

The assessment of European Union support for financing the investments of agricultural holdings in Poland¹

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Abstract

This paper presents the terms for granting financial support for agricultural holdings under Measure 121 *Modernizaion of agricultural holdings* of Rural Development Program for 2007-2013 (RDP 2007-2013), as well as the assessment of the effects of implementing this measure in each Polish voivodeship. The study was conducted using the data of the Agency for Restructuring and Modernization of Agriculture (ARMA) and of the Ministry of Agricultural and Rural Development. The main aim of measure 121 is to support modernization of holdings of its beneficiaries, in order to improve the use of the means of production.

Key words:

RDP 2007-2013, modernization of agricultural holdings, investments, financing of agricultural holdings

JEL Classification: G11, Q14, Q18

1. Introduction

In developed countries, agriculture is both protected from excessive foreign competition, as well as supported by a wide range of agricultural policy instruments (Wilkin, 2000). Polish membership in the EU meant the inclusion of Polish agriculture in the mechanisms of the Common Agricultural Policy³. It created the opportunity of improving the effectiveness of agriculture and, consequently, the situation of the rural population. The benefits of integration relate to the possible acceleration of overall economic development, new market opportunities for agriculture, advancement of the restructuring of agriculture and rural areas, the system of agricultural financing and support, as well as growth and income opportunities (Tomczak, 2001). Agriculture is a sector which particularly requires multi-directional and capital-heavy

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³ In the initial period of implementation, the Common Agricultural Policy has focused on the direct financing of growth of agricultural production After achieving this goal in the 70's, the CAP began to move away from production support and towards supporting the increase in the agricultural producer income. At the beginning of the 90s, the aims supported by Common Agricultural Policy were extended to include development of rural areas Since then, the Common Agricultural Policy is financed through the so-called. *two pillars*. The first one offers support for agricultural enterprise, mainly through yearly area payments. The second pillar includes funds for supporting the development of rural areas, available today through Rural Development Program for 2007-2013. (<http://www.arimr.gov.pl/pomoc-unijna/wspolna-polityka-rolna/finansowanie-wspolnej-polityki-rolnej.html>, date of access 24/06/2012).

changes. Already in the first years after the transformation, Polish agricultural sector has received public aid from foreign sources. It included funds from bilateral agreements, from groups of countries and international institutions. European Union aid for the Polish agricultural sector was, and still is, essential in this area, not only because of the amount of resources, but also because of its long-term span, focus, and the creation of a system for utilizing the funds (*Programy...*, 2002).

In the past, apart from direct payments, the key mechanisms of financing agriculture, food processing and the development of rural areas were: Rural Development Plan 2004-2006 and Sectoral Operational Program "Restructuring and Modernization of the Food Sector and Rural Development 2004-2006", while now this role has been taken over by Rural Development Program for 2007-2013. The funds for implementing this program are derived from the second pillar of the Common Agricultural Policy. It is a major source of financing investments which are aimed at improving, above all, the competitiveness of farms and processing plants, creating jobs in rural areas, development of ecological and environmentally friendly methods of farming as well as the preservation of cultural and rural landscape. RDP 2004-2006 was the basic program aimed at financing sustainable and multifunctional rural development for years 2004-2006. Its main advantage was lack of participation requirement of farmer's own funds (Czudec, Kata, Miś, Zajac, 2008). Two strategic aims were set: strengthening of the economic competitiveness of the agri-food sector and sustainable development of rural areas. Within the first aim, the following measures were realized: support for agricultural holdings in less favored areas (LFA); support for agri-environment and animal welfare; afforestation of agricultural land; support for the adjustment of agricultural holdings to the EU standards. The second objective, on the other hand, included: early retirement; support for semi-subsistence farms; agricultural producers' groups. Additional measures were also undertaken, such as technical assistance and complements to direct payments. Funds for realization of RDP 2004-2006 were derived from the Guarantee Section of The European Agricultural Guidance and Guarantee Fund (€2,866.40 million), as well as from the national budget. The total amount of aid provided for in the RDP 2004-2006 was €3,592.40 million, of which more than 20% was spent on complementary direct payments and to finance projects submitted to the SAPARD program (*Wstępna...*, 2009). It should be noted that the resources under the RDP 2004-2006 has been used almost in 100% and the average per beneficiary for a period of five years was PLN 15,300. Rural Development Program for 2007-2013 is also financed under the second pillar of Common Agricultural Policy. This program is the largest aid program for the agri-food sector in Polish history, implemented by the Agency for Restructuring and Modernization of Agriculture. Program budget is over €17.4 billion. It consists of EU funds from the European Agricultural Fund for Rural Development Areas (€13.4 billion) and co-financing from the national budget - around €4 billion (*Program...*, 2011). RDP 2007-2013 includes 23 measures which are implemented in the four priority axes: Axis 1 - Improving the competitiveness of the agricultural and forestry sector; Axis 2 - Improvement of the environment and the countryside; Axis 3 - The quality of life in rural areas and diversification of the rural economy; Axis 4 - Leader. Since the launch of the Program until 15th June 2012, taking all measures into consideration, 5,380,995 requests for aid were submitted, while the number of contracts or decisions issued was 4,351,219. Within RDP 2007-2013, beneficiaries received payments for the amount of PLN 35,36 billion (*Informacja...*, 2009).

A special place within RDP 2007-2013 is held by the measure *Modernization of agricultural holdings* which is a continuation of the pre-accession SAPARD program, and the SOP Restructuring and Modernization of Food Sector and Rural Development 2004-2006. The measure is intended to support modernization of holdings in order to improve their effectiveness through better use of the means of production, quality improvement, agricultural

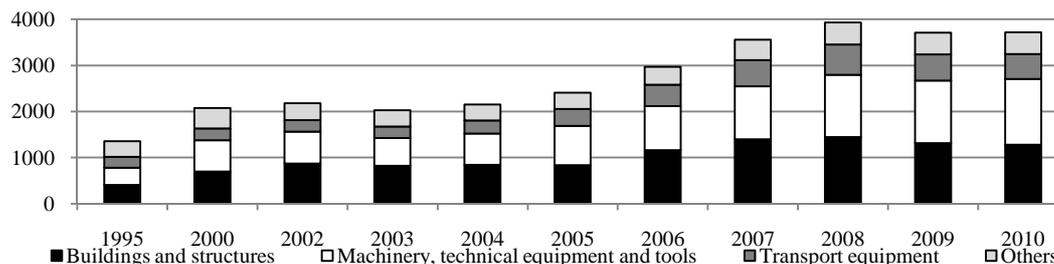
activity differentiation and harmonization of agricultural production conditions with the requirements related to natural environment protection, production hygiene and animal welfare (*Program...*, 2011). In addition, special help within the aforementioned measure was extended to milk producers, in relation to restructuring of dairy production. Support for investment in agricultural holdings in the case of SAPARD Program amounted to PLN 588.5 million (around €133.8 million) and within SOP 2004-2006, PLN 2,418.5 million (around €644.1 million). From 9th November 2007, the measure is implemented within RDP 2007-2013. The aid is granted for investments in modernization of primary plant or animal production, excluding forest and fish production. The aid has the form of partial reimbursement of the investment cost. This measure operates through partial refinancing of already incurred documented costs of operations carried out under contracts with the beneficiaries. The aid may amount to (depending on the category of the beneficiary and location of the household) to 70% and not more than PLN 300,000. Since the beginning of the implementation of measures, some significant changes have been introduced, which include: enabling submission of aid applications via mail and ARMA county offices - in order to facilitate application process for the farmers (in the first call, applications were submitted in person at regional ARMA offices); choice of the implemented operation based on ranking results; selection criteria relate to the economic size of the holding; in the dairy sector, individual milk quota is taken into account and there is preference for operations involving the purchase of equipment for common use; allowing individuals to apply for joint grant aid for the purchase of machinery and equipment for common use. Efforts to increase the budget for the measure was also an important change. According to the originally agreed allocation, the financial limit for Measure 121 *Modernization of agricultural holdings* for the entire duration of the program amounted to €1,779.9 million. This limit was increased by €69.2 million due to additional funds allocated to Poland for the so-called new challenges. Due to the importance of this measure in improving the competitiveness of Polish agriculture and great interest of the beneficiaries, the budget of this measure was increased to €2.087 billion (*Informacja...*, 2009).

The primary objective of this research is to demonstrate the terms for granting financial support for agricultural holdings under Measure 121 *Modernization of agricultural holdings* of Rural Development Program for 2007-2013 (RDP 2007-2013), as well as the assessment of the effects of implementing this measure in each Polish voivodeship. The study was conducted using the data of Agency for Restructuring and Modernization of Agriculture (ARMA) and the data of Ministry of Agricultural and Rural Development.

2. Research results

From the perspective of a company, investments are a necessary factor for modernization, development, and increasing the competitive position on the market. The scope of investments carried out is either an economic strength or a weakness of a given entity. In the case of agricultural enterprises, modernization of fixed assets is highly relevant, as the analysis of their resources indicates a depreciation of fixed assets (Poczta, 2010). Figure 1 shows the value and structure of investment in the sector of agriculture and hunting in Poland.

Figure 1: Structure of investment in agriculture and hunting according to current prices (in millions PLN)



In 2003-2008, there is a noticeable systematic increase in the value of investments of agricultural enterprises in Poland. In 2008 the value amounted to PLN 3,929.1 million. The drop in the investments value in 2009 down to PLN 3,710.3 million could have been caused by the effects of the global market crisis which were perceptible in Poland. Until 2008, predominant investments in the structure of investment in agriculture and hunting were those related to buildings and structures. In 2009-2010, however, companies from this sector increased the outlays on machineries, technical equipment and tools. This phenomenon should be considered positive, since there is a dominance of inactive assets (buildings and structures) in the structure of assets of farmers in Poland, which far exceed the value of current assets. (Ryś-Jurek, 2009; Poczta, 2010; Szafraniec-Siluta, 2011). In the case of agricultural enterprises, dependencies occurring between investment and financial decisions become particularly important. Research shows that the financial factor shapes the investments in agricultural holdings (Zinych, Odening, 2009; Petrick, 2004). Farmers in Poland are characterized by a high proportion of equity in the financing of agricultural activities (Szymańska, 2008; Strzelecka, 2011). This stems, on the one hand, from the aversion of farmers towards debt and, on the other hand, from credit limitations due to the specificity of the activities in the analyzed sector. Research shows, however, that low capital accumulation, high volatility of agricultural incomes resulting from production risk and market fluctuations, the discrepancy between the date of expenditure on production, and the timing of revenues and proceeds from buyers of agricultural products and increased demand for foreign products and services is forcing the farmers to use external sources of financing (Kata, 2009). Thus, low use of foreign capital is partly due to farmers' self-exclusion from the credit market, but is also associated with imperfections of the financial market in agriculture (Zhixiong, 2004; Latruffe, 2005). According to D. Kusz (2009), the main source of financing investments in agricultural holdings are funds obtained from the European Union. The least demanding, from a formal perspective, and thus a widely used form of support are direct payments to agricultural lands (Figurski, 2009). Farmers can also apply for financial support in the context of current investments. One possibility in this regard is Measure 121 Modernization of agricultural holdings. Farmers wishing to carry out investments in their holdings can significantly shorten the period of accumulation of capital that is needed to implement these measures if they use the financial assistance provided under the RDP for the period 2007-2013.

According to the Regulation of Minister of Agriculture and Rural Development in Poland of 17 October 2007, with later amendments (Rozporządzenie, 2007), requests for assistance in the implementation of the Modernization of agricultural holdings measure may be submitted by individuals requesting individually or jointly, legal persons, members of civil partnerships, commercial partnerships, which are sole or dependent owners of an agricultural holding⁴ exceeding 1 hectare or property intended for production in special branches of agricultural

⁴ Agricultural holding is considered to be agricultural lands, including forest land, buildings or their parts, equipment and inventory, which are or could be organized in an economic unit within laws associated with running an agricultural holding (*Ustawa*, 1964)

production within the meaning of the regulations on social insurance for farmers (Ustawa, 1990). Agricultural holding, which would apply for financial support under Measure 121 must have an economic size of at least 4 ESU.⁵ The beneficiary must also conduct agricultural activities⁶ on Polish territory, be an adult (18 years old), but cannot exceed the retirement age (60 years for women and 65 for men) and should have appropriate professional qualifications specified in the applicable regulations.

The level of fund limits under the measure Modernization of agricultural holdings for individual voivodeships was fixed by the Minister of Agriculture and Rural Development in Poland, after consultation with local governments. The indicator used to distribute the funds between individual voivodeships was the synthetic measure of economic size of a holding. It was constructed on the basis of economic size of holdings which would probably apply for financial support under this measure, as well as agricultural area in each voivodeship. (Resolution, 4/09/2007).

Fund limit for the measure Modernization of agricultural holdings in Poland was €910.98 per agricultural holding.⁷ Based on the synthetic measure of the economic size, the highest aid limit was granted to the Masovian voivodeship (€3494 million). However, if measured per agricultural holding, voivodeships with largest fund limits were Kuyavian-Pomeranian and Greater Poland voivodeships, with €1,801 and €1,631⁶⁹ respectively, while Subcarpathian had the lowest fund limit (€239.48).

Financial aid within Measure 121 is given in the form of partial reimbursement of the costs of the following investments: a) building or renovation combined with modernization of buildings used for agricultural production or for storage and preparation for sale or direct sale of agricultural products, b) purchase of machinery, equipment for agricultural production, storage, drying and preparing agricultural products for sale and direct sale, c) establishing and modernization of orchards or perennial plantations (with the exception of spruce, cherries, raspberries, strawberries, currants and crops for energy purposes, d) equipment or enclosures for grazing animals, e) the supply of farms in water, f) the installation or construction of buildings or structures, and the purchase of machinery or equipment to protect the environment, g) purchase of computer equipment and software. In addition, there is a possibility of reimbursement for installments paid under a lease contract, provided it satisfies the additional conditions laid down in the Regulation (Rozporządzenie, 17/10/2007). A wide spectrum of investments which could receive financial support contributed to the great interest of farmers in Poland in this this form of assistance.

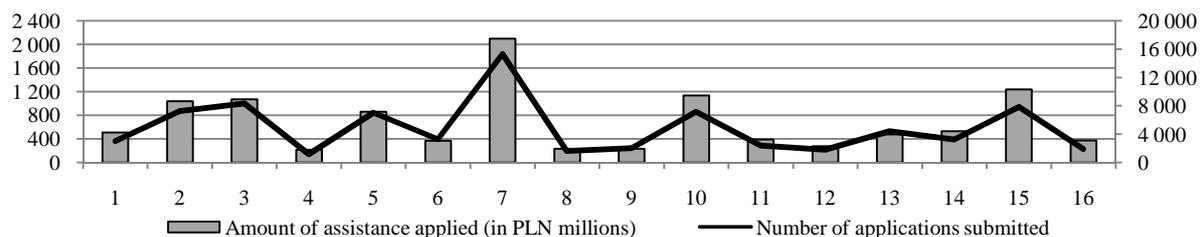
Figure 2 presents data on the total number of applications in each voivodeships in the calls for 2007, 2009 and 2011 concerning Measure 121.

⁵ This value is determined based on the sum of the standard gross margins (SGM) for all activities that occur for a given entity. The standard gross margin is the excess of the value of the agricultural activity over the value of the direct costs within average standards of production for a given region. The parameter determining the economic size of a farm is the European Size Unit (ESU). One ESU is the equivalent of €1,200 (Goraj, Mańko, Osuch, Płonka, 2009).

⁶ Plant or animal activity, including the production of seed, nursery stock, breeding and reproduction stock, vegetable production, ornamental plants, mushroom cultivation, horticulture, farming and the production of breeding material of animals, birds and insects utility or industrial livestock production, with the exception of aquaculture (Rozporządzenie, 17/10/2007).

⁷ Due to the lack of data on the number of farms in each province in 2011, the calculation used data from Agricultural Census in Poland in 2010 (Główny Urząd Statystyczny, 2010).

Figure 2: Number of applications submitted and the amount of assistance applied for in each voivodeship in Measure Modernization of agricultural holdings, as of 30/06/2012



Legend: 1- Lower Silesian, 2- Kuyavian-Pomeranian, 3- Lublin, 4- Lubusz, 5- Łódź, 6- Lesser Poland, 7- Masovian, 8- Opole, 9- Subcarpathian, 10- Podlaskie, 11- Pomeranian, 12- Silesian, 13- Świętokrzyskie, 14- Warmian-Masurian, 15- Greater Poland, 16- West Pomeranian

In all calls for applications in Measure 121, there were total of 77,911 applications submitted, of which 18,372 were in the first call, 24,863 in the second, and 34,676 in the third call. The data presented in Figure 2 shows that the largest number of applications was made in the Masovian voivodeship; however, both in the first and in the second call, the largest number of applications were submitted in Greater Poland (2,775 and 5,091 applications respectively). High demand for EU funding of investments among farmers in Greater Poland resulted in exhausting the limit for funding in the first two calls for beneficiaries in this administrative division. As a result, they were not eligible for funding in 2011. In the last call, the largest number of applications was submitted in the Masovian voivodeship (8,704).

Funding under Measure 121 can be received when the eligible costs of the planned investment are more than PLN 20,000, whereby one beneficiary and one farm can get the maximum support of PLN 300,000. The base level of funding is 40% of the eligible costs. It can be increased up to 50%, 60% or 70%, provided that the requirements of the regulation for granting of aid under Measure 121 *Modernization of agricultural holdings* are met.⁸

From the data presented in Figure 2, it can be concluded that farmers interested in being granted financial aid for investments submitted applications for a total amount of PLN 11,035,256,643.04, of which around 46% (PLN 5,052,916,748.04) were submitted in the 2011 call. When analyzing the data from all calls, it can be noted that 19% of the total amount requested was in the Masovian voivodeship (PLN 2,095,582,478.38), while the lowest amount, representing 2% of the total pool of funds has been requested in Lubusz viovodeship. The average amount for a submitted project was PLN 124,017 in the first call, PLN 148,972 for the second and PLN 145,718 in the last of the announced calls. It must be noted that the highest average amount per single application was recorded in West Pomeranian (for each call PLN 195,653; PLN 202,450 and PLN 187,661 respectively). The lowest average amount per one application under the first two calls were recorded in Świętokrzyskie (PLN 72,501 and 105,569 respectively), and under the 2011 call in the Lesser Poland voivodeship (PLN 123,338).

In the first call (2007), the decisions of granting the aid were made on the first-come first-served basis. (Rozporządzenie 17/10/2007). In 2009 the order of granting aid was determined by a lottery with the use of ICT (Information and communications technology) system (Rozporządzenie, 18/03/2009); while in the last call (2009), detailed criteria for assessing the submitted proposals were implemented under the Regulation of Minister of Agriculture and Rural Development (Rozporządzenie, 2010). Farmers specializing in the production of milk were treated preferentially. Their applications were rated higher than other farmers. It was

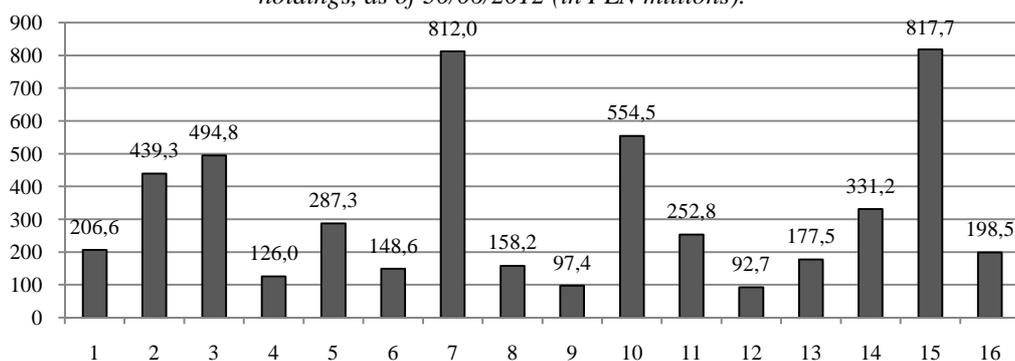
⁸ Detailed terms and conditions for gaining reimbursement of costs higher than 40% are stated in §8 of Regulation of the Minister of Agriculture and Rural Development in Poland of 17 October 2007, with later amendments (Rozporządzenie, 2007).

taken into consideration whether the planned investments were aimed at increasing milk production, or changing the profile of the holdings (resigning from milk production), what was the amount of milk quota and whether the application was by an individual or a group. For other farmers, the economic size of the holding was primarily assessed.

By 30 June 2012, there were 53,236 contracts signed under the measure *Modernization of agricultural holdings*, which constituted 68.33% of all applications for financial support of investments in agricultural holdings. The largest number of contracts with beneficiaries were signed in the Masovian voivodeship (9,887), Lublin voivodeship (6,903) and in Greater Poland (6,130), the lowest, on the other hand, in Lubusz voivodeship (790). In case of the Opole voivodeship, 86.18% cases of application submission were positively verified and finalized by signing of the contract. It was the highest score for any of the Polish voivodeship. Modernization of holdings should result in an increase in agricultural production, and thus in economic surplus. The voivodeships where the largest number of contracts under the Measure 121 was signed produced in 2009 a total of 38.9% of global agricultural production in Poland (*Rocznik Statystyczny...*, 2011).

The study also investigated the amount of payments realized in each of the voivodeship under the aforementioned measure (Figure 3).

Figure 3 The amount of payments realized in each voivodeship under the Measure Modernization of agricultural holdings, as of 30/06/2012 (in PLN millions).



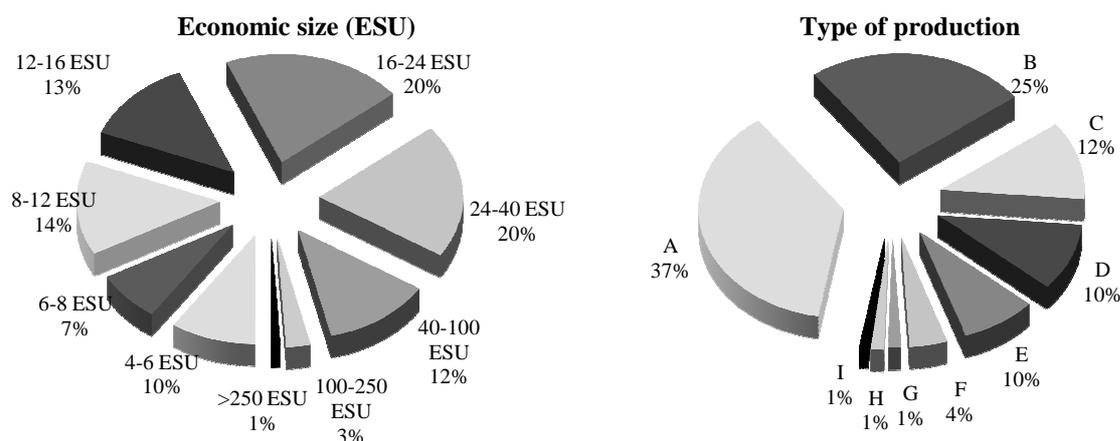
Legend: as in Figure 2.

By 30/06/2011, beneficiaries operating on the Polish territory received funds in the amount of PLN 5,195.33 million, under the measure supporting modernization of Polish agricultural holdings. Payments with the highest value were realized in the Masovian voivodeship (PLN 812 million) and in Greater Poland (PLN 817.7). West Pomeranian voivodeship has the highest value of payments made in relation to the number of contracts. The average amount of funds paid per one contract in this voivodeship was PLN 170,980. This variable was also high in the Lubusz voivodeship – PLN 159,520. In the investigated period, the financial aid under Measure 121 per one agricultural holding in Poland was PLN 2,282.79.⁹ High efficiency in obtaining funds from the source in question was exhibited by holdings in the Podlasie and Greater Poland voivodeships, where the amount of payments realized per farm amounted to PLN 5,269.44 and PLN 5,039.66.

Figure 4 presents the economic size and main lines of production of the beneficiaries under the *Modernization of agricultural holdings* measure.

⁹ Due to the lack of data on the number of farms in each province in 2011, the calculation used data from Agricultural Census in Poland in 2010 (Główny Urząd Statystyczny, 2010).

Figure 4: Economic size of a holding and main lines of production of the beneficiaries under the Modernization of agricultural holdings measure, as of 31/12/2011. [in %]



Legend: Type of production: A- milk production; B- field crops; C- pigs; D- mixed production; E- gardening; F- permanent crops; G- meat production (pasture-raised animals); H- poultry; I- other types of production

The economic size of farms differentiates them more accurately than the commonly used measure of an area of agricultural land (Jóźwiak, 2008), because it includes not only land but also other production factors in agriculture, namely labor and capital. Among the beneficiaries of Measure 121, the most frequent were those whose economic size of the holding was between 16 and 40 ESU (40%). A small percentage of holdings were of the highest economic size (over 250 ESU). 31.5 ESU was the average economic size of an agricultural holding of the beneficiaries of the measure in question (*Działanie...*, 2012). Milk production holdings were the most frequent (37.2%), due to the fact that they were given preferential treatment under the *Modernization of agricultural holdings* measure. In the 2011 call, in 6 of the 16 Polish voivodeships only milk producers could apply for aid. In the remaining voivodeships, applications of milk producers were graded higher than the rest of the farmers (*Ostatnia szansa*, 2011). Apart from milk production, the main lines of production in the beneficiary holdings were field crops (23.8%) and pig breeding (11.6%). Moreover, most funds were granted for holdings of the economic size between 16 and 40 ESU (43%). Among the beneficiaries of Measure 121, 15.97% were these farmers whose holdings were of the size 40 ESU or higher. The intensity of investment in the economically strongest holdings is displayed by the fact that these beneficiaries received 23.75% of the payments realized within the financial aid in questions. Among the farmers benefitting from the *Modernization of agricultural holdings* measure, the most frequent were those with holdings of the size between 30 and 50 hectares (21.36%).

3. Conclusion

Based on the study conducted, the following conclusions were drawn:

1. In 2003-2008, there is a noticeable systematic increase in the value of investments of agricultural enterprises in Poland. In the structure of assets of Polish farmers, there is a dominance of inactive assets (buildings and structures). Farmers are characterized by a high proportion of equity in the financing of agricultural activities.
2. The aim of *Modernization of agricultural holdings* measure is to support the modernization of holdings in order to increase their efficiency through better use of means of production.
3. In all the calls of Measure 121, there were total of 77,911 applications submitted in Poland, for the total amount of PLN 11,035,256,643.04, and there were 53,236 contracts

signed. The largest number of contracts with beneficiaries were signed in the Masovian voivodeship, Lublin voivodeship and in Greater Poland, the lowest, on the other hand, in Lubusz voivodeship.

4. The largest number of beneficiaries specialized in milk production.

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