Chapter 6

Personal Income Tax Gap: The Czech Experience

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6.1. Introduction

Estimating the tax gap for personal income tax and social security contributions varies from country to country. Fundamentally, it depends on the average effective tax rate for dependent and independent activities. If there is a significant difference in the taxation rates of dependent and independent activities, then it is advantageous for taxpayers not to be taxed typically as employees but as self-employed persons. In the Czech Republic, this phenomenon is referred to as the so-called *švarcsystém*, i.e. an employee performs dependent activity in certain segments of the economy but is not considered an employee for tax purposes, but a self--employed person. Given that the average tax rate for employees and self-employed persons differs by around 7 or more percentage points, this is an interesting issue from a tax and fiscal point of view. It should be stressed that this legal disparity has an impact on public revenue and on the overall collection of personal income tax and social security contributions. However, the line between dependent and independent activity is very thin, whilst it should be said that there are a number of jobs on the labour market that are offered both in the form of an employment contract and a trade licence. The labour market is therefore clearly supporting this trend, and the reasons are not only fiscal, but also purely regulatory with regard to the Labour Code, yet the fact is that it is a tax saving for both the 'employee' billing as self-employed and the employer, who saves on social security contributions. The aim of the article is to quantify the impact of the *švarcsystém* on the revenue side of the Czech public finances. The data show that the impact is far from negligible and causes damage to the country's public finances.

6.2. Literature Review

The article deals with the issue of tax justice represented in tax theory by the principle of payment justice, or the so-called horizontal justice in taxation. According to this theory, it would be appropriate that two individuals who earn, for example, the same amount of income should pay the same amount of tax on that income. This issue has been more extensively discussed by Kubátová (2003), Široký, (2003), and among international authors, e.g. Jackson and Brown (2003), and Samuelson and Nordhaus (2007), while the foundations of this theory were already laid by Adam Smith in his An inquiry into the nature and origin of the wealth of nations in 1776. However, this horizontal equity rarely occurs because tax systems, not only the Czech one, have various sub-parameters in the area of individual income taxation that significantly influence the level of taxation (effective tax rates) to the benefit or disadvantage of individuals. Obviously, it is purely in the hands of legislators how they set the way individuals are taxed, still in line with tax theory, two basic requirements should be balanced: efficiency and fairness, but these two requirements are often at odds with each other. Therefore, an analysis of the effective tax burden before and after the change would be appropriate for all parametric changes in the taxation of individual income. These authors, however, mention the general principle of tax fairness; the Czech-specific situation of the švarcsystém is, of course, not addressed so explicitly in the international literature. Among Czech sources, one can mention Finardi and Vančurová (2014) focusing on data on average gross expenditure and income by sector in the EU countries under study. It is a method based on macroeconomic data of the countries in question from the National Accounts. In absolute terms, the PIT gap, including social security contributions, was just under CZK 5 billion. In another paper (Finardi & Procházka, 2016), the authors also work with the National Accounts method and their estimate of the PIT gap including social contributions is CZK 9.5 billion. The last relevant estimate (Finardi & Melicharová, 2021) focuses on the share of self-employed persons without employees in the working-age population, by NACE economic sector, according to which, the PIT gap, including social contributions, amounted to CZK 14.4 billion.

6.3. Data and Methods

This section focuses on the evolution of the number of self-employed persons in the Czech Republic from 2010 to the third quarter of 2024, while the other data are always year-end data. The development of the number of self-employed persons is also influenced by the economic cycle. For the purposes of the analysis, the self-employed applies to their main form activity. They do not therefore have significant income from employment and are also not considered, for example, as students or recipients of a retirement pension as their main source of income is self-employment. Table 6.1 shows that the share of these persons in the total number of self-employed persons fell by only 7 percentage points since 2010, which is not a significant decrease. It is clear from this statistic that 59% of self-employed persons carry out this activity as their main activity, with the remainder being secondary activities. Naturally, the main activities are subject to stricter rules for the collection of social security contributions and are subject to higher minimum assessment bases. There are no minimum tax bases in the personal income tax system, which has an impact on the income tax collection of individuals filing tax returns.

Table 6.1. The number of self-employed persons in the Czech Republic in 2010-2024

Year	Total number of self-employed persons	Main activity of the self-employed	Secondary activities of self-employed persons	Share of self-employed persons (main activity) in the total number of self-employed persons (%)
2010	977,069	640,406	336,663	66
2011	1,001,764	649,990	351,774	65
2012	994,088	627,596	366,492	63
2013	977,228	602,395	374,833	62
2014	972,356	586,112	386,244	60
2015	975,952	578,544	397,408	59
2016	981,355	577,818	403,537	59
2017	991,444	582,226	409,218	59
2018	1,011,355	590,705	420,650	58
2019	1,031,365	598,086	433,279	58
2020	1,051,179	611,383	439,796	58
2021	1,078,096	634,205	443,891	59
2022	1,104,258	649,189	455,069	59
2023	1,127,189	668,737	458,452	59
2024	1,158,440	684,798	473,642	59

Source: (Česká správa sociálního zabezpečení, 2024).

Based on previous estimates (Finardi & Melicharová, 2021) of the number of self-employed persons excluding employees per working-age population by NACE economic sector, it is possible to establish a lower bound for the PIT gap, hence the lower bound is 20% of the total number of self-employed persons engaged in the main activity. A further estimate can be made according to the real labour market offers in different sectors in the Czech Republic. Based on this survey, it can be concluded that the upper estimated limit is about 33%, and the study continues to work with these two values in the estimates of the PIT gap. The real value may of course be higher, but unfortunately not enough data and information were available to make this evaluation.

The estimation focused on the years 2022, 2023 and 2024 with other years not considered due to the non-availability of suitable data, and 2020 and 2021 were also omitted due to the covariance crisis. The following table shows the authors' estimate of the number of self-employed persons in the *švarcsystém* zone, with the higher estimate over 200,000 people.

Table 6.2. Estimate of self-employed persons in the *švarcsystém* zone (20% and 33% of the main activity)

Year	Number of self-employed persons (main activity)	20%	33%
2022	649,189	129,838	214,232
2023	668,737	133,747	220,683
2024	684,798	136,960	225,983

Source: own calculations.

It was then necessary to estimate the average income of the self-employed in the years under review. The basis for the estimation was the average monthly wage determined by the Ministry of Labour and Social Affairs of the Czech Republic for the purposes of social insurance premiums (Všeobecná zdravotní pojišťovna České republiki, n.d.). The coefficient considers the real statistics of consumption expenditure of Czech households according to the position of the head of the household, with a focus on self-employed persons (Czech Statistical Office, 2023). A major problem with these estimates is that one does not know the exact value of the average annual income of self-employed workers in the *švarcsystém* – there are only statistics on average monthly wages for employees, but these are not sufficient. Therefore, expenditure statistics, which partly capture the income situation of the self-employed, appear to be appropriate. This is an expert estimate which will need to be further refined.

Table 6.3 shows the average annual wage according to the Ministry of Labour and Social Affairs for each year and its adjusted value for the authors' calculation by the coefficient 1.24.

 Table 6.3. Adjusted annual income of self-employed workers (2022-2024)

Year	Average annual wage (in CZK)	Adjusted annual income of self-employed persons (in CZK)
2022	466,932	579,000
2023	483,888	600,000
2024	527,604	654,000

Source: own calculations.

All the relevant factors for personal income tax and social security contributions were taken into account for the calculation of total tax payments in each year, in particular the minimum assessment bases for social security contributions for self-employed persons from their main activity. For personal income tax, no deductions from the tax base were considered, which is a simplifying assumption, and only the basic allowance per taxpayer was used. A flat-rate expenditure of 60% was used to determine the tax base of the self-employed. Actual expenses were not considered at all.

6.4. Results

The results confirm that there is a significant difference in taxation between employees and the self-employed, due to the design of individual tax levies, in particular personal income tax. Table 6.4 compares the effective tax rate for employees and the self-employed and the absolute value of the total tax levy, as well as how much more employees pay compared to the self-employed on an annual basis.

Table 6.4. Effective tax rate of employees and self-employed workers and the difference in tax payments between employees and self-employed workers (2022-2024)

Year	Effective tax rate (employee) in %	Effective tax rate (self-employed) in %	Difference in tax payments in CZK/year
2022	20.67	12.00	50,195
2023	20.86	12.19	52,014
2024	21.88	13.80	52,889

Source: own calculations.

Table 6.4 describes the microeconomic impact, i.e. the impact on the individual taxpayer's budget. Next the macroeconomic significance and the impact on public budgets were addressed. Therefore, the calculation was based on the number of people operating in the *švarcsystém* zone and the difference in tax payments between employees and self-employed workers. The estimation was made for the lower and upper bounds of the estimate, i.e. 20 and 33% (Tab. 6.5).

Table 6.5. Estimated PIT gap in CZK (2022-2024)

Year	Lower limit 20%	Upper limit 33%
2022	6,517,231,482	10,753,431,946
2023	6,956,701,954	11,478,558,225
2024	7,243,720,108	11,952,138,177
Total 2022-2024	20,717,653,544	34,184,128,348

Source: own calculations.

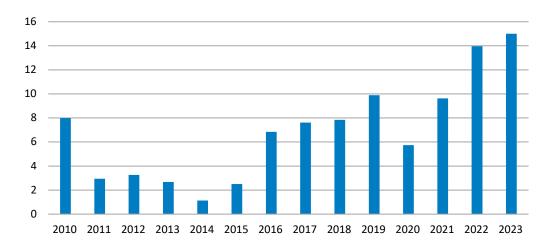


Fig. 6.1. Personal income tax collections from returns from 2010 to 2023 (CZK billion)

Source: (Vývoj inkasa..., n.d.).

It is useful to compare the results of the performed estimation with actual personal income tax collections from tax returns, mainly taxpayers who have income from self-employment. Figure 6.1 shows that personal income tax collection was not stable in the Czech Republic (*Vývoj inkasa...*, n.d.), however the low collection was not due to the cyclical development of the economy but to parametric changes in the personal income tax. In particular, the introduction of lump-sum expenses and changes in their rates over the years. Personal income tax collection has been improving since 2021. In 2023, this collection from taxpayers amounted to CZK 15 billion, whereas by comparison, personal income tax on employment income alone amounted to CZK 176.7 billion in 2023. To express this relationship in proportional terms, the share of personal income tax collections from tax returns in employment tax collections in 2023 was 8%, but in 2014, for example, it was only 1%.

6.5. Discussion

Table 6.6 compares previous estimates made using a similar method. If one compares these results with the authors' estimate, they are similar, thus confirming that these results have some predictive power. The estimate of the Ministry of Finance was available only for personal income tax and amounted to CZK 5 billion. Unfortunately, this estimate is no longer officially available as it was part of the draft law on electronic sales registration, however on 1 January 2023 the electronic sales registration was abolished. The aim of this instrument was to counter the concealment of income of the self-employed.

Table 6.6. Comparison of PIT gap estimations

Author	PIT gap including social security contributions (CZK billions)
Finardi and Melicharová (2021)	14.4
Finardi and Procházka (2016)	9.5
Finardi and Vančurová (2014)	4.6

Source: own calculations.

As already mentioned, it is difficult to estimate the importance of the *švarcsystém* in the Czech Republic because it is a legal tax optimization. There is no credible database regarding the persons who are in this tax zone, therefore these are estimates based on the knowledge of the Czech tax system and labour market.

6.6. Conclusions

Given the assessment of the significance of the impact of the *švarcsystém* on Czech public finances, it appears logical to continue to pay attention to this phenomenon. The Czech Republic loses approximately CZK 12 billion annually, which cannot be considered a negligible amount with regard to the total income tax collection of individuals filing tax returns.

The taxation of individuals has undergone a number of significant reforms, one of which was the introduction of flat-rate expenses for self-employed persons. This has also led to an overuse of the *švarcsystém* in the labour market, as these individuals often do not have very high actual expenses. One way to limit the overuse of the *švarcsystém* is therefore to reform the flat-rate expenditure. In addition to reducing the relative rates and the absolute maximum amount of flat-rate expenditure, it is also possible to limit the range of taxpayers who can benefit from flat-rate expenditure (e.g. the value of annual gross income up to a certain limit).

The current system of taxation of income from employment and the *švarcsystém* is unfair and shifts the tax burden primarily to employees, who are also heavily burdened with social security contributions. Given the need to continue to consolidate the Czech public finances, it will therefore be necessary to increase the level of taxation of the self-employed, in particular for personal income tax. The reform of flat-rate expenses, which have a significant impact on the effective taxation rate of the self-employed, should contribute to this.

Another important area is the non-reporting of self-employment income. Electronic sales registration was supposed to help combat this phenomenon – however, as already mentioned, this instrument was abolished as of 2023.

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