INCOME, TAX, EMPLOYEE AND EMPLOYER SOCIAL SECURITY CONTRIBUTIONS IN VISEGRAD GROUP COUNTRIES

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Abstract

The difference between official overall labour costs and net income motivates economic players to avoid this difference and pushes them into the shadow economy zone. The difference depends on levels of income tax and social security contributions. This is why these two variables play a crucial role in defining the key features of the shadow economy and monitoring its growth. There are disparities within V4 countries as for the taxation of labour. The compulsory payments of social security contributions in these countries are at the top of the OECD list. In contrast to this, the income tax level in the Visegrad Group countries is below OECD average. The aim of this paper is to assess the setup and the structure of labour taxation from both the employer's and employee's point of view using the example of the Visegrad Group countries. A significant year-to-year decrease in tax wedge within V4 countries was recorded using methods of analysis and comparison as these countries followed the worldwide trend stated in OECD statistics. The downward trend in tax wedge reflects changes made in the system of personal income tax and social security contributions payments. All these changes were recorded and described with the help of specific indicators.

Keywords

Taxation of Labour, Social Security Contributions, Personal Income Tax, Labour Costs, Compulsory Payments, Tax Wedge, Visegrad Group Countries, V4, the Visegrad Four

I. Introduction

The Visegrad Group (V4) was established in 1991 as an alliance of four Central-European countries, which signed a declaration of cooperation and mutual support on their way to European integration. The Visegrad Group represents a historically homogeneous entity because it comprises four postcommunist countries at present members of the European Union (EU) and Organization for Economic Cooperation and Development (OECD). Nowadays, the Visegrad Four is a clearly defined political initiative of the four countries in Central Europe. According to Ministry of Labour and Social Affairs of the Czech Republic (2020), the main goal of this alliance is the cooperation between its members in the field of protecting their regional interests and strengthening the Central-European area. Joining the European Union meant for these countries a significant step towards elimination of all artificial demarcation lines within Europe that were considered to be the leftovers of their communist past and influence of socialism. As a result of the European integration process the next and highest level of integration appears to be a monetary union. This level of integration is preceded by the creation of an economic union, seen as a coordinated economic and social policy with identical conditions in all member countries. There is no harmony in the basic economic indicator in the European integration process, that is the wages. According to Fassmann (2018), the cause for this situation is obvious. It is securing the competitiveness of the largest economies in the EU.

Using the example of the Visegrad Group countries, the main goal of this work is to assess the setup and the structure of labour taxation from both the employer's and employee's point of view within countries of the Visegrad Group, i.e. The Czech Republic, Hungary, Poland, Slovakia (in alphabetical order). By means of comparative and analytical methods of research the following questions will be answered: How heavy is the complex tax burden of V4 countries in comparison with the rest of the EU? Are there any differences between revenue structures across the Visegrad Group countries? Is the extent of labour taxation within the Visegrad group comparable with the OECD countries? Are

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there any year-to-year changes, which would reflect the overall taxation of labour within V4 countries? Is the tax burden from the income tax and social security contributions point of view paid by an employee comparable with the OECD average? With the help of comparative and analytical methods we are able to come to relevant conclusions leading to better appreciation of relative tax wedge in Visegrad Group countries. It occurs that in comparison with other EU and OECD countries the Visegrad Group countries have huge differences between taxation of labour, which is very low and social security contributions, which sit right at top of the list.

The topic for future discussion should encompass the theme of labour taxation structure and not only the ways to impose and measure the tax. The social insurance contributions cuts are a subject of regular political lobbying taking advantage of public opinion that in countries of the Visegrad Group (especially in the Czech Republic and the Slovak Republic) the level of social security is well above the EU average, thus, it is disproportionally high. In fact, cuts in social security mean loss of income in public budgets, which are the source of public services and financing of social transfers. The regular audits to assess the quality of public services and transfers, as well as keeping the public informed about their results, are inevitable. Social security contributions mean regular and reliable sources of income in terms of public budgets in every country. Intentional and calculated decrease in health insurance and social security contributions does not lead to financial savings in a field of personal income. The result of this activity only leads to public budgets disharmony, which subsequently proves an unstable and unsustainable way of controlling the expenditures covered by these sources.

II. Literature Review

Historically, the countries of the Visegrad Group turned from a centrally planned economy into a market economy. The core of this transformation were the institutional reforms that influenced the job market and income inequality. The income inequalities and job market conditions in V4 countries differ. (Malgorzata, Szulc-Obloza, 2020). Job market is influenced by cultural, institutional, legislative and political mechanisms (Betcherman, 2001). Number of studies deal with the institutional frame of a job market and with influence analysis of institutional aspects on a job market regulation and its optimal setup. (Tvrdoň, 2014). Job market flexibility represents its ability to adjust itself to everchanging macroeconomic conditions. (Eamets, Masso, 2004). Job market flexibility is driven by four fundamental aspects such as real flexibility of labour costs at the economic level, variability of relative labour costs across the industry and professional orientation of workers, workforce mobility and flexibility of work hours (Klau, Mittelstaedt, 1986).

Taxation of labour is an important factor influencing the level of investment (Alesina et al., 1999). Personal income tax within the EU is not harmonised. Each EU member state applies their own system of income taxation (Friedrich, 2012). Combination of the structure and parameters of each and every fiscal system with taxable income of taxpayers are the sub factors that influence the overall tax burden on the income. (Vlachý, 2017). We can consider tax rates effective if they take into account the maximum of aspects and affect the tax liability as a whole. Tax burden is not always measured as a total value in the studies. Instead, the authors always focus on a particular type of an economic subject whose tax burden they wish to measure (Kotlán, Machová, 2012). To achieve an impartial assessment of personal tax in individual countries, in which different systems of income taxation have been set up, it is necessary to use the selected relative indicators for their evaluation (Friedrich, 2012). The study outcomes of Vlachý (2017) imply that the fiscal system of the Czech Republic is, judging by the income tax burden on employees and considering the income insecurity, highly ineffective. The fiscal systems of the Slovak Republic and Poland show continuous progression and as far as Hungary is concerned the fiscal system does not get affected by the chosen parameters at all. The member states of The Visegrad Group should strive to secure a long term fiscal sustainability (OECD, 2021a). The extent of taxation leads to decreased investment activities. (Alesina et al., 1999). From the investors' point of view the growing progress and labour taxation show a negative influence on decreasing return on their investment. (Hendricks, 2004). From the published studies it is clear that an increase in tax and social security contributions has an impact on a job market and stimulates workforce demand in the zone of the shadow economy (Schneider, 2002). The higher taxation of consumption through VAT or a selective excise tax have similarly negative impacts like labour taxation. (Salanié, 2003).

The struggle against tax avoidance schemes and shadow economy has been one of the main political goals of the OECD countries. (Schneider, 2011). Shadow economy is a broadly discussed theme, which is at the forefront of interests of many renowned economists, sociologists, political players and entrepreneurs. There are a lot of different approaches to define the term shadow economy. The sheer concept of the shadow economy has grown wider together with an effort to establish the cause of its creation including possibilities to measure its impact on fiscal policies of individual states and the human society as such. In the last two decades the number of scientific studies concerning this problem has sharply risen. These studies focus mainly on the definition of econometric models determining the size of the shadow economy and assessment of the influence of individual factors, which cause its very existence. Contemporary studies and researches capture the shadow economy evolution and development within given time periods, regions and countries. They try to predict its progress and measure the given indicators. Shadow economy is widely spread across the world and it represents, to a certain point, an issue for most of the countries. We can state, by common consent, that the extent of taxation is one of the main causes of the shadow economy formation. Smith (1994) defines shadow economy as a market production of goods and services, which are illegal and/or unlawful and which cannot be detected in official GDP estimates. According to a general definition, the shadow economy comprises all unregistered economic activities, which participate in creation of calculated GDP of the given country. The shadow economy could be also defined as economic activities together with their revenues, which bypass the state regulations and do not get taxed (Schneider, 2011). Owing to its latent character the assessment of shadow economy is complicated and there are many discussions concerning the topic of what methodology would be the best to quantify it. It is quite difficult to obtain information about economic activities that occur within the shadow economy zone as it is, by definition, virtually impossible to trace (Orsi et al., 2014). From the outcomes of published studies emerges a fact that an increase in the tax wedge and social security contributions is one of the main reasons for constant growth of the shadow economy. The bigger the difference between official labour costs and net income the bigger the motivation of economic players to avoid this difference. The difference depends on the level of a tax wedge and social security contributions and that is why these two variables play the main role in defining the key features of the shadow economy and its growth. (Schneider, 2002). Resulting from work by Orsi et al. (2014) it is obvious that a moderate decrease of taxation together with substantial efforts in monitoring and controlling of the tax collection causes a dramatic decrease of the size of the shadow economy and gives a positive stimulant towards the official economy. Both these effects together represent growth in fiscal revenues. Low level of the wages and their low tax progression cannot secure sufficient sources of income for public budgets. Solution does not lie in decreasing non-wage costs and maintaining a low level of wages (below European average in the long term), but in the just setup of the tax system and explicit division and determining of tax structures in each and every country of the Visegrad Group.

III. Methodology and Data

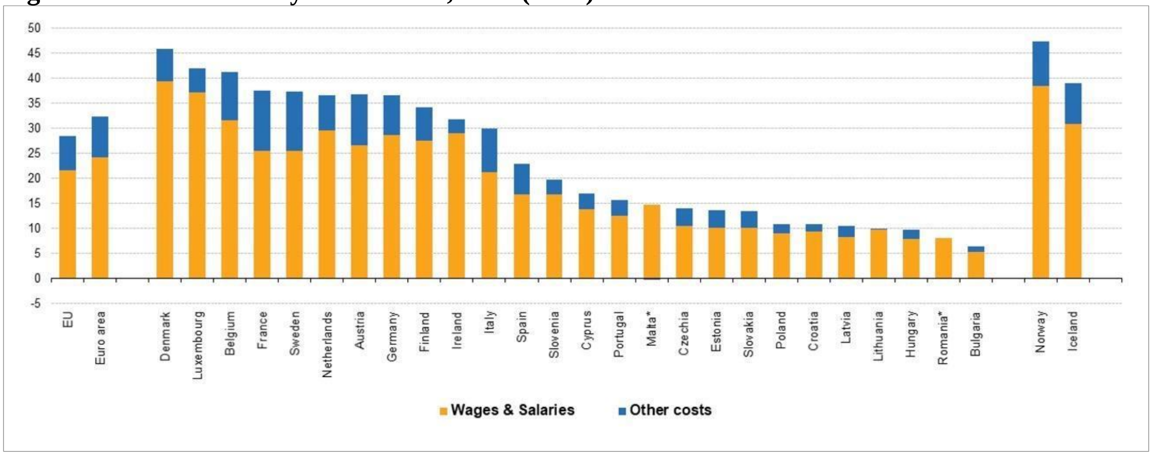
Analysis lies at the heart of methodology developed at the macroeconomic level. It is carried out in order to get the basic knowledge of the status-quo and trends in the area of labour taxation in connection with the overall economic development of the given country. It does not allow more detailed knowledge of the tax wedge system structure and especially its causality. At this level it is easier to work with international comparison methods. By all available macroeconomic and structural statistics from foreign and domestic sources it is possible to carry out analysis at the macroeconomic level. This level of analysis serves the purpose of social security contributions and tax wedge assessments within Visegrad Group countries. Simultaneously, the structural analyses are carried out at this level and with their help we can compare all the necessary characteristics of the V4 countries with the other EU member states and the OECD average. Data and information commonly published as results of the statistical research in the form of databases, graphs and tables were used for the analysis of the selected macroeconomic indicators. Alternatively, they can be found in scientific and specifically oriented publications published by relevant organizations. Results of the statistical research and scientific publications of Eurostat, OECD and multinational professional services network of firms PricewaterhouseCoopers International Limited are a valuable source of data and information. All the data for the needs of the analysis have been used unchanged in their original and published form. The subject of the analysis is a combination and interpretation of information gained from this data. Analysis at the macroeconomic level works with data and information relating to the economy of the given place expressed as classification of regional statistical units NUTS 0 (La Nomenclature des Unités Territoriales Statistiques). Knowledge acquired at this level serves as starting documentation for deeper analyses at further levels. The analysis and comparison outputs give information that can be used strategically for following studies concerning the evaluation of structure and effectiveness of the tax wedge system in the Visegrad Group countries.

To evaluate the impact that the social security contributions have on the given country's shadow economy we need deeper analysis and comprehensive assessment of the social security system structure including the usage of econometric models. Additional indicator, which is the compound tax quota, is used for the purposes of this work. This fundamental economic indicator is a percentage of tax revenue and nominal GDP. Theory works with two basic terms: a single, and a compound tax quota. According to Agenda and Documents of Chamber of Deputies Parliament of the Czech Republic (2017), the compound tax quota is a complex indicator of the tax burden as it comprises the public budgets tax revenues, the compulsory payments of social security contributions, the state employment policy contributions and compulsory payments of the health insurance. Another indicator, which measures the relative burden on the labour and burden of social security contributions in connection with the labour costs, is the tax wedge. The tax wedge is expressed as a proportion of the amount of taxes and social security payments paid by employees and the overall salary costs paid by employers (OECD, 2021a). The tax wedge is defined as "the difference between the extent of the society yield before tax and the extent of the investor's yield after tax followed by personal income tax (Holečková, 2012, s. 127). According to Schneider (2002) it is exactly the dimension of the difference between the official overall labour costs and yield after tax that influences the motivation of economic players to avoid this difference. The difference depends on the tax wedge and social security contributions. Therefore, these two indicators are the crucial factors for the definition of the key shadow economy characteristics and recognition of its growth. For the purpose of this paper the available OECD statistics were utilized. They define the tax wedge as the ratio of an amount of taxes paid by an average worker to the corresponding overall labour costs for the employer. The average worker, in this case, is considered a single person without children at 100 % of average earnings. Example of a single employee without children is used for statistical purposes mainly because of the absence of their exploitation of various benefits, tax bonuses and child and spouse allowances. The OECD statistics record annual changes, which are expressed in percentage points capturing the overall tax burden on labour, income tax and social security contributions paid by employees as well as employers. The OECD data, which state the impact of tax measures on chosen analysed indicators, published in context with Covid-19 pandemic were used for the assessment of the year-to-year changes in the field of labour taxation.

IV. Results

The objective of this paper is the evaluation of social security contributions and the tax wedge within the Visegrad Group countries, i.e. The Czech Republic, Hungary, Poland, and Slovakia (in alphabetical order) from both employer's and employee's point of view.

Figure 1 Estimated hourly labour costs, 2020 (EUR)



Source: Eurostat (2021)

As stated in studies of the authors Malgorzata, Szulc-Obloza (2020), the countries of the Visegrad Group turned from a centrally planned economy into a market economy. The core of this transformation were the institutional reforms that influenced the job market and income inequality. When compared, the statistical indicators describing the labour costs within national economies in EU countries in 2020 (EUR/worked hour) for the unit of a work force in the EU countries, the V4 countries are amidst countries with the lowest average labour costs per hour. In comparison with the EU countries, the V4 countries are right at the bottom of the list. The estimated hourly labour costs in the Czech Republic are 14.1 EUR, in Slovakia 13.4 EUR, in Poland 11 EUR, and in Hungary 9.9 EUR. The chart above shows the hourly costs of labour in all economic areas excluding agriculture and administration. The data was obtained from companies with ten or more employees. According to Fassmann (2018), it is possible to divide the EU states into three core groups by the amount of labour costs: the most advanced EU countries (labour costs for every hour worked are higher than 20 EUR); peripheral EU countries (labour costs for every hour worked are higher than 10 EUR); developing EU countries (labour costs for every hour worked are lower than 10 EUR). Within the comparison frame of labour costs per hour worked the V4 countries can be found amongst the peripheral and developing groups of European countries. It is clear from the chart that the differences in average hourly labour costs in the EU countries are significant. Analysis of the share of costs in addition to normal costs (social costs) in total hourly labour costs in the EU countries in 2020 (in %) gives evidence that the percentage of social security payments is in the Czech Republic 25.9 %, the Slovak Republic 24.9 %, Poland 18.4 % and Hungary 18.3 %. It is necessary to mention that this indicator is from the economic policy perspective not relevant (Eurostat, 2021).

Table 1 Compound tax quota in V4 countries in 2015–2019, expressed as a percentage of GDP

	2015	2016	2017	2018	2019
EU 27*	40.9	40.9	41.0	41.2	41.1
EU 28	39.7	39.9	40.1	40.3	40.2
Czech Republic	34.3	35.1	35.4	36.0	36.1
Hungary	38.9	39.2	38.0	37.0	36.5
Poland	33.4	34.3	35.0	36.0	36.0
Slovakia	32.8	33.2	34.1	34.2	34.6

*Source: Eurostat (2020a), * EU 27 represents the European Union with 27 member states as of 1st February 2020*

Development of the total revenue from a taxes and social contributions (meaning the sum of the taxes and net social contributions as a percentage of GDP) in years 2015–2019 reveals the fact that the Visegrad Group countries are below the EU 27 level. The overall Tax to GDP ratio in the European Union stood at 41.1 % in 2019. Compared with 2018, the total revenue from a taxes and social contributions increased in the Czech republic and Slovakia. There is a year-to-year growth of the total revenue from a taxes and social contributions within these countries. The largest rise being observeved in the Slovakia (from 33.2 % in 2016 to 34.1 % in 2017). Compared with 2018, the total revenue from a taxes and social contributions decreased in Hungary (from 37.0 % in 2018 to 36.5 % in 2019). Hungary shows reduced value of the total revenue from a taxes and social contributions in years 2017–2019. In the latest reference period Poland exhibited the same value of the total revenue from a taxes and social contributions as in the previous year. It is clear from the fashion in which the compound tax quota indicator was created that its growth does not automatically mean growth of the tax burden. Level of the tax quota is determined by economic cycle, amount of taxes and social security payments and effectiveness of tax collection. The growing effectiveness of tax collection establishes a situation, from the GDP point of view, where subjects migrate from the shadow economy zone into the official economy. According to Ministry of Finance of the Czech republic (2021), the growth of the compound tax quota could mean the growing effectiveness of tax collection.

Table 2 Structure of tax revenue in V4 countries, 2019, expressed as a percentage of GDP

	Production and Import Tax	VAT	Income Tax	Taxes on Individual or Household Income	Corporate Tax	Social Security Contributions
EU 27*	13.7	7.2	13.0	9.6	2.7	14.2
EU 28	13.6	7.2	13.1	9.6	2.6	13.3
Czech Republic	12.1	7.6	8.4	4.9	3.3	15.6
Hungary	18.1	9.5	6.6	5.1	1.2	11.8
Poland	14.0	8.0	7.9	5.3	2.2	14.2
Slovakia	12.2	7.3	7.2	3.8	3.0	15.3

*Source: Eurostat (2020b), * EU 27 represents the European Union with 27 member states as of 1st February 2020*

In 2019 the social security contributions formed the biggest part of tax revenues in European Union countries. It was exactly 14.2 % GDP. The similar situation was in Poland. As for the Czech Republic and Slovakia the social security contributions formed the biggest part of the tax revenue with its value exceeding the one of the EU 27. The social security contributions in the Czech Republic are the highest, creating 15.6 % of GDP and in Slovakia 15.3 % of GDP. The right opposite was Hungary, where a significant part of tax revenues was created by production and import taxes, namely 18.1 % of GDP. The social security contributions in Hungary reached 11.8 % of GDP which put them below EU 27 level. The tax revenues in Poland are formed mainly by social security contributions 14. 2 % of GDP and production and import taxes 14 % of GDP. The personal income tax and household income tax revenues in all V4 countries are below the EU 27 average. The lowest amount of tax revenue in this category was in Slovakia in 2019 – concretely 3.8 % of GDP.

Table 3 Average Tax wedge in V4 countries in 2015–2020*, expressed as a percentage point (p.p.)

	2015	2016	2017	2018	2019	2020
OECD	35.41	35.36	35.22	35.10	35.01	34.63
Czech Republic	42.80	43.04	43.40	43.74	43.90	43.87
Hungary	49.03	48.25	46.15	45.04	44.58	43.64
Poland	35.73	35.58	35.66	35.76	35.58	34.82
Slovakia	41.52	41.66	41.73	41.86	41.87	41.24

*Source: OECD (2021b), * taxation of a single person without children at 100 % of average earnings*

The Visegrad Group countries exhibit above average levels of the tax wedge indicator within OECD. The Czech Republic, Slovakia and Hungary belong to the countries with a massive tax burden on the labour costs as their relative tax wedge is also very high. Poland counts among countries with a lower tax wedge. The tax wedge is an indicator, which encompasses the level of costs per employee. The tax wedge within OECD countries varies significantly. The biggest tax wedge for a single person without children at average earnings can be found in the Czech Republic (43.9 %) and Hungary (43.6 %). A year-to-year decrease in the tax wedge given in percentage points was observed in all V4 countries. The OECD statistics describe the taxation of labour of a single person without children with 100 % of average earnings. It is clear from the concept of the indicator that employees with a higher income have a bigger tax wedge than employees who have incomes below average wage. Decrease in a tax wedge relates to decrease in social security contributions payments and lower taxation of wages. Current situation in the field of social security contributions and income tax in individual countries of the Visegrad Group is described in the end section of the analytical part.

According to Schneider (2002), and the published results of studies, it is obvious that an increase in tax burden and social security contributions has an impact on the job market and stimulates workforce demand in the zone of the shadow economy. The Centre for Tax Policy and Administration – OECD worked out and published the Taxing Wages 2021 – Tax wedges in the OECD in the context of COVID-19. The document gives information about particular indicators for the year 2020 struck by Covid-19 pandemic. Furthermore, it comprises up-to-date information about income tax and social security contributions levels paid by employees and employers.

Table 4 Comparison of Total Tax wedge in 2020, expressed as a percentage point (p.p.)

	Total Tax wedge 2020	Annual change, 2020/19 (in percentage points)			
		Tax Wedge	Income Tax	Social Security Contributions (Employee)	Social Security Contributions (Employer)
OECD	34.63	-0.39	-0.26	0.00	-0.08
Czech Republic	43.87	-0.03	-0.03	0.00	0.00
Hungary	43.64	-0.94	0.21	0.26	-1.41
Poland	34.82	-0.76	-0.76	0.00	0.00
Slovakia	41.24	-0.62	-0.50	0.02	-0.15

*Source: OECD (2021a) * taxation of a single person without children at 100 % of average earnings*

Year-to-year shift in the tax wedge level in years 2019 and 2020 in connection with a single person without children with an average income is shown in the Tax Wedge column in table 4. The OECD average went down by 0.39 p.p. Comparing the data shown in table 3 it is possible to say that the decrease was quite a significant one considering the previous years. The tax wedge within the V4 group of countries decreased in 2020. Contraction of the tax wedge was recorded in Hungary (0.94 p.p.) followed by Poland (0.76 p.p.), Slovakia (0.62 p.p.) and the Czech Republic (0,03 p.p.) It appears from the OECD document that decreasing tax wedge (in case of a single person without children earning average wages) was a result of changes in the tax policy setup, especially lowering the income tax. This concerns the Czech Republic, Slovakia and Poland. The downward trend in tax wedge in Hungary relates to social security contributions paid by employers. Its share in costs percentage went down by 1.41 p.p. Hungary implemented some permanent changes into the system of labour taxation. The drop also relates to the recently adopted measures in the struggle against Covid-19 pandemic (OECD, 2021a).

Table 5 Income Tax in V4 countries in 2015–2020*, expressed as % of gross wage earnings

	2015	2016	2017	2018	2019	2020
OECD	15.5	15.4	15.4	15.3	15.5	15.1
Czech Republic	12.4	12.7	13.1	13.6	13.9	13.9
Hungary	16.0	15.0	15.0	15.0	15.0	15.0
Poland	7.1	7.2	7.3	7.4	7.2	6.3
Slovakia	9.9	10.1	10.3	10.6	10.8	10.1

*Source: OECD (2021a), * taxation of a single person without children at 100 % of average earnings*

Taxation of a single person without children at 100 % of average earnings is described in table 5 as a percentage of gross wage earnings. These figures imply that the tax burden from the perspective of income tax is in V4 countries below the OECD average level. The lowest tax burden in the form of income tax is imposed on a single person without children in Poland (6.3 %) as opposed to Hungary, where the tax burden upon such a person is the heaviest (15.0 %).

The social security contributions form a very important cost element for the employers, self-employed people and employees. At the same time, the social security contributions represent an important source of income designated to protect and safeguard the population in case of social situations such as public health protection during illness, unemployment, old age support and other social situations stated in law (Fassman, 2018). According to Czech Social Security Administration (2020), the three main parts of social security contributions are specified as health and pension insurance schemes and state employment policy contributions. The structure of the social security system is fully in the state competence.

Table 6 Income Tax and SSC (Employee) in V4 countries in 2015–2020*, expressed as % of gross wage earnings

	2015	2016	2017	2018	2019	2020
OECD	25.0	24.9	24.9	24.8	25.2	24.8
Czech Republic	23.4	23.7	24.1	24.6	24.9	24.9
Hungary	34.5	33.5	33.5	33.5	33.5	33.5
Poland	24.9	25.0	25.1	25,2	25.0	24.1
Slovakia	23.3	23.5	23.7	24.0	24.2	23.5

*Source: OECD (2021a), * taxation of a single person without children at 100 % of average earnings*

Income tax and social security contributions paid by an employee as a single person without children at 100 % of average earnings are described in table 6 as a percentage of gross wage earnings. These figures imply that in Hungary and Czech Republic the income tax and social security contributions (employee) from the perspective of tax burden are above the OECD average level. The lowest tax burden in the form of income tax and social security contributions payments is carried by a single person without children in Slovakia (23.5 %) and in Poland (24.1 %) as opposed to Hungary, where the tax burden imposed on such a person is the highest (33.5 %).

The company PricewaterhouseCoopers International Limited (PWC) operates via its consultancy companies, which are part of the PwC net, in more than 157 countries of the world. The company runs the worldwide database, through which all the data about tax rates and maturity of individual taxes in individual countries of the world (PWC, 2021a). The PWC was the source of data for description of social security payments rates and personal income tax within V4 countries. Information about health insurance in individual V4 countries is presented in the conclusion of the analysis. This microeconomic point of view factually complements the analysis overview and ensures a logical order of provided information.

The Czech Republic

The level of social security contributions payments in the Czech Republic is limited for both employees and employers. The maximum basis of assessment for calculation of social security contributions payment is 48 times the monthly average wage. This amount in 2021 is 1,701,168.00 CZK. The health insurance payment limit was abolished in 2013 (PWC, 2021b). In 2021 the super-gross wage was abolished and thus the country returned to progressive taxation, whose threshold for personal income tax rate is 23 %. The maximum amount of gross wage, which is subject to a 15 % tax rate, is 48 times the monthly average wage, i.e. 1,701,168.00 CZK. In case the gross wage exceeds this amount the income tax rate is 23 %. Solidarity contribution of 7 % of the gross income of self-employed people concerning those with the highest income was abolished in 2021 (PWC, 2021c).

Hungary

In Hungary the basis of assessment for calculation of social security contributions payment is the gross salary paid to an employee. The employer pays social security contributions at the rate 15.5 %, which is called the social tax. Employees pay the social security and health insurance contributions in the following ratio: social security 11.5 % (10 % of which form pension scheme contributions and 1.5 % form state employment policy contributions) and health insurance 7 %. The minimum basis of assessment for calculation of social security payments is a law-guaranteed monthly minimum wage. In 2020 the amount of a minimum monthly wage for jobs without qualification was 161,000.00 HUF and minimum monthly wage for qualified jobs 210,600.00 HUF (PWC, 2021d). The income tax rate is 15 % and it is derived from a gross wage. In 2019 the gross income included all benefits and remunerations provided by the employer (holiday allowances, supplementary pension provision, etc.) taxed as an income. In detail, they are taxed at the rates of 15 % and 15.5 % also called the social tax. Both rates are calculated from a real market value of the benefit. The exemption is the recreational card Széchenyi worth max. 100,000.00 HUF per year. It is stated in the law which specific benefits can be provided by the employer (PWC, 2021e).

Poland

In Poland employers pay the social security contributions between 19.21 % and 22.41 % in total. The amount is derived from the employee's gross income. The rate is influenced by the accident insurance that is a part of these payments and it is directly related to the business sector, in which the employer is economically active. Employees pay the social security and health insurance contributions in the amount of 13.71 % of their gross earnings. In 2021 the maximum basis of assessment for aforementioned rates is 157,770.00 PLN. If an employee crosses this maximum yearly limit, their wages get taxed with a contributory rate of 3.2–6.41 % paid by the employer, and 2.45 % paid by the employee. The health insurance rate corresponds to 9 % of the basis of assessment, which is employees' gross wage (7.75 %) and their net wage (1.25 %). The maximum basis of assessment for the health insurance contributions has not been set up. In Poland the social security system is composed of several types of contributions, namely: pension and invalidity schemes, sickness-related schemes, breakdown cover, labour fund, fund of guaranteed occupational benefits, and health insurance (PWC, 2021f). From the personal income tax point of view, those taxpayers whose yearly income does not exceed 8,000.00 PLN are exempted from the tax payment. Taxpayers who earn more than 8,000.00 PLN are taxed at the rate of 17 %. Furthermore, taxpayers whose yearly income does not get over 127,000.00 PLN can exercise their option to get so-called personal allowance, which reduces tax by 0.01–1,360.00 PLN. As of 2019, Poland established a 4 % solidarity tax for taxpayers whose yearly income was higher than one million PLN (PWC, 2021g).

Slovakia

In Slovakia the maximum payment of monthly social security contributions paid by employees is 627.73 EUR. Employers pay 1, 629.42 EUR a month. Employers also pay employee's accident insurance contributions which is 0.8 % of the total wage costs per employee. The amount of these costs is not limited (PWC, 2021h). Basis of tax assessment that is equal to a yearly income of 176.8 times the minimum subsistence level, i.e. 36,256.38 EUR, is 19 %. If the basis of tax assessment for the yearly income exceeds this amount, the tax rate is 25 % (PWC, 2021i).

Differences are made evident by redistribution of wage costs of social security insurance payments on the side of an employee and an employer. In Poland and Hungary these costs are divided between employees and employers almost in parity. In the Czech Republic and Slovakia social security insurance payments are divided unequally and the social security payment costs are mainly on the side of the employer (almost 34 %). There is a significant difference within the V4 in the field of tax deductions and tax basic deductible items and it was not possible within the scope of this document to note them all. It is worth noting that Hungary is the only state in the Visegrad Group without the basic deductible item or the basic tax allowance in their tax system.

The Economic and Development Review Committee OECD worked out and published Statistics of Income in Member States 2019, 2020. For the Czech Republic the OECD Committee identified following measures: to support the labour market through strictly specified and concretely focused active employment policies; to ensure a long-term and sustainable fiscal policy; to increase the tax revenues not only through taxation of income but also through property and consumption taxation and to implement new rates for ecological taxes (OECD, 2020a). For Hungary there are following recommendations: to tighten up the fiscal policy; to solve problems connected with ageing of population (one of the proposals points to increasing the retirement age to 65 years of age); to carry on decreasing the tax wedge and increasing tax revenues with the help of excise duty. (OECD, 2019a). The OECD Economic Committee recommends that Poland consolidate their fiscal policy which leads to a public debt reduction in relation to the GDP. Furthermore, the Committee encourages Poland to implement an active employment policy, which leads to lifelong education of people with low qualification with the stress on development of skills and knowledge within the IT technologies field (OECD, 2020b). It was also recommended by The OECD Committee that Slovakia carries on decreasing the state debt and works out concrete plans for medium-term fiscal policy. Moreover, to increase tax rates on energy, align and set up implicitly the CO2 emissions tax, realize the pension scheme reform in full. It is necessary for Slovakia to increase the active employment policy focused on requalification of the labour force in concord with the needs of the labour market opening it to new and highly qualified labour force (OECD, 2019b).

V. Conclusion

There are differences in tax revenue structures within the Visegrad Group countries. Similarly to EU 27 the social security contributions in 2019 formed the biggest part of tax revenues in the Czech Republic, Poland and Slovakia. The social security contributions in Hungary were below EU 27 level. Significant part of tax revenues in Hungary was created by production and import taxes. All V4 countries exhibited the level of personal income tax and household tax that is below EU 27 average. The compound tax quota is a complex indicator of a tax burden as it comprises tax revenues of public budgets, the compulsory social security contributions payments, state employment policy contribution and compulsory payments of the health insurance. Development of the total revenue from a taxes and social contributions in years 2015–2019 reveals the fact that the Visegrad Group countries are below the EU 27 level. Compared with 2018, the total revenue from a taxes and social contributions increased in the Czech republic and Slovakia. Hungary shows reduced value of the total revenue from a taxes and social contributions in years 2017–2019. The largest decrease being observeved in Hungary in 2019. In the latest reference period Poland exhibited the same value of the total revenue from a taxes and social contributions as in the previous year. The very construction of the compound tax quota indicator shows that the growing compound tax quota does not automatically mean growth of the tax burden. The level of the tax quota is determined by economic cycle, amount of taxes and social security contributions and effectiveness of tax collection. The Economic and Development Review Committee (EDRC) worked out and published Statistics of Income in Member States containing recommendations for individual countries. According to The Committee, it is crucial for the countries of the Visegrad group to ensure a long-term and sustainable fiscal policy, actively realize employment policy and to ensure growth of tax revenues not only through increased taxation of income but also via other types of taxes.

Another indicator that measures the relative tax burden on the labour and social security contributions payments in relation to labour costs, was the tax wedge. In 2020 the labour market within OECD experienced a huge shock resulting from Covid-19 pandemic. The situation around Covid-19 pandemic influenced the labour market, level of average wages and the taxation setup in a more significant way than in previous years. National governments adopted complex measures in reaction to the worldwide crisis. These measures were supposed to support both employers and employees. The measures to support the businesses were aimed at tax payments deferral including postponement of social security contributions payments paid by employers. Furthermore, various measures were introduced to support cash flow, preserve jobs and to create new forms of employment. However, these measures brought a number of changes and reformed the labour market. Changes made in the tax policy setup and degressive average wages in some countries resulted in decreased tax wedge within OECD for a single person without children. In the years 2019–2020 all countries of the Visegrad Group experienced a significant decrease in tax wedge expressed in percentage points. It appeared from the OECD document that decreasing tax wedge was a result of changes in social security contributions payments and personal income tax systems. The tax burden in the Visegrad Group countries, from the income tax point of view, sits below the OECD average. The lowest tax burden, from the income tax point of view, is carried by the single person without children in Poland. The heaviest tax burden in the form of the income tax falls on people in Hungary. From the tax burden point of view the income tax and social security contributions paid by an employee in Hungary and the Czech Republic are above the OECD average. The lowest tax burden in the form of income tax and social security contributions is carried by a single person without children in Slovakia and in Poland as opposed to Hungary, where the tax burden is the heaviest. The year-to-year decrease in tax wedge in the Czech Republic and Poland was related to changes in the field of personal income tax. The year-to-year decrease in tax wedge in Slovakia and in Hungary had a bearing on the changes in the field of personal income tax and social security contributions payment system. It is worth mentioning Hungary, where the significant year-to-year decrease in the tax wedge is closely linked to the changes made in the field of labour taxation and measures adopted in relation to Covid-19 pandemic. As of 1st July, 2020 the tax rate of social security contributions paid by employers was lowered from 17.5 % to 15.5 %, thus going down by 2 p.p. disregarding The Wages and Taxes Agreement concluded by Hungarian government and private sector representatives. This measure induces permanent changes to the taxation of labour. The changes of the tax wedge and their causes in selected groups of average workers and families within V4 will be assessed in the follow-up study. The analysis and comparison outputs provide information that can be used strategically in following studies concerning the evaluation of structure and effectiveness of the tax wedge system in the Visegrad Group countries and its impact of shadow economy in these countries.

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