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# **EU CAP 2014-2020 policy implementation choices: Is there a Member State typology?**

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## Abstract

In this study an attempt was made to develop a typology, grouping Member States based on their implementation choices in Pillar 1 and Pillar 2, which extends previous analysis that were limited to only one of the CAP pillars. The outcomes of the analysis are five clusters consisting of 5 to 8 countries. It turned out to be difficult to detect an overarching pattern in terms of the use of different instruments and measures. From the typology analysis it can be concluded that for the majority of the Member States, the main focus of the CAP remains viable food production. The analysis did not allow to establish a clear link between the implementation choices (in terms of measures chosen) under Pillar 1 and the decisions made in Pillar 2.

*Keywords: agricultural policy, the CAP, political economy*

*JEL: Q18, Q28, Q38*

## 1 Introduction

In its November 2017 Communication *The Future of Food and Farming* the EU Commission indicated that a new delivery model is needed for the CAP, in which Member States (MS) should bear greater responsibility and be more accountable as to how they achieve the objectives agreed at EU level and targets agreed with MS. Greater subsidiarity would make it possible to better take into account local conditions and needs, against appropriate objectives and targets. In this context it is very interesting to assess what happened during the latest CAP reform. In contrast with the previous programming period, in the latest CAP reform (CAP 2014-2020) Member States have already gained a great deal of flexibility regarding the implementation of the new CAP regulations, particularly in relation to the implementation of the new direct payments regulation (Swinnen, 2018). Member State flexibility relating to the European Agricultural Fund for Rural Development (EAFRD) and the CMO remained unchanged. Consequently, the range and combination of implementation choices made by Member States under both Pillar 1 and Pillar 2 will have a significant influence on the attainments of the CAP objectives as specified in Art. 110 (2) of Reg. (EU) No 1306/2013 of the European Parliament and of the Council.

For several reasons it is important to evaluate the implications of the flexibility allowed to Member States with respect to the policy implementation options. It could be that the flexibility provided to Member States allows them to tailor the CAP better to their local needs and as such improves the relevance and effectiveness of the CAP. Alternatively, it could be that Member States use the flexibility to pursue own objectives, that might be not in line with the overall CAP policy objectives. The introduced flexibility would then reduce rather than improve the orientation of the implemented measures to the EU policy objectives. In the latter case the introduced flexibility could maybe be interpreted as a first step to renationalization of the CAP.

Because of its focus on Member State implementation choices, the analysis made in this paper is focused on certain elements of the legislation only. The main focus is on the implementation modalities of Direct Payments (Reg. 1307/2013), on articles 14, 17-26, 28-29 and 35 of the Rural Development policy (Reg. 1305/2013) and on certain elements of the Reg. 1303/2013.

The paper is organized as follows. The next section provides an overview of the most important policy implementation choices EU Member States had during the last CAP Reform (Section 2). Section 3 introduces an analytical framework, based on the political economy and public choice literature, which should help to understand the main drivers of agricultural policy decision making. In section

4 the methodology used for the Member State typology analysis is discussed. Section 5 provides the results of the analysis, which is followed by a discussion (section 6). Section 7 closes the paper with some concluding remarks.

## **2 Member State policy implementation choices**

### *Shift budget between CAP pillars*

Member States have the flexibility to transfer 15 % of their direct payment envelope from Pillar 1 to Pillar 2 as well as in the opposite direction from Pillar 2 to Pillar 1. In the case of the transfer from Pillar 2 to Pillar 1, 12 Member States are permitted to transfer an additional 10 %, bringing the maximum transfer permitted up to 25 % (Art. 14 of Reg. (EU) No. 1307/2013). These countries are Bulgaria, Estonia, Spain, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia, Finland, Sweden and the United Kingdom.

Decisions on transfers from Pillar 1 to Pillar 2 for the 2015-2019 period had to be notified to the Commission by 1 August 2014 (transfers could also be applied for the 2014 year, in which case they had to be notified by 31 December 2013). There is an opportunity to review the rates for the 2018 year onwards, with notifications to be made to the Commission by 1 August 2017. Similar notification requirements are in place for the transfers from Pillar 2 to Pillar 1 – Member States had to notify the Commission by 1 August 2014 for transfers for the years 2016-2020 and can review their decision for the years 2019 and 2020, with notifications due by 1 August 2017.

The current net result of the transfers (which are subject to possible review in 2017 for 2018 and 2019) amounts to a total transfer of € 3 billion from Pillar 1 to Pillar 2 over six years .

### *Implementation choices available under the first Pillar*

As regards the direct payments under Pillar 1 there are three compulsory elements to the new structure: i) the basic payment scheme (BPS); ii) payments for agricultural practices beneficial for the climate and the environment (the so-called ‘greening’ measures); and iii) the young farmer scheme (YFS). Member States can also choose to introduce some optional measures – e.g. voluntary coupled support (VCS) and payment to farmers in areas of natural constraint (ANC).

Within the BPS, there are further rules and optional elements. Those Member States that were previously operating the Single Area Payment Scheme (SAPS) can continue to do so until 2020. However those Member States not operating the SAPS must shift direct payments to farmers away from being calculated on an historic basis towards a uniform per hectare rate across the country (or region – which can be defined according to a number of criteria) and they must reduce payments to those in receipt of over € 150 000 of direct payments by at least 5 %. They also have the option to introduce a redistributive payment to a maximum number of ‘first hectares’ of farms and if they allocate over 5 % of the national ceiling to these types of payments then they are no longer required to implement the reduction of payments rules.

### *Implementation options available under the second Pillar*

For the second Pillar, one of the most important changes with the last programming period is the removal of the four axes. They have been replaced with six Union priorities and nineteen Focus Areas (see Table 1). Aside from implementation modalities and technicalities, MS can choose the

focus of the measures on these six priorities when implementing measures. Also it is now possible to link the two Pillars with each other by:

- Complying with greening through equivalent measures under Pillar 2;
- Young and small farmers can be supported through both Pillar 1 and Pillar 2 interventions;
- Support for areas facing natural constraints can be granted both under Pillar 1 and Pillar 2;
- The risk management toolkit under Pillar 2 can be linked to Direct Payments and market measures under the Common Market Organisation (CMO);
- Support for cooperation is also covered by both Pillar 1, Pillar 2, including market measures under the CMO.

Under all circumstances, Member States should implement rules to avoid double funding.

### **3 Conceptual framework**

There exists a large body of literature (see De Gorter and Swinnen, 2002 for an overview and the references cited therein) attempting to provide explanations on governments' choices with respect to agricultural policy. This literature is known as the political economy of agricultural policy. Within this literature several approaches can be found, among which<sup>1</sup>:

- The classic theory of economic policy approach, which dates back to the work of Jan Tinbergen and has a strong focus on policy optimization and engineering;
- The collective action approach, initiated by the work of Mancur Olson, which depicts the governments as relative passive authorities that responds to lobby activities organized by interest groups;
- The political support function approach, based on the work of Anthony Downs, where politicians provide transfers to their constituency in return for political support;
- The revealed preference approach, with governments maximizing a weighted sum of interest group welfare measures;
- The model focusing on short run political bargaining with stakeholders and long structural factors as a two-layer model to explain agricultural policy formation, developed by Michel Petit.

Based on an assessment of these theories, which differ in various respects, a number of insights have been identified that are relevant to consider when creating a typology of Member States policy implementation choices. Selected insights obtained from this literature are the following:

1. Agricultural policy formation is understood as a bargaining process between the government and its stakeholders, where both governments and stakeholders have their own objectives. The government is in need for a certain level of political support for its policies thus policies emerge being a compromise between various interests. Bargaining may imply strategic behaviour of the parties involved. As a result of this there can be a distance with respect to rhetoric about what parties want and strive for and what they actually want to achieve;
2. An important aspect to explain (agricultural) policies is to recognize their importance in providing income transfers to agriculture or specific groups within agriculture. According to some theories this is particularly urgent in agriculture due to the so-called farm problem, which causes a decline in relative farm income if no preventive actions are taken;

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<sup>1</sup> The Tinbergen approach is not discussed by De Gorter and Swinnen in their review article, but surely needs a place, also given its prominent place in the macroeconomic policy literature. For an application to agriculture see Oskam (1982).

3. Another important aspect to explain agricultural policies is market failure. According to that approach agricultural policies fill the gaps left by the market and are crucial to secure an adequate provision of (green) public goods and proper treatment of positive and negative externalities. With respect to agriculture this is relevant for green (e.g. agri-environmental services, biodiversity) and blue services (e.g. water storage, water management) and landscape preservation;
4. Several approaches confirm an anti-trade bias in agricultural policy formation, or equivalently a bias towards protection or favouring of domestic production (neo mercantilism);
5. The political decision-making structure and institutions play a significant role in agricultural policy formation. The EU is a specific case in this regard because of having a common policy for a union of 28 Member States, spanning a wide diversity of agronomic conditions (growing season, climate), wealth, development, political and economic history, population density, etc.<sup>2</sup>;
6. Although the political economy literature on redistribution is much more developed than the literature on the choice of policy instruments, an interesting result is that governments can use inefficient policy instruments to achieve their objectives, including farm income goals. An example are price support policies (or voluntary coupled payments) which might be chosen over direct income support (direct payments) as improving “self-sufficiency” appeals more to nationalistic sentiments of voters, and because farmers fear a “welfare”-stigma. Other examples are related to the phenomenon of asymmetric information by voters, interest groups and competing politicians;
7. In contrast with the previous bullet, there is also a literature arguing for the making of efficient policy instrument-choices. However, then it has to be assured that the total costs (i.e. transaction and administrative costs as well as the social costs of public funds) of policy measures are taken into account when studying the trade-offs between policy measures. Moreover, it is argued that when multiple instruments are used, combinations can arise, leading to relative low distortions (and associated welfare losses) and relative efficient transfers (especially when price or income support measures are combined with a production control measure);
8. With regard to policy dynamics, several studies point to the inertia in the political system with respect to agricultural policy reforms, with changes made often only incrementally and over long periods of time (status quo bias). This may relate to the role of vested interests that strive to protect their rents from the system. Rent-seeking behaviour combined with the subsequent defence of earlier obtained rents creates a type of farm dependency in the formation of agricultural policies.

Based on these considerations, it is suggested that when making a typology of a Member State’s policy implementation choices, alongside the implementation choices a number of confounding variables should be taken into account, which are able to capture aspects such as:

- The potential path-dependency of policy formation and thus the implemented policies (e.g. status quo-bias);
- The identified needs (or priorities) with respect to policy objectives and implementation;
- Experienced changes in the policy (e.g. budget reduction or increase relative to the pre-reform period) and the implications this may have for the current policy implementation;
- Issues of market failure (e.g. preservation of biodiversity, negative environmental externalities) and the measures available and chosen to address these needs;
- The occurrence of policy interdependencies or potential interaction between different policy measures and how this may impact policy implementation.

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<sup>2</sup> There are not many studies that discuss the specific institutional structure of EU policy making and its impact on the policy outcomes (e.g. Runge and Von Witzke (1987), Moyer and Josling (2002), Petit (2003), Swinnen (2008; 2015), Naylor (2014)).

The political economy literature shows that policies usually change in an incremental way. Policy implementation outcomes, including its details, usually reflect a close interaction of the policy maker at Member State level with local stakeholder/interest groups. As such policy implementation choices are often complex “co-productions”, reflecting national political-institutional “equilibria” involving different and diverse stakeholder groups. Policy reforms can be interpreted as being motivated by the strive to improve, not only to cope better with new challenges, but also to avoid mistakes and address weaknesses in the existing policies, and to rebalance the policy in the context of the new political context, including the constellation and impact of interest groups. In order to understand and appreciate a policy reform it is therefore relevant to assess what the criticisms were with respect to the old policy and also to evaluate them within their broad political context (including the role of stakeholder organisations and alliances and their efforts to influence the policy implementation).

Based on the previous steps and taking into account that only a limited number of additional variables could be dealt with in the statistical analysis (due to limited degrees of freedom), the following set of confounding variables has been selected as potential candidates to include in the analysis (see Table 2).

## **4 Method**

The objective of the analysis is to use an objective approach for developing a typology which satisfies the following criteria:

- the approach should take into account all policy implementation options, without excluding certain options
- the approach should be objective and avoid as much as possible any prior weighting of policy implementation options by the researchers;
- the approach should allow to take into account insights from the political-economy theories about agricultural policy formation;
- the approach should not be based on the policy implementation options in either the first or the second pillar of the CAP, but on the implementation choices made with respect to both pillars of the CAP, thereby allowing to take potential interlinkages between the policy implementation choices in both domains into account.

To achieve this a three step methodology was chosen. First, an inventory of the policy implementation choices by Member State has been created. This characterized the implementation options Member States made with respect to the implementation of both Pillar I and Pillar II of the CAP, as well as the set of confounding variables (see discussion in previous section). This resulted in a large number of variables (about 45). In addition a unified scaling transformation was applied to these data.

Second, in order to identify common patterns in the implementation choices factor analysis and cluster analysis are applied to the policy measures implementation data. Factor analysis is an appropriate statistical tool to detect common patterns in large datasets, without imposing any a-priori structure or weighting to the data. The method has the advantage that it can handle a lot of variables and reduces these to a limited number of common factors. To the extent clear underlying patterns and/or policy implementation strategies are present, these are likely to be detected by the resulting common factors. To the extent this is the case, the common factors may be given a certain interpretation or be “labeled”. The method allows to detect multiple strategies or patterns and offers

certain statistical criteria to determine the optimal number of patterns that should be distinguished to get an appropriate coverage of the total set of policy implementation option choices. The factor analysis method has certain constraints with respect to the number of variables that can be taken into account, although this number is large relative to other statistical approaches such as standard regression analysis. Although a large number of variables can be taken into account some kind of clustering of implementation options turned out to be unavoidable in the analysis.

While the strength of the factor analysis is to detect common factors or patterns in the large dataset comprising the policy implementation options with respect to both pillars of the CAP made by Member State and/or RDP region, a complementary cluster analysis based on the results obtained from the factor analysis will help to cluster Member States and/or RDP regions into groups or types. The cluster analyses can be motivated in terms of the detected common factors from the factor analysis. Note that when having one common factor (e.g. use of voluntary coupled support measures in specific sectors) there can still be several clusters of Member States associated with this factor (e.g. Member States which use VCS a lot and Member States which use this only to a minimum extent).

Because the results of the factor analysis turned out to have limitations in identifying clear policy strategies as an intermediate step a more limited set of indicators was developed, which “summarized” the policy implementation options and better discriminated main directions chosen from more specific details, that were judged to be less relevant to base a typology on. Whereas this step was informed by the results from the factor analysis it also included expert knowledge about the CAP and the functioning and aimed use of specific policy measures. The typology has been established based upon an assessment of the implementation choices as summarized by the following ten aspects:

- 1) Direct payments and equality (2 indicators);
- 2) The role of (voluntary) coupling;
- 3) The small farmers scheme;
- 4) The implementation of the greening payment;
- 5) The extent to which it was decided to rebalance support by shift budget to different Pillars;
- 6) The role of AECS/biodiversity/environment;
- 7) The role of support aimed at influencing structural change (2 indicators);
- 8) The strengthening of the position of farmers in the supply chain;
- 9) Viability of rural areas;
- 10) The role of information and knowledge sharing.

Indicators have been developed to measure each of these aspects. In total 12 indicators are used. Based upon these 12 indicators, the typology was established, using a cluster analysis.

As a third step in the methodology, a CAP-mapping analysis has been made, involving country experts for all EU-28 Member States, which generated primary data at EU Member State level, containing not only additional background information on the implementation choices but also about the justifications and motivations underlying these choices. In addition they provided information on the policy formation process at Member State level, taking into account issues such as governmental organisation structure and the influence of different stakeholders interest on policy formation. Whereas the first and the second step focus on the revealed preferences, step 3 provides information on the stated preferences, which could include an ex-post rationalization of choices made before. The information from step 3 could help to interpret the typology or cluster outcome from steps 1 and 2.



## 5 Results

### *Typology based on cluster analysis*

The typology analysis described above resulted in 5 clusters of Member States (see Figure 1 for an overview). Table 3 provides an overview of the main characteristics of each of the clusters (see Chartier et al, 2016 for more details).

### *Main insights from CAP mapping analysis*

The findings from the descriptive analysis in general confirmed the results obtained from the review of the political economy literature. More specifically it was found that:

- Member States have a tendency to resist change. As change might distort the initial political equilibrium, remedying actions or implementation choices can be made, counteracting or ‘neutralizing’ the change. Examples of this are the move of funds between the First and Second Pillar of the CAP and the way in which internal convergence, degressivity and the redistributive payments are implemented.
- Income support (and remedying the impacts of negative income impacts from policy changes) is often considered important, and could be a factor behind specific CAP measure implementation options.
- Member States could follow a strategy that aims to allow farmers at a maximum extend to benefit from the use and expenditure of EU public means. This could be a reason to make more measures available than the most simple possible selection, in order to allow for a maximum absorption rate.
- Furthermore, in most Member States coordination between the decision-making procedure for implementing Pillar I and Pillar II remains limited. For the majority of Member States, it was recorded that the process is coordinated yet no overarching strategy is defined integrating choices under Pillar I and Pillar II.

## 6 Discussion

### *Typology and CAP objectives*

The results of this exercise show that although there are some common grounds, basing a typology on the implementation decisions of Member States is not straightforward. Decisions made on one instrument do not imply certain other choices on other instruments. The overarching findings of establishing this typology can be summarised as follows:

- There are no large discrepancies or trends in terms of implementation choices between the different Member States. Some Member States have made similar implementation choices, yet in many cases there are also a lot of specificities. As indicated in the political economy literature, making policy choices is not a clear cut and directed optimization process (e.g. Zarnt, 2011). The specific socio-economic contexts in each Member State as well as its history, the importance and power structure of various stakeholder groups and the political orientation of the government play an important role in the decision-making process;
- The redistribution of support or payments over beneficiaries is a sensitive issue in policy making (e.g. strong resistance from vested interests and rent-seeking activities). For a number of Member States (e.g. those that in the past still followed the historical model; 12 MS out of EU-28) the switch from a single farm payment scheme (SFS) to a hectare-based flat rate, implied a significant redistribution of support over different sectors and regions within the country. This can impose a challenge to policy-makers to balance policy implementation choices.;

- No clear relationship between Pillar 1 and Pillar 2 policy measures implementation choices have been found. To the extent the different pillars address different policy objectives this outcome is understandable. However, where measures from both pillars have an impact on similar policy objectives one would have expected to find correlations between the measure implementation choices with respect to both pillars. From the mapping analysis and consultations with experts (see step 3), it became clear that in most Member States no integrated approach has been taken towards the design and choices under Pillar 1 and Pillar 2. Responsibilities for the two Pillars are often divided over different government departments and other stakeholder groups are involved in the decision-making process.

In terms of focus on the three CAP objectives, it should be noted that agricultural policy is in the first place a sectoral policy aimed at supporting the well-functioning of a sector in the entire economy. For (primary) agriculture, with its crucial role in the food supply chain, this involves mainly food production. Food production has many aspects, such as the provisioning of a sufficient amount of food, which has a good quality and at a reasonable price. As shown in Table 4, by its design the CAP has a strong focus on measures supporting the objective of viable food production. This is the case for the wide set of direct payment measures under the first Pillar of the CAP, but also measures of the Rural Development Policy, including support for investments in physical assets, the farmer's position in and the functioning of the food supply chain, in quality schemes and payments for farmers facing natural or other handicaps. Although viable food production has always been a prominent objective of the CAP (and Member States have flexibility with respect to many policy options yet not the option not to support farm incomes) it still is possible to compare the different types or cluster with respect to their relative focus on the different objectives of the CAP (see Table 4).

#### *Other studies on Member State typology*

De Sotro (2015) developed a Member State typology using a factor analysis approach, with a focus on the Member State's implementation choices on the first pillar of the CAP. Rather than all the measures, he focused on what he argued to be the most important ones. His analysis can be best compared with our first pillar analysis, be it that we differ in two main respects: i) we take into account all implementation options rather than the most important ones; ii) based on the theoretical analysis we included a number of confounding variables, reflecting the past (Member State history) as well as potential linkages between both CAP pillars. De Sotro applies a factor analysis comparable to the one we used in this study, but his subsequent classification step is done "by hand" (e.g. drawing circles in a score graph). His results are rather comparable with respect to our findings (see Table 5, left column). De Sotro accepts 5 "outliers", most of which (DE being an exception) could have been added to his purple-group. When this would have been done De Sotro's classification would become more similar to the classification made by the European Parliament study (see further details below).

Likewise De Sotro, the European Parliament (2015) study provides a provisional typology of the Member State policy implementation options of the first pillar of the CAP. The study provides a detailed analysis of all implementation choices. They introduce then 4 reading keys, or composite indicators that represent i) the speed of adjustment, ii) the tightness in the selection of beneficiaries, iii) the redistribution between sectors, farmers and regions, and iv) the national tailoring of the CAP. Member States are scored in a qualitative way on each of these 4 reading keys. Subsequently, based on cluster analysis run on the 4 reading keys they classify the Member States into three types. Whereas their analysis has a cluster analysis in common with our approach, they differ with respect to the factor analysis, but rather have a stage where they create 4 "common factors" (reading keys) "by hand" and subsequently score the Member States on these factors in a qualitative way. The clusters obtained by the European parliament study show significant overlap with the clusters found by De Sotro (see Table 5).

As can be seen from Table 5 (see right column) our classification turns out to be a bit more refined compared to the ones of De Sotro and the European Parliament. As compared to these studies in particular the large C2/purple cluster is subdivided in even three subgroups (C1, C2, and A2). Although the three studies have differences (in particular in the way they classify some individual Member States), it can be concluded that there is also a lot of overlap in the obtained clustering.

## 7 Concluding remarks

In this study an attempt was made to develop a typology, grouping Member States based on their implementation choices in Pillar 1 and Pillar 2, which extends previous analysis that were limited to only one of the CAP pillars. The outcomes of the analysis are five clusters consisting of 5 to 8 countries. It turned out to be difficult to detect an overarching pattern in terms of the use of different instruments and measures. The typology results indicate a poor correlation between the decisions made in the first and the second Pillar: the analysis did not allow to establish a clear link between the implementation choices (in terms of measures chosen) under Pillar 1 and the decisions made in Pillar 2. From the typology analysis it can be concluded that for the majority of the Member States, the main focus of the CAP remains viable food production.

When Member States are given more freedom than before with respect to their policy implementation choices, as is the case in the last CAP reform, it could be argued to also make them more accountable by asking them to motivate their policy choices in a Member State CAP policy measures implementation vision document, which links these choices to the pursued policy objectives and (local) needs. In its recent communication on the future of the CAP, the EU Commission accepts this idea by requesting MSs to establish a CAP strategic plan, which would cover interventions in both pillar I and pillar II.

One could question to what extent the additional freedom granted to Member States during the latest CAP reform has led them to addressing new challenges (e.g. climate) as the main focus still seems to be and stay with viable food production.

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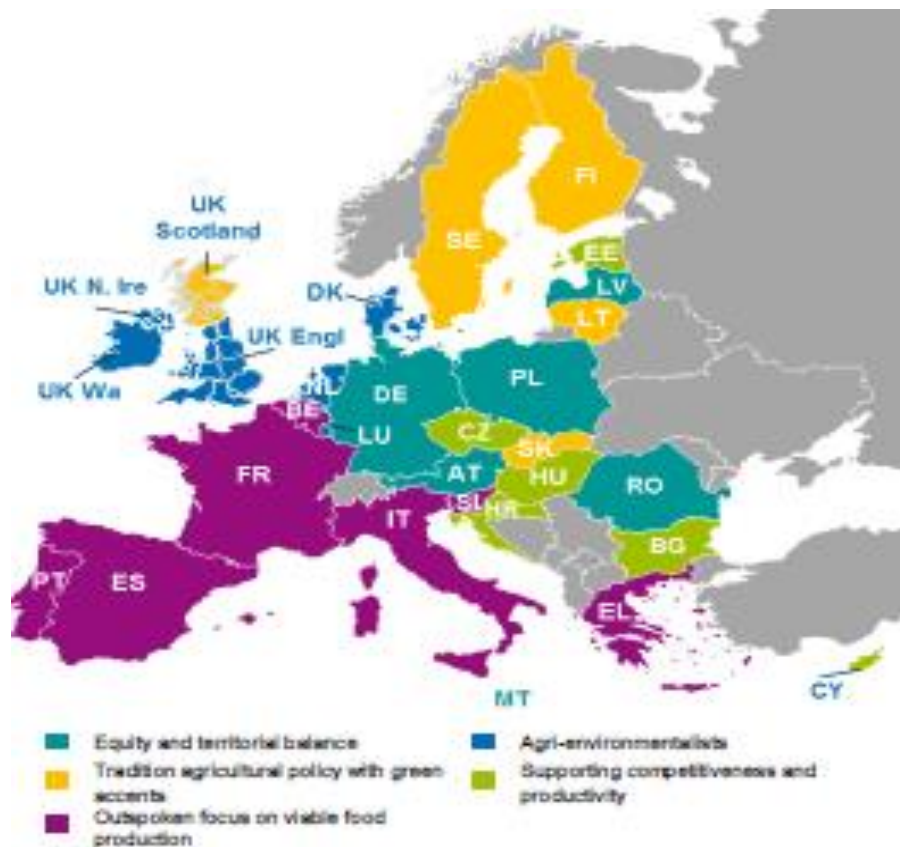


Figure 1 A typology of EU Member States based on their policy implementation option choices

**Table 1** Priorities and focus areas of the second Pillar of the CAP

| Priority  | Focus area  |
|---|---|
| 1.Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas   | <p>1a) fostering innovation and the knowledge base in rural areas;</p> <p>1b) strengthening the links between agriculture and forestry and research and innovation;</p> <p>1c) fostering lifelong learning and vocational training in the agricultural and forestry sectors;</p>  |
| 2.Enhancing competitiveness of all types of agriculture and enhancing farm viability  | <p>2a) facilitating restructuring of farms facing major structural problems, notably farms with a low degree of market participation, market-oriented farms in particular sectors and farms in need of agricultural diversification;</p> <p>2b) facilitating generational renewal in the agricultural sector;</p>             |
| 3. Promoting food chain organisation and risk management in agriculture   | <p>3a) better integrating primary producers into the food chain through quality schemes, promotion in local markets and short supply circuits, producer groups and inter-branch organisations;</p> <p>3b) supporting farm risk management;</p>  |
| 4. Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry   | <p>4a) restoring and preserving biodiversity, including in Natura 2000 areas and high nature value farming, and the state of European landscapes;</p> <p>4b) improving water management;</p> <p>4c) improving soil management;</p>  |
| 5. Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors, | <p>5a) increasing efficiency in water use by agriculture;</p> <p>5b) increasing efficiency in energy use in agriculture and food processing;</p> <p>5c) facilitating the supply and use of renewable sources of energy, of by products, wastes, residues and other non-food raw material for purposes of the bio-economy;</p> |
| 6. Promoting social inclusion poverty reduction and economic development in rural areas   | <p>6a) facilitating diversification, creation of new small enterprises and job creation;</p> <p>6b) fostering local development in rural areas;</p> <p>6c) enhancing accessibility to, use and quality of information and communication, technologies (ICT) in rural areas.</p>   |

**Table 2** Confounding variables used in the factor analysis of the CAP 2014-2020 policy implementation

| Variable  | Comments   |
|---|--|
| Share of Pillar I funds in total CAP 2007-2013 envelope   | Takes into account the history w.r.t. the distribution of the budget over the two pillars of the CAP   |
| Change in Pillar I envelope for CAP 2014-2020 relative to the Pillar I envelope of the CAP 2007-2013                    | Characterizes the change in the Pillar 1 budget (reduction/increase) of the current reform relative the previous CAP implementation <sup>3</sup> .   |
| Change in Pillar II envelope for CAP 2014-2020 relative to the Pillar II envelope of the CAP 2007-2013                  | Characterizes the change in the Pillar 2 budget (reduction/increase) of the current reform relative the previous CAP implementation  |
| Change in total (annualized) budget of the CAP 2014-2020 relative to the total (annualized) budget of the CAP 2007-2013 | Characterizes the change in the CAP (total) budget (reduction/increase) of the current reform relative the previous CAP implementation   |
| Old or new Member State indicator   | Characterizes the year of entry to EU of a Member State, which has a link to the implementation of the direct payments policy in the past (e.g. single area payment or SAPS, and single farm payment or SFP) and potentially for the current policy implementation |

**Table 3** Results of the typology analysis: clustering and selected characteristics

| Cluster | Member States/Regions  | Typical characteristics of Member States' implementation choices  |
|---------|--|---|
| 1       | 6: AT, DE, LV, MT, PL, RO                                    | Strong/full internal convergence (DE, MT flat rate since 2015; LV&PL&RO=SAPS), flexible implementation of the greening payment, small farmers support, viability of rural areas is an important objective                   |
| 2       | 5: FI, LT, SE, SK, UK Scotland                               | Internal convergence to flat in 2015 or 2019 (SE in 2020, LT & SK=SAPS), relatively strict implementation of the greening payment, high coupled support, no small farmers support, risk management and POs not so important |
| 3       | 8: BE Flanders, BE Wallonia, ES, FR, EL, IT,PT, SI           | Partial internal convergence, high VCS, small farmer support is of some importance, productive investments are supported, on average more attention to risk management and POs  |
| 4       | 7: DK, LU, IE, NL, UK England, UK Wales, UK Northern Ireland | Low use of coupled support, limited targeting of direct payments, no small farmer support, support for environmental investments and high use of AECS   |
| 5       | 6: BG, CY, CZ, EE, HR, HU                                    | SAPS (exc. HR), coupled support is important, small farmers support some importance, productive investments high, viability of rural areas important  |

<sup>3</sup> Budgets in real terms are used for 2013 and 2019 as indicated in the Regulations have been used to calculate in order to also have data for Croatia.

**Table 4** Relative focus of Member States' policy implementation choices to different general objectives of the CAP

| Cluster | Viable food production | Sustainable management of natural resources | Balanced territorial development |
|---------|------------------------|---|----------------------------------|
| 1       | +++                    |   | ++                               |
| 2       | +++                    | ++  |                                  |
| 3       | +++                    | +   | +                                |
| 4       | ++                     | ++  |                                  |
| 5       | +++                    | +   | ++                               |

Legend: + = some support; ++ = supported (focus item); +++ = strongly supported

Source: own analysis

**Table 5** Comparing our findings to the clustering (typology) obtained in the studies by De Sotro and the European Parliament

| Cluster/type | De Sotro study   | European Parliament study   | Groups in our typology that correlate best with the other studies |
|--------------|--|---|---|
| C1/Blue      | AT, DK, LU, NL, SE, UK (Scotland), UK (Wales), UK (England), UK (Northern Ireland) | AT, DE, NL, SE, UK (Scotland), UK (Wales)   | A1, A3  |
| C2/Purple    | CZ, CY, EE, FI, LT, LITH, MT, RO, SLK, SLV   | BE (Wallonia), BE (Flanders), CZ, HR, CY, DK, EE, FI, IE, LT, LITH, LU, MT, PT, RO, SLK, SLV, UK (England), UK (Northern Ireland) | C1, C2, A2  |
| C3/Green     | BE (Wallonia), BE (Flanders), ES, EL, FR, IE, IT                                   | BG, FR, EL, HU, IT, ES, PL  | B3, A2  |
| Outliers     | BG, DE, HR, HU, DE   |   |   |