dr hab. Iwona LASKOWSKA, prof. UŁ
Uniwersytet Łódzki, Wydział Ekonomiczno-Socjologiczny
e-mail: iwona.laskowska@uni.lodz.pl
ORCID: 0000-0002-1657-5541

THE IMPACT OF INSURANCE ON ECONOMIC GROWTH IN CENTRAL AND EASTERN EUROPEAN COUNTRIES AGAINST OTHER EUROPEAN ECONOMIES[1]

Abstract

Purpose – The purpose of this paper is to assess the impact of the insurance sector on economic growth based on panel data for 31 European countries covering the period 2004–2019, with particular emphasis on the countries of Central and Eastern Europe.

Method – Dynamic econometric models were used in the analysis (Generalised Method of Moments). An attempt was made to quantify the impact of the insurance sector on economic growth for selected indicators of activity in that sector (insurance density and market penetration) for 2004––2019.

Conclusions – Research using regression analysis has confirmed the importance of insurance activity (in total, life and property & casualty insurance) for economic growth in a group of 31 European countries. The analysis carried out for the group of CEE countries has not confirmed significant impact of any of the variables characterising the development of total insurance and life insurance markets on GDP per capita. However, a significant impact of property & casualty (P&C) insurance, expressed in terms of insurance density, has been confirmed.

Originality/value/implications/recommendations – The results of the study may constitute a recommendation for supporting the further development of the insurance sector by formulating appropriate regulations and legal frameworks and by taking measures that can increase trust in the insurance sector and raise insurance awareness.

Keywords: insurance, economic growth, panel models, Central and Eastern European Countries

JEL Classification: C23, G22, O43.

1. Introduction

The insurance sector forms a crucial part of the financial system in a market economy. According to the European Commission, access to insurance products is essential to the functioning of the contemporary society [European Commission, 2008, pp. 13–14]. The insurance sector can affect the real economy via various

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transmission mechanisms. Moreover, insurers offer necessary protection to numerous households, businesses and financial market participants, and compensate them for the consequences of the various financial risks they undertake. On the other hand, as financial institutions, they are closely involved in cash accumulation and distribution processes. Insurance companies are both an important financial intermediary and a large institutional investor. Insurers' financial operations have a stabilising role, whether for society at large or the economy. In many countries, the insurance sector is an important employer [Arena, 2008, p. 2; Bednarczyk, 2012; Hamydova, 2014; Pradhan, 2017, p. 3; Rokicki, 2018, p. 187; Ward, Zurbruegg, 2000, p. 489; Bayar et al., 2021, p. 696].

Despite recent research concerning the relationship between the insurance and economic development, the relationship has not been fully recognised in the existing literature and the results of most empirical studies differ depending on their underlying data and the econometric tools [see, among others: Outreville, 2013].

The purpose of this paper is to assess and attempt to quantify the impact of the insurance sector on economic growth based on the 2004–2019 data for European countries, focusing in particular on Central and Eastern European countries whose insurance markets are still some distance away from most other European countries, despite their dynamic development post – 1990. The paper puts forward the following hypothesis: the insurance sector can be an important driver of economic growth, but its importance for the economy depends on the level of the development of that sector. The analysis is based on econometric models for cross-sectional time-series data. The attempt to assess the impact of the insurance sector on economic growth relied on the main indicators of activity in that sector: insurance premium per capita (insurance density) and a share of written premiums in GDP (insurance market penetration). There have been few studies so far aiming to identify the impact of insurance on economic growth in the countries of Central and Eastern Europe, and the results of previous research on countries that have undergone economic transformation lead to different conclusions. This paper is an attempt at filling that gap. This seems to be of particular importance given the expected involvement of insurers in the reconstruction of Europe after the COVID-19 pandemic [Directive 2009/138/EC].

2. Literature review

In analysing the links between insurance sector and economic growth, different research approaches can be used, based on various theoretical concepts and hypotheses [Pradhan et al., 2017, pp. 3–4; Dash et al., 2018, p. 56]. One of them is a hypothesis according to which developments of the insurance sector affect economic growth (supply-leading hypothesis). Supporting corporate growth and technological advancement or stabilisation and countercyclical activities are the main channels through which the insurance sector affects economic growth [Hamydova, 2014]. Another hypothesis (demand-following hypothesis) posits a reverse direction of

interactions: economic growth affects the development of the insurance sector. The assumption in this hypothesis is that the insurance market will not develop due to the lack of demand for its services. Growing real incomes will increase demand for insurance services from investors and savers, leading to modern insurance institutions being set up and market development [Alhassan, Biekpe, 2016; Chang et al., 2014]. A third hypothesis suggests that economic growth and insurance market activity reinforce each other [Alhassan, Biekpe, 2016; Chang et al., 2014; Pradhan et al., 2017]. According to the neutrality hypothesis, in turn, economic growth and insurance market activity remain neutral [e.g. Pradhan 2017, p. 4].

Research into interrelationships between the insurance market and economic growth has been carried out at various levels, from research combining multiple countries to studies focusing on single economies [e.g. Arena, 2008; Alhassan, Biekpe, 2016; Pradhan et al., 2017; Hamydowa, 2014; Chang et al., 2014; Ul Din et al., 2017; Wang, Lee, 2018; Safitri, 2019]. An overview of selected studies on European countries, including those of Central and Eastern Europe, employed regression analysis and causality analysis, is presented below.

P. Haiss and K. Sümegi [2008] focused their research on the links between insurance investment, premiums and economic growth across 29 European countries. The cross-country panel data analysis confirmed the positive impact of life insurance on GDP growth in the countries with developed financial markets.

Using data for 1992–2007 on ten EU countries that underwent a period of economic transformation, M. Ćurak, S. Lončar, K. Poposky [2009] investigated the links between insurance business and economic growth by relying on fixed-effects panel data models. Their conclusion was that insurance has a positive, and significant, impact on the economy. This applies to life, property and total insurance.

In his study on post-transition countries, in which he relied on data for 2000–2012 and used a panel data model, J. Phutkaradze [2015] did not confirm the hypothesis concerning the impact of insurance on economic growth as expressed by the penetration index.

R.P. Pradhan, S. Dash, R. Pratap Maradana, M. Jayakumar, and K. Gaurav [2017] investigated the so-called Granger causality between insurance market density (for life, property, and total insurance) and economic growth for 19 Eurozone countries based on data for 1980–2014. Their results provided inconclusive evidence as to the interrelationships between the insurance market and economic growth. In some cases insurance density led to economic growth; in others, economic growth contributed to insurance market density.

V. Peleckiene, K. Peleckis, G. Dudzeviciute, and K.K. Peleckis [2019] examined the relationship between the insurance sector and economic growth in the European Union countries over 2004–2015. Their analyses found that, in terms of its directionality, causality varied. For instance, the Granger test showed unidirectional causality running from GDP to insurance in Luxembourg and Finland, unidirectional causality running from insurance to GDP in the Netherlands, Malta and Estonia, the bidirectional causality in Austria, and no causality between insurance and economic growth in Slovakia.

S. Wanat, M. Papież, and S. Śmiech [2019] examined causality between insurance market development and economic growth in the ten EU member states that had previously undergone a period of economic transition, using data for 1993–2013. The study identified different types of relationships between economic growth and insurance development (both in terms of global insurance market and for life and property insurance). For some of the countries under analysis, the supply-leading hypothesis was confirmed; for others, the demand-following hypothesis was confirmed. In the case of other countries, the neutrality hypothesis could not be rejected based on the findings.

In their study of 25 EU countries over 2009–2017, N. Kaya, N. Beser [2020] relied on cointegration analysis to show that certain variables characterising economic growth and premium volume remain in a long-term cointegration relationship. Based on their analysis, a 1% increase in premium volume leads to a 0.113% rise in the economic growth.

Y. Bayar, M. Dan Gavriletea, and D.C. Danuletiu [2021] investigated the impact of the insurance sector – expressed as penetration rates for life and property insurance – on economic growth. Their sample included 14 Central and Eastern European countries and covered the period between 1998 and 2016. They used econometric techniques for panel data and per-country studies, and reached the following conclusions: life insurance showed no significant impact on economic growth both across the panel and in individual countries, while property insurance had a positive impact on economic growth both in the panel and on a per-country basis.

The above literature review shows that the research findings so far are not unequivocal, which raises the need for further analysis to assess the potential causal relationship between insurance market activity and economic growth.

3. European insurance market and its specificity
in Central and Eastern European countries

The European insurance market generates 32% of the world's gross written premium [www 2]. In 2019, on a per capita basis, the average gross written premium in Europe was EUR 2,187. In some countries, total insurance density exceeded EUR 5,000 per capita (Denmark, Luxembourg, Switzerland). In the countries of Central and Eastern Europe, the level of that ratio still deviates significantly from this European average, despite more than doubling over 2004–2019. In 2019, the gross written premium per capita in this group of countries averaged EUR 339, with the highest insurance density (EUR 1,163 per capita) observed in Slovenia, and the lowest one (EUR 140 per capita) in Latvia.

The saturation of the insurance market in Central and Eastern European countries – expressed as a penetration rate, which reflects the ratio of gross written premiums to gross domestic product (GDP) – also remains significantly below the European average. While its value in Europe is 7.4%, the rate in Central and Eastern

European countries is a mere 2.6%. The lowest market penetration is observed in Romania (1.2%); the highest one is in Denmark, at 11.2%.

In Poland, the 2019 ratio of gross written premiums to GDP was 2.7%, with premium per capita amounting to EUR 373.

In the period under examination, life insurance premiums within the European insurance market accounted for about 56% of total insurance, measured as gross written premiums, with health (13%) and property and casualty (P&C) insurance at 31% [www 2]. The higher than European average share of life insurance in total insurance is characteristic mainly of the Nordic countries, such as Finland or Denmark, but also of Italy, the United Kingdom, Ireland, Luxembourg, France, and Belgium.

A different structure of insurance markets is observed in the countries of Central and Eastern Europe: property insurance is dominant here (at approx. 65% of the market) and the largest share of gross written premiums comes from motor insurance policies [www 2].

The data above prove that the insurance market in Central and Eastern European countries is relatively underdeveloped, and its structure is dominated by property insurance, unlike in West European markets.

4. Data and research methodology

The research presented here sets out to verify the supply-leading hypothesis. It was conducted on a sample of 31 member countries of Insurance Europe, and separately for a group of ten Central and Eastern European countries and 21 other countries. The Central and Eastern European countries included Bulgaria, Croatia, the Czech Republic, Estonia, Latvia, Poland, Romania, Slovakia, Slovenia, and Hungary. For lack of complete data, Lithuania was not part of the study.

The other countries covered by the study are: Austria, Belgium, Cyprus, Denmark, Spain, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Sweden, Switzerland, Turkey, the United Kingdom, and Portugal.

The 2004–2019 data from Insurance Europe and Eurostat databases are cross-sectional time-series data. The basic period is a calendar year, while objects represent countries.

To verify the hypothesis concerning the impact of insurance on economy, growth regressions were taken as the starting point [Hansen, Tarp, 2000, p. 8; Bond, Hoeffler, Temple, 2001, p. 35]:

$$\Delta y_{it} = (\gamma - 1)y_{i,t-1} + \boldsymbol{x}_{it}^{T}\boldsymbol{\beta} + \alpha_i + \varepsilon_{it}, \text{ i = 1,…, N, t = 1,…,T.}$$

where: y_{it} – logarithm of GDP *per capita* in the *i-th* country in year *t*, $\mathbf{x}_{it} = [x_{kit}]_{K \times 1}$ – vector of explanatory variables, α, δ, γ – structural parameters of the model common to all *i* and *t*, with γ as autoregression coefficient, α_i – individual effects, ε_{it} – random component

This formula might also be expressed as:

$$y_{it} = \gamma y_{i,t-1} + \boldsymbol{x}_{it}^T \boldsymbol{\beta} + \alpha_i + \varepsilon_{it}.$$

In the proposed methods for estimating dynamic models using cross-sectional time-series data, those derived from the generalized moment method (GMM) are of the greatest practical significance, as they allow consistent parameter estimators to be obtained with endogenous explanatory variables [Blundell, Bond, 2000]. Endogeneity, which occurs because of potential bidirectionality between economic growth and insurance, is a common problem in the research focusing on the dependence of economic growth on the insurance sector.

The condition of the insurance sector in individual countries is expressed in two ways:
 – as a density rate of: total insurance measured by gross premiums written per capita (density_total), life insurance density, which is life gross premiums written per capita (density_life), and P&C insurance density (density_P&C),
 – as a penetration rate for: total insurance, being the ratio of total gross premiums written to GDP (penetration_total), life penetration rate (penetration_life), and property and casualty penetration rate (penetration_P&C).

Given the marginal role of health insurance in the countries of Central and Eastern Europe (with penetration rate at approx. 0.5%), this type of insurance was not included in further considerations.

Investments, measured as a share of investment expenditure in GDP, are among basic explanatory variables when analysing economic growth using growth regressions [e.g. Barro, Sala-i-Martin, 1995; Hansen, Tarp, 2000; Dritsaki et al., 2004]. In this study, too, economic growth is made dependent on an investment rate measured as a share of investment expenditure in GDP (*investments/GDP*). The impact the insurance sector has on economic growth may depend on the insurance market's operating environment. One important element of that environment is the level of development of the banking sector. Studies on the relationship between the insurance sector and economic growth often express the development of the banking sector as a share of loans for the private sector in GDP [Arena, 2008; Hamydowa, 2014; Ul Din et al., 2017]. The analyses below use a similar approach. The *loans/GDP* variable approximates the development of the banking sector.

Table 1 shows average values for the variables used in the analysis of the relevant groups of countries, in 2004–2019.

Clear disproportions can still be seen, despite the dynamic growth of the insurance market across the CEE countries. Total premium per capita reveals a particularly large discrepancy: its average value in CEE countries is many times lower than in the countries with well-developed insurance markets. Much higher differences are observed for life insurance.

Large disproportions also characterise GDP per capita. Its average level in the CEE countries under review is more than twice lower than the average for all of the countries surveyed (according to PPP).

TABLE 1.
Average values for variables used in the analysis, 2004–2019

Variable name	Full sample (n= 31)	CEE countries (n=10)	Other countries (n=21)
GDP *per capita* (EUR, PPP)	20010.00	9200.00	25200.00
Total insurance density (EUR *per capita*)	1947.20	318.50	3920.00
Total insurance penetration (%)	7.40	2.98	8.42
Life density (EUR *per capita*)	1090.00	111.30	2919.00
Life penetration (%)	4.40	1.32	5.72
P&C density (%)	623.70	200.40	1024.00
P&C penetration (%)	2.23	1.66	2.50
Share of investments in GDP (%)	22.21	23.82	21.44
Share of loans for the private sector in GDP (%)	87.78	55.81	103.00

Note: Values are for non-logarithmic variables.

Source: Own calculations based on: [www 2; www 3; www 4].

5. Estimation results

Table 2 shows econometric model estimation results for total insurance in the groups of countries under consideration. The first two columns present the results for all of the countries examined; here, insurance was approximated using insurance density (model 1) and insurance penetration (model 2). The subsequent columns present the results from analogous models for the countries of Central and Eastern Europe (models 3–4) and other countries (models 5–6). Models with lagged variables characterising the insurance market were also considered. However, those variables turned out to be statistically insignificant.

The most important diagnostic tests in the generalized method of moments (GMM) include the Arellano-Bond test, which verifies the first- or second-order autocorrelation (as appropriate), and the Sargan test, which verifies the correctness of the instruments used in the process of estimation [Arellano, Bond, 1991]. Out of the many models considered, all of which differed in specifications and estimators used, a decision was made to present the results whose correctness was confirmed by the Sargan and Arellano-Bond tests.

Based on the results for all European countries under analysis (a sample of 31 countries), the insurance sector exerts a positive impact on economic growth. Parameter evaluations for the insurance sector variables are positive and statistically significant, confirming the supply-leading hypothesis. Both insurance density and penetration rates for total insurance are significant contributors to economic growth. Similar conclusions can be drawn for the group of 21 countries with average

GDP per capita and the insurance sector development exceeding the average for all of the European countries under analysis (models 5–6).

Impact of total insurance on economic growth: GMM estimation results

Explained variable	Dependent variable: ln (GDP per capita)					
	Full sample		CEE countries		Other countries	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
$\ln(\text{GDPpc})_{i,t-1}$	0.978*** (0.009)	0.992*** (0.126)	1.002*** (0.151)	0.881*** (0.102)	1.005*** (0.151)	0.881*** (0.102)
$\ln(\text{investments/GDP})_{it}$	0.033*** (0.009)	0.085** (0.051)	0.065* (0.035)	0.132* (0.067)	0.065* (0.035)	0.132* (0.067)
$\ln(\text{density\_total})_{it}$	0.013** (0.005)	–	−0.008 (0.014)	–	0.010*** (0.014)	–
$\ln(\text{penetration\_total})_{it}$	–	0.007** (0.003)	–	−0.097 (0.062)	–	0.003* (0.062)
$\ln(\text{loans/GDB})_{it}$	-0.033*** (0.005)	-0.028*** (0.003)	-0.044** (0.038)	–	-0.017** (0.008)	-0.011** (0.001)
Observations	465	465	150	150	315	315
AR(1) test	-3.152 [0.002]	-3.141 [0.001]	-2.711 [0.047]	-1.878 [0.060]	-2.007 [0.047]	-2.470 [0.060]
AR(2) test	-1.796 [0.072]	-1.736 [0.073]	-1.657 [0.113]	-1.314 [0.188]	-1.588 [0.113]	-0.814 [0.372]
Sargan test	30.487 [1.000]	29.588 [1.000]	8.484 [1.000]	7.225 [1.000]	8.484 [1.000]	20.860 [1.000]

Notes*: The constant is omitted from the table. Parameter estimation error values are in square brackets under parameter evaluations. Parameters marked with '***', '**' and '*' are relevant at the (respectively) 1%, 5% and 10% of significance levels

AR(1) test and AR(2) test: empirical values for the Arellano–Bond autocorrelation test, in square brackets – p values for H0: first- (second-) order autocorrelation does not occur;

Sargan test – empirical values of the Sargan test; in square brackets – p-values for H0: over-identifying conditions are correct (instruments are correct).

Source: own calculations based on: [www 2; www 3; www 4].

The findings for CEE countries lead to different conclusions (models 3 and 4). Parameter evaluations for variables approximating the development of the total insurance market (total insurance density, penetration) are not statistically significant. Therefore, the analyses cannot confirm the supply-leading hypothesis for the global insurance market in this group of countries.

When assessing the significance of the insurance market for economic development, the specificity of that market in CEE countries has to be kept in mind. In addition to its generally low quantitative indicators of development, that market is also different structurally. It is dominated by property insurance (P&C), with life insurance playing a smaller role. Table 3 shows estimation results for life insurance

models in which insurance sector development is characterized by life density (*density_life*) and life penetration (*penetration_life*).

Table 4 shows the results of analogous analyses for property insurance (P&C). The variables used to characterise the P&C insurance market were density (*density_P&C*) and penetration (*penetration_P&C*).

<div align="right">TABLE 3.</div>

Impact of life insurance on economic growth: GMM estimation results

Variable	Dependent variable: ln (GDP per capita)					
	Full sample		CEE countries		Other countries	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ln(GDPpc)$_{i,t-1}$	0.946*** (0.007)	0.933*** (0.002)	1.003*** (0.126)	0.881*** (0.102)	1.003*** (0.126)	1.003*** (0.008)
ln(investments/GDP)$_{it}$	0.032*** (0.010)	0.035*** (0.009)	0.085* (0.056)	0.132* (0.067)	0.085* (0.056)	0.103*** (0.002)
ln(density_life)$_{it}$	0.025*** (0.003)	–	−0.008 (0.014)	–	0.007** (0.003)	–
ln(penetration_life)$_{it}$	–	0.023*** (0.001)	–	−0.097 (0.062)	–	0.005*** (0.001)
ln(loans/GDB)$_{it}$	0.034*** (0.005)	-0.026*** (0.004)	-0.044*** (0.038)	-0.039*** (0.031)	-0.016*** (0.001)	-0.007*** (0.001)
Observations	465	465	150	150	315	315
AR(1) test	-3.160 [0.002]	-3.153 [0.001]	-2.007 [0.044]	-1.878 [0.050]	-2.480 [0.010]	-2.470 [0.013]
AR(2) test	-1.790 [0.073]	-1.795 [0.072]	-1.588 [0.112]	-1.314 [0.188]	-0.870 [0.351]	-0.83 [0.405]
Sargan test	30.104 [1.000]	30.003 [1.000]	8.484 [1.000]	7.225 [1.000]	8.484 [1.000]	20.729 [1.000]

Notes: see Table 2.

Source: own calculations based on: [www 2; www 3; www 4].

The calculations have confirmed life insurance impacts in two country groups: a group of 21 countries with developed insurance markets and a group of all 31 European countries. Statistically significant structural parameter evaluations were obtained for both life density and life penetration rates. For CEE countries, the findings did not confirm the importance of this type of insurance for economic growth.

As shown by the research, however, the development of the property & casualty market may become a significant factor in the growth of CEE countries. It should be emphasised, however, that only one characteristic of that market is significant, namely P&C insurance density. For countries with well-developed insurance markets and higher GDP per capita levels, P&C density is the only significant variable for economic growth.

Impact of P&C insurance on economic growth: GMM estimation results

Variable	Dependent variable: ln (GDP per capita)					
	Full sample		CEE countries		Other countries	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ln(GDPpc)$_{i,t-1}$	0.814*** (0.009)	0.985*** (0.003)	0.804*** (0.043)	1.003*** (0.001)	1.009*** (0.008)	1.006*** (0.006)
ln(investments/GDP)$_{it}$	0.025*** (0.004)	0.050*** (0.004)	0.069* (0.045)	0.097*** (0.025)	0.004* (0.002)	0.010*** (0.005)
ln(density_P&C)$_{it}$	0.041*** (0.008)		0.090** (0.036)		0.008** (0.003)	–
ln(penetration_P&C)$_{it}$	–	0.003*** (0.002)		−0.001 (0.010)	–	0.008 (0.010)
ln(loans/GDB)$_{it}$	–	-0.018** (0.005)	-0.017** (0.229)	–	-0.016** (0.001)	-0.013* (0.002)
Observations	465	465	150	150	315	315
AR(1) test	-3.136 [0.002]	-3.124 [0.001]	-2.160 [0.0307]	-1.990 [0.040]	-2.160 [0.030]	-2.550 [0.010]
AR(2) test	-1.706 [0.087]	-1.588 [0.112]	-4.680 [0.070]	-1.564 [0.117]	-4.710 [0.080]	-1.753 [0.079]
Sargan test	30.487 [1.000]	30.125 [1.000]	-106.53 [0.170]	7.225 [0.390]	20.635 [0.170]	197.750 [0.390]

Notes: see Table 2.

Source: own calculations based on: [www 2; www 3; www 4].

The analyses above confirm the supply-leading hypothesis for CEE countries with respect to property insurance only, which is the most popular type of insurance there.

Regarding the other two groups, the analyses confirm the proposed hypothesis for total insurance, life insurance, and property & casualty insurance. Insurance density is significant for property insurance in highly-developed countries, while the other characteristic, i.e. P&C insurance penetration, is not significant in statistical terms.

The conclusion, therefore, is that economic benefits resulting from the development of the insurance market may differ, depending on the level of development of that market.

The Arellano-Bond AR(2) autocorrelation tests for all the models considered indicate no grounds for rejecting the null hypothesis, which means that there is no second-order autocorrelation. The Sargan test was used to verify the hypothesis that the instrument matrix (overidentifying conditions) is correct. No grounds were found for rejecting that hypothesis. The evaluation of the parameter with a lagged endogenous variable was positive and statistically significant for all the considered models, confirming the validity of using dynamic models. The findings also confirm that the investment rate has a positive and significant impact on the explained

variable across all the models; the share of private sector loans in GDP, on the other hand, had a negative impact on the economic growth in European countries. The results of previous research into the banking sector development, and in particular its importance in strengthening or weakening the impact of insurance on economic growth, are inconclusive [Ul Din et al., 2017; Hamydowa, 2014]. This requires further analysis.

Given that the conducted analysis involved a selection of insurance characteristics and only one basic characteristic of economic growth, its findings should be approached with great caution.

6. Conclusions

This article attempted to assess the relationship between the insurance market – measured by its density and penetration rates – and economic growth in European countries, with particular emphasis on those in Central and Eastern Europe. The starting point for the research was the hypothesis that the development of the insurance sector can be a driver of economic growth.

Regarding the group of Central and Eastern European countries, the analysis did not show any significant impact of any relevant total and life insurance development variables on GDP per capita. What has been confirmed, however, is the impact of property and casualty (P&C) insurance expressed as gross written premiums per capita for this type of insurance. Structurally, property insurance dominates the CEE market, although its density and penetration rates are still much lower than in Western European countries, which is a prerequisite for their further development.

The insurance sector can be an important determinant of economic growth, as proven by the analysis regarding both the 21 countries with well-developed insurance markets and the wider group of 31 countries under examination. It should be noted, however, that, on average, both insurance density and insurance penetration rates for all insurance in CEE countries are still much lower than the average for the entire group of European countries that have been examined. The same is true of life insurance. This leads to the conclusion that, while increasing, the activity in the life and total insurance markets is still insufficient to affect economic growth in any significant way.

The conclusions that can be drawn from the research coincide with those of other authors [e.g. Haiss, Sümegi, 2008; Pradhan et al., 2017].

To recapitulate, economic benefits resulting from the development of the insurance market may vary, depending on the level of the development of that market. The results of this study may constitute a recommendation for providing further support to the insurance sector, with CEE countries still exhibiting great potential for its development. It is recommended that particular attention should be paid to formulating appropriate regulations and legal frameworks to facilitate development of the insurance sector, and to taking measures that can increase trust in that sector and raise insurance awareness, especially regarding life insurance.

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