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**ECONOMIC FREEDOM AND GOVERNMENT QUALITY -  
INFLUENCE FACTORS FOR SOCIAL INSURANCE BUDGETS  
SUSTAINABILITY IN CENTRAL AND EASTERN EUROPEAN  
COUNTRIES**

***Abstract.** This paper explores how social insurance budgets of Central and Eastern European countries are influenced by the degree of economic freedom and the perception of the quality of governance. Our findings show that there is a strong correlation between the revenues of social insurance system and economic freedom even if tax burden has a negative influence on budget revenues. Also, the results emphasize that the perception of the quality of public services, the government's capacity to draw up and implement sound and stable policies and the control of corruption positively influence the revenues of the social insurance budgets. From a policy perspective, our findings may be a starting point for the consolidation of the sustainability of social insurance budgets.*

***Keywords:** Social insurance system, budget sustainability, Central and Eastern Europe, tax burden, business freedom, government quality.*

**JEL Classification: E62, H11, H61**

## **1. Introduction**

At all times, the social protection of citizens was the main preoccupation for the political leaders of any state. Starting with the Hammurabi Code and the Elizabethan Act for the Relief of the Poor, following with the sociological ideas during the industrial revolution, the social policies promoted by Chancellor Otto von Bismarck and William Henry Beveridge and continuing with the revolutionary idea of private insurance funds conceived by the economist Milton Friedman the honoring of the human being by providing health care and financial security for children, elderly and people who cannot work to earn an income was constantly sought (ILO, 2012).

As each state developed its own social policy in order to fulfill the social needs of its citizens, the configuration of the social insurance system is very diversified worldwide. However, the country's government system seems to be the element that gives the direction of the social policy and determines the social insurance system configuration. According to Dodlova, Giolbas and Lay (2017), democratic states promote the social insurance systems which constrain the social transfers and the provision of social benefits by fulfilling some eligibility criteria, while the non-democratic states prefer unconditional systems. On the same note, Rivera-Rozo et al. (2018) show that states having as main purpose cutting down the social uncertainty will reduce the exposure to the investment risk related to the financial markets, while Boadway and Keen (2000) argue the effectiveness of public social insurance system due to state autonomy and the ability to redistribute the national welfare.

Central and Eastern European countries (CEEC) developed the social insurance systems based on the conceptions regarding the social protection of Chancellor Otto von Bismarck. The social insurance system developed by Bismarck operates on the contributivity, solidarity and redistribution principles, therefore a share of the wage earned by workers is directed to the social insurance budget to cover the expenditures with the benefits provided to the insured persons. Therefore, maintaining the sustainability of the social insurance systems requires the balance between the taxpayers and beneficiaries, between the social contribution revenues and the expenditures with provided benefits.

It is difficult to maintain this balance in CEEC, given the aging population and the migration of the labor force. On top of that, the COVID – 19 pandemic puts even more pressure on the social insurance budgets since there were billions of people infected who required medical attendance and healthcare services. Due to the social distancing measures and restrictions, a lot of businesses found it difficult to continue the economic activity dismissing employed people that applied for unemployment benefits. Considering all these uncertain conditions, the present paper addresses the social insurance budgets of CEEC, given the influence of the

economic and social policy and the political governance quality on their sustainability.

In this paper, we aim to research the influence of economic freedom and the perception of the quality of governance on the revenues of the social insurance budgets. This influence derives from the principles that operate the social insurance system and ensure the collection of budget revenues. First, the social contributions are mandatory pecuniary levies established by the fiscal law, therefore the tax burden is an important factor that influences the budget revenues. Second, the taxpayers are represented by employers and employees so business and labor freedom are also factors that influence the budget revenues. Third, the perception of the political governance quality seems to affect the law compliance of taxpayers and, thereby, some significant indicators of government quality were considered to influence the social insurance budget revenues. The results of this paper extend the research on the financing of social insurance systems in CEEC and provide some insights on how the socio-economic policies and the quality of government may improve the sustainability of the social insurance budgets. Our findings show a positive correlation between the revenues of the social insurance system and the business freedom, the perception of the public services quality, the government's capacity to develop and implement sound and stable policies and the control of corruption. As expected, the tax burden has a negative influence on the revenues of social insurance budgets. From a policy perspective, these findings may be a starting point for the consolidation of the sustainability of social insurance systems of CEEC.

The paper is organized into five sections, starting with the introduction of the purpose of this research. In the next section a summary of the literature regarding the social insurance systems implemented in CEEC and the main influence factors of their sustainability was made, and the research hypothesis was stated. The third section presents the research methodology and the data used, while the fourth section exposes the results obtained. Finally, at the end of the paper, the conclusions of the paper are drawn.

## **2. Theoretic considerations and research hypotheses**

The social insurance systems implemented in CEEC have as a core principle of their functioning the contributivity of insured people. From a taxation perspective, social contributions are mandatory levies paid to the social insurance budget by taxpayers from their gross income, expecting in return tangible benefits guaranteed by the state (Trigg & Lowe, 2011). The following benefits are provided by the social insurance systems in CEEC: pensions, unemployment benefits, medical services, social assistance services and family allowances.

In CEE countries, the contributions to social insurance systems are divided between the employee, as the insured person, and the employer, as the organizer of the work activity. According to Directorate-General for Taxation and Customs

Union (2019), the structure of tax revenues in countries of European Union shows the labor taxation predominance, where social contributions represent more than two-thirds of it. Medina and Schneider (2018) draw attention to the excessive labor taxation and the increased tax burden as being a cause for developing informal and underground economy.

International Labor Organization (2010) defines the underground economy as all economic activity that violates legal regulations or only partially complies with them. The most common forms of underground economy manifested in the labor market are undeclared work and part-time contracts, payment of employees in non-taxable benefits, partial declaration of the sum of wages. Mineva and Stefanov (2018) reveal that collaborative activities and improper use of digital platforms, electronic money and cryptocurrencies transfers represent the new channels of the underground economy.

The consequences of the underground economy over the tax system can be seen in the reduced number of taxpayers, leading to the increase of the tax burden and the decrease of the revenues of the state budget. As regards the implications for the social insurance system, the underground economy limits the access of people to social protection and, at the same time, threatens the sustainability of the system by decreased revenues and increased required benefits. European Commission (2013, pp.9) clearly states that “any act or omission to act in order to obtain or receive social security benefits or to avoid the obligation to pay social security contributions, contrary to the law of a Member State” is a fraud and it is sanctioned according to the legal provisions. Considering all these ideas, the next research hypothesis was stated: „*The tax burden has a negative influence on the revenues of social insurance budget in CEEC*”.

Besides the tax burden, Schneider (2012) highlights the role of poor labor legislation and the lack of state institutions’ efficiency in discouraging the development of the underground economy. Pilc (2015) investigated the employment protection legislation reforms and his findings suggest that apart from GDP, employment, unemployment and level of government expenditure, the reforms are driven by political factors. As Lehmann and Muravyev (2012) show, the labor market evolutions depend on its institutional framework, in the same time Estrin et al. (2013) argue that entrepreneurial activity is conditioned by the business environment, the efficient property rights and the lack of corruption. These perspectives lead us to the following research hypothesis regarding the CEE countries: „*The business freedom has a positive influence on the revenues of social insurance budget.*” and „*The labor freedom has a positive influence on the revenues of social insurance budget*”.

The financing of social insurance system is influenced, as it was several times suggested before, by the relationship between the taxpayer and state. The compliance of taxpayers with the provisions established by the state is defined by the correct establishment of taxation base, considering the exemptions and

deductions, the computation of the sum of social contributions by applying the social contribution rate and the payment to social insurance budget before the due date. According to Fonseca and Myles (2012), the compliance of the taxpayers can be estimated by the ratio between declared and actual income.

Feld and Frey (2001) present the attitudes of the authorities and the perception on the quality of public services to determine the taxpayers' compliance, while Beale and Whyatt (2017) argue that shortages of legislation and corruption reduce the trust in the public administration and the taxpayer compliance. This point of view is also supported by McGillivray (2000) who believes that lack of trust in the social insurance system is one of the causes of tax avoidance. Gambo et al. (2014) referred to the tax legislation and advocated the negative influence of a complex tax system on the taxpayers' compliance. Based on these insights, *the perception of the public services quality, the government's capacity to draw up and implement sound and stable policies, the confidence in law system and the control of corruption will be considered determinants of the social insurance budget revenues.*

The understanding that the final beneficiaries of the social insurance system are the taxpayers should raise awareness of the importance of social contributions. The COVID – 19 pandemics brought to attention the important role of the social insurance systems for the wellbeing of citizens, but, at the same time, raised questions regarding the solutions for improving their solvency and sustainability. Economic freedom, tax policy, labor regulations and quality of political governance seem to be determinants of the social insurance systems sustainability, contributing to the sustainable development in CEEC.

### **3. Methodology and data**

The purpose of the paper is to deepen the research on the social insurance systems by emphasizing the influence of economic freedom and the perception of the quality of governance on their revenues in the case of CEEC. Therefore, the correlations between the social insurance budgets revenues, as a dependent variable and the specific indicators of economic freedom and governance quality, as independent variables, were studied. A database was created for the period 2008 – 2018 synthesizing the variables and their proxies as seen in Table 1.

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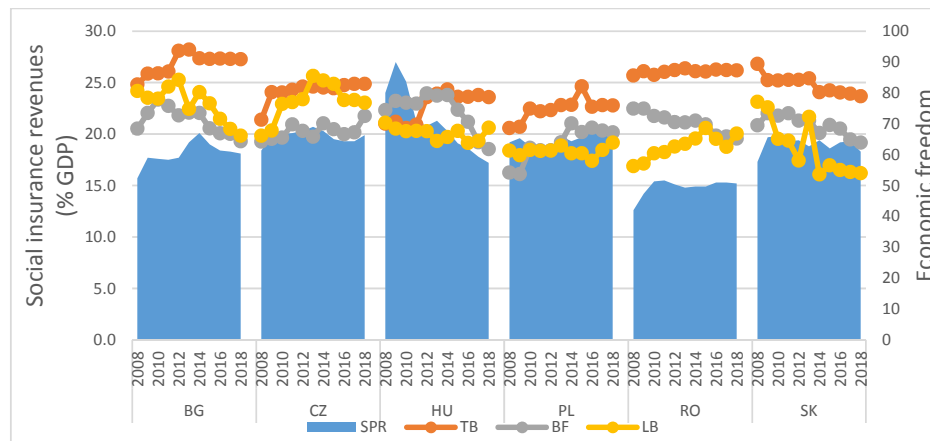
**Table 1. Variables and data**

Variable		Description	Unit of measure	Source
Revenues of social insurance budget (SPR)		Total collections of social insurance budget	Percentage of national GDP	Eurostat
Economic freedom	Tax burden (TB)	The overall tax burden from all forms of taxation	The score ranges from 0 (least freedom) to 100 (maximum degree of freedom)	Heritage Foundation
	Business freedom (BF)	Regulations on entrepreneurial activity and business environment		
	Labor freedom (LF)	Employment legislation		
Government quality	Government effectiveness (GE)	Perceptions of the quality of public services	The score ranges from – 2.5 points (weak) to 2.5 points (strong) in governance performance	World Bank
	Regulatory quality (RQ)	Perceptions of the ability of the government to formulate and implement sound policies and regulations that allow and promote private sector development		
	Rule of law (RL)	Perceptions of the extent to which agents have confidence in the rules of society		
	Control of corruption (CC)	Perceptions of the extent to which public power is exercised for private gains		

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The revenues of social insurance system budgets are collected from the social contributions paid by employees and employers, and also from government transfers. Between 2008 and 2018 in CEEC the revenues of social insurance budgets represented under 25% of the national GDP, increasing by 2.6% in Romania, by 2.4% in Bulgaria, by 1.5% in the Czech Republic, by 1% in Slovakia, and by 0.5% in Poland, Hungary being the only CEEC where social insurance revenues decreased by 6.8% (Figure 1).

Economic freedom is expressed by three indicators: tax burden, business freedom, and labor freedom. Between 2008 and 2018, economic freedom in CEEC was found above average score of 50 points. It was observed that the tax burden increased in all CEEC, except Slovakia which reduced his tax burden by 10.5 points. The highest growth of tax burden was recorded in the Czech Republic (+11.6 points), Hungary (+8.6 points), and Bulgaria (+8.2 points). Business freedom developed only in Poland (+13 points) and the Czech Republic (+8.3 points), scaling down by 12.6 points in Hungary, by 9.7 points in Romania, by 5.6 points in Slovakia and by 4.1 points in Bulgaria. As regard labor freedom, Slovakia loses 23.10 points, Bulgaria 14.5 points and Hungary 1.6 points, while the Czech Republic succeeded in rise labor freedom by 10.7 points, Romania by 10.5 points and Poland by 2.6 points (Figure 1).

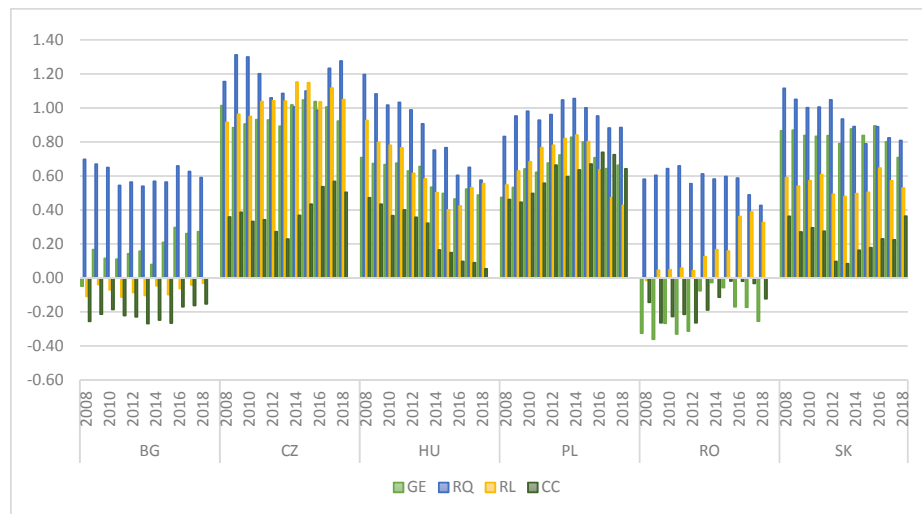


**Figure 1. Evolution of the revenues of social insurance budgets and economic freedom in CEEC between 2008 and 2018**

Government quality in CEEC has positive values at all indicators, except for Bulgaria and Romania. Improvements were made since 2008 regarding government effectiveness in Bulgaria, Poland and Romania, regulations quality enhanced in the Czech Republic and Poland, rule of law extended in Bulgaria, the Czech Republic and Romania, and control of corruption get better in Bulgaria, the Czech Republic, Poland and Romania. However, Bulgaria and Romania still have

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negative values of rule of law and control of corruption, respectively government effectiveness and control of corruption. Also, in Hungary and Slovakia all indicators of government quality recorded falling values (Figure 2).



**Figure 2. Evolution of government quality in CEEC between 2008 and 2018**

The research method used to determine the correlations between the social insurance budgets revenues and the economic freedom and governance quality indicators was the Ordinary Least Squares (OLS). According to the researched hypothesis stated before, the regression equations used are:

*H1: "The tax burden has a negative influence on the revenues of social insurance budget in CEEC".*

$$SPR_{it} = \alpha + \beta_1 x TB_{it} + \beta_2 x GE_{it} + \beta_3 x RQ_{it} + \beta_4 x RL_{it} + \beta_5 x CC_{it} + \varepsilon_{it} \quad (Eq 1)$$

$$SPR_{it} = 28.79240 - 0.157793 x TB_{it} + 3.920572 x GE_{it} + 2.507996 x RQ_{it} - 2.073090 x RL_{it} - 1.210850 x CC_{it} + \varepsilon_{it} \quad (Eq 1a)$$

$$SPR_{it} = 18.69523 - 0.070601 x TB_{it} + 2.566166 x GE_{it} + 3.677619 x RQ_{it} + 2.405357 x RL_{it} + 1.093722 x CC_{it} + \varepsilon_{it} \quad (Eq 1b)$$

$$SPR_{it} = 25.31841 - 0.135927 x TB_{it} - 0.942894 x GE_{it} + 3.910279 x RQ_{it} + 1.749072 x RL_{it} + 4.261290 x CC_{it} + \varepsilon_{it} \quad (Eq 1c)$$

*H2: "The business freedom has a positive influence on the revenues of social insurance budget in CEEC."*

$$SPR_{it} = \alpha + \beta_1 x BF_{it} + \beta_2 x GE_{it} + \beta_3 x RQ_{it} + \beta_4 x RL_{it} + \beta_5 x CC_{it} + \varepsilon_{it} \quad (Eq 2)$$

$$SPR_{it} = 6.884360 + 0.139737 x BF_{it} + 3.407580 x GE_{it} + 0.525363 x RQ_{it} - 0.896451 x RL_{it} + 2.403806 x CC_{it} + \varepsilon_{it} \quad (Eq 2a)$$



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$$SPR_{it} = 8.819165 + 0.068234 \times BF_{it} + 1.109590 \times GE_{it} + 3.131778 \times RQ_{it} + 3.741184 \times RL_{it} + 0.588931 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 2b)$$

$$SPR_{it} = 13.17701 + 0.016892 \times BF_{it} - 0.737985 \times GE_{it} + 3.118166 \times RQ_{it} + 2.782775 \times RL_{it} + 3.820965 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 2c)$$

*H3: “The labor freedom has a positive influence on the revenues of social insurance budget in CEEC”.*

$$SPR_{it} = \alpha + \beta_1 \times LF_{it} + \beta_2 \times GE_{it} + \beta_3 \times RQ_{it} + \beta_4 \times RL_{it} + \beta_5 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 3)$$

$$SPR_{it} = 13.06856 + 0.043916 \times LF_{it} + 3.050908 \times GE_{it} + 1.885144 \times RQ_{it} - 1.845814 \times RL_{it} + 2.489358 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 3a)$$

$$SPR_{it} = 13.19346 - 0.007172 \times LF_{it} + 1.563451 \times GE_{it} + 4.199420 \times RQ_{it} + 2.898917 \times RL_{it} + 1.246018 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 3b)$$

$$SPR_{it} = 15.85313 - 0.020752 \times LF_{it} - 1.104190 \times GE_{it} + 3.050325 \times RQ_{it} + 2.746948 \times RL_{it} + 4.667857 \times CC_{it} + \varepsilon_{it} \quad (Eq\ 3c)$$

where:

$\alpha$ —free coefficient

$\beta_{1,2,3,4,5,6,7,8}$ —coefficients of independent variables

$SPR$ —budget revenues

$TB$ —tax burden

$BF$ —business freedom

$LF$ —labor freedom

$GE$ —government effectiveness

$RQ$ —regulatory quality

$RL$ —rule of law

$CC$ —control of corruption

$\varepsilon_{it}$  – regression error

#### 4. Results and discussions

The paper aims to study the influence of economic freedom and the perception of the quality of governance on the social insurance budgets revenues in the case of CEEC, using the OLS method. The descriptive analysis of the variables used shows that the revenues of social insurance budget have a normal distribution with the positive skewness and leptokurtic kurtosis. The most independent variables present an abnormal distribution with negative asymmetry and platykurtic distribution. The government effectiveness has a normal distribution, the labor freedom and the regulation quality display a positive skewness, while the business freedom exposes a leptokurtic kurtosis (Table 2).

**Table 2. Descriptive statistics**

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness
SPR	18.73	19.20	27.00	12.60	2.43	0.31
TB	81.76	82.00	94.00	68.60	6.35	-0.30
BF	69.31	69.55	79.80	53.70	5.34	-0.39
LF	67.79	66.10	85.50	53.60	8.45	0.37
GE	0.499	0.65	1.05	-0.36	0.42	-0.66
RQ	0.850	0.89	1.31	0.43	0.23	0.09
RL	0.49	0.53	1.15	-0.11	0.38	-0.12
CC	0.19	0.23	0.74	-0.27	0.31	-0.05

Variable	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.
SPR	4.79	9.94	0.01	1236.00	383.95
TB	2.53	1.61	0.45	5396.00	2617.88
BF	3.55	2.48	0.29	4574.50	1850.84
LF	2.16	3.42	0.18	4473.90	4639.54
GE	2.18	6.73	0.04	32.96	11.30
RQ	1.86	3.66	0.16	56.10	3.55
RL	1.93	3.29	0.19	32.66	9.44
CC	1.77	4.17	0.12	12.44	6.09

The OLS method allows regression analysis with several estimation methods. Therefore, the Redundant Fixed Effects Tests and the Correlated Random Effects – Hausman Test were applied to see if the fixed effects and the random ones are appropriate for our study. The results obtained show that all three-regression equations can be analyzed using the fixed effects method (Table 3). Therefore, the analysis was performed by OLS without effects, OLS with cross-section fixed effects and OLS with cross-section and period fixed effects.

**Table 3. Results of Redundant Fixed Effects Tests**

Eq 1			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	10.926569	(5,45)	0.0000
Cross-section Chi-square	52.458740	5	0.0000
Period F	1.499939	(10,45)	0.1710
Period Chi-square	18.986347	10	0.0404
Cross-Section/Period F	4.646853	(15,45)	0.0000
Cross-Section/Period Chi-square	61.755009	15	0.0000

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Eq 2			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	9.273696	(5,45)	0.0000
Cross-section Chi-square	46.743712	5	0.0000
Period F	0.759564	(10,45)	0.6657
Period Chi-square	10.294063	10	0.4151
Cross-Section/Period F	3.661580	(15,45)	0.0004
Cross-Section/Period Chi-square	52.651131	15	0.0000
Eq 3			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	11.809217	(5,45)	0.0000
Cross-section Chi-square	55.319314	5	0.0000
Period F	1.033608	(10,45)	0.4317
Period Chi-square	13.646337	10	0.1897
Cross-Section/Period F	4.710036	(15,45)	0.0000
Cross-Section/Period Chi-square	62.298094	15	0.0000

The first hypothesis researches the impact of tax burden on the collection of the revenues of social insurance budget, using the first regression equation. The model is partially significant, but the results obtained reflect, as expected, that tax burden is a significant factor in determining the revenues of the social insurance budget and has a negative influence on them. As regards the variables that express the perception of the political governance, the results reveal that government effectiveness, regulatory quality and control of corruption are significant factors in determining the revenues of the social insurance budget, having a positive influence on them (Table 4).

**Table 4. Empirical results – first hypothesis**

Dependent Variable: SPR						
Variable	Method: Pooled Least Squares					
	No effects (Eq 1a)		Cross-section fixed effects (Eq 1b)		Cross-section and period fixed effect (Eq 1c)	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	28.79240	0.0000	18.69523	0.0001	25.31841	0.0000
TB	<b>-0.157793</b>	<b>0.0020</b>	-0.070601	0.1638	<b>-0.135927</b>	<b>0.0189</b>
GE	<b>3.920572</b>	<b>0.0003</b>	2.566166	0.2861	-0.942894	0.7358
RQ	2.507996	0.2008	<b>3.677619</b>	<b>0.0257</b>	3.910279	0.1056
RL	-2.073090	0.1011	2.405357	0.1859	1.749072	0.3233
CC	-1.210850	0.4228	1.093722	0.6050	<b>4.261290</b>	<b>0.0977</b>
R-squared	0.583414		0.782090		0.836566	

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Adjusted R-squared	0.548698	0.742470	0.763928
F-statistic	16.80557	19.73975	11.51700
Prob(F-statistic)	0.000000	0.000000	0.000000

The second research hypothesis investigates the impact of business freedom on the revenues of social insurance budget of CEEC, using the regression equation (2). The model is partially significant and the results reflect that labor freedom is a significant factor in determining the revenues of social insurance budget only in case of the OLS without effects. However, business freedom is positively correlated with the social system collections, suggesting that enhancing the liberty of entrepreneurship in CEEC will increase the role of social insurance system and will supplement its resources. Regarding the governance indicators, the results reflect that government effectiveness, regulatory quality, rule of law and control of corruption are significant factors in determining the revenues of social insurance budget, having a positive impact on them (Table 5).

**Table 5. Empirical results – second hypothesis**

Dependent Variable: SPR						
Variable	Method: Pooled Least Squares					
	No effects (Eq 2a)		Cross-section fixed effects (Eq 2b)		Cross-section and period fixed effect (Eq 2c)	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	6.884360	0.0170	8.819165	0.0032	13.17701	0.0048
BF	<b>0.139737</b>	<b>0.0012</b>	0.068234	0.1164	0.016892	0.7754
GE	<b>3.407580</b>	<b>0.0011</b>	1.109590	0.6305	-0.737985	0.8059
RQ	0.525363	0.7944	<b>3.131778</b>	<b>0.0690</b>	3.118166	0.2268
RL	-0.896451	0.4738	<b>3.741184</b>	<b>0.0488</b>	2.782775	0.1832
CC	<b>2.403806</b>	<b>0.0666</b>	0.588931	0.7833	3.820965	0.2416
R-squared	0.589982		0.784184		0.815351	
Adjusted R-squared	0.555814		0.744945		0.733285	
F-statistic	17.26704		19.98467		9.935296	
Prob(F-statistic)	0.000000		0.000000		0.000000	

The last hypothesis regards the impact of labor freedom on the revenues of social insurance budget by the third regression equation. The model is partially significant and the results obtained reflect, contrary to our expectations, that labor

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freedom is not a significant factor in determining the revenues of social insurance budgets in CEEC. Government effectiveness, regulatory quality and control of corruption are significant factors in determining the revenues of social insurance budget, having a positive influence on them (Table 6).

**Table 6. Empirical results – third hypothesis**

Dependent Variable: SPR						
Variable	Method: Pooled Least Squares					
	No effects (Eq 3a)		Cross-section fixed effects (Eq 3b)		Cross-section and period fixed effect (Eq 3c)	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	13.06856	0.0000	13.19346	0.0000	15.85313	0.0000
LB	0.043916	0.1398	-0.007172	0.8194	-0.020752	0.5422
GE	<b>3.050908</b>	<b>0.0064</b>	1.563451	0.5052	-1.104190	0.7116
RQ	1.885144	0.3728	<b>4.199420</b>	<b>0.0110</b>	3.050325	0.2313
RL	-1.845814	0.1690	2.898917	0.1211	2.746948	0.1477
CC	2.489358	0.1081	1.246018	0.5622	<b>4.667857</b>	<b>0.0934</b>
R-squared	0.528534		0.774414		0.816551	
Adjusted R-squared	0.489245		0.733399		0.735018	
F-statistic	13.45250		18.88098		10.01498	
Prob(F-statistic)	0.000000		0.000000		0.000000	

The findings of the paper bring new insights regarding the influencing factors of the revenues of social insurance budget in CEEC. The results confirmed the first research hypothesis by establishing the tax burden as a significant negative factor of the collection of revenues of social insurance system. As regards business freedom, the results reflect the positive influence over the budget receipt, even if it isn't a significant determining factor of them. Contrary to our expectations, labor freedom is not a significant factor in determining the revenues of social insurance budgets in CEEC. These findings bring evidence that in matters of economic freedom, in CEEC tax freedom has the most considerable impact on public budget revenues. Comparable results were attained by Mazhar and Méon (2017), Shkolnyk et al. (2020), Lunina, Bilousova and Frolova (2020).

The perception of political governance quality influences the collection of revenues of social insurance systems of CEEC. The results show the positive influence of government effectiveness, regulatory quality and control of corruption on the social insurance receipts, confirming our assumptions that a strong faith in state policies and institutions can support the sustainability of social insurance

systems in CEEC. Our findings are in line with those obtained by Schneider (2016), Lawan (2017), Achim et al. (2018), Cristea et al. (2019), who stress the role of tax burden and the trust on public administration in developing the non-compliance of taxpayers.

### **5. Conclusions**

Social insurance systems were developed with the purpose to ensure citizens against biometric risks. Their role increased in the last year due to the pandemic which brought into attention the healthcare system and unemployment insurances. With the increased expenditures with pension benefits, health care, medical supplies, unemployment benefits, social assistance services and the decrease of social contributions payments, the sustainability of the social insurance systems is threatened.

This paper aimed to expand the research regarding the financing of social insurance systems in CEEC and to provide some insights on how the socio-economic policies and the quality of government may improve the sustainability of the social insurance budgets. Our findings show that there is a strong positive correlation between the revenues of social insurance system, as a dependent variable, and economic freedom and the perception of governance quality, as the independent variable.

Tax burden is the main indicator to characterize the economic freedom in CEEC and the result emphasizes its negative influence on social insurance budget collections, suggesting the need for a stable economic framework as regards the taxation policies and the reduction of the burden of direct taxation of labor. Moreover, the findings of the paper highlight the positive influence of the perception on the quality of public services, the government's capacity to draw up and implement sound and stable policies and the control of corruption on the revenues of the social insurance budgets.

As the Covid-19 pandemic increased the economic uncertainty and instability, emphasizing the necessity of strong social insurance systems, our findings may be a starting point for the consolidation of the sustainability of social insurance budgets. The results obtained point up the necessity to link-up the social policies with fiscal, business, labor market regulations and political environment. The empirical findings suggest the necessity of advantageous taxation of labor and proper exemptions, stimulation of entrepreneurship, the constant increase of the public services quality and the trust in state institutions and law.

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