Using electronic record of sales to support fair budgetary allocations across Czech municipalities

Pavel Semerád — Vladimír Rogalewicz — Miroslav Barták

1 Department of Accounting and Taxes, Sting Academy, Czechia
2 Department of Biomedical Technology, Faculty of Biomedical Engineering, Czech Technical University in Prague, Czechia
3 Department of Social Work, Faculty of Social and Economic Studies, J. E. Purkyně University in Ústí nad Labem, Czechia

Abstract

The paper focuses on electronic record of sales, a tool enabling continuous monitoring and control of declared sales of business entities. Such systems have been recently gaining popularity in European countries. The objective of the paper is to analyse the possible use of electronic record of sales for a fairer redistribution of shared taxes according to the place where the taxable income was earned. We do not consider the current situation to be entirely fair, as sales may be realized in the whole territory of the country. However municipalities that help businesses achieve their income are not fairly rewarded for doing so. This usually gives larger municipalities an advantage at the expense of smaller ones. Currently, the tax administration has sufficient technical equipment to be able to identify the place where the revenue was received.

Highlights for public administration, management and planning:

- The budgetary allocation of taxes is not set fairly, which negatively affects the revenue side of budgets, especially for smaller municipalities.
- The budgetary inequality can be effectively addressed by using data on where businesses earn taxable income.
- This data is available to the Ministry of Finance of the Czech Republic from the electronic record of sales.

Keywords

Electronic record of sales, Regional and municipal budgets, Shared taxes, Czech Republic

1 Introduction

The issue of financing regions and municipalities is a subject of extensive academic but also practical debate (e.g. Andrlík et al. 2021), as the decentralisation of public administration and public services is conditional on the setting of an optimal level of fiscal decentralisation, i.e., the distribution of revenues among all public budgets. The financing of municipalities and regions defines the framework of their functioning. Municipal and regional budgets are the tools how local governments meet their public finance allocation function by setting the objectives and policies that ensure the development of their municipalities and regions (Kruntorádová 2012).

In the Czech Republic, the tax system has been designed in such a way that municipalities and regions themselves are not financially self-sufficient and the state has to redistribute part of the nation-wide tax revenues among them (Marková 2018). The distribution of taxes to budgets for shared taxes is shown in Table 1.

However, due to inaccuracies in administrative registers, the taxes are redistributed unevenly across the municipalities, in contrary to the intention of the legislators who wanted to navigate them partly to the places where they originated. The act on the distribution of taxes to budgets favours the more economically developed regions (including the capital city of Prague) (Kožíšek & Klazar 2015). This implies that the remaining Czech regions are not receiving as much funding as it should be fairly redistributed to them, which is in contrary to the EU public aid rules that aim to strengthen economic, social and territorial cohesion in the European Union by correcting imbalances between its
regions. A fairer budgetary determination of taxes may play a vital role in the process of reducing existing inequalities across Europe (see e.g. Cairney et al. 2022). The fact that cities and regions cannot manage some processes without being supported from other levels of the government should be taken into consideration (see e.g. Zhou et al. 2022).

Table 1 Distribution of taxes to budgets in the Czech Republic as of 1 January 2021 (Financial Administration of the Czech Republic 2021)

<table>
<thead>
<tr>
<th>Tax</th>
<th>Regions (%)</th>
<th>Municipalities (%)</th>
<th>State budget (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal income tax (entrepreneurs)</td>
<td>9.78</td>
<td>25.84</td>
<td>64.38</td>
</tr>
<tr>
<td>Personal income tax (employees)</td>
<td>9.78</td>
<td>25.84</td>
<td>62.88</td>
</tr>
<tr>
<td>Personal income tax (withholding tax)</td>
<td>9.78</td>
<td>25.84</td>
<td>64.38</td>
</tr>
<tr>
<td>Corporate income tax</td>
<td>9.78</td>
<td>25.84</td>
<td>64.38</td>
</tr>
<tr>
<td>Corporate income tax (paid by municipalities and regions)</td>
<td>100*</td>
<td>100 **</td>
<td>0</td>
</tr>
<tr>
<td>Value added tax</td>
<td>9.78</td>
<td>25.84</td>
<td>64.38</td>
</tr>
<tr>
<td>Real estate tax</td>
<td>0</td>
<td>100 ***</td>
<td>0</td>
</tr>
</tbody>
</table>

* taxes paid by the region
** taxes paid by the municipality
*** properties located in the territory of the municipality

We are fully aware of the fact that larger municipalities operate important and strategical facilities such as hospitals, secondary or higher schools, retirement homes, or public transportation means that generate costs. However, there are usually other subsidy titles supporting such infrastructure. The support of larger municipalities providing some services also for their surroundings should be provided transparently, e.g. by fixing parameters of the governmental subsidy programs, rather than turning a blind eye to a miscalculation and tacitly tolerating it.

In the case of rural and peripheral regions, on the other hand, insufficient funding may reduce their attractiveness and, consequently, cause the migration of people from rural to urban areas (Khendriche Trhlínová 2022). This is a long-term problem, although recently we have seen the opposite trend of people moving from bigger cities back to rural areas, which, however, do not have sufficient resources to build the necessary infrastructure (Weikert 2022).
Murphy 2004; Nerudová et al. 2020). The tax administration responded to this situation by changing the procedure for the assignment of local competence (General Financial Directorate 2015) and the result is, for example, Section 4(1) (i) of the Value Added Tax Act, which states that the place where key decisions are taken shall be the actual place of residence of a person liable to tax. However, this change affects only the administration of taxes, not the distribution of taxes to budgets.

Another motivating element for entrepreneurs to continue setting up businesses in other municipalities is a more lucrative address of their headquarters (Kučera 2013).

The COVID-19 pandemic confirmed still another fact: except for personal services such as short-term accommodation, businesses can execute a large number of activities online. By offering shipping services, they can deliver their goods/services throughout the Czech Republic. From this perspective, allocating taxes according to an officially registered address may not be the best option.

The objective of this paper is to propose a mechanism to (partly) remedy this situation using data (automatically) collected by the electronic record of sales system.

2 Methods

The electronic record of sales system is a tool that allows tax administrators to obtain information on the sales made by entrepreneurs in real time. Although this solution can be found in 17 countries of the European Union, we focused our attention only on the Czech Republic, as we will analyse the option of using the electronic record of sales system to reach a fairer budgetary determination of taxes, i.e. redistribution of a part of nation-wide taxes to the budgets of municipalities and regions. This possibility seems to be theoretically interesting, although the Czech Republic recently decided to terminate recording of sales without any alternative solution.

The sales record system works on the following principle (Figure 1): The recipient of the sale (in cash / by a card) is obliged to register the sale immediately (in the Czech Republic it was within 48 hours). This can be done using a fiscal cash register (offline option) or any electronic device enabling data transfer between the tax entity and the tax administrator1 (online option).

After the sale is registered with the Tax Administration, the recipient of the sale receives unique codes (BKP – Taxpayer’s Security Code, and FIK - Fiscal Identification Code) that uniquely identify the transaction. After receiving the codes (response time is a few seconds at most), the recipient can print a tax receipt for the customer. In addition to the compulsory elements defined e.g. by the Value Added Tax Act, the document also contains the codes mentioned above, by which the customer can verify that the sales were actually recorded. Similarly, the tax administrator may also check the activities of the tax entity and, in case of suspicion, may initiate a local investigation without undue delay.

Our assessment is further based on an analysis of the entrepreneurial environment in the Czech Republic. To find out the differences between individual regions (the Czech Republic has 14 self-governing regions), we asked the General Financial Directorate (2022) to provide us with the following information (based on the Act 106/1999 Coll. on Free Access to Information). We asked for data concerning three issues:

(i) How many economically active entities were registered for the electronic record of sales system in each region in the period from 1 November 2016 to 31 December 2021 (number of taxpayers by location). Since the qualifying condition was that they received and electronically recorded at least one sale in cash or by payment card during the entire period.

(ii) How many establishments in each region (PZP) were registered in total. Since it would be difficult to assess this situation for individual municipalities, we used registered establishments divided by regions.

(iii) How many establishments are registered in each region, while the taxpayers (operators of these establishments) do not have their place of business in these regions (PZPmk).

3 Results

The data obtained from the General Financial Directorate are summarized in Table 2. Its last column can be interpreted as the percentage of establishments which are operated by businesses without their seat in the region. If this value is above the average (21.88%), it would mean a net drain of shared taxes to other regions (while the value below the average roughly means a net inflow). Particularly Prague would have an exceptional position at the expense of other regions. Below, we explain this situation using the case of three largest filling station networks as a model example. Although all three have their headquarters in Prague, they operate only 7.78% of their filling stations there; the rest of them are located in other regions.
Table 2: Business environment in the Czech Republic as of 31 December 2021 (compiled by the authors on the basis of data provided by the General Financial Directorate 2022)

<table>
<thead>
<tr>
<th>Region as per taxpayer’s registered address</th>
<th>Number of taxpayers as per registered address</th>
<th>PZP</th>
<th>PZPmk</th>
<th>PZPmk/PZP ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prague</td>
<td>37 404</td>
<td>57 636</td>
<td>7 494</td>
<td>0.1300</td>
</tr>
<tr>
<td>South Moravian</td>
<td>23 869</td>
<td>42 140</td>
<td>7 176</td>
<td>0.1703</td>
</tr>
<tr>
<td>Central Bohemian</td>
<td>22 877</td>
<td>40 623</td>
<td>11 301</td>
<td>0.2782</td>
</tr>
<tr>
<td>Moravian-Silesian</td>
<td>18 830</td>
<td>35 775</td>
<td>6 904</td>
<td>0.1930</td>
</tr>
<tr>
<td>South Bohemian</td>
<td>13 044</td>
<td>23 532</td>
<td>5 554</td>
<td>0.2360</td>
</tr>
<tr>
<td>Ústí nad Labem</td>
<td>12 615</td>
<td>22 536</td>
<td>5 455</td>
<td>0.2421</td>
</tr>
<tr>
<td>Hradec Králové</td>
<td>10 587</td>
<td>20 198</td>
<td>5 312</td>
<td>0.2630</td>
</tr>
<tr>
<td>Olomou</td>
<td>10 408</td>
<td>19 983</td>
<td>5 305</td>
<td>0.2655</td>
</tr>
<tr>
<td>Zlín</td>
<td>10 172</td>
<td>19 093</td>
<td>4 194</td>
<td>0.2197</td>
</tr>
<tr>
<td>Pilsen</td>
<td>10 169</td>
<td>18 492</td>
<td>4 321</td>
<td>0.2337</td>
</tr>
<tr>
<td>Pardubice</td>
<td>8 580</td>
<td>16 026</td>
<td>4 120</td>
<td>0.2571</td>
</tr>
<tr>
<td>Vysočina</td>
<td>8 249</td>
<td>15 546</td>
<td>4 247</td>
<td>0.2732</td>
</tr>
<tr>
<td>Liberec</td>
<td>7 990</td>
<td>15 076</td>
<td>4 362</td>
<td>0.2893</td>
</tr>
<tr>
<td>Karlovy Vary</td>
<td>6 222</td>
<td>10 882</td>
<td>2 461</td>
<td>0.2262</td>
</tr>
<tr>
<td>Abroad</td>
<td>x</td>
<td>25</td>
<td>25</td>
<td>1.0000</td>
</tr>
<tr>
<td>Total</td>
<td>201 016</td>
<td>357 563</td>
<td>78 231</td>
<td></td>
</tr>
<tr>
<td>Average value</td>
<td>0.2188</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PZP is the number of establishments in each region; PZPmk is the number of establishments in each region, for which the taxpayers (operators of these establishments) do not have their place of business in these regions.

3.1 Example: petrol stations

To demonstrate how difficult it is for other regions to compete with Prague in terms of the number of taxpayers by location and the number of registered establishments (PZP), an example of filling station operators can be given. Three largest companies in this sector in the Czech Republic operate under the brands Benzina ORLEN (427 filling stations, 28 of which are in Prague), MOL (304 filling stations, 41 in Prague) and EuroOil (207 filling stations, 4 in Prague). The owners of these networks, ORLEN Unipetrol RPA – BENZINA, MOL Czech Republic and ČEPRO, have all their headquarters in Prague. Yet only 73 stations (7.78%) out of a total of 938 are operated in Prague. The remaining stations are located in other municipalities and regions. Although these municipalities create and provide the infrastructure for the premises, incomes on shared taxes do not have to be fairly redistributed in their favour. Prague is thus logically considered to be the municipality with the largest share of GDP, although, in the case of non-Prague filling stations, other municipalities also contribute to the total GDP. If the shared taxes were redistributed according to the actual shares of municipalities and regions taking into account the place of generation of the taxable income, the budgets of other municipalities would increase (in this model case at the expense of Prague).

We are aware of the fact that these companies do not operate some of their filling stations independently, but in some cases they also lease them to tenants who may be based in the municipality where a particular filling station is operated. It is therefore virtually impossible to estimate the total amount of collected shared taxes. Indeed, there is no publicly available data on the tenants, natural persons.

4 Suggested changes in shared taxes redistribution

Before the introduction of the electronic record of sales system in 2016, tax administrators had hardly a way to distinguish, without disproportionate costs, what part of a particular entrepreneur’s income was generated in a particular municipality. It was only possible to ascertain from the tax return...
what the sum of all the taxable incomes declared for the tax year was.
The possibilities that have been provided to tax administrators by the electronic record of sales system are revolutionary since it is possible to find out, on the basis of the registered places of operation at which place (in the cadastre of which municipality or region) the sales were received. At this point, of course, it can be argued that not all sales are received in cash or using a payment card, and that a part of them is received by a transfer between bank accounts. While this is certainly true, there is nevertheless room for accurate real-time determination of the place of receipt of sales. At the same time, this would make it possible to determine (in the case of a concentration of a larger amount of recorded sales) where the real place of interest of the entrepreneurial entity is. We are now so technologically advanced that we could add a parameter of the place where the taxable income and the taxable transaction occurred to support fairer redistribution of shared taxes.

This idea is not new, as the redistribution of property tax is based on the same principle. The income from the taxed immovable property is in favour of the municipality in whose cadastral territory the subject of the tax is located, while municipalities can additionally influence the collected tax by local coefficients (Sedmihradská 2013). This mechanism can also be found in other countries. For example, Jurčík (2007) gives the example of Canada, where each bill shows the proportion of the tax paid to the local government. Opponents of this measure could argue that it is administratively demanding (Boháč 2018). Indeed, if the pro-rata part were to be calculated manually on simplified tax documents (receipts) within the retail sector, this would be time-consuming and would increase the risk of error in the calculation. However, thanks to electronic sales records, this is not necessary. All information can be linked to the entrepreneur’s (payer’s) cash register and this information does not even need to be included on the tax documents (receipts). It is sufficient just to register the sales and the redistribution of the tax would proceed automatic. This arrangement would be in agreement with all the requirements defined by Adam Smith in his canons of taxation. Consistency can be found in tax fairness, certainty and convenience of payment, as well as in keeping costs low.

This proposal is not intended to change the percentage of taxes collected that is currently redistributed under the Distribution of Taxes to Budgets Act (see Table 1). The goal is to design a method of calculating the redistribution amounts that is fairer and redistributes a fair share to municipalities. However, based on the analysis of the Czech business environment (see Table 2), it is logical and obvious that some taxpayers have multiple registered establishments (places of operation), even in regions where they do not have their registered addresses. This is not surprising, as entrepreneurial entities are expanding (not only) throughout the Czech Republic. However, if we look at the ratio of the number of registered establishments outside the taxpayer’s region of residence (PZPmk) per number of registered establishments in the region (PZP), we find that the national average is 0.2188, which corresponds to 21.88%.

There are only three regions that achieve lower values than the national average - Prague (13%), the South Moravian Region (17.03%) and the Moravian-Silesian Region (19.30%). On the opposite side there are the Liberec Region (28.93%), the Central Bohemian Region (27.82%) and the Vysočina Region (27.32%), while the remaining regions are above the national average as well. Although we do not have more precise data that would allow us to attribute the share of PZPmk to any particular region where the taxpayers come from, it can be assumed that Prague is favoured at the expense of other regions. This is confirmed by the findings of Kožišek and Klazar (2015).

4.1 Practical implementation

For the practical application of our proposal, it is necessary to take into account how the tax obligations of entrepreneurs are calculated and paid, since the payment does not occur at the moment of receipt of the payment (taxable supply), but only after the end of the tax period. The calculation of the tax liability is then carried out according to (partial) steps set out by law that also allow for tax optimisation.

Our proposals take care of not increasing administrative or financial costs for businesses. Thus, all administration and data processing shall be done by the state. Automated systems can be designed to set up a calculation method that will allow the shares of individual municipalities (and regions) in the total tax liability of entrepreneurs to be quantified from the data on recorded sales and data provided in tax returns. These calculations can proceed according to formulas 1–8 designed specifically for income tax and for value-added tax.
4.1.1 Income tax

In the Czech Republic, the calculation of income tax differs depending on whether the taxpayer is a natural person or a legal entity. A personal income tax payer can claim e.g. expenses determined as a percentage of income, non-taxable parts of the tax base, tax credits or tax benefits. It is necessary to add that other types of income, such as income from employment or rent, are also included in the tax base for individuals. For corporate taxpayers, it is also possible to deduct items reducing the tax base (§ 20) or tax credits. For this reason, it is necessary to establish a ratio (r) that takes these facts into account and fairly reflects the merit that municipalities have in achieving total taxpayer sales. In addition to this conversion, we also propose that the obligation for entrepreneurs to electronically record sales made by payment cards abolished as of 1 March 2018 be reinstated. The reintroduction of sales records using payment cards is desirable because the popularity of card payment has been growing as well as the volume of card transactions (Czech National Bank 2021). To avoid the administrative burden on businesses, this obligation can be replaced by cooperation with payment terminal operators, who can match the payment to a particular location, e.g. by using the IP address of the device from which the transaction was made. Therefore, formula (1) distinguishes between the total recorded sales of the entrepreneur in cash (EETₜₕ) and the total sales of the entrepreneur made via payment cards (EETₚₖ), i.e.

\[ r_{DP1} = \frac{\sum EET_{obec}}{\sum EETₜₕ + \sum EETₚₖ} \]  

(1)

where \( r_{DP1} \) is the ratio of recorded sales in the municipality EETₜₕ to the total count of cash (EETₜₕ) and payment card (EETₚₖ) transactions. However, the ratio obtained in this way only reflects the sales recorded using the electronic record of sales system. Completely missing are, for example, bank transfers, barter transactions and non-monetary income that are subject to tax as well. However, their value is expressed in the tax return and it is possible to work with this data further. Therefore, to make our proposal applicable in practice, the ratio (\( r_{DP2} \)) of the total recorded sales by cash and payment cards to the (partial) business tax base (DZD) will be expressed for the particular entrepreneur:

\[ r_{DP2} = \frac{\sum EETₜₕ + \sum EETₚₖ}{\sum EET_DZD} \]  

(2)

Subsequently, the ratio of DZD to the total tax base (ZD) is determined, resulting in the ratio \( r_{DP3} \):

\[ r_{DP3} = \frac{\sum DZD}{\sum ZD} \]  

(3)

As a final step in this calculation, we calculate how much of the total tax liability (TL) is generated by the business activity:

\[ r_{DP4} = TL \cdot r_{DP4} \]  

(4)

In other words, this is the amount (\( r_{DP4} \)) that will be gradually redistributed according to sub-calculations (1)–(3) until the municipality’s part on the entrepreneur’s tax liability comes out. The fact that the electronic record of sales system has taken place in this municipality (and at the same time in the region) is understood to be a merit.

4.1.2 Value added tax

The redistribution of value-added tax (VAT) will be calculated similarly. This means that the same conditions (5) will apply as in the case of income tax (DP), resulting in the ratio (\( r_{DPH1} \)):

\[ r_{DPH1} = \frac{\sum EET_{obec}}{\sum EETₜₕ + \sum EETₚₖ} \]  

(5)

In the second step, we determine the ratio (\( r_{DPH2} \)) representing the share of electronically recorded sales on domestic transactions (TP):

\[ r_{DPH2} = \frac{\sum EETₜₕ + \sum EETₚₖ}{\sum EETₜₕ} \]  

(6)

In the third step, the ratio (\( r_{DPH3} \)) will be determined representing the share of domestic transactions (TP) in the total tax base (ZD):

\[ r_{DPH3} = \frac{\sum TP}{\sum ZD} \]  

(7)

In the last step, the amount of tax liability (TL) generated by entrepreneurial activity (\( r_{DPH4} \)) will be calculated, i.e. the sum that will be redistributed according to the shares of municipalities and regions using equations (5)–(7):

\[ r_{DPH4} = TL \cdot r_{DPH3} \]  

(8)

5 Discussion

The electronic record of sales system is a tool that enables continuous monitoring of entrepreneur’s cash (and/or payment card) sales.
Thus, it is a tool to detect dishonest entrepreneurs that try to hide some part of their sales. Its popularity is growing, as evidenced by Germany that introduced the electronic record of sales system in 2020 (Bundesministerium der Finanzen 2021). However, despite its relatively simple operation, the system of records of sales is a controversial topic not only among entrepreneurs, but also among politicians. The complexity of its position among these interest groups can be seen in the example of the Czech Republic.

In 2016, the introduction of the Czech electronic record of sales system represented a revolutionary change in real-time recording of cash sales by entrepreneurs. Although it was not a completely new instrument and the Czech proposal was inspired by the already functioning Croatian model (Smetánková & Palán 2015), the electronic record of sales system divided the political scene into two hostile groups. And eventually, the Czech Republic decided to terminate recording of sales at the end of 2022 (Financial Administration of the Czech Republic 2022). The electronic records of sales system was discontinued in the Czech Republic in January 2023, following a political decision to terminate it. This article shows that operating an electronic record of sales system can bring additional benefits. It proposes using the electronic record of sales system to redistribute shared taxes more fairly between municipalities and regions, based on an analysis of the business environment and distribution of taxes to budgets in the Czech Republic, since the tax system in the Czech Republic is set up in such a way that municipalities and regions are not financially self-sufficient and the state has to redistribute part of national tax revenues among them (Marková 2018).

However, as the results achieved by Kožíšek and Klazar (2015) show, larger municipalities are favoured at the expense of smaller ones. The same was also shown by our analysis of the business environment in the Czech Republic. Specifically, it concerns the uneven distribution of the number of entrepreneurial headquarters and registered establishments in individual regions. In addition, there is reasoning that entrepreneurs may be motivated to relocate their headquarters, e.g. because of a lower probability of tax audits (General Financial Directorate 2015), a more lucrative headquarters address (Kučera 2013), or because of other advantages in everyday civic life. According to Svatůš (2021), there are hundreds of thousands of such residents. This harms municipalities where these residents actually live (and do business), while their income is taxed in favour of other municipalities where they have officially declared places of permanent residence (and registered addresses). At the same time, such disadvantaged municipalities, at least in the case of entrepreneurs, are necessarily involved in building infrastructure and creating the conditions for achieving and securing taxable income. We consider such circumstances to be unfair and suggest that the redistribution of shared taxes was adjusted. The strengthening of local infrastructures of these problematic regions becomes a very important element for increasing their competitiveness (Koutský et al. 2011).

In our opinion, it is possible to use the electronic record of sales system for this purpose, thanks to which it is possible to determine the place of record of sales (according to the cadastral area), at least in the case of cash payments. Simultaneously, we propose to renew the obligation to record also sales made using payment cards. However, everything must be done in such a way that entrepreneurs do not incur additional administrative burdens, and that it enables them – in a figurative sense – to contribute to the activities of the municipalities in which they do business. We have shown how the electronic record of sales system can be used for automated calculations in the redistribution of shared taxes. Our arguments might support the legislators in re-introduction of the recently abolished system that effectively limits tax evasion in sale recording (Marethová & Snopková 2018; Pisková & Semerád 2022).

This change would benefit different types of entities and, as a result, increase the pressure on improving business environment. The beneficiaries would primarily be the municipalities that would be entitled to a fair proportion of the shared taxes (e.g. Marková 2007). The municipality would thus not only have an incentive to create better conditions for citizens and support their entrepreneurial activities, but would also newly receive funding for this.

The citizens of the municipality (customers) – who would know how their taxes are used – would be the second beneficiary (Otavová et al. 2014). It is therefore in the general interest of the citizens that the revenues flowing into the public budget are not reduced as they will be further used for activities in the public interest (Havlíček 2021). Based on our proposed solution, citizens would also know that when they buy from a local entrepreneur, the municipality will receive a portion of their spending, a kind of an (indirect) financial support. Tax assignment systems are driven by a similar principle. It is a mechanism by which
taxpayers can decide how to use part of the taxes they pay. As a side benefit, this would also increase the motivation of buyers to take a tax receipt from the entrepreneur. The Ministry of Finance of the Czech Republic sought to do this by introducing a receipt lottery, but it was stopped in spring 2020 in connection with the COVID-19 pandemic. Our proposed solution, in addition to a fairer redistribution of revenue to municipal budgets, could also increase the tax literacy of residents who would know how the state obtains and uses the taxes collected (Pham et al. 2020). This would allow them to require proper registration of the sales, e.g. by taking a (tax) receipt. The entrepreneurs themselves would create the third group of beneficiaries; they would support the municipality in which they have their activity by property taxation of their income. This, according to Sheth (2020), should be a part of doing business. The question is whether entrepreneurs would be interested in supporting the local community (Lähdesmäki & Suutari 2011). It would be particularly interesting to observe the behaviour of entrepreneurs who have had a negative attitude towards sales recording (Sejkora & Mlazovsky 2021). When registering sales they would be under a permanent supervision of their neighbours and fellow citizens, which may have a greater effect on tax collection than anonymous supervision by the local tax administrator. However, they could also use this to gain a better reputation with their customers and clients by declaring that they pay their taxes properly. Conversely, it appears that if firms tried to evade paying taxes, they will put themselves at risk of negative public reactions in case of disclosure (Hillenbrand et al. 2019).

Although the main assumption of the proposal is that all calculations and matching of payments will be done automatically, similarly as it is in the case of the so-called control statement, the administrative complexity for some types of entrepreneurs cannot be ignored. The application of stationary payment terminals and payer’s cash registers is possible for entrepreneurs who have premises registered at a specific address. Some types of entrepreneurs, such as craftsmen or mobile shops (e.g. market stalls), can be expected to have only one registered establishment. The certificate will thus be registered to the registered address of the entrepreneur or their brick-and-mortar shop. However, the actual sale or provision of services can take place anywhere in the Czech Republic.

For these businesses, switching the cash register (except for the IP address of the payment terminal) would increase the administrative burden and could discourage them from recording sales properly. It would also be in contrary to Adam Smith’s canons of taxation. In such a case, let the merit of the sales be given to the municipality according to the establishment in the generated electronic sales record certificate. However, if the entrepreneur will have an establishment with a fixed address, which may be, for example, accommodation and restaurant establishments, retail and wholesale outlets, etc., then nothing prevents the application of the proposed changes with an impact on the redistribution of shared taxes between municipalities and regions.

However, our study is also burdened by certain limitations that we are aware of.

(i) Our proposal to use the record of sales as a compulsory system and extend this obligation to all entrepreneurs would cause a society-wide discussion on the administrative costs of complying with this obligation. While the larger businesses normally use some kind of cash register connected to state-of-the-art accounting software for their entrepreneurial activities, the technical equipment may be more limited in the case of freelancers, craftsmen or farmers. Convincing them to acquire more modern means of communication would not be easy.

(ii) This is especially the case when emphasizing the benefits that - by supporting the municipality by recording sales - they can get a better name with their customers (Lähdesmäki & Suutari 2011; Sheth 2020). Obviously, they can achieve a similar effect by, for example, making a monetary or non-monetary donation. If we take inspiration from other countries, there is room to introduce the tax assignment system in the Czech Republic as well. This way the entrepreneur would only need to provide the identifier of the municipality(-ies), and the share determined by law would be redistributed to that municipality(-ies). Administratively, it would be much easier. But we would like to argue by saying that this portion would be reallocated only based on the actually declared sales. The state would thus lose the possibility to verify whether this is the maximum possible allocation (of all taxable income subjected to bookkeeping).

(iii) We force businesses to record card payments, when it can be argued that they leave a digital trail themselves and can be re-traced. Here, however, we see the electronic record of sales system as a comprehensive solution that also serves the tax redistribution.
(iv) We are aware of the fact that not all sales are paid for in cash or by payment cards. Large amounts of sales can only be paid by a bank transfer; the reasons include the maximum daily limit for a single transaction (approx. EUR15,000). By definition, our proposal cannot affect sales received in this way, as there is no instrument that would unambiguously identify the place of payment receipt. Moreover, the electronic record of sales system must still be seen primarily as a tool to help fight tax fraud, which was the main reason for its introduction.

(v) We are also aware of the negative environmental impact of printing documents that nobody will take over from the entrepreneur because they are not needed. The society-wide costs are not only to print paper; other inputs consumed are also involved and include e.g. energy. However, this obligation can be replaced by a more up-to-date form of electronically recorded documents, e.g. by uploading them to a loyalty card or a mobile application.

6 Conclusions

We have shown that the electronic record of sales system is an effective tool that not only enables real-time control and monitoring of businesses, which generates the correct amount of tax revenue, but also facilitates the public administration to redistribute shared taxes more fairly among municipalities and regions. Such a move is desirable and was unfeasible before the introduction of the electronic record of sales due to an administrative complexity. We consider the recent termination of the electronic record of sales system to be an out-of-concept political decision, as no alternative has been proposed. There is a question of how the market will react on cancelation of this obligation.

The electronic record of sales system certainly has a much greater potential than the public administration has used so far. The possibility of a fairer redistribution of shared taxes is one of important benefits that the government should take into account when deciding whether to re-introduce it since, at present, there is no such multifunctional tool that could improve the functioning of markets, make the control of entrepreneurs more efficient (in the case of receipt of sales), reduce tax evasion based on objective findings, and at the same time be used as a side effect in the redistribution of taxes according to the place of receipt of payment.

Footnotes

1 For more information on the operation itself, see e.g. Dušek (2020); Financial Administration of the Czech Republic (2016, 2021, 2022); Radván and Kappel (2015).

References


