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COLLECTION OF ROAD TAX IN THE YEARS FROM 1993–2011 IN THE CZECH REPUBLIC

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Abstract

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The article deals with the position of road tax in the tax system of the Czech Republic. It focuses on the analysis of road tax collection in the years 1993–2011 and the determination of reasons for change in the collection amount in the individual monitored years, especially in connection to amendment of the basic law, which is law No. 16/1993, Road Tax Code. Within the frame of the analysis not only the absolute collection of road tax is quantified and discussed, but also basic statistic indicators are calculated, e.g. growth rate or absolute increase of road tax collection. Part of the paper deals with the road tax yield. The paper judges the success rate of the tax administrator in collecting the same amount of financial means which was ordered by the tax administrator for the particular tax period. In the next part the share of road tax collection on the whole tax collection in the Czech Republic is measured and discussed on the determined time axis.

road tax, property tax, tax collection, Czech Republic

In the Czech Republic tax system, the road tax in the current form has been applied since the origin of the new tax system grounded in the law No. 212/1992, Tax System Code, valid from January 1st 1993. The conception and structure of this tax system model corresponds to the tax systems of developed countries' economics and it has starting position in classification to direct and indirect taxes. The road tax comes under property taxes in the Czech Republic system, whereas according to OECD classification it comes under consumption taxes. From this point of view, road tax is not always considered to be a property tax. at least not a typical property tax, in professional literature. According to Boňek (2001), in spite of all these road tax classification aspects, road tax is classified as a property tax, as it is similar to other property taxes especially due to used tax technique. Generally speaking, the road tax purpose can be defined as taxation of road network usage by road vehicles in the Czech Republic. Within the frame of this basic principle we limit the road tax subjects only to vehicles used for economic activity of a business entity. The legal standard regulating the road tax is the law No. 16/1993, Road Tax Code, in its 19 amendments (hereafter TRL), by which the legislation tried to solve the urgent problem how to raise the financial funds for maintenance and development of road infrastructure in the area of the Czech Republic.

The road vehicles taxation should correspond to requirements, whose fulfilment is expected by tax imposing. Široký (2008) summarizes the requirements to a good tax system and individual taxes into four basic principles, that is the principle of effectiveness, administration simplicity, flexibility and justice. The titles of individual principles can differ in professional literature, for example according to Peková (2008), yet they remain almost identical as for the content, see e.g. Musgrave and Musgrave (1994).

The object of this article is to measure and discus the road tax collection, exploiting secondary data, as the man indicator of meeting the general principle of tax imposing with the aim to raise sufficient resources for public budgets financing. The tax collection means for individual participants of the whole tax collection and administration process real detriment, for tax payers it means the tax payment itself and next expenses connected with the tax system, which they have to spend to meet they tax duty. The state (tax administrator) does not achieve

net income by the tax collection which would correspond to total amount of tax collection, but the tax incomes are reduced by the amount of expenses necessary for the working of the whole tax collection and administration system. It results in outright disproportion between collected tax amount and the final amount for public budgets available for public benefits. The aim is, obviously, to struggle for the lowest possible difference between these two points of view on the tax collection amount. The main purpose of a good state fiscal policy, as part of the state economic policy, is the effort to reach the effectiveness of collection of particular components forming the state tax system. According to Baumol and Blinder (2011) issue of the effectiveness of macroeconomic taxes is especially a problem in the whole breadth of view of the economy of the state. From this point of view, in the Czech Republic conditions, effectiveness of all property taxes is a highly discussed issue, when on the Czech political scene there are different opinions on abolition or radical changes of these taxes. Low yields combined with high direct administration costs are becoming the strongest arguments in favour of amendment or abolition of specific components of property taxes. The issues of road tax effectiveness measurement and quantification of specific results is dealt with in detail by Andrlík (2012).

MATERIALS AND METHODS

The state fiscal policy is nowadays always in the centre of attention particularly because the public budget is financed by the means of this policy. Tax issues experts as well as politicians are always dealing with the question of the best mechanism which would ensure stable and preferably high tax incomes for public budgets. Nowadays, in the period of subsiding economic crisis and high deficits of Czech Republic state budgets the possibilities are discussed, what and how to achieve the start of reducing process of state budget deficit. Partial area discussed in the context of securing stable income to the state budget is also the road tax. The aim of the contribution is to process quantification of road tax in the Czech Republic from various aspects, using analysis of information sources and data.

The initial numeral characteristic necessary for the research of road tax position in the Czech Republic is its collection on the time axis from 1993 to 2011. The defined time axis was chosen deliberately with the aim of maximum possible overview of road tax development in the Czech Republic, that is from the time when the law No. 16/1993, Road Tax Code, came into force. The source data on road tax collection are acquired from the overview of the tax collection published by the Ministry of Finance of the Czech Republic, where there is, besides other things, information on the difference in assessment and collection of road tax in a particular calendar (tax) year. Next very important information source were internal materials of the Ministry of Finance, which were provided for the purpose of processing of this contribution.

In the text of this article standard scientific methods are used. These are above all methods of analysis, description, induction, and deduction, basic mathematical and statistical methods. Graphic methods, increasing the information value of particular achieved results, are also used.

RESULTS AND DISCUSSION

The quantification of road tax in the Czech Republic is processed using primary information sources published by the Czech Tax Administration and on determined time axis. The particular numeral data are processed from the view of quantification of absolute collection, quantification of road tax collection per one active tax subject, quantification of yield, quantification of growth rate and absolute increase of road tax. The next, not less important, aspect is the specification of road tax share of the total tax collection in the Czech Republic.

As we can see in Tab. I and II, the road tax is among the property taxes with the highest collection level in the Czech Republic, and from this point of view it is a significant part of state budget income within the frame of property taxes. The road tax collection increased by 852 mill. CZK (19.7%) in the monitored period 1993–2011. The average level of road tax collection in absolute numbers reaches the amount of 5060 mill. CZK per year on the monitored time axis.

I: Collection of property taxes and road tax in CR 1993–2001 in mill. CZK

ITEM		Development of road tax collection in the Czech Republic in mill. CZK										
I I EAVI	1993	1994	1995	1996	1997	1998	1999	2000	2001			
property taxes	8 554	9 894	10 924	12 168	13 457	14 761	16 321	16 030	16 239			
of it:												
road tax	4 335	4 147	3 930	4 321	4 565	4 373	5 226	5 587	5 283			
inheritance tax	13	55	91	97	116	146	148	122	112			
gift tax	156	389	357	296	350	427	405	413	475			
real estate tranfer tax	616	1 645	2 768	3 464	4 488	5 677	6 271	5 439	5 834			
real estate tax	3 434	3 658	3 778	3 991	3 938	4 138	4 271	4 469	4 535			

Source: own work, Czech Tax Administration (2012a)

11. 170perty taxes and road to		Development of road tax collection in the Czech Republic in mill. CZK											
ITEM	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011			
property taxes	17 946	19 351	20 836	18 285	18 961	21 613	21 607	19 215	21 525	25 474			
of it:													
road tax	5 512	5 738	5 509	5 191	5 428	5 915	6 002	4 795	5 100	5 187			
inheritance tax	86	100	100	103	124	109	115	88	87	78			
gift tax	601	648	818	510	604	692	345	162	138	4 279			
real estate tranfer tax	7 171	8 025	9 461	7 494	7 788	9 774	9 950	7 809	7 453	7 362			
real estate tax	4 576	4 840	4 948	4 987	5 017	5 123	5 195	6 361	8 747	8 568			

II: Property taxes and road tax collection in CR 2002–2011 in mill. CZK

Source: own work, Czech Tax Administration (2012a)

From other property taxes called transfer taxes, the tax with the lowest collection level on the monitored time axis is inheritance tax with average year collection of 99 mill. CZK. The average amount of gift tax collection within the monitored period is 635 mill. CZK. The transfer tax with the highest collection is real estate transfer tax, whose average annual collection reaches the amount of 6236 mill. CZK within the monitored period. One of the factors creating its strong position especially in 2007–2008 is housing construction in the Czech Republic. The last mentioned property tax is the real estate tax, whose average annual collection amounts to 4978 mill. CZK. A significant collection increase can be seen lately at this tax due to clearly identified legislative changes. A more detailed analysis and results are discussed in the article Andrlík (2010a).

The tax road collection development is increasing on the time axis 1993–2011. If we interpose the road tax collection data on the time axis by a linear trend connecting line, we get an equation of the linear trend line in the form of y = 74.735t + 4312.9. From this point of view the tax administrator meets the basic assumption of his legislative activity, keeping and increasing the income level coming from individual taxes to the state budget, or in this case the income level of the State Fund of Transport Infrastructure. The State Fund of Transport Infrastructure is according to § 5 of the law No. 243/2000, Tax Revenue Code, the recipient of the gross road tax yield.

Nevertheless, during the monitored period some significant changes in tax collection can be identified. The identification is performed using the analysis of significant changes in road tax legislation No. 16/1993 in individual amendments and using individual annual reports on Czech Tax Administration activity. Within the analysis of annual fluctuation of road tax collection we will first focus on legislative measures which had significant impact on the collection volume.

• In 1999 the road tax collection increased by 853 mill. CZK (19.5%) compared to the year 1998, which was the most substantial collection increase from the year 1993. It was caused by termination of tax exemption in § 3, par. 1, letter j) to 31st December 1998. The tax exemption was introduced by law amendment No. 143/1996 and law amendment

No. 61/1998 and it was not extended, on contrary, it was left out with validity from 1st January 1999. Within this regulation, in § 3 the tax exemption for vehicles with controlled catalytic converters, that is vehicles meeting ecological limits defined by specific regulations ECE OSN and EU, was abolished.

- In 2000 the tax administrator expectations on tax collection decrease was not accomplished. The tax collection decrease was expected in relation with tax road law amendment No. 303/2000 introducing in § 6 par. 6 and 7 tax benefits consisting in tax rate reduction. The tax reduction for vehicles meeting the emission standard EURO 2 was 25% and for vehicles meeting the emission standard EURO 3 the tax reduction was 50%. The first factor influencing the collection volume was in this case the fact that the mentioned amendment came into force on 7th September 2000, that is in the second half of the year. The second factor was the fact, that the limits EURO 3 were defined by the Ministry of Transport as late as in December 2000. Owing to these facts the road tax payers had to pay the tax deposit without the possibility of the tax rate reduction application. The collection increased by 361 mill. CZK, that is annual increase by 6.9%.
- On the contrary, in 2001 the full effect of the road tax law amendment No. 303/2000 showed and there was a decrease of finance collection. This decrease was therefore caused by amendment of regulation § 6, reducing tax rate for vehicles meeting the limits EURO 2 and EURO 3. The collection development was also influenced by the direction of Ministry of Finance of the Czech Republic to waive the tax to taxpayers who handed in the licence plates of their vehicles to transport inspectorate depository. Both the significant changes negatively influenced the collection volume, which decreased by 304 mill. CZK, that is by 5.4%.
- In the tax period 2002 the collection increased by 229 mill. CZK, that is by 4.3% compared to 2001 and this growth was caused by a legislative change carried out by amendment of law No. 493/2001 consisting in annual rate increase in § 6 par. 8 by 15% at vehicles registered in the Czech Republic by 31st December 1989 and by termination of the possibility of tax reduction according to § 6 par.

6 by 25% at vehicles meeting the emission limits EURO 2.

- The growth of collection volume in tax period 2003 by 226 mill. CZK, that is by 4.1% was also due to legislative changes by law amendment No. 207/2002, consisting in extension of the tax subject in § 2 par. 1. New extension of the tax subject enables taxation of all vehicles with total weight of 12 tonnes and higher, designated solely for freight transport without connection to business activity.
- In 2004 there was a slight drop of road tax collection by 229 mill. CZK, that is by 3.9%. The collection volume decrease was influenced by legislative changes carried out by law No. 102/2004. Within this amendment there was a change in § 2 par.1, defining that the road tax subject are not vehicles designated for business, but only vehicles designated for business activity. The vehicles were therefore subject to road tax in the calendar months when they were really used for business or self- employed activity regardless whether they were included in the business property or not. Next legislative change leading to road tax collection decrease was tax rate reduction in § 6 par. 6 and 7 at vehicles meeting the emission limits EURO 2 and EURO 3. The vehicles meting the emission limits EURO 2 could reduce the basic road tax rate by 60% (originally by 25%) and vehicles meeting the emission limits EURO 3 and higher could reduce the basic road tax rate by 66% (originally by 50 %). Amendment No. 635/2004 and change in §15 par. 3 caused road tax reduction at vehicles with total weight 12 tonnes and higher at tax subjects not operating road freight transport for others by as high as 100% (they do not file a tax return). The road tax collection decrease in 2004 is, according to Czech Tax Administration, also influenced by the fact, that tax subjects are discarding old freight vehicles and replacing them by new, meeting the emission limits EURO 2 and higher. Tax subjects use in higher extent the possibility of tax waiving according to direction D-241 of the Ministry of Finance in the Czech Republic, which specified regulations (time tests) of road tax waiving following the temporary removal of a vehicle from Register of Road Vehicles.
- The road tax collection decrease continued in the tax period 2005, when the tax collection volume was lower by 318 mill. CZK compared to 2004, that is annual decrease by 5.8%. The continuing road tax collection decrease was influenced by the change of road tax subject valid also in the tax period 2004, when the tax subjects have the tax duty only in the months when the vehicle is being used for business activity. Czech Tax Administration (2012b) states that tax yield was in the last years influenced by permanent reduction of annual rates at trucks, including trailer trucks and corresponding number of semi trailers and tandem trailers, that is at vehicles meeting the emission limits EURO 2, EURO 3 and higher.

- Compared to previous tax periods 2004 and 2005, in 2006 the road tax collection is higher by 237 mill. CZK, that is by 4.6%, which is the result of a road tax law change by amendment No. 545/2005, coming into force on 1st January 2006. The basic road tax rate reduction was changed from 60% to 40% at trucks, including trailer trucks and corresponding number of semi trailers and tandem trailers meeting the emission limits EURO 2 and from 66% to 48% at trucks, including trailer trucks and corresponding number of semi trailers and tandem trailers meeting the emission limits EURO 3 and higher.
- \bullet In 2009 the annual collection decrease is 1 207 mill. CZK, that is 20.1% compared to 2008. This slump is the highest detriment for public budget on the time axis 1993-2011 (State Fund for Transport Infrastructure). This slump was negatively influenced by the law amendment No. 246/2008 bringing about the change of the principle of tax rate reduction application according to § 6 par. 6. The tax rate reduction is newly applied according to the date of the first registration of the vehicle regardless of the place of the first registration. The application of basic tax rate reduction at vehicles imported from abroad is according to § 6 par. 7 bound to documenting of the date of the first registration of the vehicle abroad. If this cannot be objectively proved, it is not possible to apply the tax rate reduction. The regulation on basic tax rate reduction was according to contemporary regulations of this amendment in force already in tax period 2008, but, according to the Czech Tax Administration (2012b), the full effect showed in the tax period 2009. The Czech Tax Administration (2012b) for 2009 also states that the slump is caused above all by unfavourable economic situation resulting from the global financial and economic crisis, when there was a considerable decrease of business sector performance.

From the material point of view, the reasons for increase of identified road tax collection is in the growing number of filed tax declaration, which is caused by rising number of vehicles subject to road tax, as well as by modernization of vehicle fleet, when old and low-performance vehicles are being discarded from the vehicle fleet and they are being replaced by more powerful, high-performance vehicles with higher road tax rate. The data about number of filed tax declaration on the time axis 1994–2010 are stated in Tab. III and Tab. IV. This time axis is shorter compared to the time axis used for road tax collection analysis because the Ministry of Finance of the Czech Republic have not published the data for 2011 yet.

From the results stated in the Tab. III and Tab. IV we can see, depending on the above mentioned fact about the road tax collection development and number of tax declaration, that in the years 1994–2003 the trend in number of filed road tax declaration is growing (with the exception of a small drop in 2000). From the tax period 2004

III: Development of number of tax declaration in 1994-2002

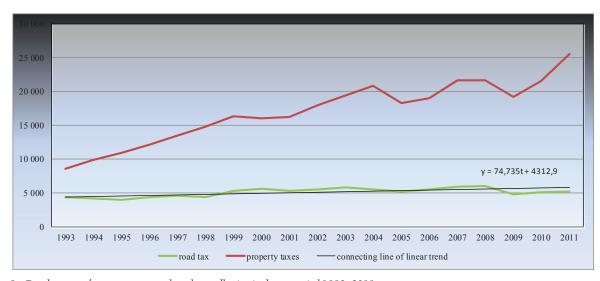
KLEM		Road tax declaration in the CR in 1994 - 2002										
ITEM	1994	1995	1996	1997	1998	1999	2000	2001	2002			
tax declaration	279 797	334 460	399 157	443 229	479 914	506 279	495 820	517 428	528 848			

Source: own work, Czech Tax Administration (2012c)

IV: Development of number of tax declaration in 2003-2010

ITEM			Road tax de	claration in	the CR in 2	003 - 2010		
	2003	2004	2005	2006	2007	2008	2009	2010
tax declaration	544 269	539 786	525 648	531 697	513 087	513 064	478 026	441 040

Source: own work, Czech Tax Administration (2012c)



1: Development of property taxes and road tax collection in the tax period 1993-2011 Source: own work, Tab. I and Tab. II

the number of filed tax declaration is falling and this slump culminates in 2009–2010. The negative development of the last two tax periods is, according to the Czech Tax Administration (2012b) for the year 2009, caused by unfavourable economic situation resulting from the global financial and economic crisis, when there was a considerable decrease of business sector performance and author agrees with this statement.

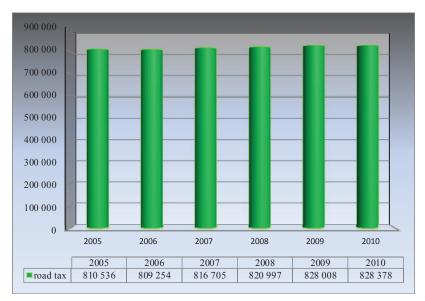
The graphic presentation of the road tax collection development was complemented by property tax collection collected in the area of the Czech Republic – inheritance tax, gift tax, real estate transfer tax, real estate tax. The objective of the graphic presentation is to prove the fact that road tax represents an important component within the property taxes. Fig. 1 representing the mentioned fact is created from the determined results of property taxes collection in Tab. I and Tab. II.

The elaborated results of road tax collection development in the Czech Republic can be complemented by the statement that in the future we can expect slight increase of road tax collection as a result of the trend of growing number of vehicles used for business activity. Positive impact

is also caused by replacement and modernization of vehicle fleet not only of hauliers but also of individual small business subject. It is realized by purchase of higher capacity and weight category vehicles and from the road tax point of view, their usage for business activity is taxed by higher rate.

Quantification of road tax collection per one tax subject is performed on time axis from 2005–2010 (at the moment of writing this article the final data from 2011 were not published yet by the Ministry of Finance of the Czech Republic). The reason for shorter time axis, compared to time axis mentioned and used in the case of quantification of absolute road tax collection, is the fact, that the algorithm for data collection of tax subjects number has been changed since 2005. The data on tax subjects number before 2005 are not therefore taken into consideration as it would be inconsistent and incomparable time axis of data output. The below mentioned description of both algorithms comes out of internal data provided by the Ministry of Finance of the Czech Republic.

Until 2005 the algorithm for calculation of tax subjects number was as follows. The number of road tax subjects is given by sum of tax subjects who



2: Development of number of tax subjects in the period of 2005–2010 Source: own work, the Czech Tax Administration (2012b)

V: Road tax collection per active tax subject

ITEM		Road tax collection per tax subject in CZK								
I I EAVI	2005	2006	2007	2008	2009	2010				
road tax	6 404	6 707	7 243	7 311	5 791	6 157				

Source: own work, the Czech Tax Administration (2012b)

within the followed period filed or updated the tax return. Only "current" tax declaration are chosen and additional tax declaration are not considered. At the selection the tax subjects are chosen according to road tax return. The algorithm is then applied like this: if a tax subject has, according to the mentioned conditions, e.g. five road tax declaration, in the total number of tax subjects it is considered as one tax subject.

Number of tax subjects from 2005 is divided into two basic groups. The first group consists of active tax subjects and the other group consists of registered tax subjects. The road tax subject is considered as an active subject if he meets at least one of the following conditions:

- the tax subject filed road tax return within the followed time period (that is the calendar year),
- the tax subject has a current formal notice to file road tax return within the followed time period (that is the calendar year),
- the tax subject has a decision of prolongation of time limit to file the road tax return with the term of filing within the followed time period (that is the calendar year).

The road tax subject is considered as a registered subject if he meets at least one of the following conditions:

• the tax subject has an unfinished tax registration (its termination is not recognizable in registration documents or in the personal tax account),

 the tax subject has an open, approved road tax return or ordered road tax return with unfinished assessment procedures or submitted right of appeal.

Fig. 2 presented development of number of tax subjects in the years of 2005–2010 (the Czech Tax Administration, 2012b). The Tab. V summary is elaborated on the basis of above mentioned reasons and on the obtained data on the number of active tax subjects from the Czech Tax Administration sources (2012b) in the years 2005, 2006, 2007, 2008, 2009 and 2010. The Tab. V shows data on an average amount of road tax which the tax administrator collects per active tax subject in the particular calendar year. From the results we can see that the highest average tax collection amount was collected in the tax period of 2008, when the average tax collection per active tax subject was 7 311 CZK.

To supplement the interpretation, other property taxes collections per active tax subject are stated here. At real estate tax, the tax collection amount per active tax subject is 1676 CZK per year 2009 and 2 243 CZK per year 2010. At transfer taxes (the inheritance tax, gift tax and real estate transfer tax), the collection amount per active tax subject is 27 684 CZK per year 2009 and 27 825 CZK per year 2010.

The quantification of road tax yield is given on the time axis in individual years from 1995 to 2010 (the data for periods 1993, 1994 and final 2011 are not published by the Ministry of Finance of the Czech Republic). The tax yield calculation can be expressed by the following formula (1).

$$tax yield (\%) = \frac{collection}{assessment} \times 100.$$
 (1)

From the results of Tab. VI and Tab. VII on road tax yield we can see, that the tax administrators were almost 100% successful at tax collection. The potential discrepancies between the ordered tax amount and the real tax collection can be caused by several factors. The most often mentioned factor is a poor payment behaviour of tax payers. The yield amounts higher than 100% are caused by situation when the tax administrator collects outstanding arrears from last year in the current year and lower tax yield is caused by outstanding arrears. The average road tax yield in the monitored period is 99.45%. From the tax road yield point of view not only the collection itself should be considered, but also the effectiveness of road tax collection must be quantified. It is necessary to compare the whole collection volume of a particular tax with the cost of collection. The tax collection amount is not net income for the public budget as the cost of collection must be deducted. The cost of collection must be as low as possible to achieve effectiveness of the tax collection. If not the case, the tax collection loses a sense and becomes an ineffective and useless burden for both the tax payers and the tax administrators. The particular results of effectiveness measurement, as mentioned above, are stated by Andrlík (2012). As for the results, of these analyzes for property taxes are published in the article Andrlík (2010b).

Next important characteristic quantified within this contribution is the growth rate of road tax. The calculated growth rate indexes in the monitored period complement the absolute expression of road tax collection mentioned above and clearly prove the particular annual changes in the tax collection.

The presentation of quantification measurement of absolute increase (decrease) in road tax collection uses graphic display of results of achieved amounts in individual monitored years.

The Fig. 3 of development of absolute increase in road tax collection in the Czech Republic shows that the road tax fluctuates considerably (the Czech Tax Administration 2012a). These fluctuations result from implemented amendments of law No.16/1993, which were analysed and discussed in detail in the previous part of this article. The highest absolute increase on the time axis is identified in 1999, when the road tax collection grew in absolute expression by 853 mill. CZK. This collection increase was caused by tax exemption for vehicles with controlled catalytic converters, that is vehicles meeting ecological limits. At the same time with the law amendment, the higher number of road tax declaration in 1999 also had considerable impact on the road tax collection increase. The number of road tax declaration increased by 26365 items in 1999 compared to 1998. On the other hand, the highest absolute decrease of 1206 mill. CZK is identified in 2009 which was caused by change of law regulation in the area of basic rate reduction of road tax depending on the date of the first registration of

VI: Road tax yield in the years 1995-2002

FUENA	Road tax yield										
ITEM	MJ	1995	1996	1997	1998	1999	2000	2001	2002		
road tax	%	100,00	102,85	97,79	98,94	99,85	98,81	99,66	101,81		

Source: own calculations, the Czech Tax Administration (2012b)

VII: Road tax yield in the years 2003-2010

FFFM	Road tax yield										
ITEM	MJ	2003	2004	2005	2006	2007	2008	2009	2010		
road tax	%	97,87	99,45	99,26	99,48	101,79	98,82	96,87	97,88		

Source: own calculations, the Czech Tax Administration (2012b)

VIII: Growth rate of road tax - part 1

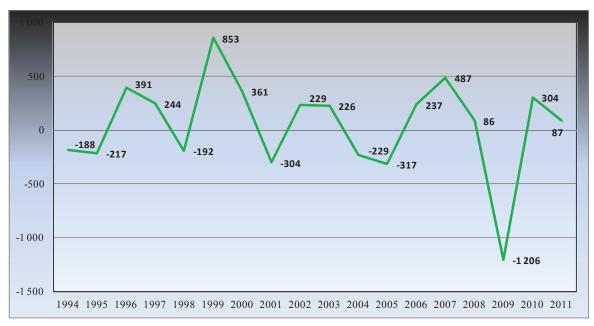
PPEN 4		Development of growth rate of road tax collection											
ITEM	MJ	Index 94/93	Index 95/94	Index 96/95	Index 97/96	Index 98/97	Index 99/98	Index 00/99	Index 01/00	Index 02/01			
road tax	%	95,66	94,77	109,94	105,66	95,79	119,51	106,91	94,56	104,33			

Source: own calculations, the Czech Tax Administration (2012a)

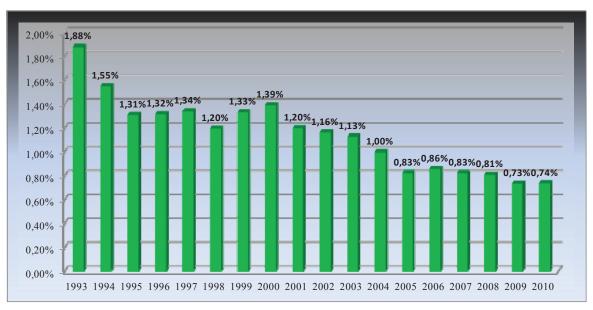
IX: Growth rate of road tax - part 2

FFEM		Development of growth rate of road tax collection											
ITEM	MJ	Index 03/02	Index 04/03	Index 05/04	Index 06/05	Index 07/06	Index 08/07	Index 09/08	Index 10/09	Index 11/10			
road tax	%	104,10	96,00	94,24	104,56	108,97	101,46	79,90	106,35	101,71			

Source: own calculations, the Czech Tax Administration (2012a)



3: Development of absolute increase in road tax collection in mill. CZK Source: own work, the Czech Tax Administration (2012a)



4: Road tax share on the total tax collection Source: own work, the Czech Tax Administration (2012a), Customs Administration of the Czech Republic (2012)

a vehicle. This decrease was also influenced by lower amount of filed road tax declaration, which dropped by 35 038 items in 2009 compared to tax period of 2008.

The yield of road tax in the Czech Republic does not play an important role compared to total tax incomes. In the Czech Republic the road tax share of the total collection in 2010 is only 0.74% (at the time of this article processing the results of total tax collection in the Czech Republic for 2011 were not available, therefore the time axes is from 1993 to 2010). The development of road tax share on the time axis is shown in Fig. 4. This proves the above

mentioned fact, that the road tax represents only a complementary income for the public budget.

The Fig. 4 and the above mentioned facts clearly show, that the road tax does not represent a significant share of total tax incomes in the Czech Republic (the Czech Tax Administration, 2012a, Customs Administration of the Czech Republic, 2012). The average share of the total tax incomes on the time axis 1993–2010 is 1.15%. Nevertheless, nowadays, in the period of deficit state budgets of the Czech Republic, any positive flow is important, regardless of its height.

Nowadays the road tax collection represents relatively low share of total tax incomes of public budgets (the State Fund of Transport Infrastructure), yet the road tax plays an important role in the tax system of the Czech Republic. In a simplified way we can say, that the road tax complements the

tax system complexity and its application is from theoretical point of view based on the application of benefit and solvency principle. The road tax can be considered a stable tax as the collection provides almost constant incomes within individual periods.

CONCLUSION AND SUMMARY

The quantification of data input of road tax in the Czech Republic also contains the determination of basic statistical indicators processed from primary data (e.g. growth rate). The results clearly show that the road tax applied in the area of the Czech Republic represents only a complementary component of public budget incomes, as the road tax share of the total tax yield in 2010 is only 0.74%. The average annual amount of road tax collection reaches in absolute numbers 5 060 mill. CZK on the time axis 1993–2011. The paper also discussed in detail the legislative amendments to the Act No. 16/1993 Coll., on road tax, as amended, and identify their impact on the collection of road tax.

Nevertheless, it is obvious that the fiscal income in the presented average amount is insufficient regarding the objective to obtain sufficient amount of financial means for maintenance and development of road infrastructure of the Czech Republic. The potential financial reserve of road tax can be seen within the tax subject specification. The tax subjects are, according to § 3, Road Tax Code, motor road vehicles and their trailers, if they are used and registered in the area of the Czech Republic and if they are used for business activity or another self-employed activity or in their direct connection. Just in the restriction of tax subject, especially at passenger vehicles, to only vehicles used for business activity, there is the collection income reserve, regarding growing number of registered passenger vehicles. Introduction of flat taxation of all vehicles regardless of business criteria would lead to income increase of public budget, or, more precisely of State Fund of Transport Infrastructure, which is, according to § 5 of law No. 243/2000, Tax Budget Determination Code, the recipient of gross yield of this tax.

The assessment of the road tax effectiveness is also related to success rate of tax administrator, which is connected with the achievement of the highest possible tax yield. At the road tax the tax yield oscillates around 100%, in a simplified way we can state that what is ordered is also collected. The future and next development in the road tax area in the Czech Republic depends particularly on decisions of individual political parties, which can in the future consider a totally different taxation conception of motor vehicles operation in the Czech Republic, for example with emphasis on environmental aspects of their operation.

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REFERENCES

- ANDRLÍK, B., 2010a: Vývoj inkasa transferových daní v letech 1993 až 2009 v České republice. *Acta univ. agr. et silv. Mendelianae 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. Mendelianae Brunensis.* sv. LVIII, č. 6, s. 13–20. ISSN 1211-8516.
- ANDRLÍK, B. 2012. Efficiency of road tax in the tax system of the Czech Republic. *Acta Universitatis agriculturae et silviculturae Mendelianae Brunensis*. vol. LX, No. 2, p. 17–24. ISSN 1211-8516.
- BAUMOL, W. J., BLINDER, A. S., 2011: Macroeconomics: Principles & Policy. Mason, Ohio: South-Western, 2011. 472 p. ISBN 978-0-538-45365-3.

- BONĚK, V. et. al., 2001: Lexicon tax concepts. Ostrava: Sagit, 2001. 626 p. ISBN 80-7208-265-5.
- CUSTOMS ADMINISTRATION OF THE CZECH REPUBLIC, Annual reports [online]. 2012, [Accessed 2012-09-15]. Available at: http://www.celnisprava.cz/cz/statistiky/Stranky/vyrocni-zpravy.aspx.
- THE CZECH TAX ADMINISTRATION, Development of collection of taxes in the Czech Republic in the years 1993-2011 [online]. 2012a, [Accessed 2012-09-06]. Available at: http://cds.mfcr.cz/cps/rde/xchg/cds/xsl/13879.html?year=0>.
- THE CZECH TAX ADMINISTRATION, Annual reports and related documents [online]. 2012b, [Accessed 2012-09-07]. Available at: http://cds.mfcr.cz/cps/rde/xchg/cds/xsl/325.html?year=0.
- THE CZECH TAX ADMINISTRATION, Number tax declaration [online]. 2012c, [Accessed 2012-

- 09-14]. Available at: http://cds.mfcr.cz/cps/rde/xchg/cds/xsl/13887.html?year=0.
- MUSGRAVE, R. A., MUSGRAVEOVÁ, P. B., 1994: Public Finance in Theory and Practice. Praha: Management Press, 946 p. ISBN 80-85603-76-4.
- PEKOVÅ, J., 2008: Public finance. Praha: ASPI, 2008. 580 p. ISBN 978-80-7357-358-4.
- ŠIROKÝ, J. et al., 2008: Tax theory with practical application. Praha: C. H. Beck, 2008. 301 p. ISBN 978-80-7400-005-8.
- Instruction D-205 Ministry of Finance of the Czech Republic.
- Instruction D-241 Ministry of Finance of the Czech Republic.
- Law No. 16/1993 Sb., Road Tax Code, in the individual amendments.
- Law No. 212/1992 Sb., Tax System Code, as amended. Law No. 243/2000 Sb., Budgetary Tax Code, as amended.