DOI: 10.17707/AgricultForest.61.4.21

Adam WASILEWSKI¹

EFFICIENCY OF STRUCTURAL AND REGIONAL POLICY MEASURES FOR DEVELOPMENT OF NON-AGRICULTURAL ECONOMIC RURAL ACTIVITY IN SELECTED POLISH COUNTIES

SUMMARY

A large part of the rural population is not currently employed in the agriculture. In addition, as a result of investments, labour productivity in the agricultural sector is increasing. Therefore, entrepreneurship of rural population is an important issue, which leads to the development of non-agricultural sectors of the economy in rural areas, reducing thereby the negative effects of limited mobility. The role of the development of non-agricultural activities in the rural areas as well as existing barriers and drivers of this development have caused that the issue has become a subject of interest, and also the influence of different policies. Therefore, the main objective of the research conducted in 2011-2014 was to assess the efficiency of selected instruments of entrepreneurship development in the rural areas, using a multi-criteria approach. The study of policy efficiency involved descriptive and comparative analysis of the state and changes of private and micro-enterprise number in rural counties' as well as the simple regression analysis, utilized for the assessment of the impact of financial support scale on the county budget revenues and creation of new businesses and jobs. The above analyses use the data from Central Statistical Office (CSO) Local Data Bank for 2004-2013 for 1,529 rural counties. The structural and regional policies, focusing on the use of financial instruments, generally have no positive impact on reducing inequalities in local development. But, this does not mean the absence of the process of reaching the state of long-term equilibrium by counties with lower levels of development.

Keywords: EU policy, efficiency, policy measures, rural development, business development.

INTRODUCTION

The professional literature contains a wide range of definitions of the term policy (Murzyn 2010), which depend on the approach applied, i.e. official and legal, behavioural, functional, rational or post-behavioural. However, it generally means the exertion of influence on various areas of human activity by specific public authority organs. In the case of the policy supporting business activity development, this is the intervention of the state and the European Union in the

¹ Adam Wasilewski (corresponding author: wasilewski@ierigz.waw.pl), Institute of Agricultural and Food Economics – National Research Institute, Warsaw, POLAND

Paper presented at the 6th International Scientific Agricultural Symposium "AGROSYM 2015" Note: The authors declare that they have no conflicts of interest. Authorship Form signed online.

area of the production of private goods. According to the mainstream economists' opinion, this is an undesirable situation, since the only regulating factor should be the market. Due to the functioning market failures, such as externalities, information asymmetry, unemployment and lack of equilibrium, the European Union adopts the approach of active participation in the public sector in the development of business activity, particularly the sector of small- and medium-sized enterprises. The official justification for the construction of the strategy and initiation of specific measures in this area is the equalisation of the conditions of competition.

In general, the theoretical considerations suggest that any form of intervention, which may also include EU direct financial support to SMEs, slow down the efficient allocation of resources. Nevertheless, they can be a key driver for economic growth, as was the case in China. In accordance with Murrell (2005), the dual economy model plays such a role. As a matter of fact, the use of different intervention forms strengthens "marginal" efficiency. In relation to the New Institutional Economics, this means a temporary approval for a set of informal rights allowing for sub-marginal production. However, it provides social protection for entities which would lose the most due to reforms, i.e. transition to a purely market economy (Lau et al. 2000). As a matter of fact, the result is a slowdown in the said reallocation, but - according to neoinstitutionalists - it allows to gain time to develop protection mechanisms for market transactions. Given the social aspect of the dual economy, it can be said that certain solutions can be applied also in Poland. In fact, the use of such mechanisms is well-founded in the Constitution of the Republic of Poland, which defines the state economic system as a "social market economy". Therefore, the main objective of the paper was to introduce come section of the efficiency assessment of selected instruments of entrepreneurship development in the rural areas, using a multi-criteria approach. In this case it was the assessment of the impact of EU financial support on the local economy.

MATERIAL AND METHODS

The efficiency of regional and structural policy instruments to support the development of non-agricultural economic activities was assessed in respect of financial transfers from the EU budget through the Regional Operational Program (ROP), Innovative Economy Operational Program (IEOP), Human Capital Operational Program (HCOP) and others. While assessing the efficiency of financial support, both direct and indirect non-refundable support, which influenced the development of SMEs, was examined. Furthermore, the assessment of these instruments received by far the most attention in the study. However, such an approach was taken, because the EU budgetary period had finished, thus a need to assess the effects of the policy pursued in various aspects. The study of efficiency involved descriptive and comparative analysis of the state and changes of private and micro-enterprise number in rural counties' in various aspects determined by the scale of EU financial support for the development of

entrepreneurship. The analysis is also focused on the relationships between this support and the employment and unemployment in rural counties. The criterion for grouping was the median and quartile value of the support per one inhabitant in working age. Finally the correlation and simple regression analysis were utilized for the assessment of the impact of financial support scale on the county budget revenues and creation of new businesses and jobs.

The above analyses use the data from Central Statistical Office (CSO), Local Data Bank, for 2004-2013 for 1,529 rural counties. The population of this group of counties was without the units with own income in excess of the average value of income by more than 3 standard deviations. These were mainly counties obtaining substantial income from compensation for mining damage and those of typical tourist profile.

RESULTS AND DISCUSSION

Theoretical background. Active state policy (Landreth & Colander 2005) for the development of entrepreneurship, based on the use of a wide range of instruments (Wasilewski 2011), is justified primarily by market failures (Stiglitz, 2004), which result from under-utilisation of labour resources. This is unemployment, which makes state institutions intervene in the allocation of resources by means of measures, such as support for training and career counseling or direct subsidies for running or launching own economic activity (Gancarczyk, 2010), etc. Furthermore, failure resulting from asymmetric information is important as regards support to SMEs. In the event of these failures, state intervention involves the reallocation of some resources from one group of entities to the other. Instruments for such transfer are taxes on the one hand, and on the other hand direct subsidies or subsidies in the form of public goods. In theory, such transfers are justified, given the decreasing marginal utility of goods.

If the transfer of funds deteriorates one's situation, Pareto efficiency does not improve. However, Kaldor-Hicks efficiency may improve. This approach aims at maximising the allocation of wealth or welfare expressed in money (Stringham 2001). A general increase in welfare is justified, even if the situation of a certain group of persons deteriorates. Regardless of the approach to efficiency improvement, the benefits resulting from transfers should outweigh the costs. In general, the resulting net benefits are a measure of the efficiency of given allocation. However, the state making a social choice in the allocation of resources, which is not accompanied by Pareto efficiency improvement, must also take into account the loss of certain individuals or groups.

Efficiency of subsidies at local level. In 2004, i.e. at the time of Poland's accession to the European Union, over 545 thousand private sector economic entities (employing at least 10 workers) operated in the examined area. Their number increased steadily until 2013, in which it reached nearly 712 thousand. Nonetheless, enterprise growth rates in rural areas in 2007-2013 and 2004-2006 were similar. It should be noted, however, that some instruments to support the

development of economic activities in rural areas were also used in 2004-2006. Therefore, comparing certain economic changes during these two periods would, in principle, bring little to the analysis of the local efficiency of EU policy instruments. For this reason, the economic changes observed were analysed depending on the level of the support received. For this purpose, the counties were divided into quartiles, the boundaries of which are shown in the previous paragraph.

While analysing an increase in the absolute number of economic entities in county groups with different levels of financial support (Fig. 1), it can be concluded that the relative level of financial transfers from the EU budget played an important role in launching economic activities by physical persons. In 2007-2013, i.e. the effective period of the financial instruments concerned, a larger increase in the number of economic entities was observed in county groups with a greater level of support. Quartiles 1 and 4 are significantly different. Throughout the effective period of support, the number of these entities in the latter increased by as much as 6 percentage points more. At the same time, it should be noted that the number of the entities was higher. Having regard to the increase in the number of private economic entities, EU financial support can be considered as a quite efficient instrument.



Figure 1. Increase in the absolute number of private economic entities in 2007-2013, in county groups with different levels of EU support per capita of workingage population. Source: Own calculations based on CSO data.

In 2007-2012, the share of the employed in the total number of workingage population decreased. However, in absolute terms, employment in rural areas increased by 10.7% (Fig. 2). This employment growth was observed in all county groups, regardless of the level of support. Nevertheless, it was greater in counties with a higher level of EU support. Research shows that the difference between extreme, in terms of the relative level of support, county groups was as much as 11 percentage points, meaning that public funds were a relatively strong driving force for the recruitment of new staff, although they were insufficient to create conditions, in which these growing labour resources would be fully utilised. It should also be emphasised that the fastest growth in employment was observed in counties, in which its level was higher. In view of the above, it can be concluded that the diversity of rural areas in terms of the utilisation of labour resources increases. Nonetheless, the criteria used to distribute public financial support foster a kind of rural economic polarisation.



Figure 2. Changes in the number of the employed in 2007-2012, in county groups with different levels of EU support per capita of working-age population. Source: Own calculations based on CSO data.

During Poland's membership in the European Union, two characteristic periods in unemployment changes can be distinguished. In 2004-2008, there was a systematic and quite dynamic drop in the share of the unemployed in the total number of working-age rural population. In 2009, the financial crisis brought the upward trend that lasted until 2013. The unemployment rate increased relatively in all counties, regardless of the level of the support obtained from the EU budget. Furthermore, there were no significant differences in the level of unemployment among county groups with different levels of EU assistance. However, it was noted that the smallest increase in the share of the unemployed in 2007-2013 was observed in counties with the highest level of financial support. This would suggest that only a high level of EU funds slowed down unemployment to reduce unemployment can be efficient, but it cannot be applied on a wider scale at both EU and national levels due to budgetary constraints. However, it can be a spot-intervention instrument.

Analyses show that the relative level of the support obtained significantly contributed to increasing municipal budget revenues from both real property and income taxes in relative and absolute. Own real property tax revenues per capita in county groups with the highest level of support increased by as much as 7.6 percentage points more than in counties in which this support reached the lowest level. As regards personal income taxes, these relations were also observed, but the difference was only 4.2 percentage points. Even greater differences between extreme county groups were reported in terms of revenue growth in absolute terms. In fact, real property tax revenues in county groups with the highest level of support increased by as much as 13.1 percentage points more than in the group with the least resources secured. As regards an increase in personal income tax revenues, this difference was slightly smaller, but still reached as much as 8.2 percentage points. On these grounds, it can be concluded that the larger level of EU funding accelerates the growth rate of own municipal real property tax and personal income tax revenues.

The impact of the level of support on the level of own revenues is also confirmed by research carried out using the correlation and regression analyses. The correlation coefficient between the level of funds transferred to counties in 2007-2013 and municipal real property tax revenues obtained in 2013 was 0.35. As for municipal personal income tax, it was 0.32. Indeed, both correlation coefficients are not too high, but the tests carried out confirmed their significance at 0.05. In turn, simple regression models, developed in both cases, revealed that the support used resulted in a measurable increase in income tax revenues. The models show that every 1 Polish zloty (PLN) of gained support led in 2013 to an increase in real property taxes by PLN 0.04, while in personal income tax revenues – by PLN 0.05. Both determination coefficients reached just 0.1, but were statistically significant. Thus, the models developed explain this increase in revenues thanks to EU support only in 10%. Nevertheless, they confirm the important role of this support in improving the economic situation.

The correlation analysis and simple regression models were also used to examine the relations between the level of support and an increase in the number of economic entities in rural areas. Correlation coefficients between the level of support in 2007-2013 and the number of private economic entities, the number of micro-enterprises and the number of the employed in 2013 stood at 0.33 and were significant in all cases. In turn, the simple regression models developed explained an increase in the number of private enterprises, micro-enterprises and the number of the employed as a result of the transfer of EU funds at a very similar level as in the case of real property taxes or personal income taxes. These models were used to estimate amounts of support, which gave rise in 2013 to an additional private economic entity, micro-enterprise or encouraged the employment of an additional staff member. In accordance with these estimates, the greatest amount of support was crucial to the establishment of an additional private economic entity (over PLN 150 thousand). Over PLN 20 thousand less was necessary to launch a new micro-enterprise, as a result of using the policy instruments concerned. However, the creation of an additional job with the help of public funds required spending nearly PLN 67 thousand).

CONCLUSIONS

Allocating resources by means of policy is negatively assessed, in particular since these funds are obtained, according to theorists, primarily by rent seekers, rather than efficient entities. Nonetheless, as representatives of certain economic trends believe, allocating resources by means of policy may also have positive consequences. This view is shared especially by dual economy proponents. In their view, all forms of interventionism, which include subsidies for the activities of enterprises, slow down the allocation of resources to the most efficient economic entities. Nevertheless, they thus provide time for the weakest entities to adapt to market requirements.

However, based on empirical research on the impact of EU funds, which can be classified as instruments to directly or indirectly support the development of entrepreneurship in rural areas in 2007-2013, on economic processes, it is difficult to set a timeframe within which they will be reallocated to the most efficient entities. As a point of fact, they bring both measurable and positive economic effects in the current period. Analyses show that the higher level of support from the EU budget accelerates an increase in the number of private enterprises, micro-enterprises and the number of the employees. Moreover, it slows down the processes of growth in the number of the unemployed. Nonetheless, the economic situation in a particular area can be improved thanks to the transfer of a given amount of public funds. The positive impact of financial support from the EU budget on the local economy is also proved by an increase in municipality's local revenues. In fact, municipalities obtaining relatively higher support enjoyed a larger increase in real property tax and personal income tax. In other words, the transferred funds generated a rise in both local community assets and population incomes, thus increasing the said municipal tax revenues.

When considering the possibility of using public financial support as an instrument for rural economic development, certain negative aspects should be kept in mind. In 2007-2013, relatively higher financial resources were transferred to more economically developed municipalities. Although they had positive effects, i.e. they accelerated economic development, their distribution under the same conditions can lead to the further diversification of rural municipalities in terms of both the level and rate of development. Thus, the distribution criteria applied neither foster the implementation of balanced rural development, nor promote bridging the gap in this development. However, they can be retained if another national development concept is pursued, such as establishing the socalled central units or growth poles. What is more, the positive effects of public financial support can be observed in the short term, i.e. during the period of transfer. In accordance with the existing theory, their positive impact on the local economic situation is supposed to weaken in the long run. Having ceased the use of this form of assistance, other instruments under policy to support the development of entrepreneurship are to play a greater role. In this case, fiscal policy and reduced bureaucracy can gain importance.

REFERENCES

- Gancarczyk, M. (2010). Wsparcie publiczne dla MSP (Public support for SME), C.H. Beck, Warsaw.
- Landreth, H., Colander, D. (2005). Historia myśli Ekonomiczej (History of economic thought), PWN, Warsaw.
- Lau, L., Quian, Y., Roland, G. (2000). Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition, Journal of Political Economy 108 (1), 120-143.
- Murrell, P. (2005). Institutions and Firms in Transition Economies (in:) Menard, C., Shirley, M., Handbook of New Institutional Economics, Springer, Dordrecht, Berlin, Heidelberg, New York, pp. 688-690.
- Murzyn, D. (2010). Polityka spójności Unii Europejskiej a proces zmniejszania dysproporcji w rozwoju gospodarczym Polski (EU cohesion policy in the disproportion reducing of economic development in Poland), C.H. Beck, Warsaw.
- Stiglitz, J. (2004). Ekonomia sektora publicznego (Public sector economics), PWN, Warsaw.
- Stringham, E. (2001). Kaldor-Hicks Efficiency and the Problem of Central Planning, The Quarterly Journal of Austrian Economics, Vol. 4., No. 2, (42), pages.
- Wasilewski, A. (2011). Instrumenty polityki regionalnej i strukturalnej wspierające rozwój przedsiębiorczości na obszarach wiejskich (Structural and regional policy instruments supporting entrepreneurship development in rural areas), Prace Programu Wieloletniego, No. 14, IAFE-NRI, Warsaw.