

Article DOI: <http://doi.org/10.15544/RD.2017.158>

## THE PROS AND CONS OF THE EU COMMON AGRICULTURAL POLICY

**Aldona ZAWOJSKA**, Department of Economics and Economic Policy, Faculty of Economic Sciences, Warsaw University of Life Sciences - SGGW, Address: 166, Nowoursynowska Str., 02-787 Warsaw, Poland; [aldona\\_zawojaska@sggw.pl](mailto:aldona_zawojaska@sggw.pl)

The Common Agricultural Policy (CAP) of the European Union has generated a great deal of attention and controversy among research community, practitioners and the wider population. The aim of this study is to overview and to discuss the thoughts and comments on the CAP which have been addressed by both its proponents and its opponents in the scientific publications, political commentaries, official reports, public opinion surveys and social-media-based public forums. While on the one hand, recent public opinion poll (Eurobarometer 2016) indicated broad support among EU citizens for the CAP; on the other hand, other sources give some strong arguments in favour of reducing or even scrapping the CAP.

The CAP supporters (including European Commission itself) highlight, among others, the benefits of this policy (environmental; cultural; social vitality; food variety, quality and security; maintaining of rural employment, etc.) for all European citizens and not only for farmers, while CAP opponents stress its unfairness both to non-farmers (e.g. huge financial costs of its policy for taxpayers) and small farmers (large farmers benefit most), heavy administrative burden for farmers as well as the CAP's destructing impact both on the EU states' agriculture systems and developing countries' agricultural markets. The CAP is basically the same for all EU member states but the EU countries differ considerably in terms of their rural development. According to some views, the CAP does not fit the Central and Eastern European countries. It represents a failure of the EU to adjust adequately from an exclusively Western European institution into a proper pan-European organization.

*Keywords: benefits and costs, Common Agricultural Policy, European Union, opponents, supporters*

### INTRODUCTION

There are many ways to look at the Common Agricultural Policy (CAP) of the European Union (EU). For example, economists could either play up to the preconception of politicians and special interest groups or stick to academic (neutral) arguments. Krugman (1994), while referring to the people (mainly economists) who shape or influence economic policy, divided them into the two radically different groups: the policy entrepreneurs (the former) and the professors (the latter). Many would agree with the opinion of Carter (1995) that academic economists have a tendency to implicitly support established agricultural policies by remaining silent on disputed issues and not challenging social desirability of those policies. They may behave in this fashion because of the risk of offending funding bodies (e.g. European Commission in the case of the CAP) and other politically powerful institutions or because of the fear of getting involved in a political debate as there is a fine line between pure politics and policy analysis.

The CAP really raises numerous highly sensitive economic, social, environmental, political and ethical issues so it seems worthwhile to consider different approaches to them.

The aim of this study is to contribute to the academic debate about the rationale and perceptions of EU agricultural policy by showing both conflicting (mixed) research findings of several studies and opposite arguments concerning the CAP. This is also done through reviewing and discussing the thoughts and comments on the CAP which have been addressed by both its proponents and its opponents.

The research questions addressed in this article are defined as follows:

1. How do the EU citizens evaluate the CAP contribution to the benefits of the wider public?
2. Whether the CAP effectively supports the social and economic cohesion, the competitiveness, productivity and structural changes of European agriculture, and environmental sustainability?
3. Whether empirical research has been really able to unambiguously indicate the full range of positive and negative consequences of the CAP?

Variation in outcomes can be useful as it may provide clues to valuable information. For policy-makers, however, scientific summary of any research seems to be only a valuable supplement to political debate, as they operate under different professional constraints and public (voters') pressure.

## **MATERIAL AND METHODS**

The article is based on desk research drawing from relevant scientific literature, legislation documents, political commentaries, official reports, public opinion surveys and social-media-based public forums. The study uses a topoi approach which seeks to identify distinctive discursive schemes for explaining and arguing which are embedded in a given text. Greek word ‘topos’ is that which justifies a line of argument but needs less justification itself because it represents common-sense reasoning that relates to a body of collective knowledge and experience about any topic that are shared among groups and communities (Dick, 1964). The topoi are often assumed rather than mentioned explicitly in a text. An attitudinal approach to the CAP was also applied.

In particular, the paper draws on studying and analysis of empirical papers on the CAP (published in peer-reviewed scientific journals), public opinion reports (Eurobarometer) and other recorded sources. The purpose of such analysis is to open up material that does not have to be created on the basis of data collected individually by the researcher. The focus was on the economic, social, political and environmental dimensions of the CAP consequences. To select the reviewed literature, the deductive approach was applied (selection before the material was analyzed). An analysis is presented in descriptive and tabular forms.

## **RESEARCH RESULTS**

The Common Agricultural Policy, just like other public policies, disposes of three important tools: regulatory instruments, economic instruments and information instruments (Vedung, 1998) to shape actors’ behaviour. Regulatory instruments or so-called “sticks” apply administrative penalties (sanctions) in case of non-compliance to prescribed behaviour. An example of the CAP regulation affecting farm production is Natura 2000 and Water Framework Directive which require farmers to comply, among others, with relevant EU environmental legislation. Economic instruments (“carrots”) encompass financial incentives such as payments and subsidies paid to individuals, companies and organisations to do or not to do some (un)desired forms of activity, as well as trading schemes. Information-based policy instruments are efforts to use the data and knowledge available to government to influence consumer and producer (as well voter) behaviour in a direction consistent with government aims and wishes. The development of new information and communication technologies allowed governments to “sell” their policies more effectively (e.g. via advertisements, public information campaigns and public opinion surveys).

Advantaged groups – who receive benefits with respectful tools, rules and implementation structures – receive messages that they are valued, good, responsible people who deserve what they are getting. Political rationales focus on the importance of these benefits to the broader public interest and the fact that the recipients have earned them (Howlett and Mukherjee, 2017).

Agricultural economics, with help of economic theories, usually explains (and sometimes justifies) the CAP inductively on the basis of certain specific features of agriculture as a branch of production (e.g. utilized farmland as a specific factor of production, vulnerability to the impacts of climate conditions). Powerful rhetorical concept which tends to value positively the judgments about agriculture, as well as those who cultivate the land (i.e. farmers) is an agrarianism. Ideas of agricultural exceptionalism have achieved a high degree of institutionalization among the central agents within the CAP, including the European Commission for Agriculture and Rural Development (ECARD).

Motivations underlying the EU choice of alternative policy mechanisms for subsidizing agriculture and stimulating rural development have been usually closely related to the two types of politicians’ desires: (1) to be elected to or remain in office for a long time (pursuit of private interests and goals, explained among others by public choice theory); (2) to meet societal demands (pursuit of public or collective interests). Lynggaard and Nedergaard (2009) emphasizes that within EU studies, the European Commission is seen as a policy entrepreneur within the political system that needs to broker between stakeholders with dissimilar interests (well-organized business interests, on the one hand, and the weakly organized consumer and tax payers’ interests, on the other hand). Therefore, the Commission is active in various discursive contexts in search of public support for the CAP.

Historically, the objectives of farm policies have evolved with society’s attitude towards agriculture (Van Tongeren, 2008, p. 6). However, according to former European Commissioner for Agriculture and Rural Development Fischer Boel (2008), “agriculture” and “rural development” have shown that they make a strong couple – and they should stay together under the same policy roof”. Her reflection suggests that society’s attitudes to rural development are also considered by policy-makers as an agricultural policy design variable.

The survey conducted by TNS political & social at the request of the Directorate-General for Agriculture and Rural Development<sup>1</sup> (European Commission, 2016), which probably reflects political rhetoric of the importance of European agriculture and rural areas (and consequently of the CAP) indicates (in the form of suggested statements the respondents were asked to agree or not agree with) the following positive contributions of agriculture to the society: protecting the environment, maintaining economic activity and employment in rural areas, ensuring the EU’s food self-sufficiency, supplying the population with a diversity of quality products, ensuring the welfare of farmed animals, and encouraging and improving life in the countryside. Listed priorities of the CAP included: enhancing the competitiveness and productivity of European agriculture; developing research and innovation in agriculture; investing in rural areas to stimulate economic

---

<sup>1</sup> The survey was conducted in the 28 Member States of the EU between 17 and 26 October 2015. 27,822 EU citizens from different social and demographic categories were interviewed face-to-face at home and in their native language.

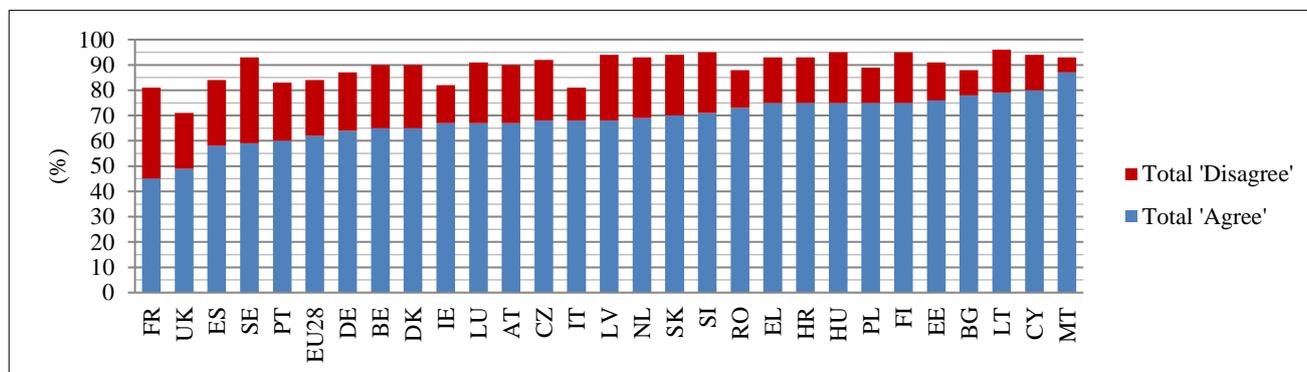
growth and job creation; strengthening the farmer's role in the food chain, encouraging young people to enter the agricultural sector; boosting investment, growth and increasing the number of jobs in the agriculture or food sector.

At the same survey, the recommended arguments put forward to defend significant spending on the CAP (around 1% of the combined public expenditure of the 28 Member States and almost 40% of the total EU budget) were: almost entire financing of agricultural sector by the EU budget rather than at national/local level, ability to guarantee the food supply of Europeans by financial aid to farmers; heavy human and financial investments required by agriculture; possibility to ensure the sustainable production of food products due to financial aid to farmers; more expensive production of food products in the EU than in other countries because of stricter standards (e.g. animal welfare).

Statements from the survey questionnaire uncover the four distinctive topoi of the CAP: (1) the topos of competitiveness (grounded in the arguments of inferior positioning of EU agriculture both against other sectors and other countries); (2) the topos of solidarity (visible in advocacy for food security and safety, fair incomes and job security for farmers as well as better rural living conditions); (3) the topos of empowerment (recognized need to strengthen abilities and capacities of farmers, especially young ones); (4) the topos of sustainability (focus on preservation of environment and economic activity in rural areas, delivery of public goods, animal ethic).

When it comes to the results of this survey, namely Europeans' view of the CAP, there are differences across individual EU countries and between their groups with regards to many issues.

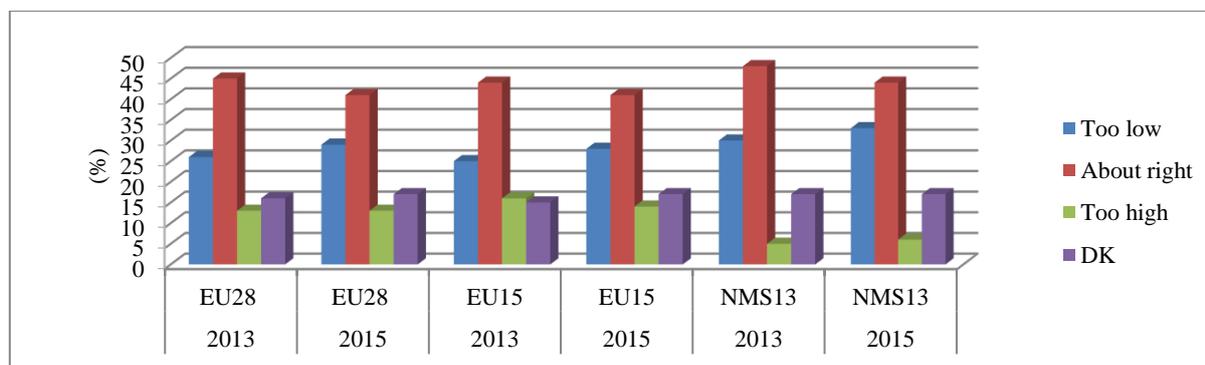
In 2015, clear majority of EU citizens (62%) agreed the CAP benefit all society and not only farmers, while 22% of them disagreed with it. The remainder did not take a position (Fig. 1). Compared with the survey conducted in 2013, there was a 15-point decline in "total agreement" with largest drop (by 20 points) in the UK, Belgium, Spain and France. In 2015, the most skeptical about positive impact of this policy on the entire populations were citizens of France, the United Kingdom, Spain, Sweden and Portugal. In new member states (NMS-13) the percentage of citizens who thought that the CAP brings benefits for a country as a whole was noticeable higher than in "old" member states (74% against 59%).



Source: Own compilation based on European Commission, 2016.

Figure 1. Agreements and disagreements of Europeans with the statement that the CAP benefits all European citizens and not only farmers (percentage of respondents, 2015)

As concerns the EU citizens' attitudes towards financial spending on the CAP (Fig. 2), in 2015 over 40% of them (on average) considered financial support provided to farmers and rural areas to be "about right" while for increasing proportion of respondents (29% against 26% in 2013) this amount was "too low". These responses can be regarded as expressions of potential demands, because they can represent desire of the majority either to maintain status quo or to increase spending on agricultural policy. In the EU-15, the proportion of respondents who think that the aid is "too high" was almost three times higher than in new member states, so distinction between the two groups of countries is self-evident. Additionally, the survey indicates that almost half of respondents (45%) would like to see an increase in the CAP spending over the next ten years, while only 13% of them would like see its decrease. EU citizens expecting the reduced aid to farmers were less likely to agree the CAP benefits all society compared with those who think EU aid to farmers should increase. The above results, in general, do not support widespread view that the CAP is too expensive.



DK – don't know

Source: Own compilation based on European Commission, 2016.

Figure 2. Europeans opinions on the level of the CAP expenditures (percentage of respondents, 2013, 2015)

The CAP adaptation entails pros and cons not only for farmers but also for all food chain participants, other stakeholders and the society at large.

Table 1. Positive consequences of the CAP – results of the research overview

Authors	Countries/Period	Pros
Kiss (2011)	New Member States, after EU accession	The economic situation of the farmers improved due to increasing agricultural income. Incentives to agricultural production and to utilize natural endowments (mainly agricultural land).
Bartolini, Viaggi (2013)	11 Case Study Areas in 9 European Countries, 2009	Under the current CAP the majority of the farmers state their intention to not change the amount of farmed area, whilst a significant number of farms would expand their land size (about 25%). The evident effect of CAP abolishment is the reduction of the “expansionary intentions” of those farmers who expect to increase their farmed area under the current policy conditions.
Baer-Nawrocka (2013)	EU countries, 2000-2011	The accession to the EU had a positive impact on agricultural incomes in the majority of new member states (EU-12), especially in Poland. The disparities between EU-12 and EU-15 in agricultural incomes per AWU and per farm have been slowly diminishing.
Slajs, Doucha (2014)	the Czech Republic, after EU accession	Decisive improvement of the economic situation on farms due to the CAP subsidies.

Source: Own compilation based on literature review.

Table 1 presents advantages (strengths) of the CAP, while table 2 – its disadvantages (weaknesses) according to the research results in the literature. The sources were selected on the basis of the diversity of countries (“new” and “old” members of the EU) and the prevailing research fields in the literature on the CAP.

Table 2. Negative consequences of the CAP – results of the research overview

Authors	Countries/Period	Cons
Nedergaard (2006)	Theoretical model, not tested empirically	A “super asymmetric” political system of the EU concerning agricultural policy decisions. The general asymmetry between farmers and consumers in the political system of the CAP exists because it is possible to push the costs of expansion of agricultural production to other Member States and countries outside the EU. Many of the institutionalised counterweights that exist at the national level are either very weak or do not exist at the European level. Structural tendency to increasing bureaucratisation of the CAP.
Grant (2010)		The CAP has been marked by considerable complexity with its broad consequences: it has increased losses and transaction costs; it has created substantial opportunities for fraud; and it has created entry barriers to the political debate.
Kiss (2011)	New Member States, after EU accession	Massive import penetration of agricultural markets in NMS.
Fair Trade Advocacy Office, 2011	The EU and third countries	The impacts of the CAP on food security in developing countries have been generally negative so far, and have limited the opportunities of these countries to realize autonomy or self-sufficiency regarding their food provision.
Raggi et. al (2013)	9 EU countries (2300 farm-households), 2009	A minor role for CAP in decisions to re-allocate land through sale when exiting from agriculture. The choice to exit farming increases sharply under the scenario characterised by the abolition of the CAP.
Spicka (2013)	EU-15 and EU-12; 2001-2011	Negative structural changes in production. Sharp drop in livestock production in the EU-12 after the EU accession.
Stonkute (2013)	Baltic states (Estonia, Latvia and Lithuania), 2003-2012	“Subsidies trap” or buffering effect of subsidies (on products) on productivity (of labour, capital, energy) in some countries. Product subsidies can limit incentives for optimizing input use and productivity developments.
Slajs, Doucha (2014)	the Czech Republic, after EU accession	Unbalanced distribution of income supports. Their largest part is received by a limited number of very large farms, in majority with extensive systems, very low employment and weak links to rural communities.
Giannakis, Bruggeman (2015)	EU-27 countries, 2007-2011	A statistically significant positive relationship between the economic performance of farms and the direct CAP payments per farm holding. This wide variation of support levels between high and low performing countries deteriorates further the performance of farm sectors with chronic structural weaknesses.
Buckwell et al. (2017)		Direct payments (which account for over 70% of CAP expenditure and almost 30% of the entire EU budget) do not serve well the purpose of income support of the neediest farmers, and are inefficient instruments to address food security, risk management, efficiency of resource use as well as the delivery of rural environmental services.

Source: Own compilation based on literature review.

A thorough review of the relevant empirical literature (table 1 and table 2) suggests that while a strong case can be made in favour of the CAP, its some elements (e.g. badly targeted direct payments and their scale, administrative burden) are ill designed and require further improvements (e.g. greater flexibility and less complexity of policy support instruments). Positive effects of the CAP that have been identified by researchers include: (1) improvement in economic

performance of farms; (2) narrowing farm income gap between old and new member states; (3) incentives to utilize agricultural land, and (4) to maintain or enlarge the farm size. A brief review of the empirical evidence for new member states finds negative impact of the CAP on: (1) domestic agricultural markets (e.g. import penetration); (2) structural changes in their agriculture; (3) either capacity or willingness to improve resource (input) productivity in farming. From the perspective of less-developed countries, the most important CAP shortcomings underlined by the researchers are those with regard to food security and agri-food exports of these countries.

The selected studies indirectly articulate the negative and positive aspects of the policy individual instruments (e.g. direct payments), and/or single dimensions of the policy impact (e.g. resource allocation), and/or different countries as well as different time periods. Thus, empirical research results can differ depending upon research questions as well as its object and subject.

Additionally, it is worth paying attention to the recent statement by over 150 civil society organizations on the future of the CAP which underlines the rationale for its reform: “The European food and farming system is broken: it is working for the interests of a few to the detriment of the majority of people, farmers, and the planet. A reformed CAP must empower fair and diverse farming economies, support a healthy environment, good animal welfare, and citizens' wellbeing, and be underpinned by participatory governance, citizens' empowerment and democracy” (Friends of the Earth Europe, 2017).

Short summary of the contrasting arguments on the CAP found in the literature and other sources is presented in Table 3.

Table 3. Summary of supporting and opposing arguments concerning the Common Agricultural Policy

Arguments for the CAP	Argument against the CAP
Putting food on Europe's plate (food security)	Waste (overproduction, not efficient allocation of resources)
Protecting the rural communities (employment, economic activities, viability, etc.)	So much from so many to so few (unequal distribution of the EU budget between agriculture and other sectors)
Tasty European food variety (food safety and organic products)	Helping the rich get richer (injustice distribution of payments between small and big farmers/landowners/companies; harming trade efforts of the developing countries, perpetuate inequalities in global food distribution)
Environment protection and public goods	We all pay more (the tax burden on a society, high food prices)
Welfare system for farmers (especially smallholders)	Crowding-out effects on other sectors of national economy (e.g. research and innovation)
	Poor value for money for a Budget Focused on Results (mainly in the case of Pillar 1)

Source: Own compilation based on Debating Europe (2016), Buckwell et al. (2017) and other cited sources.

## CONCLUSIONS

1. Finally, it is difficult to decide whether the CAP does more harm than good. Recent scientific literature reviewed in this article suggests more negative than positive effects of this policy while the public opinion in the EU is rather supportive of the CAP. We can agree with the argument posed by Fischler (2016, p. xix) that scrapping this policy, as a growing number of people advocate would involve a number of risks and mean throwing out the baby with the bath water. On the other hand, we can also support the view of Buckwell and others (2017) that the *status quo* is unacceptable, and consequently – modernization of the CAP is needed.
2. The CAP is basically the same for all EU member states but the EU countries differ considerably in terms of development of their agriculture and rural areas. According to some views, the CAP does not fit the Central and Eastern European countries. It represents a failure of the EU to adjust adequately from an exclusively Western European institution into a proper pan-European organization. It seems, however, that the CAP is much more appreciated in new member states of the EU than in old ones, as Eurobarometer survey shows.
3. After reviewing the literature on the CAP, it is possible to suggest the research gap for further investigation, namely models all of the complex (economic, financial, social, political, administrative, environmental, ethical etc.) advantages and disadvantages of the CAP for the whole national society. So far, it is difficult to identify the full range of positive and negative consequences of the CAP.

## REFERENCES

1. Baer-Nawrocka, A. 2013. The Influence of Common Agricultural Policy on Agricultural Incomes Effects in the New Member Countries of the European Union. *Polityki Europejskie, Finanse i Marketing*, Vol. 9(58), pp. 34–44.
2. Bartolini, F., Viaggi, D. 2013. The Common Agricultural Policy and the Determinants of Changes in EU Farm Size. *Land Use Policy*, Vol. 31, pp. 126–133. <https://doi.org/10.1016/j.landusepol.2011.10.007>
3. Buckwell, A., Matthews, A., Baldock, D. Mathijs, E., 2017. CAP - Thinking Out of the Box: Further Modernisation of the CAP – Why, What and How?, RISE Foundation.
4. Carter, C.C. 1995. Understanding the Canada/United States Grains Dispute: Factors and Impacts, In: Loyns, R. M., Knutson, R. D, Meilke, K.D. (eds), Proceedings of the 1st Canada\U.S. Agricultural and Food Policy Systems Information Workshop, pp. 133–145, Dept. of Agricultural Economics and Farm Management, University of Manitoba, Winnipeg.
5. Debating Europe 2016. Arguments for and against the Common Agricultural Policy, Available at <http://www.debatingeurope.eu/focus/arguments-for-and-against-the-common-agricultural-policy/#.Wg3LZLg09IV> (Accessed on 10/10/2017)
6. Debating Europe, 2012. Should Europe scrap the CAP? Available at: <http://www.debatingeurope.eu/2012/02/20/should-europe-scrap-the-cap/#.Wg3UX7g09IU> (Accessed on 21/10/2017).

7. Dick, R.C. 1964. Topoi: An Approach to Inventing Arguments. *The Speech Teacher*, Vol. 13, Iss. 4, pp. 313–319. <https://doi.org/10.1080/03634526409377395>
8. European Commission 2016. Europeans, Agriculture and the CAP. Special Eurobarometer 440. Open Data Portal, Brussels.
9. Fair Trade Advocacy Office. 2011. Consultation for the Impact Assessment on the “Common Agricultural Policy towards 2020” Proposals. European Commission, Brussels, 20.10.2011 SEC(2011) 1153 final/2
10. Fischer Boel, M. 2008. Prospects for Rural Development Policy. Conference organised by the DG for Agriculture “Europe's rural areas in action: facing the challenges of tomorrow”, Limassol, Cyprus, 16 October 2008. Available at [http://europa.eu/rapid/press-release\\_SPEECH-08-533\\_en.htm](http://europa.eu/rapid/press-release_SPEECH-08-533_en.htm) (Accessed on 3/11/2017).
11. Fischler, F. 2016. Foreword. A Common Agricultural Policy for the Twenty-first Century. In: Sorrentino, A., Henke, R. (eds.) *The Common Agricultural Policy After the Fischler Reform: National Implementations, Impact Assessment and the Agenda for Future*, Routledge, London and New York, p. 544.
12. Friends of the Earth Europe. 2017, Civil Society Statement on the Reform of European Agricultural Policies, Available at <http://www.foeeurope.org/joint-cso-statement-future-cap-060317> (Accessed on 10/10/2017)
13. Giannakis, E., Bruggeman, A. 2015. The Highly Variable Economic Performance of European Agriculture. *Land Use Policy*, Vol. 45, pp. 26–35. <https://doi.org/10.1016/j.landusepol.2014.12.009>
14. Grant, W. 2010. Policy Instruments in the Common Agricultural Policy. *West European Politics*, Vol. 33, Iss. 1, pp. 22–38. <https://doi.org/10.1080/01402380903354049>
15. Howlett, M., Mukherjee, I. (eds.). 2017. *Handbook of Policy Formulation*, Edward Elgar Publishing, Cheltenham, UK, p. 584. <https://doi.org/10.4337/9781784719326>
16. Kiss, J. 2011. Some Impacts of the EU Accession on the New Member States’ Agriculture. *Eastern Journal of European Studies*, Vol. 2, Iss. 2, pp. 49–60.
17. Krugman, P. 1994. *Peddling Prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations*, W.W. Norton & Co., New York.
18. Lynggaard, K., Nedergaard, P. 2009. The Logic of Policy Development: Lessons Learned from Reform and Routine within the CAP 1980–2003. *Journal of European Integration*, Vol. 31(3), pp. 291–309. <https://doi.org/10.1080/07036330902782147>
19. Nedergaard, P. 2006. Market Failures and Government Failures: A Theoretical Model of the Common Agricultural Policy. *Public Choice*, Vol. 127, pp. 393–413. <https://doi.org/10.1007/s11127-005-9000-1>
20. Raggi, M., Sardonini, L., Viaggi, D. 2013. The Effects of the Common Agricultural Policy on Exit Strategies and Land Re-allocation. *Land Use Policy*, Vol. 31, pp. 114–125. <https://doi.org/10.1016/j.landusepol.2011.12.009>
21. Slajs, J., Doucha, T. 2014. Situation in the Czech Agriculture after 9 Years of EU Accession – A Research Position to Strategic Challenges for a Future Policy after 2013. *Zagadnienia Ekonomiki Rolnej*, No. 1 (338), pp. 116–127.
22. Spicka, J. 2013. The Impact of the Common Agricultural Policy on the Farm Income and its Determinants. *Proceedings of the International Scientific Conference “Rural Development 2013”*, Vol. 6, Book 1, pp. 362–366, Lithuanian University of Agriculture.
23. Stonkute, E. 2013. Comparative Analysis of Productivity Developments of Agricultural Sector in Baltic States: Assessing the Impact of Subsidies on Products, *Proceedings of the International Scientific Conference “Rural Development 2013”*, Vol. 6, Book 1, pp. 622–626, Lithuanian University of Agriculture.
24. Van Tongeren, F. 2008. *Agricultural Policy Design and Implementation. A Synthesis*, OECD Food, Agriculture and Fisheries Working Papers 7, OECD Publishing, France.
25. Vedung, E. 1998. Policy Instruments: Typologies and Theories. In: Bemelmans-Videc, M.L, Rist, R.C., Vedung, E. (eds) *Carrots, Sticks, and Sermons: Policy Instruments and Their Evaluation*, Transaction Publishers, New Brunswick N.J., pp. 21–58.