


Impact of Solvency II on the Lloyd's of London Marketplace

Implications for the Management of Insurance Assets

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1. EXECUTIVE SUMMARY

Objectives

The primary objective of this paper is to explore the likely effects of the introduction of the Solvency II Directive with particular focus on the implications for the management of the investments of Lloyd's of London syndicates.

The research is aimed at analysing some issues within the Lloyd's of London market that could arise as a result of the Solvency II Directive. Additionally, it highlights industry trends that are likely to evolve as a consequence of adapting to the change in regulation.

The intention of this document is not to draw definitive conclusions or specific recommendations, but rather to present the findings of our research and identify critical areas that managing agents should bear in mind on their path to compliance.

Methodology

During September and October 2010, the authors conducted one-on-one meetings with various stakeholders of Lloyd's of London.

The authors met with various managing agents (including Finance Directors, Investment Managers, Treasury Directors, Risk Managers and individuals or teams in charge of the implementation of Solvency II), individuals at the Lloyd's of London Corporation, the Financial Services Authority, as well as consultants from Meridian and Ernst & Young.

Additionally, the authors designed a survey aimed at gathering quantitative and qualitative data from managing agents. Considerations on the aggregate findings of the survey are included throughout this report.

Key Observations

The main findings from our research are summarised below. Each point is expanded later in the report, under Chapter 4.

- a) **Solvency II should improve Enterprise Risk Management (ERM):** One of the objectives of Solvency II is to enforce tighter risk management at an enterprise level.
- b) **Solvency II ought to lead to better interaction between the underwriting and the investment sides of the business:** Increased ERM should lead to better information flow between the two areas.
- c) **Solvency II should lead to closer asset-liability matching:** Solvency II is expected to reward syndicates that closely tie their investments to the underwriting risk.
- d) **The Investment Management function should become central for insurers as a consequence of Solvency II:** The role of the Investment Management function will be crucial in ensuring the efficient allocation of risk. Increased reporting and closer interaction with investment managers can lead to a more dynamic management of investments.
- e) **Ownership structure is a key driving force to investment risk appetite:** Organisational risk appetite often stems from the risk profile of the ultimate stakeholders of the business.
- f) **Solvency II may play a role in driving industry consolidation:** Higher costs amidst a soft insurance market place and diversification benefits offered by Solvency II may drive industry consolidation.
- g) **Solvency II may be implemented differently across Europe:** The FSA and other European regulators may implement Solvency II with different degrees of rigour, which may leave an uneven playing field across Europe.

2. INTRODUCTION TO LLOYD'S OF LONDON

From its first beginnings in Edward Lloyd's Coffee House in 1688, Lloyd's of London ("Lloyd's") has been a pioneer in marine insurance and has evolved into a leading market for specialist insurance. Lloyd's is not an insurance company, but rather a society of members, both corporate and individual, who supply capital to syndicates on whose behalf professional underwriters accept risk. Lloyd's conducts business in over 200 Countries across many sectors.

Figure 1: Business and region breakdown¹

	Reinsurance	Property	Casualty	Marine	Energy	Motor	Aviation	Total
Total	36%	23%	20%	7%	6%	5%	3%	100%
North America	31%	31%	20%	5%	10%	1%	2%	45%
Other America (Incl. Bermuda)	75%	8%	8%	4%	2%	1%	2%	6%
UK	28%	20%	21%	7%	1%	22%	1%	20%
Europe	36%	16%	20%	17%	6%	1%	4%	16%
Asia Pacific	47%	14%	25%	6%	4%	1%	3%	9%
Rest of the World	61%	9%	13%	8%	3%	2%	4%	4%

The Corporation of Lloyd's oversees and supports the market. Its main functions include determining the capital that members must provide to support their proposed underwriting, undertaking financial and regulatory reporting, developing Lloyd's global network of licences and promoting the Lloyd's brand around the world.

Lloyd's comprises the following groups of actors:

§ Policyholders

Businesses, organisations, other insurers and individuals request insurance cover to protect themselves against risks that could potentially affect them

§ Brokers

Understand clients' individual needs and place the risk. Most of the risk on the Lloyd's market is placed with the assistance of a broker.

¹ Source: Lloyd's of London, *Lloyd's Strategy 2010-2012*.

Brokers operating on the Lloyd's market must meet Lloyd's eligibility criteria, in addition to being overseen by their national regulator

§ **Syndicates**

Underwriters negotiate with brokers and decide which risks the syndicate will underwrite and under what terms. Syndicates specialise in, and work across coverage areas including marine, aviation, catastrophe and motor, and many syndicates customise solutions to the risks of their clients

§ **Managing Agents**

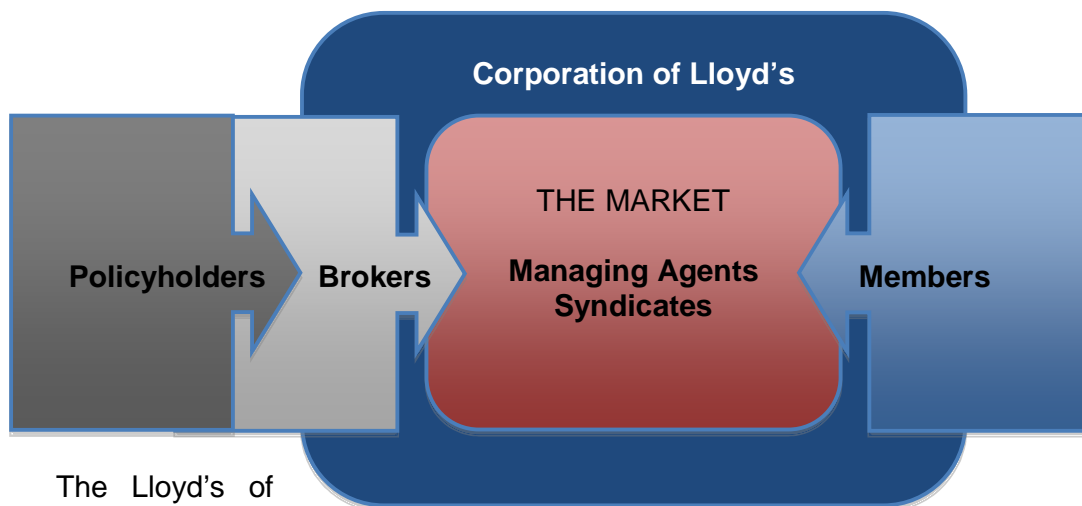
Having their origins in the time when individual Names (wealthy individuals) needed an agency through which to conduct business in the Lloyd's marketplace, managing agents were established for the sole purpose of managing a syndicate. They employ the underwriting staff and handle the day-to-day running of a syndicate's infrastructure and operations. Managing agents may be responsible for more than one syndicate

§ **Members**

Provide the capital to support syndicates' underwriting. Members include large insurance groups, as well as individuals and limited partnerships

As of the end of 2009 Lloyd's was home to 51 managing agents and 84 syndicates.

Figure 2: How Lloyd's work

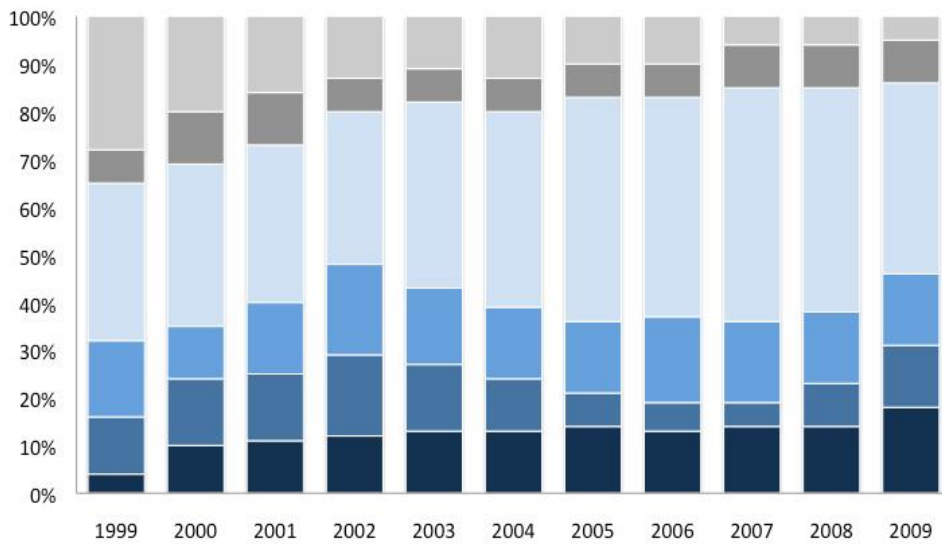


The Lloyd's of London market has a

long and storied past. When Lloyd's of London was founded, risk insured through the Lloyd's market was backed by wealthy individuals (called 'Names') who held unlimited liability. Lloyd's started by providing insurance to overseas shipping, such as in the slave and tea trades, however over time expanded into many diverse and specialised areas.

In the late 1980s and early 1990s, Lloyd's syndicates suffered terrible losses from claims caused by Exxon Valdez, the 1989 San Francisco earthquake and, most importantly, asbestos-related workers compensation. Over 1,000 of the 30,000 Names declared bankruptcy, and in 1994 Lloyd's opened the market to allow corporate members to underwrite risk with limited liability. Furthermore, in 1996 Lloyd's instituted a Reconstruction and Renewal (R&R) Plan, which, in brief, aimed to end market-wide litigation and provide a fresh start by reinsuring all liabilities prior to 1992 under Equitas, which was eventually sold to Berkshire Hathaway.

Figure 3: Composition of capital²



Today, 95% of the underwriting capacity is provided by corporations of various sizes, operating with limited liability.

This percentage has been increasing steadily in the past 10 years (from 72% in 1999) as individual Names are no longer permitted to enter the market. With some syndicates still maintaining legacy Names, the type of capital backing a

² Source: Lloyd's of London, *Lloyd's Strategy 2010-2012*.

syndicate continues to vary across the Lloyd's market.

The Chain of Security

Lloyd's has a unique capital structure, often referred to as the 'Chain of Security', aimed at providing financial security to policyholders and capital efficiency to members. There are three links in the Chain of Security:

- § Syndicate level assets
- § Members' funds at Lloyd's
- § Central assets

The First Link – Syndicate level assets: Premium Trust Funds (PTFs) are the deposit accounts for premiums written and the first layer of capital responsible for paying policyholder claims. PTFs comprise the largest proportion of funds within the Lloyd's capital structure, are invested mostly in liquid securities such as cash and government bonds, and are held in trust in the currency of the premium. Just 3% of PTF aggregate assets are invested in equities. Currently premium trust funds comprise a Sterling, a Dollar, a Canadian, and an Asian fund.

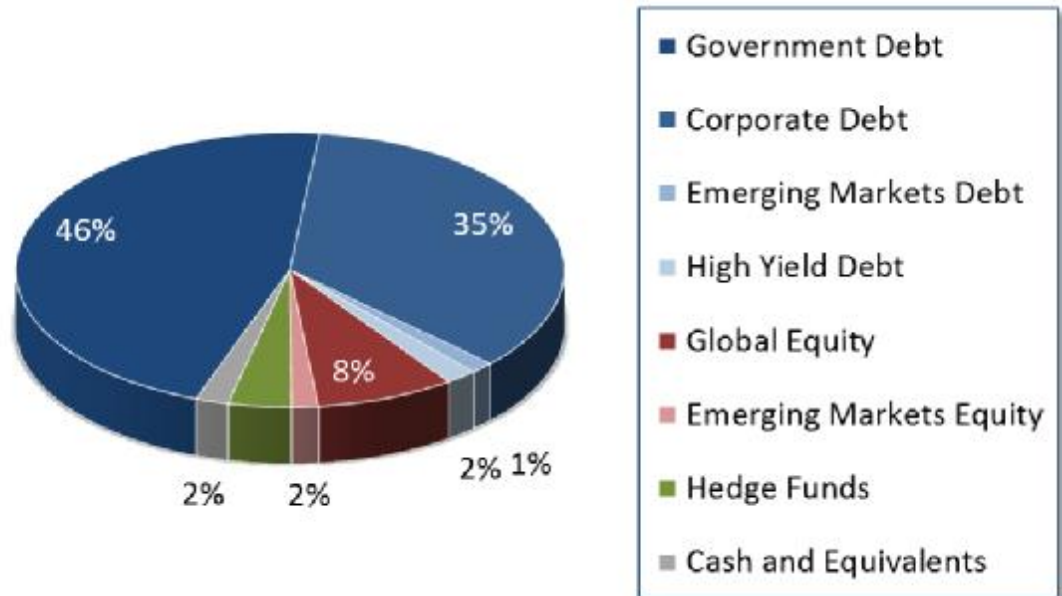
While PTFs are often administered by one custodian, such as Citigroup in the case of the U.S. Dollar Trust Fund, syndicate accounts must be held separately (not commingled) and be managed by the syndicate's managing agency. As the largest capital source at Lloyd's, PTFs account for the largest proportion of aggregate investment performance across the Lloyd's market.

The Second Link - Members' funds at Lloyd's: The second link is the capital each member must provide to support its underwriting activity at Lloyd's, and serves as a backstop for excessive losses for each syndicate. Therefore, the amount of Funds at Lloyd's for each member is dependent on the individual policies underwritten by each syndicate. Each year syndicates must conduct a capital adequacy test, called the *Individual Capital Assessment* (or "ICA"), which determines the adequate capital requirement for each syndicate for that year. Members' Funds at Lloyd's are administered by Lloyd's, although syndicates are able to provide letters of credit from their banking institution to supplement actual funds deposited, in effect allowing syndicates to leverage their underwriting business. Letters of credit comprise the majority of assets held in the Funds at Lloyd's.

The Third Link – Central assets: The Central assets act as the third layer of

security at Lloyd's, and this capital is provided through members' annual contributions, which for 2009 was 0.5% of gross premiums written.

Figure 4: Third link - Asset allocation³



Lloyd's has a target to maintain a minimum of £1.7 billion of Central assets, which comprise both central fund assets and subordinated debt. Because claims rarely require Central Fund support, the Central Fund invests in "riskier" and longer duration asset classes, such as equities and hedge funds, and uses the support of subordinated debt.

3. SOLVENCY II

Introduction

³ Source: Lloyd's of London, *Lloyd's Interim Report Six Months Ended 30 June 2010*.

Solvency rules define the minimum amount of capital that insurers and reinsurers must set aside to cover the risks to which they are exposed. Solvency II is a fundamental review of the capital adequacy regime and establishes a revised set of EU-wide capital requirements, valuation techniques and risk management standards.

The new regime, which is currently scheduled to take effect from 1 January 2013, is expected to apply to all insurance firms with gross premium income exceeding €5m or gross technical provisions in excess of €25m.

The stated objectives of the new regulation are:

- § Deepen integration in the insurance market
- § Protect policyholders and beneficiaries
- § Improve International competitiveness
- § Overcome inadequacies of Solvency I

More generally, the regulation aims to reduce the likelihood of an insurer failing and to protect policyholders and the stability of the financial system as a whole. This objective is pursued by aligning capital requirements with risk profile. Additionally, the regime seeks to improve risk awareness and quantification as well as the integration of this information into business decision-making, governance and operations.

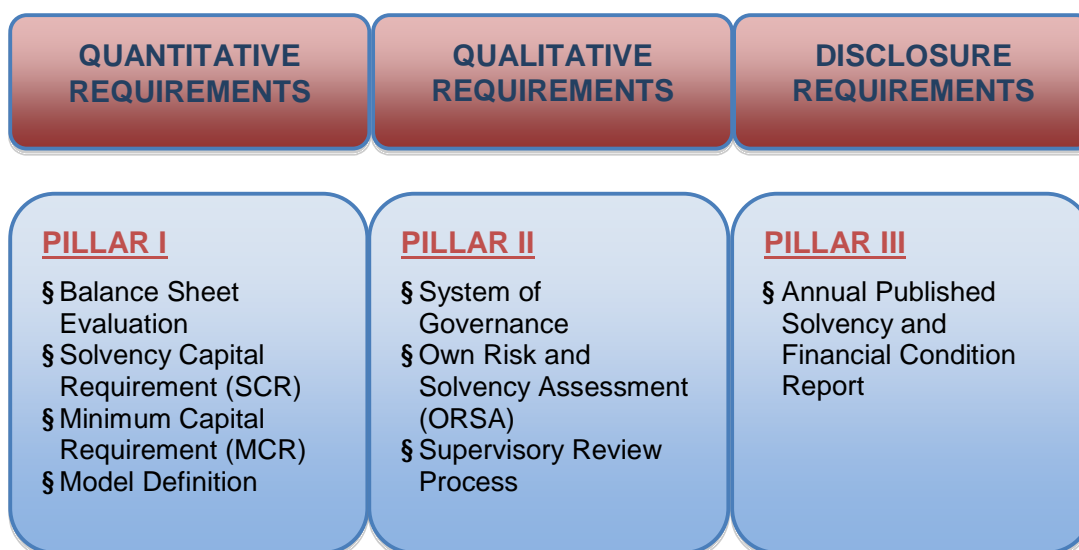
Importantly, the rules also lay down the principles that should guide insurers' overall risk management so that they can better anticipate and handle adverse events.

The rationale for EU insurance legislation is to facilitate the development of a single market in insurance services, whilst at the same time securing an adequate level of consumer protection. Many Member States have concluded that the current EU minimum requirements are not sufficient and have implemented their own reforms, thus leading to a situation where there is a patchwork of regulatory requirements across the EU. The new Solvency II rules will replace these old requirements and establish more harmonised rules across the EU, thus promoting competitive equality as well as high and more uniform levels of consumer protection.

The Three Pillars

The Solvency II regime has a three-pillar structure, with each pillar governing a different aspect of the requirements.

Figure 5: The three pillars



Pillar 1 – Quantitative requirements: The first Pillar sets out the quantitative requirements that insurers must satisfy to demonstrate they have sufficient financial resources. It contains two capital requirements:

- § Minimum Capital Requirement (MCR): reflects an absolute minimum level of required capital below which supervisory action will automatically be triggered
- § Solvency Capital Requirement (SCR): represents additional capital to firms to absorb significant unforeseen losses

Solvency II introduces new risk-based capital requirement calculations of the MCR and the SCR. The MCR is designed to be the lower solvency calculation. This corresponds to a solvency level below which policyholders and beneficiaries would be exposed to an unacceptable level of risk, if the insurer were allowed to continue its operations. The SCR aims to reflect a level of eligible funds that enables insurers to absorb losses to a confidence level of 99.5% over one year.

Firms can choose to adopt a standardised model to calculate regulatory capital or develop one internally.

The standardised approach is easier to implement and less time-consuming, but is based on averages and involves a significant amount of estimates and uncertainty.

Companies electing to develop an internal model will be required to seek regulatory approval. The design, testing and approval of internal models is a demanding and time-consuming exercise, however, robust models can be integrated in the management of risk and support decision-making.

Solvency II will also permit a hybrid approach involving simplified models with an element of standardisation.

Pillar 2 – Qualitative requirements: sets out requirements for the governance and risk management of insurers, as well as for the effective supervision of insurers. Pillar 2 has two main aims:

- § Ensure that a firm is well run and meets adequate risk management standards
- § Ensure that it is adequately capitalised

Specifically, Solvency II requires firms to have an effective risk management system and requires them to consider all risks to which they are or could be exposed. The risk management system has to be fully integrated into the organisation as a fundamental part of the firm's operations. Further, Solvency II explains the role that risk management systems must play in any internal model the firm presents for approval, as a means of calculating regulatory capital. The firm must consider all risks that are included in the calculation of the SCR as well as the risks that are not, or not fully, captured in the calculation (for example, liquidity or reputational risks). To fulfil these requirements the firm must first be able to monitor and understand all the risks to which it is exposed.

Firms are prompted to assess the risks they have within their business and the level of solvency required to mitigate those risks. The ORSA is an internal assessment process that aims to ensure senior management have conducted their own review of the risks to which they are exposed and that they hold sufficient capital against those risks. The ORSA must reflect the firms' own risk appetite, which means that many may wish to target a higher confidence level (or a longer time horizon) than the one prescribed under the ICAS regime (99.5%) and at which the SCR is set under Solvency II.

Pillar 3 – Disclosure requirements: focuses on disclosure and transparency requirements and is aimed at demonstrating that the analysis supporting the other two pillars is dependable. It requires insurers to provide key, verifiable information relevant to their capital adequacy. In broad terms, these would

cover:

- § Measures of financial condition and performance
- § Measures of risk profiles and the data and other assumptions upon which they are based
- § Measures of uncertainty, including information on the accuracy of previous estimates and the sensitivity of the calculations to market volatility.

The innovations introduced – a comparison with Solvency I

The current framework known as Solvency I was introduced with the aim to harmonise the capital rules in different European Countries, however, it only included considerations on liabilities without properly addressing the assets side of the balance sheet. The minimum capital requirement was only based on size and was not linked to the actual risk. Solvency II improves the consistency and achieves a better correlation of capital requirements to economic risk. The main innovations introduced with the new regime are highlighted below:

§ Consistency across different European Countries

Solvency I provides a similar outline across different Countries, however, the valuation of assets, liabilities and the type of eligible capital varies significantly. Under Solvency II, assets and liabilities will be measured across the EU using a market consistent approach.

§ “Best estimate” vs. “Prudent” liabilities and technical provisions

Under Solvency I, high margins of prudence are added to a relatively fixed level of liabilities, and rates below current market yields are used to discount cash flows. As a result, technical provisions are likely to be above the best estimate fair value. Solvency II does not allow companies to add implicit margins for prudence, and cash flows are to be discounted using market-based interest rates. Furthermore, cash flows are estimated based on stochastic simulations accounting for different economic scenarios.

§ Solvency Capital Requirement (SCR) will vary according to the risk profile of the insurer

The SCR calculation will be based on stress tests that are to be calibrated to a 99.5% confidence level over a one-year period. It is

debatable how this requirement will compare to the current minimum solvency margin, but the general perception seems to be that the SCR will be higher. Falling below the SCR will trigger a stricter regulatory scrutiny, but not an automatic shut down of operations.

§ Diversification can reduce SCR

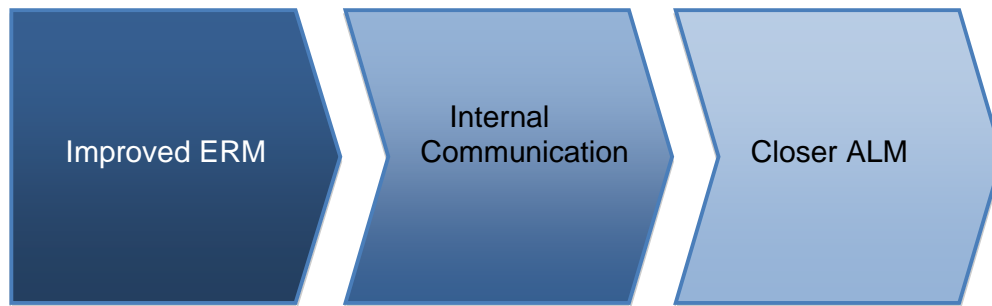
The SCR is calculated separately for each line of business, but at the aggregate level it accounts for the imperfect correlation between different risks, resulting in a lower capital requirement for diversified insurers.

4. KEY OBSERVATIONS

This section presents the finding of the authors' research carried out through in-person meetings with several managing agents, consultants and insurance experts. Additionally, it presents the conclusions drawn from an original survey submitted to Finance Directors of the organisations active on the Lloyd's market. The observations below stem from the authors' opinions formulated during the interviews and their interpretation of the survey's results.

The first three observations are closely linked together according to the following logical sequence: Solvency II is expected to improve the management of risk at the enterprise level, which should prompt closer communication between the underwriting business and the investment function, which in turn should allow closer asset-liability matching to reduce capital charges.

Figure 6: Solvency II impact



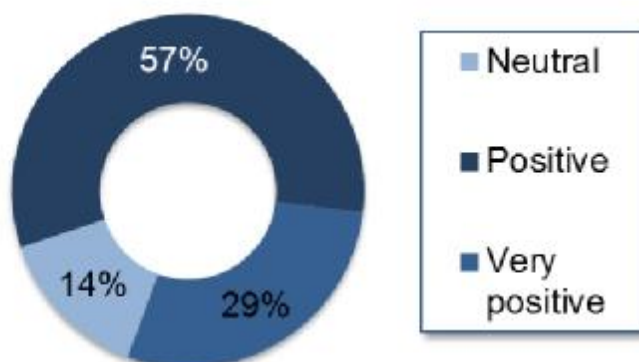
a) Solvency II should improve Enterprise Risk Management

One of the primary objectives of Solvency II is to improve risk management within the insurance sector. Under the current regime, when one thinks about insurance related risks, it is primarily the underwriting risk that comes to mind. However, Solvency II aims to tie in all parts of the business to assess the overall enterprise risk.

Top management will have to develop a deep and thorough understanding of how any decision would materially change the risk profile of the entire organisation. This exercise is currently being undertaken across syndicates via an in-house assessment through actuary and risk management teams.

Figure 7: Survey – “How do you view the impact of Solvency II in improving your firm’s

enterprise risk management?”



The spirit of the legislation seems to encourage companies, especially larger players, to develop tight internal models. The intention is that these models should be comprehensive enough to enable management to get an accurate picture of their risk exposures that include underwriting, investment, operational, counterparty, credit, currency, liquidity, interest rate and diversification risks, amongst others. Once fully developed, these could help maintain tighter control on the business and provide guidance to management as to where they can afford to allocate incremental risk and where they should reduce their risk exposure. An internally developed model will not be a simple regulatory obligation, but will increasingly become an essential tool to support strategic and tactical decisions.

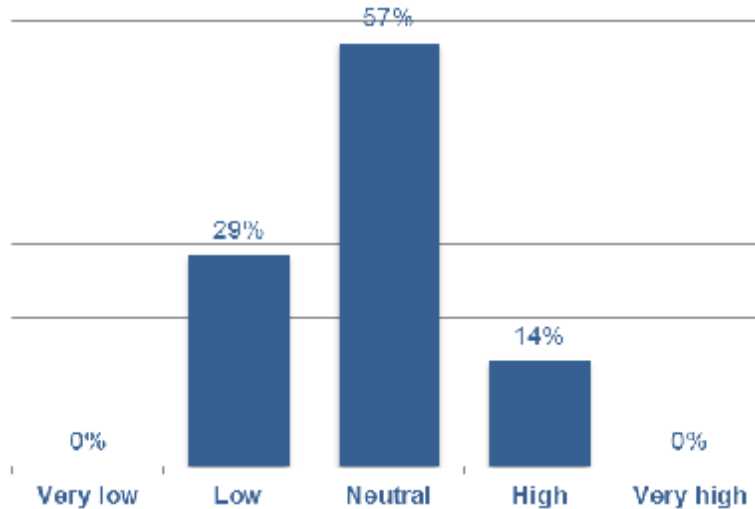
Since stronger ERM is a clear focus of Solvency II there is an inherent consensus that this objective will be achieved. In general, managing agents appreciate the importance of a customised, well-designed and tested internal model and the value it can have for risk management: all of our survey respondents and interviewees are developing their models internally.

b) Solvency II should lead to better interaction between underwriting and investment sides of the business

Solvency II is aimed to encourage insurers to look at firm-wide implications through an integrated ERM system. As we show later in the report, businesses of Lloyd’s syndicates are currently dominated by the underwriting function. Solvency II will shed a different light on the decision making process by considering the impacts on the business as a whole.

One of the overriding trends that we noticed during interviews with top management across various syndicates is that the underwriting business and the investment business are run fairly independently of each other. From the below survey results, it can be seen that only 14% of the respondents feel that the underwriting book has a high influence on investment decision-making.

Figure 8: Survey – “How much influence does the underwriting business have in shaping investment decisions?”



With increased ERM controls, management will be forced to understand, measure and monitor the riskiness involved in all material decisions. The integration of the entire business in a single risk management framework could cause managing agents to look at returns in an integrated fashion as well, rather than focusing on return from underwriting and returns from investments separately. As such, it will become critical that both functions are closely linked.

Solvency II is expected to generate more robust reporting mechanisms. This could create the opportunity to use risk data from the underwriting book to manage investments in a more dynamic fashion, hence reducing the overall riskiness of the firm. This will not only help in monitoring investment risk better, but could also create a strong link for asset liability matching.

c) Solvency II may lead to closer asset-liability matching

As discussed above, Solvency I capital requirements were based on fixed factors that did not reflect the asset-liability duration mismatch or market risk. Under Solvency II, the calculation of SCR reflects both asset-liability duration mismatches and the market risk of different investment classes, and thus there may be a stronger tendency to minimise this gap.

A large majority of the managing agents interviewed adopt a very conservative approach in managing their investments. We observed that the average duration of the investments is consistently lower than that of their liabilities. Further, liquidity levels are significantly higher than what would ever be required to pay out claims in the short term.

Solvency II will provide an incentive for managing agents to review their asset-liability management (ALM) strategies. From an economic standpoint, firms will have to weigh the benefits of matching liability duration more closely as this may imply a reduced capital requirement. Additionally, Solvency II applies a capital charge commensurate with the level of volatility of the assets. As a result, insurers will have an incentive to focus on risk mitigating instruments. Given the volatility of the Solvency II balance sheet, insurers will also have to monitor their asset liability mismatch position much more actively.

One way to manage downside risk and duration may be to use derivative instruments. Syndicates may want to evaluate the opportunity to hold physical investments with a short duration in order to reduce volatility and address the duration mismatch through derivative instruments. There are of course a number of issues that syndicates will need to consider in deciding whether to follow this route. These include counterparty liquidity and whether the infrastructure in place is sufficient.

Although some of the larger agents already incorporate derivative instruments in their investments, there are still a significant number of them who exhibit reluctance in using derivatives. Our survey shows a strong correlation between the size of the company and the approach towards derivatives, with the smaller players declaring not to be ready to use these instruments.

The new regime seems to be heading in the direction of adopting the swap curve for discounting, rather than the traditional government bond curve.

As a result insurers may seek to use swaps in their asset portfolios to better match the discount rate that is being used for their liabilities.

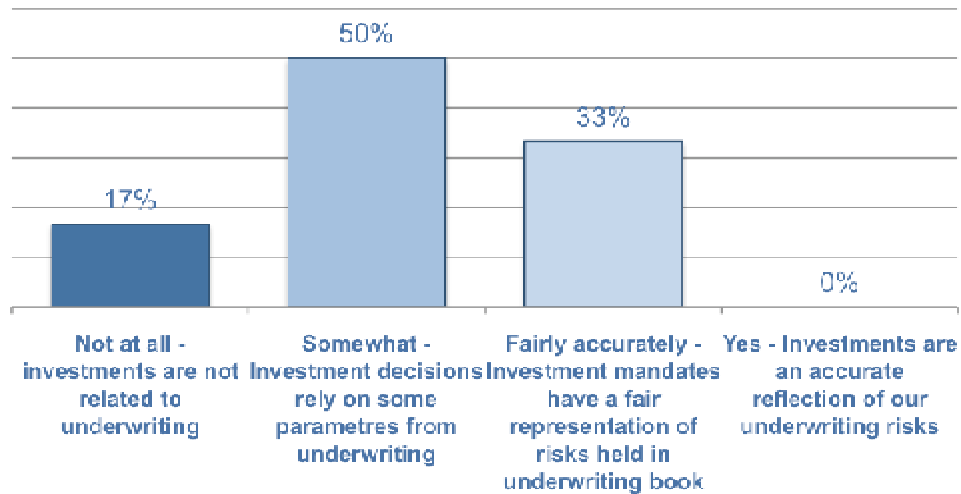
As noted above, Solvency II may change the insurers' balance sheets according to fair-value principles. Insurance companies will use the market value of assets and estimate the fair value of their liabilities. In some European Countries this is a dramatic change from the current approach that considers liabilities as fixed. The new accounting principles under development within the Phase 2 of IFRS should be inspired by a similar fair-value approach, however, the International accounting standards have different objectives from the Solvency II directive and may result in additional offsets.

d) The Investment Management function should become central for the insurers

Finance directors will have to embed capital charge considerations into their investment decisions. Each active play will have to be supported by the expectation that the additional return will overcome the additional capital charge. This will prompt an enhancement of the internal collaboration of the investment function with the underwriting side, as well as the interaction with external investment managers.

With the implementation of Solvency II, the investment management function assumes a more central role within insurance companies, as the focus will shift to efficient allocation of risk for the overall firm. Solvency II is expected to provide more relevant, accurate and timely risk information that can be used by the investment function for both, reducing overall risk through investments and increasing returns. The way this information is processed and embedded in the investment strategies will be a critical factor in the transition to the Solvency II regime.

Figure 9: Survey – “Do you think your investments accurately reflect the risk on your underwriting book?”

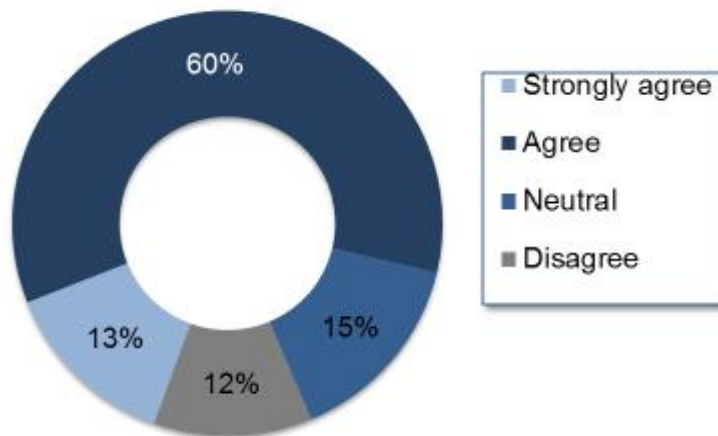


Only 33% of survey respondents declared that the risk of their underwriting books is fairly accurately reflected in their investments. This highlights not only how the new regime provides an opportunity to integrate the two functions, but also how this would entail a significant cultural shift from the practice of managing the two activities independently of each other.

e) Ownership structure is the driving force to investment risk appetite

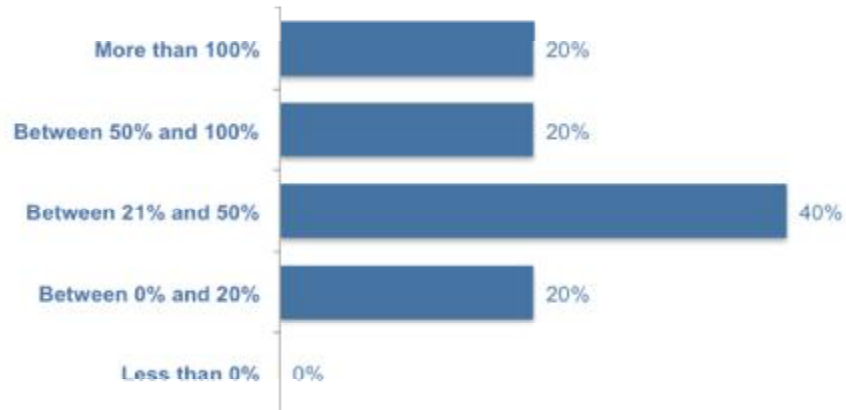
Syndicates view underwriting as their primary business and use the investment function to support it. The authors explored this relationship during their interviews and through the survey to understand the driving forces behind decision-making within syndicates.

Figure 10: Survey – To what extent do you agree with the following statement: “My company's primary function is underwriting and the goal of the investment function is to support that objective”



The results above show that only 12% of the respondents do not agree that the underwriting function is the primary business and that the investment function plays a support role. However, over the years the investment function has been a strong contributor to the returns on the overall business. As can be seen below, in the past three years investments have always been a positive contributor to the business of companies in our sample. The vast majority (80%) of the respondents reported that investments have contributed at least 20% of the firm's overall returns over the last 3 years. Furthermore, 20% of the respondents declared that returns from investments has at times compensated for the loss in the underwriting business.

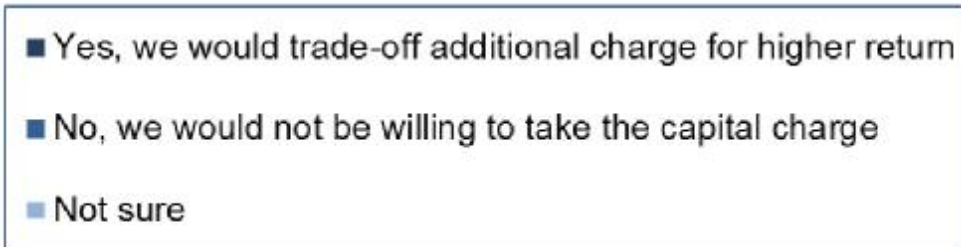
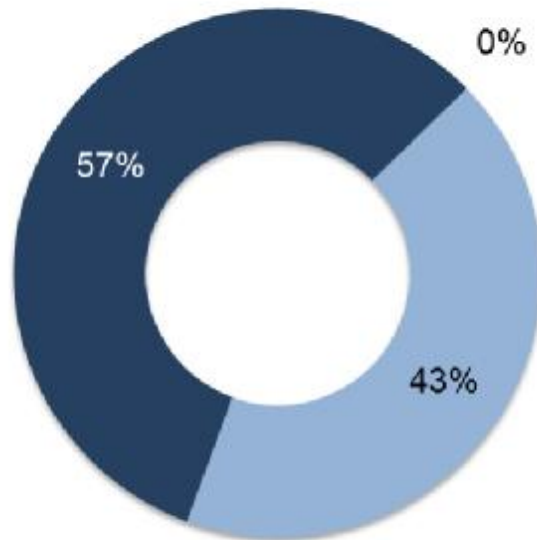
Figure 11: Survey – “On average, what portion of your firm's total return in the past 3 years is attributable to investments?”



With better ERM, Solvency II is expected to enable firms to better manage risk and thus take decisions to maximise benefit to the overall organisation. However, a key insight from our interviews has revealed that the risk appetite for the investment business has a strong correlation with each firm's particular ownership structure. Entities owned by Hedge Funds, Private Equity firms or listed firms are more inclined to take investment risk if it increases overall returns. However, firms that are owned by private or traditional owners are more comfortable with increasing underwriting risk, but are less prone to assuming risk on investments. The rationale for this approach is that private owners are funding the business primarily to obtain exposure to risks and rewards linked to the underwriting activity. Therefore, they exhibit a low tolerance for risk within the investment function, effectively making it a support to the underwriting book.

In order to best leverage the ERM that Solvency II brings, allowing management to look at firm-wide returns through a single lens, management will have to specify their risk tolerance level. Syndicates will have to think very carefully about their risk profile and take active decisions on whether they are willing to trade off higher capital charge for higher potential returns, or be very conservative to limit the capital penalty. This may also force the debate amongst company stakeholders regarding the amount of balance sheet risk they are willing to take to expand their profits.

Figure 12: Survey – “In a Solvency II world, there may be a capital charge levied if the assets are not exactly matched with liabilities. Would you be willing to take that charge if you believe there is more return to be had through investment mismatch?”

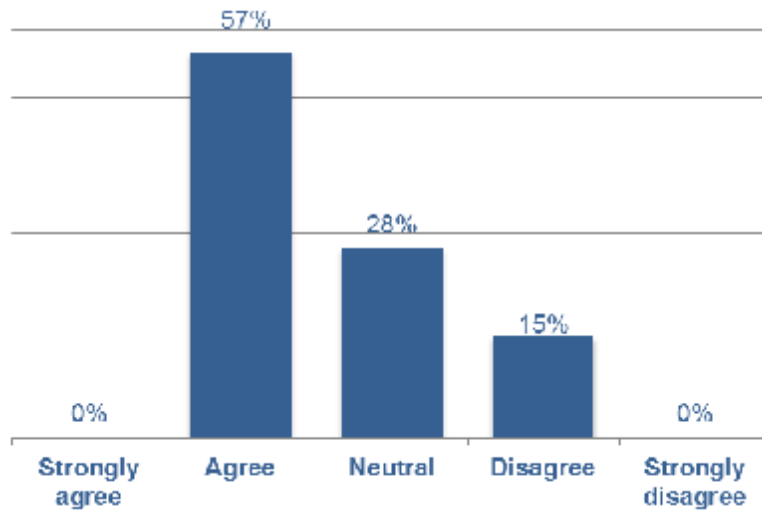


The ownership structure plays a critical role in defining the risk appetite within the syndicates and how far they are willing to go to trade off capital charge against higher returns. In a soft insurance market, this could prove to be a key differentiator to the performance between syndicates.

f) Solvency II may play a key role in driving industry consolidation

Building internal models to capture the various risk elements of the business is a lengthy and resource exhaustive affair. Syndicates that may have visions of consolidation in the future may try to expedite these plans to avoid going through the exercise of being Solvency II compliant post-integration.

Figure 13: Survey - "The cost of Solvency II will be too high and will outweigh the benefits"



As illustrated in the chart above, most respondents believe that the costs incurred to be compliant may outweigh the benefits. The implementation process and ongoing maintenance of a Solvency II compliant structure is expected to increase the cost of conducting business. Soft market conditions may not allow firms to pass on these costs to customers, causing margins to shrink and potentially trigger an increase in M&A activity within the industry.

Furthermore, Solvency II is expected to provide diversification benefits in the calculation of capital requirements. Diversification within an insurance group can be derived from a number of sources, for example across risk types, with exposures to different products and lines of business, or across geographies. A diversified group as a whole gives rise to more stable claims developments and hence to lower capital requirements. The incentive of capital relief benefits from diversification may fuel more industry consolidation, especially among firms that only cover limited geographies or sectors.

Finally, although at this stage it is still unclear whether the implementation of Solvency II will result in higher capital requirements, many commentators believe that these will increase. If their perception proves correct, some firms are likely to face difficulties in sustaining the higher charges and will therefore have an incentive to merge.

g) Solvency II may be implemented differently across Europe

Solvency II will be subject to the interpretations of the various regulators across the continent and will likely result in differences in the way it is implemented. When compared to the current regime in other European countries, the FSA regulation in the UK is closer to the spirit of Solvency II; with the introduction of the Individual Capital Assessment (ICA) in 2004 the British regulator already requires insurers to perform a self assessment of their own risk profile. As a consequence, British firms should be better prepared than others to embrace the new regime.

The FSA, however, is believed to be adopting a more stringent approach to implementation than its European correspondents. Approximately 71% of respondents believe that this is the case and some of our interviewees have expressed growing concerns that this could put them at a disadvantage relative to other European players and also relative to companies based in Switzerland, The Cayman Islands or The Bahamas that are not subject to Solvency II.

5. CLOSING REMARKS

The path to compliance to Solvency II is certainly a demanding exercise in terms of time and resources. Rumours in the City of London talk about an overall cost for the Lloyd's market of approximately £200 million, and during our interviews we came across many that believed this cost far outweighs the benefits of the new regulation.

There are clear long-term advantages for the overall European insurance industry in terms of increased competitive equality and comparability across firms. The greater transparency of insurers' accounts on their risk exposure will contribute to improve the quality of information for stakeholders, as well as the confidence of investors.

At the individual firm level, the transition may be challenging, particularly in the short term. Some players more than others will be forced into a significant cultural shift and may take time to adapt to the new regime. Some will have a strong incentive to merge in order to bear an increased cost of capital or to take advantage of diversification benefits.

Organisations with the flexibility to embrace the new regime from early on and the ability to consider Solvency II beyond a mere reporting requirement have an opportunity to improve their risk management approach and become more efficient capital allocators.

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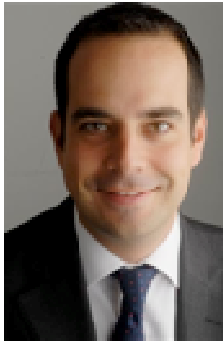
SELECTED REFERENCES

- § *Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) – 25 November 2009*
- § *Lloyd's Act 1982*
- § *Lloyd's of London (2009), Lloyd's Strategy 2010-2012*
- § *Lloyd's of London (2010), Lloyd's Interim Report Six Months Ended 30 June 2010*
- § *Financial Services Authority (June 2010), Issue 1 Delivering Solvency II*
- § *Financial Services Authority (September 2008), Insurance Risk Management – The Path To Solvency II*
- § *Insurance ERM (05 October 2010), Analyzing the capital and business implications of Solvency II*
- § *Insurance ERM (07 July 2010), Lloyd's blazes the Solvency II trail*
- § *Davies, P. (07 July 2010), Insurers still uneasy over Solvency II – Financial Times*
- § *Cruz, M. (2009), The Solvency II Handbook: Developing Enterprise Risk Management Frameworks in Insurance and Reinsurance Companies – Risk Books*

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