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Risk & Insurance Economics

Insurance Regulation
Reflections for a Post-Crisis World

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The Geneva Association

(The International Association for the Study of Insurance Economics)

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Insurance Regulation

Reflections for a Post-Crisis World

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Foreword
Twelve critical months...

The future size and shape of the international regulatory architecture for the insurance industry will become much clearer during 2012 and the discussions on that process are reaching a critical juncture. This is especially true regarding the discussions about financial stability: whilst the list of globally systemically important financial institutions (SIFIs) in banking was issued in November 2011, the methodology for identifying and designating global SIFIs in insurance seems likely to be set by the next Group of Twenty (G-20) summit in June 2012, in Los Cabos, Mexico, with further decisions being taken in late 2012.

Financial regulation has a profound impact on the way capital markets and financial systems operate and govern the velocity and parameters of their evolution. But regulation is always heavily influenced by political and social factors and reflects the interests of a variety of different stakeholders. It must, at the same time, maintain the highest levels of technical quality and address the key issues efficiently. Under ideal circumstances, the regulatory action would be as extensive as necessary but as limited as possible. However, regulatory frameworks always reflect an evolutionary process where changes have been introduced at different times and to address differing issues. This means that they are complex and highly fragile systems of interrelated and interdependent standards. It is clear, therefore, that any intervention into these systems requires prior clarification and testing, especially against possible unintended consequences.

The evolutionary change in regulation tends to be a slow and gradual process during normal market and economic conditions and the fundamental regulatory paradigm is usually not questioned as long as things work out in a broadly satisfactory manner. In times of major crises, however, the nature of regulation can be questioned and ensuing changes tend to be more than just evolutionary and are sometimes even radical. Every large financial crisis has triggered substantial regulatory reforms and this latest financial crisis has been no different. Considered by many to be the worst financial crisis in living memory, it has triggered an avalanche of financial services regulation, most of which will require years of institutional implementation and economic digestion. The risk, of course, is that hasty decisions are made in the spirit of political expediency that adversely affect the insurance industry and the rectification of these problems can only be effected through the aforementioned slow evolutionary process or maybe only following the next crisis when a broader regulatory reset might take place. One is reminded of the old adage, "act in haste, repent at leisure".

Since 2008, the global regulatory agenda has been driven by the G-20. However, the G-20 is only a network of national governments that was pulled together at a time of special need. It operates de facto by self-nomination (accounting for approximately 80 per cent of world GDP and international trade flows and domicile to two-thirds of the world population). Having no permanent executive structure, the G-20 has delegated many of the operational tasks of global financial regulation to the Financial Stability Board (FSB)—an institution whose experience is almost exclusively banking-related, a fact that is reflected in the constitution where only one seat of more than 20 is occupied by a dedicated insurance expert.

The obvious problem with this is that while different financial institutions and sectors performed differently throughout the current crisis, there is a risk that they are being treated in the same way for future reform projects, i.e. they might be submitted to the same reforms and put into the same basket regardless of whether such reforms respect their particularities and historic experience. The insurance industry proved to be extremely resilient during the recent crisis and hence should be more a source of positive examples and solutions for other industries rather than be subject to regulatory rules invented for different institutions and industries such as banking. The real challenge and concern in this context is how to push this message through to secure a playing field for the insurance sector where it can keep exhibiting its strengths rather than being submitted to weaknesses created in other parts of the financial system.

Only with a profound understanding of the technical issues can regulators effect a sound and efficient reform of complex industries and avoid possible market captures favouring one institution or industry over another. There is therefore a pressing need for maximum transparency and disclosure in the whole reform process. The insurance industry is highly complex and is not comparable overall with any other industry. It is also not well understood outside the circle of industry experts. Years of the industry keeping a low profile, its complexity and a lack of insurance alumni present in regulatory bodies mean that the overwhelming majority of people outside the industry are usually not familiar with its specificities. Furthermore they frequently misjudge its operations and the possible consequences of particular regulatory action, especially where such action might make sense for other financial institutions (that exhibit their special characteristics). Often what is needed is a specific insurance analysis and sometimes a specific insurance solution. The International Association of Insurance Supervisors (IAIS) has been charged by the FSB with carving out the specificities of the insurance industry for the forthcoming regulatory agenda. It is hoped that their expertise in insurance is acknowledged and respected in this process.

The role of the IAIS is made harder because the bodies responsible for the reform process prefer holistic solutions and often do not like complexity or special treatment, neither during the analytical and discussion phase of a reform when it adds to the cost and time of conceiving new rules, nor when they have to explain them and defend them. It is clear also, that regulatory reform does not happen in an economic vacuum. Many different market participants are affected in various ways and while some will suffer adverse consequences for their businesses, others might be better off in either relative or absolute terms. This in turn triggers more intense competition and one could expect the same to happen now in the wake of the massive changes that are reshaping the financial industry. Indeed it is not outside the realm of possibility that other industries such as banks, affected by the post-crisis regulatory reform, turn their lobbying attentions to the insurance industry for fear of losing a competitive advantage.

It has been a historical achievement of the insurance community, not least the IAIS, to bring insurance knowledge to the global discussions and to manage the decoupling of insurance regulatory reform from the banking process both in terms of time and treatment. It has afforded the regulators the rare chance to think more carefully through the upcoming decisions and take a sufficiently holistic perspective.

It seems most likely that the next 12 months will see some of the most important decisions made regarding the global insurance regulatory setup. The changes endorsed during this period —for the first time ever so intensely at the global level—could have a profound effect on the future of the insurance industry positively or negatively. Insurance is an industry entwined in the financial well-being and development of individuals, enterprises and economies, and that also, amongst other roles, represents arguably the best equipped private sector counterparty to support governments in tackling the upcoming demographic and old-age security crisis. A negative outcome for the functioning of the industry could also be negative for the world economy.

For this reason, we have produced this primer on insurance regulation that sets the context for these vital next months. The primer is part of a substantial body of work on financial stability and regulation by The Geneva Association and draws on selected contributions from a book published recently on the subject, *The Future of Insurance Regulation and Supervision. A Global Perspective* (Palgrave Macmillan 2011). The book is a collection of 27 articles written by leading insurance experts from academia, the business community and the regulatory world and edited by Patrick M. Liedtke, Secretary General and Managing Director of The Geneva Association and myself. The papers included in this publication are what we believe to be key analyses and considerations for this vital period for the future of the insurance industry and highlight some of the concepts that will be crucial in informing the debates that will prove to be so important.

We would, as always, welcome any and all feedback on this short report and any of our wider work.

For more of The Geneva Association's work on financial stability, please visit, *http://www.genevaassociation.org/Home/Financial_Stability.aspx*

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Executive summary

As we near 2012, the global financial crisis has taken on a new turn, and with it, debates on regulation and supervision of financial institutions are taking on new dimensions. Both regulation and supervision must be in line with the structure and financing of the insurance industry. From that perspective, The Geneva Association published a detailed and in-depth book on the subject in April 2011: *The Future of Insurance Regulation and Supervision—A Global Perspective*. Whereas the book looked into the long-term situation of regulation and supervision in insurance, this work focuses on the next 12 months to come, with three key pieces from the book portraying both the business and academic views of the situation.

The first article on "The Economic Rationale for Insurance Regulation", by W. Jean Kwon, Professor at the School of Risk Management of St John's University, U.S., details that, as we live in dynamic and constantly evolving markets, efficient and neutral regulation is necessary. Internationally, there is a rise in the use of a disclosure-based regulatory environment, with more support towards achieving a common international financial system with standardised international rules. Risk-based prudential regulation is increasingly supplemented by rules requiring broad disclosures of a company's finances, risks and strategies to not only stakeholders, but also the public at large. The article focuses on local responses to regulation, as compared to international ones. Local economies should strive for consistent regulation through finding common grounds and goals on which to work. Another focus of the article is risk management and decision-making on macro (government) and micro (individual) levels, and how these interlink. Depending on personal interests/situations, people will have a different perspective when managing risks and making decisions on personal economic choices. Governments here have a critical role, both in societal risk management and in economic risk management, as societal risks imply the notions of fairness and social justice, which will probably need more regulation, and governments continue to intervene in market activities. The article concludes that governments, like markets, can be imperfect. Indeed, not all strive to rectify and/or address social injustice and fairness or market failures. And those that do address this are not necessarily efficient at it.

Patrick M. Liedtke, Secretary General and Managing Director of The Geneva Association, discusses insurance activity as a regulatory object, its trends and developments and their appreciation in the context of post-crisis global markets in the second article. Due to insurance interconnectedness to other parts of the economic system, its regulation cannot be analysed and determined independently of regulation of these other areas of the economy. General financial regulation will also influence insurance's regulation. Many institutions are involved in the regulatory process, and regulation is determined on regional, national and international levels, which complicates matters further. After having looked at the rationale behind insurance regulation, Patrick M. Liedtke describes current regulatory debates in this complex environment. Then, he describes the role that the three main relevant institutions play in determining insurance regulation, namely the International Association of Insurance Supervisors (IAIS), the Group of Twenty (G-20) and the Financial Stability Board (FSB). The article concludes with six key points that will have a major impact on how the regulation of financial services in general, and insurance in particular, will develop: the fact that the crisis has made people more aware of true globalisation and its consequences, the questioning of neoclassical capitalism and the Anglo-Saxon financial hegemony, a new focus on national and international policies and a binding of resources, the creation of new, or revamping of current, institutions to deal with financial stability, international reform projects which push national agendas, and a higher relevance of politicians and public servants for economic issues. These issues need to be watched carefully.

Finally, Denis Kessler, Chair and Chief Executive Officer of SCOR SE, gives an overview of the ongoing economic and financial crisis and demonstrates its unique facets, which require unique responses, focusing on optimal, as opposed to maximal, regulation, taking into account the specific features of each industry. He insists on the real danger that inadequate regulation can pose to the global economy. It was, after all, inadequate regulation that created loopholes which turned into arbitrage opportunities for economic agents. Indeed, solutions should be "forward-looking", anticipating future trends, and not focus on addressing past issues only. Denis Kessler recommends that new regulatory measures trigger active risk management practices at insurance and reinsurance company levels, in line with each company's business plan and risk profile. Last but not least, readers will be reminded that the economy works in cycles—with inevitable ups and downs being part of the economic lifecycle. Instead of playing the blame game, or trying to fight these economic cycles, regulation should provide an optimal framework for economic activities in order to reduce the magnitude of cycle oscillations.

We hope that readers will appreciate the regulatory landscape from both industry and academic views, and will be able to form their opinions through this production.

Economic Rationale for Insurance Regulation

by W. Jean Kwon

In the current economic environment, we have observed a rise in the use of a disclosure-based regulatory environment internationally. Risk-based prudential regulation—particularly Solvency II and risk-based capital (RBC) regulation—is increasingly supplemented by rules requiring broad disclosures of a company's finances, risks and strategies to not only stakeholders but also the public at large. We also have observed a high degree of support, more or less as an outcome of the global credit crisis in the late 2000s, for a common international financial system with standardised international rules. Representatives of regulatory authorities and central banks in numerous countries share their knowledge and experience at the bilateral and international levels.

We also have examined why governments have a critical role in societal risk management and economic risk management. Social risk management deals with fairness and social justice and we expect more regulation than less in this perspective. For purposes of private sector financial services regulation, this role has evolved primarily from imperfections in the market. Of course, many of such markets become less regulated in terms of price and product but none are perfectly competitive. As such, the government continues to intervene with market activities. It is important to note that market failures are not indictments of the market and insolvency is an inevitable by-product of the capital market system.

Various theories attempt to explain the reason for regulation. None does so completely, as the market is dynamic and continues to evolve. Nevertheless, one fundamental philosophy should remain as a common denominator for all regulations. That is, regulatory efficiency and neutrality!

Potential non-neutralities may arise within a local economy if financial intermediaries are subject to different regulatory authorities. In the U.S. insurance market, for example, we observe the federal government agency plus 51 state regulators—some appointed and others elected—attempting to achieve their own goals which are not necessarily achieving regulatory efficiency.[1] At the same time, the regulated financial intermediaries may attempt to benefit from regulatory arbitrage when they can select among different regulators. Creating subsidiaries, altering corporate ownership and creating a holding company structure can be some of the examples.[2]

Just as there are market failures, so too are there government failures. Not all government interventions are directed toward rectifying social justice and fairness or market failures. Even among the interventions that are so aimed, not all are effective. Like the market, government actions also should be evaluated through an economic lens.

1 The 51 regulators include the one for Washington, DC. The U.S. also has regulators governing insurance matters in the jurisdictions and territories.

2 Carmichel and Pomerleano (2002) contend that heavily regulated parent companies could reduce their regulatory burden by shifting business into an unregulated subsidiary in a number of Asian countries and that the resulting regulatory arbitrage contributed to the Asian economic crisis in the late 1990s.

1. Market imperfections and societal risk management

Like individuals and businesses, governments attempt to maximise their welfare.[3] They commonly set guidelines and regulations to lead and control, respectively, individual or business behaviours and to lead their economic activities so that they in the aggregate help the government achieve societal welfare goals. Achieving the goals, however, does not necessarily mean that government helps its citizens maximise their own welfare. It is because citizens have their own preferences and utility functions. For example, one may believe that introduction of the mandatory public pension programme does society good, but what his or her neighbour believes and the neighbour's right often differ. Because of this and other types of differences in individual preferences, coupled with other reasons discussed in this chapter, there is no such thing as a *societal* utility function.

We find an alternative from economic theory. Efficient allocation of resources suggests that citizens should undertake risk management and other activities as long as the marginal benefit is greater than the marginal cost of each activity.[4] Theory suggests that the law of supply and demand is desirably the only one governing capital market operations. It would be so if the market were perfectly competitive.

As per gauging (marginal) benefits at the societal level, we can employ the concept of "willingness to pay" (WTP).[5] This concept generally relies on market prices. Are you willing to pay the US$100 price of a fine arts exhibition? If you are, presumably you have concluded that the benefits of attending the exhibition exceed the ticket price. If not, the price is "too high" considering the benefits. On its face, this approach seems reasonable. However, two issues arise despite the universal attempt to markets as competitive as possible.[6]

The first is the issue of fairness and social justice. For example, what if you are a poor citizen for whom US$100 spent on the ticket means that you must eat bread and peanut butter for a week? What if you are rich and do not need to sacrifice your appetite for quality food to attend the exhibition? One may conclude that it is "fair" to ration art exhibition tickets based on the WTP doctrine. What if it is healthcare that is being rationed based on the same doctrine? Should only rich citizens have access to healthcare? In the competitive (Pareto efficient) market, society's scarce resources are allocated such that no one in society can be made better off without making someone else worse off. However, society (government) may not necessarily prefer a Pareto efficient allocation of its resources if it results in some people having no access to a necessity, for example, universal health insurance, public education and public assistance.

Governments universally pursue concepts of fairness. Economics offer little support for these issues except when they involve externalities. Social justice and compassion and other non-economic factors also play a role. People generally agree that efforts should be made to rectify extreme inequality of wealth or opportunity. Nevertheless, there is much less agreement as to what constitutes "fair" and to the extent to which greater equality needs to be pursued for its own sake. These issues are complex because they are intertwined with culture and social values, which are not only abstract but also dynamic.

The second issue relates to the rigorous conditions required of the efficiency model in making decisions at the societal level. In economics, we evaluate trade-offs using the concept of

3 This chapter is based in part on selected sections in Skipper and Kwon (2007).

4 The net marginal benefit of a regulatory measure at the societal level can be estimated by the net benefit discounted by an assumed social discount rate: $\sum_{i=0}^{T} \frac{R_t - C_t}{(1+r)^t} \sum_{i=0}^{T} \frac{R_t - C_t}{(1+r)^t}$, where T is the life of the regulation, R_t revenues (benefits) at time t, C_t cost of regulation at time t, and r social discount rate.

5 Two other commonly used alternatives are the human capital approach and the direct cost approach.

6 The OECD (1998) observes that the primary public policy interest in insurance regulation relates to concerns over the willingness and ability of policyholders to observe and monitor the financial soundness of their insurance companies, especially when insurance is made compulsory.

opportunity cost. For example, would you spend US$5,000 for the additional cost of a hybrid car for better fuel efficiency or invest the same amount for better retirement life? The market says, in effect, that both options carry an equal value and the cost to society of each option is identical. But is this really correct? What if the car manufacturer managed to secure permission to hold the factory nearby an ecologically sensitive wilderness area? The production process can result in the destruction of wildlife and the pollution of the grounds and nearby streams. The US$5,000 price of the hybrid model does not necessarily include the cost for preserving the delicate environment and making right of any damages done by the manufacturer; that is, the opportunity cost of the hybrid car is higher than its price. Thus, besides the direct costs for manufacturing vehicles, the manufacturer is imposing costs on other people and society for which they pay nothing. In reality, market prices of some goods and services are below what they would be if all opportunity costs were included. With price too low, more will be produced and sold, hence imposing even more costs on others and society and using more of society's scarce resources than justified.

1.1. Market imperfections

Market imperfections reduce societal welfare and can greatly affect the quality of the decisions that the government makes to manage risk. We group the causes of market imperfections into: market power, externalities, free rider problems and information problems.

Market power. Several conditions can give rise to market power—the ability of one or a few suppliers or buyers to influence the price of a product or service. Governmentally created barriers to entry, economies of scale and product differentiation/price discrimination often create monopolistic or oligopolistic markets. In fact, most market power is facilitated by government actions. In financial services, for example, governments commonly impose national licensing requirements (an entry barrier), such as minimum capitalisation, fitness qualifications and, in some jurisdictions, detailed operating plans. Governments also tend to govern when and how insurance companies can be dissolved (an exit barrier). Problems of market power could thus be alleviated by reducing government intervention.

Economies of scale—another entry barrier—can afford a firm market power. In the market with scale economy effects, the larger the entity the more efficiently it can operate, thus putting new entrants at an immediate competitive disadvantage. Of course, whether a firm possesses market power from scale economies depends on its size relative to its market. Even a monopolist or oligopolist is unable to exercise market power in a contestable market because entry barriers are low and exit is easy in the market. In such a market, the mere threat of competition from possible new entrants may be sufficient to cause existing firms to behave as if the market were competitive.

Product differentiation occurs when one firm's goods are preferred by some consumers over its competitors'. All other factors held constant, insurers in a freer market are likely to differentiate their products based on product quality, service, location, reputation or other effective attributes. In a stringently regulation market (for instance, a market where a substantially large number of insurers produce similar but not identical products), they are likely to engage in monopolistic competition, thus wishing the ability to influence price. When firms offer identical products at different prices to different groups of customers, we observe price discrimination. Generally, governments prohibit price discrimination in insurance markets unless insurers justify price differences statistically.

Externalities. We already dealt with a case (the hybrid car manufacturer) involving an externality—the benefit or cost observed when production or consumption of a particular good has direct and uncompensated effects on others and society. Externalities can be positive or negative. Societal risk management is particularly concerned about negative externalities. With negative externalities, the price can be lower than the true economic costs of production, too much of the good or service is produced or consumed, and too little effort and resources are devoted to correcting or reducing the externality. Conversely, with positive externalities, the price becomes too high, too little of the good or service is produced or consumed, and too little effort and resources are devoted to enhancing the externality. All other things being equal, we observe more frequently problems of negative externality when property rights are not well established or widely dispersed, thus precluding effective actions by citizens against the wrongdoer.[7] Government action is often required to minimise or solve the problems.

Free rider problems. Some public goods—products and services that the public collectively consume—carry extensive positive externalities. A public good is what the public collectively consume and carries the attribute of non-rival consumption—one person's consumption of the good does not reduce its availability to others. When such products and services are available to others at low or no cost, they can bring about a free rider problem. Left to itself, a competitive market is not likely to provide as much public goods as society wants. Government action—for example, taxation—is often required to solve the problem.

Information problems. Information problems occur when consumers or suppliers lack sufficient information to make an informed purchase or sales decision, respectively. When we purchase goods, we commonly do so largely on good faith not as truly informed buyers.[8] We hope that some agency (usually the government) monitors the transactions to protect our interests and rights. Thus, markets that suffer information problems often are regulated, especially if the goods involved are important elements of our lives or the economy.

Information problems can be classified broadly into asymmetric information and non-existent information. Problems of asymmetric information can be further classified into:

- the so-called "lemons" problem (the buyer knowing less than the seller about the seller's product or service);
- the agency problem (the buyer knowing less about its agent's actions than the agent);
- the adverse selection problem (the seller knowing less than the buyer about the buyer's situation); and
- the moral hazard problem (the propensity of one party of a contract to alter its behaviour when risk is transferred to the other party).

An obvious solution is minimising, desirably eliminating, any information gap in business transactions. Contrary to the costless information assumption of the competitive market model, it costs to secure more thorough information in the real market. Tradeoffs are thus inevitable between the marginal cost incurred to become better informed and the additional cost inherent in making decisions with less information. Government actions are required when consumption of certain goods affect the public or the economy.

In many instances, the desired, complete information is simply unattainable. This kind of uncertainty leads citizens to take alleviating actions intended to reduce their exposure to the risk. Environmental factors—such as inflation and new laws—indeed present great uncertainty to the public and can render their decision-making suboptimal. Some citizens are so completely ill-informed—for example, regarding planning for financial security—that they will not or cannot protect their own best interests. Government actions are called for the creation of various safety nets for the citizens in the market.

As alluded to above, market imperfections can and do result in prices not reflecting the true economic costs. This finding suggests that no society should rely exclusively on competition to ensure adequate management of societal risk. Not surprisingly, governments have introduced

7 The Coase theorem suggests that the markets in which property rights are unambiguous and there are no transactions costs generate efficient outcomes, even with externalities. If this truly happens, government need not concern with any negative externalities—at least from a societal efficiency standpoint and individual self-interest leads its citizens to an efficient outcome.

8 Contracts in insurance and other financial services usually are of utmost good faith. However, this fact does not warrant that buyers, especially individuals and small businesses, are not well educated consumers.

scores of laws, regulations, guidelines and standards to ameliorate problems related to market imperfections. We also reiterate here that social benefits and costs often do not align with private benefits and costs. When this misalignment is substantial, society has economic justification for interfering in private decisions.

2. Regulation of private-sector financial services

The preceding section is mainly related to "social regulation" and government intervention at the societal level. In this section, we focus on "economic regulation" especially in insurance and other financial services.[9]

Private financial institutions sell a wide array of services. They are also financial intermediaries as they bring together providers and users of funds. Insurance companies (inclusive of those in the reinsurance market), depository institutions and securities firms comprise the three leading classes in the financial intermediation market.[10] Other types of institutions also exist. There are mutual funds and pension funds, which are more specialised, often large intermediaries. There is a range of other, often smaller, specialised intermediaries—such as finance companies, real estate investment trusts and mortgage companies.

We summarise below the role and importance of each type of these financial institutions.

- ***Insurance companies*** specialise in selling individuals and businesses contingent claim contracts that are payable to the contract holder (or its designee) upon the occurrence of a covered loss event. Particularly, life insurance products worldwide increasingly embed savings or investment elements on top of the traditional payment assurance of a fixed or variable sum in the event of death, incapacity or loss of health. As life insurance benefits generally are long-term debt obligations, holders of the funds—that is, life insurers—are major providers of long-term investment capital in many economies.
- ***Depository institutions***—most commonly commercial banks—take in funds principally as short-term deposits and make them available as loans to individuals and businesses. They are critical to the implementation of a nation's macroeconomic policy and their activities have considerable spillover effects in the economy.
- ***Securities firms***, also known as ***investment banks***, are involved more with direct intermediation (bringing together security issuers and investors) than with portfolio intermediation (management of security portfolios). They perform underwriting (packaging, pricing and selling of new debt or equity issues), investing (managing assets for institutional or private investors), market making and trading (working as either agent or principal) and custodial servicing (including M&A service).[11]
- ***Mutual funds*** are pools of managed assets offering investors convenient access to the securities markets. In the U.S., funds are sold predominately through securities brokers or directly to the public at no sales commission charges. In Europe, funds are sold predominately through banks. The number of mutual funds worldwide continues to grow rapidly, as do assets under management.
- ***Private pension funds***—of both employer-provided plans and individual accounts—specialise in managing diversified portfolios of assets dedicated to providing retirement income to plan participants. Pension fund assets might be managed by the fund itself or

9 Economic regulation refers to the government control of firm behaviours in a market with imperfections, whereas social regulation refers to the control of firm and consumer behaviours with respect to health, safety and environmental implications in a market. Unlike the case of economic regulation, we do not observe any move toward deregulation in the social regulation regime. In fact, the move in the regime is toward more stringent regulation.

10 The financial intermediation process includes several ancillary services such as financial advice, credit cards, brokerage and trust management.

11 When an investment bank assumes the role of the principal, it holds an inventory position in an underlying security, thus bearing the risk of future price fluctuations. This is an important distinction from a risk management perspective.

another financial intermediary or by the individual. Most pension assets are subsumed within the total assets of their managing intermediary, be it a bank, mutual fund or life insurer. Pension funds generally are considered parts of corporations or government agencies and not separate entities, so do not appear in listings of large financial intermediaries worldwide. Nonetheless, we know that the growth in private pension funds worldwide has been enormous, fuelled by ageing, more affluent populations, favourable tax treatment and revenue-starved public pension plans.

- ***Financial conglomerates*** are groups of companies that are under common management control and their predominant activities involve significant services—production, distribution or both—in at least two of the insurance, depository services and securities markets. Along with the structures like bancassurance, "allfinanz" and universal banking, financial conglomerates convey some notion of financial service convergence or integration.[12] Increasingly, non-operational companies own all or the majority of the shares in separately incorporated, capitalised sectoral subsidiaries.

All financial intermediaries, on the one hand, issue their own claims—that is, underwrite risks—whether in the form of insurance policies, savings accounts, collateral and non-collateral loans, security underwriting, etc., to clients and receive funds for doing so. They invest these funds in stocks, bonds and other income-generating instruments. Since their investment is not confined to the sector to which the savers belong, the funds can flow to the most productive sectors in an economy or abroad for possibly largest productivity gains. On the other hand, a financial intermediary may not underwrite all of the financial services it sells. Where permitted, some sell the services underwritten by other firms (for example, bancassurance).

Financial intermediation averts the need for savers to locate investors directly and vice versa. Hence, their services are essential to society. In theory, however, financial intermediaries would not exist in a perfectly competitive market because individuals and businesses in the market would have perfect information, incur no transaction costs and deal directly financial transactions with each other.

Conversely, savers in the real world afford less-than-perfect information and can experience net marginal benefits from engaging in transactions involving a financial intermediary. Customers often do not have the ability or resources to collect adequate information about the transactions they wish to engage in. Neither are they effective in monitoring the management of the invested firms. Financial intermediaries solve information asymmetry problems and agency problems by conducting research to help their clients make informed decisions and by monitoring the management of the firms in which their clients invest. Moreover, financial intermediaries assist their clients to create and monitor an investment portfolio in line with their individual risk appetite. What distinguishes insurance business from most other financial services is that insurers' underwriting processes are likely subject to greater possibilities of adverse selection and moral hazard than other types of financial institutions.

2.1. Theories of regulation

Several theories attempt to explain the reason for regulation—some more or less as a hypothesis and some others with empirical evidence. This section summarises key theories.[13]

12 The integration can be in the form of product integration (for example, unit-linked annuity, variable life insurance, securitisation of bank's asset or liability portfolios, and catastrophe bonds and other alternative risk transfers) or advisory integration (for example, risk management consultants, financial planners and attorneys offering liability, financial and legal risk management programmes) that does not necessarily require any supply-side integration or even cooperation. The product convergence trend continues, making advisory integration more complex, and regulation of the market more complicated.

13 See Bhattacharya *et al.* (1998) for a summary of the economics of bank regulation and Pacces (2000) for securities market regulation.

First, the ***public interest theory of regulation***—referred to recently as *normative analysis as a positive theory*—suggests that regulation exists to serve the public interest. Under this theory, the government seeks to prevent or make right significant societal or consumer harm resulting from market imperfections and to ultimately maximise economic efficiency in the market. This premise presumes that the government is capable of correctly identifying market failures and is functioning for the overall public good and that it is indifferent to conflicts in general and specific interest group pressures.[14] Empirical evidence, however, tends to be inconsistent with this theory, thus making it more as a hypothesis than theory with a practical application (See Viscusi *et al.*, 2005).

The capture theory assumes that regulation is in response to the industry's demand for regulation or the regulator becomes controlled by the regulated over time. This theory, too, lacks the support of empirical evidence. Neither does it successfully explain why regulation does not support other interest groups (stakeholders) in the regulated industry.

Stigler (1971) introduces the ***theory of economic regulation***. His theory advances the capture theory by attempting to answer why there is regulation and what industries are likely to be regulated. Notably, the key resource of government is "the power to coerce" and regulation is the use of power to restrict the decisions of its citizens and businesses (or economic agents in the aggregate). Regulation, he theorises, is acquired by and is designed primarily for the benefit of the regulated and in return regulators receive financial and political support so that they can continue to stay in office. In other words, the special interested groups demand regulation and tend to be well organised and financed, and the regulatory agency is created by the captured legislatures. Stigler proposes the following regulatory policies: direct monetary subsidy, control over new entry, control over substitutes and complements, and price control.[15]

Posner (1974) modifies Stigler's theory and proposes the ***equilibrium-based theory of regulation***. He explains that an equilibrium is "the product of coalitions between the regulated industry and the organised consumer group, the former obtaining some monopoly profits from regulation [and] the latter obtaining lower prices (or better services than they would in an unregulated market—all at the expense of unorganised, mostly consumer, groups." He also contends that the groups that can attain regulatory objectives share a common interest, lack to establish a cartel on their own and are geographically concentrated.

Peltzman (1976) suggests the ***self-interested theory of regulation***—also known as the Stigler-Peltzman Model and ***maximisation of political support theory***—under which regulators carry on regulatory activities to maximise their political support.[16] They, under one circumstance, would exhibit pro-industry biases to gain industry financial and other backing. Under the other circumstance, regulators would participate in activities that appeal to voting consumers (for example, price suppression) to gain their political support, even if the long-term effects were detrimental.

Joscow (1974) assumes that regulators (for example, in the electric utilities industry) wish to minimise conflicts and criticism subject to legal and procedural constraints. Under this ***minimisation of conflict theory***, the public will not be concerned with pricing as long as nominal prices are not rising and the regulated firm wishes to maximise long-term profits. However, economic analysis offers that the behaviour of the firm cannot be explained by a single variable.

14 McDowell (1989) contends that insurance is *sui generis* in many ways and is business clothed with a public interest, thus calling for development of a regulatory model just for insurance itself.

15 One may compare this to what Viscusi *et al.* (2005) propose: price control, quality control and market entry and exit control.

16 Peltzman models this theory using $M = nf - (N - n)\boldsymbol{h}$ $M = nf - (N - n)\boldsymbol{h}$, where M denotes the regulatory objective of maximising a political majority, n the number of voters in the beneficiary group, f net probability that a beneficiary grants support to the regulator, N the total number of potential voters, and h the net probability that the one who is taxed (every non-n) opposes the regulator. See D'Arcy (1982) for evaluation of this model.

Meier (1988) criticises that Stigler's theory is based on the assumed presence of mutual benefit exchange between the regulator and the regulated but not all industries demand regulation.[17] Further, many government agencies (for example, the Federal Aviation Administration and the Environmental Protection Agency) do not reflect the interest of the regulated. Regarding the U.S. insurance industry, he concludes that "capture" does not occur because the industry is too segmented to reach common policy goals, that state governments are not in full harmony—in tools and objectives—when it comes to insurance regulation and that the federal government (or Congress) continues to threat state governments if they fail to perform their duties. In sum, Meier finds evidence for a ***political theory of regulation*** under which regulation is shaped by the bargaining among multiple private interest groups—the regulated industry, consumers, the regulator and political elites (courts and the legislative body)—within the existing political and administrative structure. Each of these four groups has its own specific goals in the regulatory process and the influence of each group depends on the resources it can mobilise. These groups are not necessarily homogeneous, so bargaining outcomes depend on the particular issue on the table.

Consumers—even after factoring in the growing presence of consumer activist groups—tend not to be as well organised, financed or informed as do other interest groups. Protection of consumers, especially those in the markets with complex products, from the potential harm by other interest groups is justified, at least in theory, under the ***public interest theory***.[18]

2.2. Rationale for regulation

Development and maintenance of a sound financial market environment is important in every society. At the same time, we observe that the financial intermediation process is imperfect. A government thus can play at least two important roles in the market. First, it can play the role of supplier when the private market fails to, or does not wish to, provide financial security against certain risky circumstances that its citizens face (for example, risk of natural catastrophe).[19] Even when the private sector is willing, the government may decide to be the supplier of the security (for example, social security and national healthcare insurance). Second, the government attempts to minimise the chances that the economy or consumers in the private sector be harmed because of market imperfections. Regulation is the most typical tool it uses to manage the risk, provided that government intervention is limited to the circumstances under which market outcomes are, for some reason, unacceptable. In examining financial services regulation, therefore, we should be clear about the scope, role and types of financial intermediaries in the private market.

Recall that the imperfections in the financial services market are closely related to information asymmetry, market power and negative externality. Clearly, the information asymmetry in the market is the basis for most insurance and securities regulation, and, to a lesser extent, for banking regulation. Private financial institutions seek to create market power using market segmentation and product differentiation, generating scale and scope economy effects and scores of other strategies. This potential market power motive in the market gives another justification for government regulation.[20]

Negative externality in the private financial services market rises, among others, from the possibility of systemic risks. We can broadly identify two types of systemic risks in the market. First there is the "risk of cascading failure," meaning that the failure of one institution is the proximate cause of the failure of other institutions or even market collapse. An example is one bank's default on its short-term credit obligations to another bank precipitating other bank failures.

17 He also offers an extensive summary of empirical studies dealing with theories of regulation in Chapter 2 of his book.

18 Of course, it is not easy for a government to recognise the cases where an interest group's public interest arguments mask conflicting self-interest and private motivations.

19 Government risk-bearing is not discussed in this chapter but readers may find interesting the works by Flannery, Stiglitz and Connolly—all found as chapters in Sinderman (1991).

20 The reader may recall that government itself would hinders competition when it creates or preserves market power, for example, by creating market entry or exit barrier.

Bank regulation in principle and, to a lesser extent, securities and insurance regulation are to minimise the risk of cascading failure.

The second type is the risk of "runs," referring to the circumstance that a significant number of creditors (depositors) simultaneously attempt to withdraw their money and, often, in full. Such runs can be an event confined to a bank and its affiliates caused by a loss of confidence in the institution, often done with great haste by a real or imagined fear of insolvency. Capital, solvency and market conduct regulation in insurance and banking markets, along with the creation of guaranty fund and deposit insurance schemes, respectively, is in line with government's attempt to minimise this risk.

2.3. Government imperfections

Government intervention in a market for economic risk management would be justified if *all* the following three conditions are met: (1) actual or potential market imperfections exist; (2) the imperfections do or could lead to material economic inefficiency or inequity; and (3) the intervention can ameliorate the inefficiency or inequality. Conversely, no government intervention is warranted if at least one of the above conditions is not satisfied. More specifically, no government intervention is justified even when the market exhibits imperfections but they do not lead to meaningful inefficiency or inequality.

Even if the imperfections could lead to such inefficiency or inequality, government intervention will not be justified if the actions do not ameliorate the imperfection. In fact and as alluded to above, there is no guarantee that the government accurately assesses the imperfections. Government intervention can make matters worse and, retrospectively speaking, the proper government response would have been no action, even for inefficient markets.

Even if all three conditions are met, government intervention still may fail. As *market* failures exist, so do *government* failures. White (1996) groups the causes of the failures as follows:[21]

- Policymakers experience difficulty in identifying problems that are to be solved or implementing otherwise worthy goals.
- Agency problems exist in the government such that government employees who are agents for the public (the principal) have no strong or direct incentive to carry out laws and regulations fully and fairly. Besides, the overall compensation for civil servants is of less quality in many countries than agents in the private sector, an environment sometimes leading to laxity in performance and even abuse (for example, bribery).
- The regulated company or industry engages in economic *rent-seeking activity*.[22] Such activity is not only non-productive, but also decreases market efficiency and social welfare.
- Finally, and related to rent-seeking activity, there is the problem of capture. The regulated (for example, the producer) can be well financed and has substantial knowledge about interest in the regulation, whereas its consumers are not so well informed or organised. The regulator, because of its self-interest or ignorance, then may act in favour of the producer's perspective. Further, some government employees either are or hope to be closely allied with the regulated industry when they have or anticipate employment in the industry. This "revolving door" problem is associated with capture.

2.4. Regulation of insurance and other financial services

Generally, regulatory intervention falls into three categories. First, ***prudential regulation***, which is concerned with the financial condition of the financial intermediary, has evolved primarily

21 Specific to the cases of non-bank financial institutions, Carmichel and Pomerleano (2002) offer the following reasons: anticompetitive behaviour, market misconduct, information asymmetry and systemic instability.

22 Any payment to a factor of production in excess of the minimum required to bring forth or retain its service is referred to as "economic rent". Economic rent can be thought of as excess profits.

because of problems of information asymmetry and negative externalities (especially in the banking industry). Second, ***market conduct regulation***, referring to government prescribed rules covering inappropriate practices in the market, has been developed mainly because of information problems. Finally, ***competition policy (antitrust) regulation***, which is concerned with actions of the financial intermediary that substantially lessen competition, is primarily in response to problems of market power. Of the three types of regulation, prudent regulation remains the most critical one in government oversight of the financial services market operations.

Details of financial institution regulation, particularly prudent regulation, vary greatly cross countries as well as cross industries.[23] Nevertheless, some generalisations can be drawn in the extent of the activities that governments permit within a financial conglomerate. In a survey of 33 countries plus European Union Member States, the Institute of International Bankers (2010) finds that the majority, especially the largest states, permit financial conglomerates to undertake banking, insurance and security activities. It also finds that the majority of governments allow joint banking and securities activities, with most permitting banks to undertake securities activities within the bank itself. Several others require some or all securities activities to be undertaken through subsidiaries or affiliates. See Table 1 for detailed classification of the countries.

Insurance regulation, as well as banking regulation, is largely to monitor financial and operational soundness, thus to prevent insolvencies, in the market. Differences exist, however, in that the insurance monitoring is ultimately to protect the policyholders and claimants of defunct insurers whereas the banking counterpart is to prevent systemic risks—cascading failures and runs.

Every jurisdiction has an agency charged with overseeing and supervising its insurance marketplace. More specifically, government regulatory policy typically takes place at three levels. The legislative body commonly enacts laws to establish the country's broad legal framework. The judiciary enforces insurance laws and resolves disputes arising from insurance transactions. The state's executive branch carries out regulatory oversight. Because of the complexities in insurance business, policymakers commonly delegate this authority to a ministerial department, a (*de facto*) central bank or another government agency. The governing body may work with or further delegate its duty to a subordinate government agency (commonly, the Office of Commissioner) or a quasi-government agency.[24]

At the international level, the task of coordinating the work of national insurance regulators falls to the International Association of Insurance Supervisors (IAIS), formed in 1994. The IAIS promotes cooperation among insurance supervisors, sets international standards for insurance regulation and supervision, provides training for members and coordinates work with other financial services sector regulators and intergovernmental organisations. The IAIS represents more than 190 jurisdictions, with more than 120 observers. The IAIS issues principles, standards and guidance papers on issues related to insurance supervision.

The barriers among and distinctions between the main financial services sectors have begun to erode. This convergence raises the chance of market imperfections and systemic risk. This issue is no longer limited by national boundaries. With the continued globalisation of financial services, all stakeholders have become aware of the importance of coordinated and effective supervision of all industries in financial service. Several developments have already been made.

At the initiative of the Basel Committee, a group of banking, securities and insurance regulators examined in 1993 issues relating to supervision of financial conglomerates. The Tripartite Group, established in 1995, addressed cross-sectoral issues associated with integration on an

23 Carmichel and Pomerleano (2002) propose four main components of the regulatory framework for financial institutions. They are: (1) objectives (the reason for regulation and the societal expectation related to it); (2) structure (the desirable structure of the regulatory agency); (3) backing (the political, legal and financial backing for the regulators to effectively carry out their duties); and (4) implementation (the instruments and techniques for actual carrying out of regulatory objectives).

24 One or more industry associations bridge the regulator and the regulated in a number of countries.

Table 1: Regulation of Financial Conglomerates (2010)

Consolidated supervision applied to bank subsidiaries and affiliates of domestic and non-domestic financial groups		Consolidated supervision applied to bank subsidiaries and affiliates of domestic financial groups but not to bank subsidiaries and affiliates or unincorporated branches/agencies and affiliates of non-domestic financial groups	Consolidated supervision is not applied to either domestic or non-domestic financial groups
And to unincorporated branches/agencies and affiliates of non-domestic financial groups	But not to unincorporated branches/agencies and affiliates of non-domestic financial groups		
Argentina	Australia[8]	Czech Republic	Chile
Brazil	Austria[9]	Denmark[15]	
Canada[1]	Bahrain	Germany	
China	Belgium	Turkey	
France	Bermuda[10]		
India	Cayman Islands[11]		
Indonesia	Finland		
Ireland	Hong Kong[12]		
Israel	Korea[13]		
Italy	Latvia		
Japan	Norway		
Luxembourg	Poland		
The Netherlands	Singapore[14]		
Panama	The United Kingdom		
The Philippines			
Romania[2]			
South Africa[3]			
Spain[4]			
Sweden[5]			
Switzerland[6]			
The United States[7]			

Source: *Global Survey 2010*, Institute of International Bankers, p. 9.

1 The Office of the Superintendent of Financial Institutions (OSFI) oversees the operations at the federal level, while certain entities within a financial group (for example securities and insurance companies) may also be subject to supervision by provincial agencies.

2 For the EU non-domestic branches, reliance is placed on home country supervision. For the non-EU non-domestic branches, the Romanian legislation provides in principle for the same treatment as for institutions that are Romanian legal persons.

3 Consolidated supervision extends to all the companies in a banking group, including the controlling company, its subsidiaries, joint ventures and companies in which the controlling company or its subsidiaries have a direct or indirect participation.

4 As far as subsidiaries, affiliates or branches of non-domestic banks are concerned, consolidated supervision refers to their respective "Spanish sub-groups".

5 Regarding affiliates of banks within the European Economic Area (EEA), the Swedish authority has a shared responsibility with the home country supervisor. After notification to the Swedish supervisor a home country supervisor may conduct an on-site exam at an affiliate location in Sweden.

6 Swiss Banking law requires the Swiss Federal Banking Commission to exercise consolidated supervision over bank subsidiaries and affiliates of domestic financial groups. Bank subsidiaries and affiliates of non-domestic financial groups and unincorporated branches/agencies of non-domestic financial groups are only allowed in Switzerland if they are subject to consolidated supervision by their home country banking authority.

7 Under the Gramm-Leach-Bliley Act of 1999 and the International Banking Act of 1978 the U.S. Federal Reserve Board makes determinations regarding the capital strength of the non-domestic banking organisation that seeks to become a "financial holding company" or engage in other nonbanking activities permissible for bank holding companies.

8 The Australian Prudential Regulation Authority (APRA) supervises locally-incorporated ADIs (including their overseas branches and subsidiaries) on a consolidated basis. APRA also supervises foreign-owned locally-incorporated ADIs (and their subsidiaries and any overseas branches) on a consolidated basis. Foreign banks operating as branches in Australia (foreign ADIs) are subject to supervisory oversight on the branch operations in Australia. APRA does not supervise on a consolidated basis unincorporated branches, agencies and affiliates directly owned by non-domestic financial groups, but requires such entities to be subject to adequate consolidated supervision by the parent supervisors of the foreign ADI operating in Australia.

9 Within the European Union (EEA countries) reliance is placed on home country control; non-EU countries: the Austrian Banking Act stipulates that a non-EU non-domestic branch is treated in principle in the same way as an independent credit institution is treated. Thus, the Austrian branch is obliged to fulfill the Austrian regulatory and supervisory provisions independently. The situation of the entire bank will not be taken into account. However, legally the branch is not deemed to be independent.

[10] Bermuda does not license branches of overseas banks. Consolidated supervision is applied to the licensed entity and to any subsidiaries or affiliates.

[11] The Cayman Islands Monetary Authority (CIMA) supervises locally incorporated authorised institutions on a consolidated basis, covering their subsidiaries as well as local and overseas branches. CIMA will also require that branches of foreign incorporated banks are under adequate consolidated supervision in their home country. This is one of the minimum authorisation criteria that will be assessed at the time of authorisation and on an ongoing basis thereafter.

[12] The Hong Kong Monetary Authority (HKMA) supervises locally incorporated authorised institutions on a consolidated basis, covering their subsidiaries as well as local and overseas branches. The prudential requirements and supervisory approach applicable to foreign bank branches are broadly the same as those for authorised institutions incorporated in Hong Kong. The HKMA will also require that branches of foreign incorporated banks are under adequate consolidated supervision in their home country. This is one of the minimum authorisation criteria that will be assessed at the time of authorisation and on an on-going basis thereafter.

[13] As far as subsidiaries, affiliates or branches of non-domestic banks are concerned, consolidated supervision refers to their respective Korean sub-groups.

[14] The Monetary Authority of Singapore (MAS) supervises Singapore-incorporated banks on a consolidated basis, taking into account the operations of their domestic and overseas branches and subsidiaries. MAS does not supervise on a consolidated basis unincorporated branches, agencies and affiliates of non-domestic financial groups but takes into account, among other things, the adequacy of consolidated supervision exercised by parent supervisors for the foreign banks' operations in Singapore and overseas in considering applications made under our licensing and regulatory processes.

[15] If the parent company is located abroad only the subgroup is encompassed by the consolidated supervision.

international level. The Joint Forum on Financial Conglomerates, founded in 1996, took forward the work of the Tripartite Group. The Joint Forum consists of an equal number of banks, securities and insurance supervisors representing the Basel Committee, the International Organization of Securities Commissions (IOSCO) and the IAIS.

A few other regional economic associations and regulatory organisations exist. They include, but are not limited to, the International Network of Pensions Regulators and Supervisors (established in 2000), the Financial Stability Forum (1999), the Financial Sector Assessment Programme (1999) and the Islamic Financial Services Board (2002).

3. Future prospects

The Asian and other financial crises of the late 1990s and the recent global credit crisis brought forceful attention to how inadequate financial services regulation adversely affects national regional and global economies.[25] They called for closer attention of the local regulatory authorities—especially in countries with a sector-based regulatory structure—to the financial service sector as well as for enhanced regulatory coordination and cooperation internationally.

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Insurance Activity as a Regulatory Object

Trends and Developments and their Appreciation in the Context of Post-Crisis Global Markets

by Patrick M. Liedtke

Introduction

Insuring risks in a modern economy is a multi-dimensional and very complex undertaking. As described in greater detail in a contribution to *The Geneva Papers on Risk and Insurance—Issues and Practice*,[26] it is a highly sophisticated financial business that interacts with many aspects of our lives. The importance of the insurance industry for an economy can only in part be measured by the number of its employees in a given country, the assets under management, or its contribution to the national GDP. It actually plays a more fundamental role in the workings of a modern society, being a necessary precondition for many activities that would not take place were it not for insurance. Insurance is a key component of economic development and an important driver for growth. It should therefore not surprise much that all countries around the world regulate insurance companies rather heavily and have placed the activities in their insurance markets under close supervisory control.

However, even ambitious regulation and tight supervision can fail as the credit crisis has shown—in this case especially in the banking sector, but the point is generally valid for all regulated activities. The impact of the problems first arising in the U.S. mortgage sector and then engulfing the banking sectors of most developed and many emerging countries resulted in an extremely challenging and busy period also for all those connected to the insurance industry. And while most insurance managers were busy trying to minimise the impact of the crisis on their business and their clients, those concerned with financial regulation and supervision became hyperactive as well, often driven by policymakers who were worried that the impact on insurance could be worse than it ultimately turned out to be. Suddenly, highly sophisticated and complex issues became the subject matter of a heated political debate in public as well as private discussions. Key actions taken in the midst of the soaring financial crisis gained in relevancy, especially where they were not only concerned with immediate fire-fighting but meant to make a longer-lasting contribution to more stable and resilient financial systems. The credit crisis and its consequences have doubtlessly inspired much of the systemic reforms undertaken recently worldwide. This directly provoked a regulatory explosion that seems to appear always after major failures in an existing financial infrastructure. Hence, the proactive addressing of problems that seem to be challenging the existing regulatory paradigms is therefore nothing new even though some observers seem to be surprised at the speed and intensity with which this has occurred and still is occurring. However, we would posit that the bigger the failure, the more sweeping reforms are proposed and subsequently implemented. Consequently, given that the world was faced with the most devastating financial crisis since the Great Depression, it should not be surprising that we are going to experience a regulatory and supervisory overhaul that will be commensurate with the extraordinary dimension of the crisis.

26 Liedtke, P.M. (2007).

What might come as a surprise, however, is how the insurance industry has been and is drawn into some regulatory and supervisory discussions where it should play no (or at least a much less prominent) role as the key problems emanated from other parts of the financial services sector. And it is equally surprising how much insurers are excluded from other discussions where they are very much affected by the outcome, but considered to play no significant role. In this regard, there is something new in the current process, an important new quality to our current endeavours to set the financial services sector right: the global reach of the current considerations. Never before have so many (often sweeping) reforms been undertaken that not only affect the banking sector but also other parts of the financial services sector, such as insurance, the social systems and of course our real economy. The present discussions demonstrate how much contemporary economic systems are inter-linked and to which high degree they depend on the well-being of the financial system, its constituent parts and the regulatory and supervisory framework that is supposed to provide the necessary stable preconditions for its operation.

Insurance as regulatory object

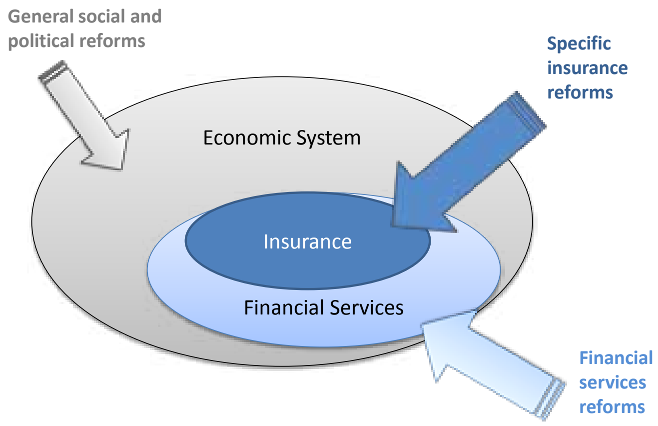
Insurance markets do not operate independently of the rest of the economy. On the contrary, like traditional horizontal activities such as energy, telecommunications or banking, it penetrates the modern economy on many levels. Today, in all advanced and emerging markets, insurance plays a key role for the efficient and sustainable development of the economy, harbouring expertise that is unavailable elsewhere. It is often the precondition for (economic) action, facilitating new ventures and is intertwined with the most basic human needs and aspirations. The availability of insurance has important positive effects and externalities that go far beyond the purely financial. It is not only a tool for addressing the immediate risk assessment and risk management challenges before us; it can also be a powerful mechanism to discover and incentivise the right behaviour.

Due to this strong connection with other parts of the economic system, insurance regulation also depends on regulatory action taken elsewhere. Any significant change in the way a modern economy is set up and governed will have an impact on how the associated activities can be insured or influence relevant parameters that will affect the risk transfer among concerned parties. Regulating general economic issues like e.g. contractual obligations, operating procedures or fiscal aspects for all participants in a modern economy will determine the insurance framework as well. In a similar manner, general financial regulation as a whole affects insurance. When general norms for accounting, auditing, financial reporting or the business relations between financial intermediaries are laid down, the insurance industry—barring any special carve-outs—will have to adhere to them as well. As a consequence, insurance regulation can be understood as a subset of the regulation that affects all economic activities and a subset of the general financial services regulation. Graph 1 shows this in a stylised way.

This setup has important consequences for the development of insurance regulation. In order to appreciate the full impact of changes to the way in which the insurance sector will function in the future, it is not enough to exclusively look at the specific changes in insurance regulation. We need to comprehend where societal trends are moving to better recognise how the economic system will be influenced in its future development. And we will have to take any general reforms of the financial services sector into account as it will impact the insurance sector too.

What complicates matters further is the sheer number of institutions that are involved in the process to devise any regulatory reforms that affect the insurance industry. By one unofficial expert count, there are between 350 and 400 entities worldwide that are directly involved in the process—and this does not include any of the bodies that have an indirect impact, such as for example those setting construction norms that affect the way in which property risks are insured or those devising technical standards that define risk profiles in engineering. But even if there were only half as many, it would still be way too much for a clear and transparent process that

Graph 1



would follow the Skipper-Klein principles mentioned later on in this paper. Just making oneself familiar with all the proposals, calls for comments, draft papers and white papers, consultations, discussions and proposals is bordering the impossible and any interested party constantly risks missing out on a pertinent element or being surprised by some new development.

This is not made easier by a high degree of interdependence of various local solutions that are discussed in a different environment than the international ones. There is a constant balancing act between what is happening on a national level and what happens on an international, read global, one. In the case of the European Union, matters are even more convoluted as there is a layer of (limited) regional authority in between the nation states and their sovereignty, and the truly international fora. The current intensity of the debates and the sometimes fierce reactions to certain proposals are explained by this additional element of stress.

Unfortunately, this multitude of institutions not only exists on the side producing initiatives for insurance-related reforms—which alone would be challenging enough. The insurance industry itself has also created an impressive number of trade associations, expert groupings, technical bodies, etc., that are all involved in the process. These entities are often overlapping in their mission and/or membership, sometimes even rivalling in their goals and are often enough not more than only loosely cooperating. The result is a challenging environment in which a cacophony of voices is the rule rather than the exception.

The rationale behind insurance regulation

So what is the rationale behind the regulation of insurance activities and why do we need to regulate them in the first place? There are many excellent articles on the basic principles of insurance regulation and the International Association of Insurance Supervisors (IAIS) and its national members habitually put out papers in which they justify the interference in what would otherwise be free markets. [27] The short answer to the above question is that regulators want to ensure competitive, solvent, and fair markets in which all key stakeholders are adequately protected. To achieve this, a fine balancing act is necessary: the various objectives have to be pursued in such a way that risk transfers can take place in an efficient way and that access to risk

27 The IAIS sets out principles that are fundamental to effective insurance supervision. Principles identify areas in which the insurance supervisor should have authority or control and that forms the basis on which standards are developed. The latest version of the core principles are available from the IAIS website at *www.iaisweb.org*. The IAIS also puts out guidance papers on insurance regulation and supervision and many technical documents.

transfer markets is open to interested parties. Regulators should ensure that quality, reasonably-priced products and services are available from reliable insurers.

During the financial crisis, solvency considerations for insurers became an issue that had many financial supervisors deeply unsettled. The collapse first of Lehmann Bros. and then AIG[28] had them worried about the resilience of the financial system and its key constituents. For the insurance industry, AIG—long heralded as the world's largest insurer despite its true operations as a financial conglomerate and its aggressive and ultimately fateful risk-taking on the non-insurance side—became the showcase on how close insurance was to the centre of the problems in the banking sector. It was and still remains to this day a key reference point for financial regulators when they consider new actions to regulate, especially large internationally active entities. One has to understand therefore that the current wave of regulation is driven chiefly—as to be expected and true to most regulatory waves preceding it—by the latest experiences from the financial crisis.[29]

There are some additional basic aspects that can further help situate the current reform debates. First up is the desire of all relevant stakeholders not to be caught off guard again. This not only applies to the regulators and supervisors and their political masters but also to the insurance industry, with its clients, its investors and bondholders and many business partners. All these parties generate a lot of energy to put things right. However, their interests are not always fully aligned and sometimes even openly opposed. While supervisors would strive for more solvency capital to better protect insurers against mishaps, the companies might regard too high a solvency ratio as detrimental to their profit generation capacity. While clients appreciate capital buffers for their added layer of protection, they do not like to pay higher insurance premiums to finance them. While policymakers like to set frameworks under which many insurance products are available to many parties, supervisors do not always appreciate complexity and convolution in the market place as it makes their job more difficult.

It is obvious that every new wave of regulation produces winners and losers; hence competition among the parties concerned is fierce. This competition does not only take place among insurance companies of a different type, sometimes pitting large against small, specialist against generalist, national against international, or mutuals against publicly traded companies. The competition also occurs among supervisors who want to be seen in control of things, especially following some of the more spectacular failures that occurred during the credit crisis. Regulators and policymakers vie for attention and have to be careful not to engage in a competition for who comes up with the most punishing rules. And for politicians this is a chance to shine, build more political capital and maybe even get an important reform project named after them, thus receiving the public recognition so important for winning the next election. In consequence, activism rather than cool objectivity is a constant danger and the objective of properly conceived regulation becomes entangled in special interests and cluttered with ulterior motives.[30]

In their 1999 paper,[31] Skipper and Klein came up with a set of principles that insurance regulation should follow: adequacy, impartiality, minimal intrusiveness, and transparency. It is hard enough for regulators to meticulously follow these principles at the best of times. In the current environment, it would be very naïve to assume that they will not be violated at least partially in the process to deal with the aftermath of the crisis and to prepare a new framework under which financial services and insurance companies in particular will operate.

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28 For further information on the AIG rescue see United States Government Accountability Office (2009).

29 It is especially instructive to read the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was introduced and later signed into law in July 2010 as "*An Act to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail', to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes*." A comprehensive summary of this act can be found at *http://banking.senate.gov/public/_files/070110_Dodd_Frank_Wall_Street_Reform_comprehensive_summary_Final.pdf*.

30 James Schiro (2006) for example writes, "*The process of designing new regulation is not always perfect. Too often regulators react to political pressure or regulation emerges through litigation and not in response to sound economic criteria*."

31 Skipper and Klein (1999).

Regulatory debates in a complex environment

An added complexity for new regulatory initiatives arises from the fact that the financial sector is very heterogeneous. This is not only true for the difference in business models between banks, insurers and other financial intermediaries. It equally applies to differences in national regulatory and supervisory approaches that are quite dissimilar even among highly developed economies, not to mention the gulf between them and emerging markets or the least developed countries. Also, the insurance world itself is home to very distinct approaches to dealing with risks; notice the variation in methodologies employed and instruments used by life companies and non-life companies. And then there are different organisational set-ups, such as publicly traded companies that have dissimilar funding and governance structures, to mutual companies where the policyholders are the owners of the operation.

The problem here resides chiefly in two fields. Firstly, the complexity of such a heterogeneous population of entities to be regulated and then properly supervised requires a very deep appreciation of the differences. It then demands a high sophistication when it comes to drafting and implementing new rules so that any unintended consequences can be minimised. Secondly, it almost forbids the use of "one-size-fits-all" approaches and the extension of rules designed for one specific part of the financial services sector to all (any) others. This results in much more complicated and lengthy processes for regulatory initiatives than many regulators and policymakers would like. Indeed, it seems to run counter the natural reaction of politicians to address problems swiftly and in a comprehensive way. It also requires more substantial communications efforts to ensure broader support for reforms. The more complex the reform, the more difficult it is to sell to voters and to convince the affected constituents that it is in their best interest.

In the current context, this sets the bar very high, especially for the insurance sector that cannot rely on a large population that is familiar with its complex business.[32] This puts insurance at a disadvantage as the risk of misinterpretation, misunderstanding and just plain confusion during any key discussion about the future rules and norms that should (and also those that should not) be applied to its business is a significant factor. *Ceteris paribus* this has to lead to sub-optimal solutions. The insurance industry is very concerned about this issue and The Geneva Association has pointed it out many times.[33]

The institutional way forward on a global scale

In the following subchapters, three most relevant institutions that are determining the longer-term future of insurance regulation will be discussed: the International Association of Insurance Supervisors (IAIS), the Group of Twenty (G-20) and the Financial Stability Board (FSB).

The International Association of Insurance Supervisors (IAIS)

Despite the fact that there are so many institutions actively involved in setting the pace of the current and coming reforms, there are some institutions that from a global perspective have more weight and/or impact than others. In terms of direct insurance regulation and supervision, the

32 Many insurance trade associations around the world have as one of their briefs to educate policymakers and the wider public about insurance issues. Especially active and well-developed on the consumer side is the Insurance Information Institute in the U.S., see *www.iii.org.* Since the credit crisis highlighted in an especially drastic way the problems associated with a lack of proper understanding of the complexities of insurance operations even by regulatory and supervisory authorities for the financial sector, The Geneva Association (*www.genevaassociation.org*) has made a special effort to address this issue. It now provides more papers, analytical studies, reports and other texts in order to raise the quality of the most relevant discussions about insurance issues that influence the framework of insurance markets. For creating efficient and resilient markets it is vital that public policymakers fully understand the unique role played by insurers in managing risk, the issues affecting the industry, both from financial and market conditions, and the special nature of insurance regulation.

33 See the various newsletters issued by The Geneva Association research programme on regulation and supervision (PROGRES), or the ones published by its Insurance and Finance Programme. All available from *www.genevaassociation.org*.

IAIS plays the central role. The organisation was established in 1994 and represents insurance regulators and supervisors of some 190 jurisdictions in over 130 countries, constituting over 95 per cent of the world's insurance premiums. Its key "*objectives are to*

- *cooperate to contribute to improved supervision of the insurance industry on a domestic as well as on an international level in order to maintain efficient, fair, safe and stable insurance markets for the benefit and protection of policyholders;*
- *promote the development of well-regulated insurance markets; [and],*
- *contribute to global financial stability*."[34]

The last point only entered the central brief of the IAIS at a high level recently and is a reflex of the experience of the credit crisis as well as the push of the political masters behind the IAIS to strengthen its role in this respect.

The IAIS is fully involved in all relevant discussions about the future regulatory framework under which the industry operates. Through its more than 120 observers and open hearings, it interfaces closely with the insurance industry. However, it lacks the real power of a true standard-setter in the sense that it can only describe best practices and provide key principles, known as Insurance Core Principles (ICP), for the regulation and supervision of insurance markets. It can neither push through binding agreements, nor enforce the application of its standards in the home markets of its members. Despite this limitation, it has a *de facto* influence of very significant proportions and is the key insurance supervisory body that represents insurance expertise in the Joint Forum, the Financial Stability Board (FSB) and other relevant international bodies that deal with financial issues. The IAIS is also central for bringing together the key national authorities that exert the direct control over the industry and it sets the agenda for the advancement of regulatory developments in insurance on the international level.

The ICP act as the benchmark for any insurance supervisory regimes and, according to the IAIS, should be used when establishing a supervisory regime or for identifying areas in existing regimes that need to be improved. The ICP currently comprise 28 essential principles which are organised under seven distinct categories: (1) conditions for effective insurance supervision; (2) the supervisory system; (3) the supervised entity; (4) ongoing supervision; (5) prudential requirements; (6) markets and consumers; and (7) anti-money laundering and combating the financing of terrorism.[35] The following paragraph from the ICP document is noteworthy as it underlines the close connection between insurance regulation and larger financial services concerns: "*Public authorities concerned with issues of financial stability are urged to provide the necessary support to the supervisory authority so that it can meet the principles and the criteria set out herein*".[36] It also bears testimony to the anxiety of IAIS members to secure the necessary resources to carry out their tasks.

The Group of Twenty or G-20

From a political point of view, the currently most important source for international regulatory initiatives is the Group of Twenty or G-20. The G-20 is a self-organised group consisting of the finance ministers and central bank governors from 19 countries plus a special seat for the European Union. It describes itself as "*...the premier forum for our international economic development that promotes open and constructive discussion between industrial and emerging-market countries on key issues related to global economic stability. By contributing to the strengthening of the international financial architecture and providing opportunities for dialogue on national policies, international co-operation, and international financial institutions, the G-20 helps to support*

34 See the mission of the IAIS as per *www.iaisweb.org*.

35 Cf. The IAIS Insurance Core Principles and Methodology of October 2003, cited as per latest available modified version of 7 March 2007 downloadable from *http://www.iaisweb.org/view/element_href.cfm?src=1/94.pdf*.

36 *Ibid.*

growth and development across the globe."[37] The members of the G-20 represent about two-thirds of the world's population and approximately 85 per cent of the global national product.

The G-20 was originally created as a response to the financial crises of the late 1990s. A key motivating factor was the growing recognition that key emerging-market countries with increasing global economic and financial relevance were not adequately included in the core of global economic discussion and governance. Following the full eruption of the credit crisis in 2008, it was the forum of choice for the leaders of the largest economies around the world (both developed and developing) to tackle the problems that the crisis created. The members wanted to strengthen international cooperation in the face of the largest financial emergency since the Great Depression. In the process, the G-20 has become the source of many important concerted actions comprising a wide array of measures like the introduction of unprecedented expansionary macroeconomic policies in member countries, the push for significant enhancements of international financial regulation (mostly concerning banking but also such affecting the wider financial services sector), and the expansion of resources to strengthen the international financial institutions. One key step was the transformation of the Financial Stability Forum (FSF) into the Financial Stability Board (FSB), which is discussed in the next subchapter.

Today, the G-20 acts as a key source and driver of a new wave of regulation in the international sphere that is relevant to many countries beyond the 20 members. And although up to date, no major projects have seen full implementation in all member states, many highly relevant projects exist where broad international agreement has already been reached, such as: dealing with tax havens/non-cooperative jurisdictions (cf. Global Forum on Transparency and the Exchange of Information), new compensation rules (FSB Principles, national legislation), the establishment of macro-prudential watchdogs (European Systemic Risk Board (ESRB), FSB), the overhaul of capital requirements (Basel III, Solvency II), the creation of a global liquidity standard (liquidity coverage ratio), the market infrastructure for derivative contracts (Central Counter-Parties (CCP)) and the regulation of rating agencies (International Organization of Securities Commission (IOSCO) code of conduct, EU regulation on credit rating agencies). Further projects are aimed at improving the current status quo but still require some more development. They include: the introduction of counter-cyclical capital buffers, resolution regimes for large banks ("too-big-to-fail"), further development of accounting rules (IFRS 9, IFRS 4 Phase II), deeper and more comprehensive bank regulation (contingent capital, capital surcharge), special hedge fund regulations (Alternative Investment Fund Managers Directive (AIFMD), Dodd-Frank-Act), and fees and levies such as the financial crisis responsibility fee or bank levy.[38]

The G-20 is without doubt very important, but it has two potential weaknesses with regards to its future development: firstly, it has no specific democratic legitimisation beyond the decision of its members to co-operate and there is no objective and widely accepted mechanism to decide on who should be allowed to participate in the group. And secondly, now that the credit crisis seems to have evolved out of its most threatening phase, the interests of its members in the post-crisis setting are starting to diverge. As long as the common menace of a global collapse of the world's financial system united the members in their efforts and concentrated the minds of those that had to take the key decisions on a common goal, co-operation was easier. It will be interesting to see how the G-20 will develop in the future as the global financial markets and the world economy are in need of a body that takes the lead in determining under what rules nation states and the different markets can and should collaborate.[39] In any case, for the present and the immediate

37 Cf the mandate of the G-20 as per *http://www.g20.org/en/g20/what-is-g20*
38 For more detailed information, see the current projects on the G-20 website (*op.cit.*).
39 For some, the International Monetary Fund (IMF), founded in 1945 and comprising more than 180 members, would be a more appropriate international body to steer global economic and financial affairs. However, at this time it is clearly the G-20 which is the source of most initiatives to deal with the economic and financial problems on the global level. Depending on how both the G-20 and the IMF develop, the prominent role of the G-20 could diminish in favour of either the IMF or maybe even a third body.

future, anyone trying to understand where the regulatory discussions are heading, will have to pay close attention to the G-20 and its initiatives.

Financial Stability Board (FSB)

In the area of financial services regulation, there are many very relevant bodies, but one of them has become the central focal point for overcoming the problems linked to the credit crisis: the Financial Stability Board (FSB). The FSB, established in April 2009, is the successor organisation to the Financial Stability Forum (FSF), which itself dates back to 1999. As a consequence of the spectacular failure of the previous setup of global financial market regulation and supervision, the realisation of the disastrous shortcomings of the former system of financial cooperation among the large economies and in particular among the banking sector supervisory authorities, and in the face of an inability to deal adequately with financial systemic risk on a global level, the leaders of the G-20 countries called for a larger membership of the FSF in November 2008. As the FSB writes, "*A broad consensus emerged in the following months towards placing the FSF on stronger institutional ground with an expanded membership—to strengthen its effectiveness as a mechanism for national authorities, standard setting bodies and international financial institutions to address vulnerabilities and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability*".[40]

Today, the FSF brings together three groups of experts on international financial matters: (a) national authorities responsible for financial stability in significant international financial centres, namely treasuries, central banks, and supervisory agencies; (b) sector-specific international groupings of regulators and supervisors engaged in developing standards and codes of good practice as well as the international financial institutions charged with surveillance of domestic and international financial systems and monitoring and fostering implementation of standards; and (c) the committees of central bank experts concerned with market infrastructure and functioning. Together they aim to address vulnerabilities in the global financial system and to develop and implement strong regulatory, supervisory and other policies in the interest of financial stability.

However, from an insurance point of view, it is disappointing that this body, which should cover all parts of the global financial system in a comprehensive way, has incorporated only very limited insurance expertise in its structure. While all member countries send general finance experts from their finance ministries (who usually have a strong banking and sometimes securities background but mostly lack specific insurance expertise), from the supervisory authorities tasked to look after the whole financial services sector (again, most experts have a banking or securities background and generally much less training in and exposure to insurance) and from their central banks (exclusively concentrated on banking issues and not insurance), there is only one specialised body in insurance that sends its chairman to the FSB, which is the IAIS mentioned above. None of the six members that form the subgroup of "international organisations" and none of the other five members that besides the IAIS form the member subgroup of "international standard-setting bodies and other groupings" has any specialised in-depth expertise when it comes to insurance matters.[41] This is surprising as insurance holds approximately 11 per cent of world assets and accounts for 7 per cent of world GDP.[42]

From a strictly systemic risk point of view, one can understand the decision of the G-20 and the FSB to have a reaction that could be understood as benign neglect towards insurance. After all, insurance was not at the source of the financial crisis[43] nor do core insurance activities represent sources for systemic risk to the global financial system.[44] However, in terms of how

40 Cf. *www.financialstabilityboard.org/about/history.htm*.
41 Compare the list of member institutions of the FSB as per *www.financialstabilityboard.org/members/links.htm*.
42 For a detailed statistic on world insurance premium income, see Swiss Re (2010).
43 The role of insurance and how it fared through the credit crisis is extensively discussed in Liedtke (2010).
44 For a detailed discussion of this issue, see The Geneva Association (2010). The IAIS wrote in its position statement on key financial stability issues of 4 June 2010 that "*...there is little evidence of insurance either generating or*

the expert discussions on financial stability and future organisation of systemic risk develop, the lack of a wider base of insurance expertise at the FSB is a concern. It is a concern for the insurance sector—supervisors, industry and markets participants alike—in two distinct ways: (1) The role of insurance companies that can act as stabilisers in many distress scenarios for financial markets is at risk of not being taken enough into account. The questions as to when insurers stabilise financial markets and when they might act as multipliers of potentially destabilising developments require deep familiarity with the complex insurance business.[45] (2) It is more likely that without adequate insurance expertise present, FSB discussions that apply strictly to banking or securities issues suddenly start influencing insurance markets in a way that nobody took properly into consideration at the outset. This would be an unnecessary contamination risk, potentially spreading a problematic situation (or even some negative effects of a well-intended solution) to the insurance sector.

So while the FSB is trying to tackle many important issues connected with financial stability, it also has to remedy an institutional shortcoming as regards the proper representation of insurance. Going forward, it will be crucial to assure that any initiatives for financial stability have the intended effects for all relevant market participants and all financial intermediaries and are not just geared towards the needs and requirements of banks and their specific operations. Insurance regulators, supervisors and the industry must strive to advise as best as possible the FSB in its work to minimise any danger of it devising inferior or even deficient solutions.

Key aspects to watch

The following is a list of key aspects that need to be watched carefully as each point will have a major impact on how the regulation of financial services in general and insurance in particular will develop. Insurance as a regulatory object is strictly dependent in which setting it is carried out and under what conditions the discussions are organised that lead to future rules and norms that define how markets are structured and the framework under which insurance companies operate. We would posit that the following key issues are of special relevance in this context:

1. *The crisis has made everybody more aware of true globalisation and its consequences*. While for several decades following the second world war the global interaction of businesses has readily increased and the openness of national economies[46] has grown, the term globalisation came to describe a new phenomenon of tight integration of markets on the world level and the appearance of global companies with production facilities and service centres in many different countries. What has not followed in an equally dynamic manner are the governance structures on the world level needed to direct globalising economies and the political and civil institutions required to accompany them. Both are needed in order to provide the same stable framework that has characterised the national (and some regional) approaches for market-oriented systems. Following the credit crisis, there is a new and stronger awareness that an overhaul of global governance—at least as far as economic and financial markets are concerned—is urgently needed.
2. *Neoclassical capitalism and the Anglo-Saxon financial hegemony are questioned*. For several decades, mainstream economic thinking has been strongly influenced by the neoclassical economic theories and their derivatives. The most dynamic economic and financial developments

amplifying systemic risk, within the financial system itself or in the real economy." Download from http://www.iaisweb.org/view/element_href.cfm?src=1/9364.pdf.

45 According to the IAIS (4 June 2010 position paper, *op.cit.*), "*There are also some circumstances where insurers may amplify risk, for example life insurers reacting to downturns in equity markets, or where they may disrupt for a period a segment of the real economy through an unexpected withdrawal of capacity.*" However, the IAIS also insists that "*An effective regime of regulation and supervision can mitigate these possibilities*", which is why appropriate specialised insurance expertise is so important.

46 The openness of an economy is defined as imports plus exports divided by (twice) the GDP of the economy. According to OECD figures, this measure has increased for almost all nations over the past 50 years.

resulted from a set of paradigms that are now being scrutinised in ever more detail in order to discover more possible shortcomings than the ones that led to the most recent crisis. The impacts of behavioural economics and other more progressive theories have begun to exert a direct influence on how the current generation of policymakers regard market performance, efficiency, resilience and limitations. Together with the increased relevance of emerging markets for the world economy, this is expected to lead to a (somewhat) reduced importance of the financial centres in the Anglo-Saxon world.

3. *New focus of national and international policies, binding of resources*. The near collapse of the world's financial system in October 2008 led to an immediate shift in attention of all major governments. Following the rescue actions, the question on how to deal with financial stability and systemic risk became the central concern for all G-20 countries. This has lead to a crowding out of other issues, such as e.g. climate change, trade negotiations, etc. While one would expect that the less threatening the situation in the world financial markets appears, the more energy will be available again for other projects, it is obvious that the challenges to safeguard the global financial system against future threats will require many years of unrelenting efforts to produce acceptable solutions. Until this is achieved, the challenges for financial stability and systemic risk will require constant attention and hence reduce the capacity of all involved governments to take on other projects at the same time.

   In addition, there will have to be a continued and sustained struggle against any potentially appearing tendencies for protectionism as some countries could try to isolate their economy from financial havoc happening elsewhere through inappropriate measures, which would have detrimental effects on world trade and future growth.[47] This as well will bind resources which are then not available for other initiatives.

4. *Creation of new, or revamping of, current institutions to deal with financial stability*. Although a lot has already happened in this respect, see e.g. the establishment of the G-20 and the reorganisation of the FSF into the FSB, more activity is expected. In many countries and regions around the world, governments are getting ready to establish systemic risk councils and boards that are going to be tasked with regional or local financial stability monitoring. Other organisations such as the IMF or the World Bank are adapting their operations to be more useful in the future to avoid financial instability and to combat it whenever it might appear. This will ultimately lead to an institutional landscape that will be very different from what was in place before the credit crisis. It will also have an influence on how and where key decisions for the world financial markets will be taken and what kind of regulation and supervision will be applied to financial institutions and of course insurers.

5. *International reform projects pushing national agendas*. As has been evident over the past two years, it is increasingly an international agenda that drives national agendas for regulation and supervision rather than the other way around. The G-20 as key source for regulatory projects and driver of institutional change has clearly established an international platform that directs the focus of national governments. Reform projects such as Basel III, Solvency II (which is increasingly not only a European project but growing into an international benchmark) or International Financial Reporting Standards reforms have not only a global quality to them but establish a mechanism of the international influencing and determining the national. As the trend of first conducting key discussions about regulatory reforms in international fora continues, it will have increasing consequences for the economic and political environments in all countries.

6. *Higher relevance of politicians and public servants for economic issues*. With *laissez-faire* capitalism (that postulated minimal governmental intervention and a soft touch for regulation

47 For a special treatise on insurance, trade and growth issues, see *The Essential Role of Insurance Services for Trade Growth and Development* (The Geneva Association, 2011).

and supervision as key principles) coming to an end, so a new group of persons will require more relevance: government officials. As central banks have greatly increased their balance sheets, as governments and their agencies have massively augmented their debt burden, as regulators and supervisors are vying for more control over the financial and economic systems, the officials in control of these institutions all exert more direct control over markets. Many decisions that will be taken by policymakers and public servants now have a more immediate impact on the economy and following the new wave of regulation this is set to increase. Market participants will have to pay closer attention to these decisions, who takes them and why, and how they will possibly affect the markets in which they are active.

Conclusion

As we write on the outset of this paper, insurance activities are crucial to the proper functioning of modern economies. These activities are now conducted in an environment that is changing in a very dynamic way as new reform projects come online, new institutions are being established and existing bodies take on different functions or develop additional responsibilities. For the whole sector it will be a constant challenge to ensure that it is fully informed about any discussions that will significantly affect its operations—even if these discussions take place outside the traditional bodies that are normally associated with the sector—that its expertise is adequately represented and listened to—even if this means that insurance expertise has to actively promote its place at the table—and that the capacity to digest the changes being mandated remains at all times sufficient.

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The Future of Insurance Regulation and Supervision—A Global Perspective

by Denis Kessler

A re-regulation move has closely followed the statement on which most commentators agree: enforced regulation failed to prevent the crisis that started in 2007. This crisis started as a financial crisis, through the sub-prime mortgages segment. Monoliners were also rapidly called into question in the autumn of 2007. From this specific starting point, the situation evolved into a major financial crisis that spread around the world, affecting the global system. The financial crisis evolved into an economic crisis, with a sharp recession. In turn, the economic crisis led to a social and political crisis. The sovereign debt crisis which appeared in 2010 is a clear example of the consequence of the difficulties that began in 2007. These three stages, and the order in which they arose, are typical of the way in which crises have evolved throughout history. From this point of view, the 2007-2010 (?) crisis is typical and, in fact, resembles many other crises that have punctuated world history.

Optimal regulation rather than maximal regulation

The question of regulation typically arises as part of the third stage, alongside political and social considerations. The fundamental need for regulation comes from the fact that governments have a particular responsibility with regard to insureds: governments must guarantee in the successful conclusion of insurance contracts. This means supervising not just the quality, fairness and comprehensibility of the insurance contracts sold by insurance companies, but primarily supervising insurance companies' solvency.

The primary aim of supervision is to protect consumers, who are considered weak compared to powerful insurers, or unable to make a rational and fully informed selection of the best insurance product and the most solvent company. Moreover, because insurers receive money from policyholders (i.e. premiums), before paying claims, consumers face two additional risks:

- a risk of mismanagement of their money, if it is not well invested or if premiums are insufficient because of initial miscalculation; and
- a risk of abuse by insurers who might take the money and disappear or, even worse, build so-called "Ponzi schemes".

The supervision of insurers' solvency is a "second best" solution that substitutes a supervisory system operated by the public authorities when confronted with market imperfections. It is a "second best" solution in that it comes at the expense of economic efficiency. Therefore it is about reducing the risks of mismanagement and abuse mentioned above, whilst keeping the insurance market sufficiently efficient and open to competition and new entrants.

It is important to bear this in mind because it helps us to avoid misunderstanding the ultimate goals of insurance supervision, which should not be to limit the role of the market in terms of allocating resources in the most efficient way and to fight against market forces, but to promote the market and help market forces to balance. One should always be wary of introducing "maximal" regulation, which would be so stringent and heavy that it would dramatically reduce efficiency and competition between insurers… at the expense, at the end of the day, of the insured's best interests.

Thus, good supervision is a matter of balance and not of safety at all costs. Optimal supervision, which should be the true goal of any government intervention, corresponds to an economic meeting point between two forces: the first leaving the greatest room for manoeuvre to the market and the second limiting opportunities for abuse as much as possible. There are indeed competing demands—minimum rates on one side, maximum security on the other—and the role of governments is to find the optimal point in what appears to be a very difficult trade off. By choosing this optimal point, governments represent a collective utility function in which the degree of public risk aversion plays a key role.

A unique crisis requires a unique response

The recent crisis had an important feature that makes it totally unique: it was the first global crisis. Initially it seemed that the fates of emerging economies would be unconnected to those of established economies. But we soon discovered that this was a sweet illusion: world economies are in fact closely correlated, and the shock waves were felt across the globe. This unique crisis should have inspired a unique and globally coordinated response.

Unfortunately there was no globally coordinated response, with most governments reacting in a very protective manner, mainly if not exclusively focusing on their own national interests. This is a typical "prisoner's dilemma" situation, where cooperation would have yielded better results than individual struggle. But uncertainties led the actors of the crisis to trade a global solution for national or even protectionist measures. In the banking sector, it is clear that each government intervened only to save their own credit institutions, as can be seen when studying the various bail out schemes implemented since 2007.

A regulatory system that takes the specific features of each industry into account

Lack of global coordination has not been the only obstacle on the road to effective regulation. Another significant looming risk is that of amalgamation: the illusion that one solution fits all industries. Governments have focused on reforming the "financial services industry", ignoring the fact that this "industry" in fact comprises several very different segments. When it comes to regulation, one should not adopt a "one size fits all" approach.

Confusion between the banking and insurance industries led to some fairly damaging solutions. For example, the catalyst that played a key role in the dissemination of the crisis was the liquidity crisis. Lack of liquidity—due to an incredible confidence crisis among financial institutions—transformed the financial crisis into a potential systemic crisis. The financial system was on the brink of virtual collapse as trust vanished, and banks stopped lending money to each other. This liquidity trap could only be avoided through large-scale action by the Central Banks.

It is well known that the insurance industry does not rely so heavily on liquidity. In fact, the insurance industry is a net provider of liquidity and resources to other economic agents. For this reason, the insurance industry is not prone to creating systemic risk. Furthermore, insurance contracts cannot be cancelled as easily as many banking or deposit contracts. Bankruptcy can happen in a day. When an insurance company is becoming illiquid, it is because it is for long insolvent and not because of independent liquidity problems. In actual fact, insurance and reinsurance provide stability to the world economy thanks to their shock-absorbing capacity and very high resilience. This fact has unfortunately been overlooked by governments and regulators.

An efficient regulatory process should bear this detail in mind, and build on it. If the true target of regulation is to provide stability, policymakers should be doing everything they can to promote insurance as a key way to limit fluctuations.

Inadequate regulation could create the next crisis

The dangers involved in inadequate or sub-optimal regulation are far worse than just being unable to anticipate the next crisis. The key issue here is that inadequate regulation creates loopholes, which transform themselves into arbitrage opportunities for economic agents. For this reason, regulation should be "forward looking", rather than trying to address past crises. Wing-mirror driving is a dangerous exercise. As Rob Curtis points out in his contribution "Solvency as a Focal Point of Prudential Regulation: Supervisory Lessons and Challenges",[48] the regulatory toolbox should include new tools, and not focus purely on quantitative aspects such as solvency.

The new regulatory framework should very much be forward-looking and focused on anticipating future trends. In this perspective, new regulations should incite the development of active risk management at the level of each insurance and reinsurance company. Each time that a risk emerges and evolves regulators should send appropriate messages to the insurance companies to call their attention to the risk and urge them to take such adverse developments into full consideration.

Some global regulation already rests on a very prospective view of each insurance company's development. This is really the optimal situation. Regulation should be as close as possible to the business plan and risk profile of each company and try to assess if the capital management of each company is fully consistent with its business plan. Moreover, it is the responsibility of each insurance or reinsurance company to define its specific risk appetite, and therefore the implied probability of loss and ruin. Once the risk appetite has been defined, the regulatory process should assess whether or not the corresponding level of capital has been secured. From this perspective, the role of internal models appears crucial. It is indeed the internal model that enables a company to check whether or not the level of capital is aligned with the risk appetite and the risk profile of a given company. It is very likely that future regulation will use each company's specific internal model, which is rooted in its specific portfolio of risks and assets. In this respect, the Solvency II approach is relevant and promising.

Get over the desire for revenge

After such a crisis, there is clearly a bitter taste in the mouths of all economic agents: companies, regulators, governments, and public opinion. They all think that the crisis could have been avoided, and that others played a key role in its creation. From this point of view, bankers were largely the victims of a finger-pointing exercise. Although this type of reaction is understandable, it is overly simplistic. Focusing on bankers allows us to avoid questioning the role of public authorities and governments.

More fundamentally, however, it would be illusory to aim for a fluctuation-free environment and an absolutely stable world. Modern societies live in a philistine "petit-bourgeois" dream of comfort and certainty. One should consider instead that cycles are consubstantial with economic and financial markets. Flattening cycles is already difficult; eradicating them is pure fantasy.

The future of regulation lies in providing an optimal framework for economic activities in order to reduce the amplitude of cycle oscillations. Insureds should of course be protected from mismanagement by companies and from the irrational and foolish behaviour of managers.

48 Curtis (2011) "Solvency as a Focal Point of Prudential Regulation: Supervisory Lessons and Challenges", in P.M. Liedtke and J. Monkiewicz (eds), *The Future of Insurance Regulation and Supervision—A Global Perspective*, Palgrave Macmillan.

Ultimately, however, insureds are responsible for choosing one insurance company over another. In most cases, difficulties for an insurance company will lead to run off or a portfolio transfer. And more and more countries have implemented guarantee funds to cope with the total failure of insurance companies. A regulatory system that is too prescriptive would create new arbitrage opportunities, and eventually lead to a new crisis. Any regulation should aim to temper competition, not to eradicate it, otherwise innovation would stop and, all things being equal, rates would increase. Regulation is a question of striking the right balance and right incentive, and not a question of maximum cautiousness that would be source of financial imbalances and that would give the wrong incentive with regard to risk transfer between economic agents.

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Publications of The Geneva Association

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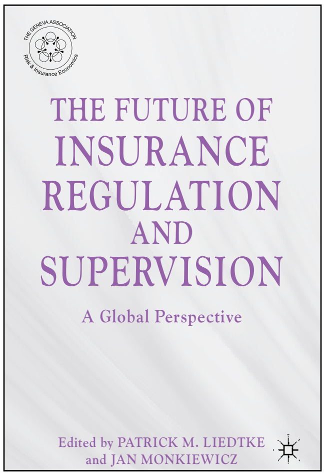
The Future of Insurance Regulation and Supervision

Edited by Patrick M. Liedtke and Jan Monkiewicz, published by Palgrave Macmillan



The recent financial crisis has provoked a broad spectrum of regulatory observations and possible responses. Although historically wide-ranging reshaping has been a common phenomenon following the severe failure of an existing financial infrastructure, there is an important difference this time—the global reach of today's markets and enterprises. Moreover, never before following a banking crisis have so many reforms not only affected the banking sector but also other parts of the financial services sector, such as insurance, the social systems and, of course, our real economy. The experts who have contributed to this book take a thorough look at the fundamentals of future insurance regulation and supervision, analyse problematic aspects and discuss the global perspectives for the insurance industry. The book contains 24 chapters, written by international experts, ranging from regulatory bodies (including NAIC and the FSA), to insurance companies and associations of insurers (including Swiss Re, The Geneva Association and ABIR) to high-level academic centres (including St John's University and London School of Economics).

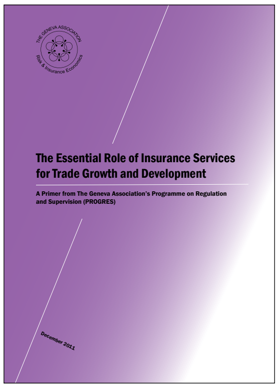
The book is structured in seven parts:

1. The Global Framework: This first section looks at insurance activity as a regulatory object, the economic rationale for insurance regulation, the global financial architecture and the insurance sector, and insurance and financial stability.
2. The Supervisory Dimension: In this section, one can read about the quality of regulation and supervision; solvency as a focal point of prudential regulation; and the architecture of insurance supervision before and after the financial crisis.
3. The Market Dimension: This part investigates the role of market discipline in the insurance industry, how to address the emergence of adverse network dynamics in insurance group supervision, the trend of tighter regulation in credit default swaps, and the current state and future challenges in the regulation of global reinsurance markets.
4. Stakeholder Protection: Topics presented in this section are: challenges and approaches in consumer protection in the insurance industry; insurance guarantee funds in relation to solvency regulation; government intervention in insurance; the cross-border aspects and policy implications in insurance companies' systemicness.
5. The Developed Markets Perspective: This part looked at regulatory developments and challenges in the U.S., the European Union and Japan.
6. The Emerging Markets Perspective: This section focuses on regulatory frameworks, developments and challenges in China, in Latin America and in Russia.
7. International Issues: This part looks at the international context in regulation, focusing on mutual recognition, equivalence and international standards, the regulatory future of international insurance centres and international trade agreements and their impact on regulation and supervision in insurance.

Other publications of The Geneva Association

Special Report

The Essential Role of Insurance Services for Trade Growth and Development—A Primer from The Geneva Association's Programme on Regulation and Supervision (PROGRES), The Geneva Association, December 2011



This document considers the essential role of insurance services in trade growth and development around the world and the main factors that influence it. In the context of the role and function of insurance in the economy and the principles and restrictions that underlie the regulation of insurance, it examines the implications of the World Trade Organization (WTO) and the Doha Development Agenda Round of trade negotiations and the work of the United Nations Commission on Trade and Development (UNCTAD) as they relate to insurance. Written by Julian Arkell, Special Advisor to The Geneva Association on Global Services and Trade and Investment issues, it is intended as a reference document and primer on these issues that affect the globalisation of the insurance industry.

Special Reports on Financial Stability

- *Considerations for Identifying Systemically Important Financial Institutions in Insurance—A contribution to the FSB and IAIS's discussions*, The Geneva Association, April 2011.
- *Systemic Risk in Insurance—An analysis of insurance and financial stability,* The Geneva Association, Geneva, March 2010.
- *Key Financial Stability Issues in Insurance—An account of The Geneva Association's ongoing dialogue on systemic risk with regulators and policy-makers*, The Geneva Association, Geneva, July 2010.

The Geneva Reports—Risk and Insurance Research

- No. 4: *September 11—Ten Years On; Lasting impact on the world of risk and insurance*, edited by Patrick M. Liedtke and Kai-Uwe Schanz, September 2011.
- No. 3: *Anatomy of the credit crisis—An insurance reader from The Geneva Association*, edited by Patrick M. Liedtke, January 2010.
- No. 2: *The insurance industry and climate change—Contribution to the global debate*, by The Geneva Association, July 2009.
- No.1: *Regulation and intervention in the insurance industry—fundamental issues*, by E. Baltensperger, P. Buomberger, A.A. Iuppa, B. Keller and A. Wicki, February 2008.

Newsletters (also available as e-newsletters)

- ***PROGRES*** contributes to the exchange of information on studies and initiatives aimed at better understanding the challenges in the fields of insurance regulation, supervision as well as other legal aspects. Last issues:
  - *PROGRES No. 54*, December 2011
  - *Geneva Association Intervention at IAIS ComFrame Dialogue in Seoul*, September 2011
  - *PROGRES No. 53*, June 2011
- ***Insurance and Finance*** deals with research activities in the field of finance where they are relevant to the insurance and risk management sector.
- ***Risk Management*** summarises The Geneva Association's initiatives in the field of risk management and is open to contributions from any institution or company wishing to exchange information.
- ***Insurance Economics*** serves as an information and liaison bulletin to promote contacts between

economists at universities and in insurance and financial services companies with an interest in risk and insurance economics.

- ***Four Pillars*** provides information on research and publications in the field of social security, insurance, savings and employment.
- ***Health and Ageing*** brings together facts and figures linked to health issues for people aged 50-80 and productive ageing, to try to find solutions for the future financing of health.
- ***World Fire Statistics*** presents statistics on national fire costs from over 20 leading countries in an effort to persuade governments to adopt strategies aimed at reducing the cost of fire.
- ***General Information.***

Journals

(published by Palgrave Macmillan for The Geneva Association)

- ***The Geneva Papers on Risk and Insurance—Issues and Practice***
  This prestigious peer-reviewed journal, published quarterly, leads its field, publishing papers which both improve the scientific knowledge of the insurance industry and stimulate constructive dialogue between the industry and its economic and social partners.
- ***The Geneva Risk and Insurance Review***
  This peer-reviewed international journal is published in annual volumes of two issues. Its purpose is to support and encourage research in the economics of risk, uncertainty, insurance and related institutions by providing a forum for the scholarly exchange of findings and opinions.

Working Papers "Etudes et Dossiers"

These working documents present intermediary or final results of conference proceedings, special reports and research done by The Geneva Association and its partners. Among the last issues:

- *8th Geneva Association Health and Ageing Conference—Insurance and Dementia*, No. 382, November 2011
- *3rd Climate Risk and Insurance (CR+I) Seminar*, No. 381, November 2011
- *38th Seminar of the European Group of Risk and Insurance Economists*, No. 380, October 2011
- *M.O.R.E. 25 Seminar*, No. 379, September 2011
- *16th International Conference on Space Activities Development—Risk Management & Insurance Aspects*, No. 378, September 2011
- *13th Meeting of ACCE & 7.5th International Liability Regimes Conference*, No. 377, August 2011
- *9th ART OF CROS*, No. 376, August 2011
- *27th PROGRES International Seminar*, No. 375, July 2011
- *11th CEO Insurance Summit in Asia*, No. 374, July 2011
- *14th Joint Seminar of the European Association of Law and Economics and The Geneva Association "Law and Economics of Natural Hazards Management in a Changing Climate"*, No. 373, June 2011
- *1st Climate Change Summit for Asia's Insurance Industry*, No. 372, May 2011
- *7th Insurance and Finance Seminar of The Geneva Association and Presentations on The Geneva Association's Financial Stability in Insurance Initiative*, No. 371, April 2011
- *6th Chief Risk Officer Assembly, A vision for risk management in the "new normal"*, No. 370, March 2011
- *World Risk and Insurance Economics Congress,* No. 369, March 2011
- *7th Geneva Association Health & Ageing Conference, U.S. and French Long-Term Care Insurance Markets Development,* No. 368, January 2011
- *7th International Liability Regimes Conference of The Geneva Association and 12th Meeting on The Geneva Association's Amsterdam Circle of Chief Economists,* No. 367, January 2011

Financial regulation is complex and has a profound impact on the way capital markets and financial systems operate. But regulation is always heavily influenced by political and social factors, and reflects the interests of a variety of stakeholders. The insurance industry proved to be extremely resilient during the recent crisis and hence should be more a source of positive examples and solutions for other industries than be subject to regulatory rules invented for different institutions and industries, such as banking. The future size and shape of the international regulatory architecture for the insurance industry will become much clearer in 2012 and the discussions on that process are reaching a critical juncture.

This document on insurance regulation sets the context for these vital next months. It is part of a substantial body of work on financial stability by The Geneva Association and draws on selected contributions from the book published recently on the subject, *The Future of Insurance Regulation and Supervision. A Global Perspective* (Palgrave Macmillan 2011). The papers included in this publication are key analyses and considerations for this crucial period for the future of the insurance industry and highlights some of the concepts that will be crucial in informing the debates that will prove to be so important.

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