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EFFICIENCY OF THE TRANSITION OF INSURANCE MARKETS IN SOUTH-EASTERN EUROPEAN POST-COMMUNIST COUNTRIES

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Abstract

This article focuses on the insurance markets transition process in ten South-Eastern Europe (SEE) post-communist countries. These insurance markets, characterized by a large number of small insurance companies, have been analyzed from several aspects in order to underline the main obstacles to their development. The research aims at identifying the relations between insurance market development and the European Union (EU) integration process as well as the overall economic development. To this end, indicators of the success in implementing these relevant processes have been identified and countries have been consistently ranked.

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1. Introduction

In the past two decades, the transition of the sector of financial services in post-communist countries has mostly involved banks and capital markets development. In these countries, the change in the insurance sector was slower, causing a clear gap with the Western insurance sector. Banks' domination is evident from the official data about the structure of the financial service sector of the countries available in the official publications from their central banks or statistical offices as well as in research provided by Fink *et al*. (2007) or Hagmayr *et al*. (2007). Besides worse regulation and lower demand for insurance, the reason for that lies in the special features of the insurance industry and also in the many difficulties in its transition as well as, in some countries, limited economic development. The transition was even slower in the countries where the impact of war was devastating for the insurance sector.

Previous studies in this field mostly focused on Central-Eastern European countries whose insurance markets are commonly defined as CEE markets in the literature. This article is about ten post-communist countries in South-Eastern Europe (SEE): Albania, Bosnia and Herzegovina (BiH), Bulgaria, Croatia, Former Yugoslav Republic of Macedonia (FYRM), Kosovo[1], Montenegro, Romania, Serbia and Slovenia.

Their geographical location requires their involvement in the European Union (EU) enlargement process. Presently, Slovenia, Bulgaria, Romania and more recently, Croatia (from 1 July 2013), are already EU Member States, while the other countries are at different levels in the EU integration process. Official data about economic development (e.g. GDP per capita) show that the transition is much more efficient in countries like Slovenia (i.e. countries bordering highly developed areas).

Before the wars of the 1990s, BiH, Croatia, FYRM, Kosovo, Montenegro, Serbia and Slovenia were part of Yugoslavia, which had the most "sophisticated and advanced" insurance sector of all communist countries (Rogers *et al*, 1988). Unfortunately, the impact of the wars affected economic development, the EU integration process and, in particular, the insurance markets in this region.

This article aims at analyzing the efficiency of the transition of the insurance sector in these countries in the period 2001-2010, when the most significant changes happened. Therefore, the basic features of the insurance sector in the previous centrally-planned communist economies will be outlined as well as the barriers to the transition process. The level of development in the insurance industry will be measured by several indicators, providing a ranking of these countries. At the same time, basic indicators of economic development and EU integration level will provide a ranking of the countries in these two processes. A relation between the insurance sector transition and economic development as well as the EU integration process

1. As defined under UN Security Council Resolution n. 1244.

will also be determined. The methodology used to measure these relations is based on the Spearman coefficient of rank correlation, which needs countries ranked according to defined criteria. The main findings provide a general overview of the transition level of the insurance sector in these countries, identifying prospects and challenges in the relevant insurance markets.

The article is structured in six sections. Section 2 presents the literature review of similar research into the insurance markets in the region. Section 3 describes key obstacles to the post-communist transition of insurance markets as well as the impact of the European integration process. Section 4 describes the efficiency of the transition in the insurance markets and of European integration for the countries based on data for the last ten years. Section 5 presents results of statistical analysis and discusses important relations as well as main findings. Prospects and challenges for SEE insurance markets are discussed in Section 6**.**

2. Literature review

Very few studies were available on the insurance markets of communist countries up until the 1990s. Most published works had been written by authors from the SEE countries, and only a few authors from Western Europe and United States took an interest in these markets, such as Rogers (1986), Rogers *et al.* (1988), Marbacher and Furrer (1990) and Frinquelli *et al.* (1991). These studies pointed out a monopolistic and uncompetitive insurance market, whose dynamics were driven by political factors. Interest in the transition of insurance markets grew sharply in the 1990s, together with the expectation of European enlargement and new business opportunities in the region. Therefore, very important contributions to the literature were provided by authors with professional experience in the insurance industry, such as Baur and Enz (1994), Baur and Hess (1995), Meyer *et al.* (1998), Rüstmann (2001), Birkmaier and Codoni (2002 and 2004) from Swiss Re. On the other hand, many academics considered this transition process as important field for research, even if much more interest was shown in the development of the banking industry. An important analysis of the transition process in the insurance market in Poland, the Czech Republic and Hungary was carried out by Dorfman and Ennsfellner (2001), who developed a methodological framework to measure the progress of these countries in the transition process. Pye (2005) provided an accurate analysis of insurance market evolution in 1990-2001 in Central and Eastern European countries and in the countries of the former Soviet Union. This author pointed out that in many countries further efforts were required to implement market-based principles to the insurance market. Changes in regulations are only a prerequisite and a starting point in the transition process, as it takes some time to implement rules effectively and to build up an ‘insurance culture’. Moreover, Cooper and Dorfman (2003) pointed out that, in many countries, business ethical problems grew worse in the insurance industry during the transition process and some prevention measures had to be implemented.

An important analysis of the trend of insurance market concentration during the transition process in Central and Eastern Europe was carried out by Tipurić *et al.* (2008). The transition process required insurance market liberalization and the access of new private – and very often foreign – insurers that replaced the monopolies of state-owned insurers. This process introduced competition in the market, reducing concentration and increasing the efficiency of the sector. However, it must be noted that in Western European countries, with higher efficiency levels in financial services, mergers and acquisitions prevailed among companies with a view to finding better risk diversification opportunities, resulting in increased market concentration (see, for example, Casu and Girardone, 2006).

The relation between insurance market development and economic growth was investigated by Haiss and Sümegi (2008). These authors emphasized the role of insurers as institutional investors that may provide an important contribution to economic growth at national level, if supported by an appropriate range of investment instruments and effective stock and bond markets. They identified a positive correlation between expenditure in non-life insurance premiums (as life insurance was not developed yet at a sufficient level) and GDP also in SEE countries. Enz (2000) suggested the use of econometric models for long-term premium forecast based on GDP projections. Ćurak *et al.* (2009) recently confirmed the previous findings on a positive relationship between the development of both life and non-life business and economic growth in ten countries involved in the EU transition process over the period 1992-2007.

Kozarević *et al.* (2008) carried out a comparative analysis of the insurance markets of the former Yugoslavia, pointing out a significant correlation between the EU integration process and insurance market development in these countries. This correlation was thoroughly investigated for the countries of the Western Balkans by Kozarević *et al.* (2011). The authors have identified insurance penetration, insurance density, share of life insurance premiums in total premiums, share of motor third part liability (MTPL) insurance premiums in total premiums and the level of the applicable solvency rules as key indicators of EU integration level. An interesting analysis of the insurance market in SEE countries and of the role of insurers associations in the EU enlargement was carried out by Kozarević (2011) in collaboration with local insurance associations. This study provides detailed data and comparative analysis of insurance markets of SEE countries, including Greece and Turkey.

The EU enlargement requirements as well as the ongoing liberalisation process of financial services in the EU have played a crucial role in the definition of the transition process. The role of financial service liberalisation and the financial market integration processes in the EU are continuously monitored by reports of the European Commission (2013) and European Central Bank (2013). The need for including the insurance sector in economic analysis of liberalisation and integration is stressed by Haiss and Fink (2006). An interesting study of the financial market

integration process of new EU member States and the challenges of EU accession was carried out by Stirbu (2004). Unfortunately, the author neglected the insurance market, but an accurate overview of the EU accession requirements and financial services development in the new EU Member States was outlined. The challenges of accession become clearer, if the European insurance market integration process and its impacts on the EU members are taken into consideration. Important contributions in this field were made by Hess and Trauth (1998), Sterzynski (2003) and Masciandaro and Quintyn (2012).

This paper contributes to the literature providing a very serious analysis of the insurance market development of the countries with very specific historical, political and economical environment. Regarding this, these countries differ from other parts of the world, even from the Central-Eastern Europe post-communist countries. Moreover, another very important contribution of the paper is to show the relationship between the insurance market development of these countries and two other very important processes, economic development and integration into the EU ones.

3. Conceptual background

To understand the current SEE insurance environment, an overview of the previous government system in these countries and its impact on the insurance sector is provided. The core differences between centrally-planned and western insurance systems must be identified to gain an insight into the key obstacles encountered by the insurance sector in its transition. At the same time, in Western Europe, the ongoing European integration process has resulted in the introduction of new rules for insurers operating in the EU, making the transition process of SEE insurance markets even more challenging.

3.1 Centrally-planned vs. western insurance market conditions

Unlike competitive Western markets, the monopoly of state-owned insurers is the distinguishing feature of the centrally-planned insurance markets. The insurance sector was nationalized after World War II and foreign insurers were expropriated. Decisions on all fundamental issues, like premium rating and policy provisions, were taken by the Ministry of Finance on the basis of the general economic policy of the state. Underwriting practices were not based on sound actuarial analysis, as insurance was meant to be a service provided by the State with no need for profit. In this context, statistics were not seriously collected and skilled staff were not specially trained for these jobs. As a result, there was insufficient control of adverse selection, so that insurance products became attractive only for customers with a level of risk above the average. At the same time, many insurance products were compulsory for all state-owned companies as well as the transfer of some risks through reinsurance. However, reinsurers were forced to accept all risks and a part of them only could be transferred abroad by retrocession.

In the centrally-planned economies the trust between insurer and insured was not so much based on contracts and the commercial legal systems, as on state policy and confidence in state solvency. Some types of insurance were provided even without a written contract between the insurer and the insured. As pointed out by Dorfman and Ennsfellner (2001, p. 3-5), the absence of an insurance-oriented culture and lack of demand for insurance were major limits to the development of the insurance sector in the centrally-planned economies.

Some other general features of the centrally-planned economies – which also had an impact on the insurance sector – must also be taken into account. First of all, managers were not focused on company profitability and risks. As the managers' selection was based on political affiliation, they were not motivated to take responsibility for pure risks which the company's assets and employees were exposed to. Personal risk management also was neglected, because the property was mostly state-owned, and the social security system provided a wide range of benefits. The underdeveloped financial sector, extremely high inflation rates and a poor economy were a huge burden on the development of life insurance.

3.2 Key obstacles to the transition process of insurance markets

SEE countries implemented their transition from a centrally-planned economy to a market economy in different ways. Most countries of the former Yugoslavia were affected by war during the 1990s, while Albania, Bulgaria and Romania were extremely poor countries, at the beginning of the transition. On the other hand, Slovenia benefitted from being the closest country to the western economies. In any case, several specific obstacles are common to all countries.

As a prerequisite for a thorough transformation of insurance markets, the new democratically-elected governments had to create a new legal and institutional framework with a view to implementing reforms. It took many years, especially in countries that had been disrupted by war.

As a first step in the transition of insurance markets, monopolies were dismantled and supervision was introduced. The privatisation of state insurance companies provided access to foreign capital and the number of active companies increased. There were many difficulties in this process, as Furstenberg and Junker explain (2005). However, new insurance regulations –very often based on developed insurance markets in the EU without previous institutional preparation– were difficult to implement in countries that had different legal systems. New supervisory authorities had an insufficient staff potential and were not able to efficiently supervise a rapidly growing number of insurers in markets affected by many problems.

The lack of an insurance-oriented culture and the economic and politic instability in some countries had a negative impact on insurance market development. The dominant products were those featuring compulsory insurance, primarily MTPL

insurance, while voluntary insurance products were long neglected. In general, savings were deposited in banks and in other financial institutions than in insurance companies.

Additionally, economic reforms in most SEE post-communist countries slowed down because of many unsolved political problems, irregularities in the privatization process, slow financial consolidation of economic organizations, exchange rate instability and inflation. Inflation was one of the important obstacles to the development of life insurance. Insufficient economic activities resulted in high unemployment rates and reduced purchasing power of the population. Insurers' frequent insolvency and delays in indemnifications made insurance services even less attractive.

Moreover, financial markets of SEE post-communist countries were poorly regulated for years and they were not able to provide insurers with appropriate investment opportunities. Even now, these markets are still at an early stage of development and they offer a limited range of financial instruments.

Finally, insurance companies need statistical databases to determine adequate prices for their products. Unlike Western markets, where databases cover periods of many decades and even up to a hundred years, in SEE post-communist countries data are barely available for the last couple of decades only. Additionally, data are often unreliable and they are not diversified, especially in countries which were deeply affected by war. In such a context, sound insurance premium calculations are very difficult.

A lack of highly skilled managers and actuaries in insurance companies and underdeveloped accounting standards unable to provide adequate information for internal management represent further relevant obstacles to the transition process (Dorfman and Ennsfellner, 1998).

3.3 Impact of the European integration process

With the fall of communism, expectations for a wider European Single Market involving Central and Eastern European countries were raised. In 1993, the EU Single Market was completed with the introduction of the free movement of people, goods, services and capital. Additionally, the EU Council defined the following criteria for European accession (as reported in the Conclusions of the Presidency of the European Council in Copenhagen, 21-22 June 1993):

- 'Stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for the protection of minorities;
- The existence of a functioning market economy as well as the capacity to cope with the competitive pressure and the market forces within the Union;
- The ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union'.

Candidate countries had also to come to terms with the ongoing western countries'

market integration process. In 1994, an important step towards the European insurance market integration process was taken with the implementation of the third generation directives (92/49/ECC and 92/96/ECC), which introduced some fundamental principles: the single EU license on transactions anywhere in EU, the home country control and the deregulation of prices and conditions, leaving to supervisors only the control over insurer solvency. Deregulated insurance markets are expected to result in a better risk diversification in both underwriting and investment activities and higher efficiency and competition. Additionally, a wider range of new and/or innovative products can be introduced to satisfy a wider range of customer needs. The higher level of integration reached in the European insurance market in recent years also translated into an increase in the number of foreign companies, global competition and a wave of mergers and acquisitions – that resulted in increased market concentration. However, the creation of a single market has been hampered by some not harmonized but very important different local rules, as, for example, the regulation on taxation, accounting principles, contracts, solvency, thus preventing the creation of a European playing field for insurers (Sterzynski, 2003). The Solvency II project –defining the new solvency rules for European insurers– and the IFRS project –defining common accounting standards for companies in the EU– are examples of the further measures needed to support the single European market. The financial crisis and the need for recovery strategies are new challenges for the market. In such an environment, SEE countries have to adapt their legal and institutional environment to these new requirements for European insurers.

4. Empirical analysis

The success of the transition of insurance markets and the European integration process in the SEE post-communist countries depends on many factors. Therefore, estimates of the progress in these processes must be based on several key indicators. A ranking of the countries based on these key criteria may result in very important findings and correlations. Some relevant studies have been published on the relationship between insurance sector development and economic growth (Pye 2005, Tipurić et al. 2008, Haiss and Sümegi 2008, 2009) in some post-communist parts of Europe, but this work focuses on the relationship between insurance market development and European integration process in the SEE post-communist countries.

4.1 Estimate of transition in insurance markets and of European integration efficiency

Efficiency of transition in insurance markets of the SEE post-communist countries can be defined as level of development of insurance markets. The benchmark used for the estimate is the level of development of the insurance market of the EU countries. To assess the efficiency of transition, the following indicators of insurance market environment progress and market development have been applied:

- Legal and institutional environment,
- Solvency standards,
- Insurance penetration,
- Insurance density,
- Share of life insurance,
- Share of MTPL insurance.

The analysis of the legal framework aims at describing the main changes that have occurred in the national insurance regulations and consistency with EU directives. The insurance market institutional framework has also to be taken into consideration to determine the ability of supervisors and other institutions to implement the new regulations successfully. Solvency standards are the indicators of the access level of the insurance market, as they define the minimum amount of equity required to ensure the insurer's capacity to meet its obligations. Insurance penetration is the ratio between insurance premiums and the national GDP and it points to the role of the insurance sector in the national economy. Insurance density is the most revealing indicator of insurance market development, as it consists of the average amount of premiums per capita or –in other terms– the amount of money each citizen spends on insurance per year. Insurance penetration and density indicators are typically used in the comparative analysis of the achieved development levels of different insurance markets. The share of life insurance premium in the total premium income determines the consumer's familiarity with financial transactions. Finally, as the MTPL insurance is compulsory in all the countries included in this assessment, its share in the total premiums is a good indicator of the insurance-oriented culture or of the lack of interest in voluntary insurance products.

The progress of SEE post-communist countries in the European integration process can be evaluated in terms of the level of compliance with the previously described main EU accession criteria (political criteria, economic criteria and ability to comply with EU obligations). On the basis of the EU 2010 progress reports for candidate and potential candidate countries, a qualitative overall judgment can be made with a view to consistently ranking SEE post-communist countries.

4.2 Comparative analysis of transition in insurance markets and of European integration efficiency

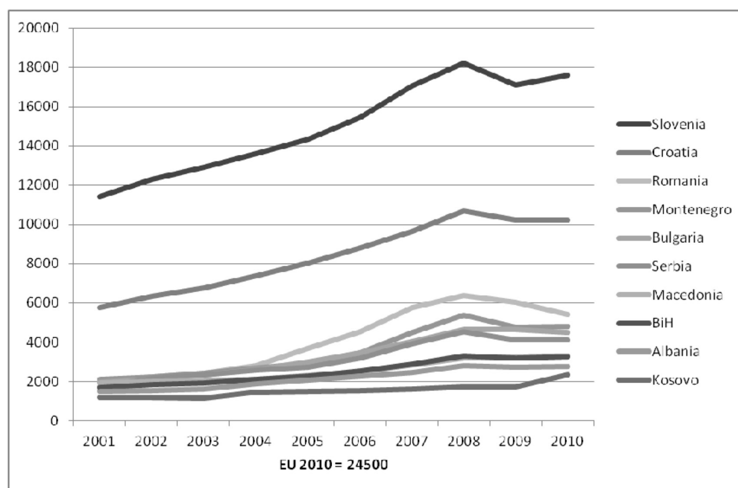
In this study, empirical analysis is based on the data from the past ten years. Unfortunately, as previously underlined, longer historical series are either not available or not reliable. Since 2001, insurance market statistics have been collected and processed by supervision authorities or by insurers associations in official reports. These are the sources of data that have been used in this study. Whenever official reports were not available, data were collected directly from country's insurers associations reports or using Swiss Re World insurance reports. Additionally, the

most recent available official reports on the EU enlargement process have been used. SEE countries' insurance markets comparative analysis is based on the above mentioned indicators of insurance market development. Whenever quantitative indicators were not available, as for the legal and institutional framework, a simple ranking based on 2010 information has been worked out. The transition indicator provided by the European Bank for Reconstruction and Development as well as the methodology developed for financial markets by Haiss and Kichler (2009) can also be used for ranking. For a better insight into the assessment, a preliminary short review of basic macroeconomics has been outlined.

4.2.1 Basic macroeconomics

All the analyzed countries have had positive trends in their basic macroeconomics, but the level of their economic development is still far from the level of the industrialized Western countries. In recent years, the economic crisis has disrupted the high rates of GDP growth of the previous period. Detailed comparisons of SEE post-communist countries GDP per capita over the period 2001-2010 are reported in Figure 1.

Figure 1. GDP per capita in the period 2001-2010 (EUR)



Sources: Compiled by the authors from official national statistic reports

In 2010, the total population of these countries was 54,103 million, accounting for 6.7 percent of the European population (including transcontinental countries) and 10.8 percent of the EU population (including Romania, Bulgaria and Slovenia). The total GDP of the countries was equal to EUR 296,401 million, i.e. 2.4 percent of the EU total GDP (Purchasing Power Standards). GDP per capita in all these countries

was EUR 5,478, i.e. 4.5 times lower than the GDP per capita in the EU, resulting in a very significant gap in economic development with EU countries. Slovenia and Croatia only had a GDP per capita exceeding EUR 10,000 in 2010. Unfortunately, the economic crisis halted the long-term trend of GDP growth in all countries.

4.2.2 Legal and institutional environment

The creation of an appropriate legal and institutional framework is the first step in the SEE post-communist transition of insurance markets. The related changes require a different time frame and countries are in different stages of the implementation as, using reports of the countries' supervisory authorities, summarized below. Since there are no quantitative measures of progress in the legal and institutional environment, a ranking of the SEE countries can be based on the analysis of the laws and bylaws introduced in accordance with EU regulations as well as of the efficiency of established supervisory institutions and insurance associations.

Slovenia has been the most successful in this process. The new insurance law was introduced in 2000, followed by many amendments and secondary legislative acts, increasing the frequency of changes as the market started preparing for the new Solvency II standards. The compulsory MTPL insurance law has also been amended many times. The Insurance Supervisory Agency became operational in 2000. The Slovenian Insurance Association, founded in 1992, is a member of the CEA (European Insurance and Reinsurance Federation).

In view of the EU enlargement, Bulgaria and Romania had to increase the pace of changes in their legal and institutional frameworks. The Bulgarian insurance market is regulated by the code on insurance introduced in 2005 on insurance and reinsurance undertakings, insurance and reinsurance intermediaries, state supervision over insurance (reinsurance) activities and intermediation as well as insurance contracts and compulsory insurance. The market is supervised by the Financial Supervision Commission established in 2003. It is a single supervisor for the non-banking financial sector (insurance, pension schemes, securities market). In Romania, the law on insurance business and insurance supervision was introduced in 2000. The amendments to the law, including compulsory MTPL insurance, were introduced in 2002. The Insurance Supervisory Commission, an independent insurance supervision authority, was founded in 2000. The Association of Bulgarian Insurers and the National Association of Insurance and Reinsurance Companies from Romania are members of the CEA.

Croatia insurance law and the Act on Compulsory Insurance within the Transport Sector were introduced in 2005 and the Croatian Financial Services Supervisory Agency was established in the same year as supervisory authority for the insurance market as well as for other non-banking financial services. The Croatian Insurance Bureau, i.e. the insurers' associations, is a member of the CEA.

In Serbia, the legal framework on the insurance market changed in 2004, when a new insurance law was introduced. The law on compulsory motor insurance was introduced in 2009. Supervision has been implemented by the National Bank of Serbia since 2004. The Association of Serbian Insurers is a representative of the insurers in Serbia.

Against the backdrop of its constitutional constraints, BiH has a very complex legal and institutional framework for its small insurance market. The insurance business is structured and regulated at entity level (Federation of BiH and Republic of Srpska), with the Insurance Agency of BiH providing a sort of supervision at state level. The state agency is not a supervisory authority and its role is to harmonize the entities' legislation and the supervisory work of the entities' agencies, to process statistical data at the state level, and to represent the country in international relations. The law on the state insurance agency was introduced in 2004. Entity laws on insurance as well as entity laws on MTPL insurance and laws on insurance mediation were introduced in 2005. Insurance companies are members of two insurance associations and their activities are very often coordinated by the state agency.

Albania adopted the new law on insurance, reinsurance and intermediation in insurance and reinsurance in 2004. MTPL insurance is now regulated by the law on compulsory insurance in the transport sector, introduced in 2009. The insurance market is supervised by the Albanian Financial Supervisory Authority established in 2006. The Albanian Insurers Association is active and it includes insurers and intermediaries operating in Albania.

FYRM insurance supervision law was adopted in 2002, and the law on MTPL insurance was introduced in 2005. In 2009, the Insurance Supervision Agency took over the role of the insurance sector supervisor from the Ministry of Finance. The National Insurance Bureau is the insurers' association in FYRM.

A new insurance law in Montenegro was adopted at the end of 2006. Other regulations on MTPL insurance, bankruptcy and winding-up of insurance companies were introduced in 2007. Supervision of the insurance sector is implemented by an independent supervisory agency established in 2008. The National Bureau of Insurers, as the insurers; association, was established in 2007.

In the light of Kosovo's special status (under UN Resolution 1244), a specific legislation known as the Insurance Rules has been enacted. The insurance market is supervised by the Central Bank of the Republic of Kosovo. The Insurance Association of Kosovo (IAK) was founded in 2002.

4.2.3 Solvency Standards

Regulators have set specific solvency standards in terms of solvency margin and minimal capital requirements so that insurers have a sufficient financial capacity. Most of these countries adapted their solvency standards to the EU directives. In the

EU, solvency standards were regulated for the first time in 1973 with the Directive of the European Economic Community on non-life insurance (73/239/EEC) and in 1979 on life insurance (79/267/EEC). Despite the fact that specified standards were not adequate, these rules remained unchanged for almost three decades. New standards, known as 'Solvency I', were established at the beginning of this century (directives 2002/13/EC on non-life insurance and 2002/83/EC on life insurance). Under these standards, the minimum guaranty fund was increased to EUR 2.0-3.0 million from EUR 0.2-1.4 million. The basis for the calculation of the solvency margin for non-life insurance was also increased to 18 percent of the premiums below EUR 50.0 million and to 16 percent for premiums exceeding EUR 35.0 million (previously it was EUR 10.0 million) or to 26 percent of the claims below EUR 35.0 millions and to 23 percent for claims above EUR 35.0 million (previously it was EUR 7.0 million). The higher amount of the two is the solvency margin. The latest solvency regulation, known as 'Solvency II', is more ambitious and it aims at making the solvency requirements more sensitive to insurer risk exposures. It is expected to be fully implemented in 2016. The solvency standards currently in force in these countries are listed in Table 1.

4.2.4 Insurance penetration and density

The best indicators of insurance market development level are insurance penetration and insurance density. A preliminary comparison of the total insurance premium data among countries is shown in Figure 2.

The SEE post-communist countries total premiums in 2010 were EUR 7,286 million, i.e. 0.68 percent of the total premiums in the EU. As the population of these countries accounts for 10.8 percent of the EU overall population, clearly there is a huge gap as compared to the EU market. The insurance markets of these countries had positive trends until 2009 when, as a consequence of the economic crisis, stagnation or decreases in premiums were reported. Romania had the most intensive premium growth over the last decade, but it was also affected by the highest decrease in premiums after 2009. In spite of the significant growth in premiums over the last decade, however, in all countries growth was expected to be sharper in view of their level of economic development and the changes implemented in their markets.

Insurance penetration – the share of insurance premiums in the total GDP – shows the role of insurance in the economy. In 2010, the average insurance penetration in these countries was 2.46 percent, pointing to a low level of insurance market development if compared with 8.55 percent at EU level. Additionally, as shown in Figure 3, except in Slovenia, insurance penetration in the other countries has not changed significantly in the past ten years.

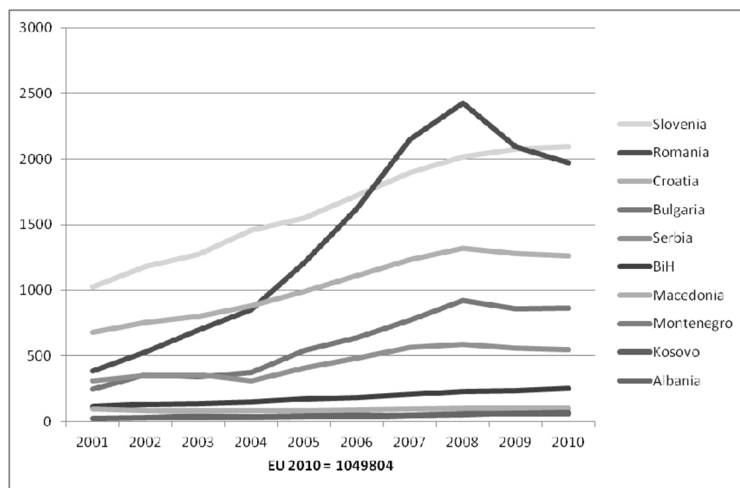
Table 1. Current solvency standards

Country	Minimum capital requirements (in million EUR)	The basis for the solvency margin calculation
Bulgaria	3.3 (for life insurance) 2.2 (only particular classes of non-life) 3.3 (for all classes of non-life) 3.3 (for reinsurance) there are different limits if the company performs particular classes of non-life insurance	According to Solvency I and preparation for Solvency II
Slovenia	3.0 (for life insurance) 2.0 (for non-life) 3.0 (additional limitation for some non-life insurance classes) 3.0 (for reinsurance)	
Croatia	3.0 (for life insurance) 2.0 (only particular classes of non-life) 3.0 (for all classes of non-life) 3.0 (for reinsurance)	
Romania	2.3 (for life insurance) 3.3 (for all classes of non-life)	
Serbia	4.0 (for life insurance) 4.5 (for all classes of non-life) 4.5 (for reinsurance) there are different limits if the company performs particular classes of non-life insurance	Under the first directives of the European Economic Community from the 1970s
Albania	2.7 (for life insurance) 5.9 (for all classes of non-life) 4.4 (for reinsurance) there are different limits if the company performs particular classes of non-life insurance	
FYRM	3.0 (for life insurance) 2.0 (for non-life) 3.1 (additional limitation for particular non-life insurance classes) 4.5 (for reinsurance)	
BiH	1.5 (for life insurance) 2.6 (for all classes of non-life) 1.5 (for reinsurance) there are different limits if the company performs particular classes of non-life insurance	
Montenegro	0.8 (for life insurance) 2.3 (for all classes of non-life) 2.0 (for reinsurance) there are different limits if the company performs only particular classes of non-life insurance 5.1 for all classes	
Kosovo	3.0 (for all classes of insurance)	The calculation is not adapted to EU directives (20 percent of minimum capital requirement)

Note: Minimum capital requirements for countries are converted into EUR at the exchange rate of 7 December 2011

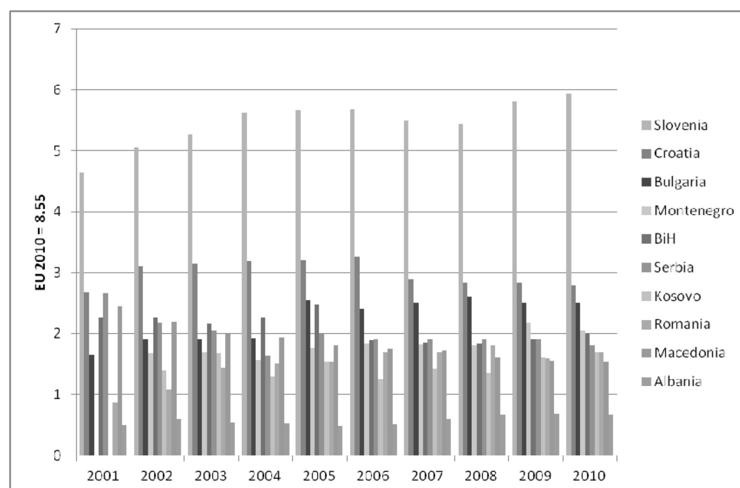
Source: National insurance laws and by-laws

Figure 2. Total premiums in the period 2001-2010 (EUR millions)



Sources: Compiled by the authors from official national insurance supervisory authority or insurance association reports

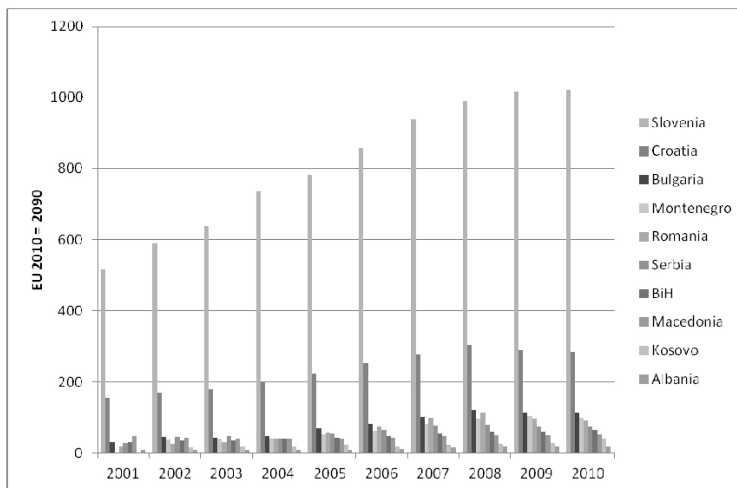
Figure 3. Insurance penetration in the period 2001-2010 (percent)



Sources: Compiled by the authors from official national insurance supervisory authority or insurance association reports

In 2010, the average insurance density –the amount of premiums per capita– in these countries was EUR 134.68. The fact that in the EU in 2010 the insurance density was EUR 2,090 shows that development is in a very critical phase. Trends in insurance density are reported in Figure 4. At the beginning of 2001, an extremely low level was reported. Except for Slovenia (EUR 1,022), Croatia (EUR 284) and Bulgaria (EUR 114), all other countries still have the features of poor markets with insurance density below EUR 100.

Figure 4. Insurance density in the period 2001-2010 (EUR)

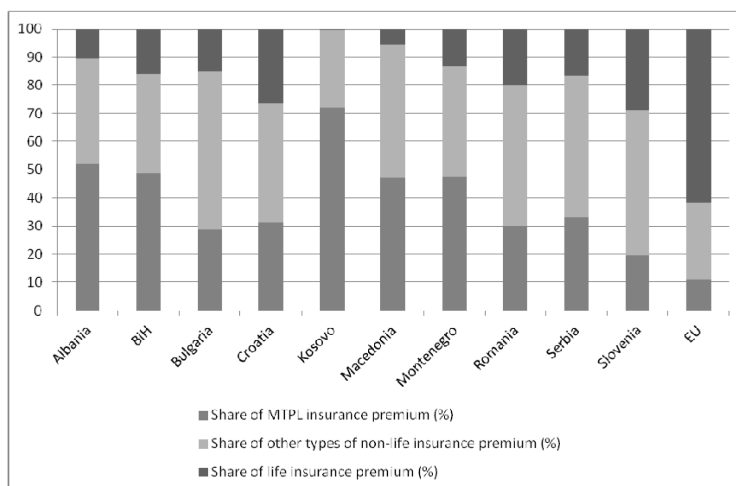


Sources: Compiled by the authors from official national insurance supervisory authority or insurance association reports

4.2.5 Shares of life and MTPL insurance

In 2010, in these SEE countries, the average share of life insurance in the total premiums was 22.14 percent. In comparison with a share of 61.6 percent of life insurance at EU level, the absence of an insurance-oriented culture becomes clear. The low share of life insurance is the result of macroeconomic instability, consumer unfamiliarity with financial transactions, and a low level of specialisation in the available insurance products. As shown in Figure 5, Slovenia (28.8 percent) and Croatia (26.5 percent) are the only countries in the sample with a share of life insurance above 20 percent.

Figure 5. Shares of life and MTPL insurance in 2010 (percent)



Sources: Compiled by the authors from official national insurance supervisory authority or insurance association reports

Similarly, the shares of MTPL insurance in the total premiums confirmed the absence of an insurance-oriented culture. The dominant market share of compulsory MTPL insurance, with an average of 28.9 percent, shows a very low level of interest in voluntary non-life insurance products. In 2010, the share of MTPL insurance was extremely high in Kosovo, Albania, BiH, Montenegro and FYRM, with a peak exceeding 40 percent of the total market (Figure 5).

4.2.6 European integration efficiency

European integration efficiency is the level of integration of the SEE post-communist countries into the EU. The level of European integration can be estimated on the basis of the official information provided by the EU on the monitoring of the progress made by candidate and potential candidate countries. A simple ranking of these SEE post-communist countries has been determined as reported in Table 3. This is necessary for later calculation of correlation coefficients. As Slovenia, Romania, Bulgaria and Croatia are already EU members, their integration process is already completed. Slovenia joined the EU in 2004 and it adopted the Euro in 2007 while Bulgaria and Romania became EU members in 2007. Croatia joined the EU more recently, in July 2013.

FYRM has been a candidate country for EU membership since the end of 2005, while Montenegro is a candidate country and applied for EU membership at the end of 2008 with the prospect of joining the EU in the medium term. Albania applied for

EU membership in 2009 and Serbia at the end of the same year. Both countries were potential candidates in 2010, with Albania being in the accession process for a longer time. For this reason in Table 3, Albania has a better ranking than Serbia in terms of integration level. However, in 2012 Serbia reached the status of candidate country, while Albania was recommended as a candidate country by the European Commission under the condition of complying with some final requirements. BiH is a potential candidate for EU membership. The country does not meet yet the political criteria, because of the lack of institutional stability and a weak political drive. Kosovo is a potential candidate for EU membership. However, the Copenhagen political criteria are far from being achieved in the light of the problems in international recognition and cooperation. Therefore, Kosovo ranks tenth in terms of European integration level (EU Commission, 2010).

5. Outcomes and discussion

After the previous analysis of insurance market development and market transition efficiency indicators, the relations between the insurance markets' development and the two following processes in the SEE post-communist countries:

- process of economic development of the national economies, and
- process of EU integration

have been investigated.

5.1 Relationship between the efficiency of transition of insurance markets and the level of economic development

With the Spearman coefficient, the correlation between the efficiency of transition (development) of insurance markets and the level of economic development rank can be identified. Ranks for these countries are reported in Table 2. The economic development ranking is based on the GDP per capita (from Figure 1), while the transition of insurance markets is based on the six previously analyzed indicators of development.

5.2 Relationship between the efficiency of transition of insurance markets and efficiency in the European integration process

The relationship between the transition efficiency of insurance markets and the level of EU integration is investigated in terms of correlation between the rank of countries in the EU integration process and each of the insurance market transition indicators, as reported in Table 3. The correlation coefficients show if the progress in the EU integration is expected to be followed by better results in insurance market development and vice versa, based on the indicators used for the analysis.

Table 2. Ranking correlation between GDP per capita and development of insurance market

Country	Ranking						
	GDP per capita	Legal and institutional environment	Solvency standards	Insurance penetration	Insurance density	Share of life insurance	Share of MTPL insurance
Slovenia	1	1	2.5	1	1	1	1
Croatia	2	4	2.5	2	2	2	4.5
Romania	3	2.5	4	7.5	4.5	3	2.5
Montenegro	4	9	9	4.5	4.5	7	7
Bulgaria	5	2.5	1	3	3	6	2.5
Serbia	6	5	5	6	6	4	4.5
FYRM	7	8	7	9	8	9	7
BiH	8	6	8	4.5	7	5	7
Albania	9	7	6	10	10	8	9
Kosovo	10	10	10	7.5	9	10	10
Correlation	**-**	**0.72**	**0.67**	**0.71**	**0.94**	**0.83**	**0.85**

Table 3. Ranking correlation between level of integration into the EU and development of insurance markets

Country	Ranking						
	Level of integration to the EU	Legal and institutional environment	Solvency standards	Insurance penetration	Insurance density	Share of life insurance	Share of MTPL insurance
Slovenia	1	1	2.5	1	1	1	1
Bulgaria	2.5	2.5	1	3	3	6	2.5
Romania	2.5	2.5	4	7.5	4.5	3	2.5
Croatia	4	4	2.5	2	2	2	4.5
FYRM	5	8	7	9	8	9	7
Montenegro	6	9	9	4.5	4.5	7	7
Albania	7	7	6	10	10	8	9
Serbia	8	5	5	6	6	4	4.5
BiH	9	6	8	4.5	7	5	7
Kosovo	10	10	10	7.5	9	10	10
Correlation	**-**	**0.78**	**0.80**	**0.47**	**0.77**	**0.60**	**0.84**

5.3 Main findings

Results from Table 2 and Table 3 are summarized in Table 4, showing relationships between these processes. Values of the Spearman coefficients show a very strong correlation between the two ranking comparisons, transition of insurance markets and the level of economic development as well as between the transition of insurance markets and the level of EU integration. Table 4 points out that some aspects of the transition of insurance markets (insurance penetration, insurance density and shares of life insurance) tend to depend on the level of economic development, while other aspects (legal and institutional framework as well as solvency standards) tend to depend more on the level of EU integration. The main reasons for the very low level of insurance market development and their relationship with the two previously mentioned processes may be explained as follows.

Table 4. Comparison between ranking correlation coefficients for GDP per capita and level of integration into the EU

	Legal and institutional environment	Solvency standards	Insurance penetration	Insurance density	Share of life insurance	Share of MTPL insurance
GDP per capita	0.72	0.67	0.71	0.94	0.83	0.85
Level of integration to the EU	0.78	0.80	0.47	0.77	0.60	0.84
Difference	**-0.06**	**-0.13**	**0.24**	**0.17**	**0.23**	**0.01**

First, many problems remain with the supervision of the insurance sector. In general, insurers have inadequate tariffs for many types of insurance or, if the tariffs are indeed adequate, premium individualization is very popular on the market. Most countries do not have databases for proper actuarial calculations, because historical data series are not adequate or the market is very small. The existence of a large number of small insurers compounds the premium calculation and prevents any control of the supervisory authority over tariffs. Namely, according to official reports of supervisory authorities, there were 127 active insurance companies with less than three percent of the respective national insurance markets in 2010. Frequently, supervisory solvency control does not achieve its basic goal – i.e. early identification of insurers with an inadequate level of solvency. The delay with which supervisors respond to an insurer's solvency problem sometimes makes any actions ineffective. Therefore, significant efforts by supervisory authorities have to be made in order to establish well-regulated markets. Supervision provides the conditions for the efficient

operation of insurers, minimizing their insolvency risk through: capital requirements, technical reserves control and control over investment of reserves. Currently the implementation of all these three sectors of supervision is questionable and needs to be improved in several countries. Customer protection, aimed at increasing the level of confidence in insurers, is generally increasing. It is typically achieved by: the licensing of insurers, the licensing of intermediaries, giving approval on conditions for every type of insurance contract and controlling an insurer's transactions on the market. However, supervisory authorities generally have insufficient staff, they are insufficiently involved in the insurer operations control and sometimes they have problems in applying a transparent process to the withdrawal of licenses. Therefore, the implementation of new regulations is very difficult and it will be even more difficult in the future, when rules will have to be fully in line with the new EU standards (Solvency II).

Additionally, some insurance companies, with their unprofessional behavior, significantly hamper market development and the work of supervisors. Reinsurance policies are very often undefined, causing frequent insolvencies and delays in indemnification. As a result, the loss of confidence in the insurance sector is obvious. Too many insurers concentrating on relatively small and undeveloped markets keenly compete on insurance policy prices to conquer small market shares. Insurers are mostly focused on the basic products only, without investing in their differentiation or in new products. Compulsory MTPL insurance accounts for 28.9 percent of the region total premiums. A small share of life (22.1 percent) and other types of non-life products (49 percent) are the best indicators of the lack of insurance culture due to poor consumer familiarity with insurance functions and low sophistication of the insurance products offered. As these are average data for the region, the structure of the insurance products in some countries is drastically worse (Figure 5). Unfortunately, insurers and their associations seem unable either to stimulate the demand for insurance products or to actively promote education to ensure proper management. Educational programs have just started being offered by universities or market players, but the training of highly skilled staff, especially for actuarial jobs, takes some time. Additionally, unfair competition is widespread in many forms, such as pricing products below the required premium, the concealment of some unfavourable terms in insurance contracts, the assignment of unreasonable bonuses to the insured to retain their loyalty, preferences for some insurance brokers irrespective of any economic reasons, or the spreading of false information about competitors, etc. Unfair competition results in a low level of cooperation among insurers to solve the problems of the market, affecting the role of the associations in promoting market development as well as in negotiating with the regulators.

With the progress in the transition process, SEE post-communist countries have become aware of the important economic role of insurance and other risk management

techniques. In spite of this – as a consequence of a state-owned economy, a strong national social security system as well as a lack of education in risk management – pure industrial risks and personal risks are often not perceived. The property of many public companies is still almost unprotected from pure risks and personal risk management and insurance culture are also undeveloped.

Finally, countries at a late stage in the EU integration process still have many unsolved political problems which impose a huge burden on the development of their economies. Financial consolidation of many economic entities has slowed down and their insolvency has been increasing and exerting great pressure on the whole economy. High unemployment rates result in poor spending capacity of the population. The privatization process of the previously state-owned companies, which was ridden with irregularities, has slowed down, hampering the implementation of economic reforms. Foreign direct investments are not as intensive as governments expected. All these factors contribute to create a very adverse environment for insurance market development (Rüstmann, 2001). Additionally, poor and insufficiently regulated financial markets affect insurers' transactions, which have to focus strictly on a proper reserve funds investment. The change in the structure of the population with an increasing 'elderly population' shows that the reform of social insurance systems cannot be further delayed. The current global economic crisis involving several economic areas (banking, real estate, car sales, industrial production, etc.) also slowed down insurance sector development. Life insurance premiums fell as a consequence of a lower consumer income, an increased unemployment rate and pessimistic expectations of future financial stability. The insurance sector in the SEE markets stagnated during 2008 and 2009. Data for 2010 show some first signs of recovery and, hopefully, this trend will be more evident in the long term.

6. Conclusion

The European integration process is one of the most important political and economic issues for SEE post-communist countries. This analysis shows that the more integrated with the EU the countries are, the more developed their insurance markets are. An expected higher level of EU integration in the future will result in an enhanced competitiveness and a wider availability of insurance products. As the establishment of a single EU insurance market offers insurers the opportunity to sell their products in the whole of the EU region, SEE post-communist markets offer good growth opportunities for Western insurers, some of which are already active in the region. On the other hand, domestic insurers are not yet competitive enough in the old EU members' markets.

Social insurance systems still play a dominant role in SEE post-communist countries. Industrialized countries have already reformed such systems years ago, as they were aware that they were not sustainable because of the demographic trends. The

SEE region, with its poor economies and high unemployment rates, had no alternative but to start with the reforms. However, the process is rather slow. The pension system reforms are generally based on the introduction of three pillars, where the development of the second (fully funded plans with defined contributions) and the third (voluntary private funded plans, savings plans, life insurance, etc.) pillars requires important legal preconditions. On the other hand, the low standard of living and undeveloped financial markets make the transition to the new pension scheme very slow and difficult, even if the level of pensions provided by the existing system forces people to save additional funds for their retirement. That represents an opportunity for the development of new life insurance products. Additionally, in most SEE countries health insurance systems inherited from the past are characterized by a wide range of benefits, but with a poor quality of service. Problems with inefficiency and irregularities of the existing state health insurance already require the development of a private health insurance system. Of course, many legal and institutional barriers have to be removed to support voluntary health insurance and private providers of health services.

At the same time, as changes in pension and health insurance systems increase people's awareness of the importance of personal risk management, companies start perceiving the importance of risk management and insurance products in the sector of personal as well as property and liability risks. Education in risk management contributes to the development of the insurance culture and it is becoming common in formal education and in universities. Many higher education institutions offer specialized programs in risk management, insurance and actuarial sciences, ensuring training also for actuarial profiles. Insurers, for which the skills of their employees are one of their main sources of competitive advantage, offer training programs to train their staff to provide high quality service and to assist clients in managing risks. Insurers' associations must play a very active role in training, as they have an interest in providing more regulations of insurers, increasing the level of confidence in the sector. This is particularly necessary considering the fact that there are so many small insurers operating in the markets.

During the transition period, important changes have been implemented to create a proper regulatory environment for insurance companies. The capacity of the supervisory authorities is improving, but they are not strong enough to fully implement all the EU Directives. Therefore, SEE post-communist countries still have different capital adequacy requirements, reflecting the specific conditions of their markets and the financial potential of their companies. Some projects have been implemented, with the support of the European Commission, in financial sector regulation development, with the insurance sector as a special area of interest. Solvency II, the new regulatory framework, is a new challenge for the insurance market, but unfortunately only a few countries of the SEE region are seriously preparing for it.

The process of integration of SEE post-communist countries into the EU is not completed and it will be a core political and economical issue for these countries in the coming years. On the other hand, the insurance markets of these countries are still in transition and their expansion is expected. While this research is focused on the end of the first decade of this century, the relationships between these two processes as well as trends of correlation coefficients will still be interesting fields of research in the coming years. However, some additional assumptions have to be taken into consideration. Namely, as this research confirmed, SEE is a region of "two speeds" with Slovenia leading the region and BiH and Kosovo, as countries that suffered from war, lagging behind. Future research should also be focused on the application of the new Solvency II regime to insurance markets of SEE countries as well as the consequences of the recent economic crisis, like Panagiotou (2013) and Schich (2010) explained.

References

Baur, E. and Enz, R., eds., 1994, "Eastern Europe: The Insurance Industry under the Impact of Economic Transition", *Sigma*, No 5. Zürich: Swiss Re.

Baur, E. and Hess, T., eds., 1995, "The Insurance Industry in Eastern Europe: Recovery has begun", *Sigma*, No 5. Zürich: Swiss Re.

Birkmaier, U. and Codoni, C., 2002, "World Insurance in 2001: Turbulent Financial Markets and High Claims Burden Impact Premium Growth", *Sigma*, No 6. Zürich: Swiss Re.

Birkmaier, U. and Codoni, C., 2004, "World Insurance in 2003: Insurance Industry on the Road to Recovery", *Sigma*, No 3. Zürich: Swiss Re (http://www.swissre.com/sigma/?year=2004#anchor0).

Casu, B. and Girardone, C., 2006, Bank Competition, Concentration and Efficiency in the Single European market, *The Manchester School*, 74 (4), 441-468.

Conclusions of the Presidency of the European Council in Copenhagen, 21-22 June 1993 (http://ec.europa.eu/enlargement/the-policy/conditions-for-enlargement/index_en.htm).

Cooper, R. W. and Dorfman, M. S., 2003, "Business and Professional Ethics in Transitional Economies and Beyond: Considerations for the Insurance Industries of Poland, the Czech Republic and Hungary", *Journal of Business Ethics*, 47, 381-392.

Ćurak, M., Lončar, S. and Poposki, K., 2009, "Insurance Sector Development and Economic Growth in Transition Countries", *International Research Journal of Finance and Economics*, 34, 29-41.

Dorfman, M. S. and Ennsfellner, K. C., 1998, "The Coming of Private Insurance to a Former Planned Economy: The Case of Slovenia", *International Insurance Foundation,* Occasional paper, 2 (http://www.iifdc.org/pubs/index.html).

Dorfman, M. S. and Ennsfellner, K. C., 2001, "Transition from Central Planning to Market-based Insurance Transactions: A Case Study of Poland, the Czech Republic and Hungary", *Journal of Insurance Regulation*, 20 (2), 160-194.

Enz, R., 2000, "The S-curve Relation Between Per-Capita Income and Insurance Penetration", *Geneva papers on risk and insurance*, 25 (3), 396–406.

EU Commission, 2010, "Enlargement Strategy and Main Challenges 2010-2011" (http://ec.europa.eu/enlargement/countries/strategy-and-progress-report/index_en.htm).

EU Commission, 2013, "European Financial Stability and Integration Report 2012", 32-39 (http://ec.europa.eu/internal_market/economic_analysis/reports/ index_en.htm).

European Bank for Reconstruction and Development, 2013: Transition indicators (http://www.ebrd.com/pages/research/economics/data/macro.shtml).

European Central Bank, 2013, Financial integration in Europe, Germany, 15-46 (http://www.ecb.int/pub/pdf/other/financialintegrationineurope201304en.pdf)

Fink, G., Haiss, P. and von Varendorff, M., 2007, "Serbia's Reform of the Banking Sector – Implications for Economic Growth and Financial Development", *Southeast European and Black See Studies*, 7(4), 609-639.

Frinquelli, M. A., Alexandre, M. M., Mitra, R. and Davis, S. I., 1991, Insurance in Eastern Europe: Massive Potential Will Attract Patient American and European insurers, New York: Salomon Brothers Research Department.

Furstenberg, G. and Junker, K., 2005, "Overcoming Past Obstacles to Insurance in the New EU Countries", *The Geneva Papers*, 30, 296–311.

Hagmayr, B. and Haiss, P., 2007, "Financial Sector Development in South-Eastern Europe", *Beyond Transition*, 18(2), 9, (http://siteresources.worldbank.org/INTTRANSITION/Newsletters/21492432/AprilJune2007.pdf).

Haiss, P. and Fink, G., 2006, "The Finance-Growth-Nexus Revisited: New Evidence and the Need for Broadening the Approach", WU Europainstitut Working Paper No. 73, 9-22 (http://ssrn.com/abstract=988299).

Haiss, P. and Kichler, E., 2009, "Leasing, Credit and Economic Growth: Evidence for Central and South Eastern Europe", March, WU Europainstitut Working Paper No. 80, (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1393162).

Haiss, P. and Sümegi, K., 2008, "The Relationship Between Insurance and Economic Growth in Europe: A Theoretical and Empirical Analysis", *Empirica*, 35, 405-431.

Hess, T. and Trauth T., 1998, "Towards a Single European Insurance Market", *International Journal of Business*, 3 (1), 89-102.

Kozarević, S., 2011, *Insurance markets in South-Eastern Europe Countries*, Roma: Ed. Ass. for ANIA (Associazione Nazionale fra le Imprese Assicuratrici) and MIB School of Management.

Kozarević, S., Kozarević, E. and Šiljegović, E., 2011, "Development of the Insurance Sector in the Western Balkan Countries: The Drive towards the European Union Insurance System", *Int. J. Economic Policy in Emerging Economies*, 4 (3), 287-302.

Kozarević, S., Regan, L. and Gibbson, R. J., 2008, "The European Integration Process and Insurance Market Development: The Case of Former Yugoslav Countries", *International Insurance Foundation*, Occasional Paper, 7, (http://www.iifdc.org/pubs/index.html).

Marbacher, J. and Furrer, J., eds., 1990, "Eastern Europe: Hard Road from Insurance Monopoly to Market", *Sigma*, No 5. Zürich: Swiss Re.

Masciandaro, D. and Quintyn, M., 2012, "Institutions Matter: Financial Supervision Architecture, Central Bank and Path-Dependence. General Trends and the South Eastern European Countries", *South-Eastern Europe Journal of Economics*, 8 (1), 7-53.

Meyer, B., Malisauskaite, L. and Hess, T., 1998, "Insurance Industry in Central and Eastern Europe: Increasing Competition – Different Prospects for Growth", *Sigma*, No 7. Zürich: Swiss Re.

Panagiotou, R., 2013, "The Greek Crisis as a Crisis of EU Enlargement: How Will the Western Balkans Be Affected?", *Southeast European and Black Sea Studies*, 13 (1), 89-104.

Pye, R. B. K., 2005, "The Evolution of Financial Services in Transition Economies: An Overview of the Insurance Sector", *Post-Communist Economies*, 17 (2), 205-223.

Rogers, P. P., 1986, *Insurance in the Soviet Union*, New York: Praeger.

Rogers, P. P., Schönfelder B. and Schütte E., 1988, *Insurance in Socialist East Europe*, New York: Praeger.

Rüstmann, M., 2001, "Insurance Industry in Central and Eastern Europe – Current Trends and Progress of Preparations for EU Membership", *Sigma*, No 1. Zürich: Swiss Re.

Schich, S., 2010, "The Role of Insurance in the Recent Financial Crisis", *Insurance Markets and Companies: Analyses and Actuarial Computations*, 1 (1), 45-53.

Stalb, D. and Bevere, L., 2011, "World Insurance in 2010: Premium Back to Growth – Capital Increases", *Sigma*, No 2. Zürich: Swiss Re (http://www.swissre.com/sigma/?year=2011#anchor0).

Sterzynski, LL. M., 2003, "The European Insurance Market: Overview and Impact of the Liberalization and Deregulation Processes", *Belgian Actuarial Bulletin*, 3 (1), 42-49.

Stirbu, C., 2004, "Financial Market Integration in a Wider European Union", HWWA Discussion Paper n. 297, Hamburg, Hamburg Institute of International Economics (http://www.hwwa.de/bibliothek.htm).

Tipurić, D., Pejić Bach, M. and Pavić T., 2008, "Concentration of the Insurance Industry in Selected Transition Countries of Central and Eastern Europe, 1998-2006", *Post Communist Economies*, 20 (1), 97-118.