

**Mechanisms and impulses
influencing development
of agriculture
and rural areas
(1)**



**INSTITUTE OF AGRICULTURAL
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**Mechanisms and impulses
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of agriculture
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(1)**

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**THE POLISH AND THE EU AGRICULTURES 2020+
CHALLENGES, CHANCES, THREATS, PROPOSALS**

Warsaw 2015

The paper was prepared under the research subject **Financial and fiscal factors in the improvement of efficiency, sustainability and competitiveness of the Polish agriculture**, in the task: *Fiscal mechanisms and stimuli having their influence on the rural development, returnable financing and quasi-marketable instruments for internalization of external effects in agriculture, the provision of public goods.*

The paper aims at introducing the following issues: a comprehensive identification of the national and the EU policies having direct impact on the development of agriculture and rural areas; estimation of fiscal multipliers; assessment of the effects of using returnable financing in agriculture; analysis of guarantee and reguarantee funds, venture and equity capital, leasing and financial innovations as sources of capital.

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Introduction

This publication is the first monograph presenting the results of the work carried out under the task entitled “Fiscal mechanisms and stimuli having their influence on the rural development, returnable financing and quasi-marketable instruments for internalization of external effects in agriculture, the provision of public goods”, which is one of three tasks within the topic “Financial and fiscal factors in the improvement of efficiency, sustainability and competitiveness of the Polish agriculture” being a part of the multi-annual programme entitled “The Polish and the EU agricultures 2020+. Challenges, chances, threats, proposals” implemented in the years 2015-2019 by the Institute of Agricultural and Food Economics – National Research Institute.

As part of the implementation in the year 2015 of the task “Fiscal mechanisms and stimuli having their influence on the rural development, returnable financing and quasi-marketable instruments for internalization of external effects in agriculture, the provision of public goods” the following research issues were set as study objectives:

- comprehensive identification of the instruments of the EU and national policies that directly influence the development of agriculture and rural areas,
- estimation of fiscal multipliers,
- assessment of the effects of returnable financing in agriculture,
- analysis of guarantee and re-guarantee funds, venture and equity capital, leasing and financial innovation as a source of capital.

This publication contains all these elements to the extent to which the research into them was carried out in 2015 and considering the fact that the studies of the majority of them will be continued in the coming years.

Probably the division of the publication for presentation of the enlisted above study objectives for the year 2015 is not an optimal one. However, it should be borne in mind that they will continue to be some part of the research focus in the next years, and therefore, this monograph is only an introduction to all these issues.

Agriculture is a particular sector of economy. Its development and fulfilment of social functions within the market economy requires specific government support¹. This support has to be adapted to the requirements included in the guidelines and other community documents concerning national policy, as well as should be consistent with the agreements of the World Trade Organisation (WTO), which to some extent limits the scope of this policy. In Poland,

¹ M. Adamowicz, (1992), *Cele i skutki interwencjonalizmu rolnego* (Objectives and effects of agricultural interventionism), *Więś i Rolnictwo* (Rural Areas and Agriculture), No. 3/4, p. 35-49.

public aid is implemented indirectly and directly. Direct aid results from direct outflow of public funds from the state budget, local government budget or budgets of other entities to the aid's beneficiary. This group includes, among others, subsidies, preferential loans, guarantees and sureties. On the other hand, indirect public aid occurs when the state or other public institution renounces due measures for the benefit of the aid's beneficiary. It includes tax exemptions and reliefs, accelerated depreciation and deferral of tax payment².

The need for implementation of state aid is most often justified by dependence of agriculture on the laws of nature. Despite significant technical progress, variable climatic conditions still strongly affect the size and quality of foodstuffs production³.

Unfavourable weather conditions result not only in direct damages, meaning physical damage to crops or farm animals, but also indirect damages, relating to loss of production capacity, increase in production costs, reduction in production and income, as well as degradation of the natural environment. Therefore, the state is justified in undertaking activities within the area of covering risk associated with natural disasters, both by economy-wide, as well as political reasons. Lack of this coverage may have adverse impact on business activity and the related economic growth⁴.

Resuming production in agricultural farms affected by natural disasters requires proper financial efforts. The scope of damages is very often so high that it is impossible to cover them with own funds. The key role in restoring socio-economic order, disturbed by the impact of unpredictable and difficult to prevent phenomena or events, is played by preferential disaster loans. The purpose of preferential loans is to reduce the costs of a bank loan, thus allowing for accelerating the process of restoring productivity of agricultural farms and stabilising their financial liquidity.

It should be noted that the scale and type of financial involvement of the state in subsidies to disaster loan interest rates is determined by many supply- and demand-related factors. Supply-related factors result from financial possibil-

² M. Koźuch, (2011), *Pomoc publiczna jako narzędzie pobudzania wzrostu gospodarczego* (Public aid as a tool for stimulating economic growth), Scientific Papers of the Cracow University of Economics, No. 860.

³ A. Kruger, M. Schiff, A. Valdes, (1988), *Agricultural Incentives in Developing Countries: Measuring the Effects of Sectoral and Economy-wide Policies*, "World Bank Economic Review", Vol. 2, No. 3, p. 255-271.

⁴ K. Ortyński, (2013), *Zakres i charakter partnerstwa publiczno-prywatnego w zarządzaniu ryzykiem katastroficznym* (Scope and nature of public-private partnership in catastrophe risk management), [in:] *Rynek Ubezpieczeń. Współczesne Problemy* (Insurance Market. Contemporary Problems), W. Sułkowska (ed.), Difin, Warsaw, p. 27-37.

ities of the state budget, as well as from the action strategy adopted by public authorities. The attitude of commercial banks, which grant loans subsidised from the state budget, constitutes an important element determining the success of the undertaken actions. On the other hand, the demand-related factors result from the scale of demand and financial possibilities of farmers, who apply for additional cash funds⁵.

The issue of state aid in the agricultural sector was repeatedly discussed in scientific papers, due to the significance of this subject matter for all institutions concerned with shaping relations in Polish agriculture.

The first chapter concerns the instruments influencing agricultural and rural development in Poland. This chapter contains two sections. In first of them, reference is made to the CAP instruments in Poland. However, due to the fact that there were no changes in the set and character of the instruments adopted for implementation in Poland within the framework of the CAP 2014-2020 it was considered unjustified to discuss them, since they were presented in detail in the publication presenting the results of research conducted in 2014 under the task of the multi-annual programme 2011-2014 concerning the impact of budgetary policy on agriculture and rural development⁶. In the second section presented are currently rarely discussed in the Polish literature instruments of national policy on rural areas and agriculture, focusing on the most important instrument of national agricultural policy (taking into account the scale of allocated funds), that is preferential credits.

An especially large share of this publication is devoted to preferential disaster credits considering it as a specific instrument that combines not only the characteristics of the instrument belonging to the group of tools called returnable financing, but also an element of support for farmers, when as a result of adverse climatic and natural conditions they suffer losses in production.

A significant part of the publication is also devoted to investment preferential credits. There is a short presentation concerning these credits from the perspective of regional differences in their use in the period 2005-2014. During

⁵ A. Alińska, (2008), *Zróżnicowanie regionalne w zakresie dopłat do kredytów preferencyjnych dla sektora rolno-żywnościowego w 2005 roku* (Regional diversity with regard to subsidies to preferential loans for the agri-food sector in 2005), [in:] *Zagadnienia produktywności, regionalnego zróżnicowania nakładów pracy i kredytowania produkcji rolniczej w świetle Rachunków Ekonomicznych dla Rolnictwa* (Issues of productivity, regional diversity of labour input and crediting agricultural production in the light of the Economic Accounts for Agriculture), collective publication edited by Z. Floriańczyk, National Research Institute of Agricultural and Food Economics, Warsaw, p. 47-61.

⁶ B. Wieliczko (ed.), B. Rokicki, St. Lenkiewicz, (2014), „*Agricultural budget« and the competitiveness of the Polish agriculture*”, „Multi-annual programme 2011-2014” no. 111.1, IAFE-NRI, Warsaw.

that time, the rules for granting these credits were adjusted to the state aid rules in force in the European Union. This change, combined with growing support granted to farmers under the CAP, led to a significant drop in the number of credits.

The second chapter of the monograph applies to estimating fiscal multipliers. This section is limited to review of the literature on the nature and size of fiscal multipliers. Therefore, this section is an introduction to the issue of fiscal multipliers, that is to the issue that is rarely tackled in the Polish economics, and at the same time – absent from the Polish research on the analysis of agricultural policy.

In the third chapter the issue of returnable financing is discussed. It focuses on the presentation of instruments used by Poland and the European Union in relation to the sector of small and medium-sized enterprises in order to present the possibilities offered by the financial instruments and on discussing the current scale use of such instruments both in the SME sector, as well as in the agriculture itself. This chapter also includes an analysis of guarantee and re-guarantee funds, venture and private equity, leasing and financial innovation as a source of capital.

1. EU and national policy instruments influencing agricultural and rural development

Agricultural and rural development is influenced by a lot of instruments from different areas of national and European Union policies. Among them are two basic categories:

- Instruments designed as a policy aimed at agricultural and rural development;
- Instruments of macroeconomic policy, especially fiscal policy and monetary policy⁷.

Due to the limitations of this publication, primarily because of the need to take into account all the elements of the research task, this chapter applies only to the first type of these instruments.

1.1. CAP instruments

As mentioned in the introduction, the shape of the CAP in Poland in the programming period 2014-2020 was decided in 2014 and widely presented in the publication created in 2014 presenting the results of research carried out in the framework of “National and the EU "rural budget" versus finance and functioning of the Polish agriculture and the national economy”⁸. Therefore, in order to avoid duplication of information on the CAP instruments to be implemented and of the assessment of their shape, here presented is a comparison of the choices made by Poland and other EU Member States with regard to the direct payments scheme.

The most important element of the CAP instruments is still the system of direct payments and it is the system of such payments that was changed the most during the last reform. Regulation of the European Parliament and the Council (EU) No 1307/2013 gives a wider range of choices enabling adjusting the system of direct payment to the circumstances of a given country. Thus, the direct payment system, already very diverse, became even more diverse.

However, the first choice that had to be made as an individual decision of each of the member states in relation to shaping the functioning of the CAP instruments in the period 2014-2020 was to determine whether and to what extent

⁷ It should be remembered that the agricultural development is also influenced by the decisions taken at local and regional levels, as well as policies and activities of local authorities and other local and regional entities, such as, for example, research institutions, associations and organisations. In more detail role of these entities in relation to the SME sector is described, inter alia, in the paper: M. Matejun, (2012), *Regionalne instrumenty wspierania rozwoju małych i średnich przedsiębiorstw*, [in:] Adamik A. (ed.), *Współpraca małych i średnich przedsiębiorstw w regionie. Budowanie konkurencyjności firm i regionu*, Difin, Warszawa 2012, p. 82-109.

⁸ B. Wieliczko (ed.), Rokicki B., Lenkiewicz St., (2014), *op. cit.*

to make use of the possibility of reallocating the funds granted to them for the implementation of direct payments and the second pillar of the CAP. The scale of possible shifts varied depending on the country and the direction of money transfers. A shift from Pillar I to Pillar II could amount up to 15% of the national envelope for direct payments. In the case of an opposite direction the situation varied depending on the country. New EU member states had the possibility of moving up to 25%, and the old ones only up to 15%. Transfers may affect both the entire period 2014-2020, as well as only some years of this period⁹. Out of 16 countries¹⁰ in which the decision was taken to reallocate funds between pillars, the majority decided to transfer funds from the first to the second pillar, which is the financial strengthening of rural development policy. However, at the same time such a transfer meant increasing the amount of funds subject to much stricter control rules and required to have a clearly defined purpose of use as support. Only five member states decided to make a transfer from the second pillar to the first pillar, and Poland decided to make use of the maximum allowable transfer limit (Tab. 1.1.1).

As regards the model of the direct payment system there is also considerable diversity. Most of the countries that became the EU members in the twenty-first century are still using the single area payment scheme (i.e. SAPS). The smallest number of countries decided on a regional model. Only six countries took the decision of implementing direct payments at the regional level, whereby, among them are mainly very large countries with a highly developed agriculture. Most countries have taken a decision on the implementation of direct payments under the national model (Tab. 1.1.2).

Under the system of direct payments it is still possible to support selected types of agricultural production. As many as 27 of 28 countries making up the European Union made use of this possibility. Only Germany chose the option of not supporting selected types of production¹¹. The share of funds allocated to this type of payment is very diverse among member states and ranges from 2.1% to 20% (Tab. 1.1.3).

⁹ The possibility of transferring funds already in 2014 was given by the regulation of the European Parliament and the Council no 1310/2013. France, Latvia and United Kingdom made use of it.

¹⁰ However, in the case of Belgium and United Kingdom only some regions made such a decision.

¹¹ Apart from Germany, these payments will not be applied in Scotland.

Table 1.1.1. Member states which made transfers between CAP pillars, its direction and scale of the funds transferred in 2019

Member states	From I to II	From II to I	Share
Belgium – Flanders	✓		10.0
Croatia		✓	15.0
Czech Republic	✓		1.3
Denmark	✓		7.0
Estonia	✓		15.0
France	✓		3.3
Germany	✓		4.5
Greece	✓		5.0
Hungary		✓	15.0
Latvia	✓		7.5
Malta		✓	3.8
Netherlands	✓		4.3
Poland		✓	25.0
Romania	✓		0.0*
Slovakia		✓	21.3
UK – England	✓		12.0
UK – Wales	✓		15.0
UK – Scotland	✓		9.5

*In 2015 only 1.8% of the second pillar funds is subject to transfer, in 2016 – 2.2% and in 2017 – 2%.

Source: Own elaboration based on European Union 2015, tab. 1.

Table 1.1.2. Chosen model of direct payment system

SAPS	Regional model	National model
Bulgaria	Finland	Austria
Cyprus	France	Belgium
Czech R.	Germany	Croatia
Estonia	Greece	Denmark
Lithuania	Spain	Ireland
Latvia	United Kingdom – England	Netherlands
Poland	United Kingdom – Wales	Luxembourg
Romania	United Kingdom – Scotland	Malta
Slovakia		Portugal
Hungary		Slovenia
		Sweden
		UK – Northern Ireland
		Italy

Source: Own elaboration based on European Union 2015, tab. 1.

Table 1.1.3. Share in national envelope of the coupled payments

Member state	Share of support for coupled payments
Austria	2.10
Belgium – Flanders	11.25
Belgium – Wallonia	21.30
Bulgaria	15.00
Croatia	15.00
Cyprus	7.90
Czech Republic	15.00
Denmark	2.80
Estonia	4.20
Finland	20.00
France	15.00
Greece	8.00
Spain	12.00
Netherlands	0.50
Ireland	0.20
Lithuania	15.00
Luxembourg	0.50
Latvia	14.00
Malta	57.00
Germany	0.00
Poland	15.00
Portugal	21.00
Romania	12.00
Slovakia	13.00
Slovenia	15.00
Sweden	13.00
Hungary	15.00
United Kingdom – Scotland	0.00
United Kingdom – remaining regions	8.00
Italy	11.00

Source: European Union 2015, tab. A.2.

Product range of support coupled with production in individual countries varies. The record number of products covered by these payments is found in Romania, which offers payments coupled with production to 12 groups of products. Slightly fewer products are covered by this payment category in Italy – 11, in Poland, Greece and Spain – 10 and in France and Latvia – 9. When it comes to products, the most widely supported is the production of beef and veal. Among the countries using payments coupled with production, only Cyprus and Ireland chose not to support them. The products most commonly supported by the member states via coupled payments are also sheep meat, milk and dairy

products, as well as fruit and vegetables. Least likely to be supported are nuts and flax. In both cases, only one country decided to grant payments for these products. In the case of nuts it is Spain, while flax is supported only in Poland (Tab. 1.1.4).

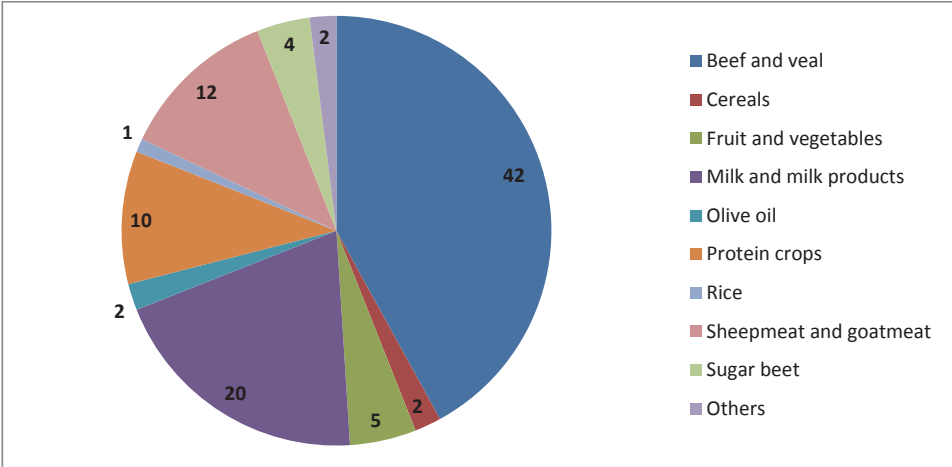
Table 1.1.4. Products covered across the EU by the coupled payments

Country	Beef and veal	Cereals	Flax	Fruit and vegetables	Grain legumes	Hemp	Milk and milk products	Nuts	Oilseeds	Olive oil	Protein crops	Rice	Seeds	Sheepmeat and goatmeat	Silkworms	Starch potato	Sugar beet	Hops
AT	X													X				
BE	X						X							X				
BG	X			X			X				X			X				
CY				X			X							X				
CZ	X			X			X				X			X		X	X	X
DK	X																	
EE	X			X			X							X				
EL	X	X		X	X						X	X	X	X	X		X	
ES	X	X		X	X		X	X			X	X		X			X	
FI	X	X		X			X				X			X		X	X	
FR	X			X		X	X				X		X	X		X		X
HR	X			X			X				X			X			X	
HU	X			X			X				X	X		X			X	
IE											X							
IT	X	X		X	X		X		X	X	X	X		X			X	
LT	X			X			X				X			X				
LU											X							
LV	X	X		X			X		X		X		X	X		X		
MT	X			X			X							X				
NL	X													X				
PL	X		X	X		X	X				X			X		X	X	X
PT	X			X			X					X		X				
RO	X			X	X	X	X				X	X	X	X	X		X	X
SE	X																	
SI	X	X		X			X				X							
SK	X			X			X							X			X	X
UK	X													X				

Source: European Union 2015, tab. A.2.

Beef and veal are not only the most widely supported products in the context of coupled payments. Also, the share of expenditure on payments for these products in the total amount of funds allocated for coupled payments is the highest reaching 42% (Fig. 1.1.1). Second place belongs to milk and dairy products – 20%, and the third one to sheep meat – 12%.

Figure 1.1.1. Structure of funds for coupled payments by groups of products covered by this support



Source: Own elaboration based on European Union 2015, tab. A.2.

Only eight member states decided to implement redistributive payments, known in Poland as additional payments. The largest part of its envelope allocated to these payments is found in France, while the lowest in Romania (Tab. 1.1.5). Also, the rate of payments as well as the area covered by them are very diverse. Two countries – Germany and Romania – opted for differentiated rates depending on the hectare of arable land to which the payment is applied. However, in the case of Romania difference the lower rate is nine times smaller than the higher one, while the payment is applied to 5-30 hectares of UAA, which is determined by the structure of UAA in this country. In Germany the difference between rates is significantly lower – the lower rate amounts to 60% of the higher one. The payment is eligible for the first 30 ha of UAA and for which the higher rate is paid. The lower one is paid to further sixteen hectares. In Poland, this payment functions in a different way for the first hectares – up to the third one there is no payment.

Table 1.1.5. Share of the national envelope allocated to the redistributive payment

Member state	Share of national envelope allocated for the payment	Area eligible for payment (in ha)	Rate (in euro)
Belgium - Wallonia	17.0	30	133
Bulgaria	7.0	30	77
Croatia	10.0	20	34
France	20.0	52	25
Lithuania	15.0	30	50
Germany	6.9	30 30.01-46	50 30
Poland	8.0	3 3.01-30	0 41
Romania	5.0	5 5.01-30	5 45

Source: Own elaboration based on European Union 2015, graph A.1 i table 4.

Only a few countries decided not to introduce restrictions and/or reduction in the volume of direct payments received by a single entity. They include: Belgium – Wallonia, Croatia, France, Lithuania, Germany and Romania. Among countries with a defined limit of support this limit amounts to EUR 150,000. More countries opted for degressivity of payments in relation to the total amount of subsidies in excess of EUR 150,000 at the rate of 5% (Tab. 1.1.6). Simultaneously, several countries apart from degressivity also decided to limit the maximum amount of payment. The lowest of these limits is EUR 176,000 in force in Hungary, while the highest – EUR 500,000 – is applied in Italy and Scotland.

Table 1.1.6. Capping and reduction of direct payments in the EU member states

Capping at EUR 150,000	Level of reduction of payments above EUR 150,000
Austria	Bulgaria – 5%; cap: EUR 300,000
Belgium – Flanders	Cyprus – 5%
Greece	Czech Republic – 5%
Ireland	Dania – 5%
Latvia	Estonia – 5%
Poland	Finland – 5%
United Kingdom – Northern Ireland	Spain – 5%
	Netherlands – 5%

cont. Table 1.1.6

	Luxembourg – 5%
	Malta – 5%
	Portugal – 5%
	Slovakia – 5%
	Slovenia – 5%
	Sweden – 5%
	Hungary – 5%; cap: EUR 176,000
	United Kingdom – England – 5%
	United Kingdom – Wales – 15%; cap: EUR 300,000
	United Kingdom – Scotland – 5%; cap: EUR 500,000
	Italy – 50%; cap: EUR 500,000

Source: Own elaboration based on European Union 2015, tab. A.2.

Another new element of the direct payment system is mandatory for all member states. It is a payment to young farmers. Regulation No 1307/2013 set a maximum limit of funds allocated for this form of payment amounting to 2% of the national envelopes. However, many countries in their direct payment systems decided to spend a different share of their national envelopes on these payments. The smallest share of national envelope is provided to young farmers in the Czech Republic, Hungary and Malta (Tab. 1.1.7).

Table 1.1.7. Share of the national envelope appropriations for payments to young farmers

≤ 1%	<1%,2%)	= 2%
Bulgaria	Belgium – Wallonia – 1,8%	Austria
Czech R. – 0,2%	Cyprus – 1%	Belgium – Flanders
Estonia – 0,5%	Finland – 1%	Croatia
Hungary – 0,2%	France – 1%	Denmark
Latvia – 0,9%	Germany – 1%	Greece
Malta – 0,2%	Italy – 1%	Ireland
	Lithuania – 1,75%	Netherlands
	Luxembourg – 1,5%	Portugal
	Poland – 1%	Romania
		United Kingdom – England
		United Kingdom – Northern Ireland
		United Kingdom – Wales

Source: Own elaboration based on European Union, (2015), tab. A.2.

As a result of all the deductions of funds allocated to the various compulsory and voluntary forms of payments only part of the national envelope remains for the so-called basic payments. It is very different depending on the country. The lowest percentage of the national envelope which remained for basic payments was recorded in Malta – 12.6%, and the highest in Austria – 69.5% (Tab. 1.1.8).

Table 1.1.8. Share of the national envelope earmarked for basic payments

Member state	Share
Austria	69.50
Belgium – Flanders	56.75
Belgium – Wallonia	29.90
Bulgaria	47.00
Croatia	43.00
Cyprus	61.10
Czech Republic	54.80
Denmark	65.00
Estonia	65.30
Finland	49.00
France	34.00
Greece	60.00
Spain	56.00
Netherlands	67.50
Ireland	67.80
Lithuania	39.25
Luxemburg	68.00
Latvia	55.10
Malta	12.60
Germany	62.10
Poland	46.00
Portugal	47.00
Romania	51.00
Slovakia	56.40
Slovenia	54.00
Sweden	55.40
Hungary	54.80
United Kingdom – Scotland	61.75
United Kingdom – remaining regions	68.00
Italy	58.00

Source: Own elaboration based on J-Ch. Bureau, L-P. Mahé, (2015), tab. 2.4.

A special system of direct payments for small farms is being implemented by 15 EU member states. Among them are: Austria, Bulgaria, Croatia, Estonia, Greece, Spain, Latvia, Malta, Germany, Poland, Portugal, Romania, Slovenia, Hungary and Italy. Analyzing the arrangements for the direct payment system being implemented in Poland and the other EU member states, it is difficult to locate Poland in comparison to other countries, because the diversification of the choices made by individual countries is so huge. However, given the scale of transfers from Pillar II to I made by Poland, it can be stated that the Polish choices are characterized by a clear desire to focus on the universality of support and the relative ease in controlling granted aid.

However, looking at what are the objectives guiding individual forms of payments we can try to determine the orientation of the payment system in the individual countries. Yet, most categories of payments have enhancing farm income as their main objective (Fig. 1.1.2). At the same time, however, basic payments are not targeted to selected groups of agricultural entities and therefore can be considered as not differentiating any groups of farmers. Thus, by analyzing the ratio between the various types of support, it can be determined whether the country is focused on raising the income of the whole of the agricultural sector or its different types depending on the size of agricultural land (the redistributive payment and the system for small farms), or the type of production (payments coupled with production)¹². It seems that such an approach would be an oversimplification and it would be more informative to look at the structure of agricultural production in individual countries and regions by analyzing the decisions about the shape of direct payment schemes.

Figure 1.1.2. Main and additional objectives of individual types of direct payments

CAP objectives	Basic payments	Redistributive payments	Green payments	Payments to young farmers	Small farmers scheme	Coupled support
Enhance farm income	Main aim					
Improve agricultural competitiveness			Additional aim			
Maintain market stability						
Meet consumer expectations						
Provide environmental public goods						
Maintain agricultural diversity						

Source: European Commission, (2015), Management Plan 2015. Directorate-General for Agriculture and Rural Development, Brussels, p.14.

¹² This is undoubtedly a simplification as the scale of support depends on the size owned of UAA.

1.2. National policy instruments influencing development of rural areas and agriculture

For a long time, the agricultural sector in Poland has been shaped by specific instruments, development programs, preferential administrative and legal regulatory arrangements, as well as other forms of current support¹³, financed by the state budget. Current national support mechanisms, including the scope of impact of the state on the activities of agricultural producers, channels, instruments and entities receiving budget funds, are adjusted to the community guidelines. Common Agricultural Policy determines in detail the interventions and support mechanisms for farmers, while the EU regulations related to public aid in agriculture leave Member States little freedom with regard to the scale and scope of granting state aid to the agricultural sector¹⁴. It should be emphasised that state aid is complementary with the European Union policy, which – as the only comprehensive community policy – limits the possibility to independently impact national governments¹⁵. In accordance with the provisions of the Treaty on the Functioning of the EU, any aid granted by a Member State or through state resources in any form whatsoever, which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods, shall, in so far as it affects trade between member states, be incompatible with internal market⁹. However, achieving the planned results with regard to the assumed economic, social, environmental and political goals in a given sector, particularly in the agricultural sector, cannot be based solely on market mechanisms. Therefore, despite this general prohibition, state aid is allowed, since it is necessary for correcting irregularities in the functioning of the market, and thus for ensuring proper and fair functioning of the economy.

State aid may be provided only if the following criteria are met simultaneously: - it does not distort competition; - it complies with the goals of the common agricultural policy, rural areas development policy and international obligations of the EU, above all those within the framework of the WTO; - fosters economic activities in the regions; - is selective, i.e. applies to a given group

¹³ W. Rembisz, *Instrumenty rynku rolnego* (Agricultural market instruments), Vizja Press & IT Publishing House, Warsaw 2009, p. 133.

¹⁴ B. Wieliczko, *Państwo a rynek w rolnictwie – rolnictwo Polskie i UE w pierwszych dekadach XXI wieku* (The state and the market in agriculture – Polish and EU agriculture in the first decades of the 21st century), [in:] *Problemy rozwoju rolnictwa i gospodarki żywnościowej w pierwszej dekadzie członkostwa Polski w UE* (Issues of the development of agriculture and food economy in the first decade of Polish membership in the EU), A. Czyżewski, B. Klepacki (ed.), PTE (Polish Economic Society), Warsaw 20015.

¹⁵ G. Spychalski, *Krajowe instrumenty wspierania rolnictwa i obszarów wiejskich w Polsce* (State instruments for supporting agriculture and rural areas in Poland), ACTA Scientiarum Polonorum, *Oeconomia* 7 (2)/2008, p. 91-101.

of beneficiaries meeting the set aid conditions (it is not a general instrument); - has benefits, which the entities cannot obtain under normal conditions¹⁶. In addition, state aid has to contain a stimulating element or has to require the entity using the aid to cooperate. This means that the community legislation does not allow for one-sided state aid intended for improving the financial situation of agricultural producers, since this kind of aid may interfere with the common market organisation mechanism¹⁷.

The national agricultural support programmes have been available in Poland for many years. The process of system transformation, as well as accession to the European Union influenced the shape of the national policy towards agriculture and rural areas, causing changes in the institutional setting and enforcing adaptation of the legal framework and financial services. Since the beginning of political transformation, until 1994 the basic objectives of national agricultural policy mainly focused on stabilization of the situation in agriculture in the new conditions of the free market economy. The involvement of the state in this period, manifested in financial support measures to improve the living and working conditions in the country and its multifunctional development, particularly by expanding support programmes in the field of infrastructure and to promote the participation of farmers in privatization processes surrounding agriculture. The emergence of the problem of indebtedness of farms and the need to intensify structural changes contributed to the creation of the Fund for Restructuring and Debt Reduction in Agriculture. The main directions of its activities included the purchase of receivables and support for their repayment, granting repair credits and modernization as well as guarantees and underwritings for borrowers¹⁸. The Fund operations were completed upon appointment in 1994 the Agency for Restructuring and Modernisation of Agriculture.

The scope of state aid instruments and their impact on the agricultural sector has changed since the beginning of their functioning. This period can be divided into three time intervals: the first one covering the pre-accession years and 3 years after the accession date (until 30 April 2007), the second one related to adaptation of state aid instruments to community guidelines concerning state aid in the agricultural sector (2007-2013), and the third one related to changes in guidelines for state aid in agriculture (2014-2020). And so, until 30 April 2007, the forms of aid used were reported to the European Commission as existing aid,

¹⁶ *Wsparcie rolnictwa i obszarów wiejskich środkami krajowymi w krajach UE* (Support for agriculture and rural areas from national funds in EU countries), FAPA, Warsaw 2006.

¹⁷ Official Journal of the European Commission C 319/1 of 27.12.2006.

¹⁸ *Agencja Restrukturyzacji i Modernizacji Rolnictwa – dokonania i zamierzenia*, Wyd. ARMiR, Warszawa 2004.

including forms of aid specified in the provisions of the Act of 29 December 1993 on the establishment of the Agency for Restructuring and Modernisation of Agriculture (ARMA). Since 1 May 2007, state aid was implemented on the basis of new legal acts set out by the European Commission, including:

- 1) Regulation of the Commission (EC) No. 1857/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to state aid to small and medium-sized enterprises active in the production of agricultural products and amending Regulation (EC) No. 70/2001 (Official Journal of the EU L 358 of 16.12.2006).
- 2) Community Guidelines for State aid in the agriculture and forestry sector 2007 to 2013 (Official Journal of the EU C 319 of 27.12.2006).

The abovementioned guidelines constituted the basis for developing new national programmes supporting agriculture, pursuant to which state aid included actions with regard to¹⁹:

- aid for tangible and/or intangible restructuring investments in agricultural farms,
- aid for environmental protection and animal welfare,
- compensation for handicaps in certain areas, limited however to EUR 250 per hectare of used arable lands for natural handicaps in mountain areas, and EUR 150 per hectare of used arable lands for handicaps in other areas,
- aid for adjustment to standards in the field of environmental protection, public health, animal and plant health, animal welfare and occupational safety,
- aid for the setting up of young farmers,
- aid for early retirement or for the cessation of farming activities,
- aid covering the costs of producer groups or their associations, limited to costs unrelated to start-up, such as costs of investments or promotional activities,
- aid for land reparation,
- aid to encourage the production and marketing of quality agricultural products,
- provision of technical support in the agricultural sector, the so-called “soft aid” improving the efficiency and professionalism of agriculture in the Community,
- aid for the maintenance and improvement of the genetic quality of Community livestock,
- aids to compensate for damage to agricultural production or the means of agricultural production, as well as for combating animal and plant diseases,

¹⁹ Official Journal of the European Commission C 319/1 of 27.12.2006.

- aid towards payment of insurance premia,
- aid for closing production, processing and marketing capacity, as well as for rescue and restructuring firms in difficulty,
- other types of aid, namely aids for employment, for research and development, for advertising of agricultural products, aid in the form of subsidised short-term credits, as well as aids linked to reduced tax rates.

Adoption of new guidelines resulted in introduction of changes in the national regulations governing the state aid in agricultural sector. The Agency's tasks have been specified anew. Implementation of the forms of aid, which are not used and had not been declared for notification by the European Commission, in relation to the adopted regulations has ceased, including:

- financial aid for projects guaranteeing the use of the available production base of agricultural farms and special sections of agricultural production in order to start up or increase production,
- aid for implementation of projects creating new jobs for the rural inhabitants in areas of rural and urban-rural areas, as well as towns populated by fewer than 20 thousand inhabitants,
- financial aid for the development of technical and production infrastructure in rural areas (among others, for construction of water supply systems, sewage system, sewage treatment plants, construction and modernisation of gmina and powiat roads, investments related to solid waste management),
- financial aid for restructuring research and development units, conducting works related to agriculture and food economy,
- implementation of projects with regard to improving or changing professional qualifications of rural inhabitants in rural and urban-rural areas, agricultural advisory services and agricultural information, as well as implementation and dissemination of accounting in agricultural farms, handled by governmental, local governmental and non-governmental organisations,
- undertaking activities for the establishment and development of mutual insurance companies in agriculture,
- undertaking activities for the development of IT infrastructure of cooperative banks,
- purchase of regional bank bonds, issued for the purpose of restructuring credit claims of cooperative banks associated therein,
- funding the expenses associated with registration of groups of fruit and vegetables producers and equipping them with technical measures,
- aid for establishing the operating fund for recognised groups of fruit and vegetable producers entered in the register,

- payment of financial compensations for non-marketing of fruit and vegetables,
- subsidies to the area of energy plant crops.

In the period of 2007-2014, under national instruments supporting agriculture and rural areas, agricultural producers in Poland had the opportunity to benefit from the following forms of aid:

- supporting investments in agriculture and agricultural product processing, through subsidies to interest on bank credits or partial repayment of the principal sum of a bank credit,
- guarantees and sureties for repayment of investment and disaster credits, as well as sureties for repayment of credits for students living in rural areas,
- undertaking projects related to resuming production in agricultural farms and special departments of agricultural production damaged by unfavourable weather conditions, specified in the Act on agricultural crops and livestock insurance,
- actions for establishment and development of groups of agricultural manufacturers and their associations,
- financial aid for collection, transport and disposal of livestock carcasses,
- equivalents for foresting of arable land,
- aid for drawing up an application for registration of names and geographic symbols,
- *de minimis* aid.

It is worth noting that there are huge discrepancies between the scope of the Agency's support since 2007, for various forms of state aid in agriculture, and the types of aid stipulated in the Regulation (EC) No. 1857/2006, which have a wider scope, but which have been omitted (e.g. preservation of traditional forms of landscape, land re-parcelling, encouragement for high-quality production). It results from the fact that each state, under the community guidelines, may form specific state aid instruments, bearing in mind the budget capacity, as well as adapt them to the needs resulting from the specific nature of agriculture.

For many years, preferential credits have been thought to be the most important of all available aid instruments for agriculture using national funds. Preferential credits are a group of credits, for which, pursuant to the adopted legal and administrative regulations, conditions more favourable than the generally binding ones were established for farmers. The benefits are in the form of lower interest rates, priority in granting credits, postponed repayment term of capital instalments and even interests, cancellation of parts or even the entire debt²⁰.

²⁰ J. Kulawik, (1998), *Kredyty preferencyjne dla rolników* (Preferential loans for farmers), Encyklopedia Agrobiznesu (Encyclopedia of Agribusiness), Innovation Foundation, Warsaw.

They are usually provided in the form of subsidies to interest rates of credits granted from the banks' own funds. Since the beginning of the preferential credits' history, i.e. from 1994 to the end of 2014, banks granted in total 5,854,904 credits for the amount of PLN 115,310.31 million, whereas subsidies to the interest rates amounted to PLN 17,280.5 million, which constituted 87.28% of all subsidies within the national instruments (Tab. 1.2.1 and Tab. 1.2.2). It should be emphasised that credit lines differ in terms of the material scope, the degree of subsidising, as well as the maximum repayment period and grace period for the credit repayment. Preferential credits include investment credits, working capital credits and disaster credits. Granting preferential credits for investments, by reducing the financial barrier, allowed agricultural farms and agricultural and food processing plants to undertake capital-absorbing investments, which in turn accelerated the changes in the food sector, improved its efficiency and competitiveness on foreign markets, as well as fostered the increase in income of agricultural farms. Preferential working capital credits, granted until 2004, became one of the main external sources of operational funding of agricultural farms and purchase of agricultural products²¹. A significant meaning among preferential credits should be attributed to credits used for resuming production in agricultural farms and special departments of agricultural production located in areas affected by disasters. Thanks to these credits, the owners of agricultural farms can recover from damages caused by adverse weather conditions and maintain financial liquidity²². This in turn results in financial security, which, on the one hand, relates to the conditions of conducting current activities continuously and effectively, and, on the other hand, is focused on the development of business operations, resulting in better market position and value of the company²³. Sureties and guarantees were another form of aid, used as a supplementation of preferential credits. While executing, in the period of 1994-2014, tasks related to granting sureties and guarantees for repayment of investments credits, the Agency secured 202 credit agreements for a total amount of PLN 55.9 million. Since 2001, it granted aid for students living in rural areas, in the form of sureties for repayment of bank credits. Until the end of 2014, sureties were granted to 5,431

²¹ ARMA (<http://www.arimr.gov.pl/>)

²² A. Kurdyś-Kujawska, (2012), *Wysokość kredytów klęskowych uzyskanych przez właścicieli gospodarstw rolnych w Polsce w latach 2006-2011* (The amount of disaster loans granted to owners of agricultural holdings in Poland in 2006-2011), *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu* (Scientific Annals of the Polish Association of Agricultural and Agribusiness Economists), Volume XIV, Journal 3/2012, p. 223-226.

²³ N. Duraj, (2014), *Dwuczynnikowa ocena bezpieczeństwa finansowego przedsiębiorstwa* (Two-factor assessment of financial security of a company), *Przedsiębiorczość i Zarządzanie* (Entrepreneurship and Management), Volume XV, Journal 5/2014, p. 25-38.

people. The total amount of sureties was PLN 76.4 million. Since 2005, sureties and guarantees have been granted to farmers, whose farms were affected by natural disasters. Until the end of 2014, a total of 7 sureties were granted, for the amount of PLN 333 thousand. The framework of the state aid also included actions supporting development of entrepreneurship in rural areas. In the period from 1995 to 2003, the funds allocated on implementation of the programme supporting entrepreneurship in rural areas amounted to PLN 258,760.7 thousand and allowed for creating 22,162 new jobs, while financial support for the programme improving and changing professional qualifications of rural inhabitants, in the period of 1994-2003, amounted to PLN 131,627 thousand. This form of aid was used by 566,695 farmers. Since the introduction national agriculture support programmes, the Agency financed equivalents for land afforestation, granted aid to the emerging groups of agricultural producers and to entities dealing with disposal of livestock carcasses.

Table 1.2.1. Implementation of national support programmes for agriculture and rural areas in the period of 1994-2006

Specification	Number of concluded contracts	Subsidy amount (in PLN thousand)	Effect
Preferential credits for agriculture	5,538,679	11,993,000	The Agency granted subsidies to the interest rates of 355,506 investment credits, for the amount of PLN 7.38 billion, 4,143,369 working capital credits, for the amount of PLN 3,675.3 million, as well as 1,039,804 disaster credits, for the amount of PLN 931.7 million
Credit sureties and guarantees	3,384	90,126	167 guarantees and sureties for repayment of investments credits were granted, for the amount of PLN 44.3 million; 3 215 student sureties, for the amount of PLN 45.6 million; 4 guarantees and sureties for repayment of disaster credits, for the amount of PLN 226,000
Financial aid for groups of agricultural producers	x	12,573.85	Aid was granted to 60 groups of agricultural producers (13 groups in 2002; 31 groups in 2003; 58 groups in 2004; 49 groups in 2005; 44 groups in 2006)
Funding equivalents for foresting of arable land	8,000	38,400	Forested land 19 500 ha
Disposal	x	76,900	Disposal of 291 000 pcs. of ruminants and 494,000 pcs. of pigs
Support for entrepreneurship in rural areas	6,542	258,760.7	Number of newly created jobs 22,162
Financial aid for the producers of fodder	x	850.5	Subsidies to up to 6,541,305 tons of fodder
Subsidies to extra class milk	193,377	692,080	Subsidy to up to 10,677 million l of milk
Implementation of the programme for improving and changing professional qualifications	8,365	131,627	Number of trained farmers 566,695
Aid for implementation and dissemination of agricultural accounting	232	57,476	Number of farms covered by the investment projects 100 000
Total	5,758,579	13,351,794.05	x

Source: Own study on the basis of Activity Reports of the Agency for Restructuring and Modernisation of Agriculture for 2003-2006.

Table 1.2.2. Implementation of national support programmes for agriculture and rural areas in the years 2007-2014

Specification	Number of concluded contracts	Subsidy amount (in PLN thousand)	Effect
Preferential credits for agriculture	316,221	5,287,500	The Agency granted subsidies to the interest rates of 104,965 investment credits, for the amount of PLN 4.450 billion, as well as 211,256 disaster credits, for the amount of PLN 837.5 million.
Credit sureties and guarantees	3,384	42,507	35 guarantees and sureties for repayment of investments credits were granted, for the amount of PLN 11.6 million; 2,216 student sureties, for the amount of 30.8 million; 3 guarantees and sureties for repayment of disaster credits, for the amount of PLN 107 thousand.
Financial aid for groups of agricultural producers	x	2,624.7	Aid was granted to 51 groups of agricultural producers (28 groups in 2007; 20 groups in 2008; 3 groups in 2009)
Funding equivalents for foresting of arable land	8,000	340,610	Continuation of payments for farmers, who afforested their land in 2002-2003
Disposal	x	481,000	Disposal of 1,098,000 pcs. of ruminants and 5,614,000 pcs. of pigs
Aid for drawing up an application for registration of names and geographic symbols	1	13.5	x
<i>De minimis</i> aid	208,640	292,065.6	In 2010, aid to the crop area of hop was granted to 1,082 farmers, for the amount of PLN 22.23 million. In 2012, aid for removal of consequences of winterkill losses in the winter period of 2011/2012 was granted to 135,000 farmers, for the amount of PLN 122.3 million. In 2013: (1) aid for removal of consequences of winterkill losses in the winter period of 2011/2012 was granted to 34 farmers, for the amount of PLN 65.1 thousand; (2) aid for agricultural producers, whose agricultural farms or special departments of agricultural production suffered damages caused by flood, hurricane, hail or tempestuous rain was granted to 11,000 farmers, for the amount of PLN 15 million. In 2014: (1) aid for agricultural producers, whose agricultural farms or special departments of agricultural production suffered damages caused by flood, hurricane, hail or tempestuous rain in 2013 covered 19 financial dispositions, for the amount of PLN 139.2 thousand; (2) aid for farmers, who in 2014 produced black currant fruit or cherry fruit – 19 101 completed financial dispositions, for the amount of PLN 21.3 million; (3) aid for farmers, who in 2014 produced onions, cabbages or apples – measures were paid out to 41,963 farmers, for the amount of PLN 109.9 million; (4) aid for farmers, who in 2014 sustained crop damages caused by wild boars – aid was paid out to 440 beneficiaries, for the total amount of PLN 1.03 million; (5) aid for removal of the consequences of winterkill losses in the winter period of 2011/2012, in the amount of PLN 800 was granted to 1 farmer.
Total	536,245	6,446,320.8	x

Source: Own study on the basis of *Activity Reports of the Agency for Restructuring and Modernisation of Agriculture for the years 2007-2014*.

Subsequent changes in the community guidelines, relating to public aid, required adjustment of agriculture to new circumstances and challenges within the scope of food safety, environment, climate changes and maintenance of the dynamism of rural economy. Thanks to these changes, it will be possible to enhance the competitive strength of agriculture, ensure sustainable natural resource management and initiate actions in the field of climate, as well as achieve sustainable territorial development of rural economies and communities, including creation and maintenance of jobs²⁴. Along with the amendments adopted since the beginning of 2015, the national regulations, on the basis of which the public aid in agriculture is granted, must be adapted to the principles of granting public aid in agriculture, specified in:

- 1) European Union guidelines on State aid in the agricultural and forestry sectors and in rural areas for 2014-2020 (2014/C 204/01) (Official Journal of the EU of 1.07.2014, C 204),
- 2) Commission Regulation (EU) No. 702/2014 of 25 June 2014 declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union (Official Journal of the EU of 1.07.2014, L 193),
- 3) Regulation (EU) No. 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No. 1698/2005 (Official Journal of the EU of 20.12.2013, L 347),
- 4) Commission Regulation (EU) No. 651/2014 of June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Official Journal of the EU of 26.06.2014, L 187),
- 5) Commission Regulation (EU) No. 1408/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to *de minimis* aid in the agriculture sector (Official Journal of the EU of 24.12.2013, L 352).

The new guidelines of the European Union, binding for 2014-2020, included most of the previously binding state aid instruments. They abandoned implementation of aid for early retirement, in the form of subsidised short-term credits, as well as aid for tax exemption, under Directive 2003/96/EC. In addition, they introduced programmes covering: - aid for organic farming; - aid for initiation of cooperation in the agricultural sector; - aid for repair of damages

²⁴ Official Journal of the European Commission C 204/1 of 01.07.2014.

caused by protected species of animals; - aid for financial contribution for common investment funds²⁵.

1.2.1. Preferential disaster credits – state instruments supporting development of agricultural producers

Preferential disaster credits are allocated on resuming production in agricultural farms and special branches of agricultural production, which incurred damages caused by drought, hail, heavy rains, negative consequences of winter-kill losses, frost, floods, hurricane, lightning, landslide or avalanche. The farmers, who incurred losses, can use two credit lines in order to resume production: investment (nKL01) and working capital credit line (nKL02).

Investment disaster credit relates to incurring capital investment for recovery of fixed assets after disasters, by means of:

- a) restoration of utility functions of destroyed or damaged livestock buildings, storage buildings, greenhouses and other buildings and structures used for production, as well as devices and facilities used for water, energy, gas supply and disposal of sewage, social rooms, fencings, damaged tractors, machines, agricultural devices and devices for management of the production process by conducting general repairs of technical infrastructure elements directly influencing the conditions of conducting agricultural activities;
- b) restoration of productivity by purchase of certified nursery stock in order to restore an orchard or other plantations of perennial plants with the period of use > 5 years (apart from energy plants), as well as a herd of the basic livestock;
- c) purchase, in place of the destroyed ones, tractors, machines, agricultural devices, devices for management of the production process, as well as trucks, vans or specialised vehicles, only for the purposes related to production in sections of special agricultural production;
- d) financing of general expenses directly related to the investment, not exceeding 12% of the credit amount (e.g. drawing up of technical documentation, costs of construction supervision, etc.).

Working capital disaster credit is allocated on financing of current production needs related to incurring tangible expenditures necessary for restoration of productivity by purchase of tangible current assets for rural production, including certified seed and nursery stock, mineral fertilisers, plant protection products, fuels for agricultural purposes, livestock, fertilised and unfertilised queen bees, feed and feed concentrates, as well as fuel materials for heating greenhouses and tunnels.

²⁵ Official Journal of the European Commission C 204/1 of 01.07.2014.

Preferential disaster credits have a specific procedure for granting aid. Banks, which signed a cooperation agreement with the Agency, may grant credits only with the approval of the Minister of Agriculture and Rural Development (until 30 September 2013, approvals were granted at the request of a competent voivode applying for their granting). The borrower, apart from a set of documents required by the bank and the investment plan (applies only to nKL01), is obliged to attach to the credit application an opinion of the voivode, competent for the place, where the damages were incurred, containing identification of the scope and amount of damage, estimated by an appropriate committee. Currently, the losses are estimated within 30 days from reporting consequences of a disaster, rather than from the date of the disaster, as was previously the case (the provision was binding until 24 July 2006).

Application for a disaster credit can be submitted by farmers, whose amount of damage incurred in the fixed asset other than agricultural crops and farm animals is higher than PLN 1,050, or if it exceeds 30% of the average annual agricultural production in the case of a farm or a special section from three years before the year, in which the damages occurred, or the average from three years in a five-year period preceding the year, in which the damages occurred, excluding the year with the highest and the lowest production volume²⁶. In the case, when the amount of damage incurred is lower or equal to 30% of the aforementioned annual agricultural production, the subsidies to credit interest rates are used as *de minimis* aid for agriculture²⁷.

Preferential disaster credits are granted until: a) 31st of December of a given year – in the case of approval of the Ministry of Agriculture and Rural Development during the period from 1st of January of a given year to 31st of May of a given year; b) 30th of June of the next year – in the case of approval of the Ministry of Agriculture and Rural Development during the period from 1st of June of a given year to 31st of December of a given year.

Conditions, on which the disaster credits are granted, are diverse and depend on the credit line. The credits in the nKL02 line, in the initial period of their functioning, were granted for a period not longer than 24 months, starting from the date, on which the damages were incurred. Since 2007, the repayment

²⁶ Commission Regulation (EU) No. 702/2014 of 25 June 2014 declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union (Official Journal of the EU L 193, of 1.07.2014, p. 1).

²⁷ Commission Regulation (EU) No. 1408/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the functioning of the European Union to *de minimis* aid in the agriculture sector (Official Journal of the EU L of 24.12.2013, p. 9) and regulations on the procedure in cases concerning public aid.

period has been extended to 4 years, and the possibility has been introduced of granting a grace period in repayment not exceeding 4 years. The repayment period of nKL01 line credits is much longer and can amount even to 8 years (except for credits intended for the purchase of certified nursery stock, which have to be repaid within 5 years), and the grace period amounts to 2 years. The credit amount cannot exceed the costs (expenditures) necessary for resuming production after the disaster, as well as the amounts estimated in agricultural cultivations or farm animals, i.e. cannot exceed the amount of loss of income (nKL02) or the amount for replacement of the destroyed fixed assets (nKL01), however, no more than PLN 4 million for agricultural farms and PLN 8 million for special sections of agricultural production. The borrowers are not obliged to pay own contribution, but they are obliged to, within 3 months from the day of collecting the funds, document the credit used in full (nKL01) or only part of the expenses, i.e. 50% since 2007 (previously 70%) (nKL02).

It should be also emphasised that, in the case of disaster credits, as in the case of other types of preferential credits, an aid intensity ratio was provided, i.e. the share of the aid amount in the credit amount. In the case of credits intended for resuming production on farms and in special branches of agricultural production, which incurred damages caused by natural disasters, the aid cannot exceed 80% of the value of replacement of fixed asset (nKL01) or the amount of loss of income (nKL02). An exception here includes farms located in mountain areas and other less-favoured areas (LFAs), as well as NATURA 2000 areas, in the case of which the aid was increased to 90%²⁸.

The amount of interest of disaster credits varies and depends not only on the margin (max. 2.5 pp), commissions and bank fees, but also on the rediscount rate for the bills of exchange received annually from banks for rediscount by the National Bank of Poland. In the period of 2003-2014, the interest rates of disaster credits could not amount to more than 1.5 of the rediscount rate, except for the years 2010-2011, when the ratio constituting the basis for calculating the amount of interest was increased to 1.6. The minimum interest rate for the borrowers amounted to between 1.2% and 3.5%, and depended on the bank granting the credit, the years, when the credit was granted, and – since 2010 – also on whether the borrower had a proper insurance. The remaining part of the interest rate was paid by the Agency (Tab. 1.2.1.1).

²⁸ ARMA (<http://www.arimr.gov.pl/>).

Table 1.2.1.1. The interest rate of disaster credits paid by borrowers
in the period of 2003-2014 (in %)

Year	Working capital credit	Investment credit	Rediscount rate
2003	1.2	1.2-1.44*	1,5
2004	1.2-1.4*	1.2-1.75*	1,5
2005	1.2	1.2	1,5
2006	1.2	1.2	1,5
2007	1.2	1.3125-1.9688*	1,5
2008	3.5	3.5	1,5
2009	2	2	1,5
2010	3.05-0.1		1.6
2011	3.85-0.1		1.6
2012	4.125-1.5		1.5
2013	2.8125-1.5		1.5
2014	2.4375-1.5		1.5

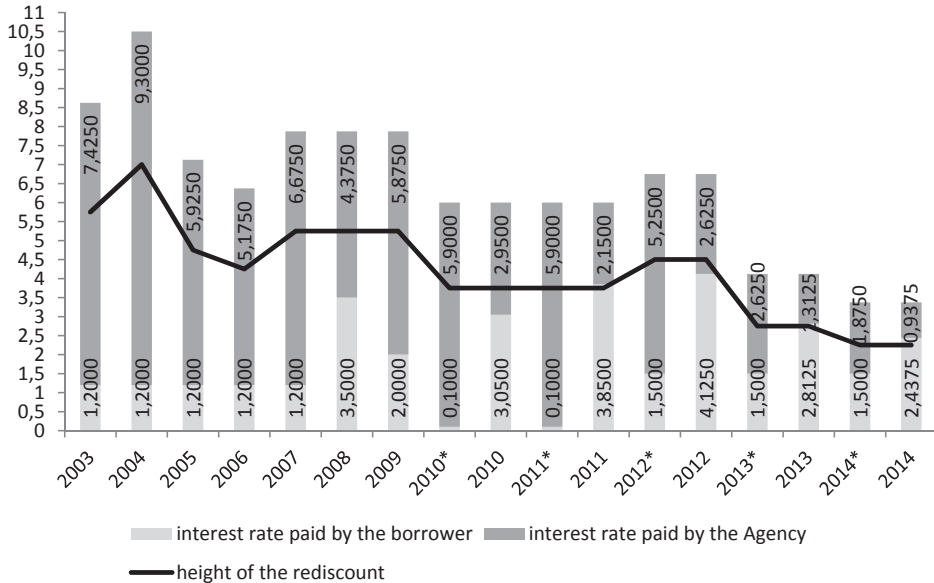
* interest rate of credits granted from the previous year

Source: Prepared by A. Kudyś-Kujawska on the basis of data from ARMA.

Until 2010, the Agency's subsidies to disaster credit interest rates amounted to 0.75 of the credit interest. In 2010, the method of calculating the amount of contributions to interest rates of disaster credits was changed. This amount was made dependent on whether the borrowing farmer had insurance covering at least 50% of the agricultural crop area, excluding meadows and pastures, or at least 50% of the number of farm animals in the agricultural holding or special section of agricultural production, and at least one of the risks, i.e. drought, hail, heavy rain, negative consequences of winterkill losses, spring ground frosts, flood, hurricane, lightning, landslide or avalanche.

In the case of lack of an insurance contract, the interest rate paid by the borrower constitutes the difference between the amount of the interest rate due to the bank and half the amount of the Agency's subsidies to interest rates of credits granted to the insured farmers. In 2010-2014, the amount of the Agency's subsidies to interest rates for the borrowing farmers without an insurance contract ranged from 2.95% to 0.93%, while farmers having a proper insurance could obtain subsidies constituting from 5.9% up to 1.87% (Fig. 1.2.1.1).

Figure 1.2.1.1. The interest rate of disaster credits paid by the borrower and ARMA in the period of 2003-2014 (in %)



* interest rate paid in the case of the farmer having a proper insurance

Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

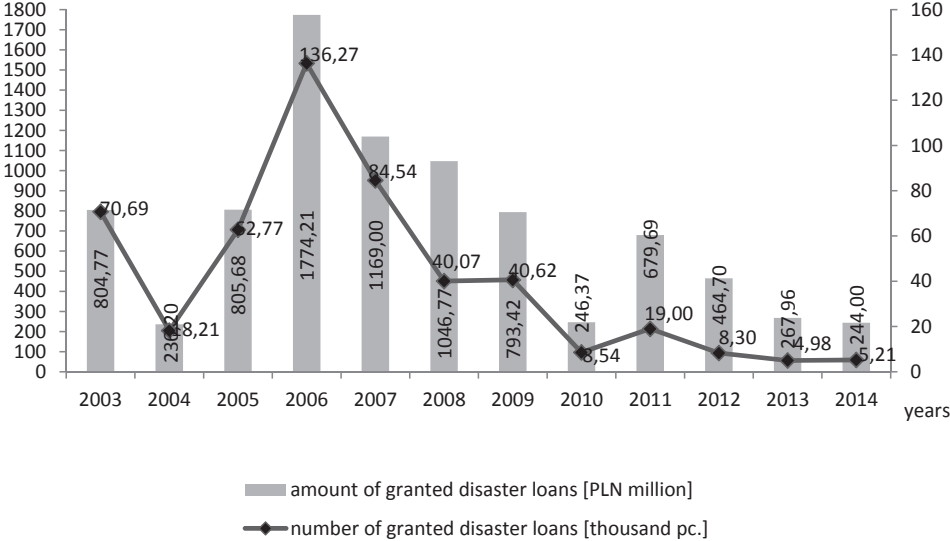
Financial and material effects of preferential disaster credits

In the period of 2003-2014, banks granted 499.19 thousand disaster credits, for the total amount of PLN 8.53 billion (Fig. 1.2.1.2). The amount of loss sustained as a result of natural disasters, estimated by the voivodeship commissions and accepted by the Minister of Agriculture and Rural Development, amounted to more than PLN 22.51 billion in total. The value of the credits granted for resuming production on average covered from 90.63% to 29.22% of the incurred losses in crops.

The highest number of disaster credits (27.30% of all disaster credits), with the value of over PLN 1.7 billion, was paid out in 2006. In total, losses in agricultural crops in that year were estimated at the amount of over PLN 6.3 billion, and were caused mainly by long-term drought in the majority of voivodeships. The highest damages covered meadows and pastures (mainly of the 2nd and 3rd windrow), within 30-100%. In the case of other crops, the losses covered: 20-60% summer cereals, 15-50% winter cereals, 5-30% rape, 10-55% potatoes and beets, as well as about 30-40% vegetables [www.mpips.gov.pl]. The lowest amount of credits for resuming production after natural disasters was granted in 2013 (1% of all credits). From among 28,361 farmers eligible for

credits for resuming production after natural disasters – only 4,980 farmers received credits (17.56%). Crop losses incurred as a result of natural disasters in this period were estimated at the amount of PLN 916.98 million, while the total value of the paid credits amounted to PLN 267 million.

Figure 1.2.1.2. The amount (PLN million) and number (thousand) of the granted preferential disaster credits in the period of 2003-2014



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

Despite the weather conditions growing increasingly more unfavourable in the last several years in Poland, the number of disaster credits granted in the examined period decreased by 92.62%. Along with the reduction in the number of credits, their value also decreased (by 69.68%). A significant decrease in the number and value of granted disaster credits has been observed since 2008. This may be due to the increased amount of the minimum interest rate paid by the farmer, changes in the ARMA’s policy regarding the use of subsidies to the interest rates of disaster credits, and conditioning of the subsidy amount on having a proper insurance contract, as well as introduction in 2010 the possibility of using EU funds under action 126 of the RDP Restoring agricultural production potential damaged by natural disasters.

The credits for resuming production after natural disasters, granted in the period of 2003-2014, were in 99.83% allocated for restoration of productivity by purchase of tangible current assets for production, while only 0.17% on recovery of fixed assets used for agricultural production. The high percentage of working capital disaster credits within the structure of disaster credits resulted mostly

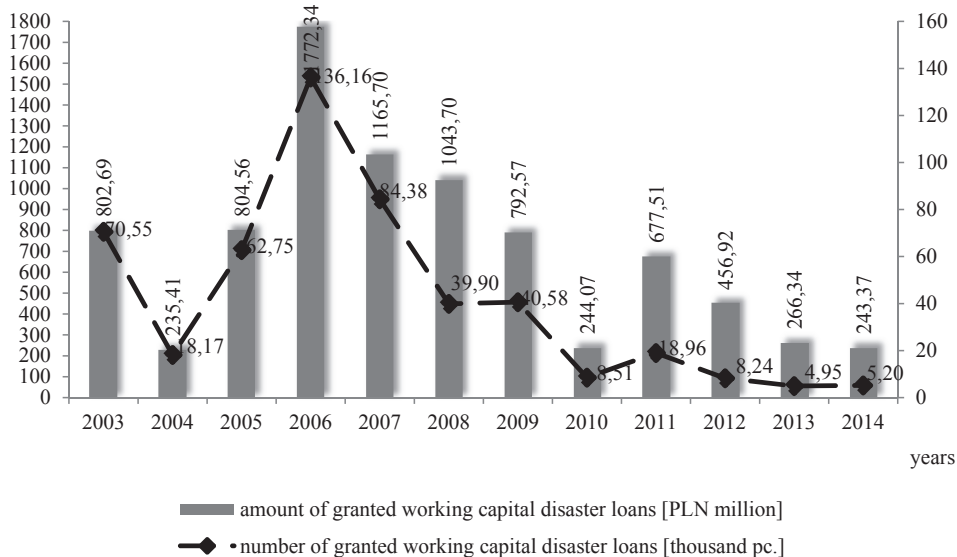
from the need to quickly restore productivity, which is related to the possibility to continue work on the farm, sometimes constituting the only source of income of the farmer and his family²⁹. In addition, a working capital credit allows for maintaining financial liquidity of the farm, which is the necessary condition for its efficient functioning, including also continuation of previously undertaken investments. It is also worth noting that a working capital disaster credit does not need to be used to restore only the production, which was destroyed during the natural disaster, as opposed to the investment disaster credit. Using the nKL02 line, the borrowing farmers can also finance other current expenses incurred in order to restore the lending capacity of relevant income from agricultural production.

In the examined period, the banks granted 498.35 thousand working capital disaster credits, for the total amount of PLN 8.5 billion (Fig. 1.2.1.3). Both the number, as well as the value of credits granted since 2007 have systematically decreased. The year 2011 was an exception, as it recorded a significant growth in the number and value of granted working capital disaster credits, as compared to the previous year. It constituted, respectively, 122.71% and 4.28%.

In the years 2003-2014, lending of investments disaster credits was significantly lower than lending of working capital disaster credits. In the studied period, the banks granted 837 disaster credits related to incurring capital investment for recovery of fixed assets, for the total amount of PLN 27.58 million (Fig. 1.2.4). The highest number of investment credits was granted in 2007-2008 (39.30% of all investments disaster credits). In this period, 5,003 farmers incurred losses in fixed assets, the restoration value of which amounted to PLN 142 million. From among all harmed farmers eligible for investment disaster credit, banks granted credits to 6.57% of farmers, which allowed for covering 4.48% of losses. The highest value of investment disaster credits was paid out in 2012, which constituted 28.20% of the total amount paid under investment disaster credits. The value of paid credits covered the losses, estimated at PLN 159 million, only in 4.89%.

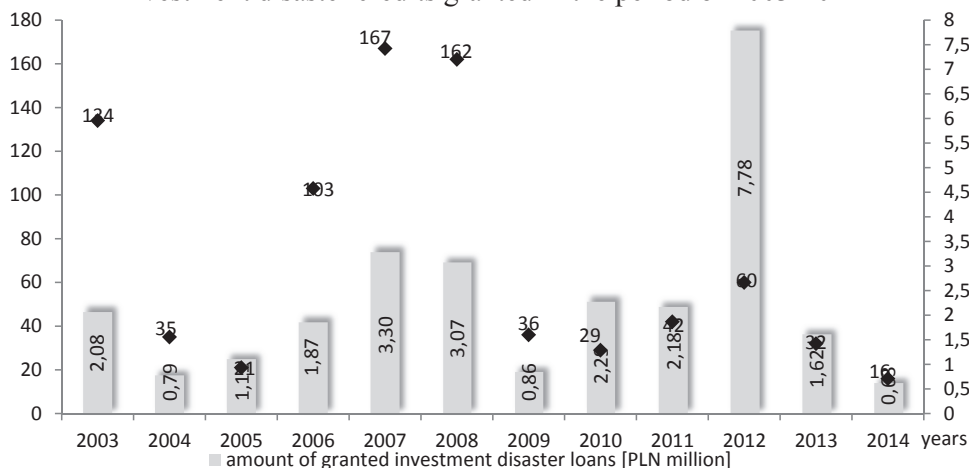
²⁹ A. Kurdyś-Kujawska, (2012), *Wysokość kredytów klęskowych uzyskanych przez właścicieli gospodarstw rolnych w Polsce w latach 2006-2011* (The amount of disaster loans granted to owners of agricultural holdings in Poland in 2006-2011), *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu* (Scientific Annals of the Polish Association of Agricultural and Agribusiness Economists), Volume XIV, Journal 3/2012, p. 223-226.

Figure 1.2.1.3. The amount (PLN million) and number (thousand) of the granted preferential working capital disaster credits in the period of 2003-2014



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

Figure 1.2.1.4. The amount (PLN million) and number (pcs.) of the preferential investment disaster credits granted in the period of 2003-2014

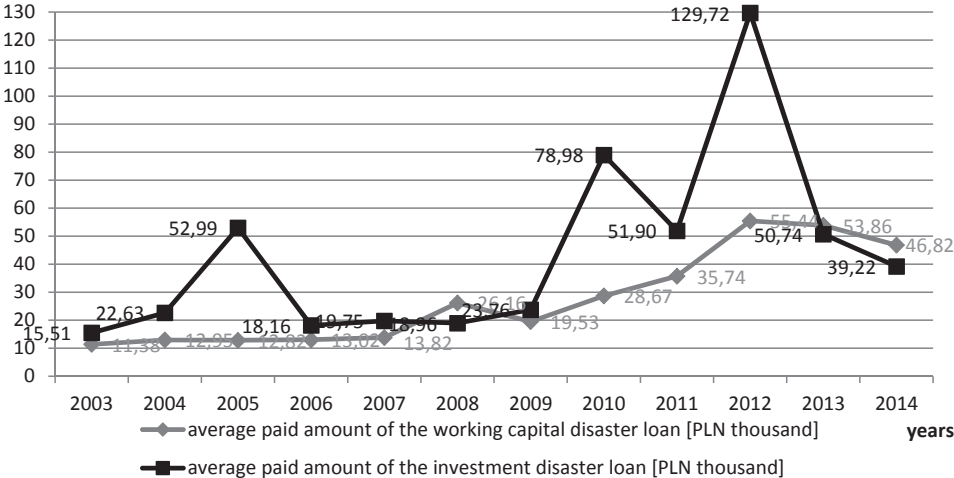


Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

The value of working capital disaster credits paid out annually on average to the harmed farmers was from PLN 11.38 thousand to PLN 46.82 thousand, while investment credits amounted to from PLN 15.51 thousand to PLN 39.22

thousand (Fig. 1.2.1.5). The higher value of the paid-out investment disaster credits results mostly from the nature of the expenditures. The expenditures on recovery of a fixed asset on a farm are much higher than expenditures on purchase of seeds, livestock, fertilisers or plant protection products. It should be also emphasised that the average credit amount for farmers, who incurred losses as a result of natural disasters, depends on the size of the incurred losses in the agricultural farm. The analysis shows that, despite the prevailing constant decreasing tendency of the number and the amount of the granted disaster credits, in 2003-2014, the average value of the credits granted for resuming production after natural disasters increased.

Figure 1.2.1.5. The average amount of a preferential working capital disaster credit and a preferential investment disaster credit paid out in 2003-2014 (in PLN thousand)



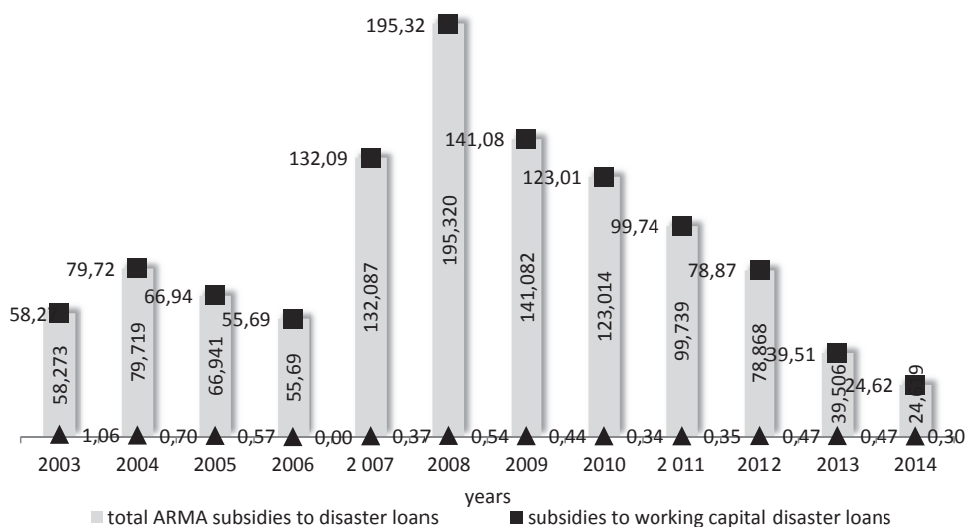
Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

State aid granted in the form of subsidies to interest rates of disaster credits

Subsidies to disaster credit interest rates are a form of aid provided for a longer period of time, i.e. throughout the whole crediting period, which in the case of disaster credits was from 4 to 8 years, depending on the credit line. This means that the annual expenses of the Agency, related to subsidies to disaster credits, cover both liabilities from the previous years, as well as new liabilities, undertaken in a given year. The amount of subsidies to interest rates of credits related to restoring production potential destroyed as a result of natural disasters in 2003-2014 amounted to over PLN 1.1 billion, including over PLN 1 billion (99.49%) of subsidies to interest rates of credits for purchase of tangible assets for production, and PLN 5.62 million of subsidies to credits for recovery of

fixed assets. Within the twelve analysed years, the subsidy amounts decreased by 58.01%. The amount of subsidies to interest rates of disaster credits in the studied period was diverse (Fig. 1.2.1.6). The conducted research proved occurrence of significant changes in the amount of subsidies, which was not uniform, especially until 2008. Since 2009, the amount of subsidies has systematically decreased. Reduction in the amount of subsidies to interest rates of disaster credits could result from changes in calculating the amount of subsidies to interest rates of disaster credits and conditioning it upon having a proper insurance. Reduction in the rediscount rate of the bills of exchange (from 5.25% to 2.25%) was also a significant factor, resulting in reduction in the credit cost. The amount of subsidies to interest rates of disaster credits could have, to a large extent, depended on the scale of funding agriculture from the national budget.

Figure 1.2.1.6. The amount of subsidies to interest rates of disaster credits in total and by credit lines in 2003-2014 (in PLN million)



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

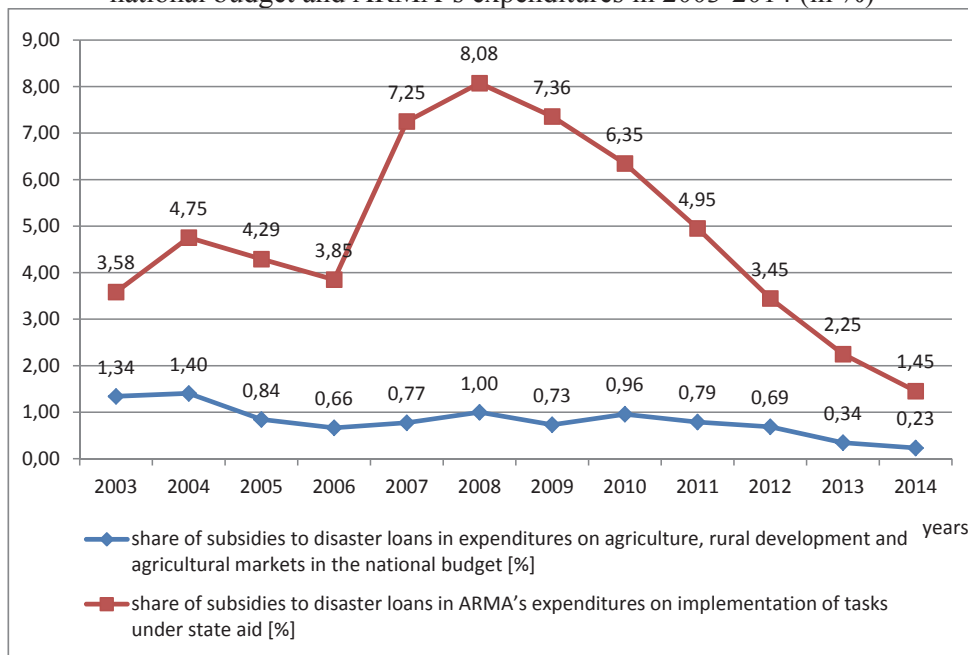
According to the research³⁰ by A. Czyżewski and A. Matuszczak, in the period of 2003-2008, the budget expenses on the agricultural sector in the sections Agriculture, rural development, agricultural markets and fishery grew both in nominal and real terms. In 2003, they amounted to PLN 4,428.9 million, and

³⁰ A. Czyżewski, A. Matuszczak, (2014), *Krajowe i unijne wydatki budżetowe na sektor rolny w Polsce* (National and EU budget expenses on the agricultural sector in Poland), *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich* (Scientific Annals of Agricultural Economics and Rural Areas Development), Volume 101, no. 2/2014, p. 37-44.

in 2008, they reached the level of PLN 19,617.0 million. Since 2009, these expenditures have been systematically decreasing, reaching the level of PLN 10,818 million in 2014. The reduction in the expenditures on agriculture, rural development and agricultural markets contributed to the reduction in the budget subsidy limit for ARMA's statutory objectives (from PLN 1,762.76 million to PLN 1,677.43 million), and, at the same time, the reduction in the Agency's expenditures (from PLN 2,425.547 million to PLN 1,715.95 million). The analysis of the interrelations between the amount of expenditures on agriculture from the national budget and the amount of ARMA's expenses demonstrated fairly strong positive dependencies. This means that, if the expenses on agriculture, rural development and agricultural markets in the state budget increase, ARMA's expenses also increase (Pearson's linear correlation factor = 0.6468). In the examined period, changes were observed in the share of subsidies to interest rates of disaster credits in the discussed expenditures from the national budget and in the ARMA's expenditures on the agri-food and rural areas sector (Fig. 1.2.1.7). In 2003, this share amounted to, respectively, 1.34% and 3.58%. In spite of the fact that the expenditures related to contributions to interest rates of credits for resuming production after natural disasters prevent the need to pay out social benefits from the budget and accelerate the process of restoration of economic independence of agricultural holdings, their share in budget expenditures decreased in the examined period, from 1.34% to 0.23%. The highest share of expenses associated with subsidies to disaster credit interest rates in the budget expenditures was recorded in 2004, when it reached the level of 1.40%. Since then, this share has regularly decreased. The year 2008 was an exception, as during that time this share amounted to 1%. As compared to total expenses of ARMA, subsidies to disaster credit interest rates decreased by 2.13 pp. The highest share of subsidies to interest rates of disaster credits in the total expenses of ARMA was recorded in 2008 (8.08%). After this period, like in the case of budget expenses, the share of subsidies in the total expenses of ARMA has systematically decreased until 2014, when it reached 1.45%.

Taking into account the available data, an attempt has been made to indicate the interrelations between the amount of subsidies to interest rates of disaster credits (x_2) and the expenses on agriculture, rural development and agricultural markets in the national budget (x_3), as well as expenses of ARMA (x_1). On the basis of the conducted analysis, it may be concluded that there are fairly strong positive dependencies between the studied characteristics (Tab. 1.2.1.4). It means that if the expenses on the agricultural sector from the national budget and the expenses of ARMA increase, then the amount of subsidies to interest rates of disaster credits, on average, also increases.

Figure 1.2.1.7. Total share of subsidies to interest rates of disaster credits in expenditures on agriculture, rural development and agricultural markets in the national budget and ARMA's expenditures in 2003-2014 (in %)



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA and A. Czyżewski, A. Matuszczak, *Krajowe i unijne wydatki budżetowe na sektor rolny w Polsce (National and EU budget expenses on the agricultural sector in Poland)*, *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich (Scientific Annals of Agricultural Economics and Rural Areas Development)*, Volume 101, Journal 2/2014, p. 37-44.

The regression coefficients in both equations, as well as the calculated Pearson's correlation coefficients are statistically significant at the level of 0.05. Figures 1.2.1.8 and 1.2.1.9 present the dispersion of empirical values of the examined characteristics, along with the linear regression function. Their equations are presented in Table 1.2.1.4.

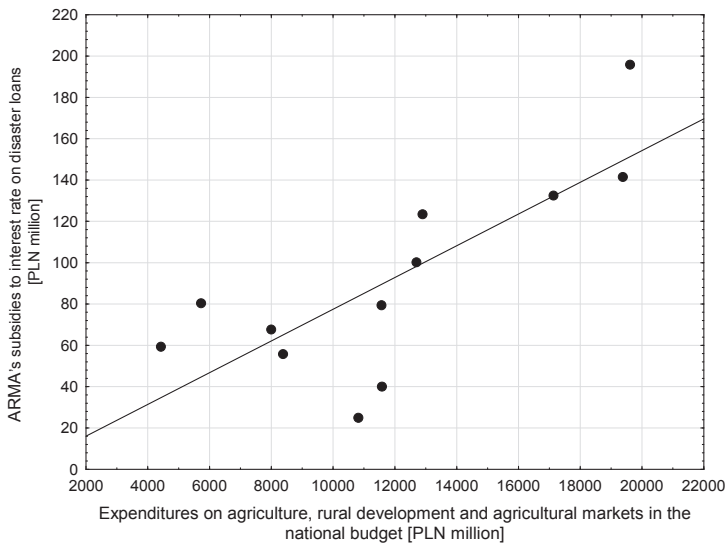
Table 1.2.1.2. The interrelations between subsidies to disaster credit interest rates and the expenses on agriculture, rural development and agricultural markets in the state budget and the expenses of ARMA

Specification	Subsidies to disaster credit interest rates and expenses on agriculture, rural development and agricultural markets	Subsidies to disaster credit interest rates and total ARMA's expenses
Regression equation	$x_2 = 0,0077x_3 + 0,6878$	$x_2 = 0,114x_1 - 121,04$
Determination coefficient R^2	59.70 %	44.84 %
Shapiro-Wilk test*	$W=0.94421$ $p=0.5544$	$W=0.94600$ $p=0.5794$
Pearson's correlation coefficient	$r=0.7726$	$r=0.6696$

* The Shapiro-Wilk test was used to examine normality of the characteristics distributions. The null hypothesis says that characteristics are normally distributed. The alternative hypothesis is contrary to the null hypothesis. All characteristics are distributed normally, which is proven by the values of test statistic W and p.

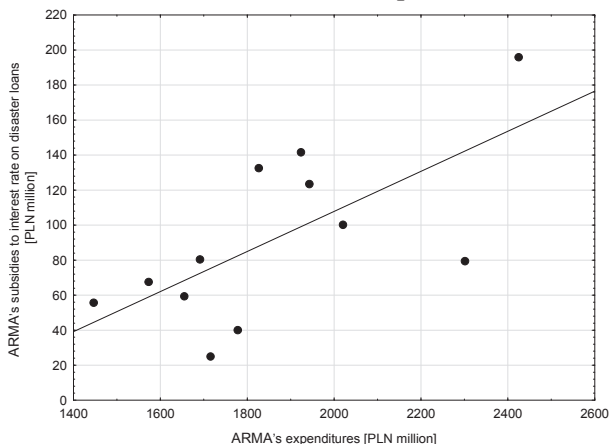
Source: Prepared by A. Kurdyś-Kujawska.

Figure 1.2.1.8. The interrelations between subsidies to disaster credit interest rates and the expenses on agriculture, rural development and agricultural markets in the state budget



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA and A. Czyżewski, A. Matuszczak, *Krajowe i unijne wydatki budżetowe na sektor rolny w Polsce (National and EU budget expenses on the agricultural sector in Poland)*, *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich (Scientific Annals of Agricultural Economics and Rural Areas Development)*, Volume 101, Journal 2/2014, p. 37-44

Figure 1.2.1.9. Interrelations between subsidies to disaster credit interest rates and total ARMA's expenses

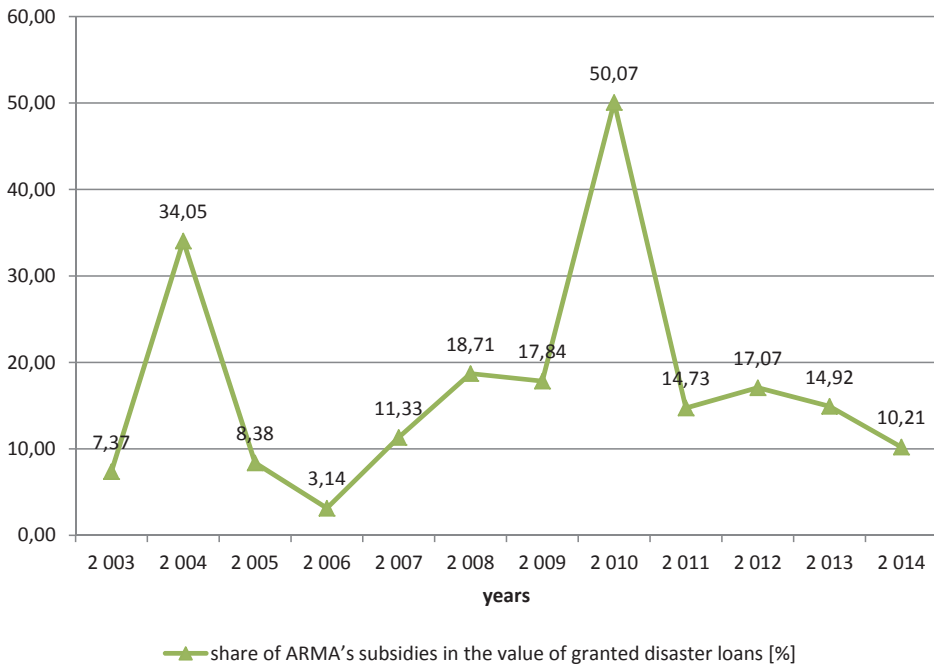


Source: Prepared by A. Kurdys-Kujawska on the basis of data from ARMA and A. Czyżewski, A. Matuszczak, *Krajowe i unijne wydatki budżetowe na sektor rolny w Polsce (National and EU budget expenses on the agricultural sector in Poland)*, *Roczniki Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich (Scientific Annals of Agricultural Economics and Rural Areas Development)*, Volume 101, Journal 2/2014, p. 37-44.

The research proved that growth in expenses on agriculture, rural development and agricultural markets in the state budget by PLN one million will result in growth in subsidies to interest rates of disaster credits by, on average, PLN 7,700. In addition, the determination coefficient at the level of 59.70% means that the changes in subsidies to interest rates of disaster credits are determined almost in 60% by changes in expenditures on agriculture, rural development and agricultural markets in the state budget. On the other hand, if the expenses of ARMA on implementation of tasks under state aid grow by PLN one million, then subsidies to disaster credit interest rates will grow by, on average, PLN 114,000. Changes in subsidies to interest rates of disaster credits are almost in 45% determined by changes in the ARMA's expenditures.

After analysing the share of the amount of the granted aid in the value of the granted disaster credits, during the period from 2003 to 2014, it may be concluded that the amount of subsidies was low. It oscillated on average at the level of 13.40%, without including the years, when this share was the highest and amounted to 50.07% in 2010, and 34.05% in 2004, and when it was the lowest, i.e. 3.14% in 2006 (Fig. 1.2.1.10).

Figure 1.2.1.10. The share of subsidies in the value of the disaster credits granted in 2003-2014 (in %)



Source: Prepared by A. Kurdyś-Kujawska on the basis of data from ARMA.

The share of subsidies in the value of credits granted in the studied period was uneven, which resulted from setting a maximum amount of subsidies to the interest rates for each credit agreement. It should be emphasised that the maximum amount of subsidies to the interest rates for a given credit agreement is the sum of nominal amounts of subsidies, the amount of which is determined on the basis of a credit repayment schedule, based on the rediscount rate of bills of exchange binding on the date of concluding the agreement. Additionally, impact on the maximum amount of the granted aid can be attributed to the maximum percentage value (80 or 90%), calculated on the basis of the restoration value (for investment credits) or the income reduction (for working capital credits), the amount of compensation paid for concluding an insurance contract, costs incurred or not incurred as a result of the damage³¹.

³¹ <http://www.arimr.gov.pl/>

Conclusions

The conducted research allowed for the following final conclusions:

- a) agricultural activity is characterised by high susceptibility to natural risk, which justifies the use of national instruments in the form of subsidies to interest rates for resuming production in agricultural farms and special departments of agricultural production, which incurred damages caused by unfavourable weather conditions,
- b) from 2003 until 2014, banks granted 499.19 thousand preferential disaster credits in total, for the total amount of PLN 8.53 billion, of which subsidies from state budget amounted to PLN 1.1 billion. The most popular were working capital disaster credits, which constituted 99.83% of the total number and 99.68% of the total amount of the granted disaster credits,
- c) the material effects of preferential disaster credits are expressed mainly in financing of current production needs related to incurring tangible expenditures necessary for restoration of productivity through the purchase of tangible current assets for rural production,
- d) despite high losses in crops and fixed assets in the studied period, a decrease in the number and value of the granted preferential disaster credits was observed, respectively by 92.62% and 69.68%,
- e) significant effect on reduction in the number of the granted disaster credits could be attributed to the increased amount of the minimum interest rate paid by the farmer, changes in the ARMA's policy regarding the use of subsidies to the interest rates of disaster credits, as well as the opportunity to use instruments financed from the EU budget, available under the RDP, ensuring restoration of agricultural production potential damaged by natural disasters,
- f) in 2003-2014, the size of subsidy streams to the interest rates of disaster credits decreased by 58.01%, which could be caused by changes in calculating the amount of these subsidies, reduction in the rediscount rate of the bills of exchange, and, in particular, reduction in the scale of funding agriculture from the national budget and, at the same time, reduction in the ARMA's expenditures,
- g) in total, the expenses of ARMA in 2003-2014 amounted to over PLN 22 billion, including subsidies to disaster credit interest rates constituting 4.93%, while the expenditures on agriculture, rural development and agricultural markets amounted to over PLN 142 billion, including subsidies to disaster credit interest rates constituting 0.77%,
- h) since 2010, a reduction in the share of subsidies has been observed, as compared to the value of disaster credits, thus limiting dependence of agriculture on the budgetary support.

1.2.2. Preferential investment credits

Preferential investment credits are a major part of the national agricultural policy affecting the level of investment in agriculture and agri-food sector. However, since the adjustment of the rules for granting credits to the EU regulations concerning the granting of public aid there has been observed a steady decline in the number and amount of credits granted annually, which is largely associated with a significant increase in the amount of capital in the Polish agriculture derived from the CAP. At the same time preferential credits, both investment and disaster ones, are the main instrument of returnable financing occurring now in the Polish agricultural sector and thus experience with the implementation of these credits can serve as a reference point for analysis of the possibility of introducing co-funded by EU financial instruments³².

Due to the restrictions on the size of this publication, the presentation of investment preferential credits is limited only to the specific types of these credits in the past ten years, i.e. in the period 2005-2014.

The purposes made using the preferential investment credits granted in the analysed period and the amounts of these credits changed over the period considered. Similarly, the average amount of credits granted for a given purpose changed. As already mentioned when discussing preferential disaster credits during the first three years after Poland's accession into the EU granting the preferential credits was based on the regulations in force before the accession, that is only on Polish regulations, especially on the regulation of 1996³³. In 2005-2007, the highest average value of credits related to assistance aimed at the extension of the range of products and adjustment to the EU sanitary and veterinary requirements (Tab. 1.2.2.1). However, these credits had a very small share in the total number of investment credits granted during that period (Tab. 1.2.2.2). The highest percentage of borrowers took advantage of preferential credits in order to improve the structure of farms and to increase the scale of production. Also part of the amount of credits allocated for these aims in the total amount of investment credits was the highest (Tab. 1.2.2.3).

³² Naming the preferential credits the key instrument of the Polish national agricultural policy is based not so much on the amounts of subsidies paid from the state budget but on the total amount of financial resources transferred to the agricultural sector including both public and private funds. The whole concept of returnable financing will be discussed in more detail in chapter 3.

³³ Regulation of the Council of Ministers of 30 January 1996 on the specific targets of ARMA activities and ways of their implementation (Dz.U. No. 16, pos. 82, with amendments).

Table 1.2.2.1. Average amount of preferential investment credits granted in the period 2005-2007 by the purpose of credit* (in PLN thousand)

Purpose	2005	2006	2007
Extension of the production range	184.8	249.9	243.3
Increasing the scale of production	117.5	160.4	208.0
Adjusting to the EU sanitary and veterinary requirements	187.7	222.1	261.1
Reducing the costs of production	106.5	112.2	122.1
Improving environmental protection in line with EU standards	79.5	154.6	170.7
Increasing the use of production capacity	92.9	116.8	148.7
Introducing new technology	161.4	240.2	260.1
Improving the quality of production	147.2	140.1	155.1
Improving waste management	106.3	126.4	54.5
Improving existing production technology	94.8	97.4	101.6
Improving the farm structure	63.5	82.3	105.1
Creating agri-tourist lodgings	68.1	79.3	102.2
Removing the effects of drought, hail, excessive rain, frost, flood, hurricane, fire, rodents or landslides	53.0	16.9	0.0

*In this and in the following two tables, when the credits in 2007 are mentioned the data presents only credits granted under the rules valid until the end of April 2007.

Source: Own elaboration based on ARMA's data.

Table 1.2.2.2. Share of credits granted for a given purpose in the total number of investment preferential investment credits granted in 2005-2007 (in PLN thousand)

Purpose	2005	2006	2007
Extension of the production range	1.7	1.6	1.4
Increasing the scale of production	29.8	24.2	19.5
Adjusting to the EU sanitary and veterinary requirements	3.7	3.6	3.8
Reducing the costs of production	5.0	5.1	5.7
Improving environmental protection in line with EU standards	0.2	0.2	0.3
Increasing the use of production capacity	3.9	3.4	3.6
Introducing new technology	4.2	3.7	5.4
Improving the quality of production	2.4	2.3	2.7
Improving waste management	0.0	0.0	0.0
Improving existing production technology	14.6	22	31
Improving the farm structure	34.1	33.2	26.4
Creating agri-tourist lodgings	0.2	0.2	0.1
Removing the effects of drought, hail, excessive rain, frost, flood, hurricane, fire, rodents or landslides	0.1	0.4	0.0

Source: Own elaboration based on ARMA's data.

Table 1.2.2.3. Share of credits granted for a given purpose in the total amount of preferential investment credits granted in 2005-2007 (in PLN thousand)

Purpose	2005	2006	2007
Extension of the production range	3.2	3.4	2.4
Increasing the scale of production	34.9	31.8	28
Adjusting to the EU sanitary and veterinary requirements	6.9	6.6	6.9
Reducing the costs of production	5.3	4.7	4.9
Improving environmental protection in line with EU standards	0.2	0.2	0.3
Increasing the use of production capacity	3.6	3.3	3.7
Introducing new technology	6.7	7.3	9.7
Improving the quality of production	3.5	2.6	2.9
Improving waste management	0.1	0.0	0.0
Improving existing production technology	13.8	17.6	21.9
Improving the farm structure	21.6	22.3	19.2
Creating agri-tourist lodgings	0.1	0.1	0.1
Removing the effects of drought, hail, excessive rain, frost, flood, hurricane, fire, rodents or landslides	0.1	0.1	0.0

Source: Own elaboration based on ARMA's data.

In the case of investment credits granted in full compliance with the state aid rules in force in the EU in accordance with arrangements laid down in the national regulation of 2007³⁴ an average amount of credit granted was much higher than in previous years (Tab. 1.2.2.4). The purposes for which the credits were granted changed significantly. In the analyzed period, the highest average amount of credits was obtained by beneficiaries planning to allocate funds to increase product range and its adjustment to market requirements as well as to improve animal welfare conditions.

However, when it comes to the popularity of credits, still the most common purpose of applying for a credit was the improvement of the agrarian structure (Tab. 1.2.2.5). In 2009, more than 62% of lending was granted for improvement of the agrarian structure. The second most common purpose was an improvement in the efficiency of production involving a reduction in production costs. Similarly shaped was the structure for the share of credits for specific pur-

³⁴ As for the regulation of the Council of Ministers of 26 April 2007 on a detailed scope and directions of the Agency for Restructuring and Modernisation of Agriculture and ways of their implementation (Dz.U. 2008 nr 107, poz. 680). Another significant change in functioning of preferential credits was introduced in 2009 – the regulation of the Council of Ministers of 22 January 2009 on the implementation of certain tasks of the Agency for Restructuring and Modernisation of Agriculture (Dz.U. nr 22, poz. 121), and then in 2015 – the regulation of the Council of Ministers of 27 January 2015 on the detailed scope and ways for the implementation of certain tasks of the Agency for Restructuring and Modernisation of Agriculture (Dz.U. nr 1, poz. 187).

poses in the total amount of investment preferential credits granted (Tab. 1.2.2.6).

It is also worth considering the structure of beneficiaries by type of agricultural activity conducted. In 2005, the largest group of borrowers were owners of farms involved in the cultivation of cereals (Tab. 1.2.2.7)³⁵. The second largest group were farmers engaged in cattle breeding. In all groups of borrowers, the average borrower's contribution reached approx. 25% and the average amount credit was in the range PLN 84,000-143,000.

The following year, the largest group of borrowers was the group of farmers specializing in cereal crops (Tab. 1.2.2.8). In the second group there were farmers conducting agricultural activities classified as "other". The average amount of credits and the value of projects undertaken, and the average own contribution were similar to those of the previous year.

In 2007, while in force still were the same rules for granting of preferential credits as in the previous years, as in 2006 the largest groups of borrowers were farmers specializing in cereal crops and other activities (Tab. 1.2.2.9). The average amount of credits grew again and the share of own contribution rose by approximately 5 pp.

After the introduction of new rules for granting preferential credits, the number of investment credits fell sharply. In the first four months of 2007, during which the old rules were still in force there were on average over 5,000 credits granted monthly, while during the remaining eight months the average number of credits granted each month did not exceed 800.

³⁵ In Table 1.2.2.7 and in the following tables the position "other" refers to these activities that were less popular among the borrowers and the position "remaining activities" refers to those activities that were named as such within by the Agency's ranking.

Table 1.2.2.4. Average amount of preferential investment credits granted in the years 2007-2014 (in PLN thousand)

Purpose	2007	2008	2009	2010	2011	2012	2013	2014
Increasing the supply of goods and its better adjustment to market requirements	314.5	440.5	501.4	678.2	632.4	761.0	812.0	895.9
Improving conditions within the requirements for animal welfare	212.0	271.1	290.9	322.4	400.2	458.2	542.9	558.0
Improving production efficiency in particular by reducing the production costs	127.5	144.5	139.6	153.2	177.1	212.1	217.5	191.8
Maintaining or improving the conditions related to environmental protection	185.2	151.6	104.0	113.2	181.0	241.7	147.1	233.4
Improving the quality and promotion of agricultural products	161.6	190.6	213.5	237.2	271.3	258.6	284.0	363.4
Improving the agrarian structure	114.8	129.7	139.9	156.9	178.0	178.7	164.4	191.0
Improving working conditions and better use of labour resources	103.3	118.4	135.7	141.4	143.2	183.0	186.4	187.5
Creating a resource base for energy crops	113.6	99.0	-	36.8	50.0	2,097.4	260.0	-
Strengthening the position of agricultural producers in the market of agricultural products	-	-	-	-	478.5	-	-	-
Improving the competitiveness of agricultural producers by including them in the process of privatization sole shareholder companies of the Treasury	-	-	-	-	106.2	-	-	-

Source: Own elaboration based on ARMA's data.

Table 1.2.2.5. Share of credits granted for a given purpose in the total number of preferential investment credits granted in the years 2007-2014 (in PLN thousand)

Purpose	2007	2008	2009	2010	2011	2012	2013	2014
Increasing the supply of goods and its better adjustment to market requirements	8.04	5.60	5.85	6.18	5.60	7.04	6.68	9.85
Improving conditions within the requirements for animal welfare	5.70	5.80	4.08	4.40	4.11	4.20	4.20	6.13
Improving production efficiency in particular by reducing the production costs	35.90	36.80	19.99	22.46	22.66	22.54	18.32	34.55
Maintaining or improving the conditions related to environmental protection	0.80	0.50	0.50	0.36	0.45	0.38	0.36	0.68
Improving the quality and promotion of agricultural products	2.50	2.70	1.76	1.44	1.82	1.76	1.47	1.95
Improving the agrarian structure	40.70	42.10	62.52	58.02	55.83	53.72	60.66	30.20
Improving working conditions and better use of labour resources	6.40	6.50	5.31	7.13	9.30	10.35	8.29	16.64
Creating a resource base for energy crops	0.00	0.00	0.00	0.01	0.01	0.01	0.02	
Strengthening the position of agricultural producers in the market of agricultural products					0.18			
Improving the competitiveness of agricultural producers by including them in the process of privatization sole shareholder companies of the Treasury					0.04			

Source: Own elaboration based on ARMA's data.

Table 1.2.2.6. Share of credits granted for the purpose of investment in the total amount of preferential credits granted in the years 2007-2014 (in PLN thousand)

Purpose	2007	2008	2009	2010	2011	2012	2013	2014
Increasing the supply of goods and its better adjustment to market requirements	17.81	15.30	17.46	21.44	16.74	22.21	22.92	30.82
Improving conditions within the requirements for animal welfare	8.60	9.70	7.05	7.26	7.78	7.98	9.63	11.95
Improving production efficiency in particular by reducing the production costs	32.20	32.80	16.60	17.60	18.99	19.82	16.82	23.15
Maintaining or improving the conditions related to environmental protection	1.00	0.50	0.31	0.21	0.38	0.38	0.22	0.56
Improving the quality and promotion of agricultural products	2.80	3.20	2.23	1.75	2.34	1.89	1.77	2.48
Improving the agrarian structure	32.90	33.70	52.06	46.58	47.03	39.81	42.10	20.15
Improving working conditions and better use of labour resources	4.60	4.80	4.29	5.16	6.30	7.85	6.53	10.90
Creating a resource base for energy crops					0.00	0.07	0.02	
Strengthening the position of agricultural producers in the market of agricultural products					0.41			
Improving the competitiveness of agricultural producers by including them in the process of privatization sole shareholder companies of the Treasury					0.02			

Source: Own elaboration based on ARMA's data.

Table 1.2.2.7. Preferential investment credits granted in 2005 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Amount of credit		Share of own input
							Total	Average	
Cereals production	6,369	719,947.3	182,791.9	536,844.3	25.4	5,957.83	0.9	84.3	25.4
Beef production	4,739	635,827.4	150,390.2	485,203.8	22.9	5,337.58	1.1	102.4	23.7
Pig production	1,775	214,779.3	52,763.3	162,015.9	7.7	1,534.29	0.9	91.3	24.6
Remaining activities	4,456	534,470.6	141,872.0	392,652.5	18.6	4,310.28	1.0	88.1	26.5
Other	3,747	763,465.3	225,097.1	53,871.2	25.5	4,243.72	1.1	143.8	29.5

Source: Own elaboration based on ARMA's data.

Table 1.2.2.8. Preferential investment credits granted in 2006 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Amount of credit	Share of own input
Cereals production	6,702	993,954.0	239,260.2	753,799.2	25.9	6,407.3	112.5	24.1
Beef production	4,885	739,236.1	174,798.9	564,508.1	19.4	4,597.4	115.6	23.6
Pig production	2,282	350,569.5	83,827.1	266,692.3	9.2	1,957.0	116.9	23.9
Remaining activities	5,366	760,248.4	206,370.3	553,591.2	19.0	4,105.6	103.2	27.1
Other	4,563	1,101,056.0	328,764.8	771,855.3	26.4	74,117.4	169.2	29.9

Source: Own elaboration based on ARMA's data.

Table 1.2.2.9. Preferential investment credits granted in 2007 based on regulations applicable until 30 April 2007 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Amount of credit	Share of own input
Cereals production	4 121	725 791,7	180 312,1	542 330,9	23,5	14 228,5	131,6	33,2
Beef production	3 641	635 332,0	151 770,7	483 484,7	20,9	11 171,6	132,8	31,4
Pig production	1 380	256 534,0	599 32,93	196 206,3	8,5	4 329,1	142,2	30,5
Cultivation in heated and unheated greenhouses of > 25 m ²	137	280 716,5	102 321,9	178 394,7	7,7	3 639,7	1 302,2	57,4
Remaining activities	3 393	542 149,4	140 423,6	400 591,0	17,3	9 806,4	118,1	35,1
Other	7 464	1 430 498,0	373 367,2	1 053 001,0	45,8	25 870,6	141,1	35,5

Source: Own elaboration based on ARMA's data.

Changing credit conditions did not affect the structure of the borrowers in the first months these new rules were in force. Again, the largest groups of borrowers were farmers engaged in cultivation of cereals and livestock husbandry (Tab. 1.2.2.10). The average amount of their credits was PLN 120,000-140,000, whereas the share of own input in the project was approx. 1/4.

In 2008, the largest group of borrowers became qualified for the category of “remaining activities” (Tab. 1.2.2.11). The second group were farmers specializing in cereal crops. The average amount of credit increased slightly and the share of own input remained at a level similar to the previous year’s one.

Both in 2009 and in 2010, the most represented group of borrowers were farmers included in the category of “remaining activities” (Tab. 1.2.2.12 and Table. 1.2.2.13). The second group by the number were in both years farmers specializing in the cultivation of cereals.

In 2011, the same situation took place. The largest group of borrowers were once again farmers representing the category “other” and those specializing in cereal crops (Table. 1.2.2.14). The average amount of credits granted to borrowers specialised in the cultivation of cereals grew significantly and amounted to PLN 215,000. Also in the case of other groups of borrowers an average amount of credit increased. The share of own input remained at a level similar to the previous year’s one.

The following year, the largest groups of borrowers were again the farmers specializing in “remaining activities” and the cultivation of cereals (Tab. 1.2.2.15). The average amount of credits in the group of borrowers representing “remaining activities” increased. For all borrower categories the own input grew by several percentage points.

In the next two years, the primacy of the farmers engaged in “remaining activities” or cultivation of cereals among borrowers remained (Table. 1.2.2.16 and Table. 1.2.2.17). However, the share of these two groups of borrowers in the total use of investment credits fell in 2014 to 41% from 75% a year earlier. While the average amount of credit and the share of own input did not change significantly.

Table 1.2.2.10. Preferential investment credits granted in 2007 based on regulations applicable after 30 April 2007 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Amount of credit	Share of own input	
									Total
Cereals production	1,764	326,546.6	81,596.5	244,950.1	25.8	2 979.8	1.7	138.9	25.0
Cultivation of industrial crops and other crops, not classified elsewhere	413	66,988.3	17,294.8	49,693.5	5.2	770.3	1.9	120.3	25.8
Beef production	1,468	231,315.3	55,486.3	175,829.0	18.5	2 041.3	1.4	119.8	24.0
Pig production	360	66,728.7	16,514.4	50,214.2	5.3	481.8	1.3	139.5	24.7
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	84	100,049.6	32,523.5	67,526.1	7.1	472.4	5.6	803.9	32.5
Remaining agricultural activities	2,121	342,515.4	86,372.6	256,142.9	27.0	2 924.1	1.4	120.8	25.2

Source: Own elaboration based on ARMA's data.

Table 1.2.2.11. Preferential investment credits granted in 2008 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of credit	Share of own input
Cereals production	3,942	900,754.4	236,929.5	663,824.9	29.2	168.4	26.3
Beef production	3,012	530,407.4	127,074.7	403,332.7	17.8	133.9	24.0
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	165	200,856.2	64,686.5	136,169.7	6.0	825.3	32.2
Remaining agricultural activities	4,428	880,656.2	243,103.4	637,552.8	28.1	144.0	27.6
Others	2,490	594,591.5	164,957.7	429,633.8	19	172.5	27.7

Source: Own elaboration based on ARMA's data.

Table 1.2.2.12. Preferential investment credits granted in 2009 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Average	
							Share of own input	Amount of credit
Total								
Cereals production	3,294	761,577.5	189,493.2	572,084.3	0.3	5,342.0	1.6	173.7
Remaining agricultural activities	3,518	711,776.9	181,043.5	530,733.4	0.3	4,873.7	1.4	150.9
Beef production	1,668	259,734.4	60,634.2	199,100.2	0.1	2,255.4	1.4	119.4
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	161	263,967.7	97,496.9	166,470.8	0.1	813.4	5.1	1 034.0
Others	2,058	451,548.3	122,012.3	329,536.0	0.2	2,838.6	1.4	160.1

Source: Own elaboration based on ARMA's data.

Table 1.2.2.13. Preferential investment credits granted in 2010 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Average	
							Share of own input	Amount of credit
Total								
Cereals production	3,835	970,689.8	241,024.5	729,665.3	0.3	8,082.9	2.1	190.3
Remaining activities	4,445	942,049.8	228,649.6	713,400.2	0.3	7,996.1	1.8	160.5
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	248	448,740.4	150,554.3	298,186.1	0.1	2,104.8	8.5	1 202.4
Beef production	2,207	382,892.2	91,508.1	291,384.1	0.1	3,553.5	1.6	132.0
Others	1,451	502,635.6	153,099.1	349,536.5	0.1	3,191.7	2.2	240.9

Source: Own elaboration based on ARMA's data.

Table 1.2.2.14. Preferential investment credits granted in 2011 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Average		
							Amount of credit	Share of own input	
Total									
Cereals production	4,890	1,398,598.6	343,268.7	1,055,329.9	33.5	19189.8	3.9	215.8	24.5
Beef production	2,555	504,712.6	118,690.1	386,022.5	12.2	7736.6	3.0	151.1	23.5
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	227	426,131.3	138,126.1	288,005.3	9.1	3880.9	17.1	1,268.7	32.4
Remaining activities	5,417	1,284,683.8	314,191.0	970,492.8	30.8	17421.3	3.2	179.2	24.5
Other	1,834	626,995.2	172,937.0	454,058.2	14.4	7039.7	3.8	247.6	27.6

Source: Own elaboration based on ARMA's data.

Table 1.2.2.15. Preferential investment credits granted in 2012 by types of farms (in PLN thousand)

Type	Number of credits	Project cost	Own input	Credit	Share of own input	Amount of subsidies	Average		
							Amount of credit	Share of own input	
Total									
Cereals production	4,427	1,304,399.0	365,546.2	938,852.8	31.3	18,465.8	4.2	212.1	28.0
Beef production	1,888	561,191.5	167,748.2	393,442.3	13.1	7,057.9	3.7	208.4	29.9
Laying poultry >80 pc. or slaughter poultry >100 pc. and poultry brooders	262	547,708.8	203,569.4	344,139.4	11.5	3,987.3	15.2	1 313.5	37.2
Remaining activities	4,350	1,210,527.2	333,470.2	877,057.1	29.3	17,917.8	4.1	201.6	27.5
Other	1,503	705,792.8	260,832.2	444,960.5	14.8	6,222.5	4.1	296.0	37.0

Source: Own elaboration based on ARMA's data.

There are different types of preferential investment credits of varying popularity. There are credits granted to agricultural holdings, holdings representing special branches of agricultural production and entities involved in agri-food processing. Among the preferential investment credits are:

- credits to young farmers;
- credits for the purchase of agricultural land;
- basic investment credits;
- branch credits;
- credits for new technologies;
- credits for producer groups;
- credits for family farms.

In the year 2005, more than 21,000 credits were granted and their total amount exceeded PLN 2.1 billion (Tab. 1.2.2.18). More than 8,300 or almost 40% of all granted credits were credits to young farmers. At the same time for these credits more than half of total amount of granted investment credits was allocated. Over 6,200 credits or nearly 30% of all granted investment credits were credits for the purchase of land. The share of these credits in the resources earmarked for investment credits was lower than 16%. Less than 22% of all credits granted were basic investment credits, which accounted for 15% of all funds for investment credits.

Table 1.2.2.18. Number and amount of preferential investment credits granted in 2005

Type of credits	Number	Amount (in PLN '000)	Share (in %)	
			in amount	in number
Credits to young farmers	8,365	1,064,760.4	50.4	39.7
Credits for the purchase of agricultural land	6,267	332,452.4	15.7	29.8
Basic investment credits	4,598	319,376.3	15.1	21.8
Credits for new technologies	635	185,998.5	8.8	3.0
Branch credits	724	153,294.2	7.3	3.4
Credits for family farms	469	53,363.5	2.5	2.2
Credits for producer groups	7	5,070.5	0.2	0.0
Total	21,065	2,114,315.8		

Source: Own elaboration based on ARMA's data.

The number and amount of investment preferential credits granted in 2006 was higher than in 2005 (Table. 1.2.2.19). The number of loans was nearly 12.5% higher than a year earlier, while total amount of these credits increased by 37.6%. Once again for the largest share of investment credits accounted the ones to young farmers. More than 9,900 of these credits were granted, that is

almost 42% of all investment credits in 2006. Their share in the total amount of credits granted, however, did not exceed 49%. Again, the second place in the share of the number and amount of granted credits were credits for the purchase of agricultural land. They accounted for nearly 27% of all granted credits in this year and less than 16% of the granted amount. The third group, as in 2005, were basic investment credits, whose share in the number of credits granted amounted to less than 22%, in the amount to 15.7%.

Table 1.2.2.19. Number and amount of preferential investment credits granted in 2006

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			amount	number
Credits to young farmers	9,933	1,421.2	48.9	41.9
Credits for the purchase of agricultural land	6,377	460.1	15.8	26.9
Basic investment credits	5,173	455.9	15.7	21.8
Credits for new technologies	1,149	320.2	11.0	4.8
Branch credits	555	171.8	5.9	2.3
Other	508	79.4	2.7	2.1
Total	23,695	2,908.6		

Source: Own elaboration based on ARMA's data.

In 2007, preferential credits were granted both under the existing rules (in the period January-April), as well as under new rules (between May and December). The total number of credits granted in 2007 fell by less than 1,000 compared to 2006, and the total amount of loans granted increased by more than PLN 350,000,000.

In the period January-April, 70.5% of all credits granted this year were contracted (Tab. 1.2.2.20). The share of credits granted under the old rules in the total amount of credits amounted to 70.8%. Such a large share of credits granted under the existing terms of the total number and amount of credits was due to the fact that many borrowers wanted to benefit from credits under less strict rules (many of them would not have obtained such a credit under the new rules), and the lack of knowledge about the new rules, limiting the number of the farmers interested in preferential credits after April 2007.

Table 1.2.2.20. Number and amount of preferential investment credits granted in 2007

Type of credits	I-IV		V-XII		Total	
	Number	Amount (in PLN '000000)	Number	Amount (in PLN '000000)	Number	Amount (in PLN '000000)
Credits to young farmers (MR, nMR)	7,644	1,190.8	2,972	435	10,616	1,625.8
Credits for the purchase of agricultural land (KZ, nKZ)	3,162	290.2	2,065	207.3	5,227	497.5
Credits for new technology (NT, nNT)	1,321	351.9	540	137.9	1,861	489.8
Basic investment credits (IP, nIP)	3,337	343.1	911	131.1	4,248	474.2
Branch credits (BR)	293	86.6	0	0	293	86.6
Credits for the purchase of agricultural land (GR, nGR)	253	47.4	202	38.5	455	85.9
Credits for producer groups (GP, nGP)	4	1.3	1	0.1	5	1.4
Credits for land settlement (OR, nOR)	1	0.3	0	0	1	0.3
Total	16,015	2,311.6	6,691	949.9	22,706	3,261.5

Source: Own elaboration based on ARMA's data.

Changing the rules, however, did not affect significantly the hierarchy of popularity of particular types of credits (tab. 1.2.2.21). In both, the first and the second period of 2007 the most popular were credits to young farmers. Their share of the total number of credits granted under the existing rules amounted to 51.5%, while in the number of those granted under the new rules it was less than 46%, which resulted in a total share of these credits reaching almost 50% in the total number of credits granted in 2007. The share of credits to young farmers in the total amount of credits was slightly lower and amounted to 48% in the period I-IV, while to more than 44% in the period V-XII, which gave a total of less than 47%. Unlike so far, in the first period of 2007, the second group were credits for the purchase of agricultural land. Their share in the total number of credits granted during that period was only 12.6%, while credits for new technologies accounted to 15.2%, and basic investment credits – 14.8%. Slightly different picture presents the participation of these groups in the total amount of credits granted in this period. For basic investment credits allocated were 20.8% of the amount of all credits, for the purchase of agricultural land 19.7%, and for credits for new technologies only 8.2%. In the period V-XII, as in the period 2005-2006, the second group both in terms of the number of credits and the amount granted were credits for the purchase of agricultural land. They accounted for 21.8% of the number of credits, and nearly 31% of the total amount of

funds granted to borrowers. While the third place in terms of the number of credits granted were credits for new technologies and they accounted for 14.5% of all credits. However, the share of these credits in the amount of lending was much lower, and amounted only to 8.1%. In terms of share in the amount of credits granted in third place was occupied by basic investment credits with the share of 13.6%, and their share in the total number of investment credits granted in 2007 under the new rules reached 13.8%. Similarly formed was the structure for the whole of 2007. In the second place in terms of both number and amount of credits were credits for the purchase of agricultural land, whose share amounted to 15.3% and 23%, respectively. The third place in terms of number of credits was occupied by credits for new technologies – 15.0%, and in terms of the amount these were basic investment credits – 18.7%.

Table 1.2.2.21. Structure of preferential investment credits granted in 2007

Type of credits	I-IV		V-XII		Total	
	Share (in %) in:					
	amount	number	amount	number	amount	number
Credits to young farmers (MR, nMR)	47.7	51.5	44.4	45.8	46.8	49.8
Credits for the purchase of agricultural land (KZ, nKZ)	19.7	12.6	30.9	21.8	23.0	15.3
Credits for new technologies (NT, nNT)	8.2	15.2	8.1	14.5	8.2	15.0
Basic investment credits (IP, nIP)	20.8	14.8	13.6	13.8	18.7	14.5
Branch credits (BR)	1.8	3.7	0.0	0.0	1.3	2.7
Credits for the purchase of agricultural property (GR, nGR)	1.6	2.1	3.0	4.1	2.0	2.6
Credits for producer groups (GP, nGP)	0.0	0.1	0.0	0.0	0.0	0.0
Credits for land settlement (OR, nOR)	0.0	0.0	0.0	0.0	0.0	0.0

Source: Own elaboration based on ARMA's data.

In 2008, the number of credits was about 1/3 lower than in 2007 (Tab. 1.2.2.22). The total amount of credits granted was nearly PLN 1 billion lower than a year earlier. Most popular were, as before, credits to young farmers. They accounted for 47.5% of all credits granted and more than 44% of the amount borrowed by farmers. The second group were credits for the purchase of agricultural land. Their share in the number of credits exceeded 23%, and the amount of credits their share was almost 34%. The third group, both in terms of the number, as well as the amount of the credits were the credits for new technologies – 15.8% and 9.8%, respectively.

Table 1.2.2.22. Number and amount of preferential investment credits granted in 2008

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			amount	number
Credits to young farmers (nMR)	6,223	1,078.0	44.3	47.5
Credits for the purchase of agricultural land (nKZ)	4,719	524.1	33.6	23.1
Credits for new technologies (nNT)	1,372	359.0	9.8	15.8
Basic investment credits (nIP)	1,174	182.2	8.4	8.0
Branch credits (nBR)	189	46.4	1.3	2.0
Credits for the purchase of agricultural property (nGR)	357	78.8	2.5	3.5
Credits for producer groups (nGP)	3	2.2	0.0	0.1
Total	14,037	2,270.5		

Source: Own elaboration based on ARMA's data.

In the year 2009, there was a renewed decline in the number of preferential investment credits. This drop exceeded 30%. The decrease also occurred in relation to the amount of granted credits. However, it was slightly lower than the number of credits and it amounted to 26%. This time, the most popular line of investment preferential credits were credits for the purchase of agricultural land (Tab. 1.2.2.23). These credits accounted for over 39% of all granted credits in this year and for as much as 52% of their amount. Another popular credit line were credits to young farmers. Their share in the total number of credits exceeded 35%, whereas their share in the amount was nearly 29%. In contrast, in the third place in terms of number of credits was taken by credits for new technologies – 12%.

Table 1.2.2.23. Number and amount of preferential investment credits granted in 2009

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			amount	number
Credits for the purchase of agricultural land (nKZ)	5,564	706.2	52.0	39.3
Credits to young farmers (nMR)	3,082	631.4	28.8	35.1
Basic investment credits (nIP)	950	133.4	8.9	7.4
Credits for new technologies (nNT)	608	215.3	5.7	12.0
Credits for the purchase of agricultural property (nGR)	418	88.5	3.9	4.9
Branch credits (nBR)	74	21.2	0.7	1.2
Credits for producer groups (nGP)	3	2.1	0.0	0.1
Total	10,699	1,797.9		

Source: Own elaboration based on ARMA's data.

In 2010, the number and amount of the granted investment credits increased. Total number of credits increased by over 13% to more than 12,100, while the amount of credits increased by much more – 32% to less than PLN 2.4 billion. This year, the most popular credit line, when it comes to the number of credits, were credits for the purchase of agricultural land. Their share amounted to nearly 48% (Tab. 1.2.2.24). The share of these credits in the amount was much lower and did not exceed 34%. As far as the amount of granted funds is concerned, the highest share went for credits to young farmers. It was more than 37% of total amount of credits. The third in terms of the number of credits was the line of basic investment credits. Their share of the total number of credits exceeded 10%. However, their share in the amount of credits granted was much smaller and reached only 7.5%. When it comes to the amount of funds granted for credits, the third group in terms of the share in the total amount of credits were credits for new technologies. Almost 11% of the funds was allocated for these credits, but their share in the number of credits was much lower and did not exceed 6%.

Table 1.2.2.24. Number and amount of preferential investment credits granted in 2010

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			amount	number
Credits for the purchase of agricultural land (nKZ)	5,792	802.5	33.7	47.6
Credits to young farmers (nMR)	3,761	882.8	37.1	30.9
Basic investment credits (nIP)	1,226	177.3	7.5	10.1
Credits for new technologies (nNT)	696	259.8	10.9	5.7
Credits for the purchase of agricultural property (nGR)	542	160.4	6.7	4.5
Branch credits (nBR)	133	79.8	3.4	1.1
Credits for producer groups (nGP)	8	16.5	0.7	0.1
Credits for land settlement (nOR)	1	0.5	0.0	0.0
Total	12,159	2,379.6		

Source: Own elaboration based on ARMA's data.

In 2011, there was a further increase in both the number and the amount of credits granted for investment compared to the previous year. The total number of credits increased by 22.7%, while the amount borrowed by farmers grew by 32.5%. Taking into account the share in the number of credits, the most popular line was the one of credits for the purchase of agricultural land (Tab. 1.2.2.25). Their share was 44%. Their share in the amount of granted funds was much smaller and did not exceed 33%. The largest share of funds was allocated for credits to young farmers. The credits of this line accounted for nearly 37% of

the total amount of credits. However, the share of these credits in the number of credits granted in 2011 was much lower and does not exceed 33%. The third line, both in terms of the number and the amount of credits were credits for new technologies.

Table 1.2.2.25. Number and amount of preferential investment credits granted in 2011

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			number	amount
Credits for the purchase of agricultural land (nKZ)	6,562	1,029.9	44.0	32.7
Credits to young farmers (nMR)	4,862	1,164.9	32.6	36.9
Credits for new technologies (nNT)	1,201	468.4	8.0	14.9
Basic investment credits (nIP)	1,119	167.8	7.5	5.3
Credits for the purchase of agricultural property (nGR)	744	227.4	5.0	7.2
Branch credits (nBR)	154	48.0	1.0	1.5
Credits for producer groups (nGP)	32	21.6	0.2	0.7
Credits with partial repayment of principal (CSK)	249	25.9	1.7	0.8
Total	14,923	3,153.9		

Source: Own elaboration based on ARMA's data.

In 2012, the number of credits and their amount fell. Their number decreased by 20% and the amount by only 5%. The most popular line in terms of the number of credits were credits for the purchase of agricultural land (Tab. 1.2.2.26). Their share in the number of allocated credits exceeded 43%. The share of these credits in the amount was much smaller and it did not exceed 29%. The largest share in the amount of the credits granted was taken by credits to young farmers. By contrast, their share in the number of credits amounted to nearly 1/3. The third place in terms of both the number and the amount of credits went to credits for new technologies. Their share in the amount was almost two times higher than in the number – 17.4% and 8.8%, respectively.

In 2013, the number and the amount of granted investment credits remained almost unchanged compared to the previous year. The total number of credits increased by less than 1%, while the amount decreased by almost 1%. This year, the most popular line of credits in terms of the number of credits granted was one for the purchase of agricultural land (Tab. 1.2.2.27). Their share in the total number of credits exceeded 50%. The share in the amount was not as high and did not exceed 32%. The largest share in the amount of credits was observed in the case of credits to young farmers, whose share in the amount of funding granted amounted to 38.6%. When it comes to the share of this credit line in the number of credits, it was much lower and exceeded only 1/4. The

third in terms of the number of credits were basic investment credits, whose share exceeded 11%. However, the share of this line of credits in the amount of funds available to borrowers was smaller and did not exceed 9%. In terms of the share in the total amount of credits the third line were credits for new technologies. Their share in the amount of credits amounted nearly to 15% of the total amount. However, the share in the total of credits granted was much smaller and it reached only 6.5%.

Table 1.2.2.26. Number and amount of preferential investment credits granted in 2012

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			number	amount
Credits for the purchase of agricultural land (nKZ)	5,368	861.7	43.2	28.7
Credits to young farmers (nMR)	4,105	1,161.2	33.0	38.7
Credits for new technologies (nNT)	1,095	522.3	8.8	17.4
Basic investment credits (nIP)	899	176.4	7.2	5.9
Credits for the purchase of agricultural property (nGR)	520	160.0	4.2	5.3
Branch credits (nBR)	106	64.9	0.9	2.2
Credits for producer groups (nGP)	8	10.7	0.1	0.4
Credits with a partial repayment of principal	329	41.3	2.6	1.4
Total	12,430	2,998.5		

Source: Own elaboration based on ARMA's data.

Table 1.2.2.27. Number and amount of preferential investment credits granted in 2013

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			number	amount
Credits for the purchase of agricultural land (nKZ)	6,305	941.0	50.2	31.7
Credits to young farmers (nMR)	3,231	1,146.6	25.7	38.6
Credits for new technologies (nNT)	810	443.2	6.5	14.9
Basic investment credits (nIP)	1,402	264.5	11.2	8.9
Credits for the purchase of agricultural property (nGR)	490	124.5	3.9	4.2
Branch credits (nBR)	26	14.2	0.2	0.5
Credits for producer groups (nGP)	2	1.5	0.0	0.1
Credits with partial repayment of principal (CSK)	285	37.0	2.3	1.2
Total	12,551	2,972.5		

Source: Own elaboration based on ARMA's data.

In the last of the analysed years, there was a sharp decline in the number and in the amount of credits compared to the previous year. The number of credits fell by more than a half, and the amount nearly by a half. The most popular line in terms of the number of credits were credits to young farmers, whose

share exceeded 28% (Tab. 1.2.2.28). As far as the share of these credits in the amount of funding contracted, it was higher than the share in the total number of credits and reached almost 36%. The second group in terms of the number of credits were credits for the purchase of agricultural land. Their share exceeded 26%. By contrast, their share of the amount was much lower than in the number and reached only 16.1%. The third line in terms of the number of credits were credits with partial repayment of principal – a new line of credits. The share of these credits amounted to 19.3%. Despite such high popularity of this line, its share in the amount of funds granted to borrowers was almost twice lower and reached only 9.8%. The second largest amount of credits granted was allocated for credits for new technologies, whose share exceeded 24%.

Table 1.2.2.28. Number and amount of preferential investment credits granted in 2014

Type of credits	Number	Amount (in PLN '000000)	Share in (in %)	
			number	amount
Credits to young farmers (nMR)	1,535	558.9	28.3	35.9
Credits for new technologies (nNT)	507	374.1	9.3	24.1
Credits for the purchase of agricultural land (nKZ)	1,432	250.2	26.4	16.1
Basic investment credits (nIP)	769	168.6	14.2	10.8
Credits for the purchase of agricultural property (nGR)	121	42.1	2.2	2.7
Credits for producer groups (nGP)	2	4.8	0.0	0.3
Branch credits (nBR)	20	4.2	0.4	0.3
Credits with partial repayment of principal (CSK)	1,047	152.3	19.3	9.8
Total	5,433	1,555.2		

Source: Own elaboration based on ARMA's data.

Loans for the purchase of agricultural land in order to increase farm (KZ/01 and nKZ/01)

As shown by the analysis of the destination of obtained credits presented above, borrowers frequently sought to improve the agrarian structure of their farms, which in practice means increasing the size of their farms. Exactly for this purpose served the line KZ /01 and later nKZ/01.

In the period 2005-2007 the number of farmers making use of this line of credit grew rapidly. In 2005, only 122 such credits were granted, and a year later, as many as 6,200 (Tab. 1.2.2.29). In 2005, the average amount of credit was much higher than in subsequent years, which shows that in subsequent years for the use of this form of lending opted also farmers with financial lower potential for undertaking investment projects.

In 2006, the largest number of credits was granted in the regions: mazowieckie, lubelskie and kujawsko-pomorskie. The average amount of credit reached PLN 67,000 and it was highly diversified depending on the region – from PLN 20,000 in świętokrzyskie to PLN 115,000 in pomorskie. The situation was similar in 2007 in respect of credits granted under the existing rules, but the average amount of credit increased.

In the period 2007-2009, the number of credits granted in any of these years did not match that of 2006 (Tab. 1.2.2.30). However, the average value of credits was steadily increasing. In this period, most often this type of credit was granted to farmers in mazowieckie, kujawsko-pomorskie and lubelskie.

It should be noted that, in the case of any type of preferential investment credits their whole amount could be spent on the purchase of land only until the end of 2009. Then the cost of purchasing agricultural land could not represent more than 10% of the amount of credit.

In the period of 2010-2013, the number of credits was close to that recorded in 2006, but after yet another change of rules concerning granting credits, in 2014, the number of credits fell several times (Tab. 1.2.2.31). At the same time throughout this period, the average amount of credits was steadily increasing. Still among the most frequent borrowers were farmers from mazowieckie, kujawsko-pomorskie and lubelskie.

In 2010, a new category of credits was introduced under this line of credits, that is credits for the purchase of agricultural land in order to enlarge a farm for farmers representing special types of agricultural production – symbol: nKZ/01d. While in 2014, new rules for this credit line were introduced as well as new categories of credits equivalent to the previously offered credits:

- nKZ/03dM – credits with subsidies applied according to regulations on *de minimis* aid in agriculture for the purchase of agricultural land in order to enlarge a farm in the case of farmers operating in special sectors of agricultural production;
- nKZ/03rM – credits with subsidies applied according to regulations on *de minimis* aid in agriculture for the purchase of agricultural land to enlarge a farm;
- nKZ/04dM – credits with subsidies applied according to regulations on *de minimis* aid in agriculture for the purchase of agricultural land to create a new farm operating in special sectors of agricultural production;
- nKZ/04rM – credits with subsidies applied according to regulations on *de minimis* aid in agriculture for the purchase of agricultural land to create a new farm.

Loans for the purchase of agricultural land to create a new farm (nKZ/02 and nKZ/02)

Much less popular line was the credit for the purchase of agricultural land in order to create a new farm. However, this situation was observed no sooner than the support to young farmers in the form of the instrument co-financed by the EU had been fully launched. In 2005, over 8,000 of such credits (Tab. 1.2.2.32). The average amount of these credits amounted to PLN 124,500, and the highest average amount of credit was recorded in śląskie – PLN 213,100 and the lowest in świętokrzyskie – PLN 91,900. The highest number of these credits was granted in podlaskie and lubelskie. The combined number of credits granted in these regions amounted to approx. 1/4 of all credits of this type. The lowest number of these credits was granted in podkarpackie.

In 2006, the number of such credits fell sharply and was more than 40 times smaller than a year earlier. The following year, when the same rules of granting credits were still in force, the average number of credits contracted each month slightly increased.

Table 1.2.2.29. Credits granted for the purchase of agricultural land in order to increase farm size (KZ/01) in 2005-2007, credits granted under the rules in force until 30 April 2007 (amount and average in PLN thousand)

Voivodeship	2005			2006			2007		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
Dolnośląskie	10	1,819.9	182.0	463	45,824.4	99.0	220	24,340.9	110.6
Kujawsko-pomorskie	16	4,398.1	274.9	786	66,812.6	85.0	396	37,723.5	95.3
Lubelskie	15	1,213.0	80.9	841	25,964.2	30.9	413	17,437.7	42.2
Lubuskie	2	3,055.4	1,527.7	113	10,851.7	96.0	74	7,282.1	98.4
Łódzkie	17	3,171.6	186.6	428	18,543.6	43.3	208	9,322.6	44.8
Małopolskie	1	49.0	49.0	90	2,479.7	27.6	35	1,463.2	41.8
Mazowieckie	25	5,682.4	227.3	926	46,344.7	50.0	407	20,354.5	50.0
Opolskie	0	0.0	0.0	367	23,179.5	63.2	152	16,686.9	109.8
Podkarpackie	3	192.7	64.2	97	2,847.5	29.4	60	2,727.2	45.5
Podlaskie	8	1,676.7	209.6	307	18,264.2	59.5	138	8,129.6	58.9
Pomorskie	9	1,438.7	159.9	296	34,041.6	115.0	143	20,035.0	140.1
Śląskie	2	533.4	266.7	49	3,180.2	64.9	26	3,006.8	115.6
Świętokrzyskie	1	58.9	58.9	302	6,108.8	20.2	147	4,875.0	33.2
Warmińsko-mazurskie	11	2,863.1	260.3	244	26,381.6	108.1	177	21,851.9	123.5
Wielkopolskie	19	12,906.2	679.3	646	56,664.1	87.7	359	42,649.5	118.8
Zachodniopomorskie	5	1,992.7	398.5	245	26,231.6	107.1	135	22,113.8	163.8
Total	144	41,051.7	285.1	6,200	413,719.8	66.7	3,090	260,000.1	84.1

Source: Own elaboration based on ARMA's data.

Table 1.2.2.30. Credits granted for the purchase of agricultural land in order to increase farm size (nKZ/01) in 2007-2009, credits granted under the rules in force after 30 April 2007 (amount and average in PLN thousand)

Voivodeship	2007			2008			2009		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
	Dolnośląskie	107	11,521.1	107.7	287	32,545.6	113.4	320	49,148.5
Kujawsko-pomorskie	311	36,214.2	116.4	667	93,604.0	140.3	770	117,917.7	153.1
Lubelskie	204	10,773.5	52.8	498	21,525.9	43.2	634	36,143.3	57.0
Lubuskie	57	6,132.3	107.6	89	17,920.5	201.4	115	17,606.1	153.1
Łódzkie	116	5,570.4	48.0	318	21,945.7	69.0	373	24,006.3	64.4
Małopolskie	9	692.9	77.0	37	2,024.2	54.7	40	4,247.4	106.2
Mazowieckie	290	18,161.3	62.6	713	59,850.0	83.9	768	57,901.0	75.4
Opolskie	153	16,145.3	105.5	275	31,739.3	115.4	352	53,809.5	152.9
Podkarpackie	32	919.1	28.7	84	6,171.6	73.5	70	5,427.5	77.5
Podlaskie	90	5,217.5	58.0	277	24,521.9	88.5	406	37,795.8	93.1
Pomorskie	129	15,470.6	119.9	219	39,570.8	180.7	236	46,134.5	195.5
Śląskie	12	3,239.4	269.9	28	4,819.8	172.1	33	8,739.8	264.8
Świętokrzyskie	54	1,794.1	33.2	135	4,411.7	32.7	128	5,834.5	45.6
Warmińsko-mazurskie	93	17,239.6	185.4	205	34,495.6	168.3	240	53,891.8	224.5
Wielkopolskie	211	29,320.8	139.0	491	66,059.0	134.5	624	98,395.6	157.7
Zachodniopomorskie	99	12,378.3	125.0	149	21,548.6	144.6	162	37,302.9	230.3
Total	1,967	190,790.4	97.0	4,472	482,754.3	108.0	5,271	654,302.0	124.1

Source: Own elaboration based on ARMA's data.

Table 1.2.2.31. Credits granted for the purchase of agricultural land in order to increase farm size (nKZ/01 and nKZ/03r - in 2014) in 2010-2014 (amount and average, PLN thousand)

Voivodeship	2010			2011			2012			2013			2014		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
Dolnośląskie	359	61,360.8	170.9	422	91,426.5	216.7	372	70,412.1	189.3	425	74,966.8	176.4	144	27,354.4	190.0
Kujawsko-pomorskie	763	109,764.2	143.9	738	113,009.2	153.1	752	136,030.7	180.9	840	147,936.9	176.1	220	41,936.2	190.6
Lubelskie	603	39,859.7	66.1	764	49,676.2	65.0	567	40,958.8	72.2	707	51,563.6	72.9	122	11,144.6	91.3
Lubuskie	122	24,257.8	198.8	162	40,103.4	247.6	81	18,199.7	224.7	81	16,651.0	205.6	24	5,612.0	233.8
Łódzkie	378	26,841.9	71.0	473	36,033.4	76.2	400	31,807.6	79.5	495	48,811.5	98.6	109	13,287.5	121.9
Małopolskie	35	2,148.3	61.4	43	2,593.3	60.3	45	3,779.4	84.0	60	5,099.0	85.0	5	867.2	173.4
Mazowieckie	803	67,192.7	83.7	993	97,426.8	98.1	797	91,470.9	114.8	868	100,192.7	115.4	205	28,091.9	137.0
Opolskie	357	50,657.3	141.9	404	85,279.2	211.1	293	56,036.5	191.3	342	53,121.9	155.3	43	8,819.8	205.1
Podkarpackie	79	8,443.5	106.9	90	11,911.7	132.4	75	9,768.2	130.2	70	11,042.1	157.7	10	1,550.9	155.1
Podlaskie	394	37,686.2	95.7	487	51,368.6	105.5	372	47,018.5	126.4	511	64,341.5	125.9	105	15,546.4	148.1
Pomorskie	257	59,854.4	232.9	255	60,318.7	236.5	184	41,843.9	227.4	255	55,764.8	218.7	68	15,774.5	232.0
Śląskie	43	8,155.8	189.7	49	12,536.8	255.9	27	7,081.3	262.3	31	6,372.8	205.6	6	1,249.1	208.2
Świętokrzyskie	120	6,603.6	55.0	153	8,664.6	56.6	131	6,506.4	49.7	166	14,321.3	86.3	46	4,173.0	90.7
Warmińsko-mazurskie	295	59,925.6	203.1	315	57,213.4	181.6	258	60,712.8	235.3	273	48,976.8	179.4	68	18,231.0	268.1
Wielkopolskie	705	118,241.6	167.7	669	124,504.4	186.1	631	133,493.5	211.6	819	163,796.4	200.0	159	30,544.0	192.1
Zachodniopomorskie	165	44,533.3	269.9	157	48,840.4	311.1	93	25,975.9	279.3	117	26,457.5	226.1	50	9,628.1	192.6
Total	5,478	725,526.6	132.4	6,174	890,906.4	144.3	5,078	781,096.1	153.8	6,060	889,416.5	146.8	1,384	233,810.3	168.9

Source: Own elaboration based on ARMA's data.

Table 1.2.2.32. Credits granted for the purchase of agricultural land in order to create a farm (KZ/02) in 2005-2007, credits granted under the rules in force until 30 April 2007 (amount and average in PLN thousand)

Voivodeship	2005			2006			2007		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
	Dolnośląskie	158	22,726.4	143.8	16	2,043.7	127.7	3	389.5
Kujawsko-pomorskie	537	61,394.0	114.3	4	758.8	189.7	2	767.1	383.5
Lubelskie	1,037	113,380.8	109.3	10	1,915.8	191.6	2	2,340.8	1,170.4
Lubuskie	95	19,730.4	207.7	18	3,908.5	217.1	7	3,442.8	491.8
Łódzkie	720	79,287.0	110.1	4	211.8	53.0	2	28.0	14.0
Małopolskie	82	8,207.4	100.1	4	267.4	66.8	1	27.0	27.0
Mazowieckie	2,096	233,205.3	111.3	19	4,669.2	245.7	6	655.2	109.2
Opolskie	233	28,628.8	122.9	12	2,670.9	222.6	4	2,935.1	733.8
Podkarpackie	56	8,006.2	143.0	2	191.5	95.8	2	133.4	66.7
Podlaskie	1,018	121,534.4	119.4	8	3,828.4	478.6	2	320.7	160.3
Pomorskie	308	33,773.7	109.7	11	2,393.5	217.6	6	5,185.2	864.2
Śląskie	110	23,439.3	213.1	5	932.0	186.4	1	237.9	237.9
Świętokrzyskie	142	13,049.7	91.9	5	601.5	120.3	3	277.6	92.5
Warmińsko-mazurskie	575	90,460.9	157.3	13	7,224.2	555.7	0	0.0	0.0
Wielkopolskie	904	147,583.2	163.3	15	4,751.4	316.8	13	5,113.9	393.4
Zachodniopomorskie	150	19,301.4	128.7	31	9,972.3	321.7	18	8,337.9	463.2
Total	8,221	1,023,708.7	124.5	177	46,341.0	261.8	72	30,192.0	419.3

Source: Own elaboration based on ARMA's data.

In the first years of granting preferential credits under the new rules this type of credits for the purchase of agricultural land still did not enjoy great popularity (Tab. 1.2.2.33). Interest in such credits rapidly grew in 2009, when the number of credits exceeded 5,200. The average amount of credits decreased significantly compared to years when credits were granted under previous rules. In 2009, when the number of credits rose again, almost 30% of the credits were granted in only two regions – mazowieckie and kujawsko-pomorskie.

In the next two years, again there was a sharp decline in the number of credits granted and to only a few hundred per year (Tab. 1.2.2.34). Renewed growth in the number of credits was recorded in 2012, when their number exceeded 3,700. However, this was accompanied by a renewed decline in the average amount of credits. At the same time, a significant concentration of the credits granted was observed. Almost 30% of them fell on two regions – mazowieckie and podlasie.

It is worth looking at the average size of agricultural land purchased by borrowers. In 2006-2009 the average size of land purchased by a borrower ranged from 9 to 12 hectares (Tab. 1.2.2.35). However, clearly visible was a huge diversity of the size of land purchased with the help of the credit. Almost throughout the whole period 2006-2009 the highest average size of agricultural land was acquired by the borrowers from lubuskie and the smallest from świętokrzyskie.

In the period 2006-2009 the average price of 1 ha of agricultural land purchased using the preferential credit obtained was steadily increasing (Tab. 1.2.2.36). Its average price in 2006 was PLN 7,000 and three years later it was twice as high and amounted to PLN 14,000. The lowest agricultural land prices were observed in świętokrzyskie and lubelskie, whereas the highest – in kujawsko-pomorskie and wielkopolskie.

Within the line KZ/01 enabling the purchase of agricultural land for enlarging a farm in 2010 was awarded support for farms in special areas of agricultural production (KZ/01d). In the years 2010-2013, this support attracted little interest. Annually approximately 20 such credits were granted with an average amount of PLN 150,000 to 200,000 (Tab. 1.2.2.37).

Table 1.2.2.33. Credits granted for the purchase of agricultural land in order to create a farm (nKZ/02) in 2007-2009, credits granted under the rules in force after 30 April 2007 (amount and average in PLN thousand)

Voivodeship	2007			2008			2009		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
Dolnośląskie	2	266.1	1,33.0	5	1,378.5	275.7	320	49,148.5	153.6
Kujawsko-pomorskie	7	1,925.4	2,75.1	42	4,111.4	97.9	770	117,917.7	153.1
Lubelskie	5	729.4	1,45.9	16	5,874.2	367.1	634	36,143.3	57.0
Lubuskie	3	673.5	2,24.5	3	1,167.8	389.3	115	17,606.1	153.1
Łódzkie	4	112.3	28.1	24	1,862.0	77.6	373	24,006.3	64.4
Małopolskie	1	55.9	55.9	0	0.0	0.0	40	4,247.4	106.2
Mazowieckie	23	1,045.6	45.5	65	5,395.9	83.0	768	57,901.0	75.4
Opolskie	2	290.3	1,45.2	7	1,345.5	192.2	352	53,809.5	152.9
Podkarpackie	0	0.0	0.0	4	609.6	152.4	70	5,427.5	77.5
Podlaskie	12	914.8	76.2	22	1,172.8	53.3	406	37,795.8	93.1
Pomorskie	4	3,515.1	878.8	10	5,740.7	574.1	236	46,134.5	195.5
Śląskie	1	44.0	44.0	1	39.0	39.0	33	8,739.8	264.8
Świętokrzyskie	3	92.6	30.9	6	152.7	25.4	128	5,834.5	45.6
Warmińsko-mazurskie	6	1,443.3	240.5	9	5,438.8	604.3	240	53,891.8	224.5
Wielkopolskie	13	3,264.2	251.1	21	3,003.6	143.0	624	98,395.6	157.7
Zachodniopomorskie	12	2,144.7	178.7	12	4,061.5	338.5	162	37,302.9	230.3
Total	98	16,517.1	168.5	247	41,353.9	167.4	5,271	654,302.0	124.1

Source: Own elaboration based on ARMA's data.

Table 1.2.2.34. Credits granted for the purchase of agricultural land in order to establish a farm (nKZ/02) in 2010-2013 (amount and average in PLN thousand)

Voivodeship	2010			2011			2012			2013		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average
	Dolnośląskie	14	4,599.5	328.5	20	9,092.4	454.6	195	46,462.0	238.3	21	3,881.0
Kujawsko-pomorskie	20	2,451.6	122.6	18	12,161.4	675.6	319	71,516.5	224.2	19	4,100.8	215.8
Lubelskie	31	1,425.5	46.0	20	1,400.2	70.0	343	53,524.8	156.0	15	1,493.6	99.6
Lubuskie	11	4,792.3	435.7	14	11,225.3	801.8	42	17,346.6	413.0	7	4,458.0	636.9
Łódzkie	24	2,185.7	91.1	29	6,026.9	207.8	325	60,961.0	187.6	25	2,463.0	98.5
Małopolskie	2	504.2	252.1	0	0.0	-	35	5,888.6	168.2	1	27.2	27.2
Mazowieckie	48	5,852.2	121.9	70	8,549.6	122.1	667	141,627.6	212.3	50	5,412.5	108.2
Opolskie	13	3,531.7	271.7	8	1,017.6	127.2	189	32,891.7	174.0	10	1,965.6	196.6
Podkarpackie	2	1,405.2	702.6	8	942.4	117.8	26	5,863.7	225.5	2	235.6	117.8
Podlaskie	27	2,769.5	102.6	34	5,370.8	158.0	386	96,225.1	249.3	9	1,187.9	132.0
Pomorskie	4	3,396.7	849.2	13	12,121.9	932.5	209	55,059.2	263.4	3	1,413.7	471.2
Śląskie	0	0.0	-	2	52.6	26.3	29	7,741.3	266.9	2	1,529.0	764.5
Świętokrzyskie	16	1,014.9	63.4	24	1,004.2	41.8	72	13,282.8	184.5	15	952.9	63.5
Warmińsko-mazurskie	16	8,497.5	531.1	20	22,234.9	1,111.7	281	84,391.8	300.3	9	5,776.5	641.8
Wielkopolskie	44	19,499.8	443.2	43	27,034.9	628.7	530	119,320.0	225.1	28	11,660.8	416.5
Zachodniopomorskie	23	12,199.6	530.4	34	15,404.7	453.1	101	21,499.7	212.9	8	890.5	111.3
Total	295	74,125.9	251.3	357	133,639.7	374.3	3,749	833,602.4	222.4	224	47,448.6	211.8

Source: Own elaboration based on ARMA's data.

Table 1.2.2.35. Size of agricultural land purchased by an average borrower under the line of credits for the purchase of agricultural land (ha)

Voivodeship	2006	2007old	2007new	2008	2009
Dolnośląskie	16.13	16.72	13.32	11.02	11.29
Kujawsko-pomorskie	8.32	8.35	8.51	7.97	7.99
Lubelskie	5.91	6.73	6.84	6.76	5.70
Lubuskie	29.15	32.00	22.27	31.91	21.59
Łódzkie	5.34	4.98	4.51	5.88	4.89
Małopolskie	4.08	5.78	11.60	4.38	8.44
Mazowieckie	6.36	5.24	5.49	6.03	5.13
Opolskie	10.73	17.90	11.92	10.48	11.34
Podkarpackie	8.16	9.71	6.22	11.76	9.75
Podlaskie	9.82	6.37	6.35	7.73	7.45
Pomorskie	16.90	20.64	12.74	15.19	14.00
Śląskie	12.47	16.74	28.62	12.48	19.00
Świętokrzyskie	3.97	5.84	4.81	3.96	5.01
Warmińsko-mazurskie	22.54	20.03	24.23	19.77	20.99
Wielkopolskie	8.71	10.84	10.35	7.30	7.63
Zachodniopomorskie	26.86	36.43	20.56	20.25	23.53
Total	10.33	11.92	10.33	9.34	9.06

Source: Own elaboration based on ARMA's data.

Table 1.2.2.36. Cost of 1 ha of agricultural land purchased with an average credit for the purchase of agricultural land (in PLN thousand)

Voivodeship	2006	2007old	2007new	2008	2009
Dolnośląskie	6.19	6.63	8.12	10.54	13.62
Kujawsko-pomorskie	10.28	11.59	14.09	17.30	20.04
Lubelskie	5.54	7.08	8.04	7.89	10.75
Lubuskie	3.86	4.14	5.09	6.50	7.06
Łódzkie	8.13	8.94	10.50	11.84	13.44
Małopolskie	7.17	7.16	6.45	12.50	12.37
Mazowieckie	8.49	9.71	11.17	13.91	14.99
Opolskie	6.35	7.03	8.90	11.20	14.07
Podkarpackie	3.76	4.75	4.62	6.55	8.03
Podlaskie	7.14	9.47	9.46	11.12	12.77
Pomorskie	7.02	8.20	11.20	13.03	14.75
Śląskie	6.11	7.18	8.83	13.42	13.94
Świętokrzyskie	5.50	5.86	6.89	8.17	8.78
Warmińsko-mazurskie	5.80	6.16	7.79	9.44	10.61
Wielkopolskie	10.67	11.84	14.05	18.47	20.96
Zachodniopomorskie	4.88	5.46	6.36	7.85	9.71
Total	6.99	7.70	9.72	11.89	14.01

Source: Own elaboration based on ARMA's data.

Table 1.2.2.37. Credits granted for the purchase of agricultural land in order to increase the farm size in the case of special sectors of agricultural production (KZ/01d) in 2010-2013 (amount and average in PLN thousand)

Voivodeship	2010			2011			2012			2013		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	1	111.6	111.6	0	0.0	,0.0	0	0.0	,0.0	1	122.0	122.0
Kujawsko-pomorskie	0	0.0	,0.0	9	1,134.2	126.0	3	698.6	232.9	2	364.3	182.1
Lubelskie	2	188.3	94.1	2	167.7	83.8	0	0.0	,0.0	0	0.0	,0.0
Lubuskie	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0	1	165.0	165.0
Łódzkie	2	183.7	91.9	4	606.5	151.6	2	521.8	260.9	6	1,552.0	258.7
Małopolskie	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0
Mazowieckie	6	425.7	71.0	0	0.0	,0.0	4	349.5	87.4	3	202.0	67.3
Opolskie	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0	1	84.3	84.3
Podkarpackie	1	87.3	87.3	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0
Podlaskie	0	0.0	,0.0	2	168.0	84.0	6	709.5	118.3	0	0.0	,0.0
Pomorskie	1	46.2	46.2	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0
Śląskie	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0	0	0.0	,0.0
Świętokrzyskie	0	0.0	,0.0	0	0.0	,0.0	1	72.0	72.0	0	0.0	,0.0
Warmińsko-mazurskie	4	503.8	126.0	6	1,335.1	222.5	4	1,864.0	466.0	3	664.2	221.4
Wielkopolskie	2	1,313.1	656.6	1	365.0	365.0	1	298.0	298.0	4	1,036.0	259.0
Zachodniopomorskie	0	0.0	,0.0	2	976.5	488.3	0	0.0	,0.0	0	0.0	,0.0
Total	19	2,859.7	150.5	26	4,753.0	182.8	21	4,513.4	214.9	21	4,189.7	199.5

Source: Own elaboration based on ARMA's data.

In 2014, the rules of support using the line for the purchase of agricultural land were changed, which resulted in an introduction of new types of credits. Starting from this year state subsidies for these credits are part of *de minimis* aid granted to farmers. As so far, the credits to farms representing special sectors of agricultural production were unpopular (Tab. 1.2.2.38). Little interest also related to credits for creating new farms. In the case of credits for enlarging farms the interest in receiving them decreased several times in relation to 2013.

Table 1.2.2.38. Credits granted for the purchase of agricultural land in 2014*

Voivodeship	nKZ/03dM			nKZ/03rM			nKZ/04rM			Total		
	Number	Amount	Average	Number	Amount	Average	Number	Amount	Average	Surface (ha)	Price per 1 ha	No. ha
Dolnośląskie	0	0	-	144	27,354.4	190.0	2	310.7	155.4	1,415	19.6	9.7
Kujawsko-pomorskie	4	841.9	210.5	220	41,936.2	190.6	5	2,090.0	418.0	1,823	24.6	8.0
Lubelskie	0	0	-	122	11,144.6	91.3	8	1,026.8	128.4	754	16.1	5.8
Lubuskie	0	0	-	24	5,612.0	233.8	1	1,500.0	1,500.0	426	16.7	17.0
Łódzkie	2	262.8	131.4	109	13,287.5	121.9	3	401.4	133.8	706	19.8	6.2
Małopolskie	0	0	-	5	867.2	173.4	0	0.0	-	42	20.6	8.4
Mazowieckie	0	0	-	205	28,091.9	137.0	5	1,324.5	264.9	1,204	24.4	5.7
Opolskie	0	0	-	43	8,819.8	205.1	3	1,250.0	416.7	339	29.7	7.4
Podkarpackie	0	0	-	10	1,550.9	155.1	2	715.4	357.7	149	15.2	12.4
Podlaskie	0	0	-	105	15,546.4	148.1	1	210.0	210.0	5,250	3.0	49.5
Pomorskie	0	0	-	68	15,774.5	232.0	0	0.0	-	568	28.7	8.2
Śląskie	0	0	-	6	1,249.1	208.2	0	0.0	-	40	31.2	6.7
Świętokrzyskie	0	0	-	46	4,173.0	90.7	0	0.0	-	335	12.5	7.3
Warmińsko-mazurskie	0	0	-	68	18,231.0	268.1	3	1,819.2	606.4	956	21.0	13.5
Wielkopolskie	2	262	131.0	159	30,544.0	192.1	5	2,349.0	469.8	1,736	19.1	10.5
Zachodniopomorskie	0	0	-	50	9,628.1	192.6	1	1,500.0	1,500.0	725	15.3	14.2
Total	8	1,366.7	170.8	1,384	233,810.3	168.9	39	14,497.0	371.7	16,468	15.2	11.5

*The line nKZ/04dM is omitted here as there was only 1 credit granted. Its amount was PLN 552,800 and it was granted in pomorskie.

Source: Own elaboration based on ARMA's data.

Investment credits for farms (IP/01 and nIP/01)

This line is also called basic investment credits. Within its framework functioned following credit categories:

- IP/02 and nIP/02 – investment credits for agricultural and food processing;
- IP/03 – investment credits for services to agriculture;
- IP/04 and nIP/04 – investment credits for special sectors of agricultural production;
- IP/05 – investment credits for the development of agri-tourism;
- nIP/05 – investment credits for the purchase of stocks and shares;
- IP/06 – mixed investment credits;
- nIP/06 – investment credits for establishing a farm.

Basic investment loans offered by the end of April 2007, attracted considerable interest (Tab. 1.2.2.39). Every year several thousands of farmers benefited from them. This number decreased several times after the introduction of new rules for granting these credits, but the average amount of credit increased. Both before and after changing the rules for crediting the largest number of borrowers came from mazowieckie, kujawsko-pomorskie and podlaskie (Tab. 1.2.2.40).

Table 1.2.2.39. Investment credits for farms (IP/01 and nIP/01) granted in 2005-2008 (amount and average, PLN thousand)

Voivodeship	2005			2006			2007			2007n			2008		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	254	16,302.0	64.2	316	31,361.4	99.2	157	16,551.2	105.4	39	6,173.4	158.3	77	12,164.2	158.0
Kujawsko-pomorskie	541	26,285.3	48.6	478	32,706.3	68.4	349	25,330.5	72.6	106	7,747.3	73.1	112	10,175.3	90.9
Lubelskie	544	14,924.7	27.4	618	25,339.9	41.0	369	20,140.2	54.6	69	4,866.8	70.5	87	9,853.6	113.3
Lubuskie	52	8,984.9	172.8	92	13,521.3	147.0	50	7,927.5	158.6	16	2,094.9	130.9	22	2,814.0	127.9
Łódzkie	333	10,273.4	30.9	331	15,881.9	48.0	204	11,458.9	56.2	32	2,592.9	81.0	64	9,543.7	149.1
Małopolskie	45	2,124.4	47.2	47	2,842.6	60.5	30	2,189.0	73.0	4	607.6	151.9	8	2,056.2	257.0
Mazowieckie	735	31,272.6	42.5	907	47,710.5	52.6	576	50,464.4	87.6	137	11,897.6	86.8	172	12,345.5	71.8
Opolskie	152	13,653.7	89.8	176	18,693.9	106.2	123	15,998.7	130.1	61	10,013.2	164.2	74	14,366.1	194.1
Podkarpackie	20	1,338.5	66.9	47	2,691.7	57.3	38	3,128.2	82.3	9	974.4	108.3	14	1,874.0	133.9
Podlaskie	485	21,254.0	43.8	456	25,946.6	56.9	338	24,369.7	72.1	138	12,222.0	88.6	151	11,847.9	78.5
Pomorskie	221	23,627.1	106.9	237	30,527.1	128.8	150	18,829.5	125.5	30	3,139.6	104.7	33	4,629.7	140.3
Śląskie	23	1,545.9	67.2	28	2,467.5	88.1	24	2,259.7	94.2	8	1,526.9	190.9	8	1,110.6	138.8
Świętokrzyskie	181	3,752.7	20.7	224	4,564.1	20.4	132	4,134.6	31.3	15	741.0	49.4	24	2,792.0	116.3
Warmińsko-mazurskie	174	16,149.8	92.8	257	38,956.7	151.6	209	25,155.2	120.4	42	4,736.2	112.8	68	8,150.6	119.9
Wielkopolskie	517	42,117.6	81.5	481	37,613.6	78.2	313	31,922.7	102.0	89	11,636.8	130.8	136	12,182.8	89.6
Zachodniopomorskie	97	9,450.3	97.4	248	31,931.3	128.8	139	22,425.5	161.3	70	9,344.0	133.5	66	13,280.5	201.2
Total	4,374	243,056.6	55.6	4,943	362,756.3	73.4	3,201	282,285.6	88.2	865	90,314.4	104.4	1,116	129,186.6	115.8

Source: Own elaboration based on ARMA's data.

Table 1.2.2.40. Investment credits for farms (IP/01 and nIP/01) granted in 2008-2014
(amount and average in PLN thousand)

Voivodeship	2009			2010			2011			2012			2013			2014		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	51	6,969.8	136.7	53	8,636.4	163.0	70	12,865.7	183.8	64	17,020.9	266.0	98	22,909.9	233.8	55	14,506.0	263.7
Kujawsko-pomorskie	93	9,421.2	101.3	137	13,132.2	95.9	136	12,454.0	91.6	84	12,460.7	148.3	169	22,827.8	135.1	81	14,049.9	173.5
Lubelskie	67	6,244.6	93.2	91	8,161.9	89.7	88	8,583.0	97.5	77	10,588.2	137.5	106	13,522.0	127.6	44	7,100.1	161.4
Lubuskie	12	1,838.8	153.2	21	2,739.5	130.5	16	3,190.8	199.4	16	4,761.6	297.6	25	6,537.8	261.5	18	3,541.8	196.8
Łódzkie	67	7,042.1	105.1	78	6,179.4	79.2	38	3,942.4	103.7	50	6,155.8	123.1	77	9,928.0	128.9	41	12,651.9	308.6
Małopolskie	3	360.0	120.0	6	1,756.8	292.8	4	730.8	182.7	6	843.3	140.6	7	4,866.4	695.2	4	2,270.0	567.5
Mazowieckie	144	10,110.5	70.2	206	19,016.6	92.3	157	17,080.8	108.8	133	21,591.9	162.3	204	30,174.2	147.9	144	18,823.5	130.7
Opolskie	65	10,067.1	154.9	68	10,308.2	151.6	59	10,298.6	174.6	73	13,256.1	181.6	90	13,580.2	150.9	43	9,452.3	219.8
Podkarpackie	9	699.0	77.7	7	1,587.0	226.7	4	279.7	69.9	4	262.8	65.7	5	1,252.2	250.4	6	1,109.9	185.0
Podlaskie	84	6,560.5	78.1	109	8,587.0	78.8	105	11,706.7	111.5	60	8,813.7	146.9	110	14,369.5	130.6	53	8,586.1	162.0
Pomorskie	34	3,873.1	113.9	47	5,971.5	127.1	39	3,397.3	87.1	28	3,520.1	125.7	46	6,782.6	147.4	21	4,549.7	216.7
Śląskie	5	524.0	104.8	9	851.8	94.6	6	679.3	113.2	3	790.0	263.3	14	4,065.0	290.4	6	1,060.3	176.7
Świętokrzyskie	24	1,332.4	55.5	23	2,156.1	93.7	25	4,048.3	161.9	13	1,241.7	95.5	24	3,188.5	132.9	12	1,626.7	135.6
Warmińsko-mazurskie	55	5,394.3	98.1	60	6,736.2	112.3	69	7,713.3	111.8	51	8,081.1	158.5	104	14,179.7	136.3	38	4,433.0	116.7
Wielkopolskie	115	11,064.7	96.2	153	23,139.2	151.2	151	23,550.3	156.0	113	23,550.4	208.4	185	40,018.5	216.3	111	18,894.8	170.2
Zachodniopomorskie	68	14,042.4	206.5	90	17,233.5	191.5	99	15,826.1	159.9	78	12,124.6	155.4	88	14,468.9	164.4	58	11,249.6	194.0
Total	896	95,544.4	106.6	1,158	136,193.2	117.6	1,066	136,346.8	127.9	853	145,062.8	170.1	1,352	222,670.9	164.7	735	133,903.7	182.2

Source: Own elaboration based on ARMA's data.

Loans to young farmers for establishing (MR/01 and nMR/01) or equipping farms (MR/02 and nMR/02)

Credits to young farmers are among the most popular types of preferential credits, however, support for establishing a farm does not attract nearly as much interest among borrowers. In the years 2005-2007, number of credits granted each year did not exceed 150 (Tab. 1.2.2.41) and their average amount ranged from PLN 300,000 to 550,000. In 2007, under new rules for lending, the average amount of credit fell below PLN 200,000. In 2008, however, it increased to almost PLN 300,000.

In the period 2009-2014, large fluctuations in the number of this type of credits was observed (Tab. 1.2.2.42). In the years 2009-2012, the number of credits granted annually did not exceed 190, and their average amount ranged from PLN 270,000 to 370,000. In 2013, there was a significant decrease in the number of credits, but their average amount reached nearly PLN 400,000. By contrast, in 2014, the number of credits dropped seven times compared to the previous year, and the average amount of credit did not exceed PLN 300,000.

As for the much more popular credits for installation on farms, in the period 2005-2008, their number in any year exceeded several thousand (Tab. 1.2.2.43). In 2005, the total number of these loans exceeded 8.2 thousand with an average loan amount of PLN 124,500. More than 1/4 of these credits were granted in mazowieckie, where the average amount of credit was PLN 111,300. More than 1,000 credits were granted in two voivodeships: podlaskie and lubelskie. In total, these three voivodeships accounted for about half of all credits granted this year under this line.

In 2006, as many as 9,800 credits were granted – an average amount of PLN 140,000. Almost 60% of them were granted to borrowers representing four out of sixteen Polish voivodeships. These were: mazowieckie, podlaskie, lubelskie and wielkopolskie. In 2007, in the period January-April, when the so far existing rules for granting preferential credits, nearly 7,600 credits were granted and their average amount exceeded PLN 152,000. In the same year, under the new rules for granting credits, over 2,800 borrowers received them. During the whole year, the largest number of borrowers came from mazowieckie. In 2008, there were 6,000 credits for equipping farms granted, of which more than 1,300 were credits for farmers from mazowieckie voivodship. The average amount of credits granted in this year amounted to PLN 169,000.

In 2009, the number of credits of this type fell by more than half, to more than 2,900 (Tab. 1.2.2.44). At the same time, however, significantly increased the average amount of credits, which amounted to nearly PLN 198,000. The largest number of credits – approx. 1/6 of them in this line contracted this year

were the credits to borrowers from mazowieckie. At the same time, an average amount of these credits, which amounted to PLN 213,100, was observed in this voivodeship in comparison with others. In the next year, the number of credits increased slightly and exceeded 3,300. However, an average amount of credit decreased to PLN 170,300. Again, most credits were granted in mazowieckie, however, their average amount was lower than for the whole population of credits and amounted only to PLN 132,800. In 2011, the number of credits increased by approx. 1/3 to nearly 4,500, with an average amount of credits totaling PLN 193,500. Once again, most credits were granted in mazowieckie voivodeship, although their average amount was lower than in the entire group of borrowers and amounted to PLN 165,400. In 2012, the number of credits given fell to 3,700, with an average amount of credit at the level of PLN 222,400. Also in this year, most credits were granted for borrowers from mazowieckie voivodeship. Their average amount was PLN 212,300. In 2013, the number of credits fell sharply to 2,900, with an average amount of credit amounting to PLN 265,500. The largest number of credits were granted in mazowieckie, where they amounted to an average of PLN 269,200. In the last of the analysed years, the number of credits fell by more than a half to 1,300 and their average amount reached PLN 276,100. This year, the largest number of credits were granted in wielkopolskie voivodeship, although a little less of them were granted in mazowieckie voivodeship. With a similar number of credits, the average amount of credits in both voivodeships was different. In wielkopolskie voivodeship this average amounted to PLN 252,800, and in mazowieckie to PLN 314,600.

Within the credits to young farmers there were or still are following types of credits:

- nMR/01d – credits for establishing farms in special sectors of agricultural production (since 2010);
- nMR/02d – credits for equipping farms in special sectors of agricultural production (since 2010);
- nMR/nIPr – credits for establishing or equipping farms with subsidies reduced to the level of credits in the line nIP (2009).

Table 1.2.2.41. Preferential credits to young farmers for establishing agricultural holdings (MR/02) in 2005-2008 (amount and average in PLN thousand)

Voivodeship	2005			2006			2007			2007n			2008		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	10	1,819.9	182.0	4	2,957.0	739.2	2	216.4	108	11	2,557.8	232.5	11	2,609.3	237.2
Kujawsko-pomorskie	16	4,398.1	274.9	7	1,679.9	240.0	6	2,011.9	335	9	3,464.5	384.9	16	7,414.2	463.4
Lubelskie	15	1,213.0	80.9	13	2,007.1	154.4	9	3,107.5	345	16	1,732.1	108.3	45	7,961.9	176.9
Lubuskie	2	3,055.4	1,527.7	3	3,008.0	1002.7	3	8,133.6	2711	2	588.0	294.0	6	1,143.3	190.5
Łódzkie	17	3,171.6	186.6	15	3,870.3	258.0	5	2,066.2	413	12	2,484.5	207.0	25	4,812.5	192.5
Małopolskie	1	49.0	49.0	0	0.0	-	1	21.9	22	0	0.0	-	1	184.0	184.0
Mazowieckie	25	5,682.4	227.3	21	6,132.8	292.0	7	6,099.1	871	20	3,388.1	169.4	28	12,095.8	432.0
Opolskie	0	0.0	-	1	1,876.6	1876.6	0	0.0	-	9	3,025.4	336.2	4	973.3	243.3
Podkarpackie	3	192.7	64.2	4	4,304.8	1076.2	1	250.0	250	1	50.0	50.0	3	369.4	123.1
Podlaskie	8	1,676.7	209.6	5	4,646.6	929.3	2	253.9	127	8	1,332.1	166.5	16	2,388.4	149.3
Pomorskie	9	1,438.7	159.9	8	3,388.9	423.6	3	662.6	221	2	510.0	255.0	12	5,328.0	444.0
Śląskie	2	533.4	266.7	2	761.6	380.8	3	525.0	175	2	66.0	33.0	5	805.1	161.0
Świętokrzyskie	1	58.9	58.9	6	731.8	122.0	1	118.0	118	5	369.2	73.8	6	1,175.9	196.0
Warmińsko-mazurskie	11	2,863.1	260.3	16	4,175.8	261.0	7	3,546.7	507	13	1,858.1	142.9	12	3,813.8	317.8
Wielkopolskie	19	12,906.2	679.3	9	5,363.7	596.0	5	3,417.0	683	9	709.0	78.8	22	8,246.0	374.8
Zachodniopomorskie	5	1,992.7	398.5	9	4,246.7	471.9	4	1,429.2	357	4	289.9	72.5	9	2,856.6	317.4
Total	144	41,051.7	285.1	123	49,151.3	399.6	59	31,858.9	540	123	22,424.7	182.3	221	62,177.5	281.3

Source: Own elaboration based on ARMA's data.

Table 1.2.2.42. Preferential credits to young farmers for establishing agricultural holdings (MR/02) in 2009–2014 (amount and average in PLN thousand)

Voivodeship	2009			2010			2011			2012			2013			2014		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	1	189.8	189.8	6	2,350.5	391.7	8	1,402.2	175.3	2	6,496.0	3,248.0	2	1,716.1	858.0	1	20.0	20.0
Kujawsko-pomorskie	14	3,478.5	248.5	10	2,390.5	239.0	18	5,147.5	286.0	16	2,956.7	184.8	8	3,785.0	473.1	2	260.8	130.4
Lubelskie	21	2,857.3	136.1	19	2,684.6	141.3	25	3,398.7	135.9	12	1,584.7	132.1	15	3,483.0	232.2	2	331.1	165.6
Lubuskie	3	2,775.1	925.0	6	1,918.8	319.8	2	700.6	350.3	2	457.3	228.6	2	464.0	232.0	0	0.0	-
Łódzkie	17	8,111.8	477.2	16	5,149.7	321.9	21	3,853.8	183.5	17	2,689.4	158.2	10	3,558.2	355.8	1	285.1	285.1
Miętopolskie	0	0.0	-	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Mazowieckie	27	6,746.6	249.9	14	2,924.4	208.9	32	7,316.1	228.6	16	2,530.2	158.1	15	6,237.5	415.8	0	0.0	-
Opolskie	5	1,483.7	296.7	5	1,441.2	288.2	9	7,732.7	859.2	1	260.6	260.6	1	292.0	292.0	0	0.0	-
Podkarpackie	2	406.2	203.1	1	200.0	200.0	1	39.6	39.6	0	0.0	0.0	0	0.0	0.0	0	0.0	-
Podlaskie	5	1,511.3	302.3	5	1,114.5	222.9	12	6,304.8	525.4	10	3,606.1	360.6	4	2,079.7	519.9	1	1,058.0	1,058.0
Pomorskie	6	1,546.5	257.7	4	678.0	169.5	13	7,434.2	571.9	6	1,018.0	169.7	3	909.8	303.3	0	0.0	-
Śląskie	2	664.0	332.0	2	549.0	274.5	3	759.6	253.2	1	250.0	250.0	0	0.0	0.0	1	321.0	321.0
Świętokrzyskie	2	216.4	108.2	3	947.8	315.9	2	229.6	114.8	2	454.0	227.0	2	330.4	165.2	0	0.0	-
Warmińsko-mazurskie	11	9,585.8	871.4	5	1,926.2	385.2	16	16,710.7	1,044.4	11	3,416.0	310.5	4	707.0	176.8	4	1,257.8	314.5
Wielkopolskie	7	4,452.2	636.0	14	7,065.3	504.7	15	6,244.2	416.3	13	3,519.9	270.8	18	9,790.8	543.9	0	0.0	-
Zachodniopomorskie	4	2,497.6	624.4	7	3,715.0	530.7	11	2,656.2	241.5	3	524.0	174.7	0	0.0	0.0	0	0.0	-
Total	127	46,522.8	366.3	117	35,055.3	299.6	188	69,930.5	372.0	112	29,762.9	265.7	84	33,353.3	397.1	12	3,533.8	294.5

Source: Own elaboration based on ARMA's data.

Table 1.2.2.43. Preferential credits to young farmers for equipping (KZ/02 and nKZ/02) in 2005-2008 (amount and average in PLN thousand)

Voivodeship	2005			2006			2007			2007n			2008		
	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average	No.	Amount	Average
Dolnośląskie	158	22,726.4	143.8	195	36,211.5	185.7	159	27,108.5	170.5	71	11,336.2	159.7	238	38,654.3	162.4
Kujawsko-pomorskie	537	61,394.0	114.3	687	82,733.3	120.4	602	80,126.8	133.1	233	38,220.7	164.0	476	84,097.4	176.7
Lubelskie	1,037	113,380.8	109.3	1,206	117,490.4	97.4	918	121,238.2	132.1	280	29,161.1	104.1	710	94,909.5	133.7
Lubuskie	95	19,730.4	207.7	122	25,312.6	207.5	91	24,505.9	269.3	35	15,066.0	430.5	63	26,563.3	421.6
Łódzkie	720	79,287.0	110.1	915	104,604.0	114.3	692	91,706.3	132.5	292	34,138.5	116.9	559	73,143.2	130.8
Małopolskie	82	8,207.4	100.1	87	12,967.3	149.0	75	8,644.1	115.3	20	1,645.8	82.3	61	12,621.5	206.9
Mazowieckie	2,096	233,205.3	111.3	2,300	316,728.4	137.7	1,659	235,693.4	142.1	608	88,634.9	145.8	1,310	194,917.2	148.8
Opolskie	233	28,628.8	122.9	287	38,722.3	134.9	230	38,282.5	166.4	117	16,916.0	144.6	209	33,793.0	161.7
Podkarpackie	56	8,006.2	143.0	96	9,123.4	95.0	81	14,388.9	177.6	50	7,937.4	158.7	87	17,323.9	199.1
Podlaskie	1,018	121,534.4	119.4	1,182	152,071.7	128.7	839	112,952.3	134.6	394	50,537.4	128.3	710	114,548.4	161.3
Pomorskie	308	33,773.7	109.7	329	44,594.9	135.5	286	34,834.2	121.8	137	21,162.1	154.5	221	38,150.3	172.6
Śląskie	110	23,439.3	213.1	137	24,436.1	178.4	95	25,615.5	269.6	39	10,371.2	265.9	98	28,086.0	286.6
Świętokrzyskie	142	13,049.7	91.9	208	23,103.5	111.1	206	20,636.8	100.2	73	7,553.6	103.5	117	13,386.5	114.4
Warmińsko-mazurskie	575	90,460.9	157.3	661	116,653.3	176.5	536	106,964.8	199.6	168	30,090.2	179.1	373	81,774.4	219.2
Wielkopolskie	904	147,583.2	163.3	1,168	222,733.9	190.7	951	186,451.9	196.1	276	41,124.5	149.0	639	127,064.7	198.8
Zachodniopomorskie	150	19,301.4	128.7	230	44,515.0	193.5	165	29,797.3	180.6	56	8,717.7	155.7	131	36,742.4	280.5
Total	8,221	1,023,708.7	124.5	9,810	1,372,001.6	139.9	7,585	1,158,947.3	152.8	2,849	412,613.4	144.8	6,002	1,015,776.0	169.2

Source: Own elaboration based on ARMA's data.

Table 1.2.2.44. Preferential credits to young farmers for equipping farms (KZ/02 and nKZ/02) in 2009-2014 (amount and average in PLN thousand)

Voivodeship	2009		2010		2011		2012		2013		2014			
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount		
Dolnośląskie	107	20,591.5	129	22,151.9	182	39,086.8	214.8	46,462.0	238.3	44,137.1	265.9	51	10,702.9	
Kujawsko-pomorskie	235	49,594.0	246	39,372.4	411	84,349.8	205.2	71,516.5	224.2	66,672.8	236.4	164	37,113.0	
Lubelskie	331	52,306.5	358	40,344.8	367	54,266.6	147.9	53,524.8	156.0	62,417.8	226.2	73	15,373.7	
Lubuskie	31	11,968.9	386.1	54	16,934.4	313.6	48	8,437.4	175.8	42	17,346.6	413.0	40	12,510.9
Łódzkie	336	47,873.6	142.5	373	55,030.0	147.5	407	73,079.4	179.6	325	60,961.0	187.6	238	59,540.8
Małopolskie	26	5,368.1	206.5	26	3,821.1	147.0	20	4,505.0	225.3	35	5,888.6	168.2	7	1,802.6
Mazowieckie	570	121,489.0	213.1	712	94,535.4	132.8	919	151,979.8	165.4	667	141,627.6	212.3	501	134,851.5
Opolskie	119	21,665.1	182.1	102	16,695.1	163.7	171	32,818.2	191.9	189	32,891.7	174.0	121	22,903.9
Podkarpackie	46	6,992.9	152.0	30	6,458.6	215.3	22	3,611.1	164.1	26	5,863.7	225.5	30	6,697.4
Podlaskie	297	53,465.7	180.0	402	76,042.9	189.2	565	112,733.5	199.5	386	96,225.1	249.3	295	88,162.2
Pomorskie	122	25,627.0	210.1	118	27,008.4	228.9	189	43,967.3	232.6	209	55,059.2	263.4	163	40,066.7
Śląskie	57	15,943.3	279.7	39	9,195.1	235.8	37	8,658.6	234.0	29	7,741.3	266.9	29	9,962.9
Świętokrzyskie	93	10,265.5	110.4	87	14,727.8	169.3	102	19,881.7	194.9	72	13,282.8	184.5	59	10,724.2
Warmińsko-mazurskie	171	44,807.8	262.0	207	52,172.1	252.0	294	82,580.0	280.9	281	84,391.8	300.3	218	69,125.4
Wielkopolskie	338	79,503.8	235.2	400	76,382.4	191.0	624	120,806.4	193.6	530	119,320.0	225.1	404	120,959.8
Zachodniopomorskie	74	16,974.6	229.4	109	26,787.2	245.8	97	21,261.6	219.2	101	21,499.7	212.9	110	29,913.8
Total	2,953	584,437.3	197.9	3,392	577,659.5	170.3	4,455	862,023.2	193.5	3,749	833,602.4	222.4	2,939	780,449.7

Source: Own elaboration based on ARMA's data.

Other lines of preferential investment credits

In addition to credit lines already discussed, among other lines of investment preferential credits there were or still are following credit lines:

- branch credits³⁶, which include: credits under the “Sectoral programme of joint use of machinery and equipment” – symbol BR/10; credits under the “Industry restructuring programme concerning potato starch processing in Poland” – BR/13; credits under the “Programme to support the restructuring and modernization of the meat industry and egg processing in Poland” – BR/14; credits under the “Sectoral programme for dairy sector” – BR/15; credits under the “Sectoral programme to support the restructuring and modernization of the rendering industry in Poland” – BR/16. Branch credits were withdrawn in 2007 with a change in credit rules, but in 2008, all of these credits were restored;
- credits for investments in agriculture and processing of agricultural products by agricultural producer groups – nGP;
- credits for purchasing agricultural land earmarked for establishing or increasing a family farm within the meaning of the Act of 11 April 2003 on shaping the agricultural system (Dz.U. 2003, no. 64, pos. 592) – nGR;
- credits for establishing or equipping farms in the framework of the programme of agricultural settlement on the land belonging to the Treasury, approved by the minister responsible for rural development and the minister for public finance – nOR.

All of these preferential credits existed or still exist as returnable instruments in respect of which aid consists of subsidies from public funds to interest on these credits. However, in the context of the rules changes introduced in 2009 under § 3.1 point 2 of the Council of Ministers regulation of 22 January 2009 on the implementation of certain tasks of the Agency for Restructuring and Modernisation of Agriculture (Dz.U. no. 22, pos. 121 with amendments) also possible is the assistance in the form of a partial repayment of principal. As for the line of credits with partial repayment of principal – line CSK. This type of aid does not exceed 35% of the credit, and does not exceed PLN 75,000. This support is paid in two instalments – first instalment – 75% of the amount, the second instalment – 25%.

Currently, the maximum amount of credit is determined as a percentage of the value of the planned investment (that is, the amount of investment) and the maximum amount stipulated for each line and it reaches:

³⁶ Current rules for granting preferential credits are defined in the document: *Rules for granting preferential loans* introduced in the decree no. 12/2015 of the President of ARMA on 12 March 2015.

- 80% of the investment input per farm (90% – line nGR), but not more than PLN 4 million;
- 70% of the value of investment in specific sectors of agricultural production, but not more than PLN 8 million;
- 70% of the value of investment in agricultural product processing, but not more than PLN 16 million;
- 80% of the value of shares of companies engaged in the processing of agricultural products or processing of fish, crustaceans and molluscs, but not more than PLN 4 million (line nIP) or PLN 5 million (line nGP);
- 80% of the value of shares of sole shareholder companies of the Treasury created for the business of artificial insemination, but not more than PLN 4 million.

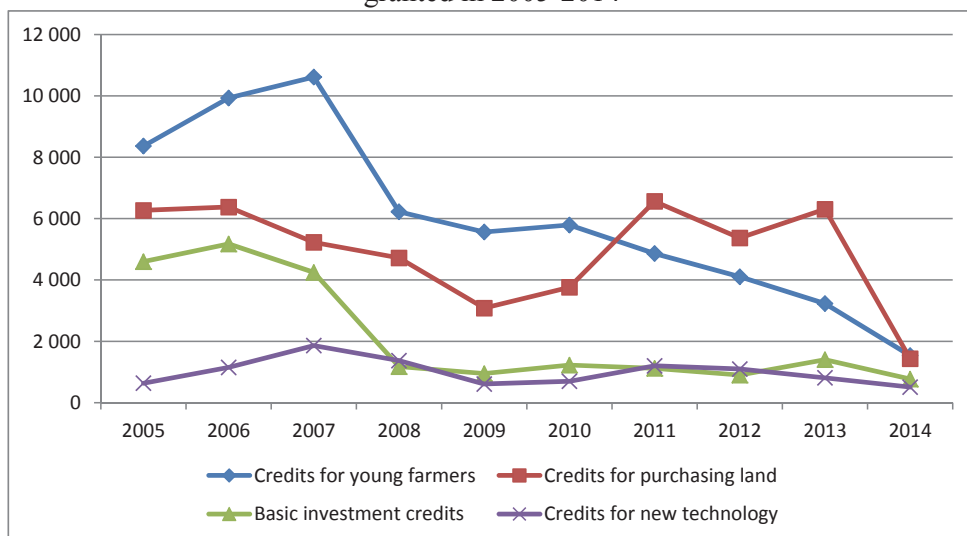
The crediting period is also dependent on the credit line and amount to:

- Credits for purchasing agricultural land earmarked for establishing or increasing the size of a family farm (nGR) – 20 years (grace period for repayment of the credit – 2 years);
- Credits to young farmers (nMR), credits for agricultural producer groups (nGP), credits for purchasing agricultural land (nKZ) and credits for new technology (nNT) – 15 years (grace period: nMR, nKZ and nNT – 2 years, nGP – 3 years);
- Basic investment credits (nIP) and branch credits (nBR) – 8 years (grace period for nIP – 2 years, for nBR – 3 years).

In the analysed period, significantly changed not only the lending rules, but also the interest rate paid and the number of cooperating banks. In 2005, ARMA cooperated with 16 banks and in 2012 only 6, while only 5 of them offered credits with partial repayment of principal. These were banks granting a small number of preferential credits that stopped cooperation with ARMA. In addition to the decrease in the number of financial institutions cooperating with the Agency also led the process of consolidation of the financial sector.

The total number of preferential investment credits granted in each year of the analysed period was systematically decreasing (Fig. 1.2.2.1). This also applied to the most popular credit lines. A significant decrease accompanied the introduction of new rules for lending in connection with the resulting from the EU Accession Treaty necessity to adapt national aid to the EU rules. This decline deepened in 2009-2010, when agriculture was sensing the global financial and economic crisis.

Figure 1.2.2.1. Number of preferential investment credits of the main credit lines granted in 2005-2014

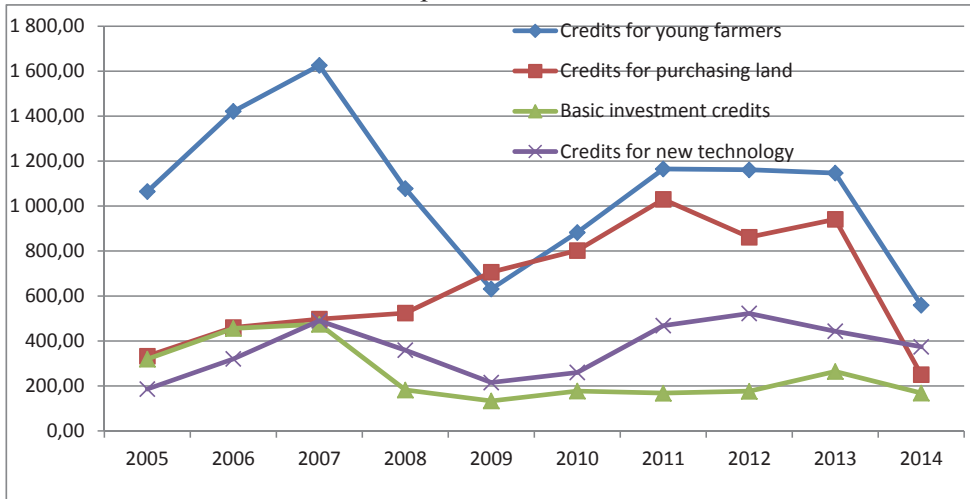


Source: Own elaboration based on ARMA's data.

Changes in the total amount of funds granted under the main credit lines looked a bit different than the number of granted credits (Fig. 1.2.2.2). In the case of most of the credit lines, as in the case of the number of credits, after 2007 there was a sharp decline in the amount of credits granted. An exception were credits for purchasing agricultural land, whose total amount increased in 2008 and was steadily increasing until 2011. Another sharp decline in the amount of credits granted occurred in 2014. This year the value of credits granted within all the main credit lines decreased. With the exception of 2009, throughout the period analysed, the majority of funds was earmarked for credits to young farmers. Also in relation to this credit line, the highest decrease in the amount of credits granted was observed. In 2007-2009, the total amount of credits granted each year within this credit line dropped from PLN 1.6 billion to only PLN 0.6 billion.

In the case of credits for purchasing agricultural land there was also a significant increase and a subsequent decrease in the total amount of credits, but it was spread over time. The amount of funds allocated for these credits increased from PLN 332 million in 2005 to PLN 1,029 million in 2011. However, in 2014 there was a sharp decline to PLN 250 million from over PLN 940 million a year earlier.

Figure 1.2.2.2 Amount of preferential credits of the main credit lines granted in the period 2005-2014



Source: Own elaboration based on ARMA's data.

Analysis of the scale and changes in lending in the period under examination on the main credit lines showed that in many cases several voivodeships could be named, in which the number of credits granted reached even ten percent of their total number. Comparing the relationship between the level of direct payments received in the campaign of a given year in relation to the amount of investment credits granted in the same year shows that there were very large regional differences (Tab. 1.2.2.45). For three years presented in the table in the six voivodeships, the ratio of the total amount of investment credits granted to direct payments was higher than the average for the whole country. Considering the amount of direct payments received (only single area payments were taken into account) as a synthetic indicator of the size of agriculture, a higher level of relation between credits and payments should be considered as an expression of a higher than the average level of investment activity, which may also translate into higher activity in trying to improve competitiveness.

Among the voivodeships with increased activity in the use of preferential investment credits, were ones which also showed high activity in obtaining support from the EU funds offered under rural development programmes.

Such a significant decrease in the ratio between preferential credits and payments resulted mainly from a systematic increase in the level of direct payments obtained and not from a decrease in the amount of credits, though, this also affected the level of this relation. However, the amount of payments in-

creased for the whole country four times in the analysed period, while the amount of loans in 2014 was only approx. 1/5 lower than in 2005.

Table 1.2.2.45. Relation between preferential investment credits granted and direct payments paid in each campaign (in percent)

Voivodeship	2005	2010	2014
Dolnośląskie	33.2	27.8	9.2
Kujawsko-pomorskie	68.7	38.9	16.8
Lubelskie	54.7	16.1	4.3
Lubuskie	50.8	34.1	9.7
Łódzkie	52.3	25.8	12.2
Małopolskie	11.7	7.4	2.4
Mazowieckie	85.2	34.7	16.7
Opolskie	64.1	36.3	8.7
Podkarpackie	11.7	10.3	1.8
Podlaskie	77.9	32.9	16.1
Pomorskie	61.3	36.1	12.4
Śląskie	55.9	27.2	6.0
Świętokrzyskie	22.3	11.1	4.7
Warmińsko-mazurskie	72.0	36.8	15.7
Wielkopolskie	78.5	43.5	21.2
Zachodniopomorskie	42.4	33.5	9.1
Total	59.9	30.5	12.3

Source: Own elaboration based on ARMA's data.

Direct payments are not an instrument of predetermined use, so that their beneficiaries can use them both for investment purposes on their farms, as well as for any other purposes not necessarily related to their agricultural activity. Therefore, in order to better show the scale lending from the point of view of the sector we should also compare its level with investment support offered within the framework of the rural development programmes. When making this comparison, however, we should bear in mind that assistance under the measure 121 "Investments in agricultural holdings", one of the measures implemented within the Polish RDP 2007-2013 was implemented on the basis of the approved appropriation of funds among the voivodeships, which means that the scale of funds raised by each voivodeship was not only the result of the activity of its farmers in applying for investment support.

The total amount of funds transferred in the period 2008-2014 to beneficiaries of the measure 121 "Investments in agricultural holdings" was more than eight times higher than the total sum of credits for investments within the line nIP/01 granted in this period (Tab. 1.2.2.46). The relation between the amount

of credits and investment support under measure 121 clearly shows regions with higher activity in applying for credits, which in part was also a result of the eligibility criteria of both of these types of aid and of the limit of support under the measure 121. The largest difference in the level of relation between investment credits and RDP funds occurred in the case of zachodniopomorskie and opolskie, where it was more than three times higher than the national average.

Table 1.2.2.46. Amount of basic investment credits for farms (nIP/01) and of funds received under the measure 121 “Investment in agricultural holdings” in the years 2008-2014 (amounts in PLN thousand)

Voivodeship	Measure 121	Line nIP/01	Relation between nIP/01 and measure 121 (in %)
Dolnośląskie	383,541.2	95,072.8	24.8
Kujawsko-pomorskie	685,658.6	94,521.0	13.8
Lubelskie	959,618.8	64,053.4	6.7
Lubuskie	156,314.2	25,424.3	16.3
Łódzkie	706,237.2	55,443.2	7.9
Małopolskie	305,444.6	12,883.4	4.2
Mazowieckie	1,485,959.0	129,143.0	8.7
Opolskie	221,779.5	81,328.5	36.7
Podkarpackie	248,488.2	7,064.6	2.8
Podlaskie	766,277.4	70,471.4	9.2
Pomorskie	338,613.1	32,723.9	9.7
Śląskie	205,316.7	9,081.0	4.4
Świętokrzyskie	364,487.0	16,385.5	4.5
Warmińsko-mazurskie	436,924.8	54,688.0	12.5
Wielkopolskie	998,916.8	152,400.7	15.3
Zachodniopomorskie	255,953.7	98,225.6	38.4
Total	8,519,530.6	998,910.3	11.7

Source: Own elaboration based on ARMA's data.

Completely different looks the comparison of assistance to young farmers. In this case, the total amount of funds transferred to young farmers under the measure 112 “Setting up of young farmers” within the RDP 2007-2013 in the period 2008 to 2014 was more than 2.5 times lower than credits granted during this time within the preferential credit line to young farmers for equipping a farm – nMR/02 (Tab. 1.2.2.47). It is clear that in the voivodeships with the smallest average size of farms – podkarpackie and małopolskie – the amount received under the measure 112 exceeded the level of resources obtained as credits to young farmers.

Table 1.2.2.47. Amount of investment credits to young farmers for equipping a farm (NMR/02) and the measures 112 “Setting up of young farmers” in the years 2008-2014 (amounts in PLN thousand)

Voivodeship	Measure 112	Line nMR/02	Relation between measure 112 and nMR/02 (in %)
Dolnośląskie	56,550.0	221,786.5	25.5
Kujawsko-pomorskie	177,850.0	432,715.9	41.1
Lubelskie	224,650.0	373,143.7	60.2
Lubuskie	27,700.0	102,873.5	26.9
Łódzkie	152,350.0	409,411.6	37.2
Małopolskie	42,625.0	34,726.8	122.7
Mazowieckie	294,675.0	912,697.6	32.3
Opolskie	47,050.0	166,571.8	28.2
Podkarpackie	49,575.0	47,824.2	103.7
Podlaskie	166,100.0	594,203.5	28.0
Pomorskie	72,400.0	249,609.0	29.0
Śląskie	36,900.0	82,540.3	44.7
Świętokrzyskie	73,750.0	85,993.9	85.8
Warmińsko-mazurskie	87,600.0	443,909.3	19.7
Wielkopolskie	260,225.0	706,739.0	36.8
Zachodniopomorskie	49,525.0	166,568.6	29.7
Total	1,819,525.0	5,031,315.3	36.2

Source: Own elaboration based on ARMA's data.

It seems that these differences in the level of credit activity are not random and are based on the involvement of farmers in developing their agricultural activities and their efforts to improve the competitiveness of their farms. At the same time it shows the potential of farms in different voivodeships to reach for support implemented in the form of financial instruments, which should be taken into account in analyzing the possibilities of implementing such instruments in the Polish rural development programmes.

2. Fiscal multipliers

Measurement and analysis of the effects of implementation of the state policy take many different forms. One of them is estimating the fiscal multipliers. The aim of determining the values of these multipliers is to determine the scale of impact of state policy on the economy. It concerns the impact of fiscal policy, understood as the size and structure of budget expenditures and revenues. The impact of fiscal policy is reflected by its impact on aggregate demand

in the economy. The influence on aggregate demand is carried out through two main channels³⁷:

1. Financing investments and capital assets;
2. Labour market.

However, in recent literature another important channel is mentioned – the effect of increased expectations concerning the level of prosperity³⁸.

The nature of the impact of fiscal policy on economic prosperity is closely dependent on the nature of this policy. Economists distinguish two main types of fiscal policy: the pro-cyclical policy and the counter-cyclical policy³⁹. The pro-cyclical policy is a policy that leads to the deepening of the current phase of the business cycle, which is considered unfavourable for the development of the economic situation. Whereas in the case of the counter-cyclical policy we deal with the desire to limit the scale of fluctuations, which in turn helps stabilize the economic situation.

The pro-cyclical fiscal policy is expressed by the scale of government spending on consumption and by the level of tax rates⁴⁰. Pro-cyclicality is most commonly measured using two indicators. The first of them is a synthetic indicator – Hodrick-Prescott filter expressed by the formula:

$$CM = \left(\frac{1}{2}HPCorr\right) + \left(\frac{1}{2}AMP\right) \quad (2.1)$$

where:

HPCorr – pairwise correlation of the cyclical components of real government consumption and real GDP;

AMP – the amplitude of government consumption measured as the difference between the average growth rate of real government consumption in good and bad times, where good and bad times are defined as years with above and below trend growth. This amplitude is then normalized into the range [-1,1]. This measure has the task of separating the components of the pro-cyclical discretionary fiscal policy.

The second indicator is based on estimating the response function to the pursued fiscal policy and is expressed by the formula⁴¹:

³⁷ P.R. Tcherneva, (2014), *Reorienting fiscal policy: a bottom-up Approach*, “Journal of Post Keynesian Economics”, vol. 37 no.1, p. 49.

³⁸ *Ibidem*, p. 52.

³⁹ More profound studies distinguish also acyclical policy

⁴⁰ G. Kaminsky, C. Reinhart, C. Végh, (2004), *When it rains, it pours: procyclical capital flows and macroeconomic policies*, NBER Macroeconomics Annual, vol. 19, pp. 11-82.

⁴¹ Both formulas according to: R. McManus, F.G. Ozkan, (2015), *On the Consequences of Pro-Cyclical Fiscal Policy*, “Fiscal Studies”, vol. 36, no. 1, pp. 29-50.

$$\Delta \log(G_{i,t}) = \alpha_i + \beta_i \Delta \log(GDP_{i,t}) + \varepsilon_{i,t} \quad (2.2)$$

where:

$G_{i,t}$ – level of real government consumption;

GDP – real GDP;

i – country i ;

t – year t ;

α – constant;

β – estimate of cyclicity.

As research conducted by R. McManusa and F.G. Ozkana shows, procyclical financial policy not only has a negative impact on GDP growth, but can also increase the likelihood of financial crisis⁴².

In recent years one of the most discussed problems in the context of fiscal policy has been the size of fiscal multipliers. After a period of much less interest in this issue this discussion broke out anew in relation to the financial and economic crisis, which erupted in 2007. The concept of the fiscal multiplier first appeared in 1931 in Kahn's publication, and in 1936 was extended.

The discussion before its current renaissance took the following course:

- the Keynesians argued that the deficit could be an effective tool to prevent a recession;
- the neoclassical synthesis – IS-LM model showed that only in the short term, it was possible to observe a positive impact of increased public spending, but only on condition that unemployment remained below its natural rate;
- in the 1970s researchers showed that the value of fiscal multiplier was zero (even in the short term) or it was even negative;
- in the 1990s, it was considered that fiscal consolidation could increase aggregate production (concept of an expansionary fiscal consolidation) and the fiscal multiplier could be negative.

The problem of fiscal multipliers and their values, although widely discussed in recent years, still has not met its final resolution. However, as S. Charles, Th. Dallery and J. Marie show⁴³, what is the reason for the frequent findings of higher value of fiscal multipliers that have often been presented in recent years. They indicate, that during an economic downturn (positive) value of fiscal multipliers is higher. The basis for this is the lower tendency of the private sector, rather rentiers, to save.

⁴² Ibidem, p. 48.

⁴³ S. Charles, Th. Dallery, J. Marie, (2015), *Why the Keynesian Multiplier Increases During Hard Times: A Theoretical Explanation Based on Rentiers' Saving Behaviour*, "Metroeconomica" vol. 66 no. 3, pp. 451-473.

The problem of the scale of impact of multipliers is closely linked to the behaviour of market participants, especially consumers. By using different theories of consumer behaviour, researchers try to explain the observed differences in the values of multipliers. Different economic theories in a different way present the response of consumers to increase in public spending. For example, in the real business cycle model increases in public expenditure are accompanied by a fall in household consumer spending. On the other hand, we have a different situation in the model of IL-SM with non-ricardian households. Contemporary theories try to reconcile these two concepts by taking into account household access to financial markets or expectations about future economic developments⁴⁴. However, it should be borne in mind that consumer behaviour in the market is very complex and it depends on many factors, like the initial level of consumption. These issues are widely presented publications of Angus Deaton⁴⁵.

The fiscal multiplier is a measure of the impact of government expenditure on GDP and is a relation of an increase in GDP to exogenous changes in the level of the budget deficit. According to the concept of a multiplier, when its value is higher than 1 it indicates an increase in private spending due to an increase in public expenditure. In contrast, when it is lower than 1 an increase in public spending implies a reduction in the scale of private spending, which may be a result of higher interest rates or an increase in the price level.

Stimulating the economy through public expenditure growth is based on the assumption that the stimulatory effect of these expenses is greater than the effect of any tax cuts. The fiscal multiplier is higher when:

- fiscal package foresees a high share of expenditure compared to tax cuts;
- measures are aimed at households, which are in the most severe liquidity constraints;
- marginal propensity to consume is high;
- marginal propensity to import is low;
- there is a large output gap;
- future tax increases are not taken into account by consumers in their economic decisions.

Studies on the fiscal multiplier are carried out in two ways. The first estimation method is based on empirical data. The second is based on the analysis of structural models. The research based on empirical data leads to very differ-

⁴⁴ This problem is presented in more detail, among others, in the article: M. Lubiński, (2015), *Mnożnik fiskalny: reaktywacja*, „Gospodarka Narodowa” nr 1(275), p. 5-26.

⁴⁵ A short description of works by A. Deaton and list of the most important of these publications is shown in a document: The Royal Swedish Academy of Science (2015), *The Price in Economic Sciences 2015*. Document available on the website: https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2015/popular-economicsciences2015.pdf

ent results regarding the level of the multiplier, which results both from a different sample used and statistical methods applied^{46,47}. A narrative method⁴⁸ developed by Ch.D. Romer and Romer is also applied. It is based on an analysis of documents in order to identify changes in fiscal policy⁴⁹. Studying unexpected fiscal shocks in government spending most often used is data on military expenditures, and therefore such studies apply only to the United States. Another approach is to study government spending in response to natural disasters⁵⁰.

In recent years, there are studies that use both of these methods in order to verify the results obtained for a given country or period. An example of this approach is the work by D. Caldara and Ch. Kamps⁵¹. These authors pointed to the fact that regardless of the method applied, the results are similar and correspond to the theory. The study showed, however, significant differences in the response of the economy to shocks in the form of an unexpected rise in the level of taxation.

The main difficulty in the studies aimed at identifying the level of fiscal multiplier is the identification of a fiscal stimulus and the isolation of exogenous changes on the revenue and expenditure sides.

The problem in determining the level of this multiplier is also the rate of import absorption of the economy. As indicated by K. Łaski, J. Osiatyński and J. Zięba, instead of the total import intensity of the economy, one should use here the total import intensity minus the export intensity⁵². For instance, in 2009, the multiplier of government spending in Poland calculated in this way was 1.8, which meant that the increase of government expenditure of PLN 1 led to the

⁴⁶ The limitations related to the applied methods, especially in the research concerning deep recessions are presented in the paper: J.A. Parker, (2011), *On measuring the effects of fiscal policy in recessions*, „NBER Working Paper Series”, no. 17240.

⁴⁷ A literature review of key studies on fiscal multipliers conducted before 2008 is presented in a document: A. Spilimbergo, S. Symansky, M. Schindler, (2009), *Fiscal Multipliers*, “IMF Staff Position Note”, SPN/09/11, International Monetary Fund.

⁴⁸ Referring to this method two names are used: narrative approach or event study approach.

⁴⁹ Ch.D. Romer, D.H. Romer (2007), *The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks*, University of California, Berkeley. Document available at the website: <http://elsa.berkeley.edu/~cromer/RomerDraft307.pdf>.

⁵⁰ This approach, using both methods is presented in the PhD thesis: W. Yang (2013), *Macroeconomic Effects of Fiscal Policy*, A thesis submitted for the degree of Doctor of Philosophy, Economics and Finance, School of Social Sciences, Brunel University, London.

⁵¹ D. Caldara, Ch. Kamps, (2008), *What Are the Effects of Fiscal Policy Shocks? A VAR-based Comparative Analysis*, European Central Bank, Working Paper Series no 877.

⁵² K. Łaski, J. Osiatyński, J. Zięba (2010), *Mnożnik wydatków państwowych i szacunki jego wielkości dla Polski*, „Materiały i Studia”, Zeszyt nr 246, NBP, Warszawa.

GDP growth of PLN 1.8, which in addition implied the budget revenue amounting to PLN 0.32⁵³.

Additionally, one should also keep in mind the fact that, contrary to most previous studies, the impact of fiscal policy is not uniform during the recovery and recession. Accepting the assumption of a uniform impact of the level of government spending on fiscal multipliers leads to an erroneous estimation of the level of these multipliers⁵⁴. P. Michailat also confirms differing levels of multipliers depending on the phase of the business cycle⁵⁵.

It should also be noted that, according to E. Farhi and I. Wening, if changes in the level of regional public spending are financed by external transfers, the multiplier at the level of the administrative unit is higher than at the national level, since it is a representative of the multiplier of own expenditure and expenditure financed by the transferred funds⁵⁶.

Analysing the impact of a possible scale of impact of discretionary fiscal policy on the economy, we should also be aware of the limitations of its influence, that is the conditions in which it is to be conducted. These conditions include in particular:

- imperfections of the credit market, particularly credit restrictions⁵⁷;
- leverage effect;
- Barro-Ricardo effect (the concept which assumes that the growth of state spending is accompanied by an increase in private sector and households' savings, what enables keeping the amount of savings unchanged);
- liquidity constraints;
- costs of adapting to changes in fiscal policy.

With respect to the effect Barro-Ricardo, the study by O. Röhn⁵⁸ shows that when the public debt exceeds 75% of GDP, the level of savings of the population increases. This is consistent with the previous model of D. Sutherland⁵⁹,

⁵³ Ibidem, p. 20.

⁵⁴ The need to conduct research without the assumption of equal scale of impact of fiscal policy in different phases of the economic cycle has been widely discussed in the article: J.A. Parker, (2011), *op.cit.*

⁵⁵ P. Michailat, (2014), *A Theory of Countercyclical Government Multiplier*, "American Economic Journal" vol. 6 no. 1, p. 190-217.

⁵⁶ E. Farhi, I. Werning, (2012), *Fiscal Multipliers: Liquidity traps and Currency Unions*, NBER Working Paper no. 18381.

⁵⁷ K. Makarski, (2015), *Mnożniki fiskalne w modelu z ograniczeniami kredytowymi*, „Materiały i Studia” nr 318, Narodowy Bank Polski, Warszawa.

⁵⁸ O. Röhn, (2010), *New Evidence on the Private Saving Offset and Ricardian Equivalence*, OECD Economics Department Working Papers, No. 762, OECD Publishing.

⁵⁹ A. Sutherland, (1997), *Fiscal Crises and Aggregate Demand: Can High Public Debt Reverse the Effects of Fiscal Policy?*, "Journal of Public Economics" vol. 65, p. 147-162.

which shows that households take into account in their decisions the level of indebtedness of the government only when its level is high enough that the costs of fiscal consolidation will be incurred by these households, rather than future generations.

When the recession is so large that we do not deal with the effect of crowding out private spending by public spending, an increase in public spending can have a very high multiplier effect.

Different research studies come to very different results determining the amount of total public expenditure multiplier. However, in general, in countries with fixed exchange rate the level of the multiplier is considerably higher than in countries with floating exchange rate. In the study conducted by E. Ilzetzi, E. Mendoza and C. Végh⁶⁰, based on data for 44 countries, the cumulative multiplier in countries with fixed exchange rate amounted to 1.4, and in countries with floating exchange it amounted to -0.69. While research conducted by G. Corsetti, A. Meier and G. Müller⁶¹, concerning 17 OECD countries, showed that it was 0.6 and about 0, respectively.

Research by E. Ilzetzi, E. Mendoza and C. Vegh also showed a difference in the level of the multiplier between highly developed countries and developing countries. In highly developed countries the multiplier was 0.39, and in developing ones -0.03. While the cumulative multiplier in developed countries was 0.66 and in developing countries it was not statistically significantly different from 0. The level of the multiplier depending on the level of state debt was also examined. The fiscal multiplier for countries with high public debt was close to 0, and the total multiplier was 3. The multiplier had a positive value in the case of debt reaching 40% of GDP. It was shown that the debt limit of 60% is a point beyond which fiscal impulses become ineffective⁶².

Due to the fact that the multiplier measurement problem is very complex we should first try to make an estimation using the previously acquired knowledge of the factors affecting its size. An estimation method is proposed in the paper prepared by N. Batini, L. Eyraud and A. Weber⁶³. It assumes the following procedure of estimating the level of a fiscal multiplier:

⁶⁰ E. Ilzetzi, E. Mendoza, C. Végh (2010), *How big (small?) are fiscal multipliers?*, „NBER Working Paper Series”, Working Paper 16479.

⁶¹ G. Corsetti, A. Meier, G. Müller, (2012), *What Determines Government Spending Multipliers?*, „IMF Working Paper”, WP/12/150, International Monetary Fund.

⁶² Numerous references to research on the level of multipliers can be found in: V.A. Ramey (2011), *Can Government Purchases Stimulate the Economy?*, „Journal of Economic Literature”, vol. 49(3), p. 673-85.

⁶³ N. Batini, L. Eyraud, A. Weber, (2014), *A Simple Method to Compute Fiscal Multipliers*, IMF Working Paper, WP/14/93.

1. Determining how many traits characteristic of an economy with high level of fiscal multipliers a given country possesses.
In the first step, we give a value of one to each of the below mentioned features when it currently occurs in the analysed country. These features are:
 - High level of labour market rigidities;
 - Low level of automatic stabilizers measured as the ratio of public spending and nominal GDP (the value lower than 0.4 is considered as low);
 - Fixed or quasi-fixed exchange rate;
 - Low or safe level of public debt;
 - Effective management of public expenditure and revenues.
2. Summing awarded points for occurring features, enables us to determine multiplier level as low (0-3 points), medium (3-4 points) or high (4-6 points). The resulting level of the multiplier corresponds to the appropriate range of their level (Tab. 2.1).
3. Raising or lowering granted scoring, depending on how the economic situation of the country currently looks like in relation to:
 - Phase of the business cycle – in the presence of an economic downturn, the lower and upper range of the level of our multiplier should be raised by 60%. If there is no output gap, a revaluation of the level of the multiplier is not necessary. While, in the case of an economic boom we decrease lower and upper range of the multiplier's level by 40%;
 - Monetary policy – at such a low level of interest rates, that policy becomes ineffective, we should raise both multiplier ranges by 30%. If there are other limitations in the effectiveness of the monetary policy, we must raise the multipliers ranges from 0 to 30%.

Table 2.1. Ranges of first-year overall multipliers in normal times

Country category	Multiplier ranges
Low multiplier	0.1-0.3
Medium multiplier	0.4-0.6
High multiplier	0.7-1.0

Source: N. Batini, L. Eyraud, A. Weber, (2014), *op. cit.*, tab. 6.

However, the analysis of the impact of public spending on the economy does not allow for a full description of the macroeconomic situation. One should take into account the borrowing needs of the state and of its public institutions, that is the sources of financing public spending. The research conducted by

W. Ziółkowska⁶⁴ concerning the Polish economy covering the period 2001-2012 shows that, although interdependencies are not conclusive, the “crowding out” effect occurred, with the investment “pushed out” by the borrowing needs of the Treasury and the issuance of Treasury securities, which means that the actual impact of implemented economic policy is less positive than it would be suggested by the assessment based only on fiscal multipliers.

3. Returnable financing and agriculture

Returnable instruments are more and more present among the instruments used in the framework of EU policies for socio-economic development of the EU⁶⁵. Also, with the respect to agriculture and rural areas in the EU, the European Commission tries to encourage their wider use.

Among these instruments we may mention two categories. The first of them encompasses equity instruments, including forms of financing such as *venture capital* or *seed capital*. The second category includes funding in a form of a debt, which includes preferential credits, guarantees and loans.

One of the primary purposes of the application of returnable financing in the support policy for this sector is to increase the scale of impact of the aid within a given budget constraints occurring in the financial capabilities to support the sector. These instruments are to have a greater impact on reducing the scale of a credit gap than non-returnable forms of support. At the same time, these instruments due to their nature are subject to the much more profound ex-ante verification than non-returnable instruments. This primarily concerns the support beneficiary who must include in its business plan the need to repay the granted support.

To agriculture apply all the problems and constraints in reaching for external sources of financing, which are faced by the sector of small and medium-sized enterprises (SMEs). At the same time, however, the agricultural sector entities also meet other restrictions to their access to external financing. These limitations are largely due to the specific nature of agricultural activity, which is largely seasonal and depends on climatic conditions and is often conducted in

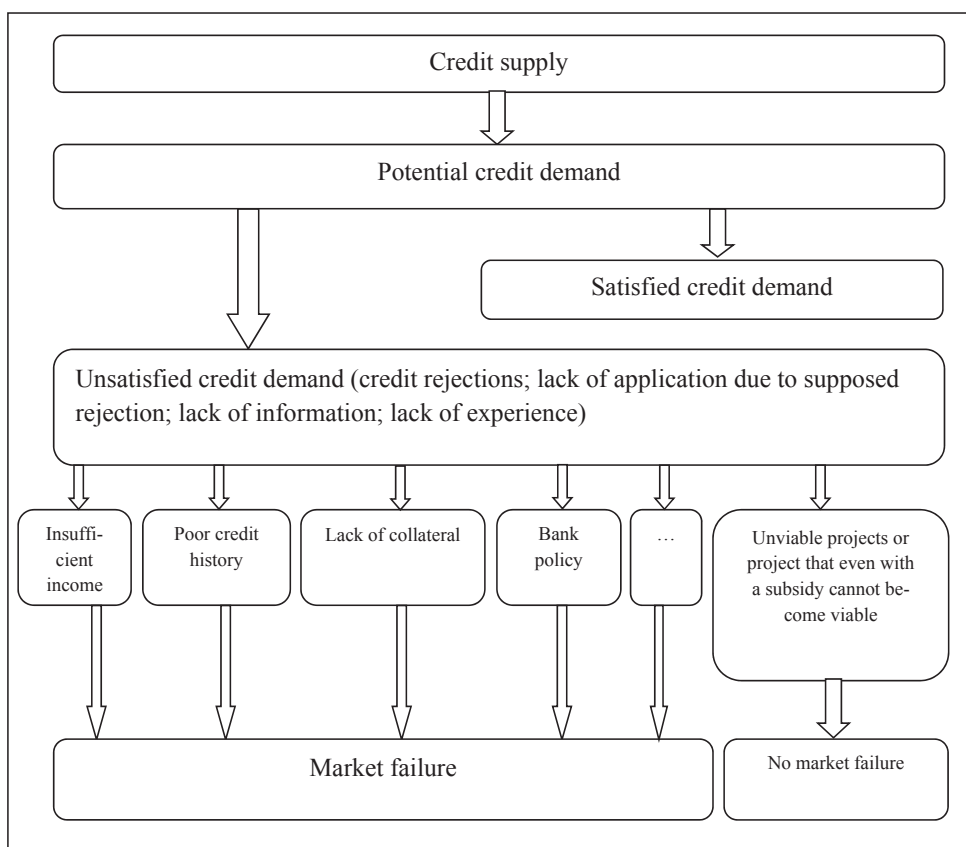
⁶⁴ W. Ziółkowska, (2015), *Efekt wypierania a pożyczki publiczne* [in:] Owsiak St. (scient. ed.), (2015), *Determinanty rozwoju Polski. Finanse publiczne*, Polskie Towarzystwo Ekonomiczne, Warszawa, p. 99-106.

⁶⁵ These instruments are also used in Poland. A list of this type of instruments implemented within the support co-financed by EU funds is shown, among others, in an elaboration: L. Frydrych, (2015), *Bezwrotne i zwrotne instrumenty pomocy publicznej Unii Europejskiej dla przedsiębiorców* [in:] Owsiak St. (scient. ed.), (2015), *Determinanty rozwoju Polski. Finanse publiczne*, Polskie Towarzystwo Ekonomiczne, Warszawa, p. 240-260.

remote areas far from commercial and financial centres, making it difficult both to access consumer markets and sources of funding.

The risk of observing a financing gap, also called funding gap, estimated using surveys and a logistic regression model determined within the ex-ante assessment of financial instruments under the Operational Programme Development of Smart Growth varies depending on the size of an economic entity. The highest concerns the smallest entities and reaches 45% for micro-enterprises, and in the case of small companies it amounts to 25.9%, while for medium and large entities it is only 11.9%⁶⁶.

Figure 3.1. Assessing financial gap



Source: European Investment Bank, 2014, ..., Fig. 5.

⁶⁶ Ocena ex-ante instrumentów finansowych w ramach Programu Operacyjnego Inteligentny Rozwój. Raport końcowy, (2014), Raport przygotowany przez firmę WYG PSDB Sp. z o.o. na zlecenie Ministerstwa Infrastruktury i Rozwoju, załącznik 5.

In the case of returnable financing instruments that may be offered under rural development programmes it is recommended in the first place to accurately analyse the needs and possibilities of implementation of such instruments. A step-by-step approach to this procedure is very complex and includes⁶⁷:

- 1) Market analysis covering all areas of the state policy towards agriculture. This analysis should include:
 - assessment of the macroeconomic context,
 - specification the type and size of market failures,
 - indication of sub-optimal investments,
 - description of the structure of agricultural holdings,
 - estimation of the gap between supply and demand in agricultural markets,
 - discussion of the specific characteristics of various agricultural markets;
- 2) Determining the added value of agricultural financial instruments and the impact of the use of such instruments within the whole system of public aid directed to agriculture. The aim is to limit the possibility of overlapping areas of support between financial instruments and other forms of public assistance and prevent any adverse impacts of financial instruments on other elements of public support;
- 3) Assessment of the additional public and private funds that will be involved thanks to the implementation of financial instruments, that is an assessment of the magnitude of the leverage effect. It is important to determine whether private investors should receive preferential remuneration for the committed capital;
- 4) Gathering relevant lessons from applying similar instruments in order to:
 - identify factors affecting the success or failure in the use of financial instruments,
 - take into account the lessons arising from previous experiences in the implementation of financial instruments at the design stage to enhance the performance of new instruments;
- 5) Ensuring coherence between financial instruments and the strategic priorities of the rural development programme. Based on the strategy of the RDP and its level of detail we should:
 - set the focus and the scale of financial instruments to be implemented,

⁶⁷ European Commission, European Investment Bank, (2015), *Preview of Methodological Handbook for implementing an ex-ante assessment of financial instruments for agriculture supported by the EAFRD*, Brussels.

- make a selection of the most appropriate financial instruments, taking into account the estimated market needs and specificities of individual market segments,
 - define the conditions for access to the financial instruments for planned groups of beneficiaries of these tools,
 - check whether the proposed investment strategy, which is to be implemented through financial instruments, is in line with the priorities of the RDP;
- 6) Determination of expected quantitative results of the implementation of financial instruments and of how they will contribute to achieving the strategic objectives of rural development policy. These measures should be accompanied by the implementation of a system for monitoring and reporting the process of implementation of financial instruments;
- 7) Review and update the system of implementation of financial instruments.

Loan funds

In Poland, the loan funds were established in the mid-1990s⁶⁸. At the end of 2014, there were 87 loan funds operating in Poland. They possessed a total capital of about PLN 2.54 billion. In 2014, these funds granted 8,599 loans with an average amount of PLN 104,000. Among the borrowers there were also companies representing agriculture, forestry, hunting and fishing. They accounted for 1.14% of all borrowers and the amount of loans they received reached 0.72% of the total amount transferred to beneficiaries. It is also worth noting that 40% of borrower entities were located in rural areas⁶⁹.

Naturally, apart from financial instruments co-financed from public funds there exist fully commercial ones. These include, besides the instruments discussed beneath in this chapter, also leasing, factoring and credits.

As shown by the study on the impact of agricultural credits for the development of rural areas, there is a positive correlation between agricultural credit and economic growth in these areas⁷⁰. This demonstrates that the validity of monitoring the availability of credit in rural areas and where financial gap is observed, can act as the basis for taking by the state an appropriate action to ensure entities functioning in rural areas have access to finance.

⁶⁸ A. Kuchciński, (2013), *Fundusze pożyczkowe finansujące MSP*, Zeszyty Naukowe Uczelnia Vistula nr 32, p. 118-129.

⁶⁹ Polski Związek Funduszy Pożyczkowych, (2015), *Rynek funduszy pożyczkowych w Polsce. Raport 2014*, PZFP, Warszawa.

⁷⁰ V. Hartarska V., D. Nadolnyak, X. Shen, (2015), *Agricultural credit and economic growth in rural areas*, „Agricultural Finance Review” vol. 75 iss. 3, p. 302-312.

Credit guarantees

One of the ways to reduce difficulties, particularly those faced by small and medium-sized enterprises, in obtaining credits is to create a system of credit guarantees. Despite their frequent inclusion within policy instruments to support small and medium-sized enterprises, economic theory offers no clear conclusion as to their usefulness. Also empirical studies do not offer definitive conclusions, what also results from the fact that there is not much reliable and comprehensive research due to a lack of access to relevant statistical data. Research conducted by P. Asdrubali and S. Signore on EU credit guarantee scheme for SMEs shows that guarantees have a positive impact on the further development of enterprises that have benefited from them⁷¹. In contrast, studies conducted by A. D'Ignazio and C. Menon for Italian companies of the SME sector, show that credit guarantees have no impact on the overall level of bank debt of entities against which credit guarantees were granted⁷².

However, in the countries of Central and Eastern Europe this way for reducing constraints in access to credit is not very popular. It is estimated that in Hungary and Romania the level of such guarantees reaches 1.2-1.3% of the GDP of these countries. In Poland, the scale of credit guarantees reaches only 0.4% of GDP. At the same time, however, the results of the survey indicate that half of the banks in Poland have much experience in credit guarantees (over 10% of the credit portfolio of the SME sector includes guarantees), and half have very little experience in this area (less than 1% of the credit portfolio of SMEs includes guarantees). It should also be noted that among all countries surveyed, only in Poland, 100% of the surveyed bankers said that in their opinion the credit guarantee supply met demand for them⁷³.

With the credit guarantees part of the risk associated with granting a bank credit to an entity is transferred to a guarantor. There are both private and public credit guarantee schemes, however, more widespread are public systems. These systems also differ in orientation of their activities and their organizational structure⁷⁴. Often we are dealing with entities that operate only on a regional

⁷¹ P. Asdrubali, S. Signore, (2015), *The Economic Impact of EU Guarantees on Credit to SMEs Evidence from CESEE Countries*, EIF Research & Market Analysis, Working Paper 2015/29.

⁷² A. D'Ignazio, C. Menon, (2013), *The causal effect of credit guarantees for SMEs: evidence from Italy*, Temi di Discussione" nr 900, Banca d'Italia.

⁷³ Vienna Initiative Working Group on Credit Guarantee Schemes, (2014), *Credit Guarantee Schemes for SME lending in Central, Eastern and South-Eastern Europe*, A report by the Vienna Initiative Working Group on Credit Guarantee Schemes.

⁷⁴ A wider review of credit guarantee systems in the OECD countries is presented in a publication: OECD, Centre for Entrepreneurship, SMEs and Local Development, (2013), *SME and Entrepreneurship Financing: The Role of Credit Guarantee Schemes and Mutual Guarantee*

scale. In the case of public bodies, there are both separate institutions, as well as domestic banks or other institutions of the public sector. In the countries of Central and Eastern Europe most of the guarantees are provided individually (not for credit groups) directly to banks, and most of guarantees relates to agriculture⁷⁵.

In Poland, credit guarantee schemes operate within the Bank Gospodarstwa Krajowego (BGK) and the Agency for Restructuring and Modernisation of Agriculture. BGK credit guarantee scheme applies to a *de minimis* guarantee, while the ARMA's system refers to guarantees related to the agricultural sector entities⁷⁶.

Credit guarantees can provide small and medium-sized businesses with various advantages. They include:

- Enabling obtaining credit;
- Reducing the size of the required credit collateral;
- Increasing the size of the credit granted;
- Longer crediting period;
- Lower interest rates;
- Shorter waiting for a credit decision.

It is worth presenting the experience in the functioning of credit guarantees for agriculture existing in Lithuania, as an example of a system run by a single entity within the whole country. Lithuanian Agricultural Credit Guarantee Fund⁷⁷ activities cover the following areas:

- Issuing credit guarantees to credit institutions and leasing companies;
- Administering national state aid;
- Administering credit fund;
- Administering compensation fund for licensed warehouses of agricultural products.

In the case of credit guarantees this fund guarantees repayment of up to 70% of the outstanding credit or lease payments. This percentage reaches 80% in the case of young farmers, farmers specializing in plant production, who have insured their crops and farms involved in animal production, if the credit is to be used for the acquisition, construction or modernization of farm buildings,

Societies in supporting finance for small and medium-sized enterprises. Final Report, OECD, Paris.

⁷⁵ Ibidem.

⁷⁶ An analysis of credit guarantee systems operating in Poland is one of the aims of the research task "Fiscal mechanisms and stimuli having their influence on the rural development, returnable financing and quasi-marketable instruments for internalization of external effects in agriculture, the provision of public goods" in 2016, therefore, this problem is not further discussed in this monograph.

⁷⁷ Information about this fund are available at the website: <http://garfondas.lt>

equipment and/or animals. However, in the case of credits granted by the Lithuanian Market Regulation Agency for State Enterprises Working in Agriculture and Food Production repayment amounts to 100%.

These guarantees are granted in respect to credits, which will be used to:

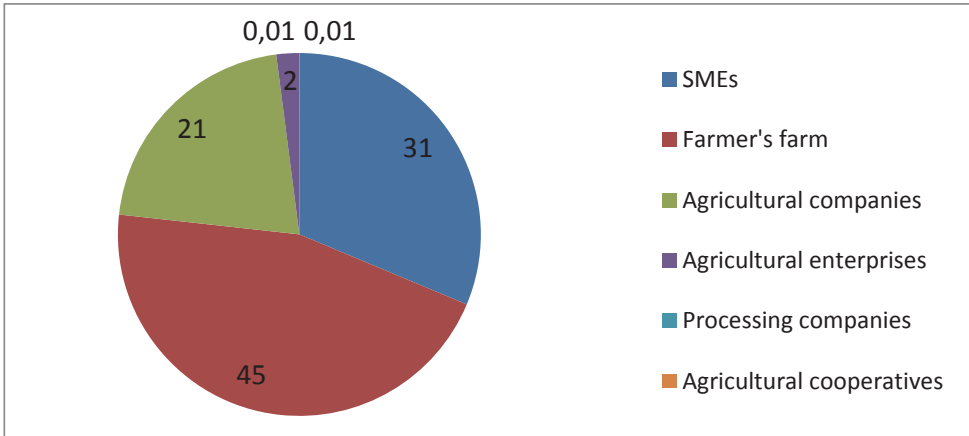
- Investments to take over assets and/or services specified in the relevant regulation of the Lithuanian Ministry of Agriculture and/or alternative activities or cooperatives set out in a relevant regulation of the Lithuanian Ministry of Agriculture;
- Investments and acquisition of working assets by entities engaged in the acquisition, processing and sale of agricultural products;
- Acquisition of working assets by companies and cooperatives that deal with purchasing, processing and sale of agricultural products and will sell those assets to farming entities of the Republic of Lithuania;
- Investments made by rural communities and local action groups, research institutions and universities, including institutions involved in vocational education (institutions not financed from the state budget) that have experimental demonstration and training farms and implement investment projects co-financed by the EU;
- Intervention purchase of agricultural products and foodstuffs and repayment of credits received by the Lithuanian Market Regulation Agency for State Enterprises Working in Agriculture and Food Production.

While, in the case of guarantees for leasing new equipment guarantee covers up to 60% of the amount of the unpaid part of the price of the leased assets. The total amount of guarantees may not exceed a limit set by the Lithuanian government. In 2009-2013, the number of guarantees granted annually ranged from 125 to 450, and the value of credit provided as a result of these guarantees ranged from 80 to 204 million LTL⁷⁸.

As for the structure of beneficiaries of credit guarantees granted in the year 2013, these were most often used by individual farms, which represented 45% of all beneficiaries of guarantees (Fig. 3.2). A significant group were also rural sector entities, small and medium-sized enterprises (31%) and agricultural companies (21%). The share of agricultural cooperatives and processing companies was negligible.

⁷⁸ Agricultural Credit Guarantee Fund, (2014), *Annual Report 2013*, Vilnius, fig. 1.

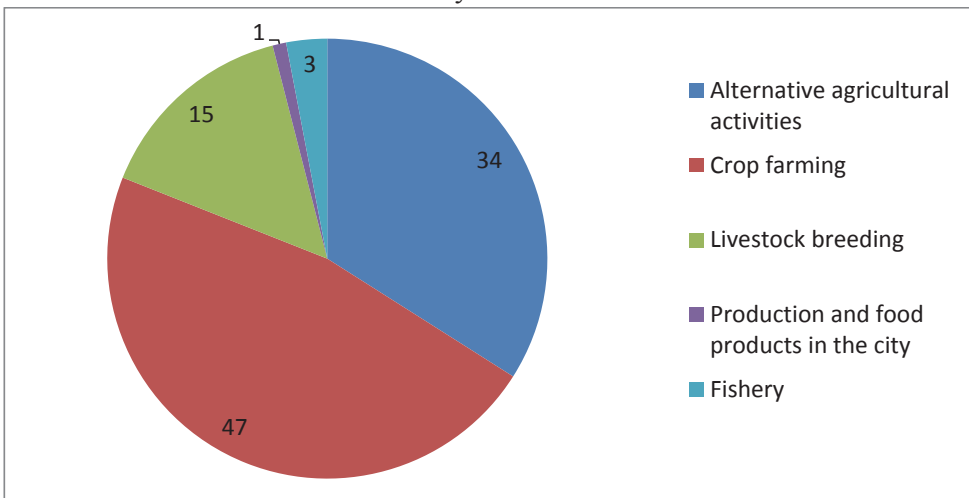
Figure 3.2. Structure of borrowers with a guarantee of Lithuanian Agricultural Credit Guarantee Fund in 2013



Source: Agricultural Credit Guarantee Fund, (2014), Annual Report 2013, Vilnius, fig. 5.

As for activities carried out by the beneficiaries of credit guarantees most common activity is the plant production (Fig. 3.3). As many as 47% of beneficiaries conducted such activities. For comparison, animal production was carried out by only 15% of the beneficiaries of the guarantees. An important group of beneficiaries are people involved in alternative sectors of agriculture, who amounted to 34% of all beneficiaries.

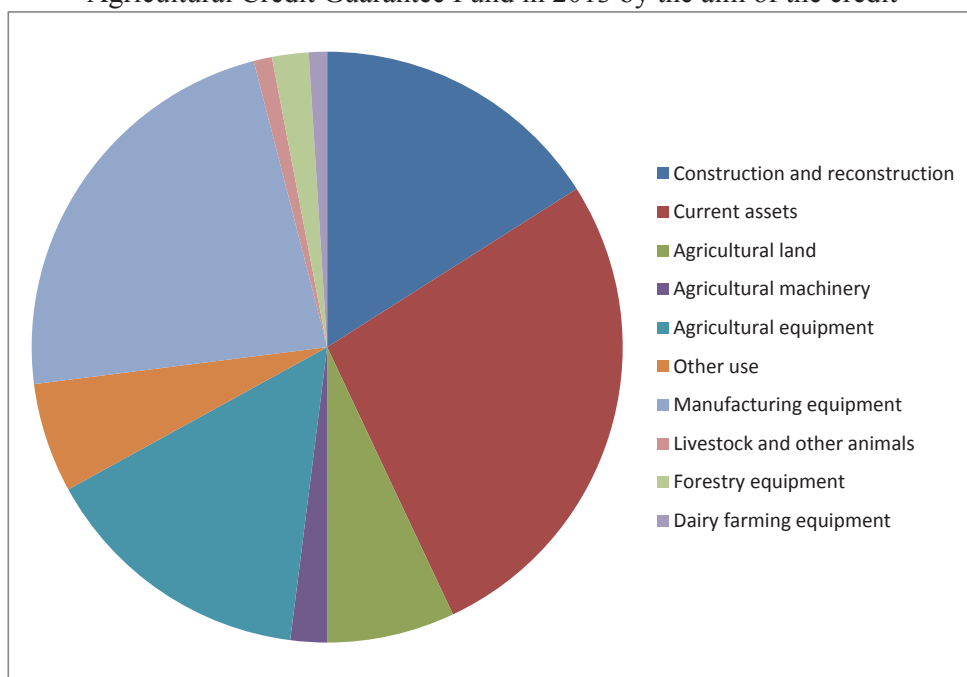
Figure 3.3. Structure of borrowers with a credit guarantee of Lithuanian Agricultural Credit Guarantee Fund in 2012 by type of activity conducted by them



Source: Agricultural Credit Guarantee Fund, (2014), Annual Report 2013, Vilnius, fig. 6.

Credits for which guarantees were granted were intended for different purposes (Fig. 3.4). More than 1/4 of them were allocated to working assets and nearly 1/4 on the equipment used in processing. The least frequent was spending the credit on animals and equipment for farms specializing in the dairy industry.

Figure 3.4. Structure of borrowers with a credit guarantee of Lithuanian Agricultural Credit Guarantee Fund in 2013 by the aim of the credit



Source: Agricultural Credit Guarantee Fund, (2014), Annual Report 2013, Vilnius, fig. 8.

An important issue for the provision of all public aid is to assess the existence of *deadweight effect*. This effect is variously defined, but essentially it refers to the use of public aid by an entity which without this support would have carried out the project.

In the literature on this subject distinguished are several categories of *deadweight effect* depending on the result of the lack of support⁷⁹:

1. Clean deadweight – without the support the project would have been carried out at the same time, location and scale.
2. Partial deadweight:

⁷⁹ H. Lenihan, M. Hart, (2003), *Evaluating the Impact of Enterprise Ireland Assistance: methodological considerations when estimating deadweight and displacement*, proceedings of the 7th EUNIP Annual Conference, Faculty of Economics; University of Porto, Portugal, 18-20 September.

- Another project location;
- Later time of undertaking the project;
- Reduced scale of the project;
- Various combinations of these elements (e.g. a project implemented later and with a reduced scale).

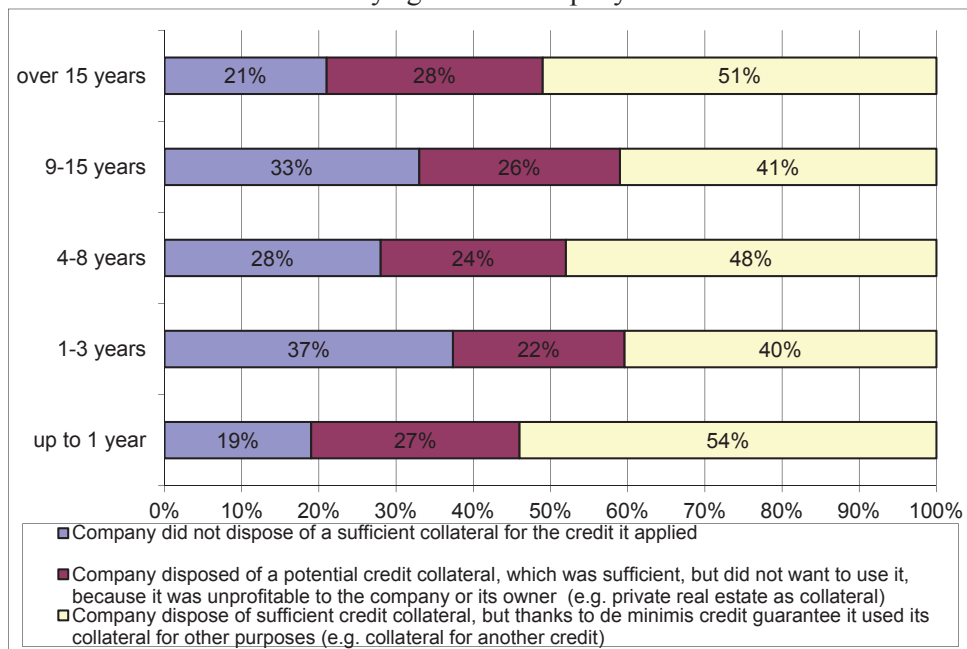
3. Lack of deadweight.

To show the complexity of this problem it is worth presenting as an example the system of *de minimis* credit guarantees granted by the Bank Gospodarstwa to entities representing small and medium-sized enterprises. As indicated by surveys conducted among Polish companies that benefited from this programme of credit guarantees for working capital credit, as many as 64% of its beneficiaries stated that would have received a credit of equal value without a guarantee. Only 19% said they would not have obtained such a credit⁸⁰. These results are not surprising when we look at the structure of answers to the question about the reason for applying for a guarantee (Fig. 3.5).

These results show that most companies had adequate collateral for the credit, for which they applied, but the use of collateral would have restricted their potential for further development, and thus the possibility of increasing their competitiveness. Thus, it is obvious that the deadweight effect did not reach an average of 64%, but in practice it did not occur.

⁸⁰ T. Kaczor, A. Kowalczyk, (2014), *Raport: Efekty programu gwarancji de minimis realizowanego przez Bank Gospodarstwa Krajowego*, Bank Gospodarstwa Krajowego, Warszawa, wykres 22.

Figure 3.5. Reasons for applying for a *de minimis* guarantee by age of the company



Source: T. Kaczor, A. Kowalczyk (2014), *op. cit.*, Fig. 19.

Leasing

In the literature, there are two types of leasing distinguished – financial leasing and operating leasing. Operating leasing⁸¹ is characterized above all by the fact that the full lease, interest and capital payments are considered the cost of achieving revenue and the leased object remains the property of the lessor at least for the duration of the contract (therefore, also the depreciation of the asset remains with the lessor). After full repayment of lease the lessee is entitled to a repurchase or resignation of the leased object. The VAT is payable with each instalment of the lease. In the case of financial leasing⁸², as a deductible costs only the lease payments and depreciation are considered, as it is paid by the lessee. The VAT is paid in advance in full with the first instalment lease. When it comes to the ownership of the leased asset, the last instalment paid by the lessee is equivalent to taking over the ownership of the leased object by the lessee.

In Poland, we observe a growing importance of leasing in agriculture. In the agricultural sector leasing is most often used not by individual farmers, but by agricultural enterprises. As shown by the study conducted by D. Zawadzka,

⁸¹ Operating leasing is sometimes also called hire purchase.

⁸² The term “capital leasing“ is sometimes used interchangeably with “financial leasing”.

A. Strzelecka and E. Szafraniec-Siluta covering the period 2006-2012, leasing and credit are increasingly being used in agriculture to finance investment⁸³.

In 2014, as many as 64% of machines financed with a leasing loan were agricultural machines⁸⁴. Such a large share of agricultural machines is largely due to the support from the EAFRD, which is used by farmers.

Credit guarantees are also part of the support co-financed under the various EU funds. The main instrument is the JEREMIE here. It is also possible to create credit guarantee schemes within the programmes co-financed by the European Agricultural Fund for Rural Development, the European Social Fund and the European Maritime and Fisheries Fund.

As shown by the past experience of other countries in the use of financial instruments under rural development programmes, these instruments meet with little interest of the beneficiaries⁸⁵. Among the member states analyzing the need to implement the financial instruments under the RDP arise, among others, concerns about:

- costs of creating an additional, parallel system of implementation of RDP instruments;
- low interest of potential beneficiaries due to complex procedures;
- parallelly operating other instruments of support, especially those non-returnable⁸⁶.

These concerns, together with the analysis of the availability of capital for agriculture made in Germany led to a conclusion that there is no need for the period of 2014-2020 to implement financial instruments within the rural development policy⁸⁷.

⁸³ D. Zawadzka, A. Strzelecka, E. Szafraniec-Siluta, (2014), *Leasing i kredyt jako źródła finansowania nakładów inwestycyjnych w rolnictwie*, Stowarzyszenie Ekonomistów Rolnictwa i Agrobiznesu, Roczniki Naukowe, tom XVI, zeszyt 4, p. 357-362.

⁸⁴ Związek Polskiego Leasingu, (2015), *Wyniki branży leasingowej za 2014 rok*. Konferencja prasowa Związku Polskiego Leasingu w dniu 02.02.2015, Warszawa.

⁸⁵ Experiences made so far with the use of financial instruments, including loans and credit guarantees implemented with the use of EAFRD are presented in the paper: B. Wieliczko, (2015), *Czy warto stosować instrumenty finansowe w programach rozwoju obszarów wiejskich?*, unpublished.

⁸⁶ B. Forstner, R. Grajewski, (2014), *Beurteilung von alternativen Finanzierungsarten und -instrumenten zur Umsetzung von investiv ausgerichteten Fördergrundsätzen der GAK*, Thünen Working Paper 29, p. XIII-XIV.

⁸⁷ *Ibidem*, p. 79.

Seed capital funds (seed capital)

Young, only just starting business entities due to lack of collateral and credit history have limited access to bank credits, and therefore require access to other sources of financing. One of them is seed capital funds. The capital offered by such funds is a long-term one. Moreover, there is no need for current payment of interest for using it.

In the Polish literature on the subject, referring to this source of capital still its English name is more often used than Polish one. Seed capital funds are the funds offered by either private or public funds.

In Poland in the programming period 2004-2006 under the Sectoral Operational Programme “Increase of Economic Competitiveness”, Polish Agency for Enterprise Development within this programmes implemented sub-measure 1.2.3 “Supporting the emergence of seed capital funds, seed capital”. Eligible for this support were micro, small and medium entrepreneurs whose projects were at an early stage of development, they were developing a new product or service or were conducting the sale on a small scale not bringing any profits, yet. Support took the form of taking shares of the company financed. The maximum amount of investment was EUR 1,000,000. During 2007-2013 it was also possible to use the support of seed capital within the framework of the programme “Innovative Economy”⁸⁸. Within this programme, there was also the possibility of setting up investment incubators. Under the currently implemented programme “Innovative Economy” such assistance is also available.

Venture capital funds (venture capital)

Venture capital funds are part of private equity⁸⁹ and are of similar nature to seed capital funds. There are both private funds (managed by individuals, banks or pension funds), as well as public ones. As pointed by Sz. Piotrowski, venture capital funds are a financial intermediary between the capital investor and the company in need of capital investment⁹⁰. The main difference is the higher level of risk of failure of the financed project. Similarly to seed funds, support is conducted by acquiring of stocks or shares of the supported entity. Obtaining such support requires the acceptance of being a subject of constant

⁸⁸ Such a support was also available with the Programme of Trans-border Co-operation in the South Baltic Region 2007-2013.

⁸⁹ External financing of companies not listed at the stock exchange. In some studies, the terms “venture capital” and “private equity” are used interchangeably.

⁹⁰ Sz. Piotrowski, (2011), *Venture capital jako forma finansowania MŚP w polityce wspierania innowacji UE*, Doctoral thesis, Uniwersytet Ekonomiczny w Poznaniu, Poznań, p. 32.

monitoring conducted by the fund, and often it also involves the obligation to make fund's representatives to the board⁹¹.

Returnable financing, although increasingly introduced in the EU policy, is still not popular among the entities to which it is directed. As shown by studies conducted in Poland for the implementation of the programme "Innovative Economy" those who have not yet benefited from this type of instruments have little knowledge on the subject. For example, almost half of those who have not benefited so far from an outside investor capital inputs, assess their knowledge about this form of investment financing as low or very low⁹². Earlier studies also show some earlier similar results (Fig. 3.6). This implies the need to implement wide-ranging information and education programmes.

There are also new alternative models of financing various investment projects constantly appearing. Currently, the most popular of these include: microfinance, social financing (crowdfunding) and peer-to-peer network loans⁹³.

Financial innovation can vary widely in its nature. They are not limited only to new products and services, but may also concern e.g. new infrastructure solutions⁹⁴. In the literature distinguished are following types of financial innovations:

- innovations in risk transfer;
- innovations in risk pricing;
- innovations supporting liquidity;

⁹¹ More about venture capital funds in Poland can be found, among others, in the paper: A. Rosa, (2008), *Venture capital w Polsce*, Zeszyty Naukowe Instytutu Ekonomii i Zarządzania Politechniki Koszalińskiej nr 12, p. 133-143. While the barriers to the development of such funds are described in detail in the paper: E. Grzegorzczak, M. Krawczyk, (2013), *Aktualny stan rynku private equity/venture capital w Polsce oraz bariery jego rozwoju*, „Annales Mariae Curie-Skłodowska Lublin-Polonia Sectio H” vol. XLVII(3), p. 209-217. The issues relating to regulations are presented, among others, in the paper: J. Adamiec, (2011), *Regulacje UE dotyczące venture capital a sektor venture capital w Polsce*, „Analizy BAS” no. 19(63).

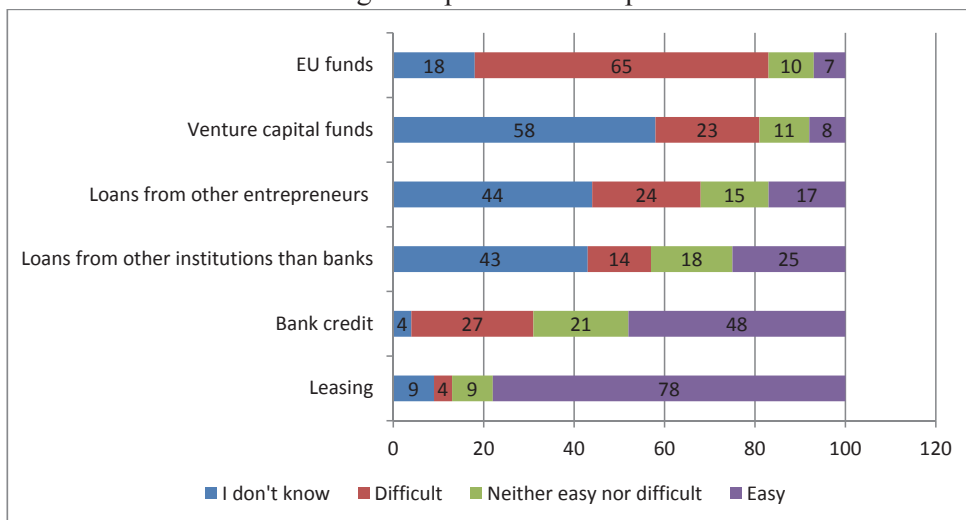
⁹² *Ocena ex-ante instrumentów finansowych w ramach Programu Operacyjnego Inteligentny Rozwój. Raport końcowy*, (2014), Raport przygotowany przez firmę WYG PSDB Sp. z o.o. na zlecenie Ministerstwa Infrastruktury i Rozwoju, p. 50. W publikacji tej szeroko przeanalizowano potencjał absorpcyjny różnych form kapitału zewnętrznego.

⁹³ More about these instruments as sources of initial (seed) capital can be found, among others, in the paper: G. Bruton, S. Khavul, D. Siegel, M. Wright, (2015), *New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations*, „Entrepreneurship Theory and Practice” vol. 39, iss. 1, p. 9-26. While the market of peer-to-peer loans in Poland is presented, among others, in a paper: K. Mitrega-Niestrój, (2014), *Recent Developments of the P2P Lending Market in Poland*, „Studia Ekonomiczne” nr 186, część 2, Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, p. 264-277.

⁹⁴ A detailed presentation of the term “financial innovation” can be found, among others, in the paper: M. Marcinkowska, (2012), *Innowacje finansowe w bankach*, „Acta Universitatis Lodzianis, Folia Oeconomica” no. 266, p. 71-96.

- innovations increasing the availability of debt financing;
- innovations increasing the availability of equity financing;
- insurance innovations;
- innovations in the management of assets and liabilities;
- innovations in financing the financial institutions⁹⁵.

Figure 3.6. Easiness of making use of different types of financing according to responses of entrepreneurs



Source: E. Grzegorzczuk, (2014), *Dokapitalizowanie rynku private equity/venture capital przez środki publiczne drogą do rozwoju innowacji w Polsce*, „Journal of Capital Market and Behavioral Finance” vol. 1(1), p. 45-63.

Based on this division, we can distinguish the following features of innovations:

- payment function;
- investment function;
- financing function;
- valuation function;
- risk management function⁹⁶.

⁹⁵ J. Błach, (2011), *Innowacje finansowe i ich znaczenie we współczesnym systemie finansowym – identyfikacja i systematyzacja problemu*, Finansowy Kwartalnik Internetowy „e-Finanse” vol. 7, no. 3, p. 25.

⁹⁶ Ibidem, fig. 5.

All of these new instruments increase the range of choices of sources of financing. At the same time they generate costs related to the necessity of obtaining knowledge about their functioning. These costs are the greater, the lower the initial level of knowledge of the potential customer. Another barrier to their popularization is risk aversion and reluctance to seek new solutions that characterizes many consumers and in most cases increases with their age. Such barriers may be particularly important for the Polish agriculture, which still has relatively little contact with all kinds of financial institutions.

However, we should strive to disseminate knowledge on new and innovative financial instruments, because their application can bring numerous benefits in terms of financing of the company. These include:

- Reducing transaction costs;
- Lowering the cost of capital;
- Offering access to new sources of financing;
- Increasing the flexibility of financing;
- Reducing financial risk;
- Managing market risk^{97,98}.

⁹⁷J. Błach, (2012), *Koszty zastosowania innowacji finansowych w działalności przedsiębiorstwa. – identyfikacja problemu*, „Annales Universitatis Mariae Curie-Skłodowska Lublin – Polonia, Sectio H” vol. XLVI, cz. 4, tab. 1.

⁹⁸ In this chapter omitted are innovations within the currency market, which are especially important not in financing companies' activities, but in their activity on international markets as exporter and importer. This type of innovations is presented in e.g. the paper: I. Miciuła, (2015), *Innowacje finansowe na rynku walutowym*, Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 862, Finanse, Rynki Finansowe, Ubezpieczenia nr 75, p. 333-341.

Summary

This publication is the first in a series of monographs which will be devoted to the findings of the research task “Fiscal mechanisms and stimuli having their influence on the rural development, returnable financing and quasi-marketable instruments for internalization of external effects in agriculture, the provision of public goods”, which is one of three tasks within the topic “Financial and fiscal factors in the improvement of efficiency, sustainability and competitiveness of the Polish agriculture”, being a part of the multi-annual programme entitled “The Polish and the EU agricultures 2020+. Challenges, chances, threats, proposals” implemented in the years 2015-2019 by the IAFE–NRI. This publication seeks to present the main results of the work carried out in 2015, determined by the task’s objectives named for this year. This publication does not present all the results obtained or the issues investigated as they are shown in other scientific publications and presentation of 2015.

Taking into account the objectives adopted for the research task in 2015 and for the following years, this monograph focuses on the first objective, that is the presentation of EU and national policy instruments directly influencing the development of rural areas and agriculture. This issue is a key point of reference for all the other research to be implemented in the period 2015-2019 as part of this task, which is why most of the monograph is dedicated to this problem. However, despite this degree of concentration on this issue, this problem was only briefly outlined, and therefore with that in coming years it will also be taken into account in achieving the research objectives planned for the next few years as it is an issue that requires ongoing monitoring necessary to ensure reliable execution of all research envisaged within this research task.

The review of the Common Agricultural Policy in its present form is planned for the year 2016. Although the current situation suggests that we should not expect the CAP reform in 2017⁹⁹, it cannot be completely ruled out. We can also be sure that the debate on the future of the CAP will be more and more intense. Given these circumstances, the need to analyze the mechanisms and fiscal impulses influencing the development of agriculture and rural areas will continue to grow.

Presented in a monograph various instruments for supporting agricultural and rural development show the growing complexity of the system of agricultural support and the increasing possibility of using alternative instruments for financing economic activities carried out by farmers and other entities operating in rural areas. Although the system of direct payments remains in Poland and

⁹⁹ A. Matthews, (2015), *Will there be a CAP reform in 2017?*, article available on the website: <http://capreform.eu/will-there-be-a-cap-reform-in-2017/>.

other countries of the European Union the primary source of funds for the agricultural sector, increasingly more and more available are public and private funds and financial institutions offering other financing instruments.

The European Commission increasingly promotes the use of returnable instruments in different areas of the EU policy. This also applies to rural development policy. Since the 2007-2013 programming period, in a palette of instruments which may be part of the rural development programmes co-financed by the EAFRD are financial instruments, previously called financial engineering instruments. However, past experience with their implementation shows that these are instruments not only of a limited interest among potential beneficiaries, but they are also tools that require completely different institutional arrangements. At the same time more difficult than for the other instruments to determine the scale of demand for them.

Despite these difficulties, it should be expected that in the next programming period the use of financial instruments can become a compulsory element of rural development programmes. As shown by the Polish experience in the implementation of financial instruments under the other funds from the EU budget than the EAFRD, the main barrier to using such instruments is the lack of knowledge among the potential beneficiaries about the principles of the functioning of financial instruments.

The Polish system of preferential credits can be seen as an important point of reference when it comes to the possibility of introducing financial instruments or returnable financing in the Polish rural development programme. Preferential credits are now the most important element of the Polish national agricultural policy. More than twenty years of experience in the operation of a set of instruments is a legacy that should be used for shaping the implementation mechanisms of financial instruments in Poland.

However, we should also pay attention to the fact that the limited assets to these credits resulting from the necessity for adjustment of the EU state aid rules led to a significant drop in the number of preferential credits granted each year. It should, however, be associated not only with the tightening of the requirements, but also with the increase of support provided to Polish farmers under the Common Agricultural Policy.

Trying to assess the impact of financial support given to agriculture and rural areas, for example by means of fiscal multipliers, we should keep in mind the systematic change in policy towards the agricultural sector and rural areas. Moreover, the ever-growing complexity of the instruments of agricultural and rural policy, an analysis of the impact of public action on the development of the agricultural sector and rural areas must take into account the fact that they affect

not only the volume of production and producers' incomes, but also to the sustainable development of agriculture and rural areas. This shows that fiscal multipliers must be analysed in different contexts, or in relation to specific objectives of the CAP. It also means significant limitations associated with the still insufficient level of development of methods for the valuation of the provision of public goods.

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