

**The Common Agricultural Policy
of the European Union –
the present and the future**

**EU Member States
point of view**



INSTITUTE OF AGRICULTURAL
AND FOOD ECONOMICS
NATIONAL RESEARCH INSTITUTE

The Common Agricultural Policy of the European Union – the present and the future

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Proceedings of the International Scientific Conference

"The Common Agricultural Policy of the European Union – the present and the future"

Multi-Annual Programme 2015-2019

"The Polish and the EU agricultures 2020+. Challenges, chances, threats, proposals"

5-7 December 2017

Stare Jablonki, Poland



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

Warsaw 2018

This monograph was prepared under the Multi-Annual Programme 2015-2019
“The Polish and the EU agricultures 2020+. Challenges, chances, threats, proposals”.

The publication is a collection of selected papers delivered at the 22th edition of the International Scientific Conference organized by the Institute of Agricultural and Food Economics - National Research Institute. The theme of the conference was "The Common Agricultural Policy of the European Union – the present and the future. The conference was placed on 5-7 December 2017 in Stary Jabłonki in Poland. Common Agricultural Policy was and still is one of the key pillars of European integration. Published in two volumes materials refer directly to the current and future of the CAP in EU and non EU member states, the strategic objectives and principles of agricultural policy for the agri-food sector and rural areas, address the issues of equilibrium between agriculture, forestry and land use, relate to the dilemmas for the EU budget and the CAP after 2020, CAP instruments and their adjustment, transformations of the rural economy and programming of the rural and agricultural policy, as well as productivity and production efficiency and tensions between sectoral action and between different models of territorial activities.

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Translated by

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Cover Project

Leszek Ślipki

ISBN 978-83-7658-743-1

DOI: 10.30858/pw/9788376587431

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10. Comparison of risk management tools under the CAP of the EU, the US Farm Bill and in the Czech agriculture¹⁵

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DOI: 10.30858/pw/9788376587431.10

Abstract

It is due to its strong dependence on the market and natural factors, such as weather conditions and extreme weather events or livestock diseases, agriculture is characterized by high exposure to risks. It is the reason for the important role of mitigation of their impacts in the framework of agricultural politics of many countries of the world. The presentation analyses the various systems of risk management tools in the agricultural policy of the EU, the US and the Czech Republic. In the US the support of risk management tools such as the crop and income insurance is the most important part of the policy. In the CAP of the EU, the support for agricultural insurance plays only a minor role and this support is usually applied on the national level. It is also the case of the Czech agriculture, which is characterized by the prevalence of large corporate farms. This structure creates the important barrier for reasonable application of the risk management tools under the RDP for the period between 2013 and 2020.

Keywords: risk management, comparative analysis, risk management tools, Common Agriculture Policy of the EU, US Farm Bill

JEL codes: Q18, Q14, H12, H84

10.1. Introduction

This paper attempts to compare risk management policies applied in the United States' Agricultural Act (Farm Bill), the European Union's Common Agricultural Policy (CAP), and in the Czech Republic on the national level [Vilhelm et al., 2015]. The findings presented in the literature review should contribute to the formulation of requirements for future risk management policy and its effective application in the conditions of the Czech agriculture in the context of the EU's CAP.

¹⁵ This paper was supported by the Internal Project of the Institute of Agriculture Economics and Information, Project no. 1115 "Comparative Analysis of Risk Management Tools: The United States, the European Union, and the Czech Republic" (Řízení rizik v zemědělství – srovnání situace v USA, EU a ČR).

The work draws mainly from the studies by Mathijs [2017] and Cordier [2015], which describe the current agricultural risk management under the EU's CAP for 2014-2020 and the US Farm Bill of 2014. Furthermore, it also makes recommendations for the future formulation of the CAP risk management policy drawing from the above-mentioned studies.

The Common Agricultural Policy (CAP) of the European Union (EU) has historically been undergoing a series of reforms that have contributed to its current form. The current CAP reform after 2020 is likely to bear a gradual reduction in the income support with the intention, e.g. to shift financial resources to risk management systems [Cordier, 2015]. The general market orientation of the European agriculture since the mid-1990s and recent liberalization in the milk (dairy) and sugar sector has put European farmers at increased risk, thus increasing the CAP's demand for more effective price volatility and other risks. The current task is to review and improve the position of farmers in supply chains and to make recommendations such as: to increase market transparency, to make risk management tools more attractive by simplifying loss calculations and the possibility to reimburse and relocate resources from unplanned direct payments to rescue networks for farmers who can use them at a time of market imbalance [Agricultural Markets Task Force, 2016]. The transfer of resources should focus on introducing an integrated risk management strategy at the EU level complementing existing Member States' strategies, not only as a freely defined set of strategies but also as a structured and coherent framework complementing both private and public risk management measures. Such a framework should provide a reasonable response to the various threats posed by producers.

In the US, agricultural policy has seen a shift from direct payments used as a basic supporting tool for agricultural income-generating programmes, both natural and price character. This approach is, therefore, fundamentally different from the approach of agricultural support implemented in the EU's CAP.

10.2. Risks in agriculture

The Organization for Economic Co-operation and Development analyses three layers of risks: high frequency/ low damage normal risks, low frequency/ high damage catastrophic risks, and marketable risks with immediate levels of frequency and damage [OECD, 2011]. Normal risks are managed by farmers as a part of the normal business strategy – small accidents, minor management failures, normal weather volatility. Marketable risks are handled through market tools (insurance, future markets, cooperative arrangements among farmers – with or without support from public sources). Catastrophic risks are handled through market tools with public support or directly by the state through government interventions.

Figure 1. Optimal pattern of risk management strategies and policies

		More government involvement →			
		ON-FARM STRATEGIES	MARKET TOOLS	EX ANTE POLICIES	EX POST POLICIES
Higher income loss ↓	NORMAL RISKS Small damage but frequent	ON-FARM STRATEGY Diversification Savings			
	MARKETABLE RISKS Middle range		MARKET TOOL Forward contract, Private insurance		
	CATASTROPHIC RISKS Rare, high damage and systematic			DISASTER ASSISTANCE POLICIES <i>Ex ante/ Ex post</i> payment, Public insurance	

Source: OECD (2011), own processing.

10.3. Risk management policy in the United States Farm Bill 2014

The US agricultural policy is established by the Agriculture Acts. The long-term objectives and priorities were and are ensuring and maintaining food security in the US, ensuring stable income and income for farmers, stabilizing agrarian markets, deepening the relationship to the environment. This law was introduced as the Farm Bill, which sets the US agricultural policy for a five-year period. The Farm Bill is approved by the Congress and the Senate of Representatives. Both producers, consumers, and taxpayers share their views with views of the aforementioned authorities. The first Farm Bill was introduced in 1949 and did not bring any major changes. The programme for food consumption, environmental protection and the recently approved programme on bioenergy has been developed over the last decade [Bureau, 2012].

Programmes focused on selected commodities were shifted from direct payments to two main instruments: Agriculture Risk Coverage (ARC) revenue programme and Price Loss Coverage (PLC) programme. The ARC can be based on coverage of individual or district earnings. Payment is paid out if yields fall below 86% of the benchmark yields. The PLC is a form of a counter-cyclical programme that pays to farmers when market prices fall below a set reference price [Cordier,

2015]. Farmers with the so-called “basic acres” had to choose to register in the ARC or the PLC in 2014. These programmes pay only for basic acres and farmers must respect certain conservation objectives. All in all, 75% of base hectares were included in ARC and 22% in PLC [Johansson, 2016]. For dairy farmers, there is a Dairy Margin Protection Plan (DMPP) based on milk prices and feed prices.

Crop insurance programmes include premiums paid by farmers. Each year, farmers can choose the acres to be covered by crops, whether net income (AYP) or gross income (ARP) and coverage. The reference net and gross revenues are set at the district level. These programmes require farmers to comply with the conservation criteria. Most farmers enrolled in the protection of gross income (70.3%) than demand protection of net income (21.0%) [Johansson, 2016].

10.4. Risk management policy of the European Union’s CAP

Since 1993, the Common Agricultural Policy has significantly changed its approach to supporting agricultural markets. Strict price and supply controls were replaced by market orientation principles and direct payments. Market measures were maintained, but for most commodities, they are long-term inactive and can be applied in exceptional circumstances. A crisis reserve was set up. Support was provided to insurance and mutual funds. However, these instruments are unevenly used by the Member States [Špička and Vilhelm, 2012]. Despite the new risk management tools mentioned above, the development of recent years was shaken by the crisis period, the agricultural sector so much that doubts arose as to whether the new EU’s CAP is capable of coping with market disruption [Cordier, 2015].

Risk management systems in the EU have not yet been established, particularly in terms of income stabilization. Instruments covering natural hazards could, due to their frequent local character, be classified in the second pillar in 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). Regulation (EU) No. 1305/2013 of the European Parliament and of the Council in Articles from 36 to 39 presents the measures related to farm risk management. Article 36, equivalent to Article 68 in Council Regulation (EC) No. 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, deals with risk management in general. The three following articles deal respectively with subsidies for agricultural insurance (Article 37: Crop, animal, and plant insurance) and mutual funds (Article 38: Mutual funds for adverse climatic events, animal and plant diseases, pest infestations and environmental incidents), and with Income stabilization tool (Article 39). However, the management and regulation of price risks are too closely linked to market measures and cannot, therefore, be created, financed and controlled within the framework of subsidiarity.

The main tools are particularly participation in income stabilization programmes, preventive savings or risk reduction due to diversification. The possibilities for intervention for agricultural products are limited, except for products such as fruit and vegetables for which the volatility is extremely high due to natural external causes. The EU's for CAP 2014-2020 has clearly positioned risk management measures in rural development, i.e. in Regulation No. 1305/2013, and no longer on farm income support as was previously the case. The shift is clear, risk management instruments moved from the first to the second pillar. Consequently, they remain as facultative instruments for the MSs. This optional implementation by the MSs will inevitably lead to the discordant development and, probably, economic distortions of this new toolkit. Furthermore, risk management policy is marginal within the text of Regulation No. 1305/2013. Qualitatively, risk management issues do not seem to be a priority for rural development either. In practice, Rural Development Programme (RDP) measures have been implemented in only 13 of more than 100 rural development programmes within the EU.

10.5. Risk management in the Czech Republic

Articles 36-39 of Regulation No. 1305/2013 of the European Parliament and of the Council are not implemented in the Czech Rural Development Programme. It is caused by a criterion for the compensation which requires at least a 30% loss compared to the production average of the last 3 years (or an average of 3 years from the last 5 years with the exclusion of the minimum and maximum), and given the size of the Czech farms (hectare-weighted median¹⁶ of 1100 hectares).

In 2016, agricultural insurance was offered by seven commercial insurance companies in the Czech Republic according to the Report on Agriculture of the Czech Republic in 2016 [Zpráva o stavu zemědělství, 2016]. Agricultural insurance companies offer commercial insurance products such as crop and livestock insurance that relate to selected natural hazards, disease risks, and possibly other risks connected to crop and livestock production. Some risks remain uninsurable in the Czech Republic, in addition to price risks. Those are for example the risks of drought and rain during the harvest period. The interface between insurable and uninsurable risks lies above all in the current supply and purchase demand for products to cover a certain risk and may change over time. As part of the subsidized insurance programme, PGRLF [Subsidiary and Guarantee Agricultural and Forestry Fund) offers support for crop and livestock insurance since 2004. The level of support was maximally 50% of the premium paid for crops or livestock insurance. The aid is granted to agricultural business entities

¹⁶ The hectare-weighted median is calculated by ordering farms from the smallest to the largest and choosing the farm size at the middle hectare. Thus, half of all agricultural land is on farms smaller than the median and the other half is operated by farms greater than the hectare-weighted median.

fulfilling the parameters of a small or medium-sized enterprise. In 2016, nearly 60% of the crop area and about 80% of animals were insured.

The damages caused by uninsurable risks, mainly draught, are usually compensated by *ad hoc* state aid. Consideration is being given to the establishment of the Fund for uninsurable risks, which has already been authorized by the European Commission and the notification is valid until 2022. However, the legislative issues and prerequisites for its functioning have not been satisfactorily resolved.

10.6. Comparative analysis of risk management policies

Agriculture income in the US is historically supported by compensatory payments that tend to stabilize incomes and leave the market to its natural variability. Farmers are responsible for individual price risk management by using time trades as well as engaging in rescue networks. Farm Bill 2014 focuses on *ex ante* risk management tools structured by safety net measures. Fixed direct payments are not implemented.

Table 1. Risk management comparison (the US, the EU, the CZ)

	Area	EU	US	CZ
Weight of policy instruments (%)	Insurance	1%	60%	1.25%
	Safety nets	30%	40%	Approx. 30%
	Income support/direct payments	60%	0%	Approx. 60%
	Policy	Static-segmented	Dynamic-integrated	Static-segmented
	Budget	Fixed	Flexible	Mostly fixed
	Risk management support	Agricultural income support	Agricultural income risk management	Agricultural income support
Estimated budget weights of programmes within agricultural policies (%)	Risk management support	1%	47%	1%
	Safety nets	5%	23%	2%
	Income support/direct payments	72%	0%	72%

Source: [Cordier, 2015], own processing.

The EU's CAP 2014-2020 concentrates most of its resources on fixed direct payments – reduces their compensatory role in lowering prices and supporting farm incomes, greening – encourages sustainable agriculture that produces improved public goods (food quality, environment, and measures against climate change).

Safety nets are included, but to a limited extent and with limited financial capacities. The European Union’s safety nets and risk management tools are now being defined, implemented and managed separately under the two pillars of the CAP. Table 1 shows the differences between the risk management policies in the EU’s CAP, the US Farm Bill, and the Czech Republic.

10.7. Recommendations

Table 2. Recommendations

ISSUES	CRITICAL POINTS	RECOMMENDATIONS / PROPOSALS
The EU public and private partnership	Absence of coordination between public safety nets and private risk management tools	Build on common parameters for defining layers of risk. Improvement of risk valuation and premium pricing
Risk coverage in between “normal” and “catastrophic” risks	Discontinuity between financial and insurance markets	Support of hybrid OTC contracts and insurance policies dealing with price and quantity risks as a “Revenue and/or Income Stabilization Tool”
“Normal” risk coverage	The CAP and MS responsibilities	Support the creation of savings accounts based on DPs in recognizing some taxes as “national co-financing”
Openness to move from constrained principles to applied projects	The administrative process for monitoring innovation. Self-censorship for experimentation	Support field tests as real options on the future of the EU farm risk management. Experience monitoring
Low experience of risk management toolkit	Lack of know-how, lack of adequate database, and lack of organization	Create an experience curve in supporting a structured portfolio of field tests with adequate evaluation
The additive umbrella principle of the EU/MS/region	Restrictive interpretation of international, EU and MS regulations	Remove all current constraints on field tests that could be adjusted later. Flexible interpretation of constraints
Research, development, and training	Investment is required for designing and implementing instruments, creating common parameters, assessing and pricing risks, training and education	Create long-term collaborative networks of European Universities with research and transfer expertise. Develop educational programmes
Financial flexibility	Fixed EU budget and limits of co-financing	Create macro- and micro-flexible funds (EU nested reserve funds and saving accounts) with adequate participative rates of DPs
Regulatory framework	Dichotomy between two pillars, Lack of coordination	Create an EU Risk Agency with adequate goals, capacities, and means
Capacity of implementation	From long-term to short-term objectives of the Agency	Establish strategic goals. Design the potential experience curve

Source: [Cordier 2014].

Recommendations voiced by Mathijs [2017] consider building adaptive capacities which make farms more resilient in undistorted markets. Furthermore, restriction of public support on market measures should be offered only as a temporary support to the costs of producer organizations under the Common Market Organization. Moreover, the authors propose that the EU Risk Management Policy (RMP) should be built on three axes: risk prevention, risk mitigation, and risk coping. The RMP should undergo transformation towards a policy in which most private and public assembled resources are spent on risk prevention and the least on coping with risk. Nevertheless, the share of government spending should be the smallest in prevention and the highest in risk coping. Mitigation should coincide with manageable risks, while risk coping corresponds with catastrophic risks.

Recommendations published in the EP study Comparative analysis of risk management tools supported by the US Farm Bill 2014 and the CAP 2014-2020 by Cordier (2014) consider 10 recommendations – see Table 2.

10.8. Summary and conclusions

Great differences between the US and the EU were evident in the importance of direct payments in the EU and the US policies. These differences evolve from the different farming cultures, approaches and historical development, and economic philosophy. Furthermore, the range of institutional instruments in risk management is more developed in the US than in the EU. The US has been designing and implementing agricultural risk management policies longer than the EU.

In the US, agricultural policy has seen a full shift from direct payments to programmes which secure farm incomes in the event of risks of natural and price cause. This approach is reflected in the design of titles/programmes to support agricultural insurance and income support which is offered to the US farmers. The funds devoted to this policy represent a major part of public spending in the context of the US agriculture. On the contrary, direct payments in the EU's CAP represent vital support for farmers and a certain source of income, regardless of the actual result of their work. Risk management tools in the current period as defined in the Regulation 1305/2013 of the European Parliament and the Council on rural development support offer to the MS limited scope to deploy. Only thirteen RDPs from over one hundred programmes are implemented within the EU Member States. Above all, the European Union's CAP 2020+ should form agricultural risk management strategy with uniform guidelines which take into consideration the individual aspects and specifics of Member States.

The diversity of approaches to risk management in agriculture in the world and the countries of the European Union reflects various risks that farmers face in different countries [Bardaji et al., 2015].

The Czech experience shows that the EU's CAP risk management is little acceptable for the big agricultural corporations. The perception of risks is differ-

ent for big corporations and for family farms [Soliwoda et al., 2017], to which the CAP is primarily targeted.

Risk management policy should address the variability of agricultural income rather than its level. The current risk management setting is too fragmented because it attaches little attention to building long-term resilience while paying too much attention to addressing short-term volatility. Creating resilience involves reducing farmers' exposure to risks. It is necessary to formulate measures compatible with incentives and measures promoting good agricultural technology and soil care. An important principle is a possibility for farmers to decide individually which tools they want to implement.

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