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POLISH LOCAL GOVERNMENTS' CAPACITY FOR TERRITORIALLY COHERENT DEVELOPMENT

Abstract: The article aims at presenting the spatial dimension of local government finance in Poland. In doing so it outlines various financial indicators which could serve as measures of local governments' capacity for territorially coherent development.

The article presents first of all the broader context for developments in the sphere of public finance, be it on a national or local level – namely the severe financial and economic crisis which led to significant increases of indebtedness of national and local governments across Europe and is now, in its latter stages, transformed into political crises in a number of European countries.

The overriding question approached in the paper is: "Has the impact of the financial crisis significantly undermined the Polish local governments' capacity for territorially coherent development?". Specifically, the following issues are covered:

- what were the effects of the crisis in terms of regional and local authorities' indebtedness?
- did the crisis significantly affect the structures of incomes and expenditures in regions and municipalities?
- did it deepen the disparities in terms of wealth distribution over space?

Key words: Local government finance, local government debt, territorial cohesion.

1. Impact of economic and financial crisis on European public finance

The economic and financial crisis which started towards the end of the first decade of the XXI century has significantly affected European public finance in both theory and practice. The long standing discussion between the supporters of Keynes and Friedman has now erupted with revived strength. As with previous crises also the most recent one has led to a significant change in the mood and stance of policy makers towards money supply, budgetary deficits and public debt.

The liberal doctrine held public debt in contempt and called for balanced budgets. With the appearance of the crisis in the late 1920s however the liberal doctrine has lost its appeal and interventionist doctrine put forwad by John Maynard Keynes gained in popularity. The economic crisis, coupled with the war which submerged Europe in bloody conflict for half a decade resulted in a strong drive towards development and rebuilding of welfare states, at least in the Western part of Europe. This in turn led to creation of large public debts, as societies 'borrowed from the future' to speed up their development. Finally, after another economic crisis, the mood changed in favour of monetarist theory which was, deep at heart, a come back to the essential assumptions formulated by the classical, liberal doctrine. The monetarist approach motivated countries to reduce their public debts somewhat.

At the beginning of the twenty first century it seemed, at least for a moment, that monetarist doctrine is going to dominate for good as "*large elements of (...) Classic Monetarism were achieving their intellectual hegemony*" [Bradford De Long 2000]. However, already a decade later, after the emergence of yet another crisis, Keynesianism came back with governments all over the world embarking on vast interventions supported by increased public spending, and the future of monetarism was seriously questioned [Issing 2010]. The intervention widely undertook in the latter part of the first decade of the XXI century was of two kinds – firstly, the governments supported the banking sector helping it recover and survive the aftershocks of the Lehman Brothers collapse following the bursting of the speculation bubble on the US property market; secondly, the governments attempted to revive their economies as growth turned into recession.

The re-emergence of Keynesianism resulted in fast increases of public debt levels across the whole of Europe. Eurostat reports that in 2007 the general government's consolidated debt of current EU members (27 countries) was at a level of 59% of their GDP. By 2010 this figure has grown to 80% [see also: Turala 2011].

It is now evident that the economic slow down and increased public spending have caused a threat to solvency of some EU members states, with Greece already all but bankrupt and Italy shaking in its foundations. Even the future of the European Monetary Union seems uncertain. These developments in terms of the 'big picture' have their significant impacts also on the regions and municipalities. It needs to be asked how these general developments were transmitted to a lower – regional and local level? What were the effects of the crisis in terms of regional and local authorities' indebtedness? Did the crisis significantly affect the structures of incomes and expenditures in regions and municipalities? Did it deepen the disparities in terms of wealth distribution over space?

Ultimately, the question which remains unanswered is whether the aftermath of the financial crisis is an abstract idea which has no impact whatsoever on the local capacity for territorially coherent development and which should be cleaned up by the national governments or, perhaps, it is a very real and hurtful problem felt all the way down to the smallest of municipalities. The paper approaches these issues by analysing the level and dynamics of debt in Polish local governments (part 2) and the spatial distribution of wealth across them (part 3). The paper is concluded with a proposed index of territorial cohesion capacity which attempts to combine the notions discussed in the paper (part 4).

Territorial cohesion is a complex notion which has not been fully defined. Camagni points out that the notion of territorial cohesion remains unclear and requires further clarifications. He proposes a definition according to which territorial cohesion ought to be perceived as spatial dimension of sustainable development [Camagni 2007]. The sixth progress report on economic and social cohesion defines territorial cohesion as "the harmonious and sustainable development of all territories by building on their territorial characteristics and resources" [*European Commission* 2009].

The above observations lead to a conclusion that territorial cohesion remains a phenomenon which is difficult to measure. It is not possible to highlight a short list of universal quantitative indices which would allow for an objective measurement of various territories' capacity for harmonious development in social, economic, environmental as well as spatial (with regards to accessibility in particular) dimensions across the whole of Europe. This results, on the one hand, from the complex nature of territorial cohesion and, on the other hand, from far reaching differences in terms of development potential and conditions between European countries and regions, not to mention municipalities.

Looking at the case of Poland, it is evident that there exist significant deficiencies in terms of infrastructure. Thus it has been assumed that the local governments' capacity for carrying out infrastructural investment projects is a relatively precise and yet simple indication of their capacity for territorially coherent development. The developments with regards to changing levels of local government debt, changes in income structures or in the spatial distribution of wealth – which are analysed in the paper – may be considered determinants of financing investment projects in Polish communes.

2. Indebtedness and income structure of local governments in Poland

The growing debts in the sector of public finance across Europe have been matched by the developments which could be observed in Polish local governments over the past several years. The ratio of local government (communal) debt to incomes has been generally increasing in Polish communes with more and more communes reaching very high levels of this ratio. The most significant increases in terms of debt levels could be observed in 2009 and 2010 – while the situation in 2007 and 2008 was relatively stable, a glance at data for 2009 and 2010 shows clearly that the world-wide economic and financial crisis has been clearly reflected also in the local governments' finance in Poland by a quick increase in debt levels.

Out of nearly two and a half thousand communes in Poland only 27 were in debt for amounts exceeding 50% of their annual incomes in 2008. A year later, in 2009, this number more than tripled – in 2009 there were 84 such communes. This number tripled once more in 2010 when already 262 communes recorded extremely high levels of debt. What is more, many more communes quickly accumulated debt and fell into the second category of significant debt (exceeding 30% of their annual incomes) – in 2008 there were 328 such communes, in 2009 their number increased to 535, while in 2010 there were already 904 such territorial units. At the same time the number of communes without any debts dropped sharply in 2010 – from 140 such units in 2008 and 141 in 2009 there were only 63 left in 2010. Further details concerning the levels of debt relative to income in Polish local governments are presented in Figure 1.

A glance at maps depicting levels of local government debt relative to incomes (Figure 2) allows for identifying an interesting pattern of spatial distribution of the said variable. It is clear that the level of debts grew most in the western part of Poland as well as in and around the largest of cities, in other words – in areas which in terms of socio-economic development are the most developed and continue to grow at the fastest pace. This observation could indicate that increased pace of growth can indeed be attributed, at least partly, to debt which finances investments of various kinds.

The growing levels of indebtedness will most certainly affect the communes' capacity to develop in a territorially coherent way, which is to say harmoniously – in terms of economic, social as well as environmental and infrastructural dimensions. After all such capacity for territorially coherent development is greatly dependent on the capacity of financing investments. The local governments whose debt exceeds 50% of annual incomes are greatly restricted in their investment activities and thus lose some of the potential for growth and development in the future.

The recent developments with regards to excessive levels of public debt causing widespread political and economic turbulence in Southern Europe adds pressure also on the Polish government to slow down the pace of growth of Polish public debt which

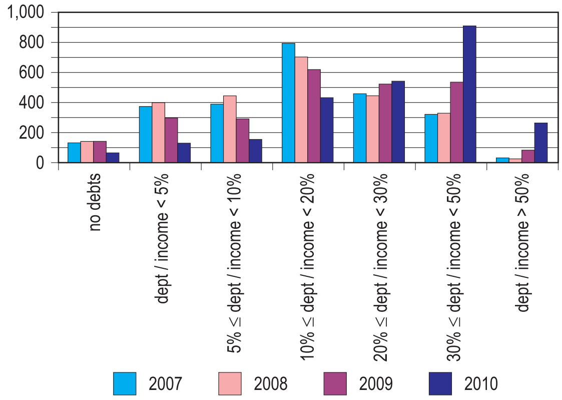


Figure 1. Indebtedness of communes in Poland

Source: Prepared by the author based on data from Polish Ministry of Finance (Figs 1-4).

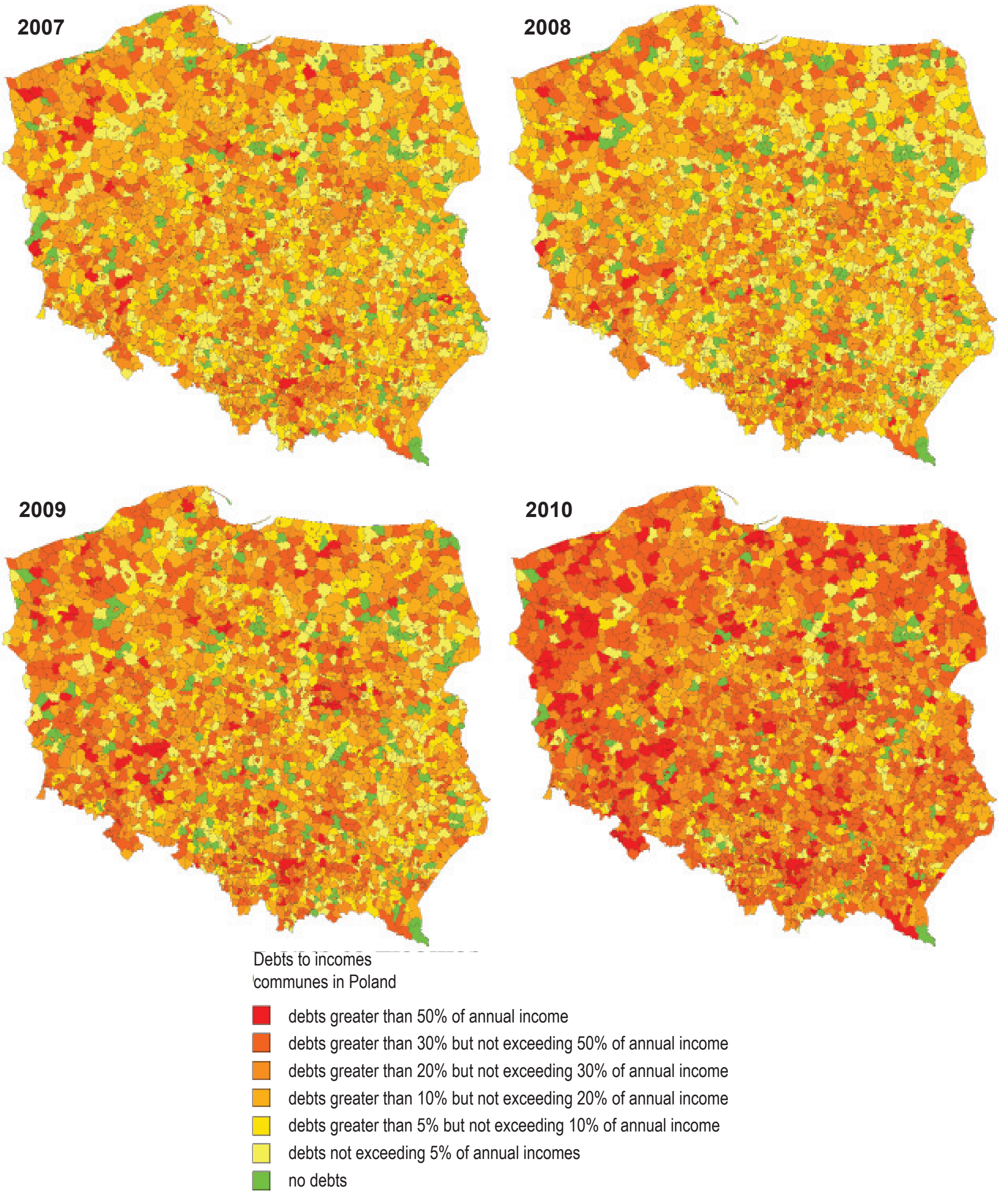


Figure 2. Spatial differentiation of indebtedness of Polish communes between 2007 and 2010
Source: Prepared by the author based on data from Polish Ministry of Finance.

is in part generated by local governments. This in turn leads to greater pressure and, possibly, additional restrictions on local governments with regards to their spending policies and possibilities of generating new debt. This relates to the broader discussion on fiscal decentralization and federalism which, amongst others, raises concerns about public sector indebtedness [Wildasin 2004].

The level of indebtedness only shows one side of the proverbial medal however. The second side is reflected by the structure of incomes of local governments and the changes which have occurred therein as a result of, amongst others, the financial and economic crisis. The structural changes are particularly significant for local governments' capacity for territorially coherent development as they may affect the level of financial autonomy which the local governments enjoy.

The notion of financial autonomy of local governments relates directly to the notions of state's decentralisation, especially with regards to administration and public finance. It is often raised in literature that significant decentralisation in terms of performed tasks (and the ensuing decentralisation in terms of incomes and expenditures) is beneficial as it raises the effectiveness with which public authorities allocate the available resources in order to meet the needs of their citizens [Guziejewska 2010, p. 126]. Decentralisation may be measured, for example, by calculating the share of expenditures carried out by local governments in the GDP or by relating local government expenditures to central government expenditures.

Any such analysis will not shed much light on the autonomy of local governments however, as it does not take into account neither the structure of incomes nor the structure of expenditures. It only serves to highlight what portion of tasks is performed locally, while the true role played by the local governments in both society and economy is dependant on the scope of financial autonomy which the local government enjoy.

One of the simplest methods of measuring the level of financial autonomy of local governments, and also the one which is used the most, is through the analysis of the local government's income structure. This approach is adopted by the OECD, amongst others [*OECD* 2001]. The OECD assumes that the financial autonomy is provided mostly by tax incomes which differ in terms of the level of autonomy that they bring about. Autonomy is ensured most by those taxes which are to some extent controlled by the local authorities.The incomes which are trabsferred from the state budget are far less significant in terms of financial autonomy, even if the transferred resources come from a tax-sharing arrangement between the local and the central government (*i.e.* with regards to both personal and corporate income tax). OECD further emphasises that there is a significant difference between the general-purpose grants and the specific grants (or targeted grants). The first group of grants allows for greater freedom with regards to deciding the structure and direction of spending while being less discretionary and awarded in accordance with objective and measurable criteria, whereas the second group of grants may be characterised as extremely discretionary and thus the most restrictive with regards to financial autonomy of territorial units.

Comprehensive approach to financial autonomy should cover two dimensions – on the one hand it should take into account the income aspect of local government finance, while incorporating also the expenditures dimension into the big picture.

Analysing expenditure financial autonomy is somewhat more troublesome than in case of income financial autonomy. In order to perform such analysis it is necessary to categorise all local government expenditures according to the level of decision-making capacity that the local governments have with regards to their tasks and thus their expenditures. Such a categorisation should identify at least three major groups of tasks: (1) facultative tasks which may be fully decided on by the local authorities, (2) obligatory tasks which are nonetheless only regulated by framework legislation which leaves a considerable space for local discretion and (3) obligatory tasks which are precisely regulated by existing legislation in terms of the standard of provided services [Oulasvirta, Turała 2009, p. 318].

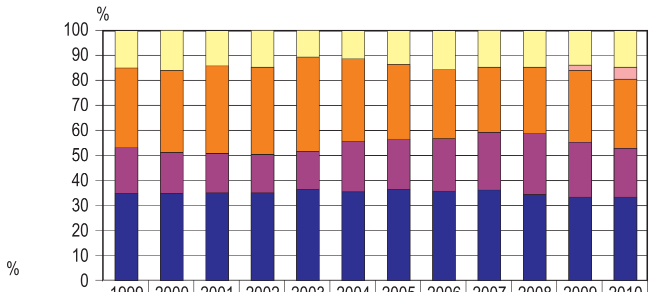
Having said that, it needs to be emphasized that the share of own sources of incomes in total incomes is by far the simplest and fastest measure of local government financial autonomy. The own sources of incomes – which include, amongst others, incomes from local taxes, fees and user charges as well as incomes from municipal property – determine the real level of self-governance and autonomy as they are the only group of incomes over which the local authorities have real, even if not full, governance.

Polish legislation, including the Constitution and the Local Government Incomes Act of November 13th, 2003 define two groups of incomes apart from the so-called own incomes. These are targeted grants and general grants. The division of grants is in line with the OECD approach – namely the targeted grants are discretionary and have fixed directions of spending, while the general-purpose grants are calculated based on various measurable and objective criteria and need not be spent in any specified way, but rather serve as means of providing funds necessary for completing the numerous tasks which the local governments are responsible for.

The own incomes, as defined in legislation, are however cause for disagreement and dispute. The reason for this being that the shares in personal income tax and the corporate income tax which the local governments receive can hardly be called own sources of incomes, even if it is beyond doubt that these are tax-based sources of incomes. The mechanism for sharing the incomes from PIT and CIT does not give local authorities any kind of decision-making capacity or discretion over these sources of incomes. Instead, the amounts which are due to be transferred to local budgets are calculated using a simple percentage-based formula, pretty much like in case of general grants. That is why the incomes form the PIT and the CIT may and should be treated as a subset of general grants, rather than as own incomes, even despite the provisions of the law – a fact which has significant bearing on the perceived level of financial autonomy as measured by the share of own sources of income in total incomes.

Figure 3 presents the structure of incomes of communes, including urban districts (*i.e.* the largest Polish cities) between 1999 and 2010.

Figure 3 shows that Polish communes are relatively autonomous with a third of their incomes coming from own sources and further one-fifth of their incomes coming from shares in income taxes. A closer look at the crisis years of 2007-2010 shows



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Targeted grants	15.4	16.3	14.6	14.9	11.0	11.8	13.9	16.0	14.9	14.8	14.4	15.0
Development grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.9
General grants	32.1	32.8	35.0	35.2	37.8	32.9	29.7	27.6	26.2	26.9	28.9	27.3
PIT and CIT	18.2	16.5	15.6	15.2	15.1	20,2	20.4	21.0	23.3	24.1	22.0	19.8
Own incomes	34.4	34.5	34.7	34.7	36.0	35.2	36.0	35.4	35.6	34.2	32.9	32.9

Figure 3. Structure of incomes of communes and urban districts between 1999 and 2010

that the level of financial autonomy dropped somewhat. First of all, the share of own incomes in total incomes dropped from 35.6% in 2007 to 32.9% in 2009 and 2010. The share of incomes from tax-sharing arrangements with regards to PIT and CIT was also reduced from 23.3% and 24.1% in 2007 and 2008 respectively to 22.0% and 19.8% in 2009 and 2010 respectively. Decreases of 2.2 percentage points in both 2009 and 2010 reflect the general economic slowdown and resulting reduced tax bases.

These reductions were matched by increases of those income sources which do not provide excessive levels of autonomy (*i.e.* general-purpose grants) or even restrict it (*i.e.* targeted grants). General grants' share increased form 26.2% in 200 to 27.3% in 2010, peaking in 2009 at the level of 28.9%. Targeted grants' share in total incomes rose slightly from 14.9% in 2007 to 15.0% in 2010 thus ending a downwards trend which lasted until 2009 when the share was 14.4%.

Decreased financial autonomy, even if the decrease was not significant, is yet another factor which may be interpreted as a sign that the communes' capacity for territorially coherent development has weakened following the financial and economic crisis.

3. Spatial distribution of wealth

Apart from indicators such as the level of indebtedness or the level of financial autonomy, the capacity of individual territorial units as well as groupings of territorial units forming larger spatial systems to develop in a territorially coherent way may be reflected also by indicators which reflect the general level of socio-economic development and/or wealth. It needs to be emphasized that whereas the level of indebtedness, analysed in previous parts of the paper, points to the existing capacities for acquiring further external sources of funding for investment projects, the general notion of socio-economic development – which is analysed in this part of the paper – reflects the territories' tax capacity to generate annually renewed resources, a part of which may be spent on infrastructure and other projects that support territorially coherent development.

Typically, the level of socio-economic development on both national as well as regional level is measured by *per capita* GDP. However, it is not possible to use this indicator for describing the situation on lower levels of administratve division as such data is simply not collected by statistical offices. That is why various substitute measures need to be employed. One of such measures which is relatively simple and yet accurate (as relevant and up to date data is readily available in statistical offices or ministries) is the level of *per capita* incomes or a subset of it, such as the level of *per capita* tax-based incomes or *per capita* own incomes.

The level of socio-economic development or, as is the case here – wealth, is a significant sign of existing capacity for further growth and territorially coherent development on the level of individual territories as well as across space – when the spatial disparities in terms of wealth are analysed. Larger areas comprised of numerous territories which all are wealthy relative to other territories may lead to synergy effects and increased multipliers to economic growth as well as social capital gains.

Table 1

Wealth distribution in Polish communes between 2007 and 2010

	2009 (data for 2007)		2010 (data for 2008)		2011 (data for 2009)		2012 (data for 2010)	
	no.	%	no.	no.	%	%	no.	%
Per capita tax-based incomes equal to or greater than 0% but not exceeding 40% of the average	375	15.1	214	8.6	240	9.7	296	11.9
Per capita tax-based incomes equal to or greater than 40% but not exceeding 60% of the average	803	32.4	780	31.5	779	31.4	811	32.7
Per capita tax-based incomes equal to or greater than 60% but not exceeding 80% of the average	587	23.7	718	29.0	691	27.9	612	24.7
Per capita tax-based incomes equal to or greater than 80% but not exceeding 100% of the average	352	14.2	378	15.3	376	15.2	356	14.4
Per capita tax-based incomes equal to or greater than 100% but not exceeding 120% of the average	182	7.3	197	7.9	186	7.5	189	7.6
Per capita tax-based incomes equal to or greater than 120% but not exceeding 140% of the average	65	2.6	79	3.2	86	3.5	77	3.1
Per capita tax-based incomes equal to or greater than 140% of the average	114	4.6	112	4.5	120	4.8	138	5.6
Total	**2,478**	**100.0**	**2,478**	**100.0**	**2,478**	**100.0**	**2,479**	**100.0**

Source: Prepared by the author based on data from Polish Ministry of Finance.

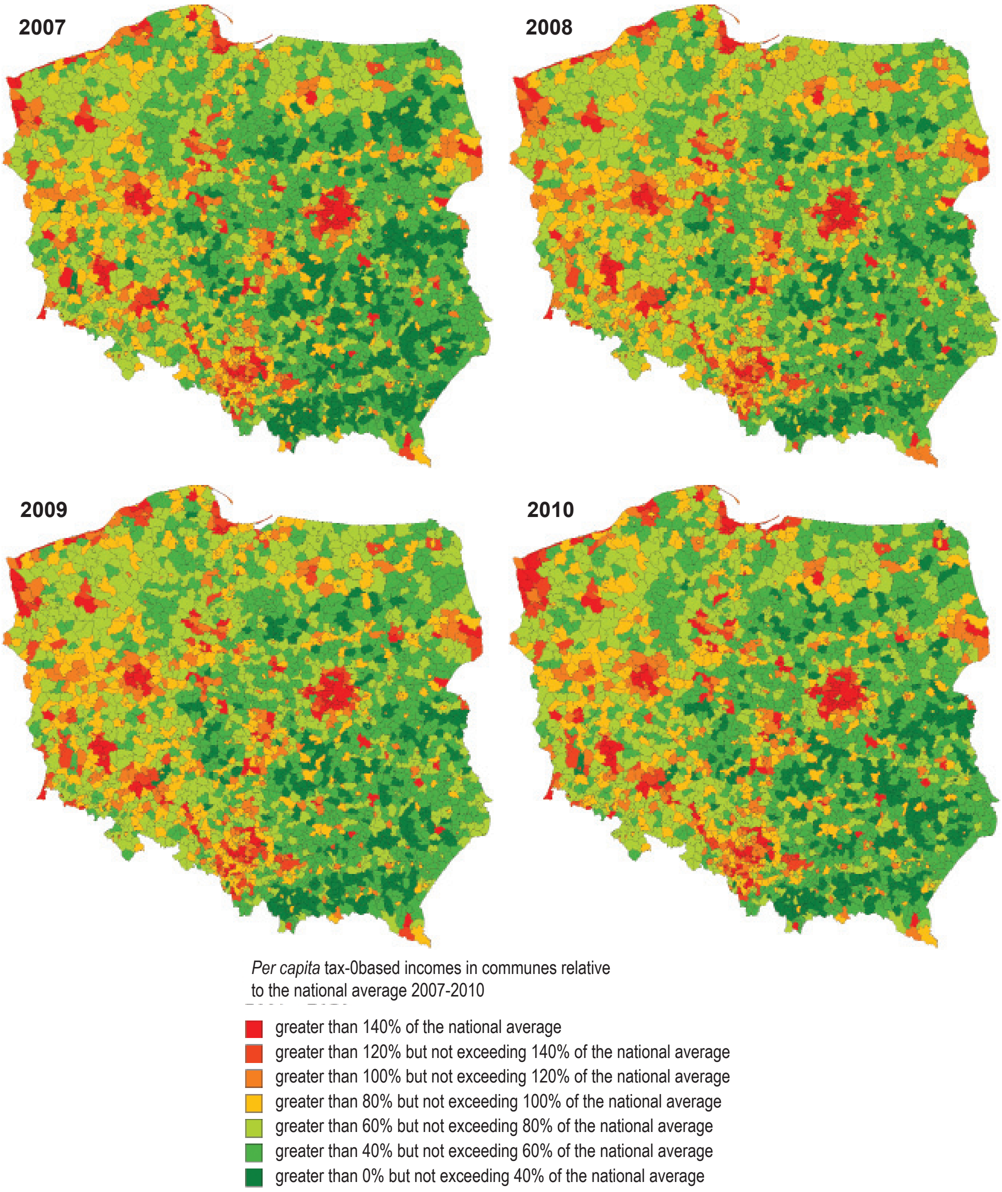


Figure 4. Wealth distribution in Polish communes between 2007 and 2010

The data which is shown below comprises of an index of *per capita* tax-based incomes which is used by the Polish Ministry of Finance in order to determine relative wealth of individual local governments. The Ministry calculates and publishes reports with values of the said index in relation to its income equalisation policy, but this data remains useful also for the purpose outlined in this paper.

The analysis below is based on the values of the aforementioned index calculated by the Ministry of Finance for communes for 2009, 2010, 2011 and 2012. Because of time delays in the availability of statistical data indices for any given year (*n*) are always based on data from two years before (*n-2*). The index for every commune was put in relation to its average value calculated for all communes in Poland. Thus Table 1 and Figure 4 depict the level of *per capita* tax-based incomes in every commune relative to average *per capita* tax-based incomes.

Table 1 shows the number and percentage of communes belonging to various categories of wealth – beginning with communes which generate extremely little tax-based incomes (*i.e.* less than 40% of the national average), and ending with those generating over 140% of average tax-based incomes.

As Figure 4 shows spatial differentiation of wealth on communal level is evident with greater resources concentrated towards the western and the northern parts of Poland and in and around major cities in particular.

The wealth distribution of Polish communes between 2007 and 2012 is characterised by high level of stability. However as far as capacity for territorially coherent development is concerned this set of data suggests that large parts of the country have resources which may be deemed as insufficient – as many as 44.6% of all communes have *per capita* tax-based incomes on a level not exceeding 60% of the national average.

Conclusions

It has already been mentioned that territorial cohesion, being a complex and somewhat undefined notion, may not be measured by a simple and universal method. However, taking into account the specificity of a given country or region it is possible to identify those indicators which are of significance for territorial cohesion, or rather for capacity of territorial units to develop in a territorially coherent way.

This paper's aim was to analyse the impact of financial crisis on Polish local governments' capacity to develop in a territorially coherent way and to identify financial indicators which could be used for analyzing capacity for territorial cohesion in Polish communes. Several such indicators were identified and described. Concluding, it may be noted that the capacity of Polish communes for territorially coherent development rests predominantly on their capacity for financing investment projects as well as on their financial autonomy.

The former may be measured by two sub-components, namely: (1) the amount of incomes available for investments after current expenditure as percentage of total incomes and (2) the amount of available loans (as percentage of total incomes). The latter may be measured in different ways, for example using the level of *per capita* tax-based incomes relative to the the national average or other methods such as a Local Autonomy Index [Oulasvirta, Turała 2009].

Using such variables an index of territorial cohesion capacity (I_{TCC}) may be proposed which attempts to summarise earlier observations and join them into a single measure. The index reflects the potential for territorially coherent development of individual communes and is given by the equation:

$$I_{TCC} = (I + D) \times FA$$

where

- I_{TCC} is the index of territorial cohesion capacity;
- I is the share of total incomes which is available for investments after current expenditure;
- D is the amount of additional loans which the commune could still take expressed as a share of total incomes;
- FA is an index of financial autonomy calculated in accordance with the chosen method; this paper assumes that FA equals to the quotient of *per capita* tax-based incomes in a given commune and the average *per capita* tax-based incomes;

Whatever the chosen methodology the conclusions are alike – the capacity for territorially coherent development differs greatly between individual territorial units. Figure 5. shows the spatial differentiation of I_{TCC} calculated for 2009 using data on *per capita* tax-based incomes as a measure of financial autonomy.

Generally speaking, the prospects of development are best in the western and northern part of Poland, especially in and around Polish metropolitan cities. In other

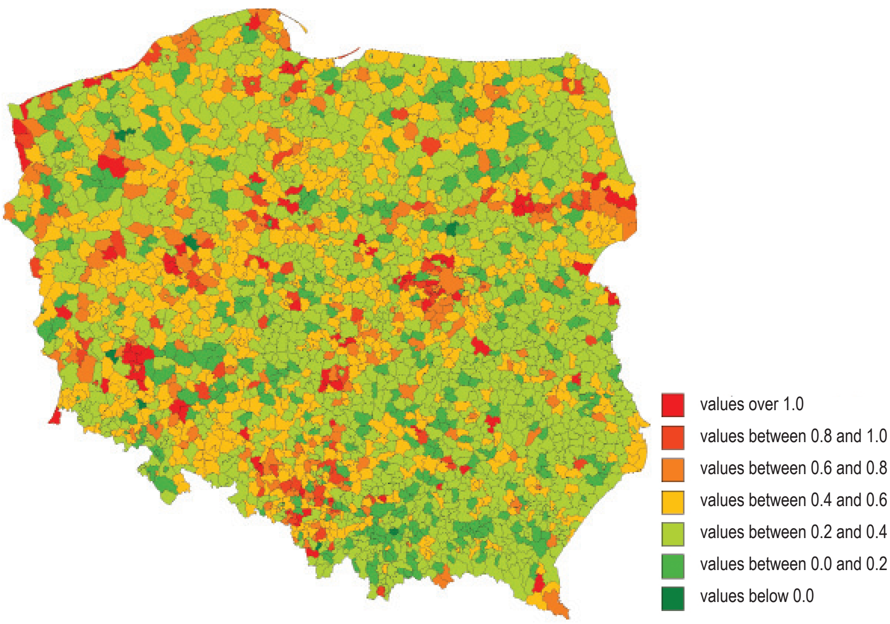


Figure 5. Index of territorial cohesion capacity in Poland (2009)

Source: Prepared by the author based on data from Polish Ministry of Finance and Central Statistical Office.

words – where the levels of socio-economic development and accumulated wealth are generally higher already. This may suggest that instead of convergence in terms of socio-economic deleopment levels, Poland finds itself on a path towards divergence. Thus any sort of terrotirial cohesion policy needs to take into account the existing disparities and differentiation in terms of capacity for attaining territorially coherent development.

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