

Municipal Area as a Criterion of the Czech Tax Assignment System

Eva Marečková

VSB – Technical University of Ostrava

Abstract

This paper deals with municipal area defined by urban area of a municipality, counted area of municipality and total area of municipality. The aim of this paper is to determine whether the municipal area or the number of inhabitants of the municipality affect the expenditure associated with municipal area, how significant is this effect and what is the progress of a possible dependence. The influence of these variables is studied in this paper through correlation and regression analysis between the municipal area or population of municipality and municipal expenditure associated with the municipal area and revaluated to 1 ha. This paper assesses whether it is appropriate to use the municipal area as a criterion for the Czech tax assignment system. The analysis is performed on the example of the Zlín Region municipalities.

Keywords: tax assignment system, Czech Republic, Zlin region, municipality, municipal area, urban area of municipality, counted area of municipality, total area of the municipality, population of municipality, municipal expenditure

Introduction

The most important source of income to municipal budgets in the Czech Republic is tax revenue. Currently (2013), on average, municipal tax revenue forms more than half of their total revenue. The allocation of the national tax revenue (or rather gross revenue of the income taxes and VAT) between municipalities depends on the Act No. 243/2000 Coll., Tax Assignment System. When this law was applied in 2001, the gross revenue of income taxes and VAT was distributed only through a single criterion (simple number of inhabitants of municipality), which over the time has been expanding and thus increasing the complexity of the set tax sharing system (the “System”).

Currently (2013), this law states four criterion on which is gross revenue of income taxes and VAT is distributed between the municipalities. They are: simply number of municipality inhabitants, converted number of municipality

inhabitants, number of pupils in nursery and primary schools funded by the municipality and counted area of municipality. The listed tax assignment system is further complicated by motivational components.

The complexity of the system is increased since the beginning of 2013, when the number of pupils in nursery and primary schools funded by municipalities was added to redistribution criterion and municipal area criterion was limited to a 10 ha counted area per inhabitant. It was also considered to using urban area of municipality as a criterion within the tax assignment system. Urban area of municipality, in certain aspects, may better reflect the field for the management, operation and financing managed by the municipalities (e.g. public green, pavements, municipal roads and other roads, public transport, street lights) and which do not relate to the entire municipality, respectively artificially set counted area of municipality, but mostly just an urban area. The area of urban area is closer to the actual area, which is managed by municipalities in reality and has greater information capability than the total area of the municipality or counted area of the municipality.

Methodology

The paper investigates the dependence between the municipal area (expressed by total area, counted area and urban area), respectively the number of inhabitants of municipality and municipality expenditure per 1 ha of the municipal area (expressed by total area, counted area and urban area). The dependence between the given variables, its intensity and process is examined through correlation and regression analysis. Correlation analysis investigates the level of relationship between municipal area, respectively number of inhabitants and municipality expenditure converted on 1 ha of municipal area, when level of the relationship is measured by correlation coefficient. The regression analysis investigates if the change of municipal area, respectively number of inhabitants (in role of causes) by one unit will influence the municipal expenditure converted on 1 ha (in role of consequences) and how significant is this change. This will enable to define the definition of regression coefficient.

For purpose of verifying the possibility of application of conclusions of the analysis carried out by the example of Zlín Region municipalities in terms of all municipalities in the Czech Republic, confidence intervals of correlation coefficients are constructed and the statistical significance of these correlation coefficients as well as statistical significance of limits of their correlation coefficients are verified. For the same reason, confidence intervals for regression coefficients are constructed and the statistical significance of regression coefficients are verified; the statistical significance of limits of confidence intervals for regression coefficients aren't investigated due to their character.

The total area of municipality is defined by the area of all cadastral parts of municipality defined by the Czech Office for Surveying, Mapping and Cadastre (2012).

For the purpose of this paper the counted area of a municipality is defined as area of all cadastral parts of a municipality defined by the Czech Office

for Surveying, Mapping and Cadastre, although it is reduced to 10 ha per one inhabitant.

In determining the term urban area it may be used Decree No. 97/1966 Coll., which was implemented certain provisions of Act No. 53/1966 Coll., The protection of Agricultural Land. This decree is no longer valid, however, of any legislation in the Czech Republic it is the only one which defines the term urban area, as a continuously built-up area or otherwise technically adapted for municipality needs, while it includes an agriculture area into the area of urban area, but it does not create the agricultural land fund coherent whole (they are separated by a continuous built-up area or they are entering to the urban areas and they are not suitable for mechanical cultivation). In connection with the above, definitions the urban area for the purposes of the paper, was defined as the sum of the areas of gardens, built-up areas, water surfaces and other areas; other areas include plantation of trees, tracks, highways, roads (roads of I. to III. category), other roads (local, special-purpose and paved forest roads), other transport areas, green areas, sports facilities and recreation area and the cemetery and urn grove, cultural and educational area, handling area (not-built-up area between buildings of the same owner), mining area, landfill, barren soil and other surfaces). Agricultural areas (see definition of urban area of municipality) are not included in the urban area for purpose of this paper on the grounds that the other areas comprise green areas, which include street and the housing greenery, parks, etc.

Table 1 Budget subsections to determine the expenditure for this paper

221	Roads
222	Public Transport
233	Watercourse and water management works
234	Water in the agricultural landscape
251	Business Support
363	Municipality services and regional development
371	Protection of atmosphere and climate
373	Protection and remediation of soil and groundwater
374	Protection of Nature and Landscape
521	Protection of Population
527	Crisis Management
531	Security and Public Order
551	Fire Protection
617	Regional and Local Government (under this budgetary subsection are recorded financial expenses associated with public management executed by the municipalities, while the grant amount from the general cash administration was deducted with the exception of subsidies for construction authorities, whose expenses to a certain extent depend on the area of the municipality).

Source: own elaboration on the basis of dates of Decree No 323/2002 Coll.

Expenditure for the purpose of this paper is divided into the current expenditure, capital expenditure and total expenditure (in terms of kind classification

of budgetary structure). Within these expenditures are defined expenditures in the budget subsections (in terms of sector classification of budgetary structure), where there is an assumption that their value is primarily influenced by the municipal area. These budget subsections are defined in the following Table 1. The budget subsections do not include the three budget subsections; 372 (Waste Management) due to the significant revenues associated with this area; 231 (Drinking Water) and 232 (Sewage and Waste Water Treatment) because of the assurance of this area in small municipalities by themselves and in large municipalities and towns by authorized external parties.

The expenditures deducted for the paper are subsequently converted by the corresponding municipal area in order to utilize them further.

The aim of this paper is to determine whether the municipal area (expressed as total area, counted area, intravilan), respectively the number of inhabitants, has the impact on municipal expenditures depending on the municipal area and how significant is the impact and what is the progress of a possible dependence.

The paper has analyzed data considering Zlín Region municipalities. There were 304 municipalities in the Zlín Region within the monitored period 2009–2011, which represents less than 5 % of the municipalities of the Czech Republic, an average of about 589 thousand population, which represents less than 6 % of the population of the Czech Republic and is located on 396 thousand ha, which represents a 5 % share of Czech Republic's area.

Results

Urban area of the municipality versus the municipal expenditure

Expenditure for this part of the paper is converted by urban area and subsequently correlated with the urban area and number of inhabitants in the municipality. It is also examined the average change in expenditure converted into the urban area when changing the urban area by one hectare and changing population by 1 person. Specific values of the coefficients of correlation (CC) and regression (CR) are shown in Table 2. Note statistically significant (SS) or statistically insignificant (SI) near the examined values of coefficients of correlation and regression and near the limits of confidence intervals for correlation coefficients are mentioned.

From Table 2 it is evident that the dependence of urban area respectively population and current expenditure converted to urban area is strong to very strong, in case of capital expenditure is dependence weak and in the case of total expenditure is dependence moderate to strong. Then, with 95 percent of probability, correlation and regression coefficients calculated for all municipalities of Czech Republic are situated in the above intervals. Limits of confidence intervals for correlation coefficients are statistically significant too. The lower limits of confidence intervals in case of capital expenditures are the exception, they are statistically insignificant; there is a possibility that some municipalities in the Czech Republic have different conclusions in capital expenditures.

However, capital expenditures don't show some tendency, but they are dependent on individual decisions of councils and therefore, certain independency on urban area of municipality and number of citizens of municipality isn't surprising.

Table 2 Average values of correlation and regression coefficients for indicator urban area of Zlín Region municipality for the years 2009 – 2011¹

	Current Expenditure	Capital Expenditure	Total Expenditure
CC "intravilan" × "expenditure/intravilan"	0.61 SS	0.17 SS	0.45 SS
Confidence intervals for CC "intravilan" × "expenditure/intravilan"	0.53 SS < CC < 0.68 SS	0.06 SI < CC < 0.28 SS	0.37 SS < CC < 0.60 SS
CC "population" × "expenditure/intravilan"	0.75 SS	0.17 SS	0.52 SS
Confidence intervals for CC "population" × "expenditure/intravilan"	0.70 SS < CC < 0.80 SS	0.06 SI < CC < 0.28 SS	0.46 SS < CC < 0.69 SS
CR "intravilan" × "expenditure/intravilan"	0.0601 SS	0.0232 SS	0.0833 SS
Confidence intervals for CR "intravilan" × "expenditure/intravilan"	0.0523 < CR < 0.0680	0.0112 < CR < 0.0352	0.0672 < CR < 0.0995
CR „population“ × „expenditure/intravilan“	0.0030 SS	0.0010 SS	0.0040 SS
Confidence intervals for CR "population" × "expenditure/intravilan"	0.0028 < CR < 0.0033	0.0005 < CR < 0.0015	0.0034 < CR < 0.0047

Source: own elaboration and calculation on the basis of data from Czech Office for Surveying, Mapping and Cadastre 2012; Decree No. 276/2009 Coll.; Decree No. 245/2010 Coll.; Decree No. 259/2011 Coll.; Ministry of Finance of the Czech Republic 2012a, 2012b.

The table also shows the values of regression coefficients, e.g. if the urban area changes by 1 ha, the current expenditure changes by an average of 60 CZK/1 ha of urban area and if the number of inhabitants changes by one it will change current expenditure in average by 3 CZK/1 ha of urban area. Analogously data may be derived from other values of the regression coefficient.

Counted area of the municipality versus municipal expenditure

Expenditure for the purpose of this part of paper is converted by counted area and subsequently correlated with the counted area and the number of inhabitants in the municipality. Also it is examined the average change in expenditure converted by area of counted area in case of change of area of counted area by 1 ha and in case of change in population by 1 person. Particular values of the coefficients of correlation and regression are shown in Table 3.

¹CC = correlation coefficient, CR = regression coefficient.

Note statistically significant (SS) or statistically insignificant (SI) near the examined values of coefficients of correlation and regression and near the limits of confidence intervals for correlation coefficients are mentioned.

Table 3 Average values of correlation and regression coefficients for indicator counted area of Zlín Region municipalities for the years 2009 – 2011

	Current Expenditure	Capital Expenditure	Total Expenditure
CC "counted area" × "expenditure/counted area"	0.39 SS	0.08 SI	0.30 SS
Confidence intervals for CC "count. area" × "expenditure/counted area"	0.29 SS < CC < 0.48 SS	-0.03 SI < CC < 0.19 SS	0.19 SS < CC < 0.40 SS
CC "population" × "expenditure/counted area"	0.79 SS	0.30 SS	0.62 SS
Confidence intervals for CC "population" × "expenditure/count. area"	0.74 SV < CC < 0.83 SV	0.19 SV < CC < 0.40 SV	0.55 SV < CC < 0.68 SV
CR "counted area" × "expenditure/counted area"	0.0019 SS	0.0006 SS	0.0024 SS
Confidence intervals for CR "count. area" × "expenditure/counted area"	0.0014 < CR < 0.0023	0.0001 < CR < 0.0010	0.0016 < CR < 0.0033
CR „population“ × „expenditure/counted area“	0.0008 SS	0.0003 SS	0.0011 SS
Confidence intervals for CR "population" × "expenditure/counted area"	0.0008 < CR < 0.0009	0.0002 < CR < 0.0004	0.0010 < CR < 0.0013

Source: own elaboration and calculation on the basis of data from Czech Office for Surveying, Mapping and Cadastre 2012; Decree No. 276/2009 Coll.; Decree No. 245/2010 Coll.; Decree No. 259/2011 Coll.; Ministry of Finance of the Czech Republic 2012a, 2012b.

Table 3 shows that the dependence of counted area, respectively population and current expenditure converted to counted area is medium, respectively very strong, in the case of capital expenditures is very weak, respectively medium, in case of the total expenditure is medium dependency, respectively stronger. On the basis on data from table 3, correlation and regression coefficients are statistically significant. With 95 percent of probability, their values for all municipalities in Czech Republic are situated in intervals specified in table 3. Also, limits of confidence intervals for correlation coefficients are statistically significant, with the exception of the lower limits of confidence intervals for correlation coefficients in case of capital expenditures; they are statistically insignificant. This finding isn't surprising considering that capital expenditures don't show the tendency to a certain indicators but they are rather dependent on the individual decisions of councils.

The given table also shows the values of regression coefficients, e.g. if the area of the counted area change by 1 ha, it will change the current expenditure by an average of 2 CZK/1 ha of counted area and in case of change of the number of inhabitants by one will change current expenditure an average of about

1 CZK/1 ha of counted area. Analogously the data may be derived from other values of the regression coefficients.

The total area of the municipality versus municipal expenditure

Expenditure for the purpose of this part of the paper is converted by total area and subsequently correlated with the total area and the number of inhabitants in the municipality. It is also examined the average change in expenditure converted on the total area with the change in the total area by one hectare and change in population by 1 person. Particular values of the correlation and regression coefficients are shown in Table 4. Note statistically significant (SS) or statistically insignificant (SI) near the examined values of coefficients of correlation and regression and near the limits of confidence intervals for correlation coefficients are mentioned.

Table 4 Average values of correlation and regression coefficients for indicator total area of Zlín Region municipalities for the years 2009 – 2011

	Current Expenditure	Capital Expenditure	Total Expenditure
CC “total area” × “expenditure/total area”	0.39 SS	0.12 SI	0.30 SS
Confidence intervals for CC “total area” × “expenditure/total area”	0.29 SS < CC < 0.48 SS	0.01 SI < CC < 0.23 SS	0.19 SS < CC < 0.40 SS
CC “population” × “expenditure/total area”	0.80 SS	0.30 SS	0.62 SS
Confidence intervals for CC “population” × “expenditure/total area”	0.76 SS < CC < 0.84 SS	0.19 SS < CC < 0.40 SS	0.55 SS < CC < 0.68 SS
CR “total area” × “expenditure/total area”	0.0019 SS	0.0006 SS	0.0024 SS
Confidence intervals for CR “total area” × “expenditure/total area”	0.0014 < CR < 0.0023	0.0001 < CR < 0.0010	0.0016 < CR < 0.0033
CR „population“ × „expenditure/total area“	0.0008 SS	0.0003 SS	0.0011 SS
Confidence intervals for CR “population” × “expenditure/total area”	0.0008 < CR < 0.0009	0.0002 < CR < 0.0004	0.0000 < CR < 0.0011

Source: own elaboration and calculation on the basis of data from Czech Office for Surveying, Mapping and Cadastre 2012; Decree No. 276/2009 Coll.; Decree No. 245/2010 Coll.; Decree No. 259/2011 Coll.; Ministry of Finance of the Czech Republic 2012a, 2012b.

From Table 4 it is evident that the dependence of the total area, respectively population and current expenditure converted on the total area is medium, respectively very strong, in the case of capital expenditure is rather weak, respectively medium, in case of the total expenditure is dependent medium, respectively stronger. On the basis of calculation it can be concluded that correlation and regression coefficients are statistically significant; with regard

to the results of analysis, correlation and regression coefficients for all municipalities in Czech Republic are situated in intervals stated in table 4 (with 95 percent of probability). Again, capital expenditures create the exception; lower limits of confidence intervals for correlation coefficients are statistically insignificant due to character and irregularity of investments; investments aren't dependent on particular factor.

The table also shows values of the regression coefficients, e.g. if the total area changes by 1 ha, it will change the current expenditure by an average of 2 CZK/1 ha of the total area and if the number of inhabitants changes by one it will change current expenditure an average of about 1 CZK/1 ha total area. Analogously the data may be derived from other values of the regression coefficients.

Comparing the values of the coefficients of correlation and regression in Table 3 it can be seen that their values are almost identical.

Population of the municipality versus municipal area

It is reasonable that the population of the municipality is a very important element. To what extent the number of inhabitant is interconnected with municipal area (expressed as the total area, counted area and urban area) is also important.

Table 5 contains the values of the coefficients of correlation and regression between the number of inhabitants and the municipal area (expressed as the total area, counted area and urban area), and other way around the values of the coefficients of correlation and regression between the municipal area (expressed as the total area, counted area and urban area) and population. Note statistically significant (SS) or statistically insignificant (SI) near the examined values of coefficients of correlation and regression and near the limits of confidence intervals for correlation coefficients are mentioned. Table 5 examines whether the dependence exists between these variables, how significant it is and how the municipal area will in average change in case of change of the population by one person and how much population will change if the municipal area will change by 1 ha.

Based on the table 5 it can be concluded that the dependency between population and urban area is almost absolute, dependence between the population and counted area or a total area is also strong, but not as significant as in the case of intravilan.

Values of regression coefficients indicate that with the change in population by one person, urban area will change in average 0.0363 ha, counted area will change by 0.1486 hectares of counted area and total area by 0.1485 hectares of the total area. On the contrary, the change urban area by 1 ha will change an average population by about 21 people, in the case of counted area and the total area that are on average about 3 citizens.

Correlation and regression coefficients are statistically significant. Then, with 95 percent of probability, correlation and regression coefficients calculated for all municipalities in the Czech Republic are situated in the above

intervals; limits of confidence intervals for correlation coefficients are statistically significant too.

Table 5 Average values of the coefficients of correlation and regression between population and area municipalities (and vice versa) for the years 2009 – 2011

CC „urban area“ × „population“	0.87 SS
Confidence intervals for CC „urban area“ × „population“	0.84 SS < CC < 0.89 SS
CC „counted area“ × „population“	0.68 SS
Confidence intervals for CC „counted area“ × „population“	0.61 SS < CC < 0.74 SS
CC „total area“ × „population“	0.68 SS
Confidence intervals for CC „total area“ × „population“	0.61 SS < CC <
CR „urban area“ × „population“	21.0340 SS
Confidence intervals for CR „urban area“ × „population“	19.7084 < CR < 22.3593
CR „counted area“ × „population“	3.0849 SS
Confidence intervals for CR „counted area“ × „population“	2.7056 < CR < 3.4655
CR „total area“ × „population“	3.0858 SS
Confidence intervals for CR „total area“ × „population“	2.7065 < CR < 3.4650
CR „population“ × „urban area“	0.0363 SS
Confidence intervals for CR „population“ × „urban area“	0.0340 < CR < 0.0386
CR „population“ × „counted area“	0.1486 SS
Confidence intervals for CR „population“ × „counted area“	0.1303 < CR < 0.1668
CR „population“ × „total area“	0.1485 SS
Confidence intervals for CR „population“ × „total area“	0.1303 < CR < 0.1668

Source: own elaboration and calculation on the basis of data from Czech Office for Surveying, Mapping and Cadastre 2012; Decree No. 276/2009 Coll.; Decree No. 245/2010 Coll.; Decree No. 259/2011 Coll.

Evaluation and conclusions

From 1 January 2008, the Czech system of tax assignment was adjusted, among others, the redistributive criteria of the total area of the municipality was introduced. Three percent of the gross revenue of the income taxes and VAT began to be distributed in accordance with the total area of each municipality. This criterion should give an advantage to the municipalities with lower population density and those who were prevented in conjunction with neighbouring municipalities by geographic conditions or it should offset the increased costs associated with the repair and maintenance of local roads and transport services. Already in 2007, due to the high variability of population density in the Czech Republic there were assumed significant differences not only between small and large communities, but also between different communities within a certain size category. The system worked unchanged until the end of 2012, when, with effect from 1 January 2013 there was limited criterion of total area to 10 ha per person. The reason for this provision was just criticism of existing extremes in tax revenues of municipalities with large rural areas (extravilan). On the contrary, this is criticized by municipalities with a small population with reasonable size of area, because this step will significantly reduce their revenue and consequently the extent of expenditure. The professional public is questioning the logic of linking the criteria of the total area and population, and they are proposing to use urban area (or its modification in the form of built-up area or residential area).

The purpose of this paper was to determine whether the municipal area (expressed as total area, counted area, urban area), eventually the number of inhabitants has the impact on municipal expenditure depending on the area of the municipality and how significant is the impact and what is the progress of a possible dependence (influence).

When calculating expenditure on 1 ha of municipal area and their subsequent correlation with the municipal area shows that dependency is the strongest in the case of urban area, nearly one-third higher than in the case of dependence counted area and the total area; in the case of current, capital and total expenditure.

When calculating expenditure on 1 ha of municipal area and their subsequent correlation with the number of inhabitants in the municipalities it shows that the dependency is slightly higher in the case of the counted area and the total area, but only very slightly; namely for current, capital and total expenditure. There is not any really noticeable difference.

The values of regression coefficients also show that changes in urban area have a much greater impact on expenditure than the changes of counted area and total area of municipality. E.g. the growth of the urban area by 1 ha will increase current expenditure by about 60 CZK/1 ha, capital expenditure by 23 CZK/1 ha and the total expenditure by about 83 CZK/1 ha. In contrast, the growth in the counted area and the total area by 1 ha will increase current expenditure by about 2 CZK/1 ha, capital expenditure by about 1 CZK/1 ha and a total expenditure by less than 3 CZK/1 ha.

The values of regression coefficients also show that changes in population have a much greater impact on expenditure converted by urban area than on the expenditure converted by counted area and by total area. E.g. population growth by 1 person will increase the current expenditure converted to 1 ha of urban area by CZK 3, capital expenditure converted to 1 ha of urban area by 1 CZK and total expenditure calculated on 1 ha of urban area by CZK 4. In contrast, population growth by 1 person will increase current expenditure calculated on a 1 ha of counted area and total area by less than 1 CZK, capital expenditures calculated on a 1 ha area of counted a total area by 0.30 CZK and total expenditure converted on 1 ha of counted area a total area by about CZK 1.

These differences in the values of regression coefficients are given by the extent of area, which is registered in each type of area municipalities, but even so the difference is significantly large.

The dependency between population and municipal area is strongest when it is given to the urban area of the municipality, the dependence is very strong, almost absolute and almost one-fifth higher than in the case where a municipal area is given by the counted area and total area. Looking at the regression coefficients between population and municipal area can see that on the 1 residents it is on average of 0.0363 ha urban area, the counted area of 0.1486 ha and 0.1485 ha of the total area. Regression coefficients between municipal area and population again shows that on 1 ha of urban area it is on average about 21 residents, on 1 ha of counted area a total surface area it accrues in average for 3 people. This demonstrates that the dependency ratio is much higher among the urban area and the population and vice versa.

Statistically significant correlation and regression coefficients and their confidence intervals, in the case of confidence intervals for correlation coefficients supplemented by statistical significance their limits, show that the results of the analysis and subsequently conclusions drawn from this analysis can be applied with respect to all municipalities of the Czech Republic.

Based on the analysis, it was determined that municipal area in terms of the urban area, counted area or total area, the most associated with the expenditure connected with the area is just urban area. Thus, in terms of use municipal area criterion within a tax assignment system it could be more suitable just urban area than previously used total area or currently used counted area. However, just the urban area depends the most on the population from the given criterions. The reason for the inclusion of criteria in the tax assignment system would not be its dependence but it is its "independence" so it could reflect to a certain extent other differences and specificities of individual municipalities. The remaining two kinds of municipal area would be the best to use, but even here the relationship between population and counted a total area is very strong, and thus raises a similar problem as in the case of urban area.

Looking at the results from the analysis point of view it can be seen that in the case of the dependency between expenditure and the population; values of correlation coefficients are relatively high and higher than in the area. These

correlation coefficients are similar to those exceptions, the current expenditure has been estimated in a very strong dependency.

Based on the above it can be stated that municipal area expressed by the urban area, counted area or total area has a certain impact on expenditure and it has great significance for municipal management. If, however, it will be considered adjustment of the tax assignment system in terms of need to modify the municipal area as criteria for redistribution, then urban area would be the most appropriate criterion. Not only that, the urban area has the greatest impact on the expenditure of municipalities in terms of different expression of area of the municipality, in some respects, better reflects the area of the administration and financing under the municipalities responsibility, and more so it corresponds to the area about which the municipality really cares, and may also have more appropriate ability than the counted area and the total area of the municipality.

However, the urban area (slightly less counted area and total area) and population are very strongly linked to each other. At the same time it can be seen that the dependence between population and expenditure converted to the area in all cases is greater than the correlation between municipal area and expenditure converted to the municipal area. In addition, tax revenue attributable to the municipality according to the criteria of the total area is on average about 31 thousand CZK/1 km² (Tománek 2011). In terms of expenditure related to the area, for 1 km² of total area accounts for the total expenditure of about 1 million CZK, on 1 km² of urban area, which is on average, about 7.5 million CZK. From this point of view is not very logical argument to interconnect the revenue side with the expenditure side.

In relation to the facts mentioned above, it can be stated that from broader context view, the results of the analysis and its conclusions and in terms of simplicity, clarity and comprehensibility of the Czech tax assignment system it is more suitable to abandon the criterion of area (in whatever terms) and retain its influence only through criteria of population.

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Rozloha obcí jako kritérium českého systému rozpočtového určení daní

Tento příspěvek se zabývá rozlohou obce vyjádřenou intravilánem, započtenou plochou a celkovou rozlohou. Cílem příspěvku je zjistit, zda rozloha obce, resp. počet obyvatel v obci, mají vliv na obecní výdaje spojené s rozlohou obce, jaký je tento vliv a jaký je průběh případné závislosti. Vliv těchto proměnných je v příspěvku zkoumán prostřednictvím korelační a regresní analýzy mezi rozlohou obce nebo počtem obyvatel obce a obecními výdaji spojenými s rozlohou obce a přepočtenými na 1 ha rozlohy obce. Příspěvek tak hodnotí, zda je vhodné použít rozlohu obce jako přerozdělovací kritérium v českém systému rozpočtového určení daní. Analýza je provedena na příkladu obcí Zlínského kraje.

Klíčová slova: rozpočtové určení daní, Česká republika, Zlínský kraj, obec, rozloha obce, intravilán obce, započtená plocha obce, celková rozloha obce, počet obyvatel obce, výdaje obcí

Contact address:

Ing. Eva Marečková, Department of Public Economics, Faculty of Economics, VSB – Technical University of Ostrava, Sokolská 33, 701 21 Ostrava 1, *e-mail:* eva.mareckova.st@vsb.cz; xMareckovaE@seznam.cz

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