



ISSN 2223-3822

Brzozowska, A., Bubel, D. and Kalinichenko A. (2015). Tendencies in financing the agricultural and food sector under the common agricultural policy. *Socio-Economic Problems and the State* [online]. 13 (2), p. 29-36. [Accessed November 30, 2015]. Available from: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15baacap.pdf>



Tendencies in financing the agricultural and food sector under the common agricultural policy

Anna Brzozowska *, Dagmara Bubel **, Antonina Kalinichenko ***

* *Częstochowa University of Technology, Institute of IT economics, Poland*

e-mail: annabrzozowskapcz@gmail.com

Dr. Hab.Inż., Prof. PCz

** *Częstochowa University of Technology, Poland*

e-mail: dbubel@bg.pcz.pl

Dr.

*** *Opole University, Chair of Processing Engineering, Opole, Poland*

e-mail: akalinichenko@uni.opole.pl

Dr. Hab., Prof.



Article history:

Received: May, 2015

1st Revision: August, 2015

Accepted: October, 2015

JEL classification:

Q180

UDC:

631.147

Abstract: Poland, having joined the EU, became subject to regulations that significantly changed the conditions under which its food industry functioned. As markets opened up to each other, the possibilities of sale increased and competitiveness of economic entities improved. Mobilised public funds contributed, among other things, to modernisation of agricultural holdings and food industry enterprises, improvement of their competitiveness, construction of the infrastructure and multifunctional development of rural areas. The paper discusses tendencies in financing agriculture under the Common Agricultural Policy in Poland against the production and economic situation of the agricultural and food sector.

Keywords: agricultural policy, CAP, financing agriculture

1. Introduction

Contemporary experiences around the world show that the market and state have to coexist, and state interventionism should always be limited to supporting rather than replacing the market. The state should intervene only where it has a clear advantage over the market mechanism, i.e. when the market does not protect collective interests (Rembisz 2010). The modern world economy often rejects the thesis about the perfection of markets, legitimising thus the need for the interventionist role of the state (Czyżewski, Matuszczak 2014). Main



Brzozowska A. Readapting macroeconomic management to a globalized economy: How to handle the accountability on the current account balance [Електронний ресурс] / Anna Brzozowska, Dagmara Bubel, Antonina Kalinichenko // Соціально-економічні проблеми і держава. — 2015. — Вип. 2 (13). — С. 29-36. — Режим доступу до журн.: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15baacap.pdf>.



This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

reasons for intervention in the modern world agriculture include high level of risk in the agricultural activity and ineffective prevention of such risk (Wasilewski, Felczak 2013). This risk is the result of, among other things, changing climatic conditions, lack of sufficient information and underdevelopment of the agribusiness structures, including consultancy. The necessity of intervention in the sector of agribusiness is also justified by: occurrence of the phenomenon of external costs and effects, low price flexibility of supply, lower level of work productivity compared to other areas of national economy, low mobility of labour force employed in agriculture, necessity of providing public goods, and implementation of the concept of sustainable development (Kowalski 2014).

The Common Agricultural Policy is an example of state interventionism in the food sector, which includes market and non-market tools. Market tools, connected with price support, favour the largest producers, especially those most productive and offering commodities (Weiss, Bitkowska 2014). Rural development programmes are examples of non-market instruments. As an instrument of the state's intervention policy, they provide a chance for stabilisation of the policy within the period of a few production cycles. They stimulate changes in the area of production structures, improvement of competitiveness, environmental protection and multifunctional development of rural areas. As such, they are a basic instrument for supporting the process of modernising the food economy and rural areas

2. Assumptions of agricultural policy in the aspect of financial outlays

The agricultural policy in Poland is not coherent (Babuchowska, Marks-Bielska 2014). It supports the functioning of agriculture based on the traditional and industrial model, ecological agriculture and agriculture based on induced development and sustainable development (Czudec 2013). The objectives and mechanisms of the Common Agricultural Policy and the specific characteristics of the Polish agriculture indicate that the functioning of our agriculture should be based in the long run on a dual model. Some agricultural holdings, meeting the basic requirements of the environmental protection, should implement production methods that ensure high economic effectiveness, while the development of the other agricultural holdings should be based on methods that are more ecosystem-friendly and allow them to use their environmental, social and cultural advantages.

The integration with the EU created new conditions in Poland for the development of agricultural and food industry. Since 2002, the food industry has been supported with funds as part of programmes co-financed from the EU budget, which overlap and complement each other. The total value of financial aid programmes together with direct payments for the agricultural and food sector and rural areas exceeds PLN 113 billion. It includes payments under the SAPARD programme - around PLN 4.5 billion, SOP "Agriculture" programme - around PLN 6.4 billion, RDP 2004-2006 - around PLN 11.1 billion, RDP 2007-2013 - PLN 27.5 billion and nearly PLN 63.5 billion of direct payments (Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za 2013).

The above-mentioned programmes are show continuity of general objectives, with systematic expansion of aid forms and changing scope and value of granted support. The SAPARD programme was preparing the Polish food and agricultural sector for the accession, especially in terms of adaptation to EU's sanitary, hygienic and environmental requirements. After 2004, the strategic objectives of the agricultural policy have become: improvement of the competitiveness of the food and agricultural sector, sustainable development of rural areas, improvement of the state of the environment, improvement of life quality and diversity of the management of rural areas. Most activities implemented from 2007 to 2013 were continuation of activities implemented in the previous years. This shows continuity of policy in the area of implementation of the objectives, but it doesn't mean that the agricultural policy is internally cohesive in the long run. Multiple actions and objectives mean that some of them cancel each other out or exclude each other.

Innovation will remain the main source of future economic growth and competitive advantages. Creation and diffusion of innovations is an important factor in improving quality and effectiveness. Although the competitiveness of the Polish agricultural and food sector can be perceived as quite high, its low innovativeness may represent a significant threat not only to the increase, but also to maintenance of the competitive position. Thus, the priority of the agricultural policy should be activities that strengthen competitiveness and innovativeness of the food and agriculture sector. These activities will become even more important, if we look at them from the perspective of the predicted increase in the size of global population and natural limitations.

An important priority of future development will also be sustainability and multifunctionality. This refers to stimulation of the economic and social activity of inhabitants of rural areas, diversification of activities to ensure alternative income sources, defining agricultural production in accordance with environmental requirements, maintaining landscape values and biodiversity. It is necessary to strive to improve the conditions under which rural population live, reduce unemployment and areas of social exclusion. The key to sustainable development is coherence in its three dimensions: economic, social and territorial.

3. Evaluation of the results of the implementation of the Common Agricultural Policy in the agricultural and food sector

Until Poland joined the European Union, EU funds had significantly contributed to financing the transformations in agriculture. The most widespread type of support are direct payments, which are received by around 1.5 million of farmers annually. Between 2004 and 2013, the value of such payments grew from PLN 6 billion to PLN 15 billion annually (Czyżewski, Poczta-Wajda, Sapa, 2010). It amounts to PLN 10 000 per agricultural holding, with 85% of agricultural holdings with the area of over 1 ha benefiting from this aid (Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za 2013).

An equally important source of income that does not depend on production but only on the location of an agricultural holding are payments to farmers in less favoured areas (LFAs). Around 700 000 farmers benefit from such payments annually, i.e. half of those receiving direct payments. The area of land eligible for LFA payments is around 6.9 million ha.

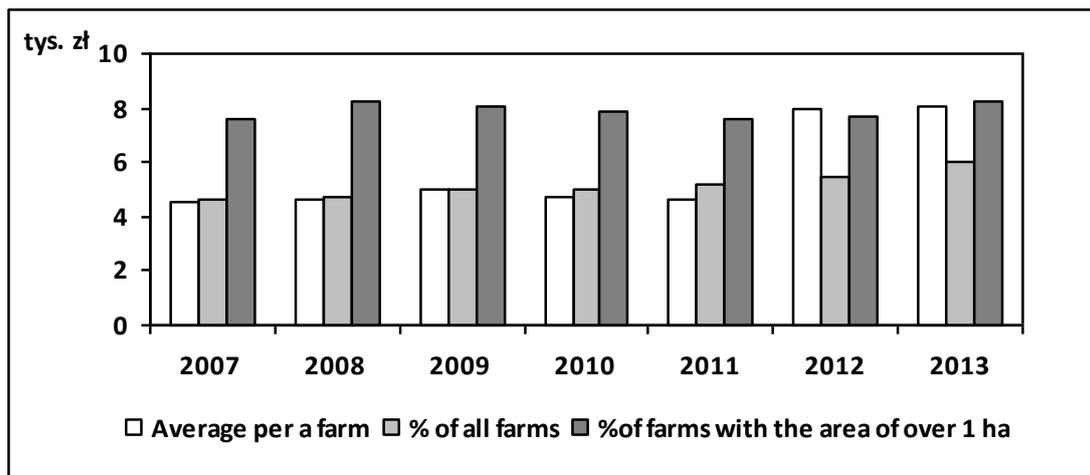


Figure 1. Direct payments - amount of payments and share in the number of agricultural holdings

Source: own work based on data from the Polish Central Statistical Office and the Agency of Restructuring and modernisation of Agriculture.

The share of direct payments in the income of agricultural holdings is around 35% (Marks-Bielska, Babuchowska, 2009). If we also take into account other types of direct payments, such as animal payments or LFA, this share will be even higher. Farmers receive such payments every year and are not obliged to account for how they spent them. Smaller agricultural holdings usually spend received payments on current needs and factors of production, whereas larger ones also on investments.

An important source of aid for agricultural holdings are funds for investments. In order to receive them, an agricultural holding has to develop a business plan and has it approved by the body managing such a programme. Funds for investments in agricultural holdings available as part of SAPARD, SOP "Agriculture", RDP 2004-2006 and RDP 2007-2013 have been fully used. In total, 15% of agricultural holdings have taken advantage of activities aimed at improvement of competitiveness of farms since 2002. The most, 8%, took advantage of the project "Modernisation of agricultural holdings"; 7% took advantage of the project "Early retirement", 2.6% – "Young farmer" and 1.2% – "Diversification of agricultural activities". The value of the grants is quite high, and its average value in the programme RDP for one beneficiary is even higher. In the operation "Modernisation of agricultural holdings" it exceeded PLN 140 000, in "Diversification of agricultural activities" - PLN 84 000, whereas in "Young farmer" - PLN 66 000 (Kozera 2011).

The income situation of most farmers covered by the mechanism of the CAP has become improved. The increase of the income level of agricultural holdings was mainly caused by grants in the form of direct payments. From 2005 to 2013, in real terms, the income from the factors of production for a full-time farmer in the Polish agriculture grew by over 47%, and for the whole agriculture of the EU - by 12.3%. The dynamics of the income growth of farmers' households was higher compared to other social and economic groups. The real disposable income of farmers grew by 66.2%, whereas overall income increased by 37.9% (Czekaj, Majewski, Wąs 2014; Kalinichenko, 2014). Improvement of the competitiveness of agriculture depends on structural changes, which determine increased effectiveness of the use of the factors of production and on the development of the whole national economy, especially in the context of its capability of creating new jobs outside agriculture. Programmes for the development of rural areas, direct payments and changes in the whole economy accelerated structural transformations in agriculture. They involved, among other things, concentration of production. Evidence of that can be over 20% decrease in the number of agricultural holdings between 2000 and 2010. It should be noted

that the biggest, 25%, decrease was seen in the number of the smallest agricultural holdings (1.5 ha), while the number of the largest ones saw significant increase. However, Poland still lags behind the main food producers in Europe in this area.

Table 1. Selected results of the implementation of activities under programmes SAPARD, RDP 2004-2006, SOP "Agriculture" and RDP 2007-2013

Activity	Beneficiaries	Funds paid in PLN million	Overall percentage of agricultural holdings	Amount of aid per one beneficiary
Modernisation of agricultural holdings	80 794	7 188	5.95	88 967
Facilitation of the start for young farmers	42 310	1 736	2.71	41 030
Early retirement	73 924	7 136	4.73	96 531
Diversification of agricultural activity	17 846	1 136	1.34	63 656
In total	214 874	17 196	14.73	80 028

Sources: own work based on data from the Polish Central Statistical Office and the Agency of Restructuring and modernisation of Agriculture.

The period of Poland's membership in the EU is connected with production, investment and trade upswing in the food industry. Between 2004 and 2013, industrial production of food was growing at an average rate of 4.9% annually.

This pace is a little faster than GDP growth (4.4%), almost twice as fast as the increase in the commodity production of agriculture (2.6% annually), 2.5 time as fast as the growth in the consumption of food, drinks and manufactured tobacco (1.9%), and a little slower than the rate of industrial production development in Poland (5.8%). At the same time, the growth rate of the value of the sales of food industry in Poland was among the highest in the EU. As a result of these changes, Poland strengthened its position on the European market. The production value of the food sector in Poland (around EUR 69 billion according to the purchasing power parity of currencies) represents around 9% of the value of food and drink production in the EU-27 countries. The fact that the Polish food sector is an important partner and competitor for EU food and drink producers is also confirmed by comparison of other indicators, such as: employment (in Poland 461 000 people, i.e. 10.8% of employment in EU-27); added value (in Poland - EUR 9.5 billion, i.e. around 7.2% of the level in EU-27); the number of companies, including the sector of micro-enterprises (in Poland - 15.9 thousand, i.e. 5.2% of companies in EU-27 countries) (Rocznik Statystyczny Rzeczypospolitej Polskiej 2013).

The result of such changes is consolidation of the industry. Between 2000 and 2013, the number of active food industry factories producing food and drinks was systematically decreasing (by around 32%). The biggest decrease was registered in the sector of micro-enterprises (by 37%), whereas the smallest among small and medium-sized companies (14% in each group). This was accompanied by decrease in employment (by around 10%). Micro-enterprises registered the biggest decrease in employment (by 21%), while in the sector of small companies employment was minimally reduced or even saw a temporary increase (Rocznik Statystyczny Rzeczypospolitej Polskiej 2013).

Privatisation of the sector, structural changes and investments to modernise and adapt processing plants to EU veterinary and sanitary norms and standards are a source of such entities' success on the domestic and foreign markets. The overall value of investments between 2000 and 2013 exceeded PLN 70.0 billion. However, the share of EU aid in this amount is small, nearly PLN 4.0 billion, and by 2013 the value of payments will have reached around PLN 7 billion (Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za 2013 rok). Nevertheless, EU funds are a catalyst for investments. In order to receive co-financing, an entrepreneur has to mobilise own funds, which makes the final value of the investment 3-4 times as high.

Almost all food industries benefited from subsidies in 2013, but the main beneficiaries of aid have remained meat, dairy and fruit and vegetable industries. The value of co-financing per one investment project was between PLN 1 and 1.5 million. From the start of the SAPARD programme to the end 2013, almost 4.0 thousand investment projects in over 2.1 thousand processing plants were implemented (Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za 2013 rok).

The effects of aid measured by the indicator of "survival" of a company on the market are very satisfactory. Most entities that benefited from EU aid are still conducting production activity.

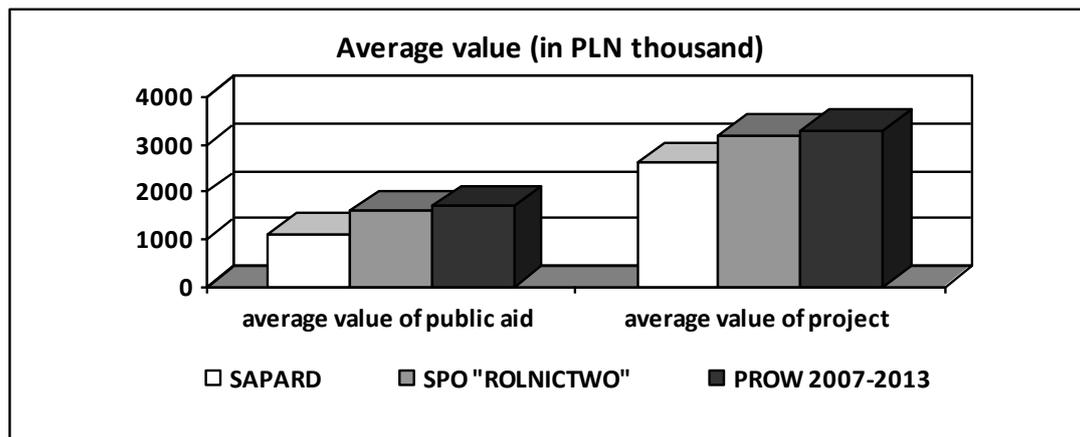


Figure 2. Average value of grant

Source: own work based on data from the Agency for Restructuring and Modernisation of Agriculture.

Medium-sized companies, i.e. those employing from 50 to 249 people, account for over 40% of companies using investment aid. Between 2002 and 2006, investments mainly focused on adaptation to EU sanitary and veterinary requirements (around 80% of the value of investments in the meat and dairy industries). Between 2004 and 2008, most investments (45% of the value) were aimed at improving the quality of production and introducing a new product to the market, whereas in the 2007-2013 programme investments focused on increasing added value (45% of the value) and introducing new products to the market. Such a change of investment types shows that processing plants gave priority to activities aimed at increasing their competitiveness. Environmental protection investments are marginal.

Public aid plays an important but decreasing role in setting the pace and direction of investments in the food industry. It certainly led to the strengthening of our competitive position and increase in the export of the Polish food industry. EU countries are the biggest outlet for Polish food and agricultural products (increase from 63% of the overall export value in 2003 to around 85% in 2013). Since the accession to the EU, the Polish export increased almost three and a half times, import - three times, and net trade in such products - over five times. This led to the increase in the positive net trade from EUR 0.5 billion in 2003 to EUR 2.8 billion in 2013. Food industry products dominate the structure of foreign trade in food and agricultural products. The results of trade in such products have a decisive influence on creation of trade surplus. The share of semi-finished products and finished products in export is growing. In 2013, proceeds from their sale accounted for 86% of the export of the Polish food and agricultural sector. For comparison, the share of processed products in the food and agriculture import is around 70% of the value of trade (Rocznik Statystyczny Rzeczypospolitej Polskiej 2013).

4. Summary

The last decade saw dynamic structural changes occurring in the Polish agriculture, food industry and in rural areas. The most important ones include: decrease in the number of agricultural holdings accompanied by an increase in the share of the largest ones, which directly impacts the increase in the average area of agricultural holdings, decrease in employment in agriculture, and growing concentration and specialisation of production. However, structural changes are slow, and cannot be effectively accelerated due to factors outside agriculture.

Investment boom in the food industry started in 2003 and was connected with the necessity of modernising and adapting Polish food enterprises to EU sanitary, veterinary, animal welfare and environmental protection standards. Investments made in the first period of Poland's EU membership made it possible to popularise obligatory quality management systems to ensure health security of food. Between 2008 and 2009, investment expenditure came to a halt, but the following year saw the first signs of recovery in this area. Thanks to the investments, the Polish food industry is among the most modern in Europe, and companies from this sector can successfully compete with producers from other EU countries.

EU aid programmes enabled modernisation of a number of agricultural holdings and processing plants, improvement of food safety and quality, increase in added value and innovativeness of production, as well as improvement of competitiveness on the international markets. Changes in agricultural and food industry do not result only from the fact that Poland was included in the Common Agricultural Policy, but also from the change in market conditions. The impact of the different instruments varies. While direct payments have the biggest impact, the impact of programmes for supporting semi-subsistence farms or early retirement is only slight.

The future strategy for the development of agriculture should take into account the current process of polarisation of agricultural holdings into agricultural and non-agricultural orientation. This polarisation refers to

people, households and economic entities (including agricultural holdings operating in rural areas). There is a growing tendency of interpenetration of various spheres of economic activity. Support for the economic development of rural areas with public funds should be based on activities aimed at ensuring the implementation of the concept of achieving an internal balance between these areas. It involves maximisation of net benefits of the economic development, and at the same time protection and ensuring long-term regeneration of natural resources services - the concept of sustainable development.

The discussion held within the EU about the future of the Common Agricultural Policy after 2013 shows that it will play a key role in ensuring food safety, sustainable development of agriculture and rural areas as well as in the management of natural resources. It will focus on new EU challenges, such as those connected with protection of resources, climate changes, water management, biodiversity, renewable energy or risk and crisis management.

The key challenge for the food sector, not only in the EU, but also all over the world, will however be food safety. The increase of the world population to 9 billion by 2050 will require a 70% increase of food production, while the access to scarce resources, in particular water, energy and land, will be limited. This means growing pressure from world markets on increasing food production, risk of price fluctuations on the food and agricultural markets, and increased pressure on natural resources. Food, like in the earlier ages, will be of strategic importance. The future agricultural policy in Poland should take into account these challenges when defining its objectives.

However, in the future public aid should play a decreasing role in setting the pace and direction of investments. The state, assuming the function of a regulator, will force certain behaviour of economic entities. Beneficiaries of public funds will, by definition, be in a privileged position in comparison with those that will not receive such grants. This however may lead to decreased effectiveness, and consequently - long-term competitiveness.

Author details (in Ukrainian)

Тенденції у фінансуванні сільського господарства і продовольчого сектора в рамках спільної аграрної політики

Анна Бжозовська *, Дагмара Бубель **, Антоніна Калініченко ***

* Ченстоховська політехніка, Інститут ІТ економіки, Польща

e-mail: annabrzozowska.pcz@gmail.com

д.е.н., проф.

** Ченстоховська політехніка, Польща

e-mail: dbubel@bg.pcz.pl

к.е.н.

*** Опольський університет, Кафедра інженерії процесів, Ополе, Польща

e-mail: akalinichenko@uni.opole.pl

д.с.-г.н., проф.

Анотація. Після вступу до ЄС Польща стала суб'єктом регуляторної політики, яка суттєво змінила умови функціонування харчової промисловості в країні. Ринки збуту стали значно відкритішими, можливості продажу зросли, конкурентоспроможність господарюючих суб'єктів покращилася. Мобілізація державних коштів сприяла, між іншим, модернізації сільськогосподарських підприємств та підприємств харчової промисловості, поліпшенню їх конкурентоспроможності, будівництву інфраструктури і багатофункціонального розвитку сільських територій. У статті обговорюються існуючі тенденції у фінансуванні агропромисловості в рамках Спільної аграрної політики ЄС на території Польщі, з акцентом на економічній ситуації в сільському господарстві і харчовій промисловості.

Ключові слова: сільськогосподарська політика, спільна аграрна політика ЄС, фінансування сільського господарства.

Author details (in Russian)

Тенденции в финансировании сельского хозяйства и продовольственного сектора в рамках совместной аграрной политики

Анна Бжозовская *, Дагмара Бубель **, Антонина Калиниченко ***

* Ченстоховская политехника, Институт ИТ экономики, Польша

e-mail: annabrzozowska.pcz@gmail.com

** Ченстоховская политехника, Польша

e-mail: dbubel@bg.pcz.pl

*** Опольський університет, Кафедра інженерії процесів, Ополь, Польща
e-mail: akalinichenko@uni.opole.pl

Аннотация. После вступления в ЕС Польша стала субъектом регуляторной политики, которая существенно изменила условия функционирования пищевой промышленности в стране. Рынки сбыта стали значительно более открытыми, возможности продаж выросли, конкурентоспособность хозяйствующих субъектов улучшилась. Мобилизация государственных средств способствовала, между иным, модернизации сельскохозяйственных предприятий и предприятий пищевой промышленности, улучшению их конкурентоспособности, созданию инфраструктуры и многофункциональности развития сельских территорий. В статье обсуждаются существующие тенденции в финансировании агропроизводства в рамках Совместной аграрной политики ЕС на территории Польши, с акцентом на экономической ситуации в сельском хозяйстве и пищевой промышленности.

Ключевые слова: сельскохозяйственная политика, общая аграрная политика ЕС, финансирование сельского хозяйства.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15baacap.pdf>

Funding

The authors received no direct funding for this research.

Citation information

Brzozowska, A., Bubel, D. and Kalinichenko A. (2015). Tendencies in financing the agricultural and food sector under the common agricultural policy. *Socio-Economic Problems and the State* [online]. 13 (2), p. 29-36. [Accessed November 30, 2015]. Available from: <http://sepd.tntu.edu.ua/images/stories/pdf/2015/15baacap.pdf>

References

- Babuchowska, K., Marks-Bielska, R. (2014). Wspólna polityka rolna Unii Europejskiej względem znaczenia kapitału ludzkiego na obszarach wiejskich i jego przemian. *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich* 101.2, pp. 45-54.
- Czekaj, S., Majewski, E., Wąs, A. (2014). „Nowe zazielenienie” WPR i jego wpływ na wyniki ekonomiczne polskich gospodarstw rolnych. *Zagadnienia Ekonomiki Rolnej* 1, pp. 39-56.
- Czudec A. (2013). Ekonomiczne, środowiskowe i społeczne funkcje drobnych gospodarstw rolnych. *Więś i Rolnictwo* 2 (159), pp. 90-105.
- Czyżewski, A., Matuszczak, A. (2014). Krajowe i unijne wydatki budżetowe na sektor rolny w Polsce. *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich* 101.2, pp. 37-44.
- Czyżewski, A., Poczta-Wajda, A., Sapa, A. (2010). Przepływy finansowe między Polską a Unią Europejską w ramach wspólnej polityki rolnej na tle wyników ekonomicznych rolnictwa. *Więś i Rolnictwo* 2, pp. 109-122.
- Kalinichenko, A.V., Vakulenko, Y.V., Galych, O.A. (2014) Ecological and economic aspects of feasibility of using crop products in alternative energy. *Actual Problems of Economics*, 161 (11), pp. 202-208.
- Kowalski, D. (2014). Zasadność interwencji państwa w zakresie wsparcia sektora mikro, małych i średnich przedsiębiorstw, ze środków publicznych w Polsce. *Zeszyty Naukowe SGGW w Warszawie. Polityki Europejskie, Finanse i Marketing* 11 (60), pp. 104-114.
- Kozera, M. (2011). Regionalne zróżnicowanie wykorzystania środków pomocowych Unii Europejskiej. *Rocz. Nauk Roln.*, Ser. G 3.98, pp. 118-125.
- Marks-Bielska, R., Babuchowska, K. (2009). Wsparcie dochodów rolników w formie dopłat bezpośrednich. *Zeszyty Naukowe SGGW w Warszawie. Ekonomika i Organizacja Gospodarki Żywnościowej* 75, pp. 135-148.
- Niewęglowski, M. (2005). Interwencjonizm państwowy w rolnictwie. *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu* 7.4, pp. 314-317.

- Rembisz, W. (2010). Krytyczna analiza podstaw i ewolucji interwencji w rolnictwie. *Współczesna Ekonomia* 4.4, pp. 7-25.
- Rocznik Statystyczny Rzeczypospolitej Polskiej 2013.
- Sprawozdanie z działalności Agencji Restrukturyzacji i Modernizacji Rolnictwa za 2013 rok. ARiMR, Departament Programowania i Sprawozdawczości, Warszawa 2013.
- Wasilewski, M., Felczak, T. (2013). Efektywność strategii płynności finansowej w gospodarstwach rolniczych o zróżnicowanej sile ekonomicznej. *Zarządzanie i Finanse* 2.2, pp. 491-501.
- Weiss, E., Bitkowska, A. (2014). Rolnictwo w Polsce w świetle zmian polityki Unii Europejskiej. *Journal of Agribusiness and Rural Development* 2 (32), pp. 203-212.



© 2015 Socio-Economic Problems and the State. All rights reserved.
This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.
You are free to:
Share — copy and redistribute the material in any medium or format Adapt — remix, transform, and build upon the material for any purpose, even commercially.
The licensor cannot revoke these freedoms as long as you follow the license terms.
Under the following terms:
Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.
You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
No additional restrictions
You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Socio-Economic Problems and the State (ISSN: 2223-3822) is published by Academy of Social Management (ASM) and Ternopil Ivan Pul'uj National Technical University (TNTU), Ukraine, Europe.

Publishing with SEPS ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the SEPS website
- Rapid publication
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a SEPS journal at <http://sepd.tntu.edu.ua>

