

Economics and Business Review

Volume 1 (15) Number 3 2015

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Paper based publication

ISSN 2392-1641

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Printed and bound in Poland by:
Poznań University of Economics Print Shop

Circulation: 300 copies

The changing architecture of the safety net in insurance worldwide: post crisis developments¹

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Abstract: This aim of this paper is to explain the safety net of the insurance sector—understood as the total means which ensure the safety of the insurance markets and their customers and how it has been heavily affected by recent regulatory initiatives. The paper then provides a review and analysis of the directions of the evolution of the architecture safety net in insurance as compared to banking. Special attention is paid to macroprudential supervision which is believed to constitute a major regulatory innovation in the aftermath of the recent global financial crisis. Additionally new restructuring and resolution concepts and tools are discussed. Particular attention is focused on Global Systemically Important Insurers (G-SII's) which are the focus of safety net regulation and which provide a regulatory impetus for the remaining part of the industry.

Keywords: safety net in insurance, globally systemically important insurance institutions, systemic risk, macroprudential supervision.

JEL codes: G15, G22, K23.

Introduction

The recent global financial crisis has revealed a need for the substantial rearrangement of the existing financial safety net to address new challenges coming both from within the financial sector at large as well as its individual components. Its final goal is a better identification of the risks of the financial system and a better delivery of the crisis management tools addressing them. Most of the new initiatives in this regard originated within the G20 and Financial Stability Board – de facto financial reform secretariat of G20. It underlines the importance of

¹ Article received 21 December 2014, accepted 3 August 2015.

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the topic in the current political agenda and provides the necessary weight behind the reform proposals. Overwhelmingly the political and research focus so far is concentrated on the banking sector and relevant solutions for banks. In the aftermath this “banking perspective” has been increasingly applied to other financial sectors. This is particularly well observed in the insurance area.

The focus of our analysis is the insurance sector and insurance relevant responses to the reform initiatives. Its purpose is to provide an analysis of the direction of the evolution of the safety net structure in insurance as compared to banking and assess its specificity and consequences.

The paper is split into four sections. In the first we discuss the context of the whole process which we believe is the emerging new regulatory paradigm of the financial sector which essentially calls for a macroprudential approach and public management of the risks of the financial system. In the next section we discuss the conventional safety net arrangements in insurance which dominated throughout the world prior to the recent global financial crisis. Finally we review major new developments in the insurance safety net such as the emergence of macroprudential supervision, introduction of multilayer regulatory standards, the development of special resolution regimes, systemic crisis back stops within government structures and provide an assessment. Section four contains our conclusions.

1. The context – the emerging new regulatory paradigm of the financial system

As a result of the developments during the last global financial crisis and the lessons learned the entire previous regulatory and supervisory paradigm has been placed in question. The whole of this “Washington consensus”, supported by the IMF and surrounding institutions’ recommendations and policies, was based on efficient market orthodoxy. It has dominated the financial regulatory domain over the last 25 years or so and has fallen apart as an effect of the last global financial crisis [Helleiner 2010]. Its essence relied on unconditional faith in the efficiency and rationality of the financial markets. It has been assumed that financial markets are, in principle, efficient though with a tendency to short term volatility. Their proper functioning required basically only adequate access to market information and market discipline. These markets should not have been overburdened with regulatory discipline but should have been left to their own devices. The “Washington consensus” has basically assumed that the financial system is safe with private risk management executed at the level of individual financial institutions. Consequently it believed that financial innovations such as securitisation or derivatives are generically good at providing more opportunities for private risk management in financial systems hence making them safer.

The “Washington consensus” focused its attention on the safety and stability of individual financial institutions without paying much attention to their interconnectedness and common exposure and even possible contagion channels (see Table 1). Its principal centre of supervision has therefore been the microprudential bodies. Generally speaking the heart of this old paradigm was based on a “regulatory trilogiy” which encompassed greater transparency, more disclosure and more effective risk management by individual financial firms [Eatwell 2009].

Table 1. The Washington and Basel consensus in comparison

Features	View of financial markets	Instruments applied	Supervision in place
Washington consensus	<ul style="list-style-type: none"> – Largely efficient, rational and self repairing – Prone to short term disruption – Financial innovations contribute to financial stability and safety – Requires better more timely information but should be left to their own devices 	<ul style="list-style-type: none"> – First hand role of market discipline – Enhanced transparency and disclosure – Private risk management (VaR models) within the financial institutions 	<ul style="list-style-type: none"> – Formal and superficial – VaR models and microprudential supervision – the route to stability – System made safe by allowing individual institutions to manage risk – Supervision isolated from politics
Basel consensus	<ul style="list-style-type: none"> – Financial markets are inherently procyclical and prone to herding – Financial innovation and increasing complexity can make the system less stable – Governance and business models should be subject to public control 	<ul style="list-style-type: none"> – First hand role of the regulatory discipline – Enhanced regulatory and supervisory powers – Public management of the financial system risk – Leverage limits and countercyclical capital buffers 	<ul style="list-style-type: none"> – Material, penetrating and profound – Macrossystem – wide perspective – Safety of the financial system becomes a public preoccupation – Excessive complexity and financial innovation put under strict control – Supervision infiltrated by politics

Sources: [Baker 2013: 117] and authors’ own additions.

The focus of the new “Basel consensus” is a “macroprudential” approach and with this a demand for public management of the risks of the financial system. Its important feature is the introduction of special regulatory standards for the systemically important financial institutions, both at global and domestic levels. The new consensus also promotes a new supervisory parameter for micro prudential supervisors which should focus their attention not

only on “solo” companies but entire financial groups and their internal risk management systems. The new consensus clearly elevates the role of regulatory discipline which should take precedence over the market. This includes even questioning of fundamental property rights and the granting of special resolution powers to public bodies. Management boards and shareholders under the new rules clearly much less trusted to control market excesses than as in the past.

The emerging regulatory and supervisory model in insurance is characterised additionally by the accelerating globalisation of regulatory choices. Recent decisions of the Financial Stability Board regarding the designation in 2013 of Globally Systemic Important Insurers (G-SIIs) and of the International Association of Insurance Supervisors, regarding accelerated development of the Comframe, including its Insurance Capital Standard (ICS) to be implemented by 2019 by all Internationally Active Insurance Groups (IAIG) operating globally, are the most profound indications of this new, qualitative development.

The upcoming new regulatory system is substantially growing in complexity in comparison to the one we know. It introduces a multilayer regulatory architecture which is composed of at least of four layers – the “ordinary” companies’ layer, IAIGs layer, G-SIIs layer and a “specials” layer (mutuals, captives). It is additionally possible to have a Domestically Systemic Insurance Institutions (DSII) layer.

Finally the new regulatory model clearly expands the regulatory parameter by introducing a macroprudential pillar to control, mitigate and possibly prevent systemic risk. On the supervisory front we are confronted with the development of enhanced supervisory penetration and the emergence of a multipolar supervisory system. Classical microprudential bodies are complemented with macroprudential authorities and enhanced consumer protection agencies. Moreover special crisis management arrangements are becoming an important part of the new regulatory and supervisory framework. Their role is to limit potentially negative spillovers and secure crisis management plans of action in advance to avoid improvisation [Claessens and Kodes 2014].

Supervisors are expected to be more holistic and penetrative in their approach to their oversight and assessment. A good example is the development of the group wide supervision concept.

Moreover the new supervisory models take into account the need for increased transborder coordination with MMOUs, supervisory colleges and Crisis Management Groups as available toolkits.

New supervisory models need to additionally recognize the increased role of shared supervision and supervisory co-decisions. It is also characterised by the implementation of new, forward looking supervisory tools – early warning indicators, scenarios and stress testing. Finally, the upcoming supervisory model is placed under the growing role of central banks.

2. Safety net arrangements in insurance prior to the crisis

Historically safety nets are the main by-product of the Great Depression 1929–1933. Once mainly implicit and ad hoc they have now become more and more explicit and permanent in nature.

Initially the concept of the safety net was a narrowly defined feature relevant to banking. For this reason its role in the stability of the financial system and the combat of the systemic risk has been enhanced. With time this strict limitation began to wane. The concept of the financial safety net came into the ownership of the entire financial system. It also started to be *expressis verbis* recognised in academic literature not only as the tool for addressing macroeconomic and macroprudential concerns but also to assist in accomplishing the microeconomic issues. It thus reflects the growing convergence of financial markets and the growing interconnectedness of financial institutions. It also reflects our better understanding of the changes that have taken place in the financial system.

Without going into detail the financial safety net may be defined as all devices which ensure the protection of the safety of the financial markets and their customers [Solarz 2008; Monkiewicz 2013]. These devices may include both private and public elements, both regulations and institutions.

The safety net is a public construct and is shaped predominantly by the State. Private elements become a part of the safety net only once they are authorized or “accredited” by the State.

Contemporary safety nets are focused primarily on the prudential protection of financial intermediaries and their customers with little attention given to financial products.

The aims of this protection may vary in different jurisdictions and market segments. In some (e. g. banks) macroeconomic and stability concerns prevail, in others (e. g. insurance) more microeconomic targets are targeted.

At national level the net is an aggregate of the individual segments of the financial sector with various links and dependencies. At the international level it is an aggregate of national constructions and international layers.

There are two sets of functions that may be allocated to the safety nets:

- preventive, which protects financial systems against the financial shock
- mitigating, (crisis management) which aims at limiting the cost of the failures of financial systems.

Overall the safety of the financial system may be viewed as an aggregate of the safety nets of the individual financial sectors embracing inter alia banking, insurance and securities. These individual parts of the sector specific safety nets exist both in competitive as well as in cooperative relationships. In either case these may lead to the convergence of some of the elements of the nets. A good example is the default compensation pay out cap which in most cases today at a similar level across different financial sectors in various

jurisdictions. These may also lead to some distortions due to the effect of the regulatory interpretation. Under current circumstances there is a clear danger of extending relevant banking safety net elements to other sectoral nets and the entire financial market. It may result in the replacement of standards which best account for the specificity of non banking financial institutions and non banking sectors.

The safety nets of the insurance sector have their industry specific institutional and structural peculiarities. This reflects firstly the different risk profile of insurance companies compared to banks and other financial institutions. In deposit taking institutions up to 80% of their overall risk is represented by the credit risk whereas in insurance the major class of risk is market risk (40%) and insurance risk (30%) [SwissRe 2010: 6]. Moreover the latter results from the losses incurred and hence is unrelated to the business cycle in contrast to credit or market risk. Additionally insurance contracts are frequently over a long period with a long settlement time. It takes on average more than 10 years to settle claims on general and motor third party liability insurance. A substantial part of life contracts terminate only after twenty to forty years.

An important characteristic of insurance compared to banking is the low exposure of insurers to liquidity risk which is an effect of the specificity of the insurance funding model. It makes the central bank in contrast with banking largely irrelevant for the safety of the insurance sector. Additionally insurers sectoral interconnectedness remains, unlike the banks, relatively low with no intense trading amongst individual agents which scales down sectoral contagion and the domino effect.

Considering the design of the insurance safety net prior to the recent global financial crisis three principal building blocks could be identified worldwide: prudential regulation, public oversight and insurance guarantee systems (market oversight). On the face of it, it seems quite similar to the architecture existing in the banking sector. A major difference vis-a-vis banking is the absence of the central bank and its lender of last resort function, crucial at times of distress.

Prudential regulations have come to the forefront of financial regulation quite recently – only at the beginning of the 90's in the XXth century [Vittas 1991]. They regulate concurrently a growing area of insurance activities. They define amongst others the principles of undertaking insurance activities, their pursuit, the principles of their financing and sound management as well as the principles of the safe wind down and market exit. They are evolving over time in response to the evolution of the safety perspective and safety models.

Prudential regulations are de facto impinging on owners' competences and oversight. This is a reflection of the lack of reliability of the latter from the public point of view. The less trusted owners' oversight is, the more public prudential regulations become necessary. This is well grounded theoretically in the agency theory and potential conflicts amongst the owners (principals)

and management (agents). Additionally it is reinforced by trends in ownership structure and nature which becomes increasingly diluted and concentrated on short term strategic goals. As a result instead of strong owners' oversight increasingly "quasi owners' oversight" emerges. It is concentrated in the hands of management and thus relieved of the owners' incentive structures. This potential for conflict between agents and principals is particularly big in insurance due to the complex insurance finance and business model and the long transaction settlement time. Both of these factors increase the danger of manipulation in financial reporting and overall performance and helps by hiding the real situation from the stakeholders. Hence we come today to the situation in which owners' oversight is performed in principle on the basis of binding public prudential standards.

The next major pillar of the insurance safety net is public prudential supervision. This pillar is essentially responsible for the daily monitoring of insurance companies, taking remedial action and ensuring their adequate compliance with regulatory rules and principles. The theoretical basis for the existence of public supervision in insurance is formulated in the theory of representation by Dewatripont and Tirole [1994] and developed further by Plantin and Rochet [2007]. According to this theory management of financial intermediaries such as banks and insurers which finance themselves by debt issuance to their customers are under pressure from their shareholders to take risky actions in order to accomplish extraordinary profits. This is fully rational from their perspective as equity (shareholder capital) in these institutions represents only small part of their overall financing. The leverage ratio (i.e. assets to equity) which illustrates this phenomenon is nowadays on average 10 for commercial banks and 3(P/C)-10(Life) for insurance companies [SwissRe 2010: 6]. Possible losses for the shareholders therefore are small and shared to large extent with their creditors: depositors and policyholders. On the other hand eventual extraordinary gains become fully appropriated by the shareholders. This natural moral hazard cannot be tempered by their creditors in the case of these institutions. Both dispersed depositors and policyholders have neither adequate technical knowledge nor the necessary information and competences to perform creditors' oversight. They are therefore neither in a position to control their principals nor their agents (management). This role is essentially taken by prudential supervision which, according to the theory, becomes a trustee of these small lenders. Apart from the protection of the individual policyholders prudential supervisors have been frequently tasked with other duties including a contribution to market integrity, its efficiency and financial stability.

The dominant supervisory model prior to the crisis was the one focusing on the financial safety of the individual insurance companies and their risk management systems that was believed to create a basis for this safety.

The third and the last pillar of the safety net in insurance prior to the crisis was composed of insurance guarantee schemes exercising a kind of a market

supervision. They are an element of crisis management in case of liquidity or solvency failure of the insurance company. They have been in most cases special purpose funds created and financed by insurance companies at the public request. They may be pre-funded before the failure happens or post funded when need arises after the failure. They become active once specified criteria are met. These specified criteria are normally either default or loss of liquidity. This is not a rare phenomena. In 1988–2008 in the US there were on average 33 insurers' insolvencies annually in the non life and 21 insolvencies in the life sector. In contrast to banking they are relatively recent innovations applied to insurance. They came in existence in the 70's and 80's during the last century in the US and subsequently spread to other countries.

Since these institutions are most often privately financed and managed by insurance industry players they may have a general inclination to discipline insurance companies and control their risk policies and behaviour to minimise collective expenditures in case of default.

These collective guarantee schemes may, in case of insurance industry, similarly to banking, play two different roles – pay box or risk minimiser. The essence of the pay box role is to pay out to eligible persons a guaranteed compensation amount notwithstanding the available resources of the failed company. The difference between available assets and liabilities is financed collectively by the remaining healthy insurance companies in proportion to the established criteria, most often the premium income. The kind of eligible persons and size of the compensation may vary depending on the specific rules adopted in a given jurisdiction. Some policyholders such as large corporations or managers of the failed entity and large shareholders are often excluded from the compensation offer. There are also frequently maximum limits of compensation offered.

Risk minimising role is an innovative and more complex function of insurance guarantee schemes. It is also much less popular with in the schemes. Its essence is to mitigate the default risk to the insured and to mitigate the adverse effects of the materialisation of default risk. The guarantee schemes in this role focus their attention on the prevention of failure by monitoring the risk taking by their sponsors and offering some financial assistance to overcome transitional difficulties if the need arrives. Additionally guarantee schemes may offer one off solutions or be involved in finding portfolio acquirers to protect the interests of the insured by continuing existing insurance contracts. In their role as risk minimisers guarantee schemes approach the activities normally restricted to supervisors and become important partners. There are good arguments for having assigned this role to guarantee schemes but there are also weighty counter arguments. The major bonus offered is increased flexibility in selecting the best possible solution to a specific problem. The most important malus is the additional provision of the moral hazard incentive

3. Safety net arrangements in insurance – post-crisis

As indicated before the recent global financial crisis has produced an ideological shift in the existing regulatory and supervisory paradigm. The micro prudential regulation and supervision dominated the scene in the pre crisis era and focused primarily on the safety of individual insurance companies has been considered ineffective and inadequate. In the aftermath of the financial crisis a need for a different perspective – a macroprudential supervision – was recognized and generally accepted [Nier et al. 2011; Osiński, Seal and Hoogduin 2013; Houben 2013] though its application to the non monetary sectors is still poorly developed. Its focus is on a market wide perspective and the safety of all market participants. Its role is the mitigation of systemic risk and the maintenance of financial stability [IAIS 2013]. Therefore its special task is detecting financial market interlinkages, identifying common exposures of insurance companies and the possible contagion effect that may be of relevance. As a result the emergence of the two pillar supervisory system in insurance as is the case in banking adds to the complexity of supervisory arrangements (see Table 2).

Table 2. Micro- and macroprudential supervision in comparison

Features	Microprudential supervision	Macroprudential supervision
Principal goal	Protection against default of individual institutions	Protection of the stability of the entire financial sector
Final goal	Protection of the customers and investors	Limiting macroeconomic costs of financial crises
Supervisory perimeter	Individual financial institutions	Financial system as a whole
Interlinkages and common exposures	Of little importance	Very important
Tools	Applied to individual entity	Applied to all or some specific groups of entities

Source: [Szpunar 2012].

These two pillars evidently need to cooperate and reinforce each other, however there may be areas where their perspectives differ and decisions are not so obviously arrived at. Take the case where the microprudential supervisor urges individual institutions to improve their balance structures and produces similar balance profiles in all entities. Their common exposures as a result increases, which is precisely what the macroprudential supervisor would like to avoid. This fallacy of the composition effect is the most relevant but not the only conflicting issue amongst the two supervisory perspectives.

The leading role in this new supervisory pillar is given to central banks because of their involvement hitherto in financial stability issues and the vast analytical resources that they possess. This is in itself an additional concern of the insurance industry which suspects a lack of insurance related knowledge in this new supervisory agent.

Additionally two more interesting and important developments with regard to prudential supervision in the aftermath of the recent financial crisis arise. This refers to the fact that supervision has begun to apply increasingly prospective supervisory tools in particular scenario analyses and prudential stress tests. This reinforces the risk preventive function of supervisors which may react well in advance of possible failures. Also supervisory authorities have begun, more often than before, to apply discretionary powers and a principles based approach. It also received many more tasks associated primarily with the development of consolidated or group wide supervision.

Prudential regulations in the insurance sector have been, until recently, addressed as a matter of principle to all insurance companies only with some exceptions in the case of mutuals and captives. With the designation of an initial list of Global Systemically Important Insurers (G-SIIs) by FSB on July 18th, 2013 a new layer of prudential regulation, based on the adds on principle, is emerging. The same is true with regard to banking which set the scene and seems to be the master cook (see Table 3).

The said G-SIIs, including in 2013, Allianz SE, AIG, Assicurazioni Generali S.p.A, Aviva plc, AXA S.A., MetLife Inc., Ping An Insurance (Group) Company of China, Ltd., Prudential Financial, Inc. and Prudential plc., and all subsequently designated entities will be subject to a range of additional regulations.

They include the recovery and resolution planning requirements as defined by FSB's Key Attributes of Effective Resolution Regimes, including the requirement for the establishment for each entity of a Crisis Management Group (CMG) and the setting up of a recovery and resolution plan (RRP), enhanced group-wide supervision, including a group wide supervisor to oversee the development and implementation of a Systemic Risk Management Plan and higher loss absorbency requirements (HLA). Of the measures outlined enhanced supervision was with immediate effect, the Crisis Management Groups should have been established by July 2014 and recovery and resolution plans, including a liquidity risk management plan should have been ready by the end of 2014. Implementation details for the HLA are to be finalized by 2015 and to be applied in 2019 by all G-SIIs identified in November 2017. Before that the IAIS is supposed to work out the "ordinary" loss absorbency capacity for the insurance world to have been ready by the G20 Summit in 2014. In 2014 FSB will have additionally designated G-SIIs and appropriate risk mitigating measures for major reinsurers. As in the case for banking, national jurisdictions will be expected to designate important insurers in their domestic market and to assign proper risk mitigating measures. This may add to the ex-

Table 3. FSB framework for systemic banks and insurers in comparison

	Framework for banks	Framework for insurers
First designation date	November 2011	July 2013
No of institutions	28	9
Overall justification	Size, global activity, interconnectedness, complexity, substitutability	Size, global activities, interconnectedness, non traditional and non insurance activities, substitutability
Measures: – enhanced supervision – effective resolution planning – higher loss absorbency (HLA)	<p>More intense and effective supervision, including stronger supervisory mandates, resources and powers</p> <p>Establishment of recovery and resolution plans (RRP) including liquidity risk management plans</p> <p>Capital surcharge ranging from 1 to 3.5% of risk weighted assets</p>	<p>More intense and effective supervision with direct regulatory powers over holding companies, and oversight of the Systemic Risk Management Plan (SRMP)</p> <p>Establishment of recovery and resolution plans (RRP) including liquidity management plans</p> <p>Capital surcharge to be developed with Basic Capital Requirement (BCR) and HLA for total balance or some activities</p>
Timeline	<ul style="list-style-type: none"> – Enhanced supervision: FSB framework in 2010 – Effective resolution: resolution planning requirement by 2012 – Capital surcharge: in 2016–2019 	<ul style="list-style-type: none"> – Enhanced supervision: SRMP as of mid 2014 – Effective resolution: recovery and resolution plans by end 2014 – Capital surcharge: BCR as of 2015, HLA as of 2016

Source: [Thimann 2014: 6].

isting batch of the prudential regulations across the globe [IAIS 2013]. This may additionally create new institutions complementing the existing safety net. This may be the case with regard to the resolution authorities which may be necessary to mitigate risk emanating from systemically important insurers – global or domestic.

The recovery and the resolution arrangements initially developed by the FSB post crisis for the banking sector seem to have finally found their way into insurance and form another innovation in the insurance sector safety net. It is based on the assumption that run-off and portfolio transfer tools traditionally used to resolve financial failures of the insurance companies may not be sufficient to mitigate the systemic impact of a large, complex insurance group. In principle, according to FSB recommendations, all insurers that

could be systemically significant if they fail should be subject to a resolution regime consistent with the “Key attributes to effective resolution regimes for financial institutions”. This includes all G-SIIs at a minimum [FSB 2014a]. As in the case of banking their implementation is supposed to govern the insurance institutions in an orderly manner without taxpayers’ exposure to loss from solvency support.

An effective resolution regime should include [FSB 2014a] “stabilisation options” which provide for the continuity of systemically important functions and “liquidation options” that provide the mechanism for the orderly closure and wind down of all or parts of the business whilst protecting the insurance policyholders. Such a regime should meet at least the following criteria:

- ensure continuity of systemically important financial services,
- protect insurance policyholders, allocate losses to shareholders and uninsured creditors,
- seek to minimise the overall costs of resolution in home and host jurisdictions,
- enhance market discipline and provide incentives for market based solutions
- not to rely on public solvency support” [FSB 2014a].

To achieve its goals and objectives the resolution authority should coordinate, on the one hand with the relevant policyholder protection schemes and on the other with the relevant supervisory authority.

Table 4. Actions and timelines of G-SIIs recovery and resolution planning

Action	Responsible	Completed by
Finalise guidance on the identification of critical functions and critical shared services in the insurance sector	FSB with participation of IAIS	Mid 2015
Report on the status of resolution strategies and plans for all G-SIIs and possible challenges	G-SII Crises Management Groups (CMG)	End 2015
Develop a proposal for draft guidance on the development of effective resolution strategies for G-SII	FSB with participation of IAIS	End 2015
Report on results of Resolvability Assessment Process(RAP)	G-SII Crises Management Groups	End 2016

Source: [FSB 2014b: 16].

FSB expects that all insurers that could be systemically significant will be subject to regular resolvability assessments and the whole process is carefully planned (see table 4). Under such assessments resolution authorities should assess whether the resolution strategy and operational resolution plans ensure the continuity of critical functions by the insurer concerned without negative externalities. The FSB acting together with IAIS has developed guidance to

assist authorities in their evaluation of the importance of the functions that G-SIIs provide to financial markets and the real economy.

Additionally all insurers that could be systemically important should be subject to ongoing process of recovery and resolution planning. The Recovery and Resolution Plans (RRP) devised should be reviewed and assessed by the micro-prudential supervisory authorities in cooperation with policyholders protection schemes as well as with the resolution authorities concerned.

FSB recommends granting resolution authorities extremely strong mandates and powers. The resolution authority should have inter alia the power to restructure, limit or write down all liabilities of the distressed insurer, including insurance and reinsurance. It could inter alia terminate future benefits and guarantees, reduce the value of contracts upon surrender, terminate or restructure options provided to policyholders, reduce the value or restructuring reinsurance contracts and the like [FSB 2014a]. The suspension of policyholders rights in resolution could continue until the temporary suspension or withdrawal from their insurance contracts with an insurer. It should also have power directly or indirectly over the insurer in resolution. These global developments are subsequently to be introduced in individual jurisdictions. Currently at EU level the existing EU directive on the reorganisation and winding up of insurance undertakings assumes that each individual member state is responsible for its own procedures in this regard. To align however with G20 and FSB recommendations the EU Commission has prepared a draft legislative proposal in the relevant EU framework. In December 2013 the EU Parliament adopted a report on the said framework in which FSB recommendations were largely supported and thus made the Commission responsible.

Finally, apart from the changes highlighted before, we should also mention the setting up on May 15th, 2013 of The International Forum of Insurance Guarantee Schemes with the intention of facilitating the sharing of experience of the leading insurance schemes in providing protection to policyholders in the event of the failure of an insurance company. Currently IFIGS membership includes Australia, Canada, Taiwan, France, Germany, Greece, Korea, Malaysia, Norway, Poland, Romania, Singapore, Spain, UK and the United States of America. Undoubtedly they will soon start to deal also with cross-border insolvency claims. It will result in a new role for the IGS in insurance relevant safety nets.

Conclusions

As our analysis indicates the safety net of the current insurance market and its operators is a complex matter which has multiple determinants and which tends to evolve over time reflecting current values and beliefs. It is built from many interrelated elements which must be properly balanced and coordinated. It is

a part of the broader category of financial system safety and its safety net with which many interconnections exist. This existence also allows a possibility for the appearance of negative externalities i. e. contagion effect.

In the course of the recent financial crisis existing safety net arrangements have been severely tested and new life has been injected into the concept of the safety net. As a result new concepts and ideas in relation to the safety net have arisen. The most important of these new elements include:

- creation of a new supervisory pillar – macroprudential supervision – for the benefit of financial stability and to mitigate systemic risk,
- differentiation of the spectrum of available regulatory standards and the creation of special regulatory regimes for systemically important institutions,
- creation of special rules for the purpose of the restructuring and the resolution of systemically important institutions,
- creation of systemic crisis back stops within government structures,
- assigning a special role to group wide regulation and supervision.

Many of these innovative ideas are borrowed from the banking sector and cannot be easily implanted into insurance with its specific business model. All of these are taking the insurance industry into uncharted waters and require proper responses both from the regulatory, supervisory and business communities. It also requires much additional empirical research.

References

- Baker, A., 2013, *The New Political Economy of the Macroprudential Ideational Shift*, *New Political Economy*, no 18(1): 112–139.
- Claessens, S., Kodres, L., 2014, *The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions*, IMF Working Paper, March.
- Dewatripont, M., Tirole, J., 1994 *The Prudential Regulation of Banks*, MIT Press, Cambridge, Mass.
- Eatwell, J., 2009, *Practical Proposals for Regulatory Reform*, in: Subacchi, P., Monsarrat, R. (eds.), *New Ideas for the London Summit: Recommendations to the G20 Leaders*, Royal Institute for International Affairs, The Atlantic Council, Chatham: 11–15.
- FSB, 2014a, *Key Attributes of Effective Resolution Regimes for Financial Institutions*, 15 October.
- FSB, 2014b, *Towards Full Implementation of the Key Attributes of Effective Resolution Regimes for Financial Institutions*, *Report to The G20 on Progress in Reform of Resolution Planning for Globally Systemically Important Financial Institutions (G-SISIs)*, 12 November.
- Helleiner, E., 2010, *A Bretton Wood Moment? The 2007–2008 Crisis and the Future of Global Finance*, *International Affairs*, May: 619–636.
- Houben, A., 2013, *Aligning Macro- and Microprudential Supervision*, in: Kellerman, J.A. et al. (eds.), *Financial Supervision in the 21st Century*, Springer, Berlin: 201–220.
- IAIS, 2013, *Global Systemically Important Insurers: Policy Measures*, July.

- Monkiewicz, M., 2013, *Bezpieczeństwo rynku ubezpieczeniowego UE a systemy gwarancyjne pewności ochrony ubezpieczeniowej. Teoria i praktyka*, Poltext, Warszawa.
- Monkiewicz, J., Małecki, M. (eds.), 2014, *Macroprudential Supervision in Insurance. Theoretical and Practical Aspects*, Palgrave Mcmillan, London.
- Nier, E.W., Osiński, J., Jacome, L.I., Madrid, P., 2011, *Institutional Models for Macroprudential Policies*, IMF Staff Discussion Note, I/18.
- Osiński, J., Seal, K., Hoogduin, L., 2013, *Macroprudential and Microprudential Policies: Toward Cohabitation*, IMF Staff Discussion Note, June.
- Plantin, G., Rochet, J.Ch., 2007, *When Insurers Go Bust. An Economic Analysis of the Role and Design of Prudential Regulation*, Princeton University Press.
- SwissRe, 2010, *Regulatory Issues in Insurance*, Sigma, no. 3.
- Solarz, J.K., 2008, *Zarządzanie ryzykiem systemu finansowego*, PWN, Warszawa.
- Szpunar, P., 2012, *Rola polityki makroostrożnościowej w zapobieganiu kryzysom finansowym*, NBP, Materiały i Studia, nr 278, Warszawa.
- Thimann, Ch., 2014, *How Insurers Differ from Banks: A Primer for Systemic Regulation*, July, Axa Group and Paris School of Economics: 1–23.
- Vittas, D., 1991, *The Impact of Regulation on Financial Intermediation*, The World Bank, WPS, August.

Aims and Scope

Economics and Business Review is the successor to the Poznań University of Economics Review which was published by the Poznań University of Economics Press in 2001–2014. The Economics and Business Review is a quarterly journal focusing on theoretical and applied research work in the fields of economics, management and finance. The Review welcomes the submission of articles for publication dealing with micro, mezzo and macro issues. All texts are double-blind assessed by independent reviewers prior to acceptance.

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