

Economics of agriculture

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## THE BUSINESS INSURANCES IN THE AGRICULTURE OF SELECTED EU COUNTRIES

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### Abstract

*The aim of this paper was to present a general situation of the development of agricultural business insurances in the selected EU countries. The Polish case was particularly included. In the analysis both the descriptive statistics and tables methods were used. It was assumed that the development of business insurances in the selected EU countries is diversified and depends on the amount of public assistance of a given country to agricultural sector. A great contribution in the agricultural insurance market development (crops and animal farms) in the EU countries can be attributed to state subsidies thanks to which the state can provide financial assistance to agricultural production insurance. It is an important step towards making such insurance policies more popular, giving tangible benefits to the state, insurance companies and the insured themselves. Subsidising the premium by the state or co-financing the costs of reinsurance is a model example of the public-private partnership, aiming to cover all the agricultural producers exposed to specific risks with insurance.*

**Key words:** *economic insurance, risk, risk management, insurance subsidies*

### Introduction

The changeability of weather conditions, liberalization of agricultural policy or corporate activity globalization are only some of the problems the 21<sup>st</sup> century agriculture is facing. The problems concern a very important issue, namely the changeability of farming conditions, and thus the risk of running a business and its management. In most EU countries risk management in agriculture is limited to using simple economic tools (e.g. production diversification). More sophisticated financial risk management methods concern mostly unforeseeable weather event insurance. The agricultural insurance systems operating in the EU countries are highly diversified.

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The present paper covers the problem of risk management in agriculture. A detailed analysis involved the agricultural economic insurance market in selected EU states. The theory presented here has been developed based on both international and domestic literature. The statistical data analysis has been developed based on the information from 2005-2009 annual and quarterly bulletins of the Financial Supervision Committee as well as the 2009 European Commission reports. The analysis involved the application of descriptive statistics methods and table breakdowns.

### **Essence of risk and risk management in agriculture**

The applicable literature provides many risk definitions referring back to the probability of obtaining a result other than expected [Kaczmarek, 2006], while all the reasonable actions which involve decision-making concerning risk faced by a given entity are part of management. Such actions aim at limiting negative effects of risk implementation. The factors which can have a significant effect on insecurity of running agricultural business cover plant yield, effectiveness of applying a new technique and methods and kinds of production [Orłowski, Wojtaszek, 1973], natural environment pollution [Stroiński, 2006], variation in characteristics and income fluctuations. The list of the factors is extended by the phenomena caused by climate changes, epidemics, competitive relations on agricultural products market, agricultural policy, opening of the markets and international trade conditions.

Considering the potential sources of risk, in agricultural activity the following kinds of risk can be distinguished: production risk, price risk, institutional risk, financial risk as well as human factor risk (the so-called personal risk) [Blanc, 2003; Cordier, Erhel, Pindard, Coureleux, 2008; Klimkowski, 2007]. The greatest importance in running agricultural business is attributed to production risk resulting from the specific nature of agricultural production as well as to price risk connected with the agricultural produce prices instability on the market. The occurrence of such types of risk leads to the emergence of income risk, being an effect of damage inflicted on in the production process as a result of the effect of weather factors and a consequence of the existing economic freedom of the market economy. With than in mind, both farmers and the state take various kinds of decisions and actions to limit the risk in the surroundings of agriculture, referred to in the applicable literature as risk management. Such actions incorporate foreseeing and limiting potential threats and the accumulation of means which could make up for the losses upon their emergence [Kaczmarek, 2006; Preś, 2007; Pawłowska-Tyszko, 2009]. The tools facilitating risk management can include economic and market instruments, the so-called risk division instruments [Berg, Schmitz, 2008]. The risk management instrument being most frequently applied is insurance since the basic problem connected with risk management in agriculture is focusing on its traditional approach, namely taking up protective measures towards threats which could cause losses than on the real actions aiming at using the occasions and building up a constant value added on the farm. Besides, the actions taken up as

part of the economic policy demonstrate that there is a certain pressure on increasing the share of market methods and private co-financing the elimination of risk in agriculture, which means a general principle of crop insurance, and thus the stabilization of income by those interested; agricultural producers.

### **Risk management systems in EU countries**

The risk in agriculture, especially price and production risks, irrespective of their causes, can be limited by e.g. a traditional purchase of the insurance policy. In the EU member states insurance is the most common form of security from the risk since insurance is a fair transfer of risk from one entity to another in exchange for a premium [Hatch, 2008]. Besides, they ensure the coverage of future financial needs caused by the events of force majeure, by distributing the burden of the coverage upon many entities exposed to the same events of force majeure [Łazowski, 1948].

Agricultural insurance is especially promoted in the countries where the law forbids the *ad hoc* funds or natural disaster funds to compensate for the damage which could be covered by insurance. And thus everything what could be covered by insurance is to be covered by insurance, however, if the farmer fails to meet that obligation, he must be aware that he will not receive any external support. In Greece, Spain, Austria, Portugal and Sweden, for example, there exist no public fund payments if the insurance of the damage was possible earlier. However, in many countries, also in Poland, clear regulations on how to allocate public funds to cover the losses in agriculture are missing.

The funds addressed to agriculture for the purpose of risk management are used by EU countries in different ways; e.g. in France one can observe a high level of *ad hoc* payments (2000-2005: 1167 m euro) and an inconsiderable level of insurance subsidies (5 m euro/year). In Spain the situation varies slightly; *ad hoc* aid over 2000-2005 was 225 m euro, for the purpose of insurance subsidies there was allocated about 230 m euro/year, which demonstrates that the approach to the use of public funds for risk management differs across the countries.

Insurance systems in agriculture in the EU states vary. Single risk insurance is most common (Table 1), operating as private insurance; unsubsidised or private with state payments. Table 1 presents the countries which have introduced private insurance systems with state payments, while in the other member states (except for Greece and Cyprus) agricultural producers can benefit from unsubsidised private insurance. In 2008 the total annual value of the premiums collected in the EU-25 countries was about 1539 m euro (without the public system in Greece), while the annual total amount of compensation was about 1061 m euro.

*Table 1 - Agricultural insurance in the EU countries*

Country	Single risk insurance	Market penetration (%)	Total value of premiums (m Euro)	Value of the compensation paid (m Euro)	Gross full premium (%)
Austria	PS	78	520	320	61
Cyprus	GC	100	87	45	52
Czech Republic	PS	35	320	240	75
Greece	P; GS + G	100	(.)	2180	-
Italy	PS	8	2712	1662	61
Latvia	PS	<1	1	(.)	-
Lithuania	PS	1	11	11	100
Luxemburg	PS	45	13	10	77
Poland	PS	7	99	63	64
Portugal	PS	22	469	302	64
Romania	PS	12	140	44	31
Slovakia	PS	(.)	(.)	(.)	(.)
Slovenia	PS	17	95	138	145
Spain	PS	26	5647	3883	69

*Source: developed based on M. Bielza Diaz-Caneja et al. Risk Management and Agricultural Insurance Schemes in Europe, JRC Reference Reports, European Commission 2009, p.15*

*Legend: PS – subsidised private insurance; GS – public insurance, partially subsidised, G – public unsubsidised insurance, GC – public obligatory insurance*

The full premium of the subsidised insurance of agricultural production in the EU countries reached an average level of 60 to 75% with some exceptions, e.g. in Slovenia 145%, and in Romania only 31%. Important factors which decrease the significance of full premium of insurance is reinsurance and public support. The assistance addressed to the agricultural sector in a form of insurance premium subsidies varied across the EU countries. In Italy such assistance accounts for about 67% of the total amount of premiums; in Spain about 49%, and in Austria about 46%. In France the insurance subsidies on average for three years account for only 2.5%, which is due to no single risk insurance subsidies. Interestingly, since 2005 in France there have been launched new insurance products in a form of subsidised crop insurance which accounts for 35% (40% for young farmers). In Slovenia, Latvia, Lithuania and in Poland insurance subsidies appeared as late as in 2006. They refer to basic risk groups (grad/hail, fire, thunderstorms) and in Slovenia account for 30-50%, while in Poland, Latvia and Lithuania – for 50%. However, despite such high payments, the level of market penetration is low, from below 1% in Lithuania to 7% in Poland. The total annual amount of agricultural insurance subsidies in the EU-25 in 2008 was about 497 m euro. The total annual amount of *ad hoc* aid in the EU-25 allocated to agriculture was 904 m euro (excluding animal production aid).

The variation in the public assistance addressed to the agricultural sector results from the agricultural policy of a given state addressed to the promotion of specific sub-sectors or varied types of farms. Some countries combine all those objectives and form a cohesive insurance system addressed to the agricultural sector, considering it to be an important instrument of the agricultural policy stabilizing agricultural income. It is the case, e.g. in Canada and the US. In the EU countries it is difficult to point to typical insurance instruments which would bear the qualities of income insurance. In Great Britain, for example, private insurance companies have introduced cereal production insurance packages. The packages, in their nature, are fixed term instruments with traditional insurance based on the purchase of the policy. Their popularity, however, is still, inconsiderable due to no insurance premium subsidy and poor knowledge of derivative instruments.

### **State of economic insurance in Polish agriculture**

The gross insurance premium is considered to be the basic measurement of the insurance market situation. In 2008 the total gross premium for property insurance in Polish agriculture was PLN 524 m and reached the level 40% higher than in 2005, which, in fact, means a real increase in the premium by over 30%. This situation has been generated by increased revenues from obligatory insurance premiums as well as optional insurance of agricultural crops and farm animals. The most dynamic increase over 2005-2008 was recorded for gross premiums for optional insurance of crops and farm animals. Over the period studied the increase was almost three-fold. However, it should be noted that between the year 2007 and the year 2008 the amount of the premiums remained almost unchanged and in real terms there was recorded an even slight, over 3%, decrease. The situation with compensation paid over that period to agricultural producers is slightly different; the indemnity decreased almost by 2%, which in real terms stands for a 5.6% decrease. The most dynamic increase over that period was recorded for the value of compensation paid for the optional insurance of crops and farm animals. The claims history in 2008 in the segment of optional insurance of agricultural crops and farm animals increased considerably (by 31.3 percentage points), as compared with the value recorded in 2007, while in the global approach it decreased slightly from 65.9% to 60.1%. Such a considerable increase in the risk of reinsurance in agriculture triggers a number of fears, especially in reference to the insurance of catastrophe-related risk and makes insurance companies' interest in that market poor. Besides, crop and animal farm insurance in Poland today stands for expensive insurance policies a little (7%) group of agricultural producers benefit from.

In 2008 for such property insurance subsidies the state budget allocated PLN 545 m. The amount covered farm animal insurance premium subsidies (PLN 25 m), agricultural crops insurance premium subsidies (PLN 135 m) and the drought damage subsidies (PLN 385 m). In 2009 only PLN 150 m was allocated to that purpose. That situation is connected with e.g. lower, than expected, subsidies made to the crop and farm animal insurance agreements entered into with farmers in the previous years. In

the first year of insurance subsidies there was used only 3.5% of the amount allocated to that purpose. However, in 2007 from the amount of PLN 210 m allocated, there was used as much as over 65% of the subsidies. Such a low total use of insurance subsidies must be referred to low insurance awareness of agricultural producers, poor information campaign, and insurance companies' offers including competitive products sold under commercial conditions being more favourable for the farmer. Interestingly, what is also missing is the widespread insurance subsidies proposed and, on the other hand, the operation of *ad hoc* state measures to finance the effects of natural disasters of high range, which can have an unfavourable effect on the development of that support instrument. Most probably introducing a common agricultural crop and farm animal insurance obligation could solve that problem.

## Conclusions

Risk insurance in European agriculture by insurance companies is a supplementary form as compared with the CAP instruments. Nevertheless, it is getting more and more important with a gradual implementation of directional changes in the Common Agricultural Policy. A great contribution to the agricultural insurance market development in the EU countries can be attributed to state subsidies thanks to which the state can provide financial support to agricultural production insurance. It is an important step towards making such policies more popular, giving tangible benefits to the state, insurance companies and the insured themselves. Subsidising the premium by the state or co-financing the reinsurance is a model example of public-private partnership, aiming at providing the insurance coverage to all the agricultural producers exposed to specific risks.

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