The agriculture could be characterized as the economic activity which production and economic results are unpredictable and unstable because of climate change, market volatility. Vast and growing risk of farming induces to look after the ways to manage it. European Union, aiming to reduce risks in agricultural activities, proposes to create mutual funds as new measures for farmers not only to protect the production, but the income losses too. Lithuania intends to implement these measures, therefore it is very important not only to analyse the experience of other countries but also to know the opinion of Lithuanian farmers’ community. The aim of the research is to examine the attitudes of Lithuanian farmers due to participation in creation of mutual funds. Using the method of force field the semi structured questionnaire was developed, it was sent to 46 leaders of farmer’s organizations affiliated to The Chamber of Agriculture of the Republic of Lithuania, 22 replies were received. The research results confirmed farmers’ attitudes, that the risk management tools, associated with creation of mutual funds are necessary and relevant in Lithuanian case, but their current level of awareness impels uncertainty and unpreparedness.

Key words: cooperation, farmers attitudes, income stabilization measure, mutual funds, risk. JEL Codes: Q10, Q13, Q18.

1. Introduction

One of the key questions of Common Agricultural Policy implemented by European Union (EU) is agricultural market stabilization, which includes risk management. While talking about agricultural risks we are talking about loses as a result, which can be incurred in various forms, but the most significant is financial loss or income volatility (Miller, 2004). The question about effective risk management in agriculture concerns all members of EU.

Farmers today face increased economic and environmental risks due to continual fluctuation of agricultural production purchase prices, the effects of climate change on plants and crops and outbreaks of animal diseases, or pest infestations, therefore it is necessary to look for appropriate measures to manage them.
One of the key questions of Common Agricultural Policy is concern about the support mechanisms for risk management and agricultural insurance which became evident with the reform of the Common Agricultural Policy of 2003, when the Council Agreement mandated that the Commission should study specific measures to address risks, crises and natural disasters that agriculture may confront (Bardají, 2016).

The risk management is one of the strategic objectives of the Lithuanian RDP 2014–2020, and will remain after 2020. Some agricultural risks are insured by the private companies in insurance market. Lithuanian government provides tools for farmers’ insurance too. Situation in autumn 2017, when because of permanent rain, farmers could not harvest the crops, to seed crops confirms the lack of risk management instruments. Estimated losses reached at least 40 million euro. This is the reasons why farmers protection became one of the central topics discussed by the national authorities. The creation of mutual funds is one of the possibilities to manage risk in agriculture as the European Commission raises the question that farmers should take over responsibility for risk management.

The CAP reform of 2014 stressed the importance of risk management instruments. The support for risk management developed through the Articles 36 – 39 of the Council Regulation 1305/2013 and considers three possibilities for support:

a) financial contributions to premiums for crop, animal and plant insurance against economic losses to farmers caused by adverse climatic events, animal or plant diseases, pest infestation, or an environmental incident (M.17.1);

b) financial contributions to mutual funds to pay financial compensations to farmers, for economic losses caused by adverse climatic events or by the outbreak of an animal or plant disease or pest infestation or an environmental incident (M.17.2);

c) an income stabilisation tool (IST), in the form of financial contributions to mutual funds, providing compensation to farmers for a severe drop in their income (M.17.3) (Bardají, 2016).

The proposed two least tools (M.17.2 and M.17.3) are based on creation of mutual funds and designed as an insurance scheme, compensating farmers’ income losses if production or income drops below a certain level (30 percent). Mutual funds as insurance tool are based on the establishment of financial reserves, built on members’ contribution. Experts raise the question concerning the mutual fund creation as a risk management tool in theoretical, practical, holistic perspective. C. Klimkowski (2016) using polish farmers Farm Accountancy Data Network (FADN) evaluates benefits, arising from implementation of IST. He argues that aggregate production insurance, which is proposed by IST, allows lower insurance premium rate in relation to insurance of specific production type, proposed by insurance in the market. M. Janowicz-Lomott (2014) identifies organizational and financial solutions of mutual funds in Poland case study. E. Clipici (2015) observes the mutual fund situation in Romania, M. Meuwissen at al. (2011) invested the opinion of experts from different European countries about income stabilization tool, T. T. Assefa (2012) analyses currently operating mutual insurance companies in Netherlands and discusses positive and negative aspects of mutual insurance schemes for farmers. M. Pigeon (2012) simulates the IST implementation effects in Belgium. C. Fabian at all (2016) estimates cost of the
implementation of the IST in Italy and the economic viability of the relating mutual fund. I. Bardaji at all (2016) overviews the state of implementation of risk management tools the Member States chose by Rural Development Programmes examines similarities and differences of applied tools.

The proposed measures M.17.2 and M.17.3 are picked heavily. Only 3 countries picked the first and 3 the second measure. The observance of the implementation showed that only two countries continue implementation, others do not apply it yet because of emerged difficulties. The measures are implemented in those countries (France, Italy) which have long traditions on mutual funds activities.

Lithuania intends to implement these measures, therefore it is very important not only to analyse the experience of other countries but also to have an understanding of what the Lithuanian farmers’ community is thinking about of this.

The aim of the study is to identify the attitude of Lithuanian farmers towards possibility create mutual funds for agricultural risk management as additional measure.

The methodology of the investigation. To achieve the aim of the article the questionnaire was prepared. The leaders of various farmers’ organizations were treated as experts reflecting the general opinion of their members. The questionnaire was distributed to the leaders of farmer’s organization belonging to The Chamber of Agriculture of the Republic of Lithuania, which unites farmers’ organizations under common umbrella. The questionnaire, which was developed using the force field analysis method, was sent to 46 organizations on 20 of September 2017, 22 replies were received.

2. The mutual funds as the risk management tool

The farmers mostly incur two main types of risk, related to their activity:
- risk, related to production losses, which rises because of climate change, animal and/or plant diseases, pest infestation or environmental incidents;
- risk, related to income losses, which depends on market conditions, price variations and volatility.

The multi-layer risk management system is based on the principle that different levels of risks (layers) must be managed by different actors, different instruments and funding. Apart from public support, EU support, the role of private insurance companies, farmers can also contribute to collective risk management, and these practices are applied in some countries, such as France, Italy, the Netherlands, and Germany.

By encouraging farmers to assume more responsibility for risks, the state can create an appropriate legal framework, an institutional framework that helps farmers create such a collective service, including cooperatives and mutual funds. Mutual funds principle means accumulation of financial reserves based on contributions from participants. The mutual funds can be seen as an organized, consolidated fund for the accumulation of income, which purpose is to stabilize incomes over time.

There is no common agricultural risk management scheme in EU. The risk management tools variety, rates, volume, public support measures differ from one Member
state to other. The risk the farmers confront differs too. The 2013 CAP reform inaugurated a new era for the EU with respect to the development and implementation of alternative risk management tools (Bardaji, 2016). CAP 2014–2020 seeks balance between countries and proffer for member state to choose appropriate measures proposed by European Commission. For the first time the mutual funds measure proposed to implement was 2007–2013 programming period. But the result was not very successful. The measure was chosen only by France so the implementation was very limited. This could be explained by complexity of the measure. The literature review let to distinguish main advantages and disadvantages of creation of mutual funds (table).

Table. Benefits and weaknesses of mutual funds implementation

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Benefits</th>
</tr>
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<tbody>
<tr>
<td>Limited risk could be covered by insurance companies in the market (Clipici, 2015).</td>
<td>Mutual funds can insure those risks, which are not insured by companies (Clipici, 2015; Fabian, 2016).</td>
</tr>
<tr>
<td>Limited resources of fund, especially in the first years of activity (Cordier, 2014).</td>
<td>Broader insurance possibilities (Janowicz-Lomott, 2014).</td>
</tr>
<tr>
<td>Instance of trust between members of mutual funds (Janowicz-Lomott, 2014, Bardaji, 2016).</td>
<td>Mutual funds are owned by participants, which can mean stronger sense of ownership and trust amongst its stakeholders as compared to conventional public stock companies, (Melyukhina, 2011, Assefa, 2012, Landini, 2015).</td>
</tr>
<tr>
<td>Lack of good experience examples (Janowicz-Lomott, 2014).</td>
<td>Farmers organize their own cross-control (Landini, 2015).</td>
</tr>
<tr>
<td>The measures are new, it is difficult to make accurate predictions about the number of farms taking part (Fabian, 2016).</td>
<td>Mutual funds avoid big distortions of the government budget (Landini, 2015).</td>
</tr>
<tr>
<td>Regionally organized mutual funds have a possibility that many or all farmers incur losses at the same time (Landini, 2015).</td>
<td>Possibility to gain contributions from the private sector (Landini, 2015).</td>
</tr>
<tr>
<td>Farmers are not always sufficiently well organized to set up an efficient mutual structure (Landini, 2015).</td>
<td>Such funds may adopt flexible regimes of premium collection, which are better tailored to cash flows of their clients (Melyukhina, 2011).</td>
</tr>
<tr>
<td>Need of an effective monitoring of farm income (Dell’Aquila, 2012).</td>
<td>IST will significantly reduce income inequality (Finger, 2014).</td>
</tr>
<tr>
<td>Mutual companies may suffer limited financial robustness due to their relatively small size and the small scope (Melyukhina, 2011, Meuwissen, 2013).</td>
<td>Flexibility in terms of insurance coverage and premium assessment (Assefa, 2012).</td>
</tr>
<tr>
<td>Requires the large investment to create data collection methods (Cordier, 2014).</td>
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</table>

In programing period 2014–2020 3 member states chose to implement the measure M.17.2 (France, Italy, Romania), 3 the measure M17.3 (Italy, Hungary, Region of Leon in Spain). It should be emphasized that only two countries – France and Italy – which have traditions of mutual funds activities in agricultural sector, imple-
ment this measure, the rest countries suspended implementation as the plenty of questions, uncertainties arose and process of setting up a mutual fund appeared intricate.

FMSE, created in 2012, is the only official French mutual fund, which is compulsory for all farms involved in agricultural activity. The structure of fund consists of two parts – common to all farmers and several specialized sections. Italian agricultural producers used mutual funds since 2002, they operate as private funds. There are 66 such producer groups affiliated in one organization – Asnacodi (Clipici, 2015).

Lithuania chose to implement the Measure 17.1 in 2014–2020 and to cover a part (65 percent) of premiums for crop, animal and plant for loss caused by an adverse climatic event, or by an animal or plant disease, or a pest infestation, or an environmental incident or a measure adopted in accordance with Directive 2000/29/EC to eradicate or contain a plant disease, or pest which destroys more than 30 percent of the average annual production of the farmer in the preceding three-year period or a three-year average based on the preceding five-year period, excluding the highest and lowest entry (Regulation …, 2013).

It is expected the expenditure will seek 17.5 million Euro and will be supported 1450 or 0.75 percent of all farmers. According to the scale of risk it is intended to refund drought and frost risks.

According to the data of the National Paying Agency under the Ministry of Agriculture of the Republic of Lithuania by the end of 2016 there was still no approved and paid support. According to 2017 data the 465 applications were collected, 82.6 per cent of them applied of crop ant plant insurance premiums, the rest ones for compensations for animal insurance premiums. The amount of support, paid for farmers, consisted 10.9 percent of total expenditures for the measure.

Insignificant number of farmers participating in private insurance market (about 800 farmers annually insured) disclose that intensity of insurance is law, farmers are not tended to cover risks of their activity. The question arises whether one or two additional insurance measures would stimulate farmers to take responsibility for risk management.

As the creation of mutual funds deeply depends on mutual relations between members, one of the indicators that could show a readiness of farmers to participate in common organization is the state of cooperative movement in the country. The traditions to cooperate are quite weak, activity is not intense and the number of cooperatives is relatively small. According to the Centre of Registers, there are 300 cooperative structures in Lithuania. Their activities are not developed and cover small number of farmers: according to the 2010 census, only about 2.4 thousand farmers were members of cooperatives. The cooperatives are very small – in 2016 according to the data of the Cooperative Survey conducted by the Chamber of Agriculture of the Republic of Lithuania 71.0 percent of cooperatives had 10 members or less. It reflects the attitude and willingness of farmers to participate in joint activities. In addition, cooperation movement in Lithuania is relatively young and does not have a long tradition of work comparing to other countries where these traditions has quite deep roots (100 years and more). This could be validated by above mentioned survey re-
Gediminas Kuliešis, Lina Pareigienė, Erika Ribašauskienė, Cécile Sablou. The readiness of farmers to create mutual funds for agricultural risk management in Lithuania

Results, which states that 53.1 per cent of cooperatives activities last less than 10 years. As the cooperation principles are similar to those of the mutual funds, therefore they could be the entities able to organize the mutual insurance as the additional service.

In the Programme of the Government of the Republic of Lithuania, government commit to stimulate the development of mutual funds for the managing agricultural risk. In this case, it is very important to know the attitudes of the farmers themselves about creating mutual funds and participating in new risk management tools.

3. Research methodology

In order to analyze the farmers' attitude, the review of both measures was presented at the meeting of the Council of the Chamber of Agriculture of the Republic of Lithuania. The discussion with the administrative personal of the Council, farmers of different sectors, government spokesman after presentation allowed seeing the very first opinions about the possibility to implement measures and to adjust questionnaire for the further research.

In order to find out stakeholders’ opinion on the establishment of mutual funds in reference with literature analysis and the results of the discussion a questionnaire was drawn up. The questionnaire was developed using the force field analysis method (Baležentis, 2007). According to this method there are always two groups of forces acting in the field: the first involves the forces acting against the implementation of the changes (limiting forces), the second group directed towards the implementation of changes – stimulating forces (Baležentis, 2007, Obrazcovas, 2005). An analysis of the force field allows us to identify which type of force is acting, evaluate their direction and intensity. In this case, the study object was the stakeholders’ attitudes towards the factors identified in the questionnaire; how much they stimulate or inhibit the establishment of mutual funds.

The questionnaire was semi structured and consisted of 8 questions, 3 of them were closed and 5 were opened. Respondents were asked to evaluate the importance of each of 21 factors from 2 to -2, were 2 meant that factor is very stimulating and -2 very inhibiting. In addition, respondents were asked to indicate the reasons raising doubts about the necessity of mutual funds and to denote factors, which could to stimulate the participation in mutual funds activity. Respondents were asked how long a farmer’s membership should last to get compensations, they were asked to evaluate the necessity of the above mentioned measures.

Questionnaires were distributed between Chamber of Agriculture of the Republic of Lithuania associations. The leaders of associations were asked to fill the questionnaire. We treated them as experts reflecting the opinion of members of the associations. The questionnaire was sent to 46 organizations on 20 of September 2017, 22 replies were received. Sectors represented: livestock farming, horticulture, horticulture, dairy farming, cereals, beef cattle, sheep breeding.
4. Results

The results of the discussion group. The main findings after the discussion at the Chamber of Agriculture were the members of Council and farmers participated were following:

- expressed anxiety that large farmers will have to cover the losses of the small farmers;
- the rules for assessing losses are complicated;
- there is no clear what contributions to the fund might be;
- the idea was raised about the feasibility of implementing the proposed measures in Lithuania, because the choice of these measures is so low in the EU27 Member States. 5 countries chose M.17.2 and M.17.3 measures and only 2 implement them. Doubts arose about the fact that Germany and Netherlands, which have lasting mutual funds activity practice in their countries do not chose those measures at all;
- talking about the organization of mutual funds activity there were proposed to focus on Schemes of Credit Unions, since their principles of operation and experience in Lithuania are closest to the proposed instruments for the foundation of mutual funds. It was suggested to talk with bank managers managing risky loans, which would provide clarity on the possibilities of implementing these measures and discussing the risks.

The results of the survey. 21 factors influencing the establishment of mutual funds and their activities in Lithuania were identified in the questionnaire. Respondents were asked to evaluate the importance of each factor by pointing out its importance: from 2 to –2. The answers were summarized and the average of each factor was derived. The value of “0” means that the factor is neutral. Negative factors, which act like inhibiting forces distributed on the negative side – their meanings are with minus mark, stimulating factors locate in opposite side. Respondents' assessments are presented in Figure.

Only 4 factors were evaluated as inhibiting fund development in Lithuania:

- detailed record and submission of farm incomes and expenses participating in mutual funds;
- the dependence of the amount of insurance payments on the volume of funds accumulated (in the absence of resources the benefit is reduced);
- the same premium for all farmers participating in mutual funds;
- fixed maximum amount of insurance benefit per farmer.

Most factors were evaluated as more or less encouraging ones, but the “strengths” of the factors differ. The most stimulating factors are:

- the ability to cover against risks that are not covered by private companies;
- the possibility for farmers to contribute themselves to decision-making on risk management;
- EU support level for insurance benefits;
- the administrative costs of setting up the mutual fund, spread over a three years;
- the fund's ability to take commercial loans in case the fund lacks of resources
- a commitment to the fund to act at least 5 years.
Fig. Factors Influencing the Establishment of Mutual Funds in Lithuania, mean scores of importance

Note: 1. Possibility to cover risks, which are not covered by private companies; 2. Possibility for farmers to contribute to risk management; 3. EU support rate 65% of the eligible costs; 4. The administrative costs of setting up the mutual fund, spread over a three years; 5. Possibility for funds to take commercial loans; 6. The activity of mutual fund should last at least 5 years; 7. Mutual funds are created by farmers; 8. Mutual funds creation by sectors; 9. Compulsory participation; 10. Mutual fund is created by state; 11. Premium from two parts: common and shifting; 12. The linkage of premiums amount with farm specialization; 13. Financial compensation only when drop of production exceeds 30%; 14. Unused resources dispense for fund members; 15. The state of farmer’s co-operation in Lithuania; 16. Common mutual fund for all sectors; 17. Financial compensation only when drop of income exceeds 30%; 18. Fixed maximum financial compensation per farm; 19. The dependence of financial compensations amount on mutual fund reserve; 20. Detailed record and submission of farm incomes, expenses; 21. Same premium for all farmers.

Such factors as the state of co-operation of Lithuanian farmers, the payment of financial compensations only when drop of income exceeds 30% of income loss, the establishment of a common mutual fund for all sectors, the fixed maximum amount of financial compensation per farmer was assessed as neutral ones – their significance are close to zero. Respondents were asked to indicate what other factors might to raise doubts about the usefulness of the fund. This question was answered by 61.9 percent of the respondents. 46.2 percent of respondents said that they query about the transparency of information the farmers would represent, another factor is distrust between farmers and distrust of the Government Institutions. 30.8 percent pointed out the high administrative costs and complex administration, 15.4 per cent doubts whether the transparency of the activities of the funds would be achieved. The lack of information about good practice examples in other countries raises doubt about fund usefulness. 5.4 percent of respondents mentioned other reasons: negative experience of cooperation, complicated rules, insufficient state aid.

Respondents were asked to indicate which additional factors would stimulate farmers to participate in the fund. This question was answered by 57.1 percent of respondents. 25.0 percent pointed out the dissemination of information: expert consul-
tations, distribution of knowledges, the advertising of funds activities with indications of disadvantages and advantages of participation. 16.6 percent marked the compulsory participation in mutual funds for farmers, which receive EU support. Participation in the activities of the funds promotes increasing risks due to climate change, growing cooperation rates and activity of economic actors, positive experience of funds activities, farmers' contributions related with the sector, transparency of activity.

Respondents were asked to evaluate which measure from the proposed two is more relevant for Lithuanian farmers. Only one respondent replied that no measure was relevant to Lithuanian farmers, 3 had no opinion yet, 40.1 percent respondents evaluated both measures as equally important and necessary, 31.8 percent would be more likely to opt for the development of mutual funds for adverse climatic events, animal and plant diseases, harmful organisms and environmental events, for 9.1 percent the income stabilization measure seemed to be more relevant to Lithuanian farmers than the first one.

By planning the implementation of measures need to consider that factors, which act like inhibiting ones and to focus on spreading the information about concerning topics. Mutual funds created for the risk management purposes may take on other functions, such as credit provision for associates. This could lead to subsidiary functions of mutual funds, not only the risk management of the agricultural activities. Another possibility is to think about possibility to create mutual funds by strong cooperatives which already act on the basis of mutuality and have practice. In this case cooperatives undertaking additional functions could enlarge the provided services and to seek broader activity possibilities. This could be said about credit unions too.

5. Conclusions

1. Because of fluctuations in the market prices of agricultural products, the effects of climate on plant and crops harvest, animal diseases, pest infestations, farmers confront with an increasing economic and environmental risk. The necessity to find appropriate instruments to mitigate these risks is rising. EU Regulation 1305/2013 finetune the possibility to apply 3 risk management tools. Tools, directed towards the creation of mutual funds are new possibility to cover risks, which are not insured by private market.

2. The research results confirmed farmers’ attitudes, that the risk management tools, associated with creation of mutual funds are necessary and relevant in Lithuanian case.

3. The factors, evaluated as mostly inhibiting the creation of mutual funds were: detailed record and submission of farm expenses and incomes participating in mutual funds; the dependence of the amount of insurance payments on the size of funds accumulated (in the absence of resources the benefit is reduced); the same premium for all farmers participating in mutual funds; fixed maximum amount of insurance benefit per farmer. These factors must be discussed the most responsible by debating with stakeholders as they evoke uncertainty.
4. Dissemination of information and examples of good practice, debates with farmers would expand their knowledge and would lead to a clearer perception of the activities of the mutual funds and the potential benefits. More specific information on calculations of contributions, losses, compensation amounts may act as stimulation factors in mutual funds creation and activity.

5. Considering the prospects for setting up mutual funds, it is worth considering two possible alternatives for implementation in Lithuania: it is a good experience of the functioning of credit unions in Lithuania and agricultural cooperatives whose principles of operation are close to mutual funds.

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References


ŪKININKŲ PASIRENGIMAS KURTI TARPUSAVIO PAGALBOS FONDUS

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Santrauka

Žemės ūkis apibūdinamas kaip ekonominė veikla, kurios rezultatai dėl klimato kaitos procesų, pokyčių rinkoje yra nenuspėjami ir nestabilūs. Didėjanti rizika kelia susirūpinimą ir poreikį ieškoti būdų jai suvaldyti. Europos Sąjunga, siekdama sumažinti žemės ūkio veikloje kylančias rizikas kaip vieną būdą siūlo tarpusavio pagalbos fondų kūrimą, draudžiant ne tik ūkininkų produkcijos, bet ir pajamų netekimą, kas iki šiol nebuvo daroma. Priemonės yra naujos, jų pasirinkimas tarp ES šalių yra menkas. Lietuva ketina ateityje įgyvendinti šias priemones, todėl labai svarbu ne tik analizuoti kitų šalių patirtį, tačiau ir ištirti ūkininkų bendruomenės nuomonę fondų kūrimo klausimu. Šio straipsnio tikslas yra įvertinti Lietuvos ūkininkų nuostatas dalyvauti tarpusavio pagalbos fondų kūrimo klausimu. Šio straipsnio tikslas yra įvertinti Lietuvos ūkininkų nuostatas dalyvauti tarpusavio pagalbos fondų kūrimo klausimu. Šio straipsnio tikslas yra įvertinti Lietuvos ūkininkų nuostatas dalyvauti tarpusavio pagalbos fondų kūrimo klausimu. Šio straipsnio tikslas yra įvertinti Lietuvos ūkininkų nuostatas dalyvauti tarpusavio pagalbos fondų kūrimo klausimu.