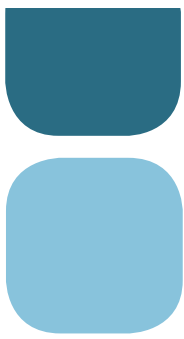
While a highly conservative approach in setting financial requirements increases resilience at individual company level to a limited extent, it is far less effective in preventing larger cross-industry crises. At the same time, as we show in the following sections, excessive financial requirements create significant additional costs for the economy and society that unavoidably outweigh the incremental benefits.

In summary, a solvency capital buffer is an important indicator of the financial solidity of an insurance company and, as such, is and will remain a critical tool for monitoring and managing the probability of future distress. Yet it does not and cannot be a binary indicator (on/off) of distress and must be seen in the context of a richer enterprise-wide risk framework.

At this stage, the key question seems to be: is the purpose of Solvency II capital regulation to avoid individual insurance distresses even if the resulting costs would far outweigh the benefits?



A solvency capital buffer is not the only indicator of financial solidity



## 2. Costs and risks arising from excessive capital requirements

At issue here is the correct balance between the costs and benefits of a solvency capital regime and a market-based system. From a purely economic standpoint, the issue should be solved with a basic linear optimisation algorithm:

*Are the additional capital requirement charges (at the industry WACC<sup>13</sup>) greater or smaller than the social cost of insolvency weighted for the probability of the events that those additional capital requirements would have avoided?*

Easier said than done. Such a trade-off is hard to measure and even harder to monitor, as it needs to be based on a thorough understanding of the different risks that each company faces, combined with the capability of management to take sufficient mitigating action at the emergence of the first warning signs. It should also be remembered that the first protection of policyholders' interests lies in adequately defined technical provisions (life and non-life reserves), and that capital requirements are meant to provide extra protection for unexpected risks.

Higher capital requirements certainly contribute to further reducing the risk of insolvency of an individual insurance company and thus help promote policyholder protection<sup>14</sup>. By adding "prudence on top of prudence", however, regulation will inevitably soon reach a point where marginal benefits are lower than marginal costs, making such an approach uneconomic for the EU insurance industry (and, as we discuss later on, the social costs of overly prudent capital charges might be even larger than the economic costs).

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<sup>13</sup> Weighted average cost of capital

<sup>14</sup> As we have seen, however, more prudent risk-calibrated capital requirements are not effective in preventing industry-wide crises, as they were unable to mitigate the chain reactions that drove the recent crisis

There is a general consensus among industry practitioners — as demonstrated by the thousands of technical comments published — that the more recent Ceiops advice papers fall into this category of “prudence on top of prudence”. Indeed, the EC confirmed in a letter to the insurance industry in December 2009 that a substantive increase in capital requirements across the European insurance industry would be counter-productive.

The highly conservative capital requirements envisaged by Ceiops would impose on the industry a level of extra capital whose cost — assuming that such a level of extra capitalisation is even available — would be transferred to policyholders or other stakeholders in the form of higher prices, lower returns for investors, lower supply and the reduced competitiveness of the EU insurance market, as insurance companies would need to adapt their organisation and behaviour to the new environment. In the following paragraphs these undesired consequences are more fully described.

## 2.1 Changes in the organisation and behaviour of insurance companies


Overly prudent capital requirements would trigger extra costs for each insurer and, eventually, foster organisational set-ups and behaviour that are not in the best interests of policyholders and do not promote the healthy development of the sector.

More specifically, the sequence of expected reactions to a sizeable increase in capital requirements that threatens to reduce business profitability below the company WACC is:

- **Internal optimisation** Initially, and as far as realistically possible, company management would try to minimise the reduction in profitability by either reducing the cost of the capital buffer required (eg, applying more precise

Excessive capital requirements would affect product price and design and underwriting and investment capacity





internal models or reducing the cost of funding through a capital tiering structure) or improving profitability in other ways (eg, by reducing cost ratios). Arguably, if such actions were feasible, each company would embark on them anyway, independent of Solvency II Pillar 1 calibration, to improve the surplus to the benefit of either its policyholders (eg, reduced prices) or its shareholders (eg, higher dividends). However, there is at least anecdotal evidence that the more inflated capital requirements are, the more optimisation efforts are driven to the extremes of a sound and proper use of internal capital models.


- **Transfer out of additional capital requirements** As a second step, the company management would try to transfer or hedge the inflated capital requirements to new “risk owners” by exploiting any market-based solution or even regulatory arbitrage. This can be achieved, for example, through reinsurance, financial hedging, issuance of insurance-linked securities or a carve-out of run-off books of business. Multinational players may also use captive reinsurance to transfer risk into more favourable solvency jurisdictions. While these actions may be potentially economically viable, they would have the inevitable effect of reducing the absolute level of industry profitability and, therefore, reducing the attractiveness of the industry to new investors.
- **Maximisation of diversification benefits** Companies would be encouraged to enter new business lines and new asset classes or to adjust their group structure (eg, transforming local subsidiaries into branches) to maximise diversification benefits recognised under the regime. While diversification is at the core of the insurance business model, companies need to build up adequate capabilities to control these strategic changes.
- **Product re-pricing** Insurance companies would be likely to increase product prices to maintain product margins, especially for products with high capital consumption (eg, general liability, capital guarantees, long-tail annuities).

These actions would be directly against the interests of policyholders, whom the regulation strives to protect with higher capital requirements.

- **Product redesign, including more risk transfer to policyholders** The company management would be forced to reduce product benefits and features. Coverage might be reduced to carve out capital-intensive elements. Guarantees could be reduced to minimise mismatch risks or hedging costs. Deductibles could be increased, co-payments increased or policy limits reduced to make policyholders retain more risk themselves.
- **More conservative asset allocation** Finally, in order to reduce the capital allocated to market risks, companies might be encouraged to overweight lower-yield fixed-income assets in their investment portfolios, affecting the expected investment returns earned on behalf of policyholders. Overly conservative investment strategies, in reaction to overly prudent capital requirements, might erode the wealth-building potential of long-term savings and pension products. For example, a potential reduction in expected yield of 1–2% a year may trim the accumulated pension savings of a retiree by up to 30–50% after 20–25 years.
- **Capacity reduction or exit** If all the above levers do not generate the target profit levels, the company would have no other option but to reduce underwriting capacity in the lines of business that remain unprofitable or even exit certain product lines and markets. Furthermore, an imposed reduction of underwriting capacity would negatively affect the competitiveness and future development of the whole sector.

All these strategies would, arguably, represent a substantial wealth transfer from the European insurance industry to the capital markets (eg, hedging, insurance-linked securitisation) or would provide a competitive advantage to non-EU players (eg, in commercial lines) in underwriting non-EU business at






Higher capital charges would limit returns and reduce profitability

advantageous conditions. This is clearly against the objective of regulation and cannot be desirable.

## 2.2 Impact on the EU insurance sector

Overly prudent capital requirements at individual company level would have a cumulative effect on the EU insurance sector overall:

- First and foremost, higher capital charges would limit the returns to insurance company shareholders and, were they to persist, might restrict equity and debt investments in the sector by institutional investors. As profitability and prospects for growth would decline, the industry would attract fewer capital investors and would need to offer higher returns on capital and debt instruments. Therefore, funding may become more expensive and difficult, given the relatively lower attractiveness of the EU insurance market. Some players may also face a shortage of capital and need to close down or consolidate with more capital-rich competitors. Global institutional investors would be likely to move their capital from EU insurance companies to other locations (eg, the US, Asia) where the capital regime remains more favourable.
- As a result, small to medium-sized players with limited access to new sources of financing would either:
  - focus mainly on the distribution of policies, retaining less insurance risk (so-called fronting), ie, transferring the risks to larger players (reinsurers) or to the capital market; or,
  - consolidate with larger players to access economies of scale and greater diversification benefits.
- Similarly, mono-liners that cannot take advantage of full diversification benefits would be encouraged to consolidate with larger, more diversified players.

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- Given their corporate structure, mutuals would find it more difficult to raise capital. Mutuals with scarcer retained earnings would either have to consolidate, transfer risk or assess their member base to be compliant with the more conservative rules.
  - Conventional life insurance products would be far less attractive to customers, as the expected capital appreciation would be dramatically reduced. Consequently, EU-wide penetration of these products would either shrink or grow much more slowly than in the past<sup>15</sup>.
  - In global business lines, where the domicile of the risk carrier is less relevant, such as commercial lines and reinsurance, EU-domiciled companies would be at a competitive disadvantage to other players domiciled in less onerous regimes (eg, the US).
  - Finally, employment levels in the EU insurance sector might go down significantly, driven mainly by the accelerated consolidation of insurance companies and reduced income opportunities for intermediaries.

### 2.3 Impact on the EU economy

Increased capital requirements may also negatively influence the financial system in the EU.

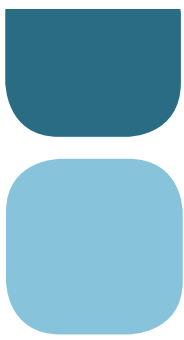
- European equity markets would lose trading volume and investments by insurance companies, as equity risk would have much higher capital charges. Insurance, as one of the biggest institutional investor groups in the EU<sup>16</sup>, would significantly

The capability of insurers to support the economy would decrease

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<sup>15</sup> In particular for non-life segments, the penetration of insurance products would change only marginally as the premium is usually a small part of any retail or commercial budget (eg, 1–3% of annual expenses), suggesting that price increases of 5–15% would be mitigated by the high — with some regional differences — price elasticity of demand

<sup>16</sup> 18% of ~\$100trn of global assets under management is invested by insurance companies, according to “Fund management 2009”, IFSL Research



reduce its investments in riskier asset classes, such as equities, thus reducing its support for the economy. This would also hurt the banking industry, as insurance companies hold a large share of the securities issued by banks.

- There would be unusual growth in low-risk asset classes, eg, high-rated government bonds, across Europe, especially in the eurozone. In less developed financial or non-eurozone markets, insurance companies would incur additional foreign exchange risk when they need to buy foreign currency-denominated paper.
- Since pension funds are exempt from Solvency II, pension funds would be able to offer their products at far lower prices, providing a windfall profit for the asset management sector and creating an unlevel playing field between pension funds and insurers in the fast growing retirement market.
- If the amount and quality of capital is excessive, insurers would be required to issue a huge amount of ordinary equity, while at the same time the largest institutional investors (banks and insurers) would be discouraged from investing in equity. The combined effect would put downward pressure on the financial markets and the economy.
- Last but not least, were investment returns to be lower, consumer spending would reduce as individuals might be expected to increase their saving for retirement and therefore reduce their spending on other goods and services.

## 2.4 Impact on policyholders and beneficiaries

Arguably, policyholders and beneficiaries would be hardest hit by overly prudent capital requirements imposed by regulators. If the current Ceiops advice papers were to be converted into law, we would envisage a negative combined impact on insurance company clients that goes far beyond the political will and intentions that underlie the Solvency II regime. As outlined above, there would be only marginal

value, if any, added to policyholder protection — the prime objective — while other regulatory and political goals, eg, the efficient, stable supply of insurance products and services, would be severely damaged, with undesired consequences for policyholders and beneficiaries. In particular, we would expect the following net effects:

- **For life policyholders and beneficiaries**

- Reduced supply of traditional life policies with minimum guaranteed returns, forcing customers to retain a greater portion of the investment risks. This would leave significant demand unsatisfied by the insurance market, as a substantial number of customers would be unable or unwilling to retain the investment risks themselves, potentially resulting in severe under-insurance of retirement funding needs. The social cost of this under-insurance would be significant.
- Less choice between insurance companies, as a number of companies would either leave the market, reduce capacity or merge with other larger players.
- Far lower funds built up for retirement, requiring customers to reduce current spending and save more. Initial simulations assuming a reduction in investment returns of about 1–2% indicate that funds available for policyholders and beneficiaries at retirement could be reduced by as much as 30–50%, depending on the country and the product. Consequently, policyholders would have to increase their annual saving accumulation by up to 50% to maintain their target wealth level at retirement.
- Product redesign, eg adjustment of guarantees and options embedded in the products, to force policyholders to retain more risk or to reduce the cost of hedging.

Social costs of under-insurance of retirement funding would be significant





Non-life prices could rise up to 20% in some lines

- Price increases of up to 20–30%, especially for conventional life products, due to higher capital requirement levels, higher funding costs and reduced investment income.
- Consumers may increasingly rely on other pension providers that are not subject to the same solvency requirements, while not being aware of the differences.
- **For non-life policyholders and beneficiaries**
  - Lower supply of capital-intense products, eg, motor liability, professional liability or natural catastrophe policies. This would be made even worse if diversification benefits across regions and products are not properly recognised. Less choice between insurance companies, as a significant number of companies would either leave the market, reduce capacity or merge with other players.
  - Product redesign, eg, limiting the scope, amount or period, forcing policyholders to retain more of the capital-intense risks that used to be covered.
  - Price increases in the range of 5–20% for more capital-intense products such as the ones with greater exposure to natural catastrophe risks (eg, homeowners' insurance in regions with high risk of windstorm) or those with a long claim tail (eg, general liability, but also motor third party liability) due to higher capital costs, higher funding costs and the increased cost of risk transfer.

- **For corporations and other businesses**

- Both large companies and SMEs would suffer from higher insurance rates, mainly driven by reduced capacity. As the supply of commercial-line products would be likely to shrink, due to their volatility-induced high capital intensity, the low price elasticity of supply in this segment would significantly increase prices.
- As a result of these inflated price levels, companies would decide to retain more risk, reducing the funds available for the production of goods and services.
- Last but not least, given the relatively higher capital requirements for investments in equities, companies would be likely to have fewer insurance companies as investors in their stock, potentially increasing funding costs and reducing funding stability in the economy.



## Conclusions

Over-capitalisation of the European insurance industry would have detrimental effects on consumers, insurers and the economy. If any, the incremental benefits of further raising capital requirements would be vanishingly small, given that insurance companies have proven their resilience in all recent severe crises. Incremental costs for the European economy would rise fast, with undesired severe consequences for private and commercial policyholders. In addition, the costs of unnecessary excess capital would have repercussions on the competitiveness of the European insurance industry, on the sector's ability to attract new funding and, ultimately, on the industry's underwriting capacity, resulting in a detrimental effect on the economy.

A balance is needed between the costs and benefits of increased capital

A balance is required between protecting the consumer by raising capital requirements and guaranteeing the consumer a wide choice of competitively priced insurance products by supporting a healthy and competitive insurance market.

The CEA believes that a more effective protection of policyholders' interests — which would likewise support the healthy development of the insurance sector — could be obtained by enforcing a more balanced and comprehensive implementation of the Solvency II Framework Directive across its three funding pillars: financial requirements; organisation and governance; and reporting and disclosure. Such an approach, in line with the original spirit of the Solvency II regulation, would enable companies and supervisors alike to spot the warning signs of emerging risks or new crises and to initiate all possible mitigating actions, without the burden and cost of an often ineffective capital surplus.

## Appendix

The following publications and papers, plus earlier working and position papers, are available to download from the Solvency II section of the CEA website, [www.cea.eu](http://www.cea.eu).

### CEA Publications

- Solvency II: Legal FAQs on group support (2008)
- Solvency II: FAQs on group supervision & group support regime (2008)
- Solvency II: How the group support regime works in practice (case studies) (2008)
- Solvency II Briefing Note 1: Diversification and specialisation (2007)
- Solvency II Briefing Note 2: The insurance groups and Solvency II (2007)
- Solvency II Briefing Note 3: The small and medium-sized undertakings and Solvency II (2007)
- Solvency II Briefing Note 4: Why it matters to consumers (2007)
- Solvency II: Main results of CEA's impact assessment (2007)
- Solvency II Glossary (2007)
- Solvency II: Frequently asked questions (2007)
- Solvency II: Understanding the process (2007)
- Assessing the impact of Solvency II on the average level of capital (2006)
- Solvency II: Introductory guide (2006)
- Solvency assessment models compared (2005)




## CEA Positions (CP = Ceiops Consultation Paper)

- Additional contribution to CP46 on own funds: own funds eligibility and criteria (01-02-2010)
- Additional contribution to CP46 on own funds: Ceiops' proposed treatment of expected future profits and the "winding-up gap" (28-01-2010)
- Examples of the macroeconomic extrapolation of the benchmark risk-free yield curve (27-01-2010)
- Key comments on CP63 to CP79 (23-12-2009)
- Responses to CP63 to CP79 ([18 responses](#)) (11-12-2009)
- Additional contribution to CP53: Operational risk (14-10-2009)
- Additional contribution to CP51: LGD of derivatives (14-10-2009)
- Additional contribution to CP49: Longevity risk (14-10-2009)
- Additional contribution to CP49: Mass lapse risk (14-10-2009)
- Additional contribution to CP49: Life cat risk (14-10-2009)
- Additional contribution to CP31: Financial mitigation techniques (14-10-2009)
- Responses to CP39 to CP62 ([24 responses](#)) (11-09-2009)
- Paper on risk-free interest rate principles (CP40) (11-09-2009)
- Comments on addendum to CP37: Group internal model (11-09-2009)
- Letter to Ceiops on first and second wave of CPs (04-09-2009)
- High-level messages on CP26 to CP37 (08-06-2009)
- Responses to CP26 to CP37 ([12 responses](#)) (01 & 08-06-2009)
- Response to informal Ceiops consultation on non-life best estimate simplifications (20-04-2009)
- Why is Solvency II good for policyholders? (20-04-2009)
- Solvency II: CEA follow-up paper on capital add-ons for Ceiops (04-04-2009)

- Response on the non-life catastrophe risk charge in the SCR (20-03-2009)
- Letter to Ceiops and EC on longevity risk calibration (13-03-2009)
- Follow-up paper on segmentation: segmentation for high-level statutory reporting purposes (09-03-2009)
- Paper on the allowance for diversification within the market value risk margin (04-03-2009)
- Paper on capital add-ons (27-02-2009)
- Response to Ceiops' request on the calculation of the group SCR (27-02-2009)
- Paper on treatment of participated undertakings (27-02-2009)
- Follow-up response to Ceiops' SRP and reporting requirements issues paper (26-02-2009)
- Paper on the treatment of ancillary own funds (19-02-2009)
- QIS4 feedback and suggestions for future implementing measures (09-01-2009)
- Response to the "Implementing measures for system of governance" issues paper (09-01-2009)
- Working paper: Initial thoughts on the use of simplifications (22-12-2008)
- Working paper on trigger points (16-12-2008)
- Working paper on deferral of coupon and principal payments (16-12-2008)
- Working paper on grandfathering of own funds (16-12-2008)
- Response to the EC consultation on the harmonisation of Solvency rules applicable to IORPs (28-11-2009)
- Response to Ceiops on segmentation (20-11-2008)
- Response to Ceiops' SRP and reporting requirements (14-11-2008)
- Response to Ceiops' own risk and solvency assessment (14-08-2008)
- Joint CEA/PEIF/CFO Forum/CRO Forum letter on current Solvency II Directive negotiations (13-11-2008)



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- Response to Ceiops' own risk and solvency assessment (18-09-2009)
  - QIS4 questionnaire for groups (01-07-2008)
  - QIS4 questionnaire for solo companies (01-07-2008)
  - Position paper: Cost of capital methodology (03-06-2008)
  - Guidance on QIS4 (03-06-2008)
  - Response on the principle of proportionality in the Solvency II Framework Directive proposal (28-04-2008)
  - Response on aspects of the Solvency II Framework Directive proposal related to insurance groups (28-04-2008)
  - Response to CP25 draft advice on aspects of the Framework Directive proposal related to insurance groups (25-04-2008)
  - Response to CP24 draft advice on the principle of proportionality in Solvency II (25-04-2008)
  - Position paper on the own funds eligibility criteria (25-04-2008)
  - Position on Solvency II and pension funds (08-04-2008)
  - Guidance on QIS4 simplification of the market interest rate risk sub-module (20-02-2008)
  - Response to EC draft call for advice on QIS4 (20-02-2008)
  - Instruments working paper on marketability (15-02-2008)
  - Joint CEA/CRO Forum letter to European Commissioner McCreevy on the methodology of the calculation of the MCR (30-01-2008)
  - Position paper on the Solvency II Framework Directive (01-10-2007)



