

Hajdúková, Tatiana; Lukáčiková, Edita

## Article

# Analysis of the payment discipline of trade-licence holders regarding social insurance contributions in the Slovak Republic

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## ANALYSIS OF THE PAYMENT DISCIPLINE OF TRADE-LICENCE HOLDERS REGARDING SOCIAL INSURANCE CONTRIBUTIONS IN THE SLOVAK REPUBLIC

TATIANA HAJDÚKOVÁ<sup>1</sup>, EDITA LUKÁČIKOVÁ<sup>2</sup>

### Abstract

Guarantee of autonomy and stability of economic subjects from the government can be considered an important gauge of state security. Due to the financial, migration and energy crisis, we can observe a notable increase of social problems, which gives more importance to the policy for social security of the population. In this article we address the ongoing problem of an excessively high number of debts owed to the Slovak Social Insurance Agency in recent years. The social security system for trade-licence holders, its financing and the method of enforcement are briefly characterised. The development of the payment/non-payment of taxes and levies to the Social Insurance Agency is tracked against the background of legislative changes. In the conclusion, the ineffectiveness of selected legal provisions and processes of exacting taxes and social security contributions is evaluated in terms of their impact on the financial disciplines of trade-licence holders in the Slovak Republic. Severity of the deficit in money collected on social insurance poses a threat in several areas, such as providing social security to all citizens in some required quality as guaranteed by the government, or sustainability of the public finance which poses a risk for the whole economic security of the country.

**JEL classification:** H63, J28, K22

**Keywords:** Public Finance, Not Paying Taxes and Insurance, Debtors, Social Insurance

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<sup>1</sup> Academy of the Police Force in Bratislava, Slovakia, email: tatiana.hajdukova@akademiapz.sk, <https://orcid.org/0000-0002-2313-4568>.

<sup>2</sup> Graduate of the Academy of the Police Force in Bratislava, Slovakia, email: edita.lucikova@akademiapz.sk, <https://orcid.org/0009-0008-0190-8439>.

## INTRODUCTION

Activity of country's population on the labour market is determined by various demographic and socio-economic factors (see: Aarson et al. (2014); Nestić & Tomić, (2017)). However, theoretical models and empirical literature indicate that one of the important factors lays also in the domain of fiscal policy in the form of tax burden on labour income.

In terms of market-oriented economic policies, the state plays an important role in creating conditions that allow people to be economically active, for which they should be appropriately rewarded financially. For the long-term stability of a society, the economic power of individuals must be sufficient not only to meet their own existential needs but also to enable their own satisfying self-realisation and to support the functioning of families as a whole, from the care of children to the elderly. Every larger society includes people who, for various objective reasons, are incapable of working, and who thus becoming dependent on social assistance and support Rievajová (2013). The complexity of socio-economic problems, as well as their mutual feedback and synergistic character, all lead to all developed countries paying increased attention to socioeconomic issues in Prokop et al. (2017) is competitiveness an entity's ability to be successful in a competitive environment so that its goals are achieved to the greatest possible extent (and in the most effective way). The funds needed to carry out a state's social policies tend to be drawn largely from the redistribution of taxes, levies and insurance premiums for social security and contributions to the state's employment policy. The basis of a country's economic progress emerges from the responsible management of public finances, the revenues of which, to a notable extent, are shared in by the business environment. Without an efficient and competitive business environment, financial resources delivered to the state budget would not suffice to cover social security for the population or for the functioning of the state or public administration. Taxation, as an economic category, is one of the oldest compulsory forms of monetary payments. Taxes were originally paid to a sovereign and only later for the benefit of the state; therefore, taxation is as old as the institution of the state itself. For these reasons, the conscious creating and supporting of a favourable and fair environment for business activities must be among the primary interests of the state. In the view of Jakúbek and Tej (2016), deliberate avoidance or non-fulfilment of the obligation to pay levies destabilises the system and compels the creation of corrective measures. Especially in a period of ongoing financial and the energy crisis, social problems and thus also the importance of social policy, including consolidation and economic management of public funds, are increasing. The state can pro-

vide social security to its citizens to the extent that citizens actively participate in it Bušovská (2014) and Marr (2022). The balance between contributions to the system and the entitlements provided is a key challenge, and the responsibility of the state lies in setting up systemic measures so that the collection of taxes and insurance premiums is functional, fair and efficient.

## LITERATURE REVIEW

The state must aim for a balanced budget and avoid deficit spending while ensuring the rate of economic growth and economic stability. The sustainability of the social security system is a highly discussed problem, which intensifies with the consequences of the economic, energy or debt crisis against a background of local and global problems. Social systems founded on an ongoing system of financing are getting into financial deficits that put ever higher demands on the economically active population through increased taxation. In recent years, it has been necessary to adopt a number of measures to solve the escalating economic and financial problems. Krebs et al. (2007) states in principle that the higher the stability of a state, the smaller or more stable are its social expenditures. The fundamental issue of all budgets from the system of public budgets is achieving a balanced budget. The ideal case is when revenues regularly cover ordinary expenses. The social security system ensures the satisfaction of social needs and the prevention of social risks while providing assistance to families and individuals and resolving social events that could not be prevented. Aksman (2017) and Ivančík (2012) points out that from an international point of view, social security is also defined as a set of tools and institutions which provides protection and assistance in the case of threats to health, illness, disability, work accidents, invalidity, old age, maternity and pregnancy, the death of a breadwinner and other cases. Rievajová et al. (2013) define the social security system as "(...) a set of legal, financial and organisational instruments and measures whose goal is to compensate for the unfavourable financial and social consequences of various life circumstances and events that endanger recognised social rights or to prevent such life situations from occurring". Historically, social security was implemented with the aim of compensating for the adverse results of various life events. Economic policy uncertainty is the lack of clarity about how and why the government will run a certain economy in the future Pastor and Veronesi (2012).

An assessment of the system of personal income taxation for taxpayers, the efficiency of tax collection and their historical development have been the subject of several studies. In the Czech Republic, researchers in the area of personal income tax focus on research into

the progressivity of fictitious incomes (mostly multiples of the average wage), for example Krajňák (2020, 2021), Krajňák et al. (2022), and Ratmanová (2011). Široký and Maková (2009) analysed the effect of replacing the nominal progressive tax rate with a nominal linear tax rate in the Czech Republic in the years 1993 – 2007. Dušek et al. (2014) report that the reform of personal income tax in 2008 led to a reduction in the tax burden in some cases, but this income tax remains a progressive tax. According to Tepperová and Pavel (2016), these reforms significantly affected the level of tax revenues and the distribution of the tax burden of personal income tax in the Czech Republic. All the mentioned authors determined that this reform lowered the tax burden on personal income tax, in particular for taxpayers with children or taxpayers with an average wage level.

Several studies focus on the impact of the tax burden on employment. For example, Blažić (2006) points out that Croatia has a high tax burden (especially due to social contributions). The effects of labour taxation on labour market indicators are subject to many international studies which include various countries and regions (for more extensive literature review see: Dolenc et al. (2011)). As reported by Deskar-Škrbič et al. (2018), excessive taxation can disrupt the proper functioning of the labour market by disrupting incentives for work, and at the same time it stimulates employment in the informal sector of the economy, where there are more problems in controlling the fulfilment of tax obligations than in the formal sector.

## COMPULSORY LEVIES TO THE SOCIAL INSURANCE AGENCY

The main and most extensive component of social security in Slovakia is compulsory public social insurance, which is based on the payment of contributions and the drawing of benefits. Social insurance addresses those social situations that citizens can prepare for in advance (i.e. by insuring themselves) through deferring a portion of their current consumption to cover future uncertain short-term or long-term social situations (Krebs et al., 2007). Social insurance is a mandatory financial system intended to provide protection to the economically active population and their family members during productive and post-productive age upon a period of loss of income from economic activity. In Slovakia, social insurance is governed by Act No. 461/2003 Coll. on Social Insurance, as amended, which determines the payer of insurance premiums for individual types of insurance and the obligation to pay insurance premiums for social insurance and sets the premium rates, assessment basis, levy of insurance premiums, fines in case of a violation of obligations, or penalties if an obligated person does not pay the insurance premium on time or pays too little.

Social security is financed mainly from collected premiums paid by individual payers, i.e. employees, employers, trade-licence holders, voluntarily insured persons and the state. According to Act No. 461/2003 Coll. on Social Insurance, as amended, for the purposes of paying social insurance, the abbreviation trade-licence holders means a natural person who has reached the age of 18 and in the calendar year relevant to the establishment or continuation of compulsory health insurance and compulsory pension insurance of the trade-licence holder, earned income from doing business and from other self-employed activities according to the Income Tax Act, carried out gainful activities, the income from which is not subject to income tax due to regulations and international treaties on the avoidance of double taxation, or performs gainful activities, the income from which is not subject to income tax according to a special regulation, if the regulations of the Slovak Republic are applied to the natural person, who conducts this gainful activity within the legal relations of social insurance.

The Social Insurance Act regulates several obligations following from the purpose of sickness insurance, pension insurance and unemployment insurance for employees, trade-licence holders, insured persons as well as employers. The amount of insurance premiums for sickness insurance, pension insurance, disability insurance, accident insurance, guarantee insurance and unemployment insurance are calculated by a percentage rate from the assessment basis achieved in the relevant period. The key value for determining the minimum assessment base for trade-licence holder in a given year (for example in 2022) is half of the average gross monthly wage in the Slovak economy two years before (i.e. in 2020). The minimum payment to the Social Insurance Agency is set by an automatic mechanism in Act No. 461/2003 Coll. on Social Insurance, as amended, as 33.15% of the minimum assessment base. The amount of social contributions to be paid for trade-licence holder is assessed on the basis of the income tax return submitted for the previous calendar year.

For the purpose of the empirical part of the study, we will narrow the group of persons obligated to pay social insurance to self-employed persons (trade-licence holders) who carry out a trade business according to Act No. 455/1991 Coll. on Trade Licensing (Trade Licensing Act). According to § 2 of the Trade Licensing Act, a trade is defined as a systematic activity operated independently, in one's own name, at one's own responsibility, for the purpose of achieving profit or for the purpose of achieving a measurable positive social impact, if it is an economic activity of a registered social enterprise based on a special regulation and under the conditions established by this act. Profits from trade-licensing activities according to Act No. 455/1991 on Trade Licensing are subject to taxes and social contri-

butions on the basis of a submitted tax return. Whether a person must pay them after one year of business and how much they will be is determined by the income from the business the trade-licence holder has achieved. The threshold for the paying of levies usually goes up every year. For example, if a trade-licence holder did not earn at least 6,799 EUR in 2022, he or she does not have to pay taxes in 2023. The amount of monthly contributions then depends on the assessment base according to the amount of revenues. For the calculation of the amount of levies, it also applies that if the health and social insurance companies calculate the monthly assessment base for a self-employed person as being below the minimum, he or she will pay contributions from the minimum assessment base. On the other hand, according to Act No. 461/2003 Coll. on Social Insurance, as amended, if the monthly assessment basis for social levies is higher than the maximum, the self-employed person will only pay contributions from the maximum assessment basis. The Social Insurance Agency does not perform an annual settlement of insurance premiums; the premium paid is the final amount of the insurance premium.

The Social Insurance Act defines the recovery of a debt, the assignment of a debt and the writing off of a debt, but it does not define the meaning of the term debt itself. In general, the term debt is understood to be the right of a creditor to demand from the debtor the fulfilment of a certain liability arising from a legal relationship. The payment of insurance premiums for social insurance is a typical example of an obligation that persons are required to meet properly and on time according to the amendment of the Social Insurance Act. If an obligated person does not fulfil these obligations properly and on time, claims against him or her arise for the Social Insurance Agency, which are prescribed by a valid and enforceable decision of the Social Insurance Agency or a court. Expectations regarding the voluntary fulfilment of the levy obligation, although mandatory by all affected subjects, would be an exaggerated idealisation that would be realistically unachievable. This is one reason why application practice is forced to permanently create instruments to improve the efficiency of compliance with legal standards.

A specific step in the area of social insurance contributions was the adoption of Act No. 2/2017 Coll, which amends the Act No. 233/1995 Coll. on Court-Appointed Executors and Executions (Execution Regulations) and on amendments to certain acts, as amended. An execution order principally changes the method of debt collection for creditors and the activities of executors. With effect from 1 July 2017, the enforcement of claims against debtors is governed and preferentially performed ex officio by the Social Insurance Agency

itself, instead of enforcement by means of an executor's office. The introduction of administrative performance is considered to be a significant legislative change in the processes of social insurance administration in recent years.

## DATA AND METHODOLOGY

The aim of this academic study is to reflect on the growth of the public finances deficit in the Slovak Republic, which in the second quarter of 2023 totalled -3.3% of GDP, which is the fourth worst position among 30 European countries. One reason for the lack of public finances is the mismatch between incomes and outlays to the Social Insurance Agency. In the article, we specify the legal and illegal behaviour through which trade-licence holders consciously try to minimise contributions to the Social Insurance Fund. We point out legal regulations in the business of trade-licence holders, the aim of which was to facilitate the business of trade-licence holders, but in reality which had a negative impact on the state budget.

In conducting the research, we set the following questions:

1. Were improvements achieved in the recovery of arrears in Social Insurance contributions in line with Act No. 2/2017 Coll. carried out by the Social Insurance Agency itself as an official duty?
2. Do most arrears in levies and taxes occur unintentionally due to forgetfulness, misunderstanding, short-term insolvency, etc. and are then paid off in a short time?
3. Is the repressive instrument of a penalty a motivating factor for the payment of contributions and taxes to the Social Insurance Agency?

In the analytical part of the study, we point out the partial portion of Social Insurance Agency's income in the form of debts on social insurance contributions from trade-licence holders between the year 2011 to 2022. More detailed results of debtors for the months of 2022, which is the regularity with which trade-licence holders are obliged to make payments, are based on the analysis and synthesis of debt records of approximately 120,000 trade-licence holders. The whole basic file in the records of the Social Insurance Agency of the Slovak Republic was analysed using frequency analysis and comparison. In order to explain the relationships and links of the studied issue, the connecting of several freely available and commercial registers in time contexts was used. From the traditional statistical methods, descriptive statistics, frequency analysis, time series and linear regression analysis were used. In the context of the results, recommendations for practice were formulated such that the administrative burden associated with the registration of debtors as well as the burden of law enforcement agencies and

the courts is reduced by means of prevention, enforceable measures and legal regulations.

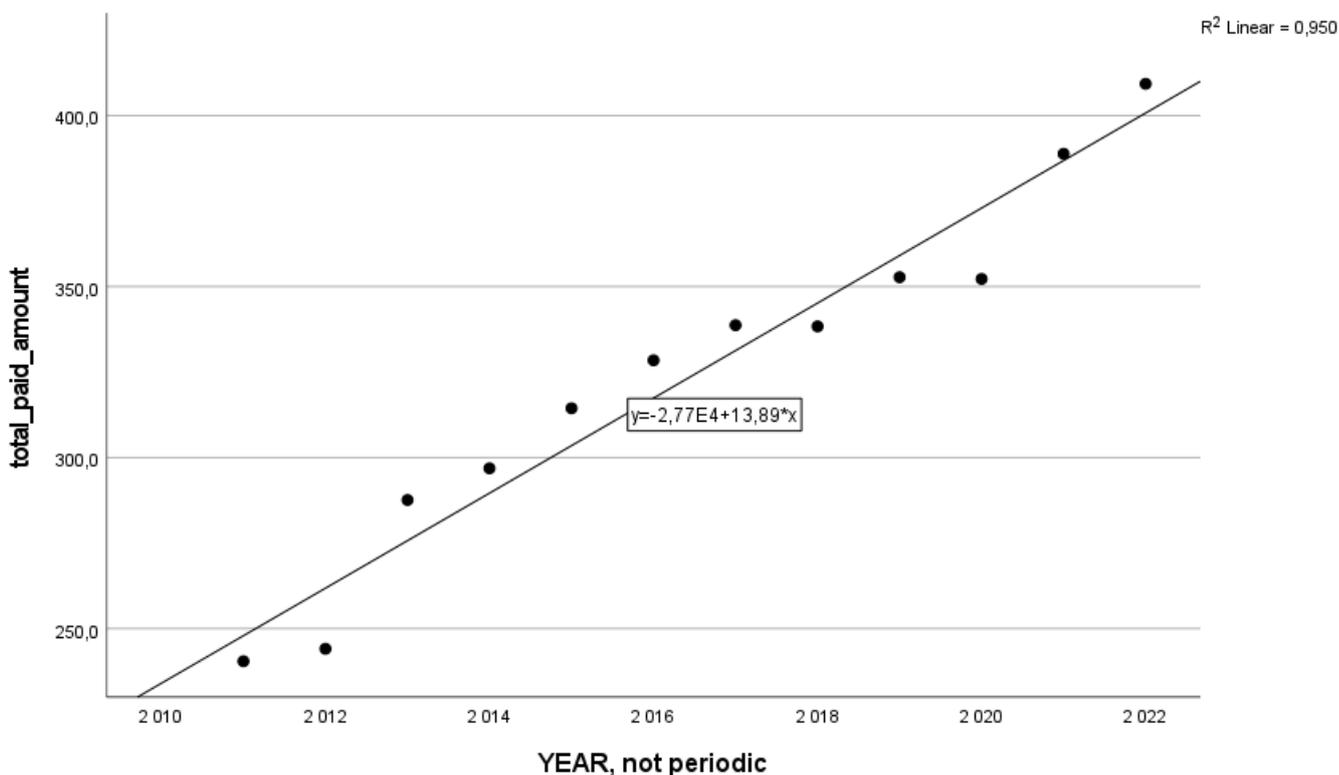
### DEVELOPMENT IN THE NUMBER OF TRADE-LICENCE HOLDERS IN SLOVAK REPUBLIC

We can deduce a partial answer to the first question from the development of the total amount transferred to the Social Insurance Company by trade-licence holders (in millions of euros) in the Slovak Republic over the last 11 years in Figure 1.

The linear trend line brought forward by the observed values has a high  $R^2 = 0.95$  and approximates

them well. In the years 2018 to 2020, i.e. after the adoption of the Act No. 2/2017 Coll, the collection of contributions to the Social Insurance Agency was recorded below the linear trend line, which is mainly associated with anti-pandemic measures, which were the most intensive in this period. A more accurate picture of the situation is provided by Figure 2, which, alongside the total amount paid to the Social Insurance Agency by trade-licence holders (in millions of euros), also shows the development in the number of trade-licence holders (in thousands) in the Slovak Republic over the last 11 years and the minimum social security contribution.

**Figure 1: Development of the total amount transferred to the Social Insurance Company by trade-licence holders in the Slovak Republic, 2010-2022**

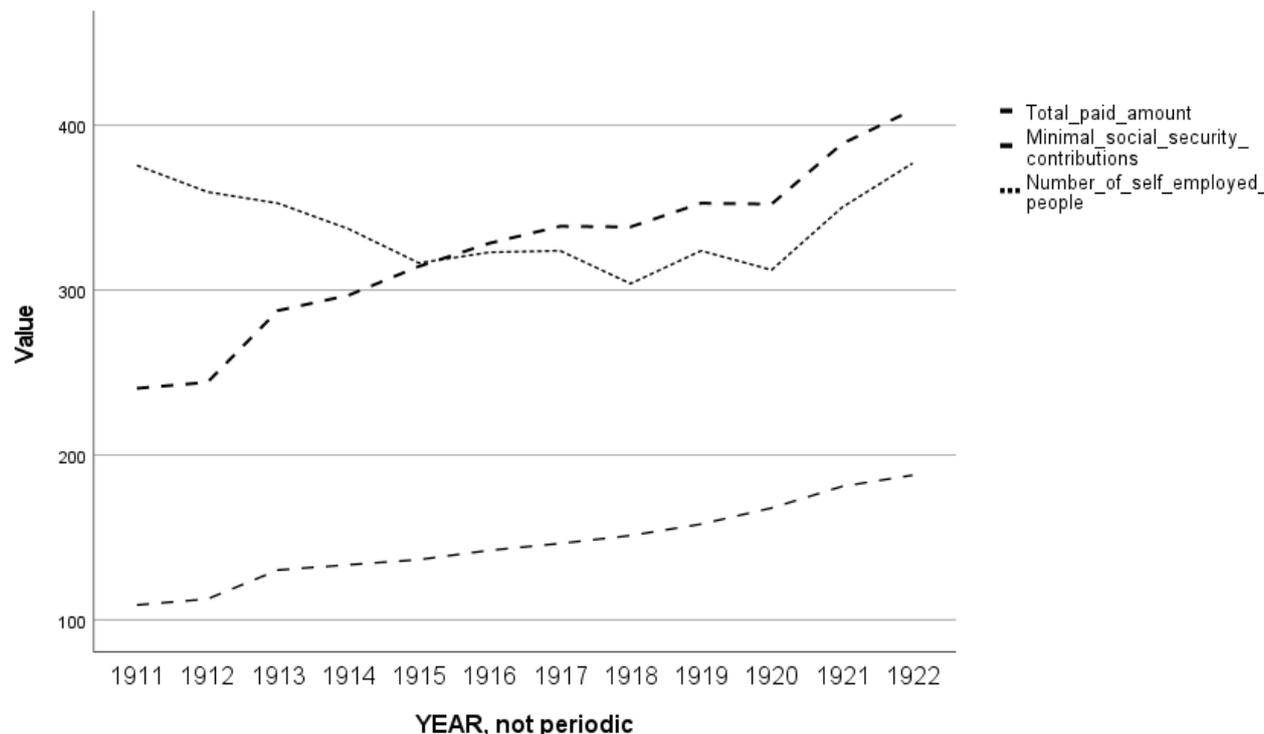


Source: Author's own processing based on data from the Slovak Social Insurance Agency.

The lower hatched curve represents the minimum contribution to Social Insurance for the given year, which is calculated from the average monthly wage in the economy of the Slovak Republic as set by the Statis-

tical Office for the calendar year two years before the relevant period. A clear, relatively stable and simple linear relationship is evident from the course of the minimum contribution curve.

**Figure 2: Development of number of trade-licence holders and total paid amount to the Social Insurance Company in the Slovak Republic, 2010-2022**



Source: Author’s own processing based on data from the Slovak Social Insurance Agency.

A legislative change in July 2017 raised the maximum amount of flat-rate expenses of trade-licence holders from 5,040 EUR per year to 20,000 EUR. What’s more, from 2020, natural persons with income from business and other trade-licence activities, as well as legal entities, have the opportunity to claim a linear tax rate of 15% after meeting the conditions, which was reflected in the sharp increase in the number of trade-

licence holders. Employers rapidly calculated that tax and insurance contributions for an employee are 2.3- to 6-times higher than for a worker who does not have an employment relationship, such as trade-licence holders.

In the next step, we carried out a linear regression step by step on these time series.

**Table 1: Correlations between total paid amount, minimal social security contributions and number of self employed people**

Correlations				
Characteristics		Total paid amount	Minimal social security contributions	Number of self employed people
Pearson Correlation	Total paid amount	1.000	0.983	-0.212
	Minimal social security contributions	0.983	1.000	-0.140
	Number of self employed people	-0.212	-0.140	1.000
Sig. (1-tailed)	Total paid amount		0.000	0.254
	Minimal social security contributions	0.000		0.332
	Number of self employed people	0.254	0.332	
N	Total paid amount	12.000	12.000	12.000
	Minimal social security contributions	12.000	12.000	12.000
	Number of self employed people	12.000	12.000	12.000

Source: Author’s own processing.

**Table 2: Model Linear regression summary**

Model Summary <sup>b</sup>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.983 <sup>a</sup>	0.965	0.962	10.0352	0.965	278.543	1	10	0.000
a. Predictors: (Constant), minimal social security contributions									
b. Dependent Variable: total paid amount									

Source: Author's own processing.

**Table 3: Coefficients of Linear Regression**

Coefficients <sup>a</sup>									
Model		Unstandardized Coefficients		Standardize Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
		1	(Constant)	22.706	18.304		1.240	0.243	
1	Minimal social security contributions	2.061	0.123	0.983	16.690	0.000	0.983	0.983	0.983
a. Dependent Variable: total paid amount									

Source: Author's own processing.

In the model, the linear relationship between total amount paid and minimal social security contributions, in which trade-licence holders who paid social insurance taxes honestly participated, was shown to be statistically significant. A negative correlation coefficient was found between the total paid amount and the number of trade-licence holders; therefore, the number of trade-licence holders was not included in the linear model. The correlation result for this pair of parameters would change significantly if we were to shorten the observed time to the last 5 years, i.e. from 2018, which is related to the previously mentioned legal changes. The significant and visual shape between them associated with the increase in 2020 is of note. The findings point to an improvement in the total paid amount as a consequence of the increase in the number of trade-licence holders and not as a result of the Execution Regulations. A look at the development of the Social Insurance debt will give us certainty in this conjecture.

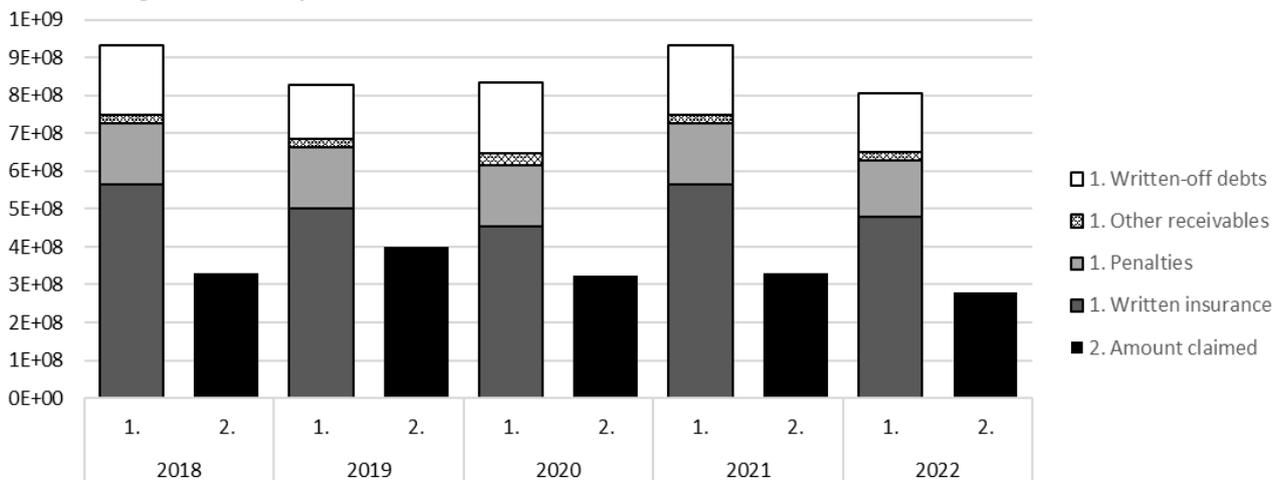
### DEVELOPMENT IN THE NUMBER OF DEBTORS AND DEBTS OF THE SOCIAL INSURANCE AGENCY

In general, the term debt is understood to be the right of a creditor to demand from the debtor the fulfil-

ment of a certain liability arising from a legal relationship. The payment of insurance premiums for social insurance is a typical example of an obligation that persons are required to meet properly and on time according to the amendment of the Social Insurance Act. If an obligated person does not fulfil these obligations properly and on time, claims against him or her arise for the Social Insurance Agency, which are prescribed by a valid and enforceable decision of the Social Insurance Agency or a court. Expectations regarding the voluntary fulfilment of the levy obligation, although mandatory by all affected subjects, would be an exaggerated idealisation that would be realistically unachievable. This is one reason why application practice is forced to permanently create instruments to improve the efficiency of compliance with legal standards.

The state of the payment discipline in the Slovak Republic with regard to the payment of contributions to the Social Insurance Agency has been wanting in recent years.

**Figure 3: Development of the total amount owed for social insurance of trade-licence holders\***



\* Written-off debts because the debt is less than 5 euros, the entity was deleted from the Commercial Register or the debtor died

Source: Author's own processing based on data from the Slovak Social Insurance Agency.

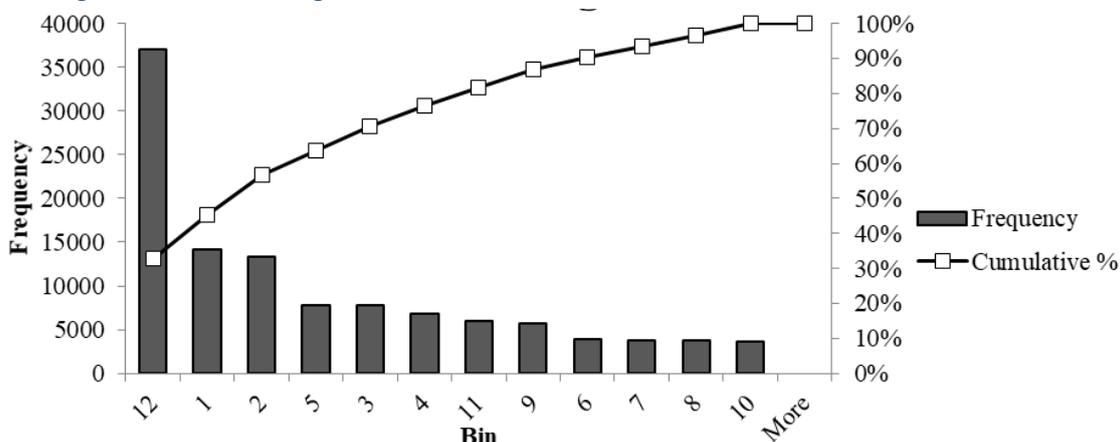
The second group of columns represents the owed amount from receivables recorded for the last five years in the Slovak Republic. This amount did not reach even half of the recorded receivables in any of the monitored years, and the lowest share occurred last year, 2022, which we will focus on in more detail in particular. In these contexts, we gain confidence that the Act No. 2/2017 Coll, did not bring the expected improvement in the collection of taxes and insurance premiums to the Social Insurance Agency.

Despite the targeted easing of conditions for trade-licence holders, even in 2022, a large number of debtors for taxes and contributions to the Social Insurance Agency were registered in the system. We will conduct a detailed analysis of debtors for the year 2022 at monthly intervals, which is the regularity with which trade-licence holders are obliged to pay levies.

The main vertical axis on the left side is the scale for the amount of debts owed for social insurance for

the individual months of 2022, the axis on the right is the scale for the number of trade-licence holders who incurred debts for social security of more than 5 EUR during 2022. The use of two vertical axes is necessary due to the large disparity between the presented frequencies, which we want to show at the same time. During the entire year, the number of debtors fluctuated slightly around the value of 70,000, while their number declined slightly from August and at the end of the year stopped at almost the same level as at the start of the year. The real dynamics in the number of self-employed debtors/non-debtors was more intense than is visible from the monthly numbers on the graph, because the number of debtors that cancelled out one another cannot be identified; i.e. if a debt arose, for example, to five trade-licence holders and in the same month another five paid their claim, the resulting number of debtors remained the same.

**Figure 4: Pareto's histogram of the duration of a trade-licence holder's debt in months 2022**



Source: Author's own processing based on data from the Slovak Social Insurance Agency and the Cribis.

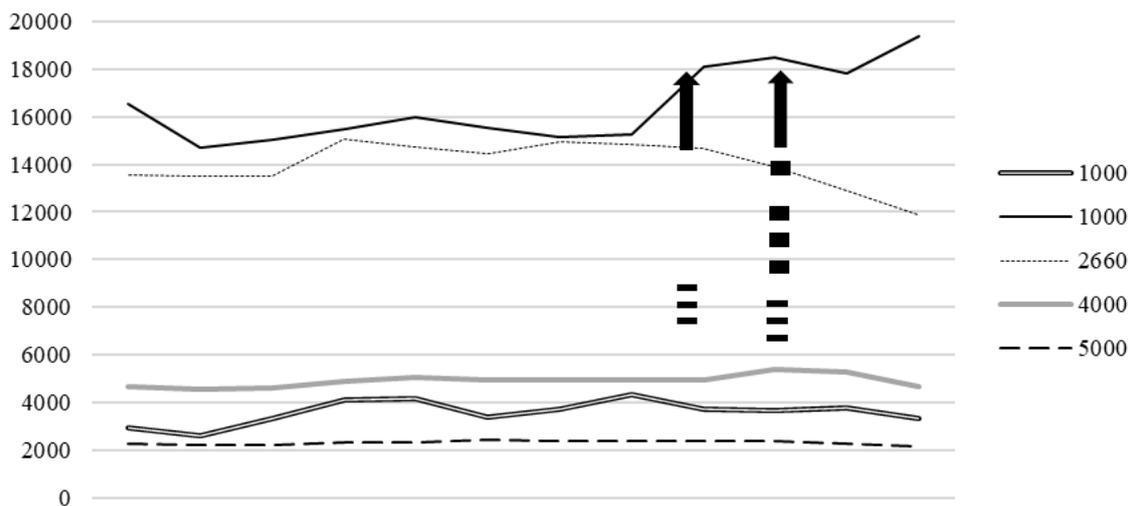
The CRIF Slovak Credit Bureau is the operator of the important information portal Cribis Universal Register, which provides a flexible range of monitoring of important information about companies, natural persons—entrepreneurs and natural persons with the possibility of continuously removing or adding monitored subjects and monitored information by the client. It contains a complete picture of the structure of the examined company, key persons in management, financial health, warning information and obligations of the subject in Slovakia and the Czech Republic. It is thus an effective tool for screening companies and individuals.

The largest group of debtors were year-round, i.e. in the duration of 12 months with the highest average debt of more than 3,200 EUR. This finding is a serious negative of the systematic transfer of tax and insurance premiums to the Social Insurance Agency, because long

-term debtors not only overload the registration system of levies, but also act as a negative example for trade-licence holders who do pay. The second research question was also not confirmed in this case. Among the most frequently occurring debts were short-term debts lasting one and two months, but they reached lower average debt values of around 300 EUR and were distributed relatively evenly throughout the entire year. These are for the most part formal non-payers due to a misunderstanding or forgetting, which is quickly corrected.

The following Figure 5 continues the overview of the number of trade-licence holders with debts of more than 266 EUR, which, according to the Criminal Code, represents the boundary for assessing the criminality of intentional behaviour.

**Figure 5: Number of trade-licence holders by category of the amount owed for social insurance over 266 EUR**



Source: Author's own processing.

On the graphic representation of the development over time, shown in Figure 5, the dynamics of the changes in the top two curves in the shape of open scissors are of interest. The crossing of these development curves means the movement of trade-licence holders between the categories of the amount owed. The number of debtors with a liability of more than 266 EUR and less than 1,000 EUR (the most prominent upper curve shown by a double line) grew mainly due to the partial repayment of debts from a value of more than 1,000 EUR and less than 2,660 EUR (the solid curve below it), but also those who owed more than 2,660 EUR and less than 4,000 EUR (dotted curve) and more than 4,000 EUR and less than 5,000 EUR (dashed curve), such that their debt in the end remained less than 1,000 EUR. The number of debtors above 2,660 EUR in comparison to other categories of debtors, indicates significantly less effort, greater speculation or

genuine insolvency to pay or reduce debts for social contributions. The horizontal, slightly wavy development curve during the entire twelve months of the year is testimony to this. The bottom three curves show "chronic" debtors, without significant changes, with the kind of debt they entered the calendar year with and which persisted throughout the year. Indicators of the efforts to pay or reduce the debt for social insurance appeared in the third quarter of 2022.

## REPAYMENT OF SOCIAL INSURANCE PREMIUM DEBTS

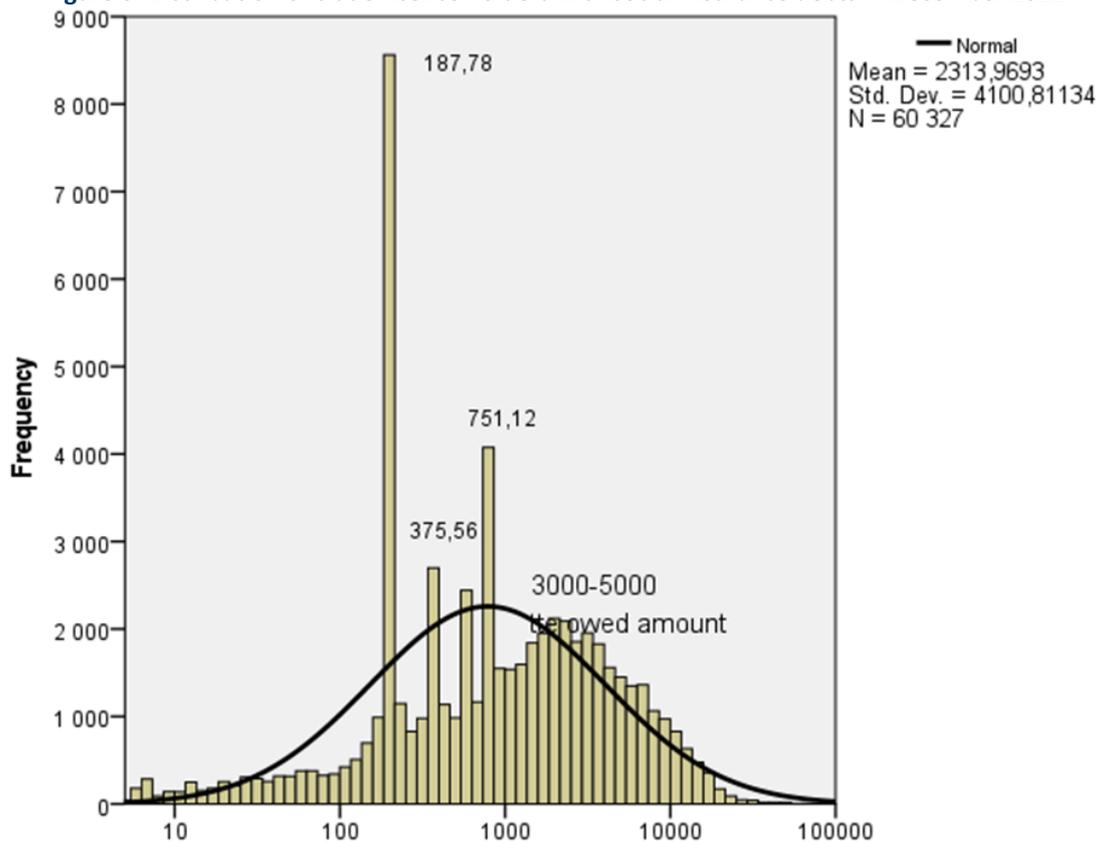
In further monitoring, to display the results, we chose a frequency analysis presented using a histogram of the number of debtors, which had a registered debt for social insurance premiums of at least 50 EUR in December. The horizontal axis of the histogram shows the

average amount owed, if they had debts for several months. With respect to the width of the interval of owed amounts and the large representation of small values up to 100 EUR, the logarithmic scale is much clearer than the linear scale, which is why we applied it to the figure. Persistent trade-licence holders are 60,327 whose total average debt exceeded 2,300 EUR. The distribution of these debtors is dispersed over the entire breadth of debt from 5 EUR to 100,000 EUR. There were also debtors for insurance premiums whose liabilities to the Social Insurance Agency reached nearly 100,000 EUR though not many of them. It is assumed that the creation as well as the disappearance of such a high debt for social insurance premiums took a long time, possibly even several years. The payment of the debt could have been preceded by administrative enforcement, or enforcement by an executor or by criminal proceedings, as a consequence of which such

a large amount was paid. The significant decrease in premiums owed could also have occurred as a result of the Social Insurance Agency transferring the debts of debtors in bankruptcy to Slovenská konsolidačná, a.s. With the assignment of such debts, the insurance premium owed is considered paid.

The high number of debtors with a debt of 187.78 EUR (the minimum contribution to social insurance for 2022) and its multiples (double to 375.56 EUR triple to 563.34 EUR and quadruple to 751.12 EUR) significantly stand out over the other almost evenly distributed numbers. The most common arrears of this group of debtors was a one-time or repeated failure to pay the minimum contribution to the Social Insurance Agency. Unlike the previous groups, the growth in the number of debtors continuously climbed to higher values at the level of 3,000 to 5,000 EUR from which the numbers began to steadily decline.

Figure 6: Distribution of trade-licence holders with social insurance debts in December 2022



Source: Author's own processing based on data from the Slovak Social Insurance Agency.

## DISCUSSION

With amendment to the Social Insurance Act in 2022, the Social Insurance Agency shall waive or not impose a penalty on debtors, if they pay their debt by 31 August 2023 at the latest. The condition for the penalty forgiveness is the payment of the entire due insur-

ance premium at once. The adjustment applies to debts incurred during the insurance period prior to 1 July 2022 without limitation of the past. In our case, this exceptional legislative instrument should affect trade-licence holders from the third monitored group (more than 60,000 persons), so long as they became

debtors by 1 July 2022 and have not yet paid their debt. Because this involves debtors whose debt was largely carried over from 2021 or earlier, the general amnesty will affect the majority of them. The debts that we based our analysis on do not include the amount of the prescribed penalty<sup>3</sup>; therefore, the amount of the debt registered of these trade-licence holders should be higher if the penalty is included. From the average total debt 2,314 EUR the penalty for one year of non-payment would total approx. 461 EUR and 1,017 EUR for two years. The purpose of the increasing penalty on a daily basis is to motivate debtors to repay the debt quickly.

In the case of a true inability to pay the debt, for example, as a consequence of pressure to engage in self-employment during the coronavirus pandemic or insufficient assistance, high penalties can represent a liquidation issue. Penalties falling under the general pardon should preliminarily total approximately 885 million<sup>4</sup> EUR. With estimates of the development of paying debts to the Social Insurance Agency in 2023, it will evidently be possible to collect debts that would have otherwise remained unpaid without the effect of the general pardon, at the price of the forgiveness of the penalty.

From a long-term view, the selected solution has a non-systemic and demotivating impact not only on honest and timely paying trade-licence holders, but also on those who are less responsible. Based on the experience of previous<sup>5</sup> general pardons, expectations may arise for the repetition of penalty forgiveness in the following years, and it will become hard to define the limits of tolerance. In these cases, the tactic of waiting proved to be more beneficial for the individual. Furthermore, there is quite often in practice an actual prolongation of the recovery and satisfaction of a debt for several months; that is, in today's system, a delay contrary to the penalty calculation mechanism is tolerated. For these reasons, we consider the set system of gradation of penalties on a daily basis to be demotivating and dysfunctional.

<sup>3</sup> According to the Social Insurance Act, the Social Insurance Agency is obligated to impose a penalty on the debtor, namely in the amount of 0.05% of the amount owed for each day of delay from the date the premium is due until the day when the owed amount was transferred to the account of the Social Insurance Agency in the State Treasury, paid in cash or until the day of the start of the inspection. A claim for a penalty arises only when this amount is prescribed by a decision. The Social Insurance Agency will send the debtor a decision on the imposing of a penalty, the amount of which he or she is obligated to pay within the specified period.

<sup>4</sup> Social Insurance Agency. Until the end of August 2023, debtors will be able to use the so-called general pardon (penalty waiver) available online: <https://www.socpoist.sk/najdolezitejsie-zmeny-v-socialnom-poistení-od-roku-2023> (Accessed: 10. 01.2023).

<sup>5</sup> Forgiving of the obligation to pay penalties for debts to the Social Insurance Agency was approved in 2008 and 2010.

## CONCLUSION

As a result of the financial and energy crisis, a noticeable increase in social issues is evident, and thus the importance of the social policy securing the population is also increasing. The state can provide social security to its citizens to the extent that they actively take part in it. The role of the state is not only to manage public funds economically, but also to create a functional legal environment and to have coercive means that would lead to respect for tax and social contributions. The social insurance system in Slovakia has undergone many changes, and since its inception it has been adjusted several times. The study reflects on the continuing problem of the disproportionate amount of Social Insurance debts in Slovakia for the recent period in relation to trade-licence holders. With 120,000 participants in the proceedings in 2022, it is hard to distinguish who does not pay their social insurance contributions because they do not want to or who cannot, because the payment of debts could have particularly adverse consequences for that person or his/her family members. We pointed in our results to some 60,000 participants in the proceedings who did not comply with the social insurance levy system the whole year 2022 and more and perhaps some even knowingly abused the overload of control mechanisms. A year-long or multi-year persistence of debt to the Social Insurance Agency is a sign of the non-functioning of the tax and insurance premium payment system as a whole. With effect from 1 July 2017, the collection of receivables from debtors is managed and preferably carried out by the Social Insurance Agency itself as an official duty. The study results did not show an improvement in the enforcement of collecting levies; rather the opposite. The introduction of this administrative exercise was considered a significant legislative change in the processes of social insurance administration; however, upon analysing it, we determined that it did not actually bring measurable results in practice.

With one of the last legislative amendments from 2020 natural persons with income from business and other self-employment, as well as legal entities, gained the opportunity to claim a linear tax rate of 15% after meeting the stipulated conditions. The reaction to this change is a jump in the number of trade-licence holders at the expense of employees, for whom the employer is obligated to pay more than double the tax and insurance premiums to the Social Insurance Agency. Results of the article point out many real world problems that arise with controlling how tax and social security contributions obligations are fulfilled, specifically in the non-formal sector of the economy.

The answer to the third question examined and proof that the penalty for late payment of tax and insurance does not work as a motivating factor is the

repeated declaration of a general pardon (most recently in 2023), by which the payment of the penalty under the conditions mentioned in the discussion was waived.

The harmonisation of expenditures is a natural effort of trade-licence holders, employees and employers, who cannot be reproached by anyone, as long as they respects the boundaries defined by the law. We would not seek a solution in this situation in increasing or decreasing the tax burden on trade-licence holders

(78% of all paying trade-licence holders pay minimum taxes) but in more consistent enforcement of the set rules, where we see the greatest deficiency.

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## REFERENCES

- Aaronson, S., Cajner, T., Fallick, B., Galbis-Reig, F., Smith, C. & Wascher, W. (2014). Labor force participation: recent developments and future prospects. *Brookings Papers on Economic Activity*, 2014(2), 197-275.
- Aksman, E. (2017). Do poverty and income inequality affect public debt? *Gospodarka Narodowa. The Polish Journal of Economics*, 292(6), 79-93.
- Ben-Salha, O. & Zmami, M. (2021). The Effect of Economic Growth on Employment in GCC Countries. *Scientific Annals of Economics and Business*, 68(1), 25-41.
- Burggraave, K., de Walque, G. & Zimmer, H. (2015). The relationship between economic growth and employment. *Economic Review*, 1, 32-52.
- Bušovská, M.Š. (2014). Convergence of tax burden, tax revenues and implicit tax rates in the European Union member states. *Ekonomický Časopis*, 62(4), 363-376.
- Butkus, M., Matuzeviciute, K., Rupliene, D. & Seputiene, J. (2020). Does unemployment responsiveness to output change depend on age, gender, education, and the phase of the business cycle? *Economies*, 8(4), 98-127.
- Carrera, J. & De La Vega, P. (2021). The Impact of Income Inequality on Public Dept. *The Journal of Economic Asymmetries*, 24(C), 216, <https://doi.org/10.1016/j.jeca.2021.e00216>.
- Dušek, L., Kalíšková, K. & Münich, D. (2014). Dopady reformy přímých daní k roku 2015: vyhodnocení pomocí modelu TAXBEN. *Politická Ekonomie*, 62(6), 749-768.
- Garnier, G., György, E., Heineken, E., Mathé, M., Puglisi, L., Ruà, S., Skonieczna, A. & Van Mierlo, A. (2014). A wind of change? Reforms of Tax Systems since the launch of Europe 2020. *Reflets et perspectives de la vie économique*, 53(2), 75-111.
- Deskar-Škrbić, M., Drezgić, S. & Šimović, H. (2018). Tax policy and labour market in Croatia: effects of tax wedge on employment. *Economic Research-Ekonomska Istraživanja*, 31(1), 1218-1227.
- Laporsek, S. & Separovic, A. (2011). Does labour taxation affect unemployment? Croatian worker in international perspective. *Ekonomska Istraživanja*, 24(3), 86.
- Ivančík, R. (2012). Bezpečnosť z pohľadu ekonomickej teórie. *Politické Vedy*, 15(3), 100-124.
- Jakúbek, P. & Tej, J. (2016). Management of the Tax Reform in Slovakia: Monograph. Ste-Con, Karlsruhe.
- Jordà, Ò., Schularick, M. & Taylor, A.M. (2011). Financial crises, credit booms, and external imbalances: 140 years of lessons. *IMF Economic Review*, 59(2), 340-378.
- Kayser, V., Nehrke, B. & Zubovic, D. (2018). Data science, V. as an innovation challenge: From big data to value proposition. *Technology Innovation Management Review*, 8(3), 16-26.
- Krajňák, M. (2021). Evaluation the impact of the personal income tax reform in the Czech Republic in 2021 on effective tax rate and tax progressivity. *Journal of Tax Reform*, 7(2), 134-145.

- KREBS, V. (2007). Sociální politika. ASPI, Prague.
- Marr, S. (2022). Prípravné konanie v kontexte problémov aplikačnej praxe. Bulletin Slovenskej Advokácie, 28(6), 1335-1079.
- Nestić, D. & Tomić, I. (2018). Jobless population and employment flows in recession. Journal of Balkan and Near Eastern Studies, 20(3), 273-292.
- OECD (2023). Tax on personal income (indicator), <https://data.oecd.org/tax/tax-on-personal-income.htm> (Accessed on 28.09.2023).
- Pastor, L.U. & Veronesi, P. (2012). Uncertainty about Government Policy and Stock Prices. The Journal of Finance, 67(4), 1219-1264, <https://doi.org/https://doi.org/10.1111/j.1540-6261.2012.01746.x>.
- Prokop, V., Stejskal, J. & Kuvíková, H. (2017). The Different Drivers of Innovation Activities in European Countries: A Comparative Study of Czech, Slovak, and Hungarian Manufacturing Firms. Ekonomický Časopis, 65(1), 31-45.
- Ratmanová, I. (2011). Analysis of the personal average tax rate evolution at the selected taxpayers in the Czech Republic during the years of 1993-2011. 8<sup>th</sup> International Scientific Conference Financial Management of Firms and Financial Institutions, 358-366.
- Široký, J. & Maková, K. (2009). Independence between the Efficient Tax Rate and Tax Progressiveness in the Czech Republic during 1993–2007. Journal of Economics, 7(57), 653-666.
- Tepperová, J. & Pavel, J. (2016). EVALUATION OF THE IMPACTS OF SELECTED TAX REFORMS INFLUENCING THE INCOME OF INDIVIDUALS IN THE CZECH REPUBLIC. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 64(4), 1401-1407.
- Rievajová, E., Husáková, M., Ošková, S., Pechová, M., Staněk, P. & Wolfová, D. (2006). Sociálne zabezpečenie. Sprint, Prague.
- Röhrs, S. & Winter, C. (2017). Reducing government debt in the presence of inequality. Journal of Economic Dynamics and Control, 82, 1-20.
- Princen, S. (2016). Political Economy of Tax Reforms–Workshop proceedings (No. 025). Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.