

Retirement System Risk Management

Implications of the New Regulatory Order

EDITED BY

Olivia S. Mitchell, Raimond Maurer,
and J. Michael Orszag

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The New Insurance Supervisory Landscape: Implications for Insurance and Pensions

Peter A. Fisher

The supervisory landscape for insurance is becoming considerably more complex and influential in the wake of the global financial crisis. New authorities have been created, new powers granted, and the scope of oversight broadened. The intent of the new apparatus is to ensure greater financial stability, improved market conduct, and greater standardization across legal jurisdictions—and many of these benefits have been realized. At the same time, the connections and rules of engagement between supervisory authorities are frequently unclear, supervisory mandates sometimes overlap, and the intended policy objectives can be pursued despite significant unintended consequences and negative effects on other dimensions of social welfare.

This chapter first outlines the new supervisory landscape in North America, Europe, and globally, with a particular focus on insurance oversight and implications for pension policy. It then explores a series of specific supervisory issues that have received special attention since the financial crisis and identifies recent supervisory developments. The effects of supervisory activities on market structure, conduct, and performance are then examined, with follow-on identification of potential effects on several dimensions of social welfare. A series of specific examples is used to illustrate connections between immediate policy objectives and sometimes ambiguous effects on net social welfare. Finally, a forward-looking view is provided, identifying future challenges and issues on the horizon.

Current Supervisory Landscape

The supervisory structures overseeing insurance and pensions exist at multiple geographic levels: provincial, national, regional, and global (see Figure 2.1). This supervisory apparatus is responsible for implementing and overseeing regulations to ensure adequate solvency, good market conduct, financial stability, and effective governance and risk management.

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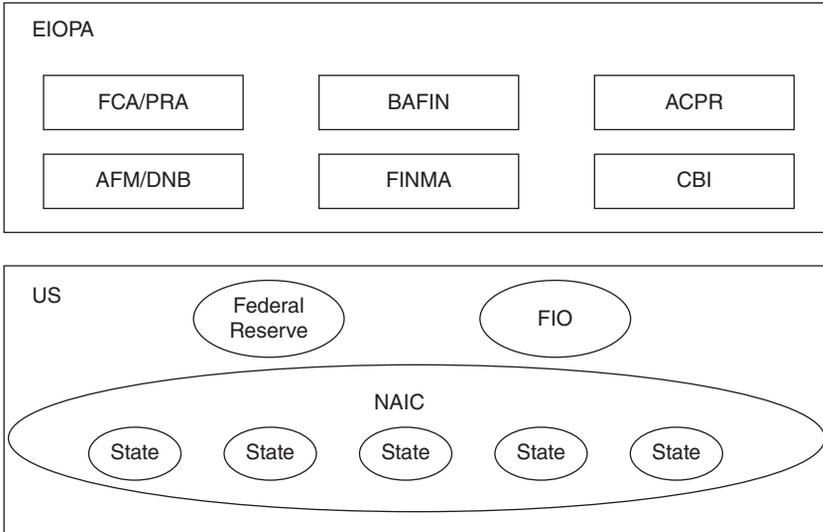


Figure 2.1 Insurance regulatory/supervisory structures

Notes: For additional detail and explanation, please see the 'Glossary of Terms.'

Source: Author's contribution.

International overview

North America

The US supervisory structure is foundationally state-based. Each state has a dedicated insurance commissioner overseeing insurance market activity within its own borders, and each commission has primary oversight over insurers domiciled within its state. State-level commissioners have a dual supervisory mandate to ensure the solvency of insurers and the protection of policyholders. Unlike many other country-level systems, the state-based US system does not directly address group-level issues but focuses instead primarily on state-level and subsidiary-level oversight and policy. Augmenting the state-level system is the National Association of Insurance Commissioners (NAIC), which acts to coordinate and, to some extent, standardize, the state-level activities of individual commissioners. The NAIC is the US standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia, and five US territories. Through the NAIC, state insurance regulators establish standards and best practices, conduct peer reviews, coordinate their regulatory oversight, and represent the collective views of state regulators domestically and internationally. The NAIC's mission includes protecting

the public interest, ensuring competitive markets, protecting insurance consumers, and promoting the financial stability and solvency of insurance institutions. The NAIC is a voluntary coordinating organization, without explicit legal authority over individual state supervisors. While its members are the insurance commissioners of each state and territory, the NAIC is a non-governmental organization that concerns itself with insurance regulatory matters but does not actually regulate. In particular, the states have not delegated their regulatory authority to the NAIC. It also acts as one of the primary points of engagement for other elements of the US and global supervisory structure, including the US Federal Reserve, the International Association of Insurance Supervisors (IAIS), and the Financial Stability Board (FSB).

At the federal level, there are three primary entities: the Federal Reserve, the Federal Insurance Office (FIO), and the Financial Stability Oversight Council (FSOC). At the national level, the Federal Reserve oversees any insurer that contains a bank holding company (BHC), has been designated as systemically important by the Financial Stability Oversight Council, or is a US domiciled insurer that is considered an Internationally Active Insurance Group (IAIG).¹ The newly created Federal Insurance Office, a part of the US Treasury, does not currently have legal jurisdiction over any element of the US insurance market, but it is an influential analyst and evaluator of the current composite framework. The FIO is currently the US representative at the IAIS, but it has no parallel domestic supervisory authority. The FIO, in its recently published modernization report, provided detailed recommendations for supervisory activities that should ideally be administered at one or more of several levels, including the individual states, the federal level, and the international level (FIO 2013). Finally, the FSOC has the authority to designate insurers as systemically important financial institutions (SIFI), depending on their size, complexity, and range of activities. If designated a SIFI, a new host of regulations then becomes active and primary supervisory oversight transfers to the Federal Reserve.²

The Canadian supervisory oversight resides primarily within the Office of Superintendent of Financial Institutions (OSFI), an independent agency that reports to the Minister of Finance. In addition to regulating banks, it is the primary regulator of insurance companies, trust companies, loan companies, and pension plans in Canada. In this capacity, it oversees matters of solvency, conduct, and financial stability at the national level and as a point of engagement with international initiatives.

Europe

The European supervisory structure has two principal dimensions: one at the country level and the other at the European regional level. Within each

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country there typically exists one of two structures: (1) a single integrated supervisor covering conduct, prudential, and systemic oversight; or (2) a ‘twin peaks’ structure that bifurcates conduct and prudential regulation into two entities, as a structural response to supervisory lessons learned from the financial crisis. An example of the twin peaks structure is the Prudential Regulatory Authority (PRA) and the Financial Conduct Authority (FCA) in the United Kingdom. Other country-level entities include Federal Financial Supervisory Authority (BAFIN) in Germany, the Autorité de Contrôle Prudentiel (ACPR) in France, the Autoriteit Financiële Markten (AFM) in the Netherlands, and the Swiss Financial Market Supervisory Authority (FINMA).

The primary regional authority for Europe is the European Insurance and Occupational Pension Authority (EIOPA), a European Union financial regulatory institution composed of representatives from the insurance and occupational pensions supervisory authorities of the European Union. It was created following the financial crisis to help ensure a more level playing field across the EU and to reflect increasingly integrated financial markets. EIOPA carries out a number of significant functions including strengthening supervisory colleges and enhancing the prudential regime within the European Union through the drafting and oversight of the Solvency II Directive. It is at this level that pan-European regulations and supervisory oversight are defined, implemented, and enforced.³

Global

At the global level, the primary organizations with significant influence over supervisory functions are the Financial Stability Board (FSB) and the International Association of Insurance Supervisors (IAIS). The FSB was created in the wake of the financial crisis to monitor and oversee financial institutions and activities to ensure global financial stability; it consists at its core of central banks and treasuries of the G20 countries. This core is augmented by a variety of additional executive, regulatory, and supervisory institutions. The IAIS, established in 1994, represents insurance regulators and supervisors of more than 200 jurisdictions in 140 countries, constituting 97 percent of global insurance premiums. It has three pillars of activity, consisting of standard setting, implementation, and financial stability for the global insurance sector.

Most recently, the IAIS and FSB have collaborated closely to develop new standards around group-level global capital standards and requirements; group supervision; corporate and risk governance; designation criteria and supervisory models for global systemically important insurers (GSIs); recovery and resolution planning; and macro-prudential standards.

Supervisory issues

Policy objectives of the many supervisory structures span a broad range, including financial stability, market conduct, solvency, organizational governance, and supervisory coordination.

Financial stability and systemic risk

Ensuring global financial stability is a top priority within supervisory mandates in the wake of the financial crisis, and it is being addressed at the global and national levels through consideration of organizational size, complexity, interconnectedness, and type of activities.⁴ Much of the supervisory mechanics for overseeing systemic risk are in very early stages of development. These include designation criteria and evaluation process; oversight of capital, leverage, and liquidity requirements; development of more intensive supervision standards; and creation of resolution and recovery plans. Designation and supervision of systemic organizations are progressing simultaneously at the global and national levels, with considerable uncertainty regarding how the range of national and global supervisors will standardize and coordinate their many designation decisions, oversight activities, and overlapping mandates.

Conduct/consumer protection

A second top priority emerging from the financial crisis is to develop a more intensive supervisory focus on the market conduct of financial institutions so as to ensure adequate consumer protection. In several countries, this renewed focus has led to the creation of a new conduct-focused supervisory body separate from prudential and stability oversight, in order to avoid potential loss of focus and mixed objectives of an integrated organization. Examples include the FCA in the UK and the Consumer Financial Protection Bureau (CFPB) in the US. The conduct mandate has frequently been defined very broadly to extend across both retail and institutional markets, and it has in some cases been defined to include all manner of conduct and elements of culture within the internal workings of financial institutions.

Solvency/funding

One of the most fundamental policy objectives for supervising both insurance and pensions is assuring adequate levels of solvency and funding of supervised organizations in meeting their expected future liabilities.⁵ Significant recent activity in this area includes the finalization, early implementation, and drive toward equivalence of Solvency II in Europe under the

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direction of EIOPA, and the NAIC's related Solvency Modernization Initiative in the US. Each has developed new approaches to accounting standards, treatment of assets and liabilities in solvency measurements, and standards for information sharing and organizational governance.

Governance

One of the many contributors to the financial crisis—as identified by supervisors—was incomplete oversight and capabilities of boards and directors. Supervisors have therefore renewed their focus on the capabilities of individual board members; the collective capabilities of the full board; committee structures, responsibilities, and composition; the specific governance of risk through the creation of new risk committees and Chief Risk Officer (CRO) roles; adequate independence of board members from the Executive; and more intensive oversight by the board regarding supervisory matters related to risk, capital, conduct, and solvency.

Coordination

With the multitude of new supervisory authorities at the national, regional, and global levels, there is a renewed focus on coordinating the many overlapping mandates. This has met with some success through the activities of supervisory colleges under the auspices of the NAIC, IAIS, EIOPA, and other institutions. However, much important work remains to be done. Supervisory colleges have improved communication and awareness among the many supervisory authorities to enhance coordination and standardization, but the degree of substantive coordination, mandate clarification, and agreement on key areas of policy is still very limited.

Recent Developments

The supervisory structure for insurance has become much more complex since the financial crisis, as authorities work to ensure greater financial stability and enhanced consumer welfare. Commentators have pointed to a variety of potential supervisory failings during this period including unclear supervisory mandates, regulatory arbitrage, non-standardized supervisory definitions and approaches across jurisdictions, a 'light-touch' stance on oversight of financial institutions, and less-than-vigorous supervision of interactions between buyers and sellers of financial products. Many of the recent supervisory developments are meant to address these perceived shortcomings.

United States

The supervisory landscape within the US has been evolving rapidly since the financial crisis. The traditional state-based supervisory system has been augmented by new federal entities with either direct supervisory authority or with important influencing roles. These include the Federal Reserve, the FSOC, and the FIO. In particular, the FSOC has designated three insurers as systemically important (AIG, Prudential Financial, MetLife), thereby transferring primary supervisory authority for these institutions to the Federal Reserve and establishing enhanced capital, liquidity, resolution, and governance requirements. The potential for being designated systemically important has also influenced the business behavior of remaining large insurers with respect to size, engagement in ‘non-traditional, non-insurance activities’ (NTNIA), and interconnectedness. As one example, the provision that authorizes Federal Reserve oversight over any insurer with a bank holding company within its structure motivated MetLife recently to shed this element of its operations. In addition, many insurers have largely exited the market for credit default swaps, considered NTNIA.

The advent of new federal supervisory authorities and new regulations has injected a degree of tension between state and federal authorities and somewhat blurred the scope of authority at these two levels. As an example, the FIO released its long-awaited reports on modernization and improvement opportunities within the state-based system in December 2013 (FIO 2013) and on the general state of the insurance industry and its oversight in September 2014 (FIO 2014). In its modernization report, the FIO recognized certain ‘limitations inherent in a state-based system of insurance regulation’ and concluded that ‘the proper formulation of the debate at present is not whether insurance regulation should be state or federal but whether there are certain areas in which federal involvement in regulation under the state-based system is warranted’ (2013: 11). Specifically, ‘In all events, federal involvement should be targeted to areas in which that involvement would solve problems resulting from the legal and practical limitations of regulation by the states, such as the need for uniformity or the need for a federal voice in US interactions with international authorities’ (2013: 12).

The report goes on to identify 18 areas which the FIO recommends for near-term reform by the states, relating to capital adequacy and safety/soundness, insurer resolution practices, and marketplace regulation. The modernization report also identifies nine areas where it recommends direct federal involvement in insurance regulation. The NAIC has vigorously opposed greater federal involvement in insurance supervision, citing the effectiveness of the state-based system in meeting local needs and providing local oversight, and the beneficial coordinating function of the NAIC.

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The NAIC has responded to greater federal supervisory participation by enhancing its governance structures, solvency standards, and engagement with federal, regional, and global supervisory authorities.

The supervisory trend within the US appears to be toward greater federalization of oversight, with the expanded authority and footprint of the Federal Reserve, influence of the FIO, and engagement of global supervisory authorities by national (vs. state-level) US entities. Growing federal oversight has at least two parallels within existing insurance markets. First, the movement toward federal oversight (relative to state-based supervision) is analogous to the group-level management and capital structures used by diversified insurers in the US to aggregate and allocate resources at the group level as they are needed locally. Second, movement toward federalization within the US in some ways parallels the evolution within Europe from country-level supervisors to more standardized approaches at the pan-European level through EIOPA and Solvency II standards. The recent FSB peer review of US insurance supervision added even greater energy to the supervisory landscape, with its findings of greater need within the US market for (1) regulatory uniformity; (2) enhanced insurance group supervision; (3) modernization of solvency requirements; and (4) governance and funding reforms (FSB 2013).

Within the next few years, several concrete issues could arise that directly challenge the evolving structures, with the possibility for one supervisory entity to establish a clear mandate on a specific issue, or to strike a compromise that keeps amorphous rules of engagement intact. Examples include the willingness of US federal and state authorities to implement and enforce standards of capital, liquidity, and governance established by the global IAIS/FSB entities. Specifically, how do IAIS directives get enforced within the US (the world's largest insurance market), and to the extent they are not enforceable, can a global standard be achieved without substantive participation by the US? Also important are disagreements between the FSOC and the IAIS/FSB on systemic designation of US domiciled insurers. Specifically, if the systemic label applied to MetLife recently via the FSOC were to be overturned, MetLife would remain systemically important by the FSB designation. So how then would US authorities carry out the requirements of a global authority in situations where the domestic process produced a different conclusion regarding systemic importance? Additionally, there are concerns about the divergent developmental pace between the Federal Reserve's creation of capital standards for firms it supervises, and that of the IAIS/FSB's crafting of the Insurance Capital Standard (ICS) for internationally active insurers, which include several firms the Fed also supervises. Another topic of discussion is the layering of local capital 'add-ons' above the level of the ICS standard established by the IAIS, resulting in a patchwork of local capital standards, undermining the

benefit of a single global standard and creating an uneven competitive field. These may all be manageable supervisory confrontations, but each would immediately test the ability of overlapping supervisors to agree, establish a clear mandate, or compromise on important elements of financial sector performance.

How this supervisory mosaic will settle in steady-state is very unclear at the moment. What is clear is the greater energy around federalization, centralization, and standardization across multiple supervisory jurisdictions across both North America and Europe. One possibility is that individual states may be left with oversight of conduct, policyholder protection, product approvals, rate-setting on required insurance, and solvency considerations to protect local policyholders; with the remaining supervisory responsibilities aggregated at the national level through the Federal Reserve, an evolving FIO, and other federal entities.

At a higher level of generalization, the complexity and possibility of unintended consequences arise from simultaneously developing important new policies and regulations (e.g., Solvency II, group capital standards, global capital standards, SIFI designations) while also implementing these policies through a supervisory structure that is itself being restructured (e.g., greater federalization within the US). Accordingly, ambiguity arises both around the substance of the new policies as well as where authorities lie to interpret and implement them.

Europe

Considerable regulatory and supervisory change is under way within Europe. The recent agreement to final standards of Solvency II regulation, with implementation beginning in early 2016, has taken center stage for much of the past few years. There are many points of intersection and potential conflicts between established Solvency II statutes and other policy areas, including the development of global capital standards for systemically important and internationally active insurers (i.e., BCR, HLA, ICS), accounting standards, valuation methodologies, asset risk-weighting measures, and liability estimation. Any degree of incompatibility between established Solvency II standards and emerging global standards will likely create confusion, additional compliance and reporting burdens, and possibly excessive levels of required capital. Alternatively, it is also possible that the implementation of global capital standards could be an opportunity, if designed in compatible ways, to effectively standardize around Solvency II norms, thereby advancing multiple policy objectives. Finally, there is some concern, particularly within European countries, that the emerging global capital standards may effectively act as a capital floor, with local supervisory

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authorities instituting ‘add-on’ requirements that raise the local de facto standard (e.g., Early Warning Indicators in the UK). This would result in a non-level competitive field, but it may also increase the likelihood and extent of base-level standards adoption.

A second area of significant supervisory change is conduct regulation and policy. In select European markets such as the UK and the Netherlands, conduct supervisors were instituted following the financial crisis, and they have taken self-described aggressive stances in redefining the distribution of rights and responsibilities between buyers and sellers of financial products. Although the most intense focus has been on retail markets, the purview of many conduct authorities extends both into institutional markets and into internal organizational behaviors of financial institutions. In the UK, conduct authority actions have included (1) examining long-dated ‘back books’ within the insurance sector, (2) instituting a requirement for ‘fit and proper’ that enables authorities to reject company selections for top board and executive management posts, (3) creating a requirement that new directors and executives take a personal oath to uphold the interests of consumers above other business objectives, and (4) participating in the recent policy change of removing required annuitization for designated portions of accumulated pension pots. Compared to supervision of systemic stability and prudential concerns, there has been very little international coordination of conduct supervision and regulation. In particular, conduct seems to persist as largely a local authority protecting the interests of residents within the domicile of the supervisor. There are, however, early movements toward a degree of international standardization and coordination on issues of conduct, initially promulgated through ComFrame and the IAIS subcommittee on market conduct, which is drafting issues papers and constructing frameworks on policyholder protection policies and devising model approaches to conduct supervision (IAIS 2015). The US Federal Reserve is also beginning to examine areas of conduct policy for those firms under its mandate.

Global

The most important global development is the direct, coordinated engagement of the FSB and IAIS in overseeing issues of global financial stability and the effective oversight of global insurance firms at the group level.

Financial stability

The FSB, established after the financial crisis, has the direct decision-making authority over designations of GSII firms, and the development of required

capital, liquidity, and resolution regulations for those firms. However, it has delegated much of the data gathering, methodology development, and analysis of these issues to the IAIS, which then makes recommendations to the FSB for final decision and implementation.⁶ Early development of methodology, designations, and oversight has begun via the FSB/IAIS process, such as GSII designation and the Basic Capital Requirement (BCR). However, other elements of this process are in very early stages of design, including the development of Higher Loss Absorbency (HLA) requirements for GSII firms, the creation of an Insurance Capital Standard (ICS) that will apply more broadly to all internationally active insurance groups (IAIG), and methods for recovery and resolution of systemic firms. As such, GSII firms exist in a state of suspended animation, knowing that their supervisory and competitive landscape will be changed significantly, but not knowing how or when these changes will occur. This creates degrees of uncertainty for boards, management teams, policyholders, prospective customers, and investors that can immediately influence significant near-term decisions.

Mandates and enforcement

A fundamental unknown at the global level of supervision is the extent and mechanism for enforcement of standards after they are defined and implemented. The FSB and IAIS do not have legal authority over insurers within any national jurisdiction. It will be incumbent on the national member of the FSB (e.g., central bank, supervisory authority) to implement and enforce the FSB/IAIS standards. Under this structure of local jurisdiction, there will be significant scope for local deviation from global standards, which creates a great deal of uncertainty for firms in the sector. Additionally, many of the specific statutes will be defined and implemented over a lengthy process, extending under current plans through 2019. Consequently, global firms are encountering lengthy periods of supervisory engagement, organizational preparation, future uncertainty, and business model redesign. This uncertainty extends significantly into the designated firms' experiences with policyholders, decisions on product design, long-term strategic direction, organizational structure and legal entity status, and capital market required rates of return.

Within the relatively fragmented US supervisory structure, there has been greater uncertainty and organizational positioning around which elements of the American system can best engage with global supervisory structures. The FIO and, to some extent, the Federal Reserve have each been positioning to become the US voice in international supervisory bodies, with the NAIC acting as the consolidated body within the US to represent state-level

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views. The NAIC's view, by contrast, is that it should be the primary voice representing the US in international supervisory bodies.

Currently the FIO sits on the Executive Committee of the IAIS and is represented within the IAIS Technical Committee developing the ICS. The Federal Reserve has applied for membership to both the IAIS and its influential Executive Committee. Some have speculated that the Fed may eventually take the place of the FIO within the Executive Committee if it is not granted membership directly.⁷ The NAIC is a member of the IAIS and has observer status at the various committee levels (conferring the opportunity to comment in detail on developing standards), but it is not a member of the Executive Committee. More recently, the IAIS has proposed ending the observer role at the IAIS, effectively distancing the NAIC from IAIS activities, which the NAIC has vigorously opposed (Woodall 2014). Finally, the Federal Reserve has attempted to unify the US voice in international venues by 'acting on the international insurance stage in an engaged partnership with our colleagues from the FIO, the state insurance commissioners, and the NAIC. Our multi-party dialogue, while respectful of each of our individual authorities, strives to develop a central 'Team USA' position on the most critical matters of global insurance regulatory policy' (Sullivan 2014: 7).

At both the US and global levels, there is also significant uncertainty regarding the implications of systemic designation. Currently nine firms have GSII designations and three US firms have been designated locally as systemically important. However, the specific requirements for capital, liquidity, risk governance, and supervisory oversight have not yet been fully articulated, so firms find themselves in the uncomfortable situation of being members of a select group under specific criteria, but not knowing what the long-term requirements or implications will be.

Global capital standards

A very active area globally is the development of new global capital standards. The IAIS/FSB recently released the first element in this series, known as the Basic (or Backstop) Capital Requirement (BCR) for systemically important insurers. This is meant to be a standardized capital floor, upon which an HLA capital add-on will be layered for systemically riskier activities. The HLA is currently under development, with focus on both the add-on methodology and the base set of activities on which it will apply. Parallel to that effort is the development of the more broadly applied Insurance Capital Standard, which will apply to all IAIGs, approximately 50 of the largest global insurers.

The ICS will have much more extensive effects, given its broader span of jurisdiction and application to all internationally active firms. It is also meant

to be a more sophisticated measure of capital adequacy relative to the BCR, which was developed very rapidly, meant to be quite basic (at the lowest capital level), and therefore considered a somewhat simple but necessarily quick measure. In particular, the BCR did not incorporate the beneficial risk reduction inherent in asset-liability matching practices and diversification across geographies, product lines, and customer segments; it assumed flat-line discount rates beyond a 30-year time horizon; and it instituted an operational risk charge of 12 percent of gross income flowing from asset management operations. The industry concern now is less with the shortcomings of the BCR and more with the possibility that much of the ICS will be modeled from the BCR, retaining some of its more primitive features. The ICS, if retaining these more primitive characteristics, would then have the capability of (1) adding significant new capital charges; (2) shortening industry time horizons to within 30 years of operations; (3) discouraging insurer involvement in the asset management sector; and (4) possibly motivating insurers to change legal organizational structure to fall outside the scope of IAIG designation and thereby not be subject to ICS requirements. However, a significant benefit of a well-designed ICS would be global standardization and comparison of required capital, a presumed reduction in risks of systemic instability and insolvency, and reduced scope to pursue regulatory arbitrage.

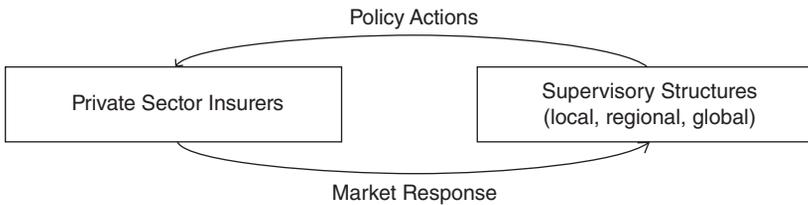
Effects on Market Structure, Conduct, and Performance

The ultimate influence of new regulations and supervisory structures on the markets for pensions and insurance depends on their propagation through a network of product manufacturers, distributors, consumers, and supervisory bodies at the local, regional, and global levels. In the first instance, policymakers usually establish requirements on product manufacturers and distributors to achieve a desired policy objective (e.g., financial stability, enhanced consumer welfare). The ultimate effect of the policy, however, depends on the action–reaction cycle between each element in the system until a new equilibrium has been achieved.⁸ When the market settles, the initial policy objectives may be achieved (or not), and there may be many side effects that were either anticipated or not, both in their existence and magnitude. Much of the current policy debate within evolving insurance and pension markets centers on the identification and quantification of these general equilibrium results, whether the initial policy objectives will be achieved, and the resulting social welfare outcome.

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Policy objectives are advanced through many levers controlled by supervisory and regulatory authorities, including capital definitions and requirements, risk-weighting of assets, regulation of product design, pricing, governance practices, and conduct oversight. Yet policy authorities do not exert direct control over desired outcomes. Financial institutions and others respond to policy actions through the levers they control, including product set decisions, product design, pricing, target customer segments, geographic presence, chosen domicile, legal entity structure, underwriting practices, risk selection, and investment portfolio decisions. It is the complex interplay between policy actions, market responses, and ongoing action–reaction responses that determine whether policy objectives are met and how social welfare is affected. This complex interplay is depicted in Figure 2.2.

New policy measures are likely to enhance financial stability, improve market conduct, standardize capital measurement and requirements, and align required levels of capital with measures of assumed risk. It is also possible for a series of potentially unintended consequences to unfold, including (1) reduced capital fungibility across geographies and businesses; (2) lower product availability, altered product structures, and rising product prices to reduce exposures to newly capital-intensive products; (3) reduced firm size for systemically designated institutions and likely exit from some products, geographies, and customer segments; and (4) reduced availability and rising prices of income-generating insurance products that are very



- **Product decisions:** pricing, design, pricing.
- **Customer decisions:** target customer, risk selection, underwriting standards.
- **Geographic decisions:** geographic presence, corporate domicile, group vs. subsidiary structures.
- **Investment decisions:** asset allocation, time horizons, asset-liability matching, risk/return profiles.
- **Solvency:** capital & liquidity requirements, capital standards, risk-weighting, investment guidelines.
- **Financial stability:** systemic designations, capital & liquidity requirements, NTNIA treatment, RRP requirements.
- **Consumer protection:** conduct policies, product & pricing approvals.
- **Governance & coordination:** board requirements, supervisory colleges, risk management policies.

Figure 2.2 Industry–policy feedback loops determine social welfare outcome

Source: Author’s contribution.

useful in shifting longevity and market risk from individuals to risk-efficient institutions and investors.

Social Welfare Dimensions and Tradeoffs

Much of the regulatory and supervisory structure within the financial service sectors is attempting to improve one or more dimensions of social welfare, including (1) financial stability; (2) individual firm solvency; (3) macro-economic growth; (4) adequate returns to investor capital; and (5) direct consumer welfare (which can be further decomposed into market coverage, product quality, and price). A simple depiction of social welfare elements and connections is shown in Figure 2.3.

In the abstract, a central policy challenge is identifying the ‘best’ social welfare outcome and then achieving it. A more realistic approach involves recognizing that there is not a single ‘best’ outcome, because each member of the system (e.g., conduct authorities, prudential authorities, consumers, financial sectors) values elements differently: what is best for one may be inferior for others. What can be achieved, however, is the set of possible outcomes where no member of the system can be made better off without making other members worse off (Pareto efficiency).⁹ All agree that

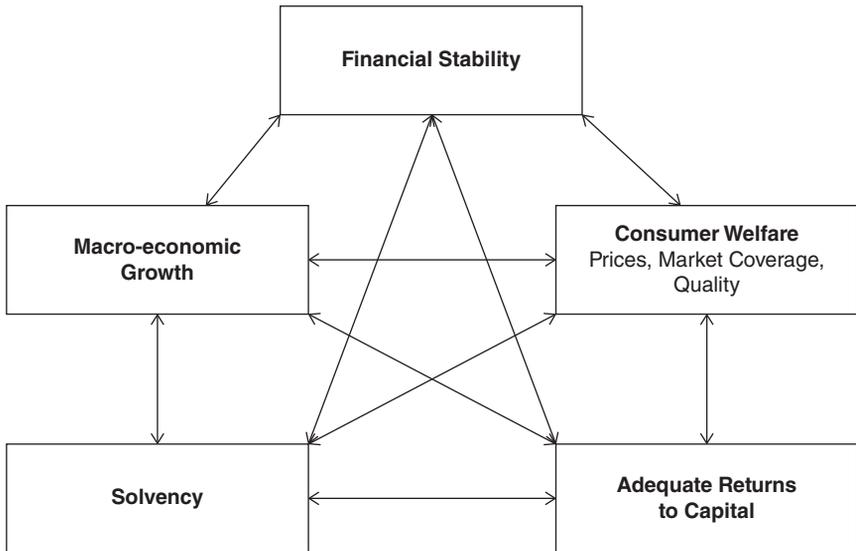


Figure 2.3 Social welfare considerations

Source: Author’s contribution.

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avoiding the inferior outcomes and achieving a Pareto-efficient outcome where 'no money is left on the table' is in the interests of all.

This is more elusive than it may seem. Frequently, members of a complex system lack awareness of the system's scope, do not appreciate the extent of system reactions in response to actions, and do not realize how beneficial intentions can sometimes propel the system into detrimental outcomes as a result of unanticipated dynamics. Specifically, in the markets for insurance and pensions, there are many challenges within the supervisory structures that complicate attempts to improve social welfare.

Geographic scope

Virtually every supervisory entity has limited geographic scope, either at the provincial, state, or regional levels. Welfare implications that lie outside the scope of geographic oversight rarely receive significant attention.

Supervisory mandates

All supervisory bodies have a limited range of activities or outcomes over which they govern. A very recent example is the separation of prudential and conduct oversight into separate supervisors at the national level in several jurisdictions. While this may sharpen the focus of supervisors on their assigned mandate, it runs the risk of lowering policy awareness and consideration of important interactions between the pursuits of each policy mandate.

Uncertain side effects

It is frequently difficult to identify and quantify the unintended side effects that may result from policy actions. Consequently, it is sometimes expedient for supervisors to acknowledge the possibility of unintended consequences and to consider opportunities to minimize them, but ultimately to assign little weight to collateral effects, relative to achievement of the more proximate policy objectives.

Social welfare tradeoffs

It is difficult for any supervisor to ascertain and implement possible social preferences for tradeoffs between multiple dimensions of social welfare. For instance, if greater financial stability is obtained at the cost of reduced sources of guaranteed retirement income, at what point are these multiple objectives in proper balance with respect to maximizing social welfare? It is

easiest for supervisors to press forward with the social welfare dimension for which they are responsible, largely discounting the possible negative effects on other dimensions as an unquantified, collateral effect.

Proximate vs. general equilibrium effects

The proximate effects of a new supervisory or regulatory action can be quite different from the ultimate equilibrium effects after all participants within the industry networks have acted and reacted to the new order and the system has reached a new equilibrium with different characteristics.

Examples of Possible Market-Wide Effects

There are many examples where actions taken to advance proximate policy goals result in significant social welfare consequences in other market dimensions. In no case is it clear that the initial policy is not worthwhile, all things considered, since that type of analysis is not conducted here. Rather, these examples illustrate the general equilibrium connectedness of policy actions and the possibility of material consequences elsewhere in the system.

Financial stability and capital allocation

Enhanced supervisory measures at national and global levels to ensure financial stability have required elevated levels of capital of insurers. In addition, many countries are requiring that the higher capital levels be effectively held at the subsidiary level within the country administering the measures. For global insurers, the result is both higher required capital levels and reduced capital mobility across national borders. These measures certainly enhance financial stability and local solvency, but at a considerable cost in terms of required cost structure and reduced fungibility of capital across geographies and markets. The risk-pooling benefit of deploying capital where it is needed most is largely lost. And higher operating cost structures can result in elevated product prices and potentially reduced competition as firms exit or trim their market presence. Finally, some globally active firms, when faced with reduced benefits from global operations through economies of scale and capital fungibility, may choose to change legal structures, breaking into several locally domiciled entities to avoid being subject to global requirements.

The earliest capital requirements for systemically important insurers were developed quickly to minimize the period where the system was still vulnerable. The Basic Capital Requirement was the first developed, and, to

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expedite the process, it was allowed to be somewhat primitive in its formulation.¹⁰ While the tradeoff between sophistication and speed may have been worthwhile for the first element of the new capital structure, now the concern is that some primitive characteristics may be carried forward into longer-term, more broadly applied measures of required capital such as the Insurance Capital Standard, which will be applied to all internationally active insurance groups. If this transpires, there could be severe detrimental effects resulting in non-level competitive fields between international and domestic insurers. This may motivate some insurers to disintegrate, changing legal organizational structure in order to bypass capital markets levied on IAIGs. The social welfare risk is that market structures will be dramatically altered, risk diversification benefits will be lost, and systemic risk will not be significantly reduced.

Conduct policies and market coverage

Conduct authorities in some countries have become very assertive in articulating the obligations of product sellers and the rights of product buyers in financial markets. Some commentators have concluded that the lines governing the relative distribution of responsibilities between buyers and sellers have moved significantly away from the traditional principle of *caveat emptor*. As a result, some product providers have decided to exit product markets, withdraw from serving less profitable customers, or alter product features and pricing to avoid market conduct risks. The recent UK experience in advice markets highlights the direct connection between safeguarding the interests of consumers and ensuring that sufficient market coverage remains with high-quality products and services that benefit most consumers.

Prudential vs. conduct policies

In a few instances the supervisory responsibility for prudential oversight has been separated organizationally from the conduct and consumer protection mandate. Although structures do exist to ensure connections between the two policy objectives (e.g., cross-membership on supervisory boards), each supervisory organization will be primarily concerned with the policy area it oversees. Consequently, prudential goals tend to be advanced with less regard for conduct implications and vice versa. Examples include the implications for firm solvency from sizeable conduct fines, and the elevated cost structures, higher product prices, and market exits created by very conservative prudential policies.

Product risks and provision

Under the current methodology adopted by the IAIS/FSB for annuity products with guarantee features, firms offering these products are likely to be designated as systemically important and have more stringent supervisory capital requirements. Both policies result in higher cost structures for firms participating in the guaranteed annuity market, causing collateral effects, including market exit, product redesign, repricing to account for higher costs, withdrawal from lower profit customer segments, and higher industry concentration. As the developed world's population ages and defined benefit structures taper, the consumer need for alternative sources of guaranteed income is rising. The enhanced financial stability accomplished through higher capital requirements for these products may very well be fully warranted given some inherent risks, but it also generates a reduction in other dimensions of social welfare through adverse effects on product markets and reduced retirement security.

Resolution methodology and capital efficiency

The regulations and supervision for orderly recovery and resolution of systemically important insurers is still a work in progress. Two of the most complex aspects of developing a credible resolution plan are identifying and enforcing the rights of the group supervisor (usually located where the firm is domiciled) to act as a 'single point of entry' in the resolution process. This lead supervisor status confers the exclusive right to oversee the distressed organization and make decisions about the uses and location of available capital, and it is crucial to an orderly resolution process. The alternative approach, multi-point resolution, allows multiple supervisors with limited oversight of the firm to seize capital wherever they may find it. Local supervisors with mandates to protect local policyholders and investors then have an incentive to secure as much capital as possible immediately, setting off a rapid-fire competition across supervisors to lock down resources in periods of distress. In resolution accords, although a single point of entry mechanism is desirable and usually officially adopted, many supervisors doubt that the resolution protocols would be strictly enforced in the event of distress. As a result, many supervisors require locally-held capital to protect the interests of local constituents, effectively raising total capital requirements and creating multiple local pockets of trapped capital. These dynamics raise insurer costs, reduce the benefits of global risk diversification, and have downstream effects on consumer welfare in the form of pricing policy, product availability, and higher market concentration.

Regulatory policies and investment pro-cyclicality

Globally, insurance companies and pensions funds manage \$50 trillion in assets (Bank of England 2014). The asset allocation and investment decisions of these institutions have decisive influence on the cost of capital of many sectors of the global economy. By extension, the regulatory, supervisory, and accounting policies that influence these institutions' investment decisions have significant second-order effects on capital market pricing and cost of capital.

Currently there are substantive differences between European and US accounting policies with respect to balance sheet valuation methods for investment assets.¹¹ European conventions largely follow mark-consistent methods, requiring that balance sheets and capital calculations incorporate recent market experience and pricing. American conventions differ in significant respects, although there is much recent examination of reconciling US standards to conform more closely to European practices. A middle ground that has been suggested by some observers would adopt 'mark-to-funding' standards, using the asset prices and returns that would be realized if the owner held the investment asset to full maturity (in the case of fixed income) (Persaud 2008).

Mark-to-market pricing conventions combined with current regulatory capital requirements, while beneficially reflecting current market values in balance sheets and regulatory capital measurements, can also create self-reinforcing pro-cyclical policies.¹² These dynamics can be magnified during periods of capital market disruption and distress. As asset prices drop, insurers' calculated assets in riskier investments decline, potentially triggering the need to bolster capital through asset sales of riskier assets (and purchase of low-risk assets to bolster capital positions) into a market already under some degree of stress. The added selling activity further depresses prices of riskier assets and increases prices of risk-free assets. The reduced yield on risk-free assets can then feed back into higher estimated liability streams. The final result is regulated institutions selling large blocks of risky assets into distressed markets. The mirror image of these feedback loops can occur during market upturns, raising capital positions during more frothy markets and encouraging greater risk-taking during market peaks.

One suggested antidote to pro-cyclical policies is to heighten capital requirements during market upturns and to exercise some measured degree of supervisory forbearance during market downturns. While potentially beneficial, these policies can also be troublesome. In particular, the frequency, incidence, and degree of supervisory forbearance can introduce moral hazard in situations where weaker or poorly managed firms are given special leniency, or where the riskier activities of some firms are forgiven through ad hoc flexibility granted during downturns.

Application of bank-oriented prudential standards within insurance sector

Many of the newly established supervisory entities for insurance are institutions with legacy oversight of the banking sector, including the US Federal Reserve, central banks in European countries, and the UK Financial Stability Board (with many central bank constituents). Although similar in some respects, the insurance and banking sectors have very important differences in the structure of their balance sheets and attendant risks. Prominent highlights include (1) the very different nature of assets within banking (e.g., outstanding loans) and insurance (e.g., investments in a variety of asset classes); (2) differing types of liabilities within banking (e.g., deposits) and insurance (e.g., uncertain future contingent payouts); and (3) the differing degrees of friction and length of time horizons for significant movements in assets and liabilities during periods of distress (e.g., depositor runs in banks vs. policy lapses/cancellations in insurance). In the early stages of newly established supervisory oversight, bank-oriented policymakers and supervisors may be inclined to apply identical or largely similar approaches from the banking sector to the insurance sector. This can result in very broadly applied designations of systemic importance and ensuing capital requirements that ensure a very high degree of system safety, but at the cost of high capital intensity and elevated cost structure that can motivate exit from product and geographic markets.

Systemic risk methodology, international capital standards, and firm structure

At the global level, the methodology for identifying and overseeing systemically important insurance firms is determined partly by size, international activity, interconnectedness, and presence in non-traditional, non-insurance activities (NTNIA). For more broadly applied supervisory tools, such as the Insurance Capital Standard, the full set of internationally active insurance firms is within scope, regardless of systemic importance. If the tools and terms for overseeing such firms are sufficiently onerous, some insurers may prefer to decouple their currently integrated operations into separate legal entities by country, thereby bypassing the more intensive oversight. This disintegration of firm structure can result in more locally dedicated capital, loss of scale and scope economies, and lower risk diversification. The net social welfare consequences are not fully known, but significant negative spillover must be considered.

Risk-weightings applied to sovereign debt and systemic risk

Much of the risk-weighted capital calculations in current supervisory models applies a zero weighting to the risk from sovereign bonds issued by developed countries. As such, the risk-weighting applied to different sovereigns would be invariant with respect to macro-economic health, debt burden, debt servicing requirements, current budget deficits or surplus, and currency strength. The rationale for this regulatory shortcut is that sovereigns are unique borrowing entities relative to private organizations that may have existential threats, and that applying differential risk weights across countries would be fraught with political risk that could unnecessarily complicate financial oversight. Capital markets, however, recognize significant differences cross-sectionally and longitudinally in the risk premiums embedded within the market pricing of sovereign debt.

Insurers and other regulated institutions effectively must hold large quantities of low-risk fixed income investments to match the time horizon of their liability streams and to satisfy supervisory requirements, and so are effectively bound to hold large investments in sovereign debt. If all sovereign debt has zero recognized risk under supervisory regimes, but sovereigns exhibit actual return variation in capital markets pricing, it can be tempting for financial institutions to invest disproportionately in some of the riskiest sovereign debt, earn higher returns, and benefit from 'zero-risk' recognition by their supervisors. This outcome introduces three types of systemic risk: (1) institutions create large allocations to some of the riskiest sovereign debt and are effectively motivated by supervisory standards to do so; (2) firms' strategies become more highly correlated as many institutions move in the same direction, exposing the financial system to amplified negative consequences in response to certain types of shocks; and (3) national governments and domestic financial institutions are more likely to experience significant negative shocks simultaneously and become more dependent on each other for mutual success or possible failure, thus increasing the 'interconnectedness' of public and private institutions during periods of distress. This is a rare example of a scenario where attempts to reduce systemic risk through specific policies can actually cause the probability and severity of systemic events to rise.

Future Challenges

The ways in which insurers are regulated and supervised across products, geographies, customer segments, and policy objectives matter very significantly for ultimate effects on broad measures of social welfare. The

transmission mechanism flows initially from the implementation of measures meant to achieve proximate policy objectives. It then has both direct effects on achieving those objectives (often recognized) and indirect effects on other social welfare measures either directly or through the second-order responses of supervised institutions (frequently unanticipated or less acknowledged by policy authorities). Additional challenges arise from incomplete mandates of supervisory authorities, resulting in either lack of recognition or less concern about the effects that materialize outside of official policy mandates. A final challenge is created when multiple supervisory authorities with intersecting mandates engage in actions that have negative action–reaction cycles between supervisory authorities and with the supervised financial institutions.

There are several worthwhile areas where new approaches to policy implementation could be developed and pursued.

Supervisory coordination across geographies

Supervisory colleges across multiple geographies are an important vehicle for better communication, coordination, and allowance for the multitude of effects flowing from supervisory actions. Global structures such as the FSB and IAIS can be very effective mechanisms for coordinating and harmonizing the implementation of policies. One model approach to improving social welfare outcomes starts with the Common Framework (ComFrame) approach taken by the IAIS for instituting supervisory and regulatory standards, which can then be interpreted and modified at more local levels.

Supervisory/regulatory clarity

Achieving greater clarity in the intent and implementation of supervision and regulation would be very beneficial both to supervised institutions and to the achievement of higher social welfare. Greater clarity can be realized in articulating desired future end states, paths to achieve them, and negative scenarios to avoid. At a more tactical level, significant improvements can be made in greater standardization of supervisory approaches, coordination across multiple authorities, reduced duplication of effort, stability of the supervisory structures, and movement toward a more level competitive landscape across geographies.

Improved understanding of outcomes

All participants within the networked financial system would benefit from greater understanding of the interconnectedness of their actions:

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TABLE 2.1. Implications for insurance/pensions/retirement security

-
- Annuity provision, pricing features, guarantees, innovation, availability
 - Capital market pricing volatility and stability
 - Market coverage of products, customer segments, geographies
 - Financial advice provision and coverage
 - Transfer of longevity risk
 - Pension settlement
-

Source: Author's contribution.

policymakers, regulators, supervisors, financial institutions. In particular, enhanced understanding of network dynamics can occur in several areas: (1) first-order responses to actions; (2) second-order effects that arise from an action–reaction cycle among members of the network; and (3) consequences that lie outside supervisory mandates.

Broader allowance for several dimensions of social welfare

Finally, it would be very helpful, although admittedly challenging, for policymakers, regulators, and supervisors to acknowledge and allow for effects of their actions on dimensions of social welfare that may have a more complex causal chain and that lie outside their official mandates. This is particularly important for connections to long-term financial and retirement security that depend on adequate returns to capital, financial stability, macro-economic growth, the ability to pool and diversify risks efficiently, and reliable, low-cost sources of guaranteed income (see Table 2.1).

Conclusion

The next decades will be decisive in determining whether the large aging population cohort in developed countries will be able to navigate a new retirement system that relies both on adequate levels of financial resources and the ability to pool and allocate specific risks efficiently across institutions and society. The supervisory structures and policies overseeing the insurance, asset management, and pensions sectors will be a significant contributor to whether and to what extent this navigation is successful.

Glossary of Terms

ACP	French Autorité de Contrôle Prudentiel
AFM	Netherlands Authority for Financial Markets

BAFIN	Germany Federal Financial Supervisory Authority
BCR	Basic Capital Requirement
BHC	Bank Holding Company
CBI	Central Bank of Ireland
DNB	Dutch National Bank
EIOPA	European Insurance and Occupational Pension Authority
FCA	Financial Conduct Authority, UK
FINMA	Swiss Financial Markets Supervisory Authority
FIO	Federal Insurance Office, US
FSB	Financial Stability Board
FSOC	Financial Stability Oversight Council
GSII	Global Systemically Important Insurer
HLA	Higher Loss Absorbency
IAIG	Internationally Active Insurance Groups
IAIS	International Association of Insurance Supervisors
ICS	Insurance Capital Standard
NAIC	National Association of Insurance Commissioners, US
NTNIA	Non-Traditional, Non-Insurance Activities
OSFI	Office of the Superintendent of Financial Institutions
PRA	Prudential Regulatory Authority, UK
RRP	Recovery and Resolution Plans
SIFI	Systemically Important Financial Institutions

Endnotes

1. The regional Federal Reserve office in which the insurer is domiciled becomes the primary overseer of that financial institution.
2. Voting members of FSOC include Secretary of the Treasury, Chairman of the Board of Governors of the Federal Reserve, Comptroller of the Currency (OCC), Director of the Consumer Financial Protection Bureau (CFPB), Chairman of the Securities and Exchange Commission (SEC), Chairperson of the Federal Deposit Insurance Corporation (FDIC), Chairperson of the Commodity Futures Trading Commission (CFTC), Director of the Federal Housing Finance Agency (FHFA), Chairman of the National Credit Union Administration (NCUA), and an independent member with insurance expertise who is appointed by the President and confirmed by the senate for a six-year term. Non-voting members include the Director of the Office of Financial Research (OFR), the Director of the Federal Insurance Office (FIO), a state insurance commissioner designated by the state insurance commissioners, a state banking commissioner designated by the state banking commissioners, and a state securities commissioner designated by the state securities commissioners.
3. See, for instance, Van Hulle (this volume, Chapter 5) for coverage of Solvency II regulations in greater depth.

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4. See, for instance, Reid and Waters (this volume, Chapter 6) for in-depth coverage of issues of financial stability and systemic risk.
5. Regulatory issues around solvency are addressed in greater depth in Van Hulle (this volume, Chapter 5).
6. The IAIS is also a member of the FSB, constituting a formal connection between the two organizations.
7. 'The Executive Committee currently has three U.S. members, two from the NAIC and one from Treasury's Federal Insurance Office (FIO). The North American region is limited to five seats on the Executive Committee. Canada and Mexico each have one' (Festa 2013).
8. This is sometimes referred to as a general equilibrium outcome, and the before-versus-after comparison as comparative statics.
9. Pareto efficiency, or Pareto optimality, is a state of allocation of resources in which it is impossible to make any one individual better off without making at least one individual worse off.
10. This included not incorporating (1) the risk-reducing benefits of asset-liability matching; (2) risk diversification advantages of deploying capital across uncorrelated geographies, product lines, and customer segment; and (3) levying a simple capital surcharge based on 12% of income generated from asset management operations.
11. See, for instance, Maurer et al. (this volume, Chapter 3).
12. The Procyclicality Working Group defines procyclicality along two dimensions:

First, in the short term, the tendency to invest in a way that exacerbates market movements and contributes to asset price volatility, which can in turn contribute to asset price feedback loops. Asset price volatility has the potential to affect participants across financial markets, as well as to have longer-term macroeconomic effects; and

Second, in the medium term, as a tendency to invest in line with asset price and economic cycles, so that willingness to bear risk diminishes in periods of stress and increases in upturns. A tendency by insurance companies and pension funds to invest procyclically in the medium term might deepen the troughs and exaggerate the peaks of asset price or economic cycles in a way that is potentially detrimental to financial stability and long-term economic growth (Bank of England 2014: 2).

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