Anna Wichowska

University of Warmia and Mazury in Olsztyn, Faculty of Economic Sciences, Department of Theory of Economics anna.wichowska@uwm.edu.pl, ^D https://orcid.org/0000-0003-2862-4424

Government transfers in the budgets of Polish municipalities and their determinants

Abstract: The level of transfer payments, factors that determine the allocation of public resources to territorial governments, and fiscal decentralization have been studied extensively for many decades. These problems have recently resurfaced in the scientific debate in the face of the economic crisis triggered by the coronavirus pandemic. The study has two aims: to evaluate the vertical redistribution of public funds to Polish municipalities, and to identify the economic factors that influence the level of transfer payments. The poverty rate and the average monthly disposal income in Polish municipalities were among the key determinants of public transfer levels.

Key words: municipal budget, decentralization, income redistribution

Introduction

The financial and economic crisis referred to as the Great Recession and the resulting market downturn has initiated a debate on the extent of fiscal decentralization and government transfers to the local level in many countries. The theory of fiscal federalism postulates that the financial links between different tiers of public administration facilitate effective management of economic crises and alleviate their consequences. Locally initiated measures are more effective, and they ultimately influence the financial condition of the state. However, in the face of the economic crisis, many countries have implemented measures that actually enhance centralized management of public resources by introducing various instruments to coordinate local budgets.

Instruments that influence both the expenditures and revenues of local governments have been implemented in European and global economic practice (Nelson 2012). They include regulatory instruments that amend legal provisions on financial discipline, introduce savings plans, new fiscal rules and more stringent regulations for controlling local debt. Some governments have intervened directly by changing the level of transfers from the central budget to local budgets



or by forcing territorial governments to rely on their own revenues to cover the costs of their statutory operations.

The Polish Public Finance Act was amended in 2019 (Act amending the Public Finance Act of 2018) to counteract the growing threat of local government bankruptcy and indebtedness. These changes have enabled the executive bodies of territorial governments to amend local budgets and long-term financial plans. A more stringent procedure for calculating the municipal indebtedness index was introduced by taking into account liabilities that generate identical consequences to loans and borrowings. Similarly to the limits applied to traditional loans and borrowings, a cap was enforced on municipal debts. The above measures had been undertaken to rationalize public finance management, reduce public debt and the associated servicing costs (Act amending the Public Finance Act 2019). The implemented norms were consistent with European trends and the recommendations formulated by global institutions such as the International Monetary Fund (Ban, Gallagher 2015).

The significance and effectiveness of these instruments have been widely analyzed by researchers as well as practitioners (Blyth 2013, Neyapti 2013, Turley et al. 2018). The political and macroeconomic implications of the introduced measures have been discussed by many authors (Feld, Schnellenbach 2011, Ponce-Rodriguez et al. 2018). The extent to which decentralization affects the implementation of state measures for crisis containment has also been investigated (Hansjörg, Junghun 2016, Wichowska 2021). These concerns and debates have been revived in the face of the economic downturn caused by the coronavirus pandemic.

Measures that affect the scope and scale of decentralization have both positive and negative implications for the economy. Instruments promoting greater decentralization increase the number of local decision-makers and can lead to coordination problems. Higher transfers from the central budget can contribute to arbitrary decision-making at the local level. Territorial governments can be tempted to increase unjustified expenses and decrease local taxes to garner political support. However, the central government can also decrease transfers and shift the political responsibility for its actions to territorial governments. In consequence, local authorities may be deprived of funds for performing their statutory duties, and they could be forced to co-finance their operations from own sources of revenue (Pisauro 2001). Low levels of fiscal autonomy resulting from low tax revenues, fees and charges, as well as high dependency on government transfers also considerably compromise the economic performance of territorial governments.

In view of the above, the aim of this article was to analyze the vertical redistribution of funds from the central budget to Polish municipalities and to identify economic factors that influence government transfers. This aim was achieved by answering two research questions. The first question was whether and to what extent the level of transfer payments to Polish municipalities has changed in recent years. The relevant literature was reviewed to determine whether changes in public transfer levels during economic recessions led to greater state assistance for Polish municipalities or whether local governments were forced to shoulder the burden of public finance deficit during economic downturns. The second question concerns economic factors that influence the level of government transfers. For the needs of the analysis, it was assumed that transfer payments are determined not only by legal provisions and the stabilization policies of the central government, but also by the economic status of municipalities. The results of the study can be used to initiate a debate on Polish administrative division and the extent of fiscal decentralization more than 20 years after the local government reform.

The article contains several chapters. The first chapter reviews the literature on fiscal decentralization. The following two chapters describe the research methodology and the results of the conducted study. Conclusions were formulated in the last chapter.

Literature review

The socioeconomic system of a country determines the scope of government activity and the manner in which public funds are allocated with the involvement of the adopted redistribution mechanisms. In federal states, the government collects a part of national and local revenues to build the central budget. Funds from the central budget are then allocated to various purposes, such as economic development, national security and defense, or social welfare. The funds dedicated to social and economic goals have to be adequately managed. Central, regional (region and district) and municipal budgets have to be reliably planned, constructed and executed.

According to fiscal decentralization theories which are well grounded in the literature and in economic practice, the redistribution of income between the central and local level is not obligatory in a market economy. Musgrave (1959) and Oates (1972) postulated that stabilization policies should be the exclusive domain of central governments, and these theories were not questioned for many years. They also posited that state authorities should develop effective systems for redistributing incomes at various levels of governance. The freedom to manage local revenues can undermine territorial governments' ability to equally satisfy local needs. These inequalities can drive migration, where less affluent citizens move to regions that offer greater social benefits, while more affluent citizens migrate to regions with lower taxes.

The debate on fiscal decentralization has continued since the end of World War II. It is usually revived at times of economic hardship because the consequences of some economic crises are first experienced at the local level, and they are transferred to the central level over time (Oates 2008). Transfer payments from the central government play a key role in fiscal decentralization. There are two approaches to government transfers in the Polish system of administrative division. The first approach is horizontal, and the revenues generated by territorial governments are transferred to other local units. The second approach is vertical, and it involves the transfer of payments from the central budget to territorial governments. Horizontal transfers have been most widely investigated in the Polish literature (Podstawka 2012, Swianiewicz 2016, Sekuła 2018), whereas the vertical distribution of funds has been less frequently studied. The vertical approach was discussed extensively at the end of the 20th century when a new system of administrative division was introduced in Poland (Swianiew-icz 2003, Guziejewska 2007). However, vertical redistribution continues to be broadly investigated in foreign literature in an attempt to determine the optimal participation of local governments in income redistribution and to assess territorial governments' ability to contain economic crises (Gordon, Cullen 2012), as mentioned in the Introduction.

Government transfer programs exist in most countries of the world, and they have various forms. Public funds can be allocated to projects and programs, transfers can be used at the recipients' discretion, or individual grants and donations can be made to residents or businesses. Regardless of the redistribution method, all funds transferred by the central government affect the economy. Analyses of the positive and negative implications of government transfers produce highly differentiated and sometimes contradictory results. The benefits associated with higher fiscal autonomy of territorial governments and lower dependence on government transfers are often emphasized in the literature. The implications of fiscal autonomy for local governments have been discussed extensively by Martinez-Vasquez and colleagues (Martinez-Vazquez, McNab 2006, Sepulveda, Martinez-Vazquez 2011, Martinez-Vazquez et al. 2017). They argued that financial independence has positive economic and fiscal consequences at the local level, including:

- lower cost of goods and public services at the local level, which increases both the quantity and quality of public services such as education, healthcare and infrastructure;
- reduction of budget deficits, depending on the size of the local population or whether local elections are held;
- economic growth, increased productivity, greater economic stability, increase in investments, higher GDP per capita, increased human capital and higher investment levels;
- price stability;
- macroeconomic stability;
- reduction of poverty, redistribution of income, greater access to public services which leads to improvements in other areas of life, such as longer life expectancy;
- greater convergence of regional economies and reduced geographic disparities in access to public services.

However, local revenue autonomy can also have negative consequences, some of which appear to directly contradict the identified benefits. The adverse effects of financial decentralization can be exacerbated during recession (Oates 2008, Martinez-Vazquez et al. 2017, Moges 2020). These include:

- macroeconomic instability resulting from irresponsible spending by the local authorities who regard government transfers as an integral element of the local budget;
- fiscal imbalance resulting from insufficiency of local revenues for performing statutory tasks;
- transmission of central budget deficits to local budgets;
- higher government transfers increase a state's overall tax burden;
- decisions regarding the allocation of transfer payments are made based on variable parameters that compromise planning and projects co-financed by the central budget and local budgets;
- income convergence, which is a natural consequence of economic growth, is disrupted because the flow of human capital and financial capital is obstructed between regions that differ in income levels.

The absence of a cohesive approach to identifying the positive and negative implications of decentralization can be attributed to changes in legal provisions, differences in the scope and significance of regulations concerning income redistribution, as well as the elusive nature of political, institutional and administrative factors. Some problems stem from local policies which affect the economic efficiency of public transfers, as mentioned in the Introduction (Salmon 2013, Filippetti, Sacchi 2016, Kopańska et. al. 2018)

In Poland, public funds are transferred from the central budget to local budgets because municipal revenues are insufficient to meet local needs and state intervention is required. Government transfers account for geographic disparities in the quality of public services, and they aim to eliminate these differences on the national scale (Patrzałek 2010, Swianiewicz 2011, Jastrzębska 2012). Transfer payments are also made to reduce local inequalities in access to infrastructure (Kańduła 2015, 2017). However, government transfers considerably limit the financial autonomy of municipal governments, which stands in opposition to the concept of local self-governance and reduces the role of territorial governments to providers of administrative functions (Poniatowicz 2014).

In Poland, public transfers to municipalities include general subsidies which are allocated based on clearly defined and transparent legal criteria. General subsidies have a complex structure, they have to be utilized in their entirety, and they can be distributed at the municipality's discretion (Małkiewicz 2013). General subsidies have three components: compensatory payments, equalization payments, and educational subsidies. Compensatory payments are made to the least developed municipalities to promote their economic growth. Compensatory payments consist of basic and supplementary payments. Basic payments are calculated based on tax revenue per capita, whereas supplementary payments are made to municipalities whose population density is below the national average. Equalization payments are part of the horizontal redistribution mechanism, where more affluent municipalities transfer a part of their revenues to municipalities with a lower financial status. The level of educational subsidies is set in the government's annual budget, and funds are allocated based on the educational tasks performed by municipalities. Targeted subsidies are also an important source of income for territorial governments. Targeted subsidies supplement municipal revenues and general subsidies. Unlike general subsides, targeted subsidies are paid only to finance or co-finance specific municipal tasks. Subsidies that were not utilized in a given fiscal year or were not utilized for the intended purpose, and subsidies that were claimed unjustly or in excessive amount have to be repaid. Targeted subsidies can be used to finance a municipality's statutory tasks, current operations and special projects, such as prevention of crime or unemployment, social welfare, education, healthcare and infrastructure development. Targeted subsidies can also involve grants that are paid to other municipalities under the concluded contracts. Various tasks and projects can be contracted in the area of culture, national heritage protection, education, transport and communications (Patrzałek 2017).

As previously noted, administrative division and legal regulations are the key determinants of government transfer levels. As regards the positive and negative effects of state intervention for local fiscal autonomy, socioeconomic factors also play a role in transfer payments. According to Musgrave's fiscal decentralization theory (Musgrave, Musgrave 1984), means of production are the major determinants of income redistribution across different levels of governance. Therefore, the scope of income redistribution is influenced mainly by personal incomes and personal assets. Musgrave argued that the availability of means of production is dependent on their market value or the value set by the state in centrally planned economies. Disposable income and purchasing power play an important role in this context. These components are influenced by social factors such as universal access to education, life expectancy and family patterns. Income redistribution is also determined by the overall supply of means of production and technology as well as consumer preferences. However, market imperfections, including informal factors such as family connections, social status, gender or race, can also affect income redistribution. Government transfers are also required to alleviate the negative consequences of social factors that contribute to social inequality.

The above-mentioned factors affecting the scope of public finance redistribution have been analyzed many times in previous publications. Jílek (2015) and Goerl & Seiferling (2014) compiled an extensive list of the literature on the subject and empirical research on the range of factors influencing tax decentralization and redistribution in various countries. They list several main categories, both quantitative and qualitative, among them. The first group of factors is the geographic scope and size of the territorial unit's population. The importance of local government and its finance will increase with the increase in the number of people and the area of the unit, as well as with the level of urbanization. Small local governments will not be able to use the economies of scale of the budget and will be characterized by high collection costs and low efficiency of local taxes. Another factor is the economic development of the country, expressed mainly in per capita income. The next factor is the scope of redistribution to date and the balance between income and expenditure redistribution. In addition, income inequalities among residents and the diversity of preferences in terms of demand for public services resulting from the ethnic diversity of a given region are of great importance. The last category of factors is the historically and legally adopted shape of federalism by the state and the specific division of tasks between the central and local levels. Among the factors that are particularly important from the point of view of this study, there are economic factors, which are quantitative and could therefore be subjected to econometric research.

Methods

The structure of municipal revenues was analyzed for the needs of the study. The proportions of general subsidies and targeted subsidies in the overall transfer payments made to Polish municipalities were considered. The results were used to determine the share of government transfers in municipal budgets, and this indicator was used as a dependent variable in econometric analyses.

The key determinants of public transfer levels and the scope of income redistribution in Polish municipalities were determined by multiple linear regression. The validity of linearity assumptions was checked with the following tests and methods (Stanisz 2007, Kufel 2011, Welfe 2014, Bhattari 2015):

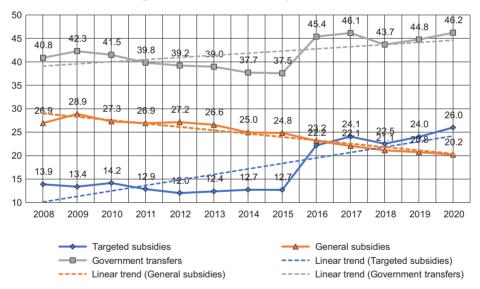
- 1. the model's linearity was checked by the Ramsey RESET test;
- 2. the number of observations *n* greater than or equal to the number of the estimated parameters was determined;
- 3. absence of collinearity/multicollinearity, i.e. the extent of correlation between one predictor and other predictors in the model, was determined by calculating the variance inflation factor (VIF) which should be less than 10;
- 4. the expected value of a random variable is zero variables that are not taken into consideration in the model do not significantly influence the average value of Y;
- 5. homoscedasticity of the random variable (the modeled variables have the same finite variance) was determined by the White test;
- 6. normal distribution of the random variable was checked by the Doornik-Hansen test.

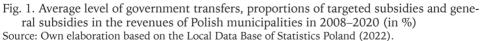
The model assumptions were tested at a significance level of p=0.05. Econometric calculations were performed in the Gretl v. 2021b program.

The following potential determinants (independent variables) of income redistribution were selected based on a review of the literature concerning the influence of government transfers on municipal budgets, and in view of data availability: gross national product per capita, gross value of fixed assets per capita, investments per capita, poverty index (% of the population in households where consumption expenditure is below the statutory poverty level), average floor area per capita, number of university graduates per 10,000 population, number of newly-concluded marriages per 1000 population, consumer price index, employment rate, percentage of the working age population in total population, average monthly disposable income, average monthly income, number of businesses registered in the REGON database per 1000 population, budget deficit per capita, municipal debt service expenditures (Musgrave, Musgrave 1984; Jílek 2015; Gavriluță, Oprea 2017). All Polish municipalities were included in the analysis. Data for 2008–2020 data were analyzed. The time period of the analysis was selected based on the availability of economic data in the Local Data Bank of Statistics Poland. GDP per capita was based on the initial estimates for 2020 (Local Data Base of Statistics Poland 2022).

Results

The share of government transfers in the budgets of Polish municipalities decreased steadily between 2008 and 2015, and only a minor increase was noted from 40.8% in 2008 to 42.3% in 2009. The decreasing trend was maintained in subsequent years to reach 37.5% in 2015. The proportion of public transfers increased significantly by 7.9 percentage points (pp) in 2016. An increase of only 0.7 pp was noted in 2017. In 2018, the share of government transfers in municipal budgets decreased to 43.7% and increased to 44.8% in 2019 and 46.2 in 2020. The relevant values are presented in detail in Figure 1.





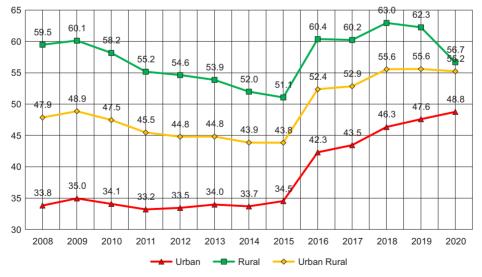
An analysis of the structure of government transfers, i.e. the proportions of general subsidies and targeted subsidies (Fig. 1), revealed that the increase observed in 2016 and 2017 resulted mainly from a higher share of targeted subsidies in the total revenues of Polish municipalities. In 2008–2014, the proportion of targeted subsidies was relatively stable at 12–14.2%. This parameter increased significantly in the following years to reach 22.2% in 2016 and 24.1% in 2017. A decrease to 22.5% was

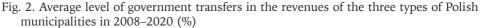
noted in 2018. In 2019 the proportion of targeted subsidies increased to 24.0% and in 2020 – to 26.0%. The increase in the proportion of targeted subsidies in municipal budgets in last years produced an upward trend line (Fig. 1).

The proportion of general subsidies in municipal budgets decreased steadily between 2008 and 2020. A minor increase was observed only in 2009 and 2012. The share of general subsidies in municipal revenues was determined at 28.9% in 2009, and it reached the lowest level at 20.2% in 2020. It should also be noted that the proportion of targeted subsidies exceeded the share of general subsidies by around 3–6 pp in the last two years of the analyzed period. A reverse trend was noted at the beginning of the analyzed period when the share of general subsidies was more than 10 pp higher relative to targeted subsidies.

According to Porawski & Czajkowski (2020), the decrease in the proportion of general subsidies in the budgets of Polish municipalities resulted mainly from lower educational subsidies despite the fact that expenditure on education more than doubled at all levels of administration. As a result, municipalities were forced to allocate more funds to education from locally generated revenues. The proportion of targeted subsidies in municipal budgets increased in the last years of the analyzed period because municipalities were assigned new tasks and responsibilities relating to social policy. More than 75% of the funds allocated under targeted subsidies were spent on current operations, and the remainder was dedicated to investments.

Due to the view of some authors presented in the literature review that the scope and level of decentralization and government transfers depends on the size of the geographical area and population size of an individual, Figure 2 presents the share of government transfers in total revenue in three types of municipalities in Poland: urban, rural and urban-rural.





Source: Own elaboration based on the Financial economy of local government units 2020 (2022).

The largest share of transfer revenues in the entire research period was characteristic of rural municipalities, slightly lower share was recorded in urban-rural municipalities, and the lowest – urban municipalities. The last group of municipalities was characterized by the greatest financial independence from the central level, and thus also the highest level of decentralization. It can therefore be concluded that the views expressed in the literature on the subject and cited earlier are also reflected in Polish municipalities. The general variability of these shares in particular types of municipalities and years can be interpreted similarly to the data presented in Figure 1.

The significance of government transfers is likely to increase in view of the new challenges and responsibilities facing Polish municipalities. The above can be attributed mainly to the steady decrease in the financial autonomy of municipalities as well as high levels of indebtedness. Changes in fiscal regulations concerning municipal debts and mandatory contributions to the projects co-financed by EU funds are also important considerations. Tax regulations were amended. and the contribution of personal income taxes to municipal budgets decreased in the first years of the analyzed period. The most important changes related to the reduction of income tax rates and the reduction of the number of tax thresholds, which came into force in 2009. In 2019, a package of changes was introduced, according to which, as of August 1, 2019, persons under the age of 26 were exempted from taxation and did not exceed the annual income of PLN 85,528, the tax-free amount was also increased. From October 1, 2019 the personal income tax rate decreased from 18% to 17%. At the end of 2020, changes were also made to the flat-rate income tax, increasing the limit of recorded incomes from EUR 250,000 to EUR 2 million. In March 2022, a draft of further changes was announced in the scope of reducing the rates of taxation of personal income to the level of 12%. In addition, the significant increase in government transfers recorded since 2016 was related to the introduction of a large-scale social program called "Family 500 plus". These factors will undoubtedly influence the structure of municipal budgets in the coming years, and they could contribute to fiscal centralization.

The degree of fiscal decentralization is directly influenced by legal provisions, but socioeconomic factors are also important determinants of government transfers to municipalities. The results of the multiple linear regression analysis revealed that two of the potential explanatory variables were significantly correlated with the explained variable: poverty index and average monthly disposable income. The regression coefficient for the first variable was estimated at 0.91, which implies that the proportion of government transfers in municipal revenues would increase by 0.91% on average if poverty index increased by 1% on average. In turn, the share of transfer payments in total municipal revenues would decrease by 0,03% on average if the average monthly disposable income increased by 1 PLN on average. The results of the multiple linear regression analysis and statistical tests are presented in Table 1. The multiple linear regression equation can be written as follows:

$$Transfers = 76.55 + 0.91 Poverty - 0.03 Income + e$$
 (1)

where:

- Transfers proportion of government transfers in the budgets of Polish municipalities (%);
- *Poverty* poverty rate;
- *Income* average monthly disposable income;
- *e* regression residual.
- Table 1. The results of multiple linear regression analysis of the proportion of government transfers in the revenues of Polish municipalities

Assessment criteria/independent variables	Poverty rate	Average monthly disposable income
Coefficient of regression	0.91	0.03
P-value in Student's t-test	0.0018	4.20e ⁻⁵
Indicator of collinearity – VIF	1.755	1.755
Combined significance of parameters	F(2, 14) = 69.02 with p-value = P(F(2, 14) > 69.02) = 5.61e-08	
Linearity test (Ramsey RESET test)	F(2, 12) = 3.77 with p-value = P(F(2, 12) > 3.77) = 0.05	
Normal distribution of the random component (Doornik-Hansen test)	Chi-square(2) = 1.44 with p-value = 0.49	
Homogeneity of residual variance – White's test	LM = 4.19 with p-value = P(Chi-square (5)>4.19) = 0.52	
Coefficient of determination (R ²)	90.79%	

Source: Own elaboration based on the Local Data Base of Statistics Poland (2022).

The variation in poverty rate and average monthly disposable income explained nearly 91% of the variance in the share of government transfers in municipal revenues in the analyzed period ($R^2 = 90.79\%$). The remaining variance (9%) was not explained by the model, but by random factors as well as factors that were not included in the model. The regression model explained a very high percentage of variance, and the interpretation of the modeled parameters and their symbols was consistent with economic theory. These results indicate that level of income redistribution from the central level to the municipal level was determined mainly by poverty rate and average monthly disposable income. Therefore, government transfers appear to be an essential element of the income redistribution mechanism in Poland.

Finally, it is worth noting that the relationship between the share of government transfers in total revenues and the poverty index and the average monthly disposable income in Polish municipalities seems to be a natural relationship resulting from the structure of targeted subsidies and general subsidies. As noted by von Braun & Grote (2002), such a relationship is not always so unambiguous for each country and each local government unit. The authors, referring to fiscal decentralization, indicated that although there may be a general relationship between government transfers and the level of poverty, for many countries such a relationship is not empirically confirmed. According to the authors, this may result from many factors

specific to a given country, which include, for example, social and geographical conditions, material and natural resources, but also the macroeconomic policy of the central government, institutional capacity and effectiveness, especially in the field of public services, which are important for the poor, i.e. education or health protection. Therefore, in the research presented in the article, it was justified to include other factors in the catalogue of potential explanatory variables.

Considering the above, the results of the presented research may suggest the existence of a cause-and-effect relationship between the income situation of residents and the level of government transfers. It is also confirmed by an attempt to verify the obtained results. For this purpose, an additional linear regression analysis was carried out for two models created as a result of replacing the previous explained variable – *Poverty* variables and the *Income* variable, while the current explanatory variable *Transfers* was included in the catalogue of explanatory variables. In the case of the *Poverty model*, the only variable that was statistically significantly associated with it was the *Transfers* variable. However, the coefficient of determination R² was only 68.2%. In the case of the *Income model*, it was not possible to conclude that there was a relationship with any explanatory variable due to the non-fulfilment of the heteroscedasticity condition of the random component and the lack of a linear relationship between the variables.

Conclusions

Fiscal decentralization and income redistribution mechanisms continue to pose a considerable challenge for researchers. The central government can influence the economy by transferring public funds to local governments. The level of central government transfers determines the type of statutory duties assigned to the local authorities. This study revealed that the proportion of government transfers in the budgets of Polish municipalities continued to increase in recent years. The observed increase constitutes a complex problem. Higher government subsidies resulted from legislative factors as well as the economic status of municipalities.

An analysis of the literature revealed several factors that could undermine the positive effects of government transfers in Poland. The structure of municipal budgets should be rationalized in the long-term perspective to ensure that public transfers not only satisfy current economic needs, but are effectively used to resolve the most pressing local problems and are less susceptible to political pressure. The observed increase in the level of government transfers also implies that Polish municipalities lack the necessary funds to perform their statutory duties and are forced to shoulder the burden of public finance deficit during economic recessions. Local needs and expectations continue to increase, which suggests that political responsibility for budget deficits is being shifted to territorial governments.

Despite the fact that the financial independence of municipalities is regarded as desirable, the study demonstrated that government transfers account for 43–46% of municipal revenues; therefore, the degree of fiscal decentralization in Poland is far from optimal. This situation results primarily from the under-financing of tasks delegated to the local level and the losses of municipalities' own revenues as a result of the law-making activities of state authorities, e.g. in the field of changes in income tax rates. The lack of local government authority to create new local taxes limits the possibility of self-financing of tasks and condemns them to government transfers. The postulate of a more complete fiscal decentralization in Poland is, in practice, associated with an increase in typically own incomes (taxes and local fees).

Similar conclusions, against the background of legal changes, can be drawn from analyses of government programs for coordinating the economic policies of municipalities which aim to impose more stringent debt limits and increase the municipalities' financial involvement in the performance of their statutory duties. These problems exacerbate economic inequalities and increase the demand for government transfers. The econometric analysis revealed that the poverty index and average monthly income were the main determinants of the level of public transfers in Poland.

The existing degree of fiscal decentralization in Poland does not promote effective resource allocation or financial discipline. Several solutions can be proposed to ensure that municipal revenues are sufficient for performing statutory duties and that the responsibility for administrative expenditures is not shifted to local governments. The transparency and predictability of public transfers and subsidies are equally important factors. All local revenues and expenditures should be fully legitimized, and they should promote the fulfillment of statutory goals, which are to maintain and enhance local standards of living, to develop means of production, and to increase capital availability. However, the first symptoms of economic recession triggered by the coronavirus pandemic suggest that these goals could be very difficult, if not impossible to achieve.

The results of this study can provide valuable insights for further research on the effectiveness of government transfers, and they can be used to formulate practical solutions for territorial governments. In the future, the influence of public transfers on the fiscal autonomy of local administration units could also be compared across countries.

References

- Act of 14 December 2018 amending the Public Finance Act and certain other acts, Journal of Laws 2018, item 2500.
- Ban C., Gallagher K. 2015. Recalibrating policy orthodoxy: The IMF since the great recession. Governance, 28(2): 131–146 (https://doi.org/10.1111/gove.12103).

Bhattari K. 2015. Research Methods for Economics and Related Studies. University of Hull Business School, Hull.

Blyth M. 2013. Austerity: The history of a dangerous idea. Oxford University Press, Oxford.

Feld L.P., Schnellenbach J. 2011. Fiscal federalism and long-run macroeconomic performance: a survey of recent research. Environment and Planning C: Government and Policy, 29(2): 494–531 (https://doi.org/10.1353/wp.2002.0016).

- Filippetti A., Sacchi A. 2016. Decentralization and economic growth reconsidered: The role of regional authority. Environment and Planning C: Government and Policy, 34(8): 1793–1824 (https:// doi.org/10.1177/0263774X16642230).
- Financial economy of local government units 2020 (2022). Statistics Poland (https://stat.gov.pl/ en/topics/national-accounts/general-government-statistics/financial-economy-of-local-government-units-2020,2,17.html; access: 20.02.2022).
- Gavriluță A.F., Oprea F. 2017. Fiscal Decentralization Determinants and Local Economic Development in EU Countries. European Union at Crossroads Building Resilience in Times of Change, 180: 180–197.
- Goerl C.A., Seiferling M.M. 2014. Income inequality, fiscal decentralization and transfer dependency. International Monetary Fund.
- Gordon R.H., Cullen J.B. 2012. Income redistribution in a federal system of governments. Journal of Public Economics, 96(11–12): 1100–1109 (https://doi.org/10.1016/j.jpubeco.2011.07.001).
- Guziejewska B. 2007. Subwencje i dotacje dla samorządu terytorialnego w polityce finansowej państwa. Gospodarka Narodowa, 215(4): 71–89 (https://doi.org/10.33119/GN/101396).
- Hansjörg B., Junghun K. (Eds.) 2016. Fiscal federalism 2016 making decentralisation work: Making decentralisation work. OECD Publishing.
- Jastrzębska M. 2012. Finanse jednostek samorządu terytorialnego. Wolters Kluwer Polska S.A., Warszawa.
- Jílek M. 2015. Factors of tax decentralization in OECD-Europe countries. European Financial and Accounting Journal, 10(2): 33–49 (https://doi.org/10.18267/j.efaj.140).
- Kańduła S. 2015. Dyskusja na temat zasadności poziomej redystrybucji dochodów między jednostkami samorządu terytorialnego. Studia Regionalne i Lokalne, 3(61): 102–125 (https://doi. org/10.7366/1509499536106).
- Kańduła S. 2017. Wyrównywanie dochodów gmin warunkiem ich zrównoważonego rozwoju? Studia Oeconomica Posnaniensia, 5(5): 103–122 (https://doi.org/10.18559/SOEP.2017.5.7).
- Kopańska A., Kula G., Siwińska-Gorzelak J., Bukowska G., Młochowska M. 2018. Autonomia fiskalna i jej wpływ na działania samorządów. Wydawnictwo Naukowe Scholar, Warszawa.
- Kufel T. 2011. Ekonometria. Rozwiązywanie problemów z wykorzystaniem program GRETL. Wydanie trzecie, zmienione. Wydawnictwo Naukowe PWN, Warszawa.
- Local Data Base of Statistics Poland 2022 (https://bdl.stat.gov.pl/BDL/dane/podgrup/temat; access: 20.02.2022).
- Małkiewicz A. 2013. Struktura gminnej subwencji ogólnej. Prawnicza i Ekonomiczna Biblioteka Cyfrowa Uniwersytetu Wrocławskiego, Wrocław.
- Martinez-Vazquez J., McNab R.M. 2006. Fiscal decentralization, macrostability, and growth (http://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1035&context=econ_facpub; access: 20.02.2022).
- Martinez-Vazquez J., Lago-Peñas S., Sacchi A. 2017. The impact of fiscal decentralization: A survey. Journal of Economic Surveys, 31(4): 1095–1129 (https://doi.org/10.1111/joes.12182).
- Moges A.G. 2020. Fiscal Federalism in Theory and Practice. Ethiopian e-Journal for Research and Innovation Foresight (Ee-JRIF), 5(1): 6–32.
- Musgrave R. 1959. The Theory of Public Finance. McGraw-Hill, New York.
- Musgrave R.A., Musgrave P.B. 1984. Public Finance in Theory and Practice. Mcgraw-Hill Book Company, New York.
- Nelson K.L. 2012. Municipal choices during a recession: Bounded rationality and innovation. State and Local Government Review, 44: 44S–63S (https://doi.org/10.1177/0160323X12452888).
- Neyapti B. 2013. Fiscal decentralization, fiscal rules and fiscal discipline. Economics Letters, 121(3): 528–532 (https://doi.org/10.1016/j.econlet.2013.10.006).
- Oates W. 1972. Fiscal Federalism. Harcourt Brace Jovanovich, New York.
- Oates W. 2008. On the evolution of fiscal federalism: Theory and institutions. National Tax Journal, 61(2): 313–334 (https://doi.org/10.17310/ntj.2008.2.08).
- Patrzałek L. 2010. Finanse samorządu terytorialnego. Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.
- Patrzałek L. 2017. Dotacje jako transfery z budżetu państwa i budżetu jednostki samorządu terytorialnego. Annales Universitatis Mariae Curie-Skłodowska, Sectio H, Oeconomia, 6(51): 293–300 (https://doi.org/10.17951/h.2017.51.6.293).

- Pisauro M.G. 2001. Intergovernmental Relations and Fiscal Discipline: Between Common Tax Resources and Soft Budget Constraints. International Monetary Fund.
- Podstawka M. 2012. Ocena mechanizmów wyrównywania sytuacji dochodowej gmin. Annales Universitatis Mariae Curie-Skłodowska, Sectio H, Oeconomia, 46(3): 209–218.
- Ponce-Rodriguez R.A., Hankla C.R., Martinez-Vazquez J., Heredia-Ortiz E. 2018. Rethinking the political economy of decentralization: how elections and parties shape the provision of local public goods. Publius the Journal of Federalism, 48(4): 523–558 (https://doi.org/10.1093/publius/ pjy003).
- Poniatowicz M. 2014. Wpływ kryzysu gospodarczego na systemy finansowe jednostek samorządu terytorialnego na przykładzie największych miast w Polsce. Wydawnictwo CeDeWu, Warszawa.
- Porawski A., Czajkowski J.M. 2020. Stan finansów JST (http://www.miasta.pl/aktualnosci/ raport-o-stanie-finansow-jst; access: 29.04.2020).
- Salmon P. 2013. Decentralization and growth: what if the cross-jurisdiction approach had met a dead end? Constitutional Political Economy, 24(2): 87–107 (https://doi.org/10.1007/s10602-013-9137-8).
- Sekuła A. 2018. Stosowanie mechanizmu wyrównania poziomego w województwach skutki dla dochodów budżetów. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 528: 196–204 (https://doi.org/10.15611/pn.2018.528.17).
- Sepulveda C.F., Martinez-Vazquez J. 2011. The consequences of fiscal decentralization on poverty and income equality. Environment and Planning C: Government and Policy, 29(2): 321–343 (https://doi.org/10.1068/c1033r).
- Stanisz A. 2007. Przystępny kurs statystyki z zastosowaniem STATISTICA PL na przykładach z medycyny. T. 2. Modele liniowe i nieliniowe. StatSoft, Kraków.
- Swianiewicz P. 2003. Transfery z budżetu państwa dla samorządów lokalnych. Studia Regionalne i Lokalne, 4(11): 97–124.
- Swianiewicz P. 2011. Finanse samorządowe. Koncepcje, realizacja, polityki lokalne. Wydawnictwo Municipium S.A., Warszawa.
- Swianiewicz P. 2016. Wyrównywanie poziome sytuacji finansowej jednostek samorządu terytorialnego – doświadczenia europejskie. Studia Regionalne i Lokalne, 17(63): 26–55 (https://doi. org/10.7366/1509499516302).
- Turley G., McNena S., Robbins G. 2018. Austerity and Irish local government expenditure since the Great Recession. Administration, 66(4): 1–24 (https://doi.org/10.2478/admin-2018-0030).
- von Braun J., Grote U. 2002. Does decentralization serve the poor? Managing Fiscal Decentralization. Routledge, London and New York, p. 92–119.
- Welfe A. 2014. Ekonometria. Metody i zastosowanie. Polskie Wydawnictwo Ekonomiczne, Warszawa.
- Wichowska A. 2021. The degree of fiscal decentralization in European Union countries in different stages of the economic cycle. Entrepreneurship and Sustainability Issues, 9(2): 198–208 (https://doi.org/10.9770/jesi.2021.9.2(13)).

Transfery rządowe w budżetach polskich gmin oraz ich uwarunkowania

Zarys treści: Okresy załamania gospodarczego wymuszają na państwie uruchamianie instrumentów oszczędnościowych i wzmagających dyscyplinę finansów publicznych. Działania te odnoszą się także do jednostek samorządu terytorialnego i ich budżetów, których ważną część stanowią transfery międzyrządowe. Jak wskazuje literatura przedmiotu, problem ich poziomu, który wpisuje się w dyskusję nad decentralizacją finansów publicznych oraz czynników determinujących ich zakres, od wielu dziesięcioleci jest ważkim wyzwaniem badawczym. Tak jest i teraz, kiedy na horyzoncie zarysowuje się kolejny kryzys gospodarczy wywołany pandemią koronawirusa. W artykule przyjęto dwa cele badawcze: ocenę kształtowania się redystrybucji pionowej środków z budżetu państwa do gmin w Polsce oraz identyfikację czynników gospodarczych, które oddziałują na wysokość tychże transferów. W kontekście dokonanego przeglądu literatury realizacja niniejszych badań pozwoli wskazać, czy zmiany poziomu transferów międzyrządowych w okresach załamania gospodarczego mogły oznaczać dla gmin w Polsce pomoc rządu, czy przeniesienie ciężaru radzenia sobie z kryzysem na niższy poziom zarządzania publicznego oraz co oprócz przepisów prawa faktycznie wpływa na ich poziom. W latach 2008–2015 udział transferów rządowych w dochodach budżetów gmin w Polsce wykazywał ogólną tendencję malejącą. Znaczy wzrost udziału transferów rządowych nastąpił w latach 2016–2020 i utrzymywał się na poziomie bliskim 50%. Przyczyn tego zjawiska było wiele, z jednej strony były nimi zmiany przepisów prawa, ale także nowe programy socjalne, w których gminy pełnią funkcję pośredniczącą. Co istotne, wśród czynników, które determinowały poziom transferów znalazł się poziom przeciętnego miesięcznego rozporządzalnego dochodu przypadającego na mieszkańca oraz wskaźnik zasięgu ubóstwa w gminach. Oznacza to, że sytuacja ekonomiczna ludności nadal stanowi ważny czynnik determinujący poziom transferów rządowych oraz konieczność ingerencji państwa w wypełnianie zadań przypisanych gminom.

Słowa kluczowe: budżet gminy, decentralizacja, redystrybucja dochodów