# Current Changes in the Role of the Insurance Sector

# Současné změny v postavení odvětví pojišť ovnictví

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### **Abstract**

The authors analyze changes resulting from impacts of the globalization process and the crisis on the financial markets, particularly on the conservative insurance sector, which is forced to accelerate the dynamics of structural changes. The adequacy of the current regulatory measures for the financial/banking markets, and the insurance sector in particular, is discussed, together with the consequences of implementing measures aimed at consumer protection/anti-discrimination measures, including the search for balance between higher internal stability and client safety on the one side, and efficiency of insurance for clients and effectiveness of the activity itself on the other side. Furthermore, the article addresses current internal problems of the sector. An opinion is expressed in conclusion that the insurance sector has potential to remain a stable sector, in spite of the outlined problems.

# **Keywords**

financial, economic and debt crisis, financial markets, insurance sector, regulatory projects, risk based approach/risk management, new architecture of the financial market regulation, consumer protection, anti-discrimination measures

#### JEL Codes

A 110, B 410, G 010, G 200, G 210, G 220, G 280, G 290, D 690, K 290

# **Abstrakt**

Autoři analyzují změny z dopadů procesu globalizace a projevů krize na finanční trhy a zejména na konzervativní odvětví pojišťovnictví, které je nuceno k rychlejší dynamice strukturálních změn. Diskutována je adekvátnost aktuálních regulačních opatření pro finanční potažmo bankovní trhy a pojišťovnictví zvláště, důsledky zavádění opatření na ochranu spotřebitele a antidiskriminačních opatření včetně hledání polohy mezi vyšší vnitřní stabilitou a klientskou bezpečností na straně jedné a účinností pojištění pro klienty a efektivností své činnosti na straně druhé. Diskutovány jsou i současné vnitřní problémy odvětví. V závěru je vysloven názor, že pojišťovnictví, přes naznačené problémy, má potenciál zůstat stabilním odvětvím.

### Klíčová slova

finanční, ekonomická a dluhová krize, finanční trhy, odvětví pojišťovnictví, regulatorní projekty, řízení rizika, nová architektura regulace finančních trhů, ochrana spotřebitele, antidiskriminační opatření

### Introduction

Throughout the modern history, the insurance market has appeared to be the most stable segment of the financial markets in the long term. This repeatedly historically-proven fact is given partly by the strong, generally applicable motivation to take out insurance coverage in order to maintain financial stability of economic entities or their close relatives in case of adverse incidents, partly by the strongly conservative nature of financial interactions carried out by the insurance sector on financial markets. Nevertheless, the current global problems characterized by high volatility of economic indicators, increased risk level, and negative selection, particularly on financial markets, have also started to undermine, to a certain degree, the stability of the insurance sector within the overall changes in the role of individual financial market segments.

The objective of this article is to analytically summarize the latest changes experienced by the global insurance sector in the past decade as a result of the financial and economic crisis and resulting inclination to more intensive government regulation on the one part and internal problems of the sector on the other part. These significant changes are apparent on the Czech insurance market as well, as it had to deal with the declining value of assets held by commercial insurance companies during the critical period and still has to cope with supranational regulation imposed by the Brussels' administration that impairs the effectiveness of the sector. A separate problem area is the occurrence of tariff imbalance resulting from the price war within the national insurance market as well as certain deformation of mediated sales of insurance products. The article also indicates predictions of further development on insurance markets.

# 1 Current State of the Financial Markets

The financial market has undergone the most significant changes as a result of the intensive globalization process in the last two decades and due to the financial, economic, and debt crisis of the past decade. Of all market segments, it has lost the most of the markets' natural ability to restore balance after deviations, thus becoming highly autonomous with significant virtual features, a financial cycle has broken away from the real economy cycle, and based on these new properties thus becoming – as essentially confirmed by the latest crisis – a major threat for the real economy, instead of its original function of serving the real economy.

In addition to the traditional general causes that established the environment for the crisis outbreak, i.e. overheating global economy due to a boom and massive credit expansion and associated overconsumption within the "welfare state" ideology, there were particularly specific causes of the crisis that resulted in the fact the first stage of the crisis, unlike the previous cycles, mainly took place on financial markets, i.e. did not start as the state of the real economy. Innovative financial instruments and failures of rating agencies added to the highly imbalanced, virtual environment as a breeding ground for radical solutions aimed at passing through the severe crisis.

<sup>1</sup> In more detail, see Daňhel, J.; Ducháčková, E. (2010), pp. 17-29.

The existing utilitarian model of capitalism has also significantly contributed to the onset of the crisis, as it causes historically unprecedented income polarization and views money as the final goal of economic interactions.<sup>2</sup> In this regard, it is necessary to add that the contemporary economic science – striving for higher level of exactness and rigorousness under the influence of excessive implementation of math as a non-dialectic scientific discipline – leaves ethics aside from the focus of the mainstream economists, thereby contributing to the creation of speculative and often incorrect economic environment with uncontrolled prevalence of negative selection and moral hazard. The resulting enormous income polarization then impairs political stability, social peace, and unfolds questions regarding the ability of a democratic society to efficiently face tendencies to speculative and corrupt economic environment.

Although the first stage of resolving the financial crisis through massive fiscalization of losses of private institutions with the use of public finance prevented the seriously imminent collapse of the global financial system, the solution infected the public finance of the leading global economies; the negative aspects of such solution comprise the intensification of the third stage of the crisis (i.e. debt crisis) that may no longer be resolved by further fiscalization due to its scope, and also the fact that the measures aimed at preventing the financial markets default were financially purposeful – i.e. they were not aimed at starting the real economy towards growth.

The cross-sectoral integration and implementation trends, which commenced in the Nineties in respect of regulatory projects that initially seemed effective, were considered to be the instruments for sustaining the economically favorable period of "great moderation" with high economic growth, low volatility of economic figures and low level of risk of economic interactions at the turn of the millennium. However, they have been recently undergoing a serious revision process, as they have not succeeded in fulfilling their role.

The cross-sectoral integration, which first appeared to be the strategy for the future, had apparently already peaked. The crisis has revealed some of its weaknesses – namely substantial differences in the consequences of crisis symptoms in respect of the economic results of individual financial services sectors; the highest differences developed within the most important institutional segments of the financial market: banks on the one side and insurance companies on the other. The crisis has also partially disputed the strategy of dominance of multifunctional financial conglomerates on financial markets. It has been proven that markets with relatively lower rate of concentration faired held up better during the crisis; similarly, medium-sized corporations did better than giants. The crosssectoral integration seems to be working well in times favorable for the economy – i.e. in the period of the upper amplitude of economic cycles; during downturns, negatives stand out, i.e. the consequences of differences in the business models of individual financial services sectors, namely banks and insurance companies. However, it is necessary to add that the capitally strong "bancassurance" companies that were not significantly exposed to toxic assets overcame the crisis relatively without problems (e.g. BNP Paribas, HSBC, and Crédit Agricole); in principle, the aforementioned statement also applies to bancassurance companies on the Czech insurance market.

<sup>2</sup> In more detail, see Daňhel, J.; Ducháčková, E. (2010), pp. 17-29, and MLČOCH (2010).

The inability (proven by the financial crisis) of regulatory projects and specific risk management models to deal with exceptional or unlikely events produces the need for their revision and modernization. As mentioned above, this mainly applies to specific causes of the crisis: prevention of evasion with regard to the necessary conservative regulation by means of innovative speculative financial instruments as well as the modernization of the method of assessing the standing of financial institutions and financial instruments in general. The internal consistency of regulatory projects for individual financial markets segment on the basis of the so-called "risk-based approach", relying on mathematical models, also continues to be a serious problem.

### 2 Current State of the Global Insurance Sector

The role and position of the insurance sector in the current global world has been significantly changing at the beginning of the second decade of the new millennium, within the environment of persisting debt crisis. The past century was characterized by rather harmonious development of the global and national insurance markets – in general, individual regional markets functioned separately, they were nationally oriented and protected by legislation. The traditional conservative protectionist markets were only minimally affected by the rather strongly volatile conduct of other segments within the financial markets in the past century; a price paid for the aforementioned continuous development was the stagnating effectiveness of the insurance sector during the past several decades.

Global processes, integration and product convergence, declining significance of geographic borders separating national insurance markets, liberalization of economic interactions, fading borders between individual segments of financial markets, etc. – all these factors have been forming new environment for the insurance sector that is subject to fierce competition and forced to higher dynamics of structural changes in the light of the global developments. The historically conservative insurance sector is asked – namely on the basis of a political dictate – for further transfer of risks, such as, for example, insurance coverage of environmental damages or IT failures, etc. This is passed off as new challenges for the insurance sectors aimed at dynamic reactions. We believe the traditional transfers of insurable risks – namely of natural disasters – also define barriers of the commercial operation of the insurance sector to such extent that the assumption of other insurance coverage risks does not seem to be realistic and/or effective in terms of insurance efficiency.

Signs of vulnerability of modern technologies associated with various natural disasters have recently been the catalyzer of the scope of damage to health, lives, and destruction of material assets, including infrastructure. One example: failure of nuclear technology arising in connection with the consequences of the devastating earthquake and resulting tsunami in one of the technologically most advanced countries in the world – Japan. The disaster was virtually immediately reflected in the financial markets weakened by the crisis – namely in terms of the falling stock prices for insurance/reinsurance companies with exposure in the given geographic area.

The "unchained" contingency in the form of natural disasters – with progressively increasing scope compared to the existing experiences – shows itself especially vigorously in this regard, with natural disasters of unprecedented dimensions, with indirect damage caused by radioactivity from a damaged nuclear power plant in Japan. It is a paradox that following the Chernobyl nuclear disaster (i.e. in 1980s already), specialized press discussed a question whether a technology as dangerous as production of nuclear energy should not have a failure probability of zero prior to being launched. Therefore, it is also logical that, following the nuclear disaster in Japan – i.e. something no one would expect in such a technologically advanced country, there is a worldwide campaign aimed at banning nuclear technology. However, the requirement for zero probability of contingencies with catastrophic consequences cannot be fulfilled in today's complex global world. Just remember the overly expressive pictures of the demolished World Trade Center buildings in New York with a caption below the photograph reading "an event with a zero probability prior to 11 September".

The earthquake in Japan shows how difficult it is for insurers to estimate the scope of catastrophic risks relying on probability based on historical data. Indemnification payments amounted to 1 134 billion yen, with the previously highest indemnification of mere 78 billion yen for the 1995 earthquake<sup>3</sup>. The high progression in the amount of damages, though not this intense, is also apparent for the consequences of American hurricanes (see Figure 1 Insured damages from global perspective). Situations symbolized by the Japanese earthquake in 2011 or Hurricane Katrina in 2005 virtually refute the application of inductive method for analyzing future contingencies, in other words: existing statistical data and posterior probabilities relying on and depicting past conditions of incident catastrophes cannot used to forecast future using exact (scientific) methods at the current knowledge level.

In this regard, it is a new relevant fact for the commercial insurance sector that this concerns significant changes in the quality of risks, which had traditionally been subject to insurance, and insurance markets had absorbed such contingencies without any major problems (until recently). The current effort aimed at resolving the impact of changes in the nature of insured risks due to catastrophic events comprises several problem areas: need to react to the trend of increasing financial funds necessary to eliminate the catastrophic damages from the perspective of the insurance sector economy; enhancement of stability and client safety of the sector as part of the financial markets suffering from crisis symptoms. However, the cardinal problem is the location of additional financing sources to cover the consequences of disasters in excess of the scope that may be resolved by commercial insurance.

<sup>3</sup> BLABLA, J. (2012).

Man-made

Eartquakes

Weather-related

Weather-related

Figure 1: Insured damages as a result of disasters<sup>4</sup> from global perspective (in bn. USD)

Source: Bevere, L., Enz, R., Mehlhorn, J. (2012), p. 7.

However, in addition to the catastrophic contingency, the present-day insurance sector also has to deal with subjective human preferences and aversions. Research shows that people are afraid of incorrect "improbable" events in connection with the problem of arranging insurance/ignoring potential adverse effects of contingencies. Heuristics, cognitive psychologists Kahneman and Tversky<sup>5</sup> studied the structure of insurance taken out, concluding that people neglect strongly improbable events when inquiring after insurance. The researches called this effect, which contradicts the primary role of insurance – i.e. to maintain financial continuity in the course of events that impair an entity's financial stability, "preference against small but probable losses" – to the detriment of the less probable but more substantial losses. When preparing prognoses, people generally tend to disregard extreme values and their negative consequences (Kahneman states that we are not usually inclined to risk out of courage, but rather due to lack of knowledge or blindness regarding the real probability of catastrophic events<sup>6</sup>).

On the other hand, insurers mostly fear the so-called unknown unknowns, which have not occurred in the past – i.e. there are no past probabilities available and it is not possible to apply formalization using mathematic models to them; however, their consequences often correspond to the consequences of the usually insured risks. Take the example of the American 9/11: this type of terrorist attack was an absolutely new phenomenon; however, not so its consequences: fire, explosion, collapse of buildings. Therefore, the problem is that if insurers failed to declare in advance that their insurance does not cover fire, explosion, etc. if resulting from an act of terrorism, they must bear the subsequent damages.

<sup>4</sup> Swiss Re defines catastrophe for 2011 by the amount of the total damages/insured damages from or total number of casualties of 20.

<sup>5</sup> Kahneman, D.; Tversky, A.; Slovic P. (1982).

<sup>6</sup> Kahneman, D.; Tversky, A.; Slovic P. (1982).

# 3 Impact of the Financial and Economic Crisis on the Insurance Sector

The traditionally conservative insurance sector was not immediately affected; however, naturally, it was not immune to serious problems of other segments of the financial markets. Therefore, though the immediate effects of the crisis on the global/national insurance markets were not as fatal as in case of the banking sector, the insurance sector has been affected in certain regards. The most significant case immediately prior to the crisis outbreak was the AIG insurance company – standing on the verge of bankruptcy – that provided insurance coverage of securitized innovative instruments CDS. AIG eventually had to be bailed out through fiscalization of losses using public finance. Specialized insurance companies providing financial guarantees (so-called monoliners) experienced overwhelming problems at the moment the credit ratings of securities issuers were lowered; their business model – relying on undiversified, highly speculative portfolio and, as such, significantly different from the conservative technical model of traditional insurance companies - failed completely.

Allianz and Aegon (the insurance company had to receive financial aid from public finance) experienced substantial losses of asset value, namely due to writing off the bonds of the bankrupt bank Lehman Brothers or overexposure to Iceland's banks that had the highest ratings possible prior to the crisis. British group Lloyds had severe problems as well: the bank, in which it had deposited its reserves, was severely endangered; however, it eventually received government aid at the end. Insurance companies, which were involved in the area of investment banking and underestimated the risks of financial instruments and which insufficiently diversified their investments, were affected the most (Yamato Life, Japanese insurance company, even became bankrupt as a result of insufficient portfolio diversification). The losses of insurance companies were also reflected in the negative results of several prominent reinsurance companies, including but not limited to Swiss Re (2008 results: -864 million CHF) or the German Hannover (-134 million EUR)<sup>7</sup>.

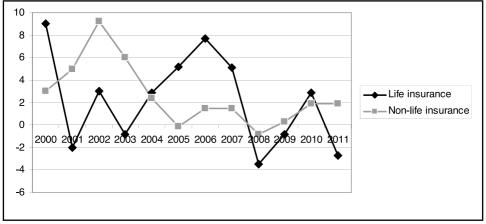
In reaction to the crisis and knowing which activities generated the highest losses during the crisis, insurance companies reduced their noninsurance operations, which were lately becoming more important within the globalization process, cross-sectoral integration, and product convergence. This does not mean insurance companies abandoned them in general, but they have started to return to their "core" business more rigorously and much more cautiously than before the crisis. When assuming the transfer of risks from their clients, insurance companies have started assessing such risks much more carefully, increasing their reserves, while accommodating their clients' requests more by modernizing and improving the quality of products offered. On the other hand, the efficiency of insurance is being impaired by the frequently implemented insurance indemnification limits and insurance exclusions. A separate problem area is the current effort of commercial insurance companies to specify the insurance premium calculations closer to the assumed risk: on the one side, it is possible to trace tendency to an increase of insurance premium tariffs; on the other hand, recession of the real economy further contributes to increasing competition and more tense relations among economic entities. The market pressures push the insurance premium tariffs down – even to or below the adequacy level

<sup>7</sup> Horáčková, J. (2011).

in some cases. To give an example: problematic development of the third party motor vehicle insurance in the Czech Republic and Slovakia.

Figure 2 documents changes in the development on global insurance markets by the fact that individual factors affecting the development are reflected differently in the life/non-life insurance market segment.

**Figure 2:** Real year-to-year change of insurance premiums underwritten from the global perspective (%)



Source: Fann, I.; Seller, T.; Stalb, D.(2012), p. 33.

# 4 Impact of Enhanced Regulation

It has already been stated that, in general, the financial and economic crisis did not dramatically affect the global and/or national insurance markets; however, there are currently strong political ambitions apparent in developed economies and integration bodies (including the EU), aimed at intensifying the regulation imposed on financial markets and "punishing" the parties guilty of the crisis outbreak, namely bankers<sup>8</sup>, all this without prior efficiency analysis of such conduct. This "Friedmanistic" improvisation of bureaucracy also strongly affects the insurance sector. Strict regulatory measures are being designed against hypothetical culprits of the crisis, namely against banks and rating agencies, which should prevent another crisis amplitude. In addition to the already imposed regulation on the bankers' remunerations, regulation of rating agencies and hedge funds, etc., another "legislative tornado" is expected to come from Brussels in this regard. Higher level of regulation (in various stages of preparation and implementation) is being prepared for OTC derivatives, central depositories, audit, and the so-called shadow banking, which also comprises leasing companies.

At the G-20 summit, which took place in Cannes at the beginning of November 2011, a list of 29 systemically important financial institutions (banks) was created, the bankruptcy of which would – according to the list authors – substantially impair the entire global

<sup>8</sup> In more detail, see Mandel, M.; Tomšík V. (2011), p. 61.

financial system. According to the authors, these "too big to fail" banks will have to adopt more stringent regulatory rules and provide regular semi-annual reporting in exchange for the guarantee of a government aid in case of a risk of default. It is somewhat interesting that the list of selected banks does not include the largest bank in the world according to market capitalization – the Chinese Industrial and Commercial Bank of China, as it is not systemically important according to the Financial Stability Board (FSB). Conversely, Dexia, a Belgian bank that passed the EU-wide (?!) stress testing in summer of 2011 only to experience significant problems in October, being saved from default by financial injections, is firmly among the selected banks. The list does not comprise any institutions other than banks; the fact the list does not include any of the important insurance companies (in spite of the original presumptions) apparently documents that the insurance business is considered, historically and traditionally, to be more conservative than banks even in the present hectic times.

However, the insurance business will be most significantly affected by the continuation of the Solvency II regulatory project, International Financial Reporting Standards 4 (IFRS 4) application, and guarantee scheme within the insurance sector. Add to the list the fact that new central Pan European authorities were created within the process of forming architectures of supervision over the financial markets, with extensive rights vested but no liability; consequently, the insurance sector will have to accept these changes.

The legislative tornado comprising new regulation, which is currently being implemented on both international and local level, represents the most significant risks insurance companies are currently facing. This is apparent from the outcome of the latest "Insurance Banana Skins" study, which has been traditionally performed by the Centre for the Study of Financial Innovations in cooperation with the audit firm PwC. New rules the government use to increasingly regulate capital adequacy or market conduct of insurance companies may enormously increase the sector-specific costs and paralyze the ability of individual companies to meet such regulatory requirements. This may also distract insurance companies' managements from much more important tasks – i.e. from restoring profit-generating activities in a situation, when the sector that is known for stagnating productivity on a long-term basis is under significant pressure. In addition to the continuation of the Solvency II project, which leads to great concerns on the part of professionals and insurance company managers, the research has also identified another swelling agenda for insurance companies, such as new international financial reporting standards or various new tax and regulatory requirements. Furthermore, managers taking part in the research often quote problems regarding the availability of capital that might be needed by insurance companies as a result of more stringent regulatory requirements for capital adequacy as

The list of the highest risks for the insurance companies according to Insurance Banana Skins 2011: (with 2010 results in parentheses): 1. Regulation (5); 2. Availability of capital (3); 3. Macroeconomic trends (4); 4. Return on investments (1); 5. Natural disasters (22); 6. Availability of key talents (-); 7. Liabilities arising from damages reported late (10); 8. Corporate governance (17); 9. Distribution channels (16); 10. Interest rates (11); 11. Political risks (18); 12. Premises of actuarial models (9); 13. Cost management (14); 14. Quality management (13); 15. Risk management (6); 16. Reputation of the insurance sector (15); 17. Back office quality (24); 18. Retail practices (25); 19. Comprehensive financial instruments (8); 20. Climatic changes (28); 21. Reinsurance (20); 22. Insurance frauds (23); 23. Terrorism (26); 24. Development of new products (29), etc.

well as due to the still uncertain prognosis of the direction the volatile financial markets might take. All these factors represent additional pressures on the sector, which is – even now – decimated by low rates and increasing competition.

The 2012 ranking of risks was also affected by the enormous financial consequences of the natural disasters in New Zealand and particularly in Japan, events in the Arab world, and problems of the euro area, which also contributed to the perception of political risks. The new HR issue is the concern about sufficient number of professionals with adequate capabilities and skills, which emerged as the main theme in all regions. Disregarding the frequency of floods, bomb attacks or oil disasters in the recent years, concerns about climatic changes, terrorism, and pollution remain relatively low. Insurance company executives believe these factors, which can be controlled through management, present considerably lower risk to the insurance sector than regulatory changes. It is not necessary to add anything else.

# 5 Discussing Efficiency of the Regulatory Schemes Being Implemented, Namely of Solvency II

We believe the continuation of the Solvency II project implementation within the insurance sector (implementation postponed to 2015) without necessary modifications and modernization will further intensify pending problems signalized by theoreticians and insurance companies themselves: this namely concerns higher capital requirements in relation to insured risks. We particularly object to the fact the Solvency model only works with past probabilities of events that have already occurred and is not able to (and cannot) anticipate future qualitative changes in the nature of insured risks or completely new risks emerging. These unknown unknowns feared by insurance companies cannot have a prior probability, as they are not even included in the past probability quantities of the probability calculation discipline, represent future state of the world and, so far, no actuary has been able to take previous conditions, under which past claims occurred, as well as the characteristics probabilities for such claims and predict the future. One of the basic methodological paradoxes applies to the calculation of such unknown events – how to make the future (i.e. future claims) the subject of scientific research, even though it does not exist yet. Models for insurance premium tariffs in the area of insurance technical risk of changes, including the unknown unknowns, require invention and subjective empathy regarding the future conditions on the part of a calculating actuary. Consequently, it is not possible to task mathematics to resolve such economic problems, as it cannot manage this as a non-dialectic scientific discipline; therefore, even the implementation of the mathematical models from the Solvency II arsenal will not be able to precisely anticipate the problem concerning future changes of conditions for claims.

Another objection of experts, which we endorse, relates to the fact mathematical models for capital requirements work better for homogenous insurance samples. Consequently, if insurance companies wish to use such approaches more effectively for determining the capital adequacy requirements (even stricter under the second stage of the Solvency project), they must homogenize, as much as possible, the insurance policy portfolios. Higher homogeneity may be achieved by "trimming" claims through strict exclusions within the insurance terms, imposing maximum insurance indemnification limits, etc.;

this may eventually be considered as significant reduction of the insurance coverage efficiency. In the light of these circumstances, we feel the initiative of reinsurance brokers aimed at detailed and exact, as much as possible, modeling of natural risks is somewhat problematic: the most important part of (above-limit) damages will not be covered by insurance/reinsurance companies as a result of imposing insurance indemnification limits and insurance exclusions in order to comply with capital requirements. It will still be necessary to find alternative methods of transferring such risks for this important part of financial consequences of various catastrophes not covered by commercial insurance, due to their multi-source or multi-layer coverage. The problem of tightening capital requirements coupled with the necessary increase in costs of relatively detailed transparent reporting under the third pillar of the project may result in the risk for the business profitability of smaller insurance companies.

The internal inconsistency of regulatory projects for individual segments of the financial services is further increasing, including cross-sectional projects. The given outputs document the clear autonomy of authors within individual regulatory areas: the preparation of implementation of the second stage of IFRS 4, which is to significantly affect accounting practices for life insurance in particular (e.g. rigorous separate reporting of investment life insurance), unify valuation of insurance liabilities, cancellation of accruals and deferrals in respect of indirect acquisition costs, etc., is absolutely inconsistent (if not controversial in some cases) with the reporting requirements under the third pillar of the Solvency II project. It is clear that individual regulatory projects have taken on a life of their own, which does not really regard the needs of real business and real economic life and, it seems, does not even regard the common sense requirements in some cases.

# 6 Other Regulatory Schemes under Preparation

Measures of the European Commission aimed at higher protection of financial services consumers are likely to increase inherent costs of the insurance operations in Member States of the EU. Although the guarantee schemes for insurance services are going to further increase stability of insurance markets and client safety, it is debatable whether or not this exceeds reasonable limit. In order to reduce the likelihood of default of financial institutions and promote the protection of financial services consumers, capital and other guarantee requirements imposed on insurance companies within the application of mathematical models are further increased, resulting in higher costs for insurance companies. Since insurance companies are not prone to sudden runs, for example, funds invested in quarantee schemes do not seem to be adequate to expected benefits.

Furthermore, insurance professionals with many years of experience do not consider reasonable the discussion about the possibility to "return" nonlife insurance policy during a trial period and whether or not the automatic annual renewal of insurance coverage is an unfair competition practice, etc. All these measures may consequently seem to be factors adversely affecting the sector efficiency; this is all the more problematic, because specialized studies suggest, as already mentioned, that the productivity of the insurance sector has been stagnating (if not declining) in the past decades. Although the insurance

<sup>10</sup> Materials from the 4<sup>th</sup> Guy Carpenter CEE Seminar in Prague, 27 March 2012.

sector did not suffer any fatal losses as a result of the crisis and, generally speaking, held up during the crisis, the nearest future may be complicated for the sector in some regards. The number of uninsured prospective clients is decreasing and insurance companies will thus have to resort to fierce competition practices in order to gain higher market share.

Another example of attempt at bureaucratic reregulation on the part of EU is the final judgment of the Court of Justice of the European Union (March 2011), according to which the consideration of gender as a risk factor in providing insurance services (namely in terms of life insurance products) is discriminatory. We believe the fact that the process preceding the implementation of unisex tariffs did not reflect the idea the distinguishing of gender in insurance calculations is unfair, but rather that the existence of similar legislation endangers one of the moral principles of the Union functioning, is symptomatic. As a result of this decision, nationals may take out life insurance in countries, where (insurance) technical principals are not restricted and which offer lower insurance premiums; consequently, this may lead to efflux of insured persons from the common European insurance market. In all these contexts, it seems almost unbelievable the EU plans other "anti-discrimination" measures that would forbid the consideration of age and/or health. Such approach that opposes common sense would result in the extinction of certain traditional and historically proven products offered by commercial insurance companies.

Effectiveness of financial institutions, high client safety, and moral hazard/negative selection form the magical triangle, all three vertices of which cannot be reached at the same time. It is easier to achieve high effectiveness of insurance companies within a society with certain level of ethics. Conversely, in case it is necessary to increase pressure on client safety and reduce prevalence of moral hazard/negative selection through government regulation within a unethical environment, it may result in a situation, where the regulatory measures go against the insurance business itself (and, unfortunately, sometimes also against common sense), with high costs of such regulation and, consequently, adverse impact on the economy. It is becoming evident that the reaching of the magical triangle vertices comprising higher level of client safety and prevention of moral hazard/adverse selection will always be achieved at the expenses of the third vertex, i.e. effectiveness of financial institutions – specifically of insurance companies. Furthermore, we also believe that more extensive regulation does not translate into its higher quality and may not prevent reoccurrence of defaulting financial institutions in the future. Innovative risk embracing conduct of investors and thus creation of brand new types of instruments/formation of price bubbles during optimistic investor period, when financial institutions particularly underestimate credit risks, can hardly be ruled out for the future.

# 7 Selected Other Factors of Changes in the Role of the Insurance Sector

One of the other problem areas is the relation of insurance companies and various brokers/middlemen, which is far from idyllic at the turn of the second decade. The same applies to mutual relations of the brokers themselves. Therefore, it is not surprising that insurance sector representatives are concerned about the work practices of some brokers/

<sup>11</sup> In more detail, see Čechová, J., Přikryl, V. (2012).

middlemen, especially in the area of life insurance. The motivation of brokers/middlemen, who work on commission basis, is not always identical with the objectives of an insurance company or client. Furthermore, the brokers/middlemen often act as financial advisors. Therefore, they are in a position to significantly affect the clients' decision, which may not always have to correspond with their interests. Just to provide an example: a new phenomenon may be encountered on the market – renegotiation of existing insurance policies in order to collect a substantial commission again. Life insurance policies cease to be profitable for insurance companies, which will eventually be reflected on clients. This practice has more or less been "customary" in the area of insurance for businesses; however, in case of life insurance, it is a new, strongly negative factor going against the very substance of life insurance – the longer clients remain with the system, under which their individual insurance reserve is valuated, the more beneficial life insurance policies are for clients.

Climate changes may also represent another problematic factor for the future insurance sector development, as they may not only result in an increased number of natural disasters, but also extend or reduce the human life span. It is difficult to predict what consequences climatic changes may have in terms of insurance protection and how these facts should be considered in actuarial calculations, the product tariffs rely on. It is becoming evident that insurance companies are still unable to (and cannot) predict the scope of potential natural disasters with sufficient accuracy and exactly approach the calculation of correct insurance premium tariffs. This fact affects not only the adequate price of non-life insurance products but also the ability of insurance companies to meet their obligations.

The insurance sector – similarly as the banking sector as well as other segments of the financial markets – is further affected by the volatility relating to the financial standing of instruments that were considered to be risk-free in terms of the investment safety prior to the crisis – e.g. particularly government securities. Concerns about the future development relating to the standing of bonds of "frivolous southern" countries undermine the financial market stability and promote investors' nervousness. Naturally, this also leads to a serious problem for the investment policy of insurance companies, which – until the beginning of the crisis – thoroughly fulfilled the safety principle of their deposits by purchasing government securities for their portfolios, reflecting (insurance) technical reserves<sup>12</sup>. To search for a safe instrument that would meet the requirements of conservative investors (such as commercial life insurance company or pension fund) within the present hectic environment – this is a current requirement imposed on the portfolio managers of such institutional investors.

Nevertheless, despite all the indicated problems, the commercial insurance sector practically continues to be the most stable financial sector, which was also documented in the past crisis period. However, it will have to face unprecedented new problems in the near future, posed by the current turbulent global world. It is positive that the starting posi-

<sup>12</sup> For example, the Allianz Group had to write off EUR 931 million worth of investments in the Greek financial sector following the quasi bankruptcy of Greece in October 2011 (ČIA NEWS, October 2011).

tion of the sector provides the necessary prerequisites for successfully overcoming the aforementioned challenges.

## Conclusions

The latest developments, especially in the past decade, have significantly affected the functioning of financial markets. The banking sector that substantially contributed to the onset and progressing of the crisis was affected the most. Due to increasing pressures of the globalization process and symptoms of the crisis, the role and functions of one of the most conservative – and thus the least affected by the crisis – financial sectors, i.e. of the insurance sector, change, as it is forced by the environment to ensure higher dynamics of structural changes.

In the near future, the insurance sector will target its "core" business more as part of its main activities, while more cautiously considering the construction of various products - both from the perspective of risk selection and the scope coverage thereof. In this regard, certain regulatory measures within the continuation of the Solvency project will also be important, namely the pressure for an arbitrarily determined ratio of insured risks and available funds of insurance companies. In this connection, we can expect incorporation of indemnification limits and insurance exclusions that will homogenize the insured portfolio, thereby making it more suitable for the application of mathematical regulatory models; however, at the expense of reduced insurance efficiency. In this environment, it will be crucial for insurance company managers, who fear increasing regulation, to find balance between higher internal stability and client safety on the one side, and efficiency of insurance for clients and effectiveness of the activity itself on the other side. The resolution of the dilemma regarding the guarantee schemes, anti-discrimination measures, etc. will be on the same note. A separate area is the search for new investment strategies of insurance companies under the current state of the financial markets; safe management of clients' disposable financial funds will be a key challenge for portfolio managers. Compared to other financial market segments, the global insurance sector has surpassed the crisis without fatal impacts; it is thus well qualified to hold up in the future, which is likely to be more complicated for the sector.

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