

EFFICIENCY OF ROAD TAX IN THE TAX SYSTEM OF THE CZECH REPUBLIC

B. Andrlík

Received: November 30, 2011

Abstract

ANDRLÍK, B.: *Efficiency of road tax in the tax system of the Czech Republic*. Acta univ. agric. et silvic. Mendel. Brun., 2012, LX, No. 2, pp. 17–24

The paper deals with the efficiency of road tax in the tax system of the Czech Republic, focusing on the administrative costs of taxation on the timeline 2005 to 2009. It contains a theoretical definition of tax efficiency, and describes the types of costs connected with taxes. From this perspective it focuses on quantifying the direct administrative costs of road tax. Direct measurement of administrative costs is done by using the method called the method of recounted worker which classifies employees of local tax authorities in separate groups and assigns each group a specific number of employees for each reference road tax using the conversion factors.

Then it defines the total expenditure of local tax authorities using the coefficients for a particular monitored tax and it provides administrative costs as a percentage of road tax receipts. It can be said from obtained results that direct administrative costs of road taxes are higher, especially if the Ministry of Finance (2004) states that the average direct administrative costs of the tax system in the Czech Republic reach about 2%. The results achieved in individual surveyed years are for road tax in relation to the reported average value of direct administrative costs of the tax system in the Czech Republic, increased on average by about 1.96 percentage point. Finally, the results of measurements indicating the proposed amendment are discussed.

road tax, property tax, direct administrative costs, Czech Republic

Road tax is classified as property taxes in the Czech Republic, although, for example, OECD classification counts it as excise duty. From this perspective also professional literature does not always consider road tax as property tax, or at least as the typical property tax. Boněk (2001) says over all these aspects of classification of the road tax, it is classified as property tax, as it is similar to other property tax, mainly thanks to the used tax method. Generally it can be defined that the purpose of road tax is to tax use of roads in the territory of Czech Republic by road vehicles. Within this basic thesis, however, there are limitations within the scope of taxes only on those vehicles which are used or intended for providing the economic activity of business entity. Road tax is regulated by legal norm, which is the Act No. 16/1993 Coll. on road tax for as 17 already performed amendments (the ART). Lawmaker sought to solve the burning problem of need to obtain funds for the maintenance and development of road infrastructure in the Czech

Republic by this legal form. However, it is obvious that the fiscal income of 5 100 million CZK (value of the tax year 2010) is insufficient in relation to this goal. Possible collection reserve of road tax can be seen in the definition of the subject of tax. Subject to tax under § 2 ART are road motor vehicles and their trailers when they are operated and registered in the territory of Czech Republic, and when they are used for business or other self-employment or in direct connection with it. Reserve of collecting income can be seen, given the growing number of registered passenger vehicles, just in the limitation of the scope of tax, particularly for passenger vehicles, only to vehicles used for business. The introduction of taxation of all vehicles regardless of the criterion of business would lead to an increase in revenues of public budget, more precisely in State Fund of Transport Infrastructure, which is beneficiary of gross gain of this tax, according to § 5 of Act No. 243/2000 Coll. on budgetary determination of taxes, as amended.

Taxation of motor vehicles should meet the requirements whose fulfillment assume the imposition of taxes. Šíroký (2008) summarizes the requirements put on a good tax system and individual taxes in four basic principles, namely the principle of efficiency, administrative simplicity, flexibility and fairness, and highlights particularly the principle of efficiency and fairness. Names of the principles may vary in the literature, such as Peková (2008), but remain mostly content and semantically almost identical, see for example, Musgrave and Musgrave (1994).

The subject of this paper is just to measure the effectiveness of collection of road tax as one of the primary principles of good tax systems. Tax collection means, for the individual participants in the whole process of collection and administration of taxes, real harm representing to taxpayers payment of taxes and other costs caused by the tax system, which must spend during fulfillment of their tax liabilities. By collection of tax, the actual state (tax authority), does not gain net income, which would correspond to a total collection of taxes, but tax revenues are reduced by the amount of costs necessary to the functioning of the entire system of tax collection and administration. This creates a clear disproportion between the amount of collected tax and the amount, which can be used by public budget for public interest.

The aim is, of course, to seek to minimize the difference between these two angles of look at the collected amount of tax. The purpose of good fiscal policy of the state, as part of national economic policy, is the effort for efficiency of collection of individual components making up the tax system of the state. From this perspective, in the Czech Republic there is highly debated issue of the effectiveness of collection of all property taxes, where there are different views on the abolition or radical modifications of these taxes on the political scene. The low yields associated with high direct administrative costs then become the strongest arguments speaking for the modification or abolition of individual components of property taxes including road tax.

MATERIAL AND METHODS

The aim of this paper is to measure direct administrative costs of taxation and according to quantified results to discuss possible direction of developments in the field of road tax applicable in the tax system of the Czech Republic. Processing of individual calculation is made on the basis of defined methodology of calculation of direct administrative costs based on the method of recounted worker. Collection of road tax, tax administration costs (current and investments costs) and the number of employees further distributed according to individual performed activities are consider to be input data, necessary for examining the direct administrative costs of road tax. Timeline

for the analysis of direct administrative costs from 2005 to 2009 is chosen deliberately, for the following reasons. On the one hand, the outputs of this paper follow the study conducted by Pudil *et al.* (2004). On the other hand, the unavailability of the currently processed information supporting material necessary to perform the defined method of measurement of direct administrative costs.

Source data about tax collection and total costs of tax administration are obtained from annual reports published by the Ministry of Finance of the Czech Republic. Information from research studies, conducted both in the Czech Republic and within international comparisons in this field, which extends the text also on the international level of measuring administrative costs of taxation, are also presented when processing this paper. Another important source of information is the internal materials of the Ministry of Finance of the Czech Republic, which are provided for the preparation of this paper (data on the number of staff of local tax authorities). The text used standard methods of scientific work, basic mathematical and statistical methods.

RESULTS AND DISCUSSION

It cannot therefore be consider only own collection in terms of profitability of road tax, but it is also necessary to quantify the efficiency of collection, because the functioning of any tax system bears costs (expenses) on current and investment activities of individual tax authorities. According to Andrlík (2010a) costs of tax authorities reduce the amount of tax collection, that's what the state (public budget) finally gets by tax collection. These costs are known as direct costs of tax authority. In addition to these costs, there are also costs for taxpayers known as compliance costs of taxation and excessive tax burden, which arises in connection with a violation of conditions for efficient use of resources. Kubátová (2003) states, those taxes, in their essence, present a transfer of funds from citizens and businesses to public budgets. The problem of the whole public sector is its tendency to inefficiency. Efficiency of administration of tax collection, which have to ensure not only smooth stable revenues of public budgets, including sanctions against tax debtors, but also respect for justice and fairness in relation to the taxpayers and payers of individual taxes significantly affect tax revenue (income) to public budgets. The actual transfer however does not go without additional costs, which have a negative effect and causes inefficiency. Costs are so inseparably connected with the administration of taxes, there would not be even costs without the existence of taxes. According to David (2009) a relevant indicator in the evaluation of taxes must always be the cost of their collection. It is not therefore questionable how to reduce cost, but rather how to compress it to a minimum level. The aim of modern tax systems is to reduce inefficiencies in the lowest possible level.

Historically, Adam Smith (2001) already presented requirement for efficiency of the tax system in his tax canons or Musgrave and Musgrave (1994) in formulating their requirements for a good tax system. Tax theories distinguish in connection with tax costs:

- direct and indirect administrative costs,
- excessive tax burden.

Pudil *et al.* (2004) also address in detail examination of the administrative costs of taxation. They define the following aspects of assessing administrative costs of taxation:

- time perspective,
- aspect of impact on the relevant economic sector,
- aspect of impact on the appropriate government level,
- aspect of type of office of public administration, where costs arise,
- chronology of creation of tax expense (an analogy with the continuity of each component of the budgetary process),
- aspect of the structure of administrative costs.

It shows six possible aspects of examining administrative costs. In another investigation, the text will in detail deal with the exploration of administrative costs according to impacts on the relevant economic sector. Within this perspective, the administrative costs will be classified in administrative costs which will be carried only by the public sector (referred to as direct administrative costs) and administrative costs, which affect the private sector (indirect administrative costs). Direct administrative costs include costs for the identification and collection of tax, which cannot be performed without personnel and equipment. Typical direct administrative costs are state costs for administration of applied tax system, records of taxpayers, collection itself of tax liabilities and, finally, for control of compliance with legal standards. Monitoring compliance with legal norms is related in particular to detecting those taxpayers who deliberately seek ways to avoid paying taxes – on the edge of the law “by legal or illegal manner”. Direct administrative costs are increased especially with the higher complexity of the tax system of particular country resulting from a large number of different taxes, from the number of tax rates, from application of various exemptions or exceptions for certain groups of taxpayers and ultimately from frequency of advance payments or payments of tax liability itself. Kubátová (2003) states that direct administrative costs often tend to grow excessively and she sees causes in fact, that the public sector is not controlled by the market, which would force it to the efficient allocation of resources (she says that it is providing services in the tax field without direct competition). Stiglitz (1997) deals with the identification of specific causes of inefficiency of public sector and defines two basic causes of inefficiency. He says that the public sector does not have to worry about bankruptcy and competition.

Musgrave and Musgrave (1994) suggest that these activities represent an important public good, and like all public goods, they should be ensured effectively and also they point out that required quality of this public good should be offered at minimal cost. The authors also define the criteria for effective tax administration to which open possible discussion:

- to determine the appropriate techniques and administrative procedures (involvement of greater amount of computer technology leads to a reduction in costs),
- to determine appropriate procedures for tax audits (determining how deep tax inspection should go to, frequency of tax audits and the resulting assessment of additional collection with costs),
- to determine whether to ensure compliance of tax laws by taxpayers by higher frequency of inspections and thereby to increase probability of disclosure of tax evasion or to ensure compliance of tax laws by setting high penalties (second introduced procedure is certainly less expensive),
- to decide how complex the tax system will be, the more complex tax system, the faster grow in direct and indirect administrative costs,
- to chosen system of tax collection. It is obvious that a centralized system of collection of tax liabilities will be less expensive than a decentralized system, which leads to duplication of the administrative apparatus.

Indirect administrative costs are associated with additional costs of private sector, which carry a burden of the tax burden, known as compliance costs of taxation. They represent the cost of taxpayer, for example for filling in tax returns or payment of given operation to tax advisors, records of supporting documents for the correct determination of taxes, study of tax laws, etc.

- costs of taxpayers (time, fees to external suppliers, staff costs, technical equipment, space, etc.),
- costs resulting from the collection of taxes earlier than there is the economic transaction (cash flow costs). This situation occurs only when the entity responsible for administering the tax, has to pay this tax, without obtaining actually tax base until the moment of payment (e.g. collection of tax liability in the case of VAT),
- “psychic costs”, which in some cases may reach significant values. These costs can also be seen in the direct administrative costs.

Kubátová (2003) observes that quantifying these costs is difficult or even impossible. The reason is that these costs cannot be somehow statistically monitored and it is possible to only estimate how much time taxpayers spend over the fulfillment of their tax liabilities. Even in this case is certainly true that the costs increase with the complexity of the tax system. Musgrave and Musgrave (1994) report that the compliance costs of taxation at income tax, according to research conducted in the U.S. brought an estimate, that indirect administrative

costs represent approximately 7% of the volume of collected taxes. An important international study annually processed by the World Bank and PricewaterhouseCoopers deals with complexity of tax systems. PricewaterhouseCoopers (2011) states that from the study of World Bank and PricewaterhouseCoopers "Paying Taxes 2011 – The global picture" regarding the difficulty of the payment of taxes and total tax burden results that Czech Republic has one of the most demanding tax systems in the world. Taxpayer in the Czech Republic must make on average 12 tax payments a year while he spends 557 hours a year by filling out tax returns and fulfilling all tax liabilities (there was an improvement of this criterion of international comparisons compared to the previous calendar year 2010 and it is reduction by 56 hours from the original 613 hours). Spent time on tax liabilities ranks the Czech Republic on 167th place from 183 surveyed countries from all over the world. In terms of comparison only within the European Union, Czech Republic holds the penultimate place (26th place), only Bulgaria is worse (average time spent over tax liabilities is 171 hours per year in the European Union). Maldives, with 0 hour per year, are at the first place in an international comparison and at the last place there is Brazil with 2,600 hours per year. In the field of indirect administrative costs, research study entitled "Analysis of costs of private sector caused by tax system" from December 2008, authors Pavel and Vítek (2008) is elaborated. This study is based on a research sample of enterprises and achieved results are applied to an entire sector. It notes that compliance costs of taxation are approximately 40 bln. CZK, i.e. 3.9% of the assessed tax, for whole Czech tax system.

Excessive tax burden is the cost arising from the loss of efficiency of functioning of the market mechanism due to the implementation of taxes. It is connected with distortion of taxes as it affects the behavior of the economically active population and gives rise to inefficiency in the economy, as a consequence of performed substitution. Smith (2001) in the fourth canon of taxation states that *any tax should be thought through and developed so that residents pay as little as possible over how much tax actually brings to the Treasury* and also notes that against the application of this principle of the tax system works, that *tax may prevent business of population and can discourage population from devoting to certain types of professions that could feed and employ a lot of people. Because population must pay this tax, some sources, which would relieve them payment of tax, are decreasing or even destroying.* From this perspective, factor causing inefficiencies in the tax system is just an excessive tax burden.

Kubátová (2003) states that any change in taxes affects the behavior of individuals who seek for the highest benefit and lowest tax burden and as a result of this behavior, they are trying to avoid tax liabilities. A specific legal instrument to tax avoidance is a substitution involving the replacement of production or consumption of newly taxed goods by

untaxed good. A typical example of such behavior is the substitution of free time at the expense of labor. She stresses, however, that it is possible to avoid tax by changing behavior, but it is not possible to avoid damage caused by tax. Musgrave and Musgrave (1994) observe that the effective tax policy should minimize excessive tax burden. The easiest way how to avoid this inefficiency is that the entire tax revenue will be based on the poll tax when everyone pays the same. This procedure would lead to removal of excessive tax burden, but it is unacceptable in terms of the principle of tax fairness. For this reason, fair taxation must reflect the taxation according to economic activity, but it necessarily distorts economic choices and it leads to excessive tax burden. Author and Kubátová (2003), however, believe that the poll tax considered as not causing distortion and not causing substitution is currently not entirely correct. Taxpayers can even avoid poll tax by moving out from tax jurisdiction where the tax is applied and excessive tax burden then represents e.g. nostalgia for his native country. Tax theory seeks to find solutions, how to formulate tax system to ensure maximum efficiency of the tax system and thus minimize the impact of excessive tax burden. Stiglitz (1997) states that one of the possible approaches is the application of thesis applied in the theory of optimal taxation, which is called the second-best. The essence of this approach is thesis that the two small taxes are in terms of efficiency better than one big tax, because the excessive tax burden is growing faster than income. More specifically it notes that it increases with the square of growth of the tax. In terms of effectiveness, these two smaller taxes are always better than one big tax and they lead to lower overall excessive tax burden. Kubátová (2003) or Široký (2008) deal with specific relationship of excessive tax burden, such as the elasticity of supply and demand, and Pudil *et al.* (2004) deal with measurement issues of excessive tax burden.

The measurement of direct administrative costs, according to Pudil *et al.* (2004), in the case of the tax administration, can be performed using the method of recounted worker, which is based on the distribution of workers of local tax authorities according to their activities and the construction of conversion coefficients to identify costs associated with the collection of specific taxes. Methodology for calculating administrative costs can be expressed using simple equations and relationships. Defined relationships are given for calculation of direct administrative costs of road taxes, but when editing indexes they are applicable to all taxes in the tax system in the Czech Republic. The distribution of employees of local tax authorities according to taxes and activities can be defined by:

$$TE_{to} = DE_{pit} + DE_{cit} + DE_{vat} + DE_{cd} + DE_{rt} + DE_{ret} + DE_{it} + DE_{gt} + DE_{rett} + DE_{na} + IE_{ta} + IE_o, \quad (1)$$

where:

TE_{to}total number of employees of territorial financial authorities,

DE_{pit} ...number of employees directly involved in the collection of personal income tax,

DE_{cit}number of employees directly involved in collection of corporate income tax,

DE_{vat} ...number of employees directly involved in the collection of value added tax,

DE_{ed}number of employees directly involved in collection of excise duties,

DE_{rt}number of employees directly involved in the collection of road tax,

DE_{ret}number of employees directly involved in the collection of real estate tax,

DE_{it}number of employees directly involved in the collection of inheritance tax,

DE_{gt} ...number of employees directly involved in the collection of gift tax,

DE_{rett}number of employees directly involved in the collection of real estate transfer tax,

DE_{na}number of employees directly involved in non-tax activities,

IE_{ta}number of overhead employees of tax activities,

IE_onumber of overhead employees undifferentiated.

Conversion coefficients are used in order to determine the number of employees of tax authority involved in the collection of a specific tax liability. At first, coefficient $K1_{rt}$ is defined to determine the number of overhead employees of tax activities involved in the administration of road tax. Calculation of $K1_{rt}$ is given by the ratio of employees involved directly in the administration of road tax in comparison to employees involved directly in the administration of other taxes.

$$K1_{rt} = DE_{rt} / (DE_{pit} + DE_{cit} + DE_{vat} + DE_{ed} + DE_{ret} + DE_{dn} + DE_{it} + DE_{gt} + DE_{rett}) \quad (2)$$

Determination of number of employees who are involved in administration of road tax, including overhead employees of tax activity involved in collection of road tax (PE_{rt}) is defined by relation:

$$PE_{rt} = DE_{rt} + K1_{rt} \times IE_{ta} \quad (3)$$

Another coefficient is $K2_{rt}$, which is used to determine the number of overhead employees

undifferentiated involved in the administration of road tax. $K2_{rt}$ coefficient is defined by relation which uses results calculated by relation (3):

$$K2_{rt} = PE_{rt} / (PE_{pit} + PE_{cit} + PE_{vat} + PE_{ed} + PE_{rt} + PE_{ret} + PE_{it} + PE_{gt} + PE_{rett} + DE_{na}) \quad (4)$$

Determination of total number of employees who are involved in collection of road tax (TE_{rt}) is defined by relation:

$$TE_{rt} = PE_{rt} + K2_{rt} \times IE_o \quad (5)$$

The last designed coefficient is $K3_{rt}$, which expresses the ratio of the total number of employees involved in the collection of road tax compared to the total number of employees of local tax authorities and is used for conversion of costs attributable to road tax.

$$K3_{rt} = TE_{rt} / TE_{to} \quad (6)$$

Total costs on road tax (TC_{rt}) are defined by relation:

$$TC_{rt} = K3_{rt} \times CC_{to} + K3_{rt} \times TNC_{to} \quad (7)$$

where:

CC_{to} current costs of local tax authorities,

TNC_{to} ... investment costs of local tax authorities.

The actual calculation of direct administrative costs of road tax is given by the ratio of total costs of road tax compared to collection of road tax (TR_{rt}) given by:

$$AC_{rt} = (TC_{rt} / TR_{rt}) \times 100, \quad (8)$$

where:

AC_{rt}administrative costs of local tax authorities as a percentage of collection of road tax.

According to provided documents by the Ministry of Finance of the Czech Republic on the specification of employees of local tax authorities according to activities, employees of local tax authorities are divided into groups defined by the relation (1) and the resulting distribution used in calculating the direct administrative costs are shown in Tab. I.

Based on the defined methodology of the calculation of direct administrative costs of taxation and the documents listed in Tab. I there

I: Division of number of workers of the local tax authorities in individual years

| Item | Number of workers in individual year | | | | |
|---------------------------|--------------------------------------|-----------|-----------|-----------|-----------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| DE_{pic} to DE_{rett} | 4 994.11 | 4 991.09 | 5 055.57 | 5 074.53 | 5 024.62 |
| DE_{na} | 3 459.51 | 3 530.33 | 3 792.56 | 4 030.68 | 4 029.99 |
| IE_{ta} | 6 096.90 | 6 270.81 | 5 825.57 | 5 473.31 | 5 480.98 |
| IE_o | 916.90 | 899.59 | 868.35 | 819.28 | 815.78 |
| Total | 15 467.42 | 15 691.82 | 15 542.05 | 15 397.80 | 15 351.36 |

Source: own calculations according to internal sources of MF ČR

are calculated the following results of coefficients for conversion of costs K3 for road tax in individual surveyed years listed in Tab. II. The results show that the trend in road tax is a gradual reduction in the number of employees involved in the administration of this tax (except for the calendar year 2006, when there was a slight increase).

It is necessary to define the amount of collection of road tax on a defined timeline from 2005 to 2009 and the amount of investment and current costs in individual years for the actual calculation of the direct administrative costs of road tax. Collection of road tax is given in Tab. III and costs of local tax authorities arising from Tab. IV.

Amounts of directive administrative costs for road tax are calculated in the individual researched years, on the basis of defined methodology of calculation of direct administrative costs of taxation and information given in Tab. II, Tab. III and Tab. IV.

Tab. V represents the results of measurement of direct administrative costs based on the method of recounted worker, which classifies employees of local tax authorities into groups and assigns a specific number of these workers to monitored road tax using the conversion coefficients. Then it defines the total costs (current and investment costs) using the coefficients for road tax, and establishes administrative costs as a percentage of collection of road taxes. It can be said from obtained results that direct administrative costs of road taxes are

higher, especially if the Ministry of Finance (2004) states that the average direct administrative costs of the tax system in the Czech Republic reach about 2%. The given results clearly show that the collection of referred tax in the monitored period is sufficient to cover the costs associated with their collection and administration. Results obtained by measurements show that from the research conducted by the authors Pudil *et al.* (2004) there was a significant improvement, given also the fact mentioned in Tab. II, which shows that since 2006, there has been gradually reduction in the number of employees involved in the administration of road tax. In 2009, however there is a slight increase in direct administrative costs by 0.89 percentage points in relation to reducing volume of collection of road tax due to change of ART in § 6, and by introducing reduction on tax rates depending on lasted period from the date of first registration. This reduction in basic tax rate is designed to run of 36-month cycle, when reduction in the tax rate in amount of 48% is provided during the first 36 months, reduction in tax rate in amount of 40% is provided for the next 36 months and reduction in tax rate in amount of 25% is provided for another 36 months. The introduction of this reduction in basic tax rates in effect resulted in reduction of volume of collection in 2009, when it is possible to identify the reduction in collection compared to the tax period of 2008 by 20.09%. Interest of lawmakers to support ecological

II: Coefficients for conversion of the cost of local tax authorities

| Item | K3 coefficients in individual years | | | | |
|----------------|-------------------------------------|--------|--------|--------|--------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| K ₃ | 0.0553 | 0.0560 | 0.0526 | 0.0495 | 0.0492 |

Source: own calculation

III: Collection of road tax in millions of CZK

| Item | Collection of road tax in individual years | | | | |
|----------|--|-------|-------|-------|-------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Road tax | 5 191 | 5 428 | 5 915 | 6 002 | 4 796 |

Source: Česká daňová správa (2010b)

IV: Costs of local tax authorities in the years 2005 to 2009 in thousands CZK

| Item | Costs of local tax authorities | | | | |
|------------------|--------------------------------|-----------|-----------|-----------|-----------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Investment costs | 412 464 | 293 798 | 335 421 | 488 791 | 250 757 |
| Current costs | 6 513 866 | 6 941 058 | 7 300 002 | 7 440 034 | 7 732 931 |
| Total | 6 926 330 | 7 234 856 | 7 635 423 | 7 928 825 | 7 983 688 |

Source: Česká daňová správa (2010a)

V: Administrative costs of tax administration in the years 2005–2009 in %

| Items | Direct administrative costs | | | | |
|----------|-----------------------------|--------|--------|--------|--------|
| | 2005 | 2006 | 2007 | 2008 | 2009 |
| Road tax | 4.02 % | 4.05 % | 3.71 % | 3.57 % | 4.46 % |

Source: own calculation

tax reform consisting in increasing the interest of taxpayers for newer vehicles was the motive for the implementation of the referred reduction in tax rate. Acquisition of newer vehicles is generally seen as acquisition of more ecological vehicles that meet stricter emission limits, and thus produce fewer pollutants into the atmosphere, especially CO₂.

CONCLUSION

Author's measurement is accomplished for the direct administrative costs, and so for road tax in the Czech Republic. Method of the recounted worker, which is defined in detail in the text, is used method for determining the direct administrative costs of referred property tax. Own results achieved in individual surveyed years are for road tax in relation to the reported average value of direct administrative costs of the tax system in the Czech Republic, increased on average by about 1.96 percentage point. At the same time it should be noted that in comparison with other property taxes (real estate tax, inheritance tax, gift

tax and tax on real estate transfer), the road tax, in terms of direct administrative costs, is the least expensive. This claim is based on the conclusions made by independent measurements, where the values of direct administrative costs, particularly for inheritance tax and gift tax exceeds the limit of 100% and their collection is from this perspective losing for the local tax authorities. Building on the achieved results of measurement of road tax is desirable to consider the change leading to reduction of administrative costs, especially in relation to the results of research conducted by the Ministry of Finance of the Czech Republic in 2004, where an average amount of direct administrative costs was set on 2% for the Czech Republic. It is possible to consider mainly the removal of the above mentioned reduction in basic rate in road tax and so decrease collection fall identified in the tax year 2009.

The future and further direction of road tax in the Czech Republic depends mainly on the will of political parties that should definitely deal with the question of cost of tax collection.

SUMMARY

This paper deals with the issue of effectiveness of the tax system and definition of three basic components that cause inefficiencies of the tax system – direct administrative costs, indirect administrative costs and excessive tax burden. It defines the basic characteristics of all given components of cost of tax system and is dedicated in detail to the direct administrative costs. For indirect administrative costs also known as incremental costs, the results of measurements carried out research studies both abroad and in the Czech Republic. Own author's measurement is accomplished for the direct administrative costs, and so for road tax in the Czech Republic.

Method of the recounted worker, which is defined in detail in the text, is used method for determining the direct administrative costs of referred property tax. The results achieved in individual surveyed years are for road tax in relation to the reported average value of direct administrative costs of the tax system in the Czech Republic, increased on average by about 1.96 percentage point. At the same time it should be noted that in comparison with other property taxes (real estate tax, inheritance tax, gift tax and tax on real estate transfer), the road tax, in terms of direct administrative costs, is the least expensive. This claim is based on the conclusions made by independent measurements, the results are listed in Andrlík (2010b), where the values of direct administrative costs, particularly for inheritance tax and gift tax exceeds the limit of 100% and their collection is from this perspective losing for the local tax authorities. The future and further direction of road tax in the Czech Republic depends mainly on the will of political parties that should definitely deal with the question of cost of tax collection.

Acknowledgements

This text is supported by the research project "The Czech economy in the process of integration and globalization and development of the agrarian sector and service sector in the new conditions of European integrated market", identification code VZ: 62156 48904.

REFERENCES

- ANDRLÍK, B., 2010a: Vývoj inkasa transferových daní v letech 1993 až 2009 v České republice. *Acta univ. agr. et silv. Mendeliana Brunensis*. sv. LVIII, č. 6, s. 21–32. ISSN 1211-8516.
- ANDRLÍK, B., 2010b: Administrativní náklady majetkových daní v České republice. *Acta univ. agr. et silv. Mendeliana Brunensis*. sv. LVIII, č. 6, s. 13–20. ISSN 1211-8516.
- BONĚK, V., a kol., 2001: *Lexikon – daňové pojmy*. 1. vyd. Ostrava: Sagit, 626 s. ISBN 80-7208-265-5.
- DAVID, P., 2009: Selected aspects of taxation of cigarettes in the EU member states. *Agricultural Economics: Zemědělská ekonomika*. sv. 55, č. 1, s. 40–50. ISSN 0139-570X.

- ČESKÁ DAŇOVÁ SPRÁVA, *Výroční zprávy a související dokumenty* [online]. 2010a, [cit. 2011-10-02]. Dostupné z: <<http://cds.mfcr.cz/cps/rde/xchg/cds/xsl/325.html?year=0>>.
- ČESKÁ DAŇOVÁ SPRÁVA, *Přehled vývoje inkasa uvedených daní v ČR v letech 2004 až 2010* [online]. 2010b, [cit. 2011-10-05]. Dostupné z: <http://cds.mfcr.cz/cps/rde/xchg/cds/xsl/ceska_danova_sprava_7997.html?year=0>.
- KUBÁTOVÁ, K., 2003: *Daňová teorie a politika*. 3., přepracované vyd. Praha: ASPI, 264 s. ISBN 80-86393-84-7.
- MF ČR, *Zdanění příjmů a majetku v České republice – výstup expertní skupiny* [online]. 2006, [cit. 2011-10-13]. Dostupné z: <http://www.mfcr.cz/cps/rde/xbcr/mfcr/Vystupni_material_expertni_skupiny_pdf.pdf>.
- MUSGRAVE, R. A., MUSGRAVEOVÁ, P. B., 1994: *Veřejné finance v teorii a praxi*. 1. vyd. Praha: Management Press, 946 s. ISBN 80-85603-76-4.
- PEKOVÁ, J., 2008: *Veřejné finance*. 4. vyd. Praha: ASPI, 580 s. ISBN 978-80-7357-358-4.
- PricewaterhouseCoopers. *Paying Taxes 2011 – The global picture* [on-line]. 2011, [cit. 2011-10-5]. Dostupné z: <<http://www.pwc.com/gx/en/paying-taxes/pdf/paying-taxes-2011.pdf>>.
- PUDIL, P., VYBÍHAL, V., VÍTEK, L., PAVEL, J. a kol., 2004: *Zdanění a efektivnost*. 1. vyd. Praha: Eurolex Bohemia, 158 s. ISBN 80-86861-07-4.
- SMITH, A., 2001: *Pojednání o podstatě a původu bohatství národů*. 6. vyd. Praha: Liberální institut, 986 s. ISBN 80-86389-15-4.
- STIGLITZ, J. E., 1997: *Ekonomie veřejného sektoru*. 1. vyd. Praha: Grada Publishing, 664 s. ISBN 80-7169-454-1.
- ŠIROKÝ, J. a kol., 2008: *Daňové teorie s praktickou aplikací*. 2. vyd. Praha: C. H. Beck, 301 s. ISBN 978-80-7400-005-8.
- VÍTEK, L., PAVEL, J., *Analýza nákladů soukromého sektoru vyvolaných daňovým systémem* [on-line]. 2008, [cit. 2011-10-12]. Dostupné z: <http://www.mfcr.cz/cps/rde/xbcr/mfcr/Analýza_nakladu_soukr_sektoru_pdf.pdf>.
- Zákon č. 16/1993 Sb., o dani silniční, ve znění jednotlivých novelizací.
- Zákon č. 243/2000 Sb., o rozpočtovém určení daní, ve znění pozdějších právních předpisů.

Address

Ing. Břetislav Andrlík, Ph.D, Ústav účetnictví a daní, Mendelova univerzita v Brně, Zemědělská 1, 613 00 Brno, Česká republika, e-mail: bretislav.andrlík@mendelu.cz