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**Non-life insurance markets in CEE countries  
– part I: Products’ structure**

DOI: 10.22367/jem.2016.25.08

**Abstract**

The course of the development of non-life insurance markets in CEE countries differs in many aspects from the Western-European countries. This study shows how these changes performed in the eight CEE countries, that overcame transition in similar time and accessed the European Union in May, 2004. In this paper (as the first part of the study) wider attention was given to the changes of products’ structure of non-life markets. It was found that motor third party liability insurance still remains the most relevant insurance line in the non-life markets of the examined countries.

**Keywords:** insurance market, non-life insurance, CEE countries, products’ structure.

**JEL Classification:** G22, P34.

**Introduction**

Insurance remains a relevant contributor to the economic growth. It offers a reduction of anxiety and more effective management of risk as well as promotes financial stability by mobilisation of savings and more efficient capital allocation [Outreville 1990; Skipper 1997; Liedtke 2007; Han et al. 2010, p.184-185; Albouy & Blagoutine 2011, p.467-469; Haiss & Sümegi 2008; Čurak, Lončar & Poposki 2009]. However, the contribution of the insurance sector to the economy depends on the development of the insurance system, which is sensitive to many factors. In particular, from a macro perspective, the development of a giv-

en national non-life insurance market is influenced by favorable or unfavorable economic conditions and globalization processes that release the flow of capital and spread of knowledge. Another area of influence is represented by risk-specific conditions. For example, natural catastrophes have a power to enhance the cyclicity of an insurance market, followed by changes of insurance premiums and availability of coverage. The behavior of insurance consumers is also a relevant factor, with changing attitudes to the need of insurance protection in the first place. It is worth to note that the development of the non-life insurance sector is also related to the situation of real estate, motor and bank loan markets.

If considering the European Union countries, the current state of the development of the national non-life insurance markets differs significantly. In particular, there is a group of transition countries which are specific due to some aspects of the non-life market development. The purpose of this study is to evaluate these changes in a group of the eight transition countries from the region of Central and Eastern Europe (CEE). This study contributes to the existing academic debate as there is a clearly identifiable research gap within cross-national studies on the performance of non-life insurance markets. The available cross-country comparative studies usually address the whole insurance sector (aggregated data), which is discussed further in the first section of this paper. By addressing exclusively the situation of the non-life markets, the evaluation provided in this study offers an insight into a segment of insurance market which is of particular importance for companies and households.

Additionally, it should be noted that the studies on the development and contribution of the insurance sector in transition countries, also remain rare in academic literature. Such studies gain considerably lower attention, when compared to other aspects of financial system performance (banking sector or capital markets). This cognitive gap may be at least partially fulfilled by this study, as it deepens some relevant aspects related to the performance of non-life markets in selected CEEs as transition economies. Non-life insurance markets in CEE countries remain specific in some aspects, although they overcame considerable changes, stimulated by the process of harmonization with the European Union. In this context, the problems subject to closer evaluation in this study correspond with three broad areas of concern. The first is presented in this paper (as the first part of the study) and addresses the market structure from a product-oriented point of view. The second area of concern refers to the polarization of insurance markets from a cross-country comparative perspective, whereas the third focuses on market concentration. The latter two aspects will be discussed in a separate paper (as the second part of this study).

The paper is organized as follows. The first section provides an overview of the accessible previous research related to the development of insurance markets in the transition countries. The second section of the paper presents the design of research and its methodology. In particular, it explains the adopted approach to the study structure, selection of sample, sources of data, as well as the time-frame of analysis. The third section of the paper presents and discusses the research results within products' structure of non-life markets. The fourth section concludes the paper.

## **1. Overview of previous research related to the development of insurance markets in transition countries**

With the downfall of communist-based regimes across the CEE region in the wake of transition, the transition countries started the process of transforming political and economic structures. However, the transition from a command to a market economy required considerable time and resources. To sustain macroeconomic stability, governments committed to provide the necessary environment for the development of the financial sector [Atje, Jovanovic 1993; Levine & Zervos 1996; Schipke et al. 2004]. For the purposes of this study, the overview of the previous works addressing the development of insurance sector in transition countries, is discussed separately for three periods:

1. The pre-transition period (till the beginning of 1990s).
2. The transition period (beginning of 1990s till EU accession in May 2004), and
3. The accession period (since May 2004, onwards).

In the provided overview, special attention is given to non-life insurance systems, as it is the core interest of the study.

***The pre-transition period.*** In this period the insurance system in communist countries was functioning in terms of a command economy. Typically, it was a two-tier system, based on two state-owned insurers. One insurer provided domestic insurance, and the other provided all other insurance that required international coverage, e.g. foreign-based construction projects, export credits, aviation risks [Pye 2003, p. 9]. The non-life sector was based on the functioning of compulsory third party motor and agriculture insurance. Other lines of insurance were less important and insurance coverage was considered as non-essential. This was caused by the nature of the communist system in which the state was the guarantor of the basic needs of society. The functioning of compulsory insurance at that time was based on the obligation of the state-agent to sell the policies. The failure to collect premiums did not release the state from the responsibility. The premiums

were established arbitrarily, with the state absorbing surpluses and guaranteeing loss coverage. In general, the functioning of insurance systems in a command economy was far from the contemporary sense and perception of insurance market functions [Pye 2003, p. 10-11].

***The transition period.*** The process of transition from a command economy to market economy started in the early 1990s. CEEs faced a need to adjust their economic systems to western standards within a relatively short period of time. The reforms were followed by a dramatic recession manifested by the decline of industrial production, high rates of inflation and the decline of GDP [Wyplosz 2000; Alam et al. 2008, p. 2-9]. The conditions for the development of insurance markets were unfavorable.

The first step of the changes of the insurance system were connected with the breaking of insurance monopolies which were in place during the communist era (as part of the fiscal authorities). The existing insurers were first converted into state-owned companies and then privatized. Some countries dissolved state monopolies earlier, but it took several years before state-owned insurers were officially founded (e.g. in Poland it was 1984, in Hungary in 1986). As the reform process started, new privately-owned insurers appeared on the markets in all parts of Europe. However, the former monopolists held on their dominant market share for several years [Borscheid 2012, p. 60; Dorfman, Ensfellner 2001, p. 162; Venard, Halek & Dorfman 2008, p. 381]. People were accustomed to one insurance provider, which was still offering insurance services under the same or similar brand name.

The transition period was also characterized with the high pace of foreign direct investments. Foreign direct investments were perceived as highly beneficial to transition economies [Ginevičius & Tvaronavičiene 2003, p. 63]. That is probably why the majority of transition states freely approved foreign direct investments in insurance markets in the form of participating interests and subsidiaries. This resulted in the inflow of capital and know-how and was particularly visible in Poland, the Czech Republic, Hungary and Slovak Republic [Borscheid 2012, p. 61]. The inflow of capital was very important as most of the domestic companies, facing the dynamic market growth, possessed weak capital bases and thus needed to cede high shares of gross premiums abroad [Borscheid 2012, p. 61; Falush 1997, p. 57]. The foreign direct investments on insurance markets were enhanced by dynamic growth rates compared with Western European markets, which attracted new investments. The number of insurers controlled abroad was high, particularly in Hungary and Poland.

The studies on the development of insurance systems in transition economies, including cross-country comparative perspectives, were scarce, as identified by Pye [2003] and Dorfman & Ennsfellner [2001]. In the academic literature availa-

ble to English-speaking researches, more attention had been given to the development of banking sector and private capital markets [e.g. Hermes, Lensink 2000; Scholtens 2000; Bonin, Wachtel 2002; Reininger et al. 2002; Naaborg, Lensink 2008; Semih Yildirim, Philippatos 2007]. The development of insurance systems was addressed by Dorfman and Ennsfellner [2001] who compared Poland, the Czech Republic and Hungary, covering the years 1991-1997 for life and non-life sector. Their study revealed the need to support the legal and professional infrastructure. The research by Pye [2003] investigated the evolution of insurance industry in the countries of the CEE and the NIS (Newly Independent States) of the former Soviet Union in the period 1990-2001. This study revealed that only a few countries have been able to successfully transform their insurance systems.

However, there are numerous studies originating from practitioners, notably from Western European insurers and reinsurers, with the leading contribution of Swiss Re. These studies provide an insight to the general trends in insurance markets (in this non-life market) in CEEs, as well as the concerns of their further growth. With regard to the transition period, Fringuelli et al. [1991] provided an overview of insurance markets in the CEE at the outset of transition from an investment market perspective. Baur & Enz [1994] and Baur & Hess [1995] reported on favorable perspectives of the development of insurance markets in transition economies (CEE and the NIS). Hess [1996] pointed out the importance of the CEEs insurance markets, similarly Meyer, Malisauskaite & Hess [1998]. In 1999, non-life insurance markets in the CEEs were able to benefit from economic recovery and Polish, Czech and Hungarian markets remain most significant in the region [Codoni 2000, p. 17]. In 2000 the situation in non-life markets was similar, however, the differences between particular countries in the region were significant [Codoni 2001, pp. 21-22]. In the years 2001, 2002 and 2003 further growth of non-life insurance markets was observed, with the increase of insurance premiums and the demand on insurance, driven by several floods in the Czech Republic and Slovak Republic and by the introduction of mandatory third party motor insurance in several states [Bikmeier & Codoni 2002, pp. 21-22; Schlag & Codoni 2003, pp. 23-24; Bikmeier & Codoni 2004, p. 24].

***The Accession period (since May 2004 onwards).*** The CEE countries, which benefited from the foreign direct investments, commenced accession negotiations with the European Union. Accession compelled the adoption of European Union standards including the ban on state monopoly, liberalization of market access, abolition of price and product controls, as well as financial-related issues such as adoption of EU solvency regulations, tightening of capital adequacy requirements and strengthening insurance market supervision [Borscheid 2012, p. 62]. The accessing countries started the process of insurance market harmonization, which

required compliance with European Union insurance directives addressing harmonization of legal, solvency and accounting rules. The harmonization provided a decisive impetus for the modernization of the insurance industry in the candidate countries. This included full access for companies from the other EU members. The key demands of economic liberalism (privatization and deregulation, free markets and cross-border business) had been accomplished in law in the preceding years [Borscheid 2012, p. 62]. The insurance directives of first generations were already adopted before accession, which was visible in the changes or amendments of the existing insurance acts.

However, there were other areas of concern regarding eligibility of membership of the European Union, as realized by Venard, Halek & Dorfman [2008, p. 390]. The candidate countries managed to achieve the political criteria and the market economy was functioning. However, there were still problems with the adjustment of the legal framework, legislature and judiciary. Moreover, there were doubts about the ability of accessing countries to compete within the EU. As spotted by Klumpes et al. [2006, p. 794], the regulation and market trends in new member countries of the European Union remained influenced by historical incidence of extensive government impact and collaboration between former insurance monopolies and international insurers. In fact, the impact of foreign insurers was significant, as most insurance market leaders in the 2004 accessing countries were owned by foreign companies (with Allianz as a leader) [Borscheid 2012, p. 62].

Taking into account the current state of insurance systems in the EU-8 countries, one of the challenging issues is still harmonization with European Union insurance market. In particular, the compliance with third generation directives (which address the problem of solvency regulations) is an important contemporary concern. It is worth to note that Dorfman and Ennsfellner [2001, p. 162] defined the desired end-point of transition with the accomplishment of insurance market harmonization by the adoption of 3<sup>rd</sup> generation EU insurance directives. In this context, transition is still in progress.

The available studies addressing CEEs covering after-accession period indicate that in years 2004-2007 there was considerable competition in the non-life insurance market, driven by foreign insurance companies. Motor insurance was an important driver of premiums growth. In the countries with a considerable non-life market growth before 2004, stagnation was observed (Poland, Hungary, Czech Republic, Slovak Republic), whereas the Baltic states represented solid growth of non-life premiums [Lorenzo & Lauff 2005, p. 27; Enz 2006, p. 23; Baez & Staib 2007, p. 25; Staib & Bevere 2008, p. 25]. Since 2008 the slowing economy adversely influenced the non-life insurance market in CEEs. In the following years (2008-2010) in most of the CEE countries there was weak growth or shrinking of

the non-life market. In addition in 2010 several CEEs experienced a number of severe natural hazard events – heat waves, wildfires and floods, which drove up loss ratios in property insurance lines [Staib & Bevere 2009, p. 27; Staib & Bevere 2010, p. 22; Staib & Bevere 2011, p. 24]. In the years 2011 and 2012 there was a slight growth of non-life markets in the region. However, the consequences of crisis were still influential, with competitive pricing, deterioration of underwriting profitability, weak investment and consumption activity [Fan et al. 2012, p. 25; Seiler, Staib & Puttaiah 2013, p. 27].

## **2. Research design and methodology**

The research presented in this study focuses on the non-life insurance markets of eight transition countries: Czech Republic, Hungary, Slovak Republic, Slovenia, Poland and three Baltic states: Latvia, Lithuania and Estonia. These countries, hereafter referred to as the EU-8, are regarded as comparable due to at least three reasons relevant for this study:

1. First, they formerly performed as centrally-planned economies and their transition to a market economy began at similar time (that is the end of 1980s/beginning of 1990s).
2. Second, they are all located in the CEE region.
3. Third, they all accessed the European Union on 1<sup>st</sup> May 2004, which was preceded by the process of harmonization.

The time frame of the research was designed with the intention of indicating the dynamics of the analyzed parameters since the EU-8 countries accession in May, 2004. Accordingly, the comparisons are based on the data provided for 2004, 2008, 2012 and 2015. The year 2004, as the year of accession, provides a start point for further analysis. The year 2008 is considered as the year of the emergence of the global financial crisis. The analysis of the data for 2008 as compared to 2004, provides an insight into the course of the 4-year development of the EU-8 non-life insurance markets before the crisis. Adding another 4-year time perspective, the data for 2012 was included. The comparisons of 2012 with 2008 allow an indication of the directions of the non-life market changes after the impact of the crisis. Comparisons of 2012 with 2004 allow to highlight the long-term post-accession trends. In order to address a relatively current state of the non-life markets performance, the 2015 was included in evaluation.

The overview of the previous studies related to the development of insurance market in transition economics (provided in the first section of this paper), has led to several compelling research questions about the differences in the

scale of non-life insurance markets developments in the EU-8 countries. In this paper a wider attention is given to the problem of **products' structure** of non-life markets, in the context of domination of mandatory motor third party liability insurance (hereafter referred to as MTPL insurance). This problem echoes the centrally planned economy. The domination of the share of MTPL in non-life insurance markets is regarded as a distinctive feature of young, transition markets. As indicated in the literature overview, the transition countries were lacking the feeling of the importance of insurance protection, which was typical for the mature, western-European markets. It provided one of the most important reasons for the domination of MTPL premiums in non-life markets. Thus, the available data was verified with the aim to answer the question:

*Is the share of MTPL insurance premiums in the non-life markets of the EU-8 declining?*

In order to answer this question, the data characterizing the products' structure of national non-life insurance markets was examined. The products' structure is here associated with the share of gross premiums written in a given products line in gross premiums written for the whole non-life insurance market segment. Such an approach is consistent with those adopted in OECD statistics or European Insurers federation databases [OECD.Stat 2014; IE 2014].

In particular, the data analyzed in this paper is derived from statistics provided by the Insurance Europe federation, presented regularly in the official statistical reports and the Internet databases. This data allow to observe the changes of non-life markets' structure in a product-oriented context<sup>1</sup>. However, it should be noted that the evaluation of products' structure faced some limitations connected with a shortage of data. In several cases the data for Latvia were not provided. Moreover, data provided by the Insurance Europe did not cover the whole non-life market (according to IE [2014, p. 6], data represent more than 90% of the market for most countries). The recent data (for 2015) were also not obtainable completely for all countries.

### 3. Results and discussion

The highest share of MTPL insurance in the sale of non-life insurance products was observable in Estonia, Poland and Slovak Republic (see Figure 1). Except Latvia, the share of MTPL insurance in 2004, as compared to 2012, was

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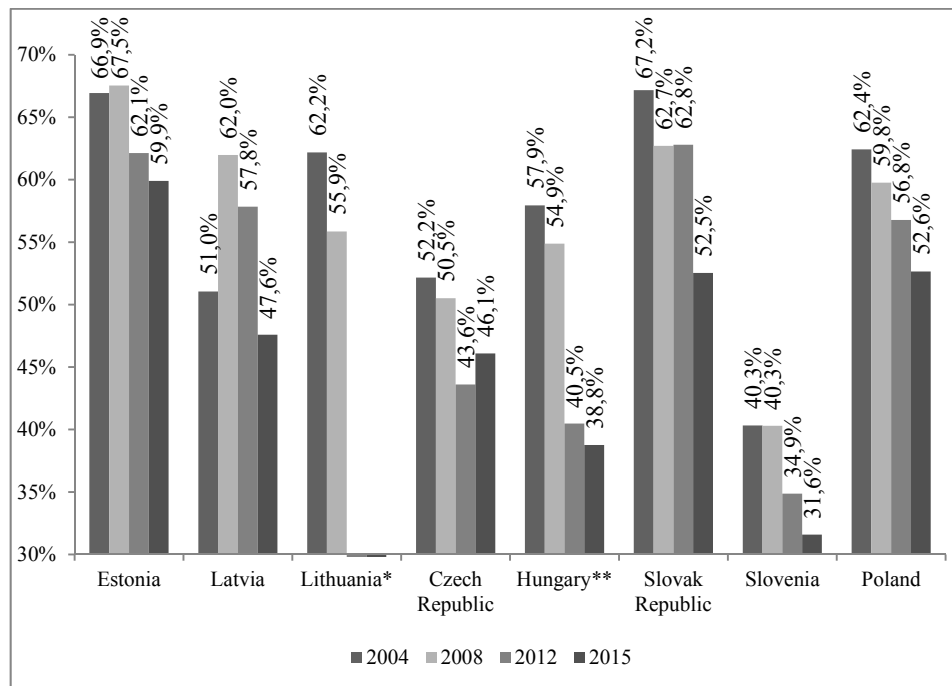
<sup>1</sup> The detailed data for non-life insurance market non-life gross premiums written and for motor insurance premiums, since 2004 for European countries are obtainable on IE [2016]. This data, however, is based on samples that represent more than 90% of the market.



declining. The decline was most visible in the cases of Hungary (c.a. 17 p.p.), Slovenia (c.a. 14 p.p.), and the Czech Republic (c.a. 9 p.p.). It should be noted that in Estonia, Latvia, the Slovak Republic, and Poland the premiums from the sale of MTPL in 2012 still were above 50% of total non-life premiums. In 2015, similar tendency was observed, except Latvia. However, there was a visible decline of the share of MTPL in 2015 as compared to 2012 in most of the analyzed countries.

Interestingly, the data presented in Annex 1 indicates that the share of MTPL insurance in Slovenia was comparable with that observed in most of the EU-15 non-life markets. In this context, the Slovenian non-life insurance market seems to be more mature when compared to the remaining EU-8 countries. The data provided in Annex 1 indicates also that in 2012, after the clear decline of the share of MTPL insurance in the EU-8 countries, there was a group of EU-15 countries which reported a the share of MTPL insurance above 50%. It is also worth to notice that the share of MTPL in Greece, Italy and Luxembourg was relatively comparable with the share of EU-8 countries in the analyzed time frame, including 2015 (see the top 10 countries in the ranking presented in Annex 1).

**Figure 1.** The share of MTPL premiums in total gross written premiums of non-life insurance markets of the EU-8 countries



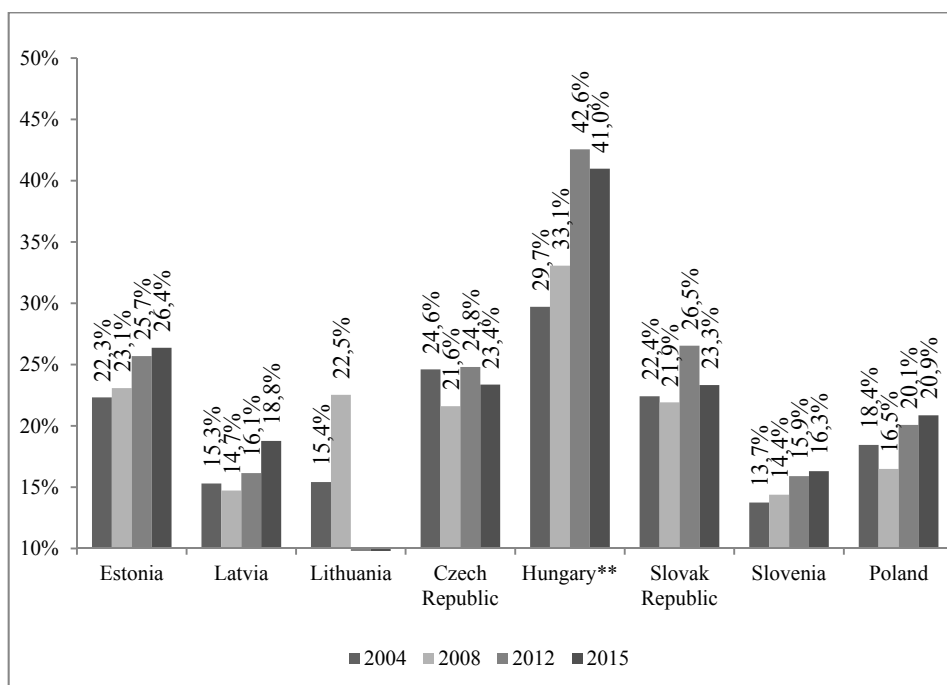
\* For Lithuania figures for 2012 and 2015 were not available.

\*\* For Hungary figures for 2015 were Insurance Europe's estimates.

Source: Based on data provided by [IE 2010; 2011; 2014; 2016].

The decline of the share of MTPL insurance in the EU-8 countries was followed by the increase in the share of property and other non-life insurance. However, as presented in Figure 2 and Figure 3, on average in Estonia, Hungary and Slovak Republic, the share of property insurance was higher, as compared to other non-life insurance. In Latvia and Slovenia the reversed tendency was observed – a visibly higher share of other non-life insurance lines. In the remaining EU-8 countries (Lithuania, the Czech Republic and Poland) the share of property and other non-life insurance was more proportional. It is worth to notice that the upward trends of the share of property and other non-life insurance in the EU-8 countries strengthened in 2015 (in most of the cases).

**Figure 2.** The share of property insurance premiums in total gross written premiums of non-life insurance markets of the EU-8 countries

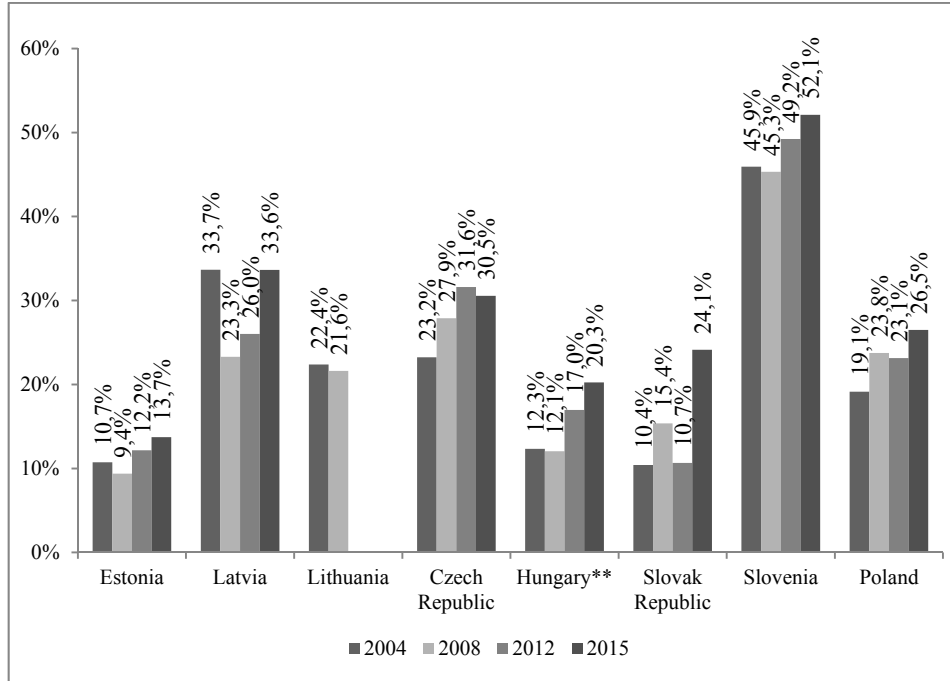


\* For Lithuania figures for 2012 and 2015 were not available.

\*\* For Hungary figures for 2015 were Insurance Europe's estimates.

Source: Based on data provided by [IE 2010; 2011; 2014; 2016].

**Figure 3.** The share of other non-life insurance premiums in total gross written premiums of non-life insurance markets of the EU-8 countries



\* For Lithuania figures for 2012 and 2015 were not available.

\*\* For Hungary figures for 2015 were Insurance Europe's estimates.

Source: Based on data provided by [IE 2010; 2011; 2014; 2016].

### Conclusions

Since the transformation from command to market economy, the insurance markets in transition countries have faced dynamic and rapid changes. This was then strengthened by the European Union accession, which was preceded by the process of harmonization. As a consequence, the performance of insurance companies was subject to fluctuations of in many areas of their business surrounding.

The purpose of this study was to provide the evaluation of the observable changes in the non-life insurance markets in the eight CEE countries, that overcame transition at similar time and accessed the European Union in 2004. In the academic literature, however, the comparative studies of the changes of non-life insurance markets in transition countries are scarce, as compared to other sectors of financial system. This research may contribute to filling in the existing cognitive gap. In particular, the overview of non-life market in transition countries was documented here, and the three periods of market development were denoted (pre-

transition, transition and accession period). The analysis of data was provided for the accession period since 2004.

In the context of data analysis, this paper gave a closer attention to the products' structure of the EU-8 non-life markets, with a focus on the share of MTPL (motor third party liability) insurance. It was observed that in most of the EU-8 countries the share of MTPL insurance was visibly declining. Simultaneously, in some countries there was a growth of a share of property insurance, whereas in other countries the growth of other non-life insurance lines was observed.

The analysis of data provided in this paper faced several important limitations. The obtainable figures were not complete (e.g. data for Lithuania). Moreover, data provided by European Insurers federation have limited comparability in some aspects due to the inclusion only of the data of the member insurers (which means that in some cases c.a. 10% of the market was excluded from database). Nevertheless, the obtainable data allowed to follow the general trends on the domestic non-life markets.

As the non-life markets in CEE countries is still evolving, further inquiries might be placed as regards the changes of the market structure. This paper, however, may provide a valuable contribution in theoretical and empirical dimension for further studies on non-life markets in Europe.

**Annex 1.** The share of MTPL (Motor Third Party Liability) insurance premiums in total non-life premiums in the EU-15 and the EU-8 countries

2004			2008			2012			2015		
1	SL	67,2%	1	EE	67,5%	1	GR	66,8%	1	EE	59,9%
2	EE	66,9%	2	LU	64,6%	2	SL	62,8%	2	GR	57,8%
3	PL	62,4%	3	GR	63,6%	3	EE	62,1%	3	PL	52,6%
4	LI*	62,2%	4	SL	62,7%	4	LV	57,8%	4	SL	52,5%
5	LU	61,9%	5	LV	62,0%	5	IT	57,7%	5	IT	52,1%
6	GR	60,5%	6	PL	59,8%	6	PL	56,8%	6	LU	48,7%
7	IT	60,3%	7	IT	58,3%	7	SE	53,1%	7	LV	47,6%
8	HU	57,9%	8	LI*	55,9%	8	LU	46,7%	8	CZ	46,1%
9	CZ	52,2%	9	HU	54,9%	9	CZ	43,6%	9	SE	41,1%
10	LV	51,0%	10	CZ	50,5%	10	IR	42,9%	10	HU**	38,8%
11	PT	48,8%	11	IR	42,6%	11	FI	42,0%	11	FI	38,1%
12	IR	41,9%	12	PT	42,2%	12	HU	40,5%	12	PT	36,5%
13	SI	40,3%	13	FI	40,5%	13	PT	39,1%	13	BG	32,4%
14	FI	39,2%	14	SI	40,3%	14	SI	34,9%	14	SP	32,3%
15	BG	35,9%	15	SP	38,9%	15	SP	34,2%	15	SI	31,6%
16	SE	35,5%	16	BG	33,3%	16	BG	33,1%	16	AT	29,3%
17	AT	35,2%	17	AT	32,2%	17	AT	30,1%	17	DR	29,1%
18	DR	34,1%	18	SE	31,6%	18	DR	29,5%	18	UK	26,4%
19	DK	28,9%	19	DR	30,3%	19	UK	28,1%	19	IR	26,0%
20	DE	27,5%	20	UK	26,3%	20	DK	25,7%	20	DK	25,1%
21	UK	27,1%	21	DE	24,0%	21	DE	23,3%	21	DE	24,9%
22	NL	19,4%	22	DK	22,9%	22	NL	8,0%	22	NL	6,7%
23	SP	16,1%	23	NL	8,9%	23	LI	n.a.	23	LI	n.a.

\* For Lithuania data for 2012 and 2015 was not available.

\*\* For Hungary data for 2015 are Insurance Europe's estimates.

Notes:

'n.a.' stands for 'not available'.

Abbreviations: AT – Austria, BG – Belgium, CZ – Czech Republic, DK – Denmark, EE – Estonia, FI – Finland, FR – France, DE – Germany, GR – Greece, HU – Hungary, IR – Ireland, IT – Italy, LV – Latvia, LI – Lithuania, LU – Luxembourg, NL – Netherlands, PL – Poland, PT – Portugal, SL – Slovak Republic, SI – Slovenia, SP – Spain, SE – Sweden, UK – United Kingdom.

Source: Based on data provided by [IE 2010; 2011; 2014; 2016].

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