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POLICY DEPARTMENT
STRUCTURAL AND COHESION POLICIES **B**

Agriculture and Rural Development

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**RESEARCH FOR AGRICULTURE
COMMITTEE – CAP REFORM
POST-2020 - CHALLENGES
IN AGRICULTURE**

WORKSHOP DOCUMENTATION





DIRECTORATE-GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

RESEARCH FOR AGRI COMMITTEE –
CAP REFORM POST-2020 - CHALLENGES
IN AGRICULTURE

WORKSHOP DOCUMENTATION

This document was requested by the European Parliament's Committee on Agriculture and Rural Development.

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POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES
AGRICULTURE AND RURAL DEVELOPMENT

RESEARCH FOR AGRI COMMITTEE – CAP REFORM POST-2020 - CHALLENGES IN AGRICULTURE

WORKSHOP DOCUMENTATION

Abstract

This document was prepared for the Workshop on "*Reflections on the agricultural challenges post-2020 in the EU: preparing the next CAP reform*" of 8 November 2016, organised by the European Parliament's Committee on Agriculture and Rural Development (COMAGRI) and its Policy Department (AGRI Research).

It contains three studies:

1. *The future of direct payments (by Alan Matthews).*
2. *The future of market measures and risk management schemes (by Louis-Pascal Mahé and Jean-Christophe Bureau).*
3. *The future of rural development (by Thomas Dax and Andrew Copus).*

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DIRECTORATE-GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

RESEARCH FOR AGRI COMMITTEE – THE FUTURE OF DIRECT PAYMENTS

STUDY

This document was requested by the European Parliament's Committee on Agriculture and Rural Development.

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I am grateful to Lars Brink for helpful comments on an earlier draft, but I retain sole responsibility for any errors, misrepresentations or significant omissions

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POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

RESEARCH FOR AGRI COMMITTEE – THE FUTURE OF DIRECT PAYMENTS

STUDY

Abstract

Direct payments are the most important component of the EU's Common Agricultural Policy (CAP) budget and the most important source of support to EU farmers' incomes. This study makes policy recommendations to AGRI Committee Members concerning the possible structure for direct payments in next CAP reform. Three models are developed to structure the possible choices. The paper recommends an integrated, one-pillar CAP based on contractual and targeted payments in place of the current system of decoupled direct payments.

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AECM	Agriculture-Environment-Climate Measure
AGRI	Agriculture and Rural Development Committee
AMS	Aggregate Measurement of Support
ANC	Area of Natural Constraints
ARC	Agricultural Risk Coverage
BPS	Basic Payment Scheme
CAP	Common Agricultural Policy
CCP	Counter-Cyclical Payments or Counter-Cyclical Prices
DG AGRI	Directorate-General for Agriculture and Rural Development
DP	Direct Payments
EAFRD	European Agricultural Fund for Rural Development
EFA	Ecological Focus Area
EGAF	European Globalisation Adjustment Fund
ESIF	European Structural and Investment Funds
ESPG	Environmentally Sensitive Permanent Grassland
EU	European Union
EURATOM	European Atomic Energy Community
FADN	Farm Accountancy Data Network
FY	Fiscal Year
GAEC	Good Agricultural and Environmental Condition
GHG	Greenhouse Gas
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
MEP	Member of the European Parliament

MFF	Multi-Annual Financial Framework
MILC	Milk Income Loss Contract
MS	Member State
OECD	Organisation for Economic Co-operation and Development
OJ	Official Journal
PLC	Price Loss Coverage
POSEI	Programmes d'Options Spécifiques à l'Eloignement et à l'Insularité
PSE	Producer Support Estimate
RDP	Rural Development Programme
SAPS	Single Area Payment Scheme
SCO	Supplemental Coverage Option
SDG	Sustainable Development Goal
SMR	Statutory Management Requirement
SNAP	Supplemental Nutrition Assistance Program
SPS	Single Payment Scheme
STAX	Stacked Income Protection
TFP	Total Factor Productivity
UK	United Kingdom
US	United States of America
USDA	United States Department of Agriculture
VCS	Voluntary Coupled Support
WTO	World Trade Organisation

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EXECUTIVE SUMMARY

This note responds to a request to provide policy recommendations to AGRI Committee Members on possible improvements of the current direct payments mechanisms in the light of future challenges for EU agriculture. The future of direct payments is central to the debate on a future CAP because of their importance both in the total support that farmers receive and in the CAP budget. Budget transfers are the single largest element of support to EU farm incomes. Direct payments accounted for around 72% of the CAP budget and for just less than 30% of the entire EU budget in the 2013-2015 period.

The note is a work of structuring and synthesis, attempting to assist AGRI Committee Members by systematically setting out the choices available to MEPs if they wish to consider further reforms of the CAP.

Chapter 2 describes the structure of direct payments following the 2013 CAP reform. Decoupled payments, in the form of the Basic Payment Scheme and the Single Area Payments Scheme, remain the single most important layer, but other layers have been added, including a greening payment and young farmer payment which are compulsory for Member States, as well as schemes for coupled support, small farmers and areas of natural constraints which are optional for Member States. The 2013 reform greatly increased the flexibility given to Member States with respect to how they could implement the direct payments regime.

The 'external convergence' formula brought about a limited but unprecedented redistribution of CAP Pillar 1 resources between Member States. However, it did not alter the relative ranking of countries, and there are still significant differences in payment levels per hectare particularly among the old Member States and between old and new Member States.

Twelve of the 18 countries applying the BPS will still use the partial convergence model in 2020. The area of eligible land has likely increased following the 2013 reform. The most popular of the voluntary measures chosen by Member States has been coupled support, which has been introduced by all except Germany. Fifteen Member States opted for the Small Farmers Scheme, covering 41% of the EU's farmers and 5% of its agricultural land.

Member States have also made wide use of the flexibility granted to attach varying conditions to the greening payment.

Chapter 3 asks whether the new direct payments regime is achieving its objectives and whether it is fit for purpose. Farm incomes remain hugely dependent on these payments. Based on FADN data over the period 2004-2013, the contribution of direct payments to farm net income was 47%, other public transfers 15% and market income 38%. The average share of direct payments was as low as 7% on horticultural farms and as high as 101% on 'other grazing livestock' farms over this period.

The 2013 reform introduced various measures to try to even out the distribution of direct payments across farms. However, degressivity/capping has made hardly any impact on the distribution of payments between farms, although the redistributive payment can play a more important if still limited role. The great majority of direct payments in the current

programming period will continue to flow to farms whose income from farming is above the median farm income.

Capitalisation effects reduce the benefits of direct payments for existing farmers and raise the costs of entry and growth for younger and expanding farmers. Direct payments have slowed the exit of some farmers from agriculture and the reallocation of land towards more efficient farms. Direct payments contribute to stabilising farm income. However, they are not well targeted because they are not specifically focused on those farms facing the highest levels of income variability. Direct payments generally have a negative relationship with farm productivity, although the move to decoupled payments has reduced the efficiency losses associated with the previous partially-coupled payments.

The available data cannot yet tell us anything directly about the environmental benefits from the greening practices. The fact that the maintenance of permanent grassland requirement and the crop diversification obligation have led to minimal changes in land use, and the fact that the great majority of the land enrolled in EFAs is used for productive options, are pointers that the additional environmental benefits, relative to the pre-greening baseline, in return for the expenditure of €12 billion annually are likely to be low. The greening choices made by Member States and farmers do not suggest that the opportunities to deliver significant environmental value have been taken in most cases.

There are no specific challenges and no specific public goods for which the appropriate policy response is a uniform, fixed, decoupled payment per hectare. There is a need to restructure direct payments to a set of targeted payments focused on well-specified objectives.

Three different models are proposed to help to identify key decisions for AGRI Members regarding the future of direct payments.

- Model 1 assumes that decision-makers prolong the current structure of direct payment into the next programming period but wish to make technical adjustments to the legislation to improve its effectiveness and to simplify its administration.
- Model 2 follows the US example in which decoupled direct payments are eliminated and the savings used either to introduce counter-cyclical payments or a set of income stabilisation tools. No merit is seen in counter-cyclical payments. There is a case to shift resources to income stabilisation tools but these should be managed principally at the Member State level.
- Model 3 revisits the greening payment and considers four different options to replace it. These include reverting the greening obligations to cross-compliance; replacing the greening obligations by a menu approach at the Member State/regional level; adopting 'conditional greening' whereby entitlement to the basic payment would be conditional on enrolling in a basic agriculture-environment-climate measure (AECM) in Pillar 2; and transferring the greening payment for voluntary AECMs in Pillar 2.

The current system of direct payments is neither sustainable in the long run nor designed to address the challenges facing farmers and land managers in Europe today and in the future. Chapter 5 puts forward a recommended structure for the future of direct payments, based on the following set of principles.

- Payments should be targeted on specific objectives with a clear results orientation.
- Payments should be restructured within a one-pillar, programmed, multi-annual CAP.
- National co-financing should be required for all CAP expenditure.
- Decoupled direct payments should be gradually phased out over a pre-announced transition period.
- Savings should be redirected to more spending on risk management, improving competitiveness, climate action and environmental public goods.
- Payment entitlements should be replaced by a contractual framework between farmers and public authorities.
- Cross-compliance and the greening payment should be replaced with 'conditional greening' whereby the receipt of public support would be conditional on enrolling in a basic (shallow) environmental scheme devised by the Member State.
- The allocation of budget resources should be incentive-based so that budgets are allocated to Member States based on performance as well as needs.

An indicative CAP budget in 2025 is prepared to illustrate the effects of these various choices. All of the elements in the recommended structure for future direct payments to farmers are familiar in the current CAP. What is proposed is to redesign these payments so that they are more effective in achieving their objectives, more understandable to farmers, give greater flexibility to national authorities, and provide greater value-for-money to the taxpayer. Policy-makers can decide the pace at which the transition can take place. What is important is that individual reforms to any element of the direct payments regime are consistent with the proposed long-term direction of travel.

However, the gains from shifting to a more targeted approach are sufficiently compelling that it would be a pity to delay.

1. INTRODUCTION

KEY FINDINGS

- This note responds to a request to **provide policy recommendations** to AGRI Committee Members on possible improvements of the current direct payments mechanisms in the light of the upcoming challenges for EU agriculture.
- The future of direct payments is **central to any debate on future agricultural policy** because of their importance both in the total support that farmers receive and in the CAP budget.
- The note is **a work of structuring and synthesis**, attempting to assist AGRI Committee Members by systematically setting out the choices available to MEPs if they wish to consider further reforms of the CAP.

This study responds to a request to prepare a detailed briefing note for a forthcoming AGRI Committee workshop entitled '*Reflections on the agricultural challenges post-2020 in the EU: preparing the next CAP reform*'. The briefing note **develops an analysis on the challenges post-2020 and their implications for the future of direct payments**. Its objective is to provide some policy recommendations to AGRI Committee Members concerning the next CAP reform, on possible improvements of the current direct payments mechanisms in the light of the upcoming challenges for EU agriculture.¹

1.1. The context for this study

The last CAP reform was agreed in 2013 and entered into force in 2015 following a transition year in 2014. Member State administrations and farmers have had, at the time of writing, only one full year of experience in implementing the new Regulations. However, discussion has already started on a possible 'reform of the reform'.²

One reason for this is the fixed timeline set down for agreeing the next Multi-annual Financial Framework (MFF). The MFF sets maximum annual limits on the amount of money that can be spent for the EU budget as a whole and on various headings within that budget, including the CAP. Under the current MFF Regulation which fixes the maximum ceilings for the EU and CAP budgets until 2020, the Commission is required to present a proposal for a

¹ Two companion studies have been prepared for the AGRI Committee workshop on 'The future of market measures and risk management tools' (Mahé and Bureau) and 'The future of rural development policy' (Dax).

² The May 2016 informal AGRIFISH Council under the Dutch Presidency focused on innovation and the future of the CAP and was supported by a discussion paper 'Food of the future – the future of food', available at <https://english.eu2016.nl/documents/publications/2016/05/31/food-of-the-future>. See also the French Government's contribution to this informal Council 'A reformed CAP for competitive, sustainable and resilient agriculture', available at <http://agriculture.gouv.fr/telecharger/79704?token=6a67fb42628b1c1d91ee1476d7cee5f2>. Members of the European Parliament have initiated discussions on the CAP after 2020 under the auspices of the 'Roundtable on the CAP' and through individual interventions in the media. Other contributions to date (mid-October 2016) include the references to sustainability and the future of the CAP in the strategic note from the European Political Strategy Centre (Falkenberg 2016), the paper from researchers at LEI-Wageningen UR (in Dutch) (Vogelzang et al. 2016), the Cork 2.0 Rural Development Declaration http://ec.europa.eu/agriculture/events/rural-development-2016_en.htm, and the conclusions of agricultural Ministers gathered at Chamborg at the invitation of the French Agriculture Minister Stéphane Le Foll in September 2016 http://agriculture.gouv.fr/sites/minagri/files/160902_cp_chambord.pdf

new MFF before 1 January 2018.³ The current Budget Commissioner has launched the consultation process on the next MFF with a call to increase the EU budget's focus on results.⁴ In her speech, she specifically queried whether the reformed CAP is achieving a sufficiently high degree of European added value and whether the greening of the CAP is working. Some stakeholders believe there could be a stronger chance to defend the CAP budget in the next MFF if there were a clearer link between agricultural spending and the challenges the EU will face in the coming decade.

Another reason for the early start of the debate around a further reform of the CAP is that the 2013 CAP reform left major stakeholders dissatisfied. There is thus pressure to reopen some of the compromises made as part of that reform (Buckwell and Baldock, 2014). The 2013 CAP reform was the first reform agreed under the co-decision procedure in which the European Parliament and the Council have equal roles. Many of the changes introduced into the CAP Regulations during the trilogue process had not undergone an impact assessment and have proved problematic in practice. Farmers criticise the increase in the regulatory requirements that they face to access direct payments, and they sometimes find the underlying logic hard to understand. They also feel that the current income situation has exposed weaknesses in the safety-net system (comprising both market management instruments and direct payments) resulting from the 2013 reform.

Environmental groups complain that the much-vaunted 'greening' of the CAP in the 2013 reform has led to very limited additional environmental action or benefit, despite the allocation of 30% of the direct payments budget to this purpose. Public policy analysts point out that a high proportion of the CAP budget continues to be spent on general, untargeted subsidies without a clear link to specific goals and targets. Member State administrations protest that the new CAP regulations are even more complex to administer, leading to an increased risk of disallowances. This has led the Commissioner for Agriculture and Rural Development Phil Hogan to emphasise a rolling programme of simplification from almost the day that the new regulations came into force. By mid-2016, this had led only to changes in the Commission's delegated and implementing acts⁵. Stakeholders may hope that re-opening the basic acts could open the way to changes more in line with their preferences.

A third reason why the debate is re-opening now on the CAP after 2020 is that the challenges facing agriculture after 2020 have evolved since the 2013 reform was discussed. This is more a question of degree than a structural change. Many of the challenges that the EU farm and food sector will face after 2020 already formed part of the context for the 2013 reform:⁶ ensuring adequate farm incomes; addressing the growing exposure to price and income volatility; reversing the slow-down in farm productivity and supporting innovation; enabling generational renewal; preparing for further trade liberalisation; preventing further loss and degradation of natural capital; protecting ecosystems and

³ Council Regulation (EU, EURATOM) No 1311/2013 of 2 December 2013 laying down the multiannual financial framework for the years 2014-2020, OJ L 347/884, 20.12.2013.

⁴ Speech by Commission Vice-President Kristalina Georgieva at the EU Presidency Conference on the Multiannual Financial Framework, Amsterdam, 28 January 2016, available at http://ec.europa.eu/commission/2014-2019/georgieva/announcements/speech-vice-president-kristalina-georgieva-eu-presidency-conference-multiannual-financial-framework_en.

⁵ In September 2016 the Commission presented proposals in the so-called 'Omnibus Regulation' COM(2016) 605 modifying the financial rules applicable to the general budget of the Union which also proposed changes to the CAP basic acts. For a summary of the proposed changes, see DG AGRI 'Main simplification measures', http://ec.europa.eu/agriculture/newsroom/296_en.pdf

⁶ See, in particular, the section "What are the challenges?" in the Commission's Communication on 'The CAP towards 2020' (European Commission 2010).

reversing the loss of biodiversity; both mitigating and adapting to climate change; reducing reliance on chemical and energy inputs; responding to the growing consumer demand for high quality, safe and healthy food; reducing food waste; building resilience to external shocks; contributing to the bioeconomy; addressing the increasing diversity of rural areas and the lagging performance of some rural regions; and simplifying the administration of the CAP. Many of these issues featured prominently in the public consultation and subsequent debate around the 2013 CAP reform.⁷

However, in the six years since the public debate on the future of the CAP was launched in 2010, some of these issues have become more urgent and the context for other issues has changed. The EU has undertaken commitments under the UN Sustainable Development Goals, including the Agenda 2030 challenge of Zero Hunger and ending extreme poverty (SDG 2) and ensuring the sustainable use of resources and climate action through responsible consumption and production (SDG 12). These commitments apply to both its external and internal policies including the CAP. The Paris Agreement on climate change set ambitious climate goals and agreed a global action plan to limit global warming below 2°C through emissions reduction and carbon sequestration.

Chinese economic growth fuelled much of the run-up in global food prices in the past decade, but with the projections for reduced future growth much of the optimism around buoyant farm commodity prices in the future has receded. The EU has accelerated its efforts to conclude free trade agreements with some of its important trading partners, and agriculture often has defensive interests in these negotiations. The volatility in energy prices and the differential movement in energy prices in the EU and in some of its main competitors have intensified competitiveness challenges. Most recently, the vote of the British people in a referendum to support a UK exit from the European Union has resulted in a profound shock. It leaves the future of the EU's relationship with the UK unclear, as well as raising fundamental questions for the future direction of EU integration which will inevitably have consequences for the future CAP.

Despite this apparent appetite to make further changes to the CAP regulations, there are also reasons to take time to reflect further on the outcome of the 2013 CAP reform. The 2013 reform introduced significant changes, not least to the Direct Payments Regulation. For the first time, a sizeable proportion (30%) of Pillar 1 payments was explicitly dedicated to "support agricultural practices beneficial for the climate and the environment applicable throughout the Union" (Recital 37). Other layers of the direct payments envelope were targeted to young farmers, areas of natural constraints and small farmers, and a further effort was made to limit payment eligibility to active farmers. An effort was made to tackle the unequal distribution of direct payments among farms, through both the capping of payments to individual farms and the introduction of a redistributive payment on first hectares.

⁷ For a summary of the public consultation, see DG AGRI, "The Common Agricultural Policy after 2013: Public debate Summary Report, available at http://ec.europa.eu/agriculture/cap-post-2013/debate/report/summary-report_en.pdf. See also the Commission's Communication *The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future* (European Commission 2010). See also various European Parliament own-initiative reports and resolutions in the run-up to the last reform, including *EU Agriculture and Climate Change* (Le Foll report) (European Parliament 2009); *The Future of the Common Agricultural Policy after 2013* (Lyon report) (European Parliament 2010); and *The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future* (Deß report)(European Parliament 2011) and other reports and resolutions referenced by these.

For the first time in a CAP reform, pre-allocated Pillar 1 national envelopes were explicitly redistributed among Member States as a result of 'external convergence'. There was also a further move away from historical payment entitlements within Member States as a result of 'internal convergence'. Land areas eligible for direct payments were updated. The possibilities to provide coupled support were expanded. Cross-compliance rules were simplified. A crisis reserve funded through the financial correction mechanism linked to direct payments was introduced. In many of these areas, multiple options were given to Member States to tailor the new structure of direct payments according to their preferences, introducing an unprecedented degree of flexibility into the implementation of the CAP.

These changes take time to bed down. It will take even longer to assemble the evidence on what has worked and what is not working. The Commission is committed to various monitoring and evaluation studies arising both from legislative requirements and subsequent political commitments. When the last reform was adopted, the Commission committed itself in a declaration relating to the delegated acts of CAP Reform to evaluate the experience with the implementation of the obligations on Ecological Focus Areas (EFA) as part of the new 'greening' obligations.⁸ This review has now been completed (European Commission 2016). Another milestone is the mandated mid-term review of the 2014-2020 MFF following on the 'revision clause' in the current MFF Regulation under which the Commission is required to present a review of the functioning of the MFF towards the end of 2016, taking full account of the economic situation at that time. The Commission is also obliged to present an initial report on the performance of the CAP by 31 December 2018 and a second report by 31 December 2021. Thus, proposals to change the basic acts at this point in time do not have the benefit of *ex post* evaluations which would provide a firmer evidence base on which to work.

Further complications arise because of the parliamentary timetable which requires new elections in May 2019 and the appointment of a new Commission College in October 2019. If the Commission were to put forward major proposals to revise the CAP regulations by the end of 2017 to coincide with its proposal for the next MFF Regulation, the current Parliament might give an initial response but it would most likely be the Parliament elected in 2019 that would conclude the co-decision process with possibly a new Commissioner in charge. The argument is also made that there is a sense of 'reform fatigue' and that farmers and Member State administrations need a period of policy stability, supporting a view that major policy reform should be postponed to a later date.

1.2. The role of direct payments

The system of direct payments plays a central role in these debates, as it did in the 2013 reform. This is in large part because of its predominant role in agricultural support and the CAP budget (Table 1). Two sets of indicators are shown in Table 1. The OECD annually calculates its Producer Support Estimate (PSE) indicator. This measures the monetary value of gross transfers from consumers and taxpayers to producers from policy measures.⁹ supporting agriculture, distinguishing between market price support and budget transfers. Direct payments are the major component of budget transfers to farmers as defined by the OECD, although the latter also encompass input subsidies, certain rural development

⁸ DG AGRI, "Commission Declaration on Delegated Acts on CAP Reform", 2 April 2014, available at http://ec.europa.eu/agriculture/newsroom/161_en.htm.

⁹ The OECD PSE figures do not include expenditure on general services provided to agriculture collectively arising from policy measures that support the agricultural sector.

payments as well as other payments from both the EU budget and from Member States. Budget transfers thus cover more than the EU Pillar 1 direct payments which are the focus of this study. However, the trends are clear. Budget transfers are the single largest element of support to EU farm incomes. At the time of the Fischler CAP reform in 2003, EU farmers received almost as much support through trade protection (paid for by consumers) as from budget support. Since then, budget transfers have grown in absolute terms (mainly because of successive enlargements of the EU in 2004, 2007 and 2013) but also as a share in total EU support.

Looking then at the EU budget figures, Pillar 1 direct payments have accounted for the greatest proportion of CAP spending for some time, and have slightly increased their share over the past decade accounting for 72% of the CAP budget in 2013-2015. The share of Pillar 1 direct payments in total EU budget expenditure has fallen slightly, but they still accounted for just less than 30% of the entire EU budget in 2013-15. The importance of direct payments is also confirmed in the current programming period 2014-2020 in which the budget for direct payments makes up 71.3% of the allocated resources, compared to 24.4% for rural development programmes and 4.3% for other expenditure (Massot 2016).

Table 1: The importance of direct payments in EU agricultural policy

	2003-05	2013-15
	€ million	€ million
Producer Support Estimate (PSE)	103,150.56	84,565.57
Market price support (OECD)	49,841.74	19,923.41
Budget transfers (OECD)	53,308.81	64,642.16
Direct payments (EU)	31,075.09	40,850.22
CAP budget	45,474.80	56,880.72
EU budget	98,510.71	145,403.05
<i>Memo items</i>	%	%
Share of OECD budget transfers in total PSE	51.7%	76.4%
Share of EU direct payments in total PSE	30.1%	48.3%
Share of EU direct payments in CAP budget	68.3%	71.8%
Share of EU direct payments in EU budget	31.5%	28.1%

Source: Own compilation based on OECD and DG BUDGET data. Market price support is estimated only for commodities that make up around three-quarters of the value of EU agricultural production and may therefore be slightly under-estimated.

Thus, arguments about the objectives, structure and targeting of direct payments are at the core of the debate about the future CAP after 2020. What objectives will be served by this measure? How does it relate to other instruments employed in the CAP? Would the objectives be better served by other measures? Once there is clarity on these questions, how should the payments be designed and implemented? How is their future role expected to change over time? How might these questions be reflected in the future role of direct payments in the CAP? This note attempts some answers to these questions.

1.3. Objectives and scope

Much has already been written on the role of direct payments in the CAP, and this note draws heavily on these contributions. The issue was exhaustively discussed in the contributions made in the public debate held prior to the 2008 reform, the impact assessment provided by the Commission when making its proposal for the 2013 reform, and in various resolutions of the European Parliament (see references in footnote 7). Other important contributions on which I have drawn include the report for the Commission *Towards a Common Agricultural and Rural Policy for Europe* (Buckwell 1997); the report for Notre Europe *CAP Reform Beyond 2013: An Idea for a Longer View* (Bureau and Mahé 2008); reports for the European Parliament *The Single Payment Scheme after 2013: New Approach – New Targets* (Bureau and Witzke 2010), *Direct Payments in the CAP post 2013* (Tangermann 2011), *Environmental Public Goods in the New CAP: Impact of Greening Proposals and Possible Alternatives* (Matthews 2012), *New Direct Payments Scheme: Targeting and Redistribution in the Future CAP* (Swinbank 2012), *State of Play of Risk Management Tools Implemented by Member States during the Period 2014-2020: National and European Frameworks* (Bardají and Garrido 2016); the paper *On the Future of Direct Payments* prepared for the Commission's Bureau of Economic Policy Advisors (Swinen 2009); and the IEEP paper *Learning the Lessons of the Greening of the CAP* (Hart, Buckwell, and Baldock 2016). The range of these contributions provides ample input for a new debate.

This note is a work of structuring and synthesis, attempting to assist AGRI Committee Members by systematically setting out the choices available to MEPs if they wish to consider further reforms of direct payments in the CAP. In a scoping paper of this size, it is only possible to identify the different alternatives in a broad-brush way. The approach chosen is to provide a framework for the discussion of the most important choices around three idealised models. These are, together with suggested labels:

- Model 1. Technical adjustments ('steady-as-she-goes')
- Model 2. The farm-focused model ('back to the future')
- Model 3. Revisiting greening ('sustainable countryside')

Chapter 2 describes the implementation of the current structure of direct payments after the 2013 reform. Chapter 3 evaluates how suitable this structure is to help farmers and landowners meet the challenges of the coming decade. Chapter 4 uses the framework of the three idealised models to examine various choices facing AGRI Committee Members as they consider the future of direct payments. Chapter 5 draws together elements from each of these models into a preferred 'targeted model' based on a one-pillar, programmed and multi-annual CAP. The main recommendations deriving from this targeted model are:

- Payments should reflect a clear results orientation.
- Payments should be restructured around a one-pillar, programmed, multi-annual CAP.
- National co-financing should be required of all CAP expenditure.
- Untargeted decoupled direct payments should be gradually phased out over a pre-announced transition period.
- Spending on risk management, competitiveness, climate action and environmental public goods should be increased.
- Entitlements should be replaced with a contractual framework between farmers and public authorities.

- Cross-compliance and the greening payment should be replaced with 'conditional greening' whereby the receipt of public support would be conditional on enrolling in a basic (shallow) environmental scheme devised by the Member State.
- The allocation of budget resources should be incentive-based so that CAP funding is allocated to Member States based on performance as well as needs.

This note was completed following the result of the UK referendum on whether the UK should remain a member of the EU or leave on 24 June 2016. It has not been possible to take account of the possible consequences of a decision by the UK to leave the EU, if this comes about, for the future of direct payments. The UK has been a supporter of lower income support and a greater role for support for public goods in the CAP. It is also a net contributor to the EU budget, so its departure will have implications for the net contributions of other Member States and for the budget that might be allocated to the CAP in the next programming period (Matthews 2016a; 2016b). In principle, the appropriate design of a scheme of direct payments should be the same for EU-27 as for EU-28. Some of the themes raised in the UK referendum campaign, such as a desire to take decisions closer to those affected by them and the need for flexibility to take into account differences in national and regional conditions, are however reflected in the recommended model set out in Chapter 5.

2. EU DIRECT PAYMENTS AFTER THE 2013 REFORM

KEY FINDINGS

- The 2013 reform greatly **increased the flexibility given to Member States** with respect to how they could implement the direct payments regime.
- The 'external convergence' formula brought about a **limited but unprecedented redistribution of CAP Pillar 1 resources between Member States**. However, it did not alter the relative ranking of countries, and there are still significant differences in payment levels per hectare particularly among the old Member States and between old and new Member States.
- Twelve of the 18 countries applying the BPS will still use the **partial convergence model** in 2020. The **area of eligible land has likely increased** following the 2013 reform.
- Degressivity/capping has made **hardly any impact on the distribution of payments between farms**, although the redistributive payment can play a more important if still limited role.
- The most popular of the targeted measures among Member States has been **voluntary coupled support**, which has been introduced by all except Germany. Fifteen Member States opted for the **Small Farmers Scheme**, covering 41% of the EU's farmers and 5% of its agricultural land.
- Member States have made use of the flexibility granted to attach **varying conditions to the greening payment**.

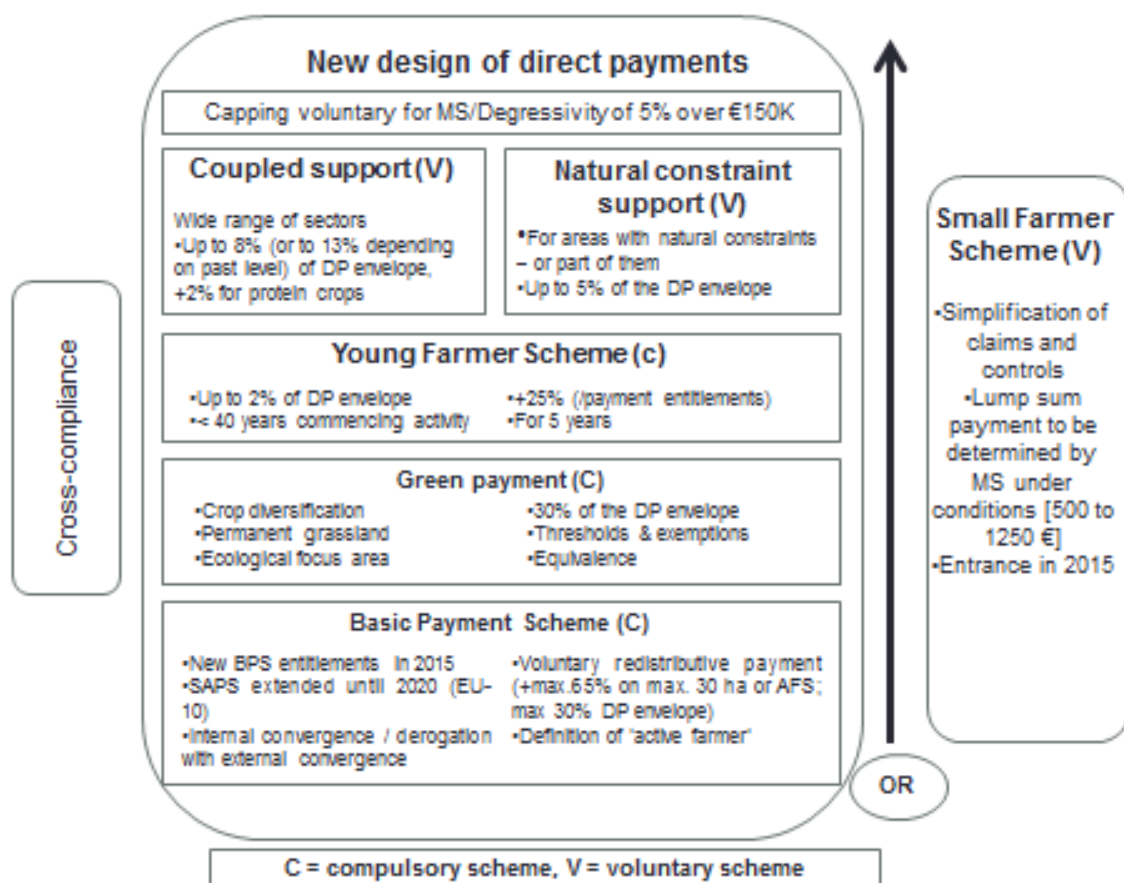
2.1. The new structure of EU direct payments

The starting point for any discussion of the future of direct payments is the structure introduced by the 2013 reform and implemented from 1 January 2015. The 2013 CAP reform was oriented around three main objectives: ensuring the long-term viability of farms; enhancing the sustainable management of natural resources; and contributing to territorial development. According to the Commission's intervention logic, the new structure of direct payments contributes to achieving these three objectives in the following way:

- Contributing to enhanced farm incomes by providing a basic layer of fixed income support, as well as making farm incomes less vulnerable to fluctuations in prices and incomes
- Enhancing the sustainable management of natural resources by supporting agricultural practices beneficial for the environment and climate
- Supporting agriculture in specific areas with significant spillover effects on the food supply chain and rural economies thus helping to maintain structural and production diversity.

In the 2013 reform, the Single Payment Scheme (SPS) introduced in 2005 was replaced by the Basic Payment Scheme (BPS), a greening payment top-up¹⁰ and various targeted measures for young farmers, small farmers, farmers in areas of natural constraints and coupled payments.¹¹ The Single Area Payment Scheme (SAPS) was extended to 2020 for those Member States that wished to continue to use it. Some of these payments are voluntary for Member States, while others are mandatory (Figure 1). The new structure was introduced to improve targeting, to bring about a more equitable distribution between Member States and farmers, and to 'green' direct payments by requiring a greater focus on supporting agricultural practices beneficial for climate and the environment.¹²

Figure 1: The structure of direct payments after the 2013 CAP reform



Source: DG AGRI

The impact of the new scheme is illustrated by the changing composition of expenditure on direct payments shown in Table 2. Payments to farmers by Member State paying agencies in 2015 are reimbursed from the 2016 budget, so the figures shown for 2016 represent the estimated expenditure in the first full year of operation of the changes introduced in the 2013 reform. The big change is the replacement of spending on the SPS in 2014 and 2015 by more differentiated spending in 2016. In particular, the greening payment now accounts for 30.2% of overall spending, coupled payments have increased their share of the total to

¹⁰ The Direct Payments Regulation refers to a "mandatory greening 'component' of direct payments". I have chosen to refer to this as the greening payment, although the term 'green payment' has also entered common usage, and both terms are used interchangeably in this note.

¹¹ Direct payments in the post-2013 CAP are based on the basic act Regulation (EU) No. 1307/2013, the delegated act Regulation (EU) No. 639/2014 and the implementing act Regulation (EU) No. 641/2014.

¹² Summaries of the structure of direct payments under the new Regulation can be found in Henke et al. (2015) and in the various fiches on the DG AGRI web page "Direct payments", available at http://ec.europa.eu/agriculture/direct-support/direct-payments/index_en.htm.

11.7% (of which 10% is accounted for by the new voluntary coupled payment scheme, with cotton and POSEI payments making up most of the balance), the new redistributive payment now accounts for 3.1% of the total, the payment for young farmers accounts for 1.4% of the total while SAPS spending has fallen to 10.4% of the total.

Table 2: Breakdown of direct payments expenditure, 2014-2016, €'000

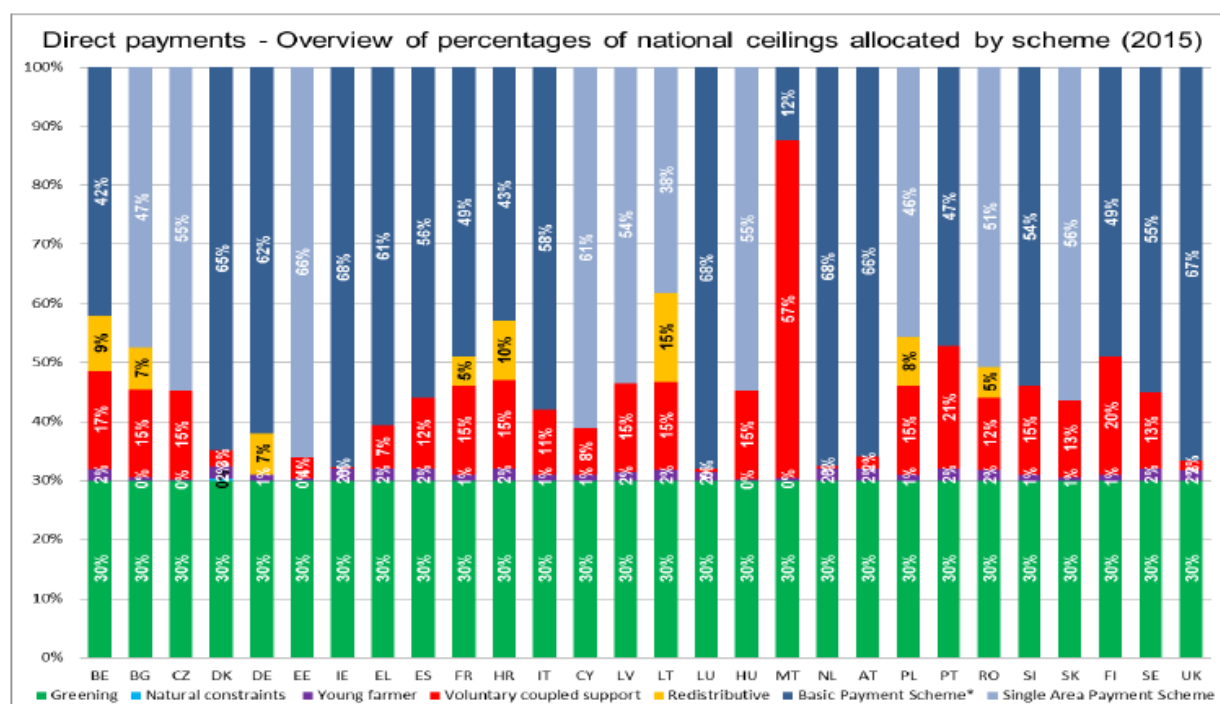
05 03	Appropriations	2016	2015	Outturn 2014	2016 Shares
05 03 01	Decoupled direct payments				
05 03 01 01	SPS (single payment scheme)	79,000	28,342,000	30,834,240	0.2%
05 03 01 02	SAPS (single area payment scheme)	4,236,000	7,806,000	7,366,437	10.4%
05 03 01 07	Redistributive payment	1,251,000	440,000		3.1%
05 03 01 10	Basic payment scheme (BPS)	17,005,000			42.0%
05 03 01 11	Payment for agricultural practices beneficial for the climate and the environment	12,239,000			30.2%
05 03 01 12	Payment for farmers in areas with natural constraints	3,000			0.0%
05 03 01 13	Payment for young farmers	549,000			1.4%
	Other decoupled direct payments	2,200	809,000	755,221	0.0%
	Article 05 03 01 — Subtotal	35,364,200	37,397,000	38,952,055	87.2%
05 03 02	Other direct payments				
05 03 02 40	Crop-specific payment for cotton	241,000	239,000	231,805	0.6%
05 03 02 60	Voluntary coupled support scheme	4,047,000			10.0%
05 03 02 61	Small farmers scheme	p.m.			
	Other coupled payments	442,396	2,839,398	2,475,786	1.1%
	Article 05 03 02 — Subtotal	4,730,396	3,078,398	2,707,591	11.7%
05 03 03	Additional amounts of aid	100	200	33	0.0%
05 03 09	Reimbursement of direct payments to farmers from appropriations carried-over in relation to financial discipline	p.m.	p.m.	-	
05 03 10	Reserve for crises in the agri- cultural sector	441,600	433,000	-	1.1%
	Chapter 05 03 — Total	40,536,296	40,908,598	41,659,679	100.0%
	Assigned revenue	1,302,000	1,245		
	Total expenditure on direct payments	41,838,296	40,909,843	41,659,679	

Source: Draft General Budget of the European Union for the financial year 2016, Volume 3, Section III, Commission.

The 2013 reform greatly increased the flexibility given to Member States regarding how they could implement the direct payments regime. Member States had the option or not to introduce the voluntary schemes and to choose, within limits, how much they wanted to spend on them. They also had the possibility to transfer funding between their direct payments envelope and their rural development programmes in either direction, again within limits. They had additional flexibility to define the beneficiaries of direct payments, to decide on the allocation of entitlements, and to choose among different implementation models for the basic payment and the greening payment.

Figure 2 shows the choices made by Member States in how they allocated their direct payments envelope in 2015. The 30% share allocated to the greening payment was fixed by legislation, although those Member States opting for the partial convergence model could choose whether to make the payment a flat-rate one or proportional to the basic payment and most choose the latter option. Apart from Malta (which is an outlier), the BPS/SAPS payment remains the most important element in each Member State, but there is considerable variation in the national envelope shares devoted to the redistributive payment and coupled payments. Payments to young farmers, to farms in areas of natural constraints, and to farmers under the small farmers scheme are a small proportion of the total as seen already in Table 2.

Figure 2: Choices made by Member States in allocating direct payments, 2015



Source: DG AGRI (2015a).

2.2. The decision on external convergence

One of the vexed questions in the debate on direct payments in the 2013 reform was the legacy of very different payment levels per hectare across Member States as a result of both the way in which the national envelopes arose (in the old Member States) and the decisions taken regarding the size of these national envelopes in the accession negotiations (for the new Member States). The decision to distribute direct support more equitably between Member States, “while taking account of the differences that still exist in wage levels, purchasing power, output of the agricultural industry and input costs” was taken by

the European Council as part of its conclusions on the 2014-2020 MFF in February 2013 (European Council 2013). Its 'external convergence' formula was that all Member States with direct payments per hectare below 90% of the EU average would close one third of the gap between their current direct payments level and 90% of the EU average in the course of the next MFF period. However, all Member States should attain at least the level of €196 per hectare in current prices by 2020. This convergence would be financed by all Member States with direct payments above the EU average, proportionally to their distance from the EU average. The process would be implemented progressively over 6 years from financial year 2015 to financial year 2020. Implementing this formula brought about a limited but unprecedented redistribution of CAP Pillar 1 resources between the Member States. However, it did not alter the relative ranking of countries, and there are still significant differences in payment levels particularly among the old Member States and between old and new Member States.

The final envelope available for direct payments in each Member State was also influenced by the choices made to shift resources between the two CAP Pillars. Overall, there was a total transfer from Pillar I to Pillar 2 of €3 billion over 6 years (Member States can review their decisions in 2017 for the years 2018 and 2019). In total, 16 Member States made use of this flexibility, with 11 Member States transferring resources from Pillar 1 to Pillar 2, and 5 Member States (all from the group of new Member States) transferring resources in the other direction (DG AGRI 2015a).

2.3. The transition towards a flat-rate payment

This process of external convergence was mirrored by internal convergence within individual Member States. Internal convergence refers to the reduction or removal of differences in payments per hectare between farmers within a Member State or region that reflected the uneven historical references of previous decades and which could no longer be justified on objective grounds. The Commission had again proposed that payments should be based on the regional model and equalised within regions, where a region could be defined in accordance with objective and non-discriminatory criteria such as institutional or administrative structure or regional agricultural potential. The final legislation introduced some additional flexibility, allowing Member States to choose from three different options for the BPS plus an option for those Member States using the SAPS:

- To apply a regional/national flat rate from calendar year 2015 as proposed by the Commission;
- To achieve a regional/national flat rate by 2019;
- A partial convergence model based on the external convergence formula which would ensure that those farms getting less than 90% (or a percentage fixed by the Member State between 90% and 100%) of the regional/national average unit value would see a gradual increase – with the additional guarantee that every farmer reaches a payment equal to at least 60% of the regional/national average by 2019. The amounts available to farmers receiving more than the regional/national average are adjusted, with an option for Member States to limit any reductions to no more than 30% of the initial unit value.¹³
- Those Member States using the SAPS could continue to use it until the end of 2020 if they wished.

¹³ The ways in which a Member State can calculate the initial unit value are set out in Article 26 of Regulation (EU) No. 1307/2013.

Six Member States decided to apply or move towards a flat-rate basic payment across the whole territory (Germany, Malta, Netherlands, Finland, Sweden and the UK with the exception of Northern Ireland) while it will partially apply in France in the case of Corsica, by 2020. Ten Member States continue to apply the SAPS, and the remaining twelve countries apply the partial convergence model (plus Northern Ireland). Six Member States (Germany, Greece, Spain, France, Finland, UK except Northern Ireland) decided to regionalise their basic payment.

With the reform, the set of farmers entitled to receive direct payments has been expanded to include virtually all active farmers. Payment entitlements could be allocated under the BPS to all active farmers applying for allocation in 2015 who, in accordance with Regulation (EC) 73/2009, were entitled to receive payments for 2013. The number of payment entitlements allocated in 2015 to each farm was equal to the number of eligible hectares that a farmer declared in 2015. Member States could limit the number of entitlement assigned to a farmer. Member States could also fix a minimum size per holding below which a farmer cannot apply for the allocation of payment entitlements. The expected outcome of these decisions is an increase in the total eligible area as compared to the SPS scheme, particularly in those Member States which applied the historical SPS model, and thus some reduction in the average amount of the basic payment per hectare as a result. Data on the outturn of the BPS in 2015 is not yet available (mid-2016) to confirm this expectation.

2.4. Redistribution towards smaller farms: degressivity and capping

The idea that direct payments should target smaller farms that need them most is not new. Since the MacSharry reform of the CAP in 1992, the Commission has proposed limits on payments to the largest farms. These were first accepted in a muted form in the CAP Health Check, which provided for a higher rate of modulation of payments from the first to the second pillar on payments exceeding €300,000 per farm. The new BPS contains measures to reduce the inequality of payments between farms.

Degressivity/Capping. To ensure a better distribution of support, Member States were required to reduce basic payments over €150,000 per farm by a minimum of 5% (degressivity). Member States could opt for any reduction percentage up to 100%, and nine Member States have opted to cap payments at amounts between €150,000 and €600,000. To avoid disproportionate effects on large farms with high employment numbers, Member States could take into account salaried labour intensity when applying the mechanism. The amount of money affected by capping is, in practice, very limited. The total amounted to €109 million in 2015, almost two-thirds of which is accounted for by Hungary (Table 3).¹⁴

¹⁴ Member States are allocated national ceilings which comprise the total value of all allocated payments entitlements plus national and regional reserves. Net ceilings are determined for each Member State taking into account the reduction of payments due to degressivity/capping and based on the notifications made by each Member State. The difference between the national ceilings plus the crop-specific payment for cotton and the net ceilings are made available for support for rural development in the same Member State. Direct payments in the outermost regions (POSEI) and in the smaller Aegean islands are exempt from the reduction in payments.

Table 3: The impact of degressivity/capping on the transfer of resources between Pillar 1 and Pillar 2, financial year 2015, € million

Member State	National ceiling	Cotton Payment	Net ceiling	Amount transferred to RDPs due to degressivity/capping
Belgium	523.7		523.7	0.0
Bulgaria	721.3	2.3	720.9	2.7
Czech Republic	844.9		840.1	4.8
Denmark	870.8		870.2	0.6
Germany	4,912.8		4,912.8	0.0
Estonia	114.4		114.4	0.0
Ireland	1,215.0		1,214.8	0.2
Greece	1,922.0	187.3	2,109.8	-0.5
Spain	4,842.7	60.8	4,902.3	1.2
France	7,302.1		7,302.1	0.0
Croatia	183.0		183	0.0
Italy	3,902.0		3,897.1	4.9
Cyprus	50.8		50.8	0.0
Latvia	181.0		181	0.0
Lithuania	417.9		417.9	0.0
Luxembourg	33.6		33.6	0.0
Hungary	1,345.7		1,276.7	69.0
Malta	5.2		5.2	0.0
Netherlands	749.3		749.2	0.1
Austria	693.1		693.1	0.0
Poland	3,378.6		3,359.2	19.4
Portugal	565.8	0.2	565.9	0.1
Romania	1,600.0		1600	0.0
Slovenia	138.0		138	0.0
Slovakia	438.3		435.5	2.8
Finland	523.3		523.3	0.0
Sweden	696.9		696.8	0.1
United Kingdom	3,173.3		3,169.8	3.5
TOTAL				109.0

Source: Own calculations based on the differences between the national ceilings and net ceilings set out in Annexes II and III of Commission Delegated Regulation (EU) No 1378/2014, adjusted by the amounts for cotton-specific payments under Article 58 of Regulation (EU) No 1307/2013. The cotton payment is an area payment paid to farmers producing cotton in four Member States under certain conditions, consequent on Protocol No 4 on cotton attached to the 1979 Act of Accession of Greece. This payment is not included in Member State national ceilings but, according to Article 7(2) of Regulation (EU) No 1307/2013 it is included in Member State net ceilings which refer to the total amount of direct payments that may be granted to each Member State. The cotton payment is thus added to the national ceilings when calculating the reduction amounts transferred to rural development.

Redistributive payment. A potentially more equalising measure was a new voluntary possibility to pay a redistributive payment on the first hectares farmed. Up to 30% of a country's national ceiling could be devoted to this, and eight Member States have implemented it. The redistributive payment permits to increase support for small and medium-sized farms by allocating higher levels of aid for the first 30 hectares (or up to the average farm size if higher) of a holding. Member States that implemented the redistributive payment (provided it used more than 5% of their national envelope) did not have to reduce payments over €150,000 by 5%, and 6 of the 8 Member States using the redistributive payment have decided not to do this (DG AGRI 2015a). The amount involved in the redistributive payment is larger than that affected by degressivity/capping, amounting to €1.25 billion in 2015 (Table 2). Because this redistribution is financed by a reduction in the basic payment to all farms, its impact on the overall distribution of payments among farms will also be limited.

2.5. The extent of targeting

Active farmer and minimum requirements for receiving aid. The fact that decoupled payments did not require production but only that land had to be maintained in good agricultural and environmental condition led to the possibility that payments could be made to people who had no connection with agriculture. It was also possible under the original decoupled payments scheme introduced in 2005 for payments to be made to non-farmers who had land deemed to be agricultural land, e.g. golf courses and airports. Already in the CAP Health Check an attempt was made to restrict payments to active farmers and these restrictions were tightened in the 2013 reform. The relevant requirements are:

- Minimum activity. Some minimum activity must be carried out (to be defined by each Member State) even where land is naturally kept in a state suitable for grazing or cultivation.
- Negative list. No direct payments shall be granted to airports, railway services, waterworks, real estate services, permanent sport and recreational grounds, but with possibility to appeal this prohibition under specified circumstances. Member States can add other entities to the negative list which meet prescribed criteria (agricultural activities an insignificant share of overall economic activity, or where the principal activity is not agricultural activity). However, these restrictions will not apply to farmers with direct payments under a threshold of €5,000 or a lower threshold to be decided by each Member State.
- Minimum size. Member States should not pay direct payments which are either less than €100 and/or claimed on less than one hectare, with some discretion to raise these minimum thresholds within prescribed limits.

Eight Member States have extended the negative list and some Member States have made it more difficult to avoid the negative list by lowering the threshold below which the negative list does not apply. Also, some Member States have taken advantage of the flexibility in the minimum size to raise the thresholds beyond the minimum set out in the Regulation (Henke et al. 2015, Table 1.11). However, there seems to be no information available on the minimum activity required in each Member State for eligibility for direct payments.

Young Farmers. In order to encourage generational renewal, the BPS/SAPS payment awarded to new entrant young farmers (those under 40) should be topped up by an additional 25% for the first 5 years of installation. This is funded by up to 2% of the national envelope and is compulsory for all Member States. This top-up is in addition to

other measures available for young farmers under Rural Development Programmes (RDPs). Fourteen Member States chose to allocate the maximum percentage of support (2%). The rest chose a percentage ranging from a minimum of 0.25% in Scotland to a maximum of 1.8% in Wallonia (Henke et al. 2015, Table 1.14).

Small Farmers Scheme. This is an optional measure for Member States. If implemented, any farmer claiming support may decide to participate in the Scheme and thereby receive an annual payment fixed by the Member State of between €500 and €1,250, regardless of the number of eligible hectares they have declared. Member States may choose from different methods to calculate the annual payment, including an option whereby farmers would simply receive the amount they would otherwise receive based on their eligible hectares. The intention was to simplify the administration of small payments both for the farmers concerned and for national administrations. Participants are exempted from the requirement to comply with greening practices and also from cross-compliance obligations and penalties (albeit they must still observe statutory obligations under legislation). Total expenditure on the Small Farmers Scheme cannot be more than 10% of the national envelope, except where a Member State chooses to ensure that small farmers received what they would be due without the scheme.

Fifteen Member States have opted to implement this scheme. For the EU as a whole, 41% of the total number of farmers but only 5% of the total agricultural area benefiting from direct payments are now covered by the scheme, although with significant variations between Member States. In Malta, the small farmers scheme covers more than 75% of farmers, while in Italy, Greece, Romania, Portugal and Poland it covers more than 40% of farmers and 6-16% of the area. In other Member States applying the small farmers scheme, it represents less than 30% of farmers but a smaller area (8% in Austria, 4% in Spain, and less than 3% in other Member States) (European Commission 2016).

Areas with Natural Constraints (ANCs). Member States (or regions) may grant an additional payment for areas with natural constraints (as defined under Rural Development rules) of up to 5% of their national envelope. This is optional and does not affect the ANC options available under Pillar 2 rural development programmes. However, only one Member State, Denmark, opted to make use of this measure with a very small percentage of its national ceiling (0.3%). The payment is made up to a maximum of 100 hectares, therefore similar in spirit to the redistributive payment albeit confined to farms in areas with natural constraints. As the same payment can be made under rural development programmes, the introduction of this possibility could be interpreted as making available another way to shift resources between the two Pillars.

Coupled support. The 2013 CAP reform altered the framework for coupled payments. The list of sectors eligible for coupled support payments is greatly expanded. Total support was limited to 8% of each Member State's direct payments ceiling, or exceptionally 13% in those countries applying the SAPS scheme, or where Member States had used more than 5% of their direct payments ceiling in any year during 2010-2014 for coupled payments including Article 68 payments. These percentages could be increased by up to 2% if this support was used for protein crops. A further derogation allowed Member States which used more than 10% of their national ceilings for coupled payments including Article 68 payments in any year between 2010 and 2014 to be permitted to use more than 13% of their national ceiling for coupled payments "upon approval by the Commission". Member States can revise their decisions with effect from 2017, increasing, decreasing or ceasing the amount of coupled support they provide within the relevant limits.

Voluntary coupled payments within these ceilings should comply with a number of conditions:

- Coupled support may only be granted to those sectors or to those regions of a Member State where specific types of farming or specific agricultural sectors that are particularly important for economic, social or environmental reasons undergo certain difficulties.
- Coupled support may only be granted to the extent necessary to create an incentive to maintain current levels of production in the sectors or regions concerned.
- Coupled support shall take the form of an annual payment and shall be granted within defined quantitative limits and be based on fixed areas and yields or on a fixed number of animals. This is intended to ensure that future coupled payments would qualify as Blue Box payments under the WTO Agreement on Agriculture disciplines on domestic support.

The use of this voluntary option by Member States shows a very varied pattern. Germany is the only Member State not to provide coupled support in 2015. Nine Member States opted to use less than the standard 8% ceiling while eleven Member States have the maximum percentage of 13% with 9 of these also using all or part of the additional 2% available in case of support to the protein crops sector. Three old Member States (Belgium, Portugal and Finland) were given permission to exceed the 13% limit. In total, around 10% of direct payments are now coupled (excluding cotton payments) which is a slight increase compared to the end of the Health Check period. Beef and dairy are the most supported sectors, with smaller amounts going to other sectors such as sheep and goats, protein crops and fruit and vegetables (Table 4).

Table 4: Amounts of voluntary coupled support (VCS) in 2015

Commodity	Number MS providing VCS	Annual amount available	Expenditure share of EU-28 direct support	Quantitative limit on support
Beef and veal	24	€1,700m	4.1%	18.6 million cattle
Milk	19	€846m	2.0%	12.3 million cows
Sheep and goats	22	€486m	1.2%	41-42 million head
Protein crops	16	€441m	1.0%	4.3 million ha
Fruit and vegetables	19	€209m	0.5%	675,000 ha
Sugar beet	10	€176m	0.4%	497,200 ha
Other sectors	13	€279m	0.7%	n.a.
Total	27	€4,100- €4,200m	9.8-10-1%	n.a.

Sources: Commission Information Notes on Voluntary Coupled Support, July and December 2015

2.6. Implementation of greening

The greening payment. In addition to the BPS/SAPS payment, each holding receives a payment per hectare for respecting certain agricultural practices beneficial for the climate and the environment (Member States are required to use 30% of their national envelope for this purpose). Respecting those practices is compulsory for farmers in receipt of the BPS/SAPS payment. Failure to respect the greening requirements will result in penalties (i.e., a farmer could lose all his or her greening payment and also face a penalty of up to 25% of the amount he or she claimed for greening).¹⁵ The greening payment sits on top of cross-compliance which includes the basic compulsory layer of environmental requirements and obligations. Further, more ambitious, environmental management options can be supported through voluntary agri-environment-climate measures (AECMs) financed through Pillar 2 rural development schemes.

The three agricultural practices required are **maintaining permanent grassland** (including a ban on ploughing and conversion of environmentally sensitive permanent grassland), **crop diversification** and **maintaining an "ecological focus area" of at least 5% of the arable area of the holding** for farms with an arable area larger than 15 hectares. These practices are meant to be simple, generalisable, non-contractual and annual. They should also go beyond the statutory rules linked to environmental rules under cross-compliance (statutory management requirements and standards for good agricultural and environmental condition of land). The legislation foresees a "greening equivalency" system for the recognition of environmentally beneficial practices already in place, although few Member States have made use of this option.

Member States were given considerable flexibility in how to implement greening. The main choices concerned whether to implement the greening payment as a flat-rate payment or to use the derogation and grant the payment as a percentage of the value of a farmer's entitlements; whether to designate environmentally sensitive permanent grassland (ESPG) outside Natura 2000 areas; whether to offer equivalent options; at what level (national, regional, farm) to implement the requirement to maintain the ratio of permanent grassland; the number of EFA elements the Member State allowed to its farmers; the method of implementation of these elements; whether to make use of weighting and conversion coefficients; and whether the Member State permitted collective/regional EFA implementation. The following summary of Member State choices is based on DG AGRI (2015a).

Almost all Member States decided to manage the ratio of permanent grassland at national level, with four opting for the calculation of the ratio at the regional level. The designation of ESPG is required in areas covered by the birds and habitats Directives but is voluntary elsewhere. Four Member States designated ESPG outside of Natura 2000 areas.

All but two Member States that will not grant the BPS in the form of a flat rate payment at regional or national level grant the greening payment as a percentage of the value of the entitlements activated. A further two Member States differentiate the greening payment granted as a flat rate amongst the regions established for the purpose of the BPS.

For the five Member States that opted for equivalent practices under greening, these were approved by the Commission "following intensive exchanges of view and subsequent modifications of the national schemes" (DG AGRI 2015a). Three of these opted for agri-environment and climate measures and two for certification schemes.

¹⁵ The penalty was phased in. A penalty of up to 20% could be applied in 2017 and up to 25% from 2018 onwards.

There is wide variation in the number of EFA elements that farmers may use to fulfil their EFA obligations. While five Member States have opted for a restricted list (between 2-4 elements), fourteen Member States offer 10 or more. The most frequently chosen EFA elements - chosen by more than two-thirds of Member States - are nitrogen-fixing crops (27 MS), followed by land lying fallow (26 MS), landscape features (at least one) (24 MS), short rotation coppice (20 MS), and catch crops (19 MS). Only two Member States allow for collective implementation of EFA obligations. No Member State decided to apply regional level implementation. A detailed description of these choices is given in DG AGRI (2015a).

One of the expected benefits of the greening payment was that it would free up some of the AECM budget in Pillar 2 so that Member States could raise the level of environmental ambition in these schemes thus increasing their overall environmental benefit. In practice, however, expenditure on AECMs in the period 2014-2020 is programmed to fall by 7.8% in nominal terms (Hart et al. 2016). Whether this more limited funding is focused on more ambitious schemes or not requires more detailed assessment. Preliminary analysis of 19 RDPs focusing on biodiversity found that 'light-green' measures continue to predominate (EEB and Birdlife Europe 2016).

Cross-compliance. The policy framework for standards of Good Agricultural and Environmental Condition (GAEC) was restructured for 2014-2020 to take into account the introduction of the greening measures. The main changes compared with the previous period are that all standards are now compulsory for recipients of direct payments and the standards were consolidated into a shorter list (Hart et al., 2016). With the introduction of the greening payment, the maintenance of permanent grassland became a greening measure and optional standards for crop rotations have been superseded by the compulsory crop diversification greening practice. One GAEC standard - GAEC7 for the protection of landscape features - was slightly extended to include an additional requirement to ban the cutting of hedges and trees during the bird breeding and rearing season and an optional element to place restrictions on invasive species. An examination of the changes in GAEC standards in four Member States found that the new cross-compliance standards led to very little change in the content of these standards under the new regime (Hart 2015).

3. ARE DIRECT PAYMENTS FIT FOR PURPOSE?

KEY FINDINGS

- Based on FADN data over the period 2004-2013, **the contribution of direct payments to farm net income was 47%**, other public transfers 15% and market income 38%. The average share of direct payments was as low as 7% on horticultural farms and as high as 101% on 'other grazing livestock' farms over this period.
- Most direct payments in the current programming period will continue to **flow to farms with farm income above the median income from farming**.
- **Capitalisation effects may reduce the benefits of direct payments for existing farmers and raise the costs of entry and growth** for younger and expanding farmers. Direct payments have discouraged some farmers from exiting agriculture and slowed the reallocation of land towards more efficient farms.
- Direct payments **contribute to stabilising farm income**. However, they are **not well targeted** because they are not specifically focused on those farms facing the highest levels of income variability.
- Direct payments generally have **a negative impact on farm productivity**, although the move to decoupled payments has reduced the efficiency losses associated with the previous partially-coupled payments.
- The greening choices made by Member States and farmers **do not suggest that the opportunities to deliver significant environmental value have been taken** in most cases.
- There are no specific challenges and no specific public goods for which the appropriate policy response is a uniform, fixed, decoupled payment per hectare. There is a need to restructure direct payments to **a set of targeted payments** focused on well-specified objectives.

Direct payments are primarily aimed at contributing to farm incomes, limiting farm income variability and meeting environment and climate objectives. However, they can also have unintended (positive or negative) effects on the achievement of other agricultural policy objectives, such as fostering a competitive agricultural sector or encouraging generational renewal. This chapter evaluates how well the current system of direct payments assists farmers in addressing the many challenges farmers will face in the coming decade.

3.1. Ensuring adequate and stable farm incomes

There can be no denying the importance of direct payments in farm incomes. DG AGRI on its website maintains a regularly-updated chart showing the dependence of agricultural factor income on public support from the EU budget (e.g. direct payments, rural development) by Member State. Agricultural factor income represents the income generated by farming which is used to remunerate borrowed or rented factors of production (capital, wages and land rents) as well as own production factors (family labour, own

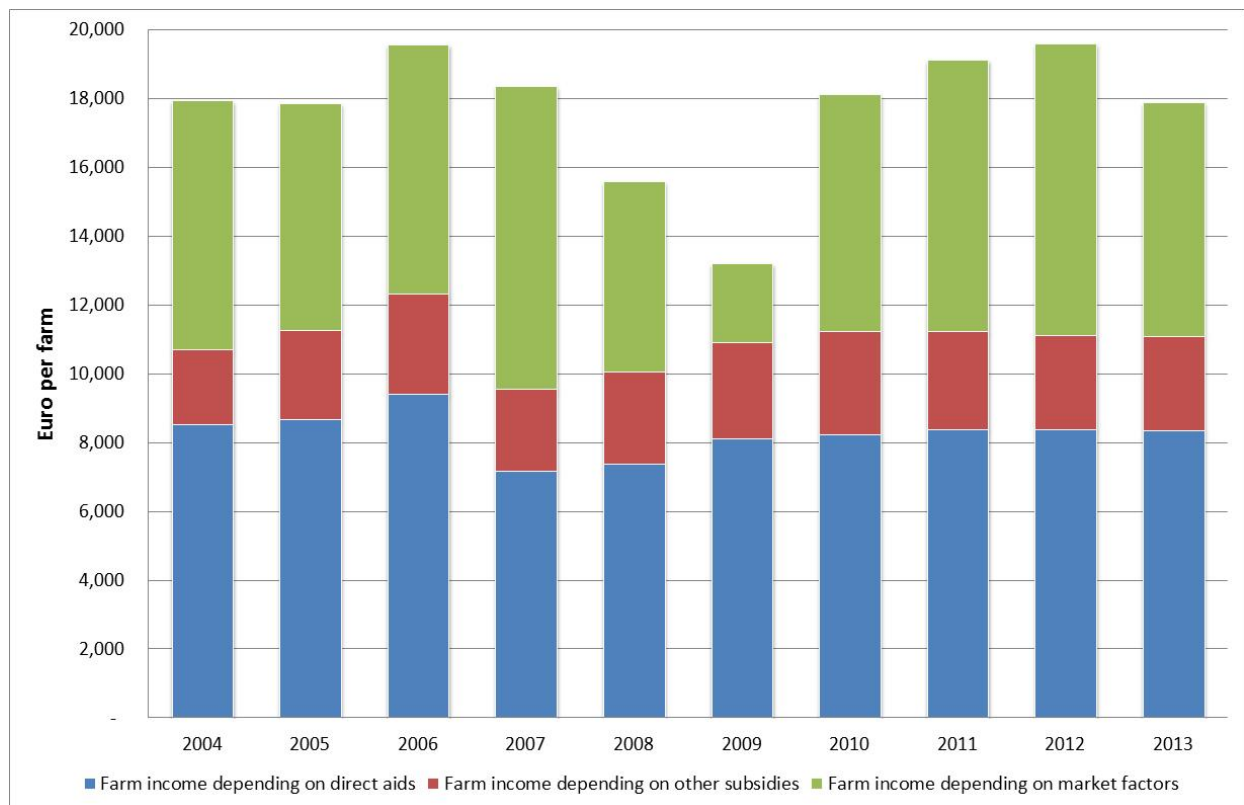
capital and own land). On average across the EU, CAP direct payments accounted for 28% of agricultural factor income in the period 2010-2014; when Pillar 2 payments such as agri-environment payments and compensatory payments for farming in areas of natural constraints are added, the total rises to 33%.¹⁶ For individual countries the percentages can be higher, and for individual enterprises within countries (e.g. beef farming) the percentages can be higher still.

Data from the EU's Farm Accountancy Data Network (FADN) suggest dependence on direct payments is even higher. The FADN data include payments received from Member States in addition to CAP payments. These payments may be compensatory national direct payments used to top-up Pillar 1 direct payments in the new Member States, national co-financing of RDPs, or other types of state aids. In the following charts, public support is compared to farm net income in the FADN database (similar to the concept of entrepreneurial income in the Eurostat Economic Accounts for Agriculture). This is the amount left over for farm families after paying for external factors of production and is a better indicator of the return from farming for farm households than is agricultural factor income (referred to as farm net value added in the FADN database).

Farm net income can be partitioned between direct payments (both coupled and decoupled), other public subsidies, and income depending on market factors (market income) defined as the residual.¹⁷ Figure 3 shows the evolution of this partitioning of farm net income over time. Averaged over the period 2004-2013, direct payments have accounted for 47% of farm net income, other public transfers 15%, and market income the remaining 38%. Direct payments have been the most stable component of farm net income, as shown by the respective coefficients of variation (0.08 for direct payments, 0.09 for other public transfers and 0.27 for market income).

¹⁶ Figures from DG AGRI, "[Share of direct payments and total subsidies in agricultural factor income](http://ec.europa.eu/agriculture/cap-post-2013/graphs/graph5_en.pdf)", available at http://ec.europa.eu/agriculture/cap-post-2013/graphs/graph5_en.pdf, accessed 24 May 2016.

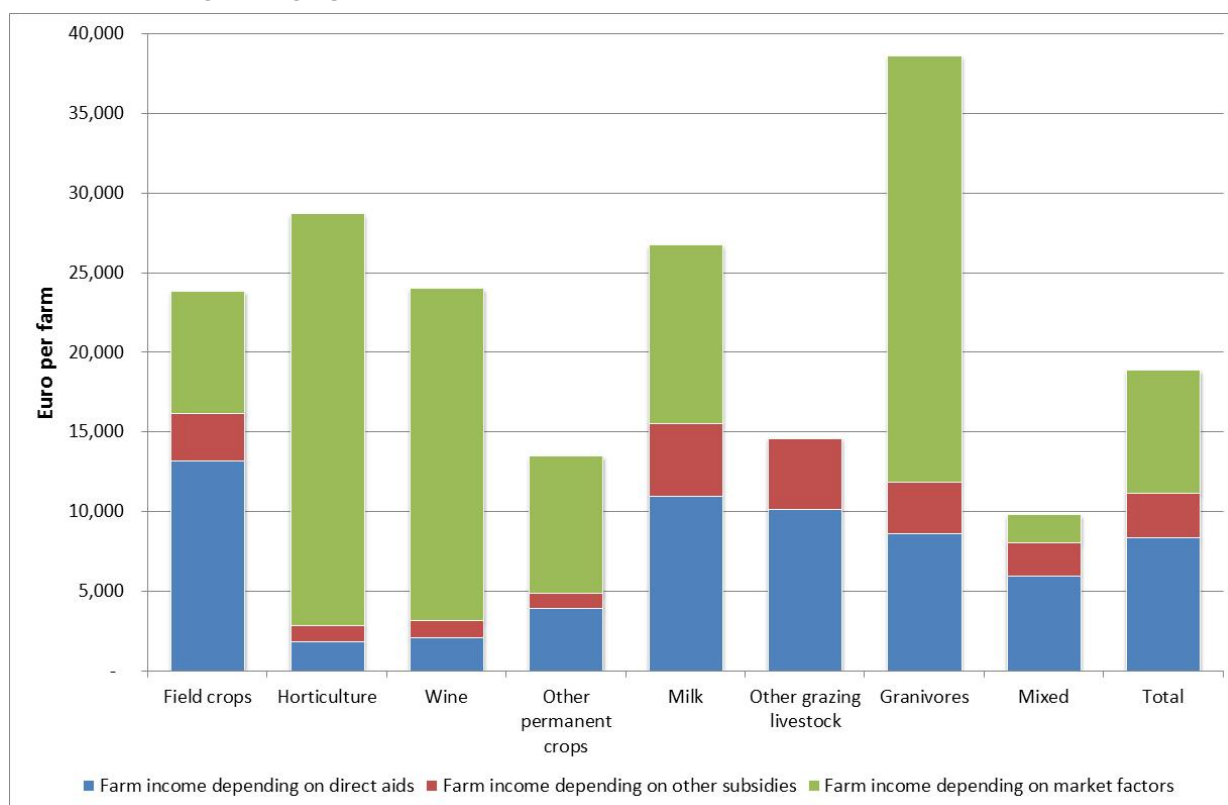
¹⁷ This partitioning is based on the strong assumption that all of the expenditure on intermediate consumption and external factors is allocated to the production of marketed output, and that the current level of public subsidies would be fully retained even if the farm reduced expenditure on intermediate inputs and external factors to zero. For example, a farmer may be renting land on which he or she is drawing a decoupled payment. Without making the rental payment the farmer would not receive the decoupled payment. Some minimal expenditure is required to maintain land in good agricultural and environmental condition which is required to receive the decoupled payment. There are also interdependencies between the different income categories. For example, higher direct payments may be reflected in higher land rents and thus lower market income. Despite these caveats, this partitioning provides useful insights into the dependence of different types of farming on the different components of income.

Figure 3: Subsidies form the major and most consistent part of EU farm income

Source: Own compilation based on FADN data

The importance of public transfers differs greatly across farm systems (Figure 4). Direct payments play a relatively minor role on horticultural farms (7%), vineyards (9%) and pig and poultry farms (granivores) (22%). However, they account for 70% of the income on 'other grazing livestock' farms (predominantly beef and sheep) and 61% on mixed farms. Taking account of other public transfers does not change this ranking. The largest amounts in absolute terms are obtained by milk and 'other grazing livestock' farms. Indeed, for the latter group, total public transfers (101%) actually slightly exceeded farm net income (the negative market income is not shown on the chart for legibility reasons). These figures refer to budgetary transfers only, and do not take account of consumer transfers due to market price support arising from trade barriers or market intervention.

The question for policy-makers is whether this level of payment support can be justified and, if support is justified, are decoupled direct payments the right way to provide it?

Figure 4: Importance of direct payments differs greatly across farm systems, 2011-2013

Source: Own compilation based on FADN data

Average household income of farm families is not out of line with society generally. It has been a central objective of the CAP since its initiation to achieve “a fair standard of living for the agricultural community”. To assess whether this objective has been achieved, the average farm income (obtained by dividing either agricultural factor income or farm net income by the numbers working in agriculture) is sometimes compared to average non-farm earnings. However, this comparison tells us nothing about the living standards of farm families. This is a function of their disposable income which, in turn, depends on the total income of agricultural households (see Hill and Bradley (2015) for a discussion). Statistics on the total income of agricultural households are not collected on a systematic basis. However, the evidence reviewed in Hill and Bradley (2015) suggests that “*The average disposable incomes of households headed by farmers (in the sense that farming is the main income source) are generally of similar levels to those of society in general*”. Of course, the statistics on which the relevant comparisons were made reflect the income transfers included in farm income. It might therefore be argued that the findings just quoted demonstrate the success of the policy. However, when juxtaposed with other evidence on who receives these payments, it is hard to defend this interpretation.

Virtually all direct payments go to farms with incomes above the median. One reason is that the bulk of support goes to relatively few farms with farm incomes well above the median. DG AGRI’s annual report on direct payments shows they are not equally distributed among beneficiaries in the European Union: in 2014, on average, 80% of the beneficiaries (88% for Bulgaria and Romania) receive around 20% of the payments (with important differences among Member States) (DG AGRI 2015c). Because 2014 was a transitional year between the previous and new systems of direct payments, it does not reflect the full impact of the 2013 reform which will not be known until the 2015 payments

report is published. However, the review in the previous Chapter suggests that the impacts of external and internal convergence as well as the targeting of payments including degressivity/capping and the redistributive payments will not be major.

The Commission's presentation of the direct payments data sorts the distribution according to the size of the individual payment made to each farmer. However, it does not tell us whether it is richer or poorer farmers (in terms of income from farming, not overall income) who receive the largest payments. Sorting direct payments by the level of farm income obtained by farmers allows us to see the share of direct payments going to those with farm incomes above a certain threshold. One exercise which tried to do this estimated that just 5% of direct payments go to farms with incomes below the median farm, while 95% of payments go to farms with incomes from farming above the median.¹⁸

Leakages to unintended beneficiaries reduce the value of support. Despite the focus on limiting payments to active farmers in the last reform, the role of non-farmers claiming entitlements to support is not the major source of leakage of the benefits of direct payments away from active farmers. This occurs through the process of capitalisation, in which the benefits of support are bid into higher land rents or higher land values. Farmers receive the payments, but in competing with one another for access to land, some of the value of these payments is transferred to land-owners. As around one-half of all EU farmland is rented, mostly from non-farmers, the transfer out of the sector is potentially large. When asset values are inflated by payments, young farmers must pay a higher price to enter farming or to acquire additional land, with the benefits going to those who are leaving the sector. For those inheriting land, higher asset prices may mean higher payments must be made to the non-farming siblings when a farm is inherited, again leading to an outflow of benefits from the sector.

The empirical evidence suggests that the actual extent to which direct payments are capitalised into land rents and prices in EU countries may be more limited than expected. This may be due to a number of factors: the role played by entitlements (where the number of entitlements is less than the number of eligible hectares, no capitalisation is foreseen); the differentiated value of entitlements in the historic or hybrid models (farms with a high-value entitlement per hectare have a lower intensity of capitalisation than those with low-value entitlements per hectare, lowering the average degree of capitalisation over all farms); the requirement for cross-compliance (the additional costs of compliance would be expected to lower the degree of capitalisation); the existence of land market regulations (rental price controls or provisions on the duration of rental contracts), in the presence of which land rents cannot adjust rapidly to changes in payment levels or design; and finally, uncertainty among farmers in their expectations regarding how long, and at what level, direct payments can be counted on to continue. Estimates from empirical studies range from as low as 6-7 cents to as high as 80-90 cents for each euro of direct payments received being capitalised into land rents, with median estimates of around 20-25 cents (Matthews, Salvatici, and Scoppola 2016).¹⁹ These capitalisation effects reduce the benefits of direct payments to existing farmers and raise the costs of entry and growth for younger and expanding farmers.

¹⁸ Matthews, A., "Focus on the distribution of direct payments", available at <http://capreform.eu/focus-on-the-distribution-of-direct-payments/>, accessed 27 August 2016.

¹⁹ A recent US study also found that for every dollar of US farm subsidies, about 25 cents leaked to landowners while 75 cents were retained by farmers (Kirwan 2009).

Direct payments and income variability. Farming is a risky business because forces (such as weather and market conditions) beyond the control of farmers affect their income. Evidence from EU countries shows that farm income variability is generally high and that differences among countries and types of farms exist: more specialised and small farms are often faced with relatively higher income variability (Vrolijk et al. 2009; Agrosynergie 2011). However, when nonfarm sources of income are taken into account, based on US and Canadian evidence, the total income of agricultural households is more stable than their income from farming alone (Mishra and Sandretto 2002; Poon and Weersink 2011).

Direct payments help to stabilise farm income because they are a less variable part of income than market income alone, as the comparison of the coefficients of variation earlier demonstrated. However, the extent of this stabilising effect will differ across different farm types, simply because direct payments are a more important contributor to farm income on some farms than on others (Figure 4). Severini et al. (2016) investigate this issue for a sample of farms in Italy where use of the historical model has also generated differences in the distribution of payment levels per hectare. They show that the income stabilising role of direct payments increases as the share of direct payments in total farm receipts increases.²⁰ However, it is not guaranteed that direct payments make the biggest contribution to risk reduction on those farms facing the largest income variability. In their sample, there was no significant relationship between the share of direct payments in total receipts and overall farm income variability, suggesting that direct payments are not well targeted as an income stabilisation measure. They investigate whether direct payments are specifically targeted to stabilise the income of those farms facing large income variability levels or not. They conclude that direct payments are not well targeted because the correlation between the variability of market income and the relative importance of direct payments in farm receipts is very low on average and in many of the types of farming they consider.

Direct payments and structural change. Over time, a steady process of farm consolidation resulting in a reduction in the number of farms is taking place in all EU countries. Some regret the disappearance of these smaller farms, although the sons and daughters of these farmers enjoy much broader life opportunities in the non-farm sector. An important role for policy is to ensure that these children have a decent education to equip them to make the best of these opportunities. Others welcome the process of consolidation because it strengthens the competitive position of remaining farm families and allows them to aspire to a larger income on their farms. Yet despite this consolidation process, the majority of farms in the EU are still very small. More than two-thirds of all holdings operate on less than 5ha of agricultural land and more than half have a total Standard Output (i.e., a standardised sales value over the course of one year) below €4,000 before deduction of any production costs. The total area occupied by these small farms amounts to only 6% of the total utilised agricultural area, while more than half of agricultural land belongs to farms which have more than 100 hectares (DG AGRI 2015c).

Direct payments can, in principle, influence the entry, growth and exit of farms. If direct payments are capitalised into land values and land rents, increased land rents and prices may represent significant barriers to entry into the agricultural sector for those not in a position to inherit farmland and may also impede restructuring within the sector. Direct

²⁰ They point out that receipts of direct payments by an individual farm can also vary from year to year for a variety of reasons. They investigate whether this variability is negatively correlated with the variability in market income, which would further add to the stabilising role of direct payments. Their empirical results show that direct payments play only a limited countercyclical role against fluctuations in market income over time.

payments can also influence a producer's decision to exit the industry, particularly for low-profit farmers. If the amount of the direct payment exceeds the loss associated with a particular productive activity, then there may be a cross subsidisation effect that will keep that producer in business thus again slowing consolidation.

There is evidence at least for the EU-15 Member States that the change to a decoupled payments regime after 2005 may have reduced the rate of farm consolidation in the EU (Brady et al. 2009; Kazukauskas et al. 2013). There is also evidence from survey intentions and simulation modelling (Bartolini and Viaggi 2013; Brady et al. 2009) that decoupled payments slow down the rate of structural change relative to a situation of no agricultural policy support. The CAP's income support payments have discouraged some farmers from exiting agriculture and slowed the reallocation of land towards more efficient farms.

This has implications for the serious problem of generation renewal in EU agriculture. The majority of EU farmers were older than 55 years and only 6% were younger than 35 years in 2013. Close to one-third of all farmers are above the normal retirement age of 65. Between 2005 and 2013, the relative importance of the different age groups has not changed significantly (DG AGRI 2015b). The Young Farmers Scheme was introduced as part of Pillar 1 direct payments in the 2013 reform to help to address this issue. It provides a top-up of the basic payment to young farmers under 40. However, it does not help to encourage the exit of older farmers and the entry of younger farmers. As previously noted, the availability of a direct payment not linked to production but linked to land encourages some older farmers to remain in farming and therefore slows the generational renewal that is needed.

3.2. Supporting production and competitiveness

EU farming now competes in a global marketplace. While commodity prices are still higher than they were prior to the 2008 price spike, recent projections suggest that real agricultural prices are projected to remain relatively flat in the coming decade (OECD-FAO 2016). Energy prices have fallen recently, but they have fallen by more in major competitors such as the US. Exchange rate movements also alter the relative profitability of production in different countries at short notice. Competitiveness pressures are expected to intensify in the coming years as trade barriers are further reduced in the context either of bilateral free trade agreements with other countries or if a new multilateral trade liberalisation agreement under WTO auspices is finally concluded. Increasing productivity and competitiveness are a prerequisite to maintaining the level of agricultural production in Europe, ensuring supplies for the processing sector, and contributing to jobs and growth.

However, recent trends in EU total factor productivity (TFP) growth have been disappointing. According to DG AGRI, the average annual TFP change between 2005 and 2014 (which smooths out yearly trends in the TFP index due to weather) was +0.7% per annum in EU-15, although the EU-13 experienced a much higher growth rate of +2.6% per annum.²¹ This higher rate of TFP growth in the new Member States is largely due to a higher growth rate in labour productivity, due to the large outflow of labour from agriculture in these countries.

²¹ DG AGRI, CAP Context Indicators 2014-2020 27. Total Factor Productivity. 2015 Update, available at http://ec.europa.eu/agriculture/cap-indicators/context/2015/c27_en.pdf, accessed 22 May 2016. These figures are surrounded by a large margin of uncertainty. OECD (2016) estimates a higher rate of total factor productivity growth of 1.5% per annum between 2003-2012 based on the USDA Economic Research Service Agricultural Productivity Database, which is just slightly below the global average figure of 1.7% per annum.

Direct payments may have both positive and negative effects on efficiency and productivity through the income effect (Zhu and Lansink 2010). Positive effects can arise if direct payments provide farmers with the necessary financial means to keep technologies up to date or to invest in cost-reducing innovations. Direct payments can be particularly important in the context of imperfect credit markets, where the availability of a steady income stream can make the difference between obtaining loan approval or not. Negative effects might arise if farmers are less motivated to perform well with more income due to subsidies. Higher incomes can lead to a lack of effort and disinclination to seek cost-reducing methods. Subsidies also lead to a soft budget constraint, meaning that farmers might be inclined to over-invest leading to inefficient use of resources. At the sector level, direct payments can increase the price of land and slow down the rate at which resources are reallocated to more productive uses in response to new technologies or market conditions. Empirical studies have generally found a negative relationship between direct payments and farm productivity, although the move to decoupled payments has reduced the efficiency losses associated with the previous partially-coupled payments (Rizov, Pokrivcak, and Ciaian 2013; Kazukauskas, Newman, and Sauer 2014).

From a broader perspective, the high dependence of EU agriculture on public support can be seen as representing a failure of policy to equip farmers to successfully operate in a more competitive environment. From this perspective, the money used to provide untargeted public support would be more effectively used to support farmers through more targeted measures, for example, to improve their competitiveness through research, extension, better infrastructure, promoting innovation, supporting quality production, encouraging producer groups and exploring new income-earning opportunities in the bioeconomy.

One competitiveness argument made in support of direct payments is that they compensate for the higher standards that EU farmers have to meet relative to their competitors in third countries and for producing high-quality, healthy and safe food. This is not a convincing argument. In the first place, we must distinguish between standards imposed under the polluter-pays-principle to prevent damage to the natural environment or the wider public, and standards which reflect particular social preferences, such as with respect to animal welfare. All industries operate under regulations designed to limit negative externalities for the rest of society, and there is no case for compensating farmers for compliance with these standards. Second, many standards may benefit farmers by increasing consumer confidence and willingness to purchase EU products. Third, differences in standards are only one element that affects competitiveness, and third country producers could use the same argument to justify support because they face poorer infrastructure or less well-developed innovation systems than in the EU. There may be cases where social preferences impose more costly standards on EU producers and where a case can be made for some form of compensation, such as with respect to animal welfare standards. But this would imply some form of targeted compensation to those producers affected, related to the additional costs they incur. Decoupled direct payments to all farmers cannot fulfil this role. Nor is there any reason why a farmer in receipt of a decoupled payment is more likely to produce high-quality food than a farmer who does not receive such a payment, given that there is no link between the payment and food quality.

3.3. Contributing to environment and climate objectives

While cross-compliance conditions have been attached to direct payments since 2005, specific environmental and climate objectives were only introduced into the direct payments system with the introduction of the greening payment in the 2013 reform. With

30% of the direct payments envelope allocated to the greening payment, around €12 billion annually of direct payments is now focused on environmental and climate objectives. Do the farm practices required by the conditions attached to the greening payment really make a significant contribution to improving the environment and fighting climate change in return for this expenditure? Although it is arguably too early to provide a complete answer to this question, the Commission has prepared a review of greening after its first year of implementation in 2015, focusing in particular on level-playing-field aspects, production impacts and possible simplifications of the greening framework that could reduce the administrative burden. The findings in this section summarise the conclusions of that review (European Commission 2016).

Obligations under the green direct payment scheme cover most of the agricultural area in the EU. Agricultural land subject to at least one green direct payment obligation amounts to 72% of the total EU agricultural area. This wide coverage demonstrates the potential of green direct payments to deliver environmental and climate benefits on a large share of EU farmland, including areas that are not covered by AECMs under RDPs. The proportion of farmers under at least one greening obligation stands at around 36% of direct payment beneficiaries. The situation is uneven across Member States reflecting the relative importance of exempted farms at national level. Some 75% of arable land is affected by the crop diversification obligation, again with significant variations across Member States, ranging from less than 10% to more than 90% of arable land. Around 16% of the permanent grassland area is classified as environmentally sensitive with a view to protecting biodiversity and carbon storage. The 5% EFA obligation is applicable to around 68% of EU arable land, again with variations between 40% and 90% by Member State. Equivalent measures only affect a small proportion of farmers and arable land (2% of farmers and 6% of arable land) except in Austria where equivalent practices under AECMs account for 19% of farmers and 53% of arable land.

Environmental performance depends on choices made by Member States and farmers. The three greening practices were primarily targeted at different environmental objectives – crop diversification at soil health, EFAs at biodiversity and permanent grassland preservation at carbon storage. However, in the impact assessment accompanying these proposals in the 2013 reform, little evidence was available to indicate what environmental improvement might be expected from the implementation of these practices. This remains an area without much quantification.

The crop diversification and permanent grassland measures have led to no immediate changes at farm level. In the case of the crop diversification requirement, while three-quarters of arable land is covered by the requirement, the Commission estimates that cultivation practices have changed on about 1% of this land (European Commission 2016). Most farmers were following these practices in any event as part of good farm husbandry.

Also permanent grassland protection has had no immediate impact as no Member State breached the limit in 2015. Much of the ESPG area was already protected as part of Natura 2000 areas, but four Member States decided to designate such areas outside Natura 2000 areas where a ban on ploughing will be implemented. For both of these measures, it is argued that they contribute to the maintenance if not the enhancement of environmental services.²² However, the recalibration of the permanent grassland reference level to a lower

²² "The introduction of greening practices does not necessarily entail changing all practices in all farms. Where these sustainable agricultural practices are already implemented, the application of the green direct payment

level implies some weakening of protection compared to the situation prior to the 2013 reform.

In the case of EFAs, the environmental effects depend very much on the choices made by Member States and farmers because of the large margin of discretion in fulfilling the EFA requirement. Overall, the area covered by declared EFAs amounts to 14% of arable land before application of the weighting factors and to 9% after this application, which is well above the regulatory requirement of 5%. The main EFA types declared by farmers are nitrogen-fixing crops (45.4% of the physical area on the ground), catch crops (27.7%), land lying fallow (21.2%), landscape features (4.3%) and buffer strips (less than 1%). EFAs areas linked to a productive activity – nitrogen-fixing crops and catch crops – amount to 73.1% of the total declared EFA area.

When corrected by their weighting factors according to their expected environmental value, the share and order of each declared EFA type appear different: nitrogen-fixing crops (39.4% of the weighted area), land lying fallow (38%), catch crops (15%), landscape features (4.8%) and buffer strips (less than 2%). While after correction nitrogen-fixing crops remain the most common declared EFA type in the EU, the share of fallow land appears more important and ranks second. Overall, the 2015 figures show that only 26.9% of the physical area of EFAs was devoted to the most beneficial elements for the environment. However, a number of Member States have imposed management conditions such as restrictions on the use of pesticides or fertilisers on the productive areas.

These data do not tell us anything directly about the environmental benefits from the greening measures. However, they are certainly suggestive in helping to understand the likely environmental effectiveness, the degree of environmental additionality achieved, and overall value for money of the greening payment. The fact that the maintenance of permanent grassland requirement and the crop diversification obligation have led to minimal changes in land use, and the fact that the great majority of the land enrolled in EFAs is used for productive options, are pointers that the additional environmental benefits, relative to the pre-greening baseline, in return for the expenditure of €12 billion annually are likely to be low. The Commission makes the argument that the payment contributes to 'holding the line' in maintaining the flow of existing environmental services, but it provides no evidence that the relevant environmental features would be under threat in the absence of the payment.

The conclusion of one set of seasoned observers is that *"From an initial review of these choices, it looks as if the opportunities for delivering significant environmental value through the greening measures have not been taken in most cases"* (Hart et al., 2016). Whether it is possible to achieve a satisfactory environmental return from the expenditure of €12 billion annually on the greening payment by tweaking the regulations or whether a different approach to greening should be pursued is discussed in Chapter 4.

3.4. Summary fitness check of the current system

Direct payments were originally introduced into the CAP as compensation to farmers for the reduction in market support prices. Their justification was changed in the Agenda 2000 reform to one of income support (Swinbank 2012). In 2005, these were mostly converted into decoupled payments. The rationale was to give farmers freedom to farm and to

scheme guarantees the preservation of these practices. In all cases, the scheme ensures that the required practices are applied on all concerned farms" (European Commission, 2016).

remove the link between support and production, in part to allow the EU to adopt a more offensive strategy in the WTO Doha Round of multilateral trade negotiations.

Further changes were made to direct payments in the 2013 reform package of which the most notable was the decision to allocate 30% of the overall ceiling to a greening payment to farmers for practices beneficial to the climate and the environment. Another consequence of the 2013 reform is the much greater flexibility that Member States have in how they implement CAP direct payments. However, a consequence of the greater flexibility allowed to Member States is complexity. Despite the intention to make CAP simplification one of the objectives of the most recent reform, the outcome has been the opposite. Thus Commissioner for Agriculture and Rural Development Phil Hogan has made simplification (yet again!) one of his priorities in his term of office.²³ To mid-2016, the proposals for simplification have involved amendments to delegated and implementing acts designed to make administration easier for paying agencies in the Member States and to reduce the scale of penalties that farmers face for unintentional errors.

However, direct payments face more serious questions. Farmers remain shockingly dependent on these payments whose justification remains unclear. Farmers deserve assistance in coping with the challenges they face in the coming decade, and their contribution to providing public goods should be recognised and remunerated. However, there is no specific challenge or specific public good where the appropriate policy response is a uniform, fixed, decoupled payment paid per hectare of all agricultural land throughout the EU. Of course, such payments make some contribution to specific objectives – reducing income variability, maintaining farming in marginal regions, benefiting climate action and the environment – but they can never be an efficient and satisfactory solution.

The last CAP reform missed the opportunity to target payments to specific objectives (only the young farmer payment comes to mind as a specifically targeted payment). As an income support, the vast bulk of decoupled payments continue to go to farms with income above the median farm income. However, lowering the cap on the amount an individual farm can receive (leaving aside the different ways individual farms might try to get around this cap) will not lead to a more equitable regime, in the sense of focusing public support on farm families with inadequate incomes. Low income from farming is not the same as low farm household income when off-farm income and other income sources are taken into account. Flat-rate payments per hectare paid to farmers irrespective of the local conditions under which they farm and unrelated to the specific public services required in their neighbourhood, are an ineffective and inefficient approach to incentivising farmers to provide these services (Tangermann, 2012). Existing direct payments may help to support the continuation of farming in the EU but they do very little to assist the sector to improve its underlying competitiveness. The opportunity to revisit the CAP regulations after 2020 provides an occasion to restructure the direct payments regime in a more targeted way.

²³ For a summary of the Commissioner's simplification agenda to date, see http://ec.europa.eu/agriculture/simplification/index_en.htm. For a discussion of the history of attempts to simplify the CAP, see Matthews, A., "Simplification as a top priority in 2015", available at <http://capreform.eu/simplification-as-a-top-priority-in-2015/>, accessed 15 March 2016. Commissioner Hogan has asked for extensive input from Member States, the European Parliament and stakeholder groups to feed into that process. In a speech to the 'Agri 2015' conference in Leipzig on 23 April 2015, Commissioner Hogan reported that he received more than 1000 pages of simplification proposals to that date.

4. DIRECT PAYMENTS AFTER 2020: BUILDING ON THE 2013 REFORM

KEY FINDINGS

- **Three different models** are proposed to illustrate key decisions for AGRI Members regarding the future of direct payments.
- Model 1 assumes that decision-makers wish to **prolong the current structure of direct payment** into the next programming period but to make **technical adjustments** to the legislation to improve its effectiveness and to simplify its administration.
- Model 2 follows the US example in which **decoupled direct payments are eliminated and the savings used either to introduce counter-cyclical payments or a set of income stabilisation tools**. No merit is seen in counter-cyclical payments. There is a case to shift resources to income stabilisation tools but these should be managed principally at the Member State level.
- Model 3 **revisits the greening payment and considers four different options to replace it**. These include reverting the greening obligations to cross-compliance; replacing the greening obligations by a menu approach at the Member State/regional level; adopting 'conditional greening' whereby entitlement to the basic payment would be conditional on enrolling in a basic AECM in Pillar 2; and transferring the greening payment for voluntary AECMs in Pillar 2.

This chapter and the next discuss some alternative proposals which respond to the issues raised in Chapter 3 around the functioning of the present system of direct payments. The choices made will reflect different views regarding the purpose of direct payments and different weightings attached the challenges facing the agricultural sector and what society expects of its farmers. For this reason, the purpose of this Chapter is to suggest a framework which can help to structure these discussions for AGRI Committee Members. The discussion is structured in terms of three different models:

- **Model 1: Technical adjustments ('steady-as-she-goes')**. Essentially, this model would maintain the current post-2013 structure of direct payments into the next programming model but make technical adjustments to the legislation to improve its effectiveness and to simplify its administration. This model might be seen as building on the Commissioner's simplification agenda but opening up aspects of the basic regulations for amendment, but within a relatively limited scope. This option would be favoured by those who see merit in the current structure. It might also be favoured by those who might seek a wider restructuring but doubt that this is the right time to pursue this. This might be because they are convinced by the argument that farmers and national administrations need a period of stability without another major upheaval in the policy environment, because they believe it makes sense to wait for further evidence on the effects of the last reform before embarking on the next one, or because they feel the legislative timeline is not conducive to the completion of a more far-reaching reform in the current legislative period.

- **Model 2: The farm-focus model ('back-to-the-future')**. Essentially, this model would focus direct payments more on the farm income and farm production objectives of agricultural policy. Under this heading, I discuss proposals for counter-cyclical payments and the diversion of some or all of the direct payments envelope to risk management measures. This might also be called the 'US model' as it would imitate the path taken in the 2014 US Farm Bill which eliminated its decoupled direct payments and replaced them with a variety of counter-cyclical and risk management programmes.
- **Model 3: Revisit greening ('sustainable countryside')**. This model revisits the greening payment and considers four different options to replace it. These include reverting the greening obligations to cross-compliance requirements; replacing the greening obligations by a menu approach at the Member State/regional level; adopting 'conditional greening' whereby entitlement to the basic payment would be conditional on enrolling in a basic AECM in Pillar 2; and transferring the greening payment for voluntary AECMs in Pillar 2.

The three models are 'ideal types', each designed to focus on different elements of the direct payments scheme to allow discussion of some of the critical choices facing AGRI Committee Members. In Chapter 5, elements from each model are drawn upon to develop a recommended 'targeted' model for the future of direct payments. This model would have a stronger focus on environmental land management than the current structure of direct payments, but it would not be solely a 'public goods' model. Support for innovation in the farm sector and to improve competitiveness would continue, as would support for risk management, to young farmers and to maintain farming in areas of natural constraints including some limited coupled payments. However, untargeted decoupled payments for farm income support would be phased out over time. Whether agricultural policy should continue to be delivered through two Pillars as well as the appropriate balance between EU budget financing and national Member State financing of future agricultural policy are also addressed in Chapter 5.

4.1. Model 1. Technical adjustments ('Steady as she goes')

In Model 1, the layered approach to direct payments introduced in the 2013 reform would continue, and the balance between these layers would be broadly maintained. However, even maintaining the 'status quo' will require some particular issues to be addressed prior to the next programming period. Also, supporters of this option may see opportunities to improve the effectiveness of spending or for further simplification without a further major restructuring. The discussion does not go into the detail of specific aspects of the direct payments Regulation, but highlights some of the top-level choices which will need to be faced.

4.1.1. Equalise more the payments per hectare across Member States

The external convergence settlement reached in 2013 may not reflect an agreed and stable equilibrium. Although disparities in payment levels per hectare between Member States have been reduced, there are still significant differences notably among the old Member States reflecting historical circumstances, and between the old and new Member States. The argument was made in the European Council conclusions on the current MFF that payment levels should reflect wages, productivity and input costs, so there would seem to be a case to revisit the allocations in the light of changes in these variables that have occurred since 2013. Newer Member States may push for full equalisation of per hectare payments across all Member States.

The role of the Parliament in this decision is limited. On the last occasion, the Pillar 1 allocation (as well as the allocation for Pillar 2 funding) was decided solely by the European Council as part of its MFF conclusions in February 2013. In its report *'The negotiations on the MFF 2014-2020: lessons to be learned and the way forward'*, the Parliament made the following observations:²⁴

"considers it regrettable that this was reflected in the fact that the national allocations, especially from the two biggest areas of expenditure in the EU budget, agriculture and cohesion policy, were determined at that moment; criticises, in particular, the increased number of special allocations and 'gifts' granted in the course of negotiations between Heads of State and Government, which are not based on objective and verifiable criteria, but rather reflect the bargaining power of Member States, trying to secure their national interests and maximise their net returns; denounces the lack of transparency in striking this agreement and the reluctance of the Council and the Commission to provide Parliament with all relevant documents; highlights that the European added value should prevail over national interests."

This suggests that the Parliament recognises the political reality that national envelopes for cohesion and agricultural spending will continue to be decided by the European Council by unanimity, while calling for the use of more objective criteria based on European value added as well as greater transparency around the negotiations. Of course, Parliament will be free to make its views known to the European Council prior to these negotiations taking place.²⁵

It is not easy to suggest what an appropriate allocation of the overall direct payments budget between the Member States should be, based on the 2013 reform. Various models based on objective criteria were canvassed in the Commission's impact assessment accompanying its CAP reform proposals in 2011 (European Commission 2011c; see also Cao et al., 2010). However, because of the lack of clarity about what the BPS/SAPS payment, in particular, is trying to achieve, reaching political agreement on a set of objective indicators would be difficult. If the 2013 external convergence formula were to be altered, the most likely approach would be to tighten the harmonising formula used on the last occasion. While this would reduce the variability in payments levels per hectare across Member States, it would not change their ranking. It also begs the question whether moving towards a more uniform payment per hectare is, indeed, a more equitable outcome. In the longer run, this problem becomes more tractable if direct payments are more linked to the achievement of specific targets of EU interest, as proposed in the targeted model in Chapter 5.

4.1.2. Complete the move to regionalised basic payment

The Commission recommended the flat-rate regional model when making its proposal on decoupled payments in the 2013 CAP reform but it was rebuffed by Member States, particularly those where this would lead to significant shifts in payments between farms. There are always political economy arguments in favour of maintaining the status quo (those who are likely to lose will be more vocal than those who are likely to gain). However, maintaining the link to the historic model also means maintaining a link between

²⁴ European Parliament, Report on negotiations on the MFF 2014-2020: lessons to be learned and the way forward, 26 March 2014 (2014/2005(INI)).

²⁵ The proposal for a minimum floor for payments per hectare was first made in the European Parliament's rapporteur's draft report on the direct payments Regulation, was approved by the AGRI Committee and endorsed in the Parliament's plenary vote (Little et al. 2013).

the level of payments and more productive farms. Other things equal, distributing payments more equally on a hectare basis tends to shift payments from more intensive to more extensive land uses. Although Member States retain the option to regionalise the basic payment which allows differences in, for example, land quality to be taken into account, these overtly redistributive decisions are politically very difficult for Member States to take, particularly when the objective of the payments is unclear. Farmers with more extensive systems will tend to have lower levels of income per hectare, and thus can argue that they have a greater need for support than farmers on better-quality land. It is for these reasons that, in 2020, the majority of Member States applying the BPS will continue to use the partial convergence model.

The Commission will again likely propose that all Member States move to a uniform flat-rate regional or national payment in the next programming period. The more time that has passed since the introduction of decoupled direct payments in 2005, the more difficult it becomes to justify the link with historical references. For those Member States unhappy to make the final move to a flat-rate system, updating the partial convergence formula to whatever new external convergence formula is agreed might be the fall-back position.

For the new Member States using the SAPS, they already have a flat-rate system but do not make use of entitlements.²⁶ The SAPs was originally introduced in 2005 as a transitional measure to 2013 for those new Member States that wished to make use of it. In the 2013 reform, this exemption was extended to 2020. The most likely assumption is that the Commission will not propose its renewal in the next programming period.

The case for using entitlements in connection with decoupled direct payments was based on the desire to facilitate the transfer of the premium rights. It also strengthened the case that these are Green Box payments under WTO rules. The link with a factor of production, namely land, is less direct. Whether this argument would hold water or not, if challenged by another WTO Member, has been questioned (Swinbank 2012). However, as the EU also notifies its SAPS payments under the Green Box (albeit under a different paragraph), this argument for entitlements on its own is hardly decisive.

Another argument used to support the use of entitlements is that this helps to minimise the extent to which the value of direct payments support is capitalised into land values. Capitalisation means that the value of support intended for active farmers is transferred to the owners of land. As one-half of agricultural land in the EU is rented, this is a substantial leakage of support to a group that is not directly farming and thus not intended as a beneficiary of the policy. Both theoretical and empirical literature has shown that capitalisation is much reduced if the number of available entitlements is less than the number of eligible hectares. This was usually the case in countries which adopted the historic model of decoupled payments in 2005.

However, following the updating of the base year for the allocation of entitlements to 2015, this 'naked land' in most countries is now included in the eligible area. The balance between the number of entitlements and the number of eligible hectares should now be roughly

²⁶ The phrase 'payment entitlements' was introduced in Regulation (EC) No 1782/2003 which introduced in the single payment system in the old member states. The single payment was determined on the basis of entitlements received by a farmer from previous direct payment schemes. The overall amount to which a farm was entitled was split into parts (payment entitlements) and linked to a certain number of eligible hectares, in order to facilitate transfer of the premium rights. To avoid the accumulation of payment entitlements without an agricultural basis, provision was made for a link between the number of payment entitlements and the number of eligible hectares a farmer had.

equal in all countries. This is expected to lead to an increase in capitalisation, ignoring other changes in the 2013 reform (Ciaian, Kanacs, and Swinnen 2014), and thus undermines this particular argument for entitlements. Capitalisation is also likely to increase because there will be an increasing demand for land towards the end of the programming period as farmers try to maximise their chances to receive, without charge, a guaranteed stream of income in the following programming period on the assumption that the current structure of direct payments is prolonged. So the expected net benefits of direct payments in the years after 2020 are likely to be bid into land values and rents in the years prior to 2020.

This rush for land would be triggered if, in the Commission proposal for the CAP after 2020, it proposed not only to prolong the current system but also to allow a further updating of the allocation of entitlements in line with the hectares in agricultural use by each farmer in 2020. Even if the Commission did not itself propose it, farmers may speculate that updating would be introduced in the trilogue negotiations between the Council and Parliament. Updating would confirm farmers' expectations that this would continue to happen on a regular basis, strengthening the argument of those who see a link between the BPS and land, possibly disqualifying the measure from the WTO green box exemption. On the other hand, if the allocation of entitlements to individual farms remains as in 2015, then the only way entitlements can change hands in line with structural changes in agricultural holdings is through their sale or transfer. But this simply leads to the leakage of the benefits of support to those farmers who are leaving the sector. Over time, active farmers who find they have to pay to acquire entitlements for support might feel they would be just as well off if the support system had never been put in place.

Because the entitlement system is already in place and the SAPS extension expires in 2020, it may be difficult to make the case for a further temporary extension of the SAPS after 2020. In Chapter 5, we propose an option to move completely away from the notion of entitlements to a contract-based support system for farmers who wish to receive public funds for investment, risk management or the production of environmental public goods.

4.1.3. Reduce capping thresholds and/or increase use of the redistributive payment

The DG AGRI figures for the distribution of aid by size-class of aid for the financial year 2015 have not yet been published (mid-2016). So we do not yet know how the distribution of payments in the first year of the new reform will compare with those reported above. However, the minimal impact of capping and the relatively modest share of the direct payments budget allocated to the redistributive payment suggest that little change should be expected. Direct payments are still largely distributed on the basis of access to land and, as farm sizes are very unequal across the EU, so is the distribution of payments.

As part of technical adjustments to the current direct payment structure, this issue could be revisited. For example, the rate of degressivity on payments over €150,000 could be increased from 5%, and/or the threshold itself could be lowered. The redistributive payment has contributed more to reducing disparities in payments across farms than degressivity/capping. However, only 8 Member States opted to use the redistributive payment, and the current ceiling that a maximum of 30% of the direct payments ceiling can be used for this payment has not been binding (the countries making the greatest use of these payments are France (20% of its national ceiling from 2018) and Belgium (Wallonia) 17% of its national ceiling) (Henke et al. 2015). So increasing the 30% ceiling would not necessarily lead to a further redistribution in favour of smaller farms.

4.1.4. Alter the greening payment rules

As noted by Hart et al. (2016) there are two variants to pursue if retaining the greening payment as part of Pillar 1 based on mandatory, simple and generalisable obligations. One is to focus on changes to the administration, verification and control regime, while the other is to attempt to change the level of environmental ambition (for many people, the intention would be to raise the level of ambition but for others it might be to water it down). As the former variant is being pursued as part of Commissioner Hogan's simplification agenda, it is the second variant which is more relevant to the future of direct payments after 2020.

The possible changes which might be considered, assuming the intention would be to raise the environmental effectiveness of the greening payment, could include:

- The proportion of the direct payments ceiling allocated to the greening payment could be changed from its current 30%. Any change in the size of the Pillar 1 budget in the next MFF will in any case lead to a change in the absolute amount available for the greening payment. If the CAP budget is reduced in the next MFF, would this be reflected in a cut in the basic payment, the greening payment, or both? If the greening payment is seen as 'compensation' to farmers for the environmental conditions attached to the payment, some might argue that the payment should be maintained in absolute terms by changing the allocated proportion if farmers are asked to observe the same requirements. The opposing argument is that there was never a clear economic rationale for the 30% figure in the first place. Related to this debate is whether the derogation not to make the payment to farmers as a flat-rate payment should be continued or not for those Member States which will continue to use the partial convergence model after 2020, if it is allowed.
- Further measures might be added to the three practices currently attached to the greening payment. Whether crop rotation should be substituted for crop diversification might be re-examined, as might the green cover option. Efforts might be made to increase the attractiveness of equivalent practices if it were felt that they were more likely to result in additional environmental benefits compared to the basic rules. The exemption thresholds for crop diversification and EFAs could be reduced, although this would greatly increase the number of farms whose compliance would have to be monitored without increasing the land area covered by the same extent. Another argument against reducing the exemption thresholds is the view among supporters of the 'small farm model' that smaller farms are in any case more environmentally benign simply by virtue of their small size and thus should be 'green by definition'.
- The EFA threshold could be revised upwards to cover a larger proportion of arable land. This may happen in any case when the Commission presents its recommendation on this issue in March 2017. In Switzerland, farmers are required to keep 10% of their arable land as 'ecological compensation areas' (the same concept as EFAs). The current exemptions from EFAs for permanent crops and permanent grassland might be re-examined.
- Changes could be made to improve the environmental benefits expected from EFAs. These could include removing some of the existing elements, changing the weights attached to the various elements, specifying stricter management requirements for

productive land in EFAs, or trying to stimulate more the creation of green infrastructure through collective schemes²⁷.

Other options for the greening payment are explored in Section 4.3 as part of the 'sustainable countryside' Model 3.

4.1.5. Grant more or less flexibility to Member States

While the essence of Model 1 is that the structure and layering of direct payments remains similar to that currently in place, there could still be scope within the meaning of 'technical adjustments' to alter the flexibility now provided to Member States to choose among the various options. Examples where the flexibility parameters could be altered include the percentages which could be transferred between Pillars in either direction, or the percentages which can be allocated to voluntary coupled support (VCS). Although it might seem most obvious to increase the scope for flexibility, one might also envisage the withdrawal of some flexibility if it was felt that this created problems. For example, the fact that many Member States have opted to provide extensive coupled support to dairy cows under the VCS scheme has exacerbated the problem of over-supply of milk on the EU market during the 2015 and 2016 marketing years and has helped to drive milk prices down to below costs of production on some farms. The possibility to transfer resources from Pillar 2 to Pillar 1 might also be withdrawn as not in line with future priorities. Also, the extremely limited uptake of the ANC scheme in Pillar 1 suggests that Member States did not find this flexibility helpful given they could provide such support under Pillar 2.

4.1.6. Stop the basic payment after retirement age

Generational renewal is one of the major challenges facing EU agriculture which the current decoupled basic payment does nothing to address. The purpose of the basic payment is to provide income support to active farmers, but why does the EU continue to make this payment also to farmers who are older than the normal retirement age? In national social welfare systems, continuing to work affects a person's entitlement to non-contributory state income support. The same reasoning could be applied to the basic payment.

4.2. Model 2. The farm-focus model ('Back to the future')

Model 2 assumes that policy-makers are mainly concerned with farm policy objectives but do not believe that decoupled direct payments provide an effective support to productive farming or provide an adequate solution to income variability. Those advocating this model are likely concerned with increasing safety-nets during periods of low prices. They will draw inspiration in particular from the direction of changes in US farm policy in its 2014 farm bill which replaced (essentially decoupled) direct payments with different kinds of counter-cyclical programmes. Because of the possible lessons to be learned, the major changes which took place in the 2014 US Farm Bill are first outlined. Two alternative proposals for possible EU counter-cyclical programmes are then examined. One is to convert decoupled direct payments into counter-cyclical payments (CCPs). The other is to transfer part of the direct payments budget into a much-expanded income stabilisation insurance scheme.

4.2.1. The US strategy in the 2014 Farm Bill

The US Agricultural Act of 2014 (P.L. 113-79, also known as the farm bill) is a mammoth piece of legislation with twelve separate Titles covering a wide range of expenditures, including on conservation, trade, nutrition, research, rural development, forestry, energy, and organic agriculture. For the purposes of this note, the relevant titles are Title I

²⁷ The Commission has already raised the possibility to limit the use of inputs on productive EFA areas in its

Commodity Programmes and Title XI *Crop Insurance*. The commodity programmes provide payments when crop prices or revenues decline for major commodity crops, including wheat, corn, soybeans, peanuts, and rice. Title I also authorises disaster programs to help livestock and tree fruit producers manage production losses due to natural disasters, margin insurance for dairy farmers, and marketing quotas, minimum price guarantees, and import barriers for sugar. The crop insurance programmes include the permanently authorised federal crop insurance programme, as well as new plans including Stacked Income Protection (STAX) for cotton and the Supplemental Coverage Option (SCO) for other crops (for a comparative analysis of risk management tools in the US farm bill and the CAP 2014-2020, see Cordier, 2014).

The cost of the mandatory programmes in the US farm bill was estimated at the time of enactment at US\$489 billion over the five years FY2014-FY2018. About 80% of mandatory farm bill spending is for the Supplemental Nutrition Assistance Program (SNAP). Farm commodity support (US\$23.5 billion) and crop insurance (US\$41.4 billion) are expected to account for 13% of mandatory program costs, with another US\$28.2 billion (6% of costs) in USDA conservation programs (Johnson and Monke 2014).

Title I commodity programmes establish minimum prices via the marketing loan program for approximately two dozen commodities, including corn, soybeans, wheat, rice, and peanuts. The most notable change in commodity programmes was the elimination of the US\$5 billion-per-year direct payment (DP) programme (which in the US had been confined to a narrow range of arable crops) together with two other direct payment programmes, the counter-cyclical price (CCP) programme and the Average Crop Revenue Election (ACRE) programme. Instead, producers of the covered crops made a one-time choice between two new programmes linked to a decline in either price or revenue: (1) Price Loss Coverage (PLC), which is a counter-cyclical price programme and makes a farm payment when the farm price for a covered crop declines below its "reference price" set in statute; or (2) Agriculture Risk Coverage (ARC), which is a revenue-based programme designed to cover a portion of a farmer's out-of-pocket loss (referred to as "shallow loss") when crop revenues decline (Johnson and Monke 2014). The distinction is that PLC payments are made when market prices fall below a set reference price, while ARC payments are made when revenue falls below a benchmark level based on a rolling average. In both cases, payments are made based on historical acreage and are independent of current production. Producers do not contribute to these programmes, and they are separate from a producer's decision to purchase crop insurance. Reference prices designed to trigger payments under the PLC were increased in the farm bill compared to the previous period.

Significant changes were also made to support for the dairy sector. The dairy product price support programme, the Milk Income Loss Contract (MILC) programme, and export subsidies were eliminated. They were replaced by a Dairy Margin Protection Program which makes payments to participating milk producers when the national margin (average farm price of milk minus an average feed cost ration) falls below a producer-selected margin. During 2015, a stable margin close to the US\$8.00 level meant that payments were made only for a limited period and targeted only to operations that had chosen the highest level of risk protection.

The federal crop insurance programme makes available subsidised crop insurance to producers who purchase a policy to protect against losses in yield, crop revenue, or whole

farm revenue (including livestock producers to a limited extent). More than 120 commodities are insurable. Yield policies protect against agricultural production losses due to unavoidable natural causes such as drought, flooding, hail, wind, hurricane, tornado, lightning, and insects. Revenue policies protect against revenue losses resulting from changes in prices and/or yields. Livestock policies protect either against a loss in gross margin (market value less feed costs) or against price declines. Producers pay a portion of the premium which increases as the level of coverage rises. The federal government pays the rest of the premium (62%, on average, in 2014) and covers the cost of selling and servicing the policies (Shields 2015). In 2014, there were over 1.2 million policies that provided nearly US\$110 billion in insurance coverage on more than 290 million acres, including more than 80% of acres planted to major field crops in the US (USDA evidence, House of Lords 2016; for comparison, the total number of farms in the US is about 2.1 million and total US harvested cropland is of the order of 315 million acres or 126 million hectares²⁸).

Funding is increased in the 2014 farm bill for crop insurance relative to baseline levels, most of which is for two new insurance products, one for cotton (STAX) and one for other crops (SCO). The STAX insurance programme was introduced because cotton is not covered by the counter-cyclical price or revenue programmes established in Title I. For other crops, the 2014 farm bill makes available SCO as an additional policy, based on expected county yields or revenue, to cover part of the deductible under a producer's underlying insurance policy (this is a farmer's out-of-pocket loss or "shallow loss") (Johnson and Monke, 2014).

The US strategy in its farm bill was to shift support to farmers from direct payments under its DP program and to use the savings to increase direct payments in the form of counter-cyclical programmes. The repeal of DP payments, which were essentially a decoupled form of income support, was a major shift in US agricultural policy. Debate continues in the US on the cost of the new programmes, which is expected to be higher than earlier projections because of lower farm prices. Farm safety net proponents say the current suite of programs has been designed for such situations and is needed to adequately protect producers and the overall agriculture sector. Critics believe that a simplified approach could be more effective and less expensive, with funds used instead for goals such as investment in agricultural research or transportation infrastructure (Shields, 2015). One specific concern is that the new farm bill programmes could result in potential compliance issues with the US's WTO Bound Total Aggregate Measurement of Support (AMS) limit for certain domestic support (Schnepf 2015) because a higher amount of payment support must now be notified as not exemptible under WTO green box criteria. The US may claim some of the new payments as exempt under the blue box criteria.

4.2.2. Convert decoupled payments to counter-cyclical payments

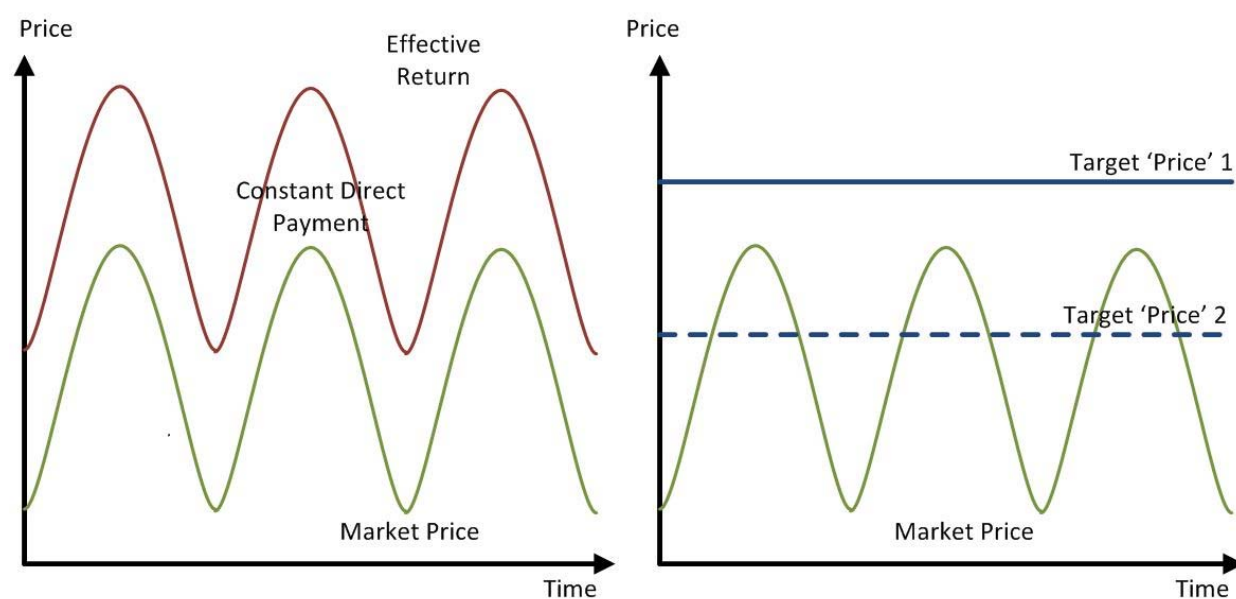
This section considers the merits and drawbacks of converting direct payments into a form of counter-cyclical payment in the EU.²⁹ The motivation for this proposal is that direct payments are paid to farmers both when prices are low and when prices are high. The idea is that when prices are high, direct payments are not necessary and when prices are low, direct payments should expand. As discussed in the previous section, CCPs are widely used in the US, and proponents argue that the EU should follow its lead.

²⁸ https://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_009_010.pdf.

²⁹ In this discussion, the focus tends to be on substituting CCPs for decoupled direct payments. In principle, it is possible to imagine varying specific area payments or animal premiums in line with prices, but this complication is not considered further here.

Because individual farm commodity prices do not move in synchronised fashion, CCPs would need to be commodity-specific. There would be little point in making payments to a wine producer if payments were triggered by a drop in the aggregate farm price level due to difficulties on livestock markets.³⁰ CCPs linked to output prices are a form of deficiency payment, as fundamentally they make up the difference with a hypothetical target price, as shown schematically in Figure 5. The current per hectare decoupled payment is assumed converted into an equivalent price per tonne of output for the purposes of this example. The left hand panel shows the effective return received by a farmer, including both the price from the marketplace and a constant equivalent amount of direct payment. The right hand panel shows the implications of using the same sum of money for direct payments (assume it is the total budget envelope set aside over the period of the MFF) to smooth the effective return. Given the evolution of market prices during this period, it would be possible to maintain a specific target 'price' equivalent to Target 'price' 1. In this instance, the market price never exceeds the target price. However, if the available budget for direct payments were such that it only allowed target 'price' 2 to be guaranteed, then the payments would be made only during the trough periods of the cycle, indicating clearly their nature as deficiency payments. In this example, it is assumed that the objective of the policy is to completely smooth farmers' effective return, but less-than-complete smoothing would also be possible, and in practice, given imperfect information, would be inevitable.

Figure 5: Stylised representation of counter-cyclical payments



Source: Own compilation

Deficiency-style payments of this kind do not necessarily solve the problem of poor targeting because there are differences in the price trends for individual commodities across Member States. The Eurostat price index for soft wheat in 2016Q1 was only 89 in

³⁰ Basing payments on the trend in the aggregate price level would also create anomalous effects among Member States. For example, assume that the trigger would be based on the Eurostat "price index of agricultural goods output" which is a price index representative of all agricultural output in the EU (Eurostat domain `apri_pi10_outq`, which is currently only published quarterly). Prices for farmers in some countries may be quite buoyant when they are low in other countries because of differences in the composition of output. For example, the average price level for total agricultural output (base 2010=100) was 92.2 in Belgium in 2016Q1 but 115 in Ireland and 121 in Hungary. A counter-cyclical payment based on the overall price index would not avoid the problem that some farmers would receive increased direct payments even though their market receipts are also increasing, and vice versa.

the Netherlands and Sweden but it was 126 in Slovenia and 140 in Slovakia. Even for milk, which is the product most in difficulty at the beginning of 2016, the price index in 2016Q1 varied from 82 for Belgium, 88 for Ireland, 89 for Germany, 96 for France, UK and Netherlands, 102 for Poland, 105 for Italy, and 120 for Romania. Returning to politically-determined trigger prices for individual commodities in a 28-member EU, with a very varied structure of production in different Member States and where production costs vary so greatly from one country to another, would be a political challenge. It is likely that the Council would insist that it alone has the right to fix these prices under Article 43(3) of the Treaty on the Functioning of the European Union.

Because price movements are not perfectly correlated across commodities, the variability of revenue for diversified farms over time will be lower than the variability of revenue for the individual enterprises separately. This provides an incentive to diversify for the risk-averse farmer. If revenue variability for individual commodities is reduced because of CCPs, farmers have less need to diversify to reduce risk. This encourages the tendency towards greater specialisation with risks for negative environmental consequences. Payments that are triggered when prices or returns are low may also tend to induce more risky farming practices.

Neither do CCPs address the significant input price variability which is an important source of income variability for EU farmers. However, input price variability is taken into account in margin protection programmes.

CCPs would not fit easily into the current rigid structure of the EU budget. Some argue that this is primarily a technical issue, and that one could envisage the management of a pluri-annual envelope under a particular ceiling as is currently the case with EU funds such as the EAFRD, European Globalisation Fund and the European Regional Development Fund. However, variable annual disbursements in these funds follow and remain within the fixed annual ceilings on commitments set down in the MFF. These funds do not allow disbursements (payment appropriations) to be brought forward from future years' commitment appropriations (borrowing), even if they allow a limited carry-forward (banking) of unused appropriations from previous years. Operationalising CCPs in a budget structure where borrowing is not allowed would seem problematic.

CCPs are tied to market conditions and would represent a return to product-related and trade-distorting support. By supporting EU production in periods of low world market prices, they amplify price instability for other countries, including developing countries, in the same way as variable import levies and export subsidies in the past. As price-related payments, they would be notified as non-exempt subsidies under WTO disciplines in the amber box. This would not cause any immediate problem for the EU given the space that currently exists between its Bound Total AMS and its Current Total AMS. Further, a US proposal to revise the blue box criteria in the Doha Round negotiations to allow it to notify its CCPs in the blue rather than the amber box was included in the draft provisions of a possible final agreement in the WTO negotiations (WTO 2004). The US proposal allowed the exemption of direct payments to producers that were not tied to current production even if they were linked to current market prices. Presumably, an EU system of CCPs could be designed to meet these criteria if that were necessary in the future.

If there is a fixed amount for the total budget for direct payments over several years in line with the stabilisation objective, Bureau and Witzke (2010) make the point that it seems to involve little apparent advantage for farmers. Farmers could just as well handle the adjustment themselves with the help of the banking sector if the total value of direct

payments over a period of several years is known beforehand, provided that the tax system does not impede such arbitrage over time. One twist on this is the proposal for a mandatory precautionary savings tool put forward by the French government to the informal AGRIFISH Council in May 2016 (see footnote 2) intended to replace the crisis reserve. This would involve direct support paid into a blocked account for a defined duration and available for use in the event of a hazard arising (use of the funds other than in such circumstances would still be possible but at a very substantial discount). Such obligatory savings could be supplemented by voluntary payments made by farmers, payments that would then attract a government top-up as an incentive (e.g. a doubling of the sums paid into the reserve, subject to a specified limit). Such an instrument has more in common with an income stabilisation tool and could be considered as part of the toolbox in the following section.

4.2.3. Replace direct payments with insurance products

An alternative farm-focus strategy would be to eliminate direct payments but use that money to subsidise insurance products for farmers, again following the US example. This strategy was recommended in the recent report for the AGRI Committee on *Management Tools Implemented by Member States during the period 2014-2020: National and European Frameworks* (Bardají and Garrido 2016). Direct payments already reduce the variability of farm incomes but they were not conceived as a risk management tool. They are (mostly) decoupled from production and are not directly correlated with changes in farm income. Indeed, because of their stabilising effect they may work as a disincentive for other risk management strategies (Bardají and Garrido 2016). Perhaps partly as a result, the use of risk management instruments has remained very underdeveloped within the EU. Although CAP support for risk management is increasing, the share of CAP funds being spent on crisis and prevention measures continues to be very low, less than 2% of the Pillar 2 funds and 0.4% of the total CAP budget in the 2014-2020 period (Bardají and Garrido 2016).

This note is not the place for a thorough discussion of risk management instruments which will be covered in a companion note for the workshop (Mahé and Bureau, 2016; see also Cordier 2014; Bardají and Garrido 2016). From the perspective of the future of direct payments, the issue addressed is the substitution of an income stabilisation tool (IST) for decoupled direct payments and the possible consequences of doing so.

Insurance products reduce income variability which can result either from production or price risk. If they are properly priced in an actuarial manner and farmers pay the full premium cost, they do not increase the overall level of farm income over time. However, public support may be provided either to subsidise the cost of premiums, to cover the cost of administration, or to contribute to the financing of indemnities paid by insurance companies. Where public support is provided, then overall farm income over time may be higher than in the absence of such public support (this will depend on the share of this public support captured by insurance companies and other intermediaries).

Until the 2013 CAP reform, support for risk management in the CAP budget was limited to the fruit and vegetables and wine sectors, as well as the possibility given to Member States in the Health Check under Article 68 of Regulation (EU) 73/2009 to provide specific support up to 10% of their direct payment envelopes for contributions to insurance premiums for crops and animal insurance or by way of mutual funds for animal and plant diseases and environmental incidents. However, these risk management instruments supported by the CAP during the period 2007-2013 were not very successful (Bardají and Garrido 2016).

The 2013 CAP reform introduced a risk management toolkit into Pillar 2. This included the Article 68 arrangements which were moved out of Pillar 1 and extended to all sectors, while a new income stabilisation tool was added. Thus the risk management toolkit in Pillar 2 now contains three instruments:

- Financial contributions to premiums for crop, animal and plant insurance against economic losses to farmers caused by adverse climatic events, animal or plant diseases, pest infestation, or an environmental incident;
- Financial contributions to mutual funds to pay financial compensations to farmers, for economic losses caused by adverse climatic events or by the outbreak of an animal or plant disease or pest infestation or an environmental incident;
- An income stabilisation tool (IST), in the form of financial contributions to mutual funds, providing compensation to farmers for a severe drop in their income.

While support for risk management through the EU budget has been limited, Member States have provided support from their own resources for risk management under state aid rules. This has included support for insurance schemes as well as disaster aid. State aid rules also provide for *de minimis* support which is intended to give Member States the flexibility to respond to crises.

In the debate around the future of direct payments, one option is to replace the basic payment with a significant expansion in the coverage of ISTs, including not only the mutual fund model included in the 2013 CAP reform but also insurance-based or savings-based models. As the Commission noted in its impact assessment of the 2013 CAP reform, "*An IST is an alternative to either returning to the 'old CAP' with high intervention prices, or addressing concerns of income volatility with some form of Counter Cyclical Payment.*" (European Commission 2011b).

The Commission estimated the cost of operating an IST in the EU-25 in its impact assessment of the 2013 CAP reform. Assuming that about 20% of all EU farmers would receive compensation payments each year, because their income drop would be more than 30% compared to their average income, and assuming that all Member States would implement the scheme, and that all farmers would opt to participate in the scheme, the cost of compensation could amount to some €4-7 billion for the EU-25 (European Commission 2011b).³¹ Sensitivity analysis showed the strong reaction of these estimates to price fluctuations. With an average price drop across all sectors of 10%, the estimated compensation would increase to almost €11 billion. These orders of magnitude compare with expenditure on the BPS in 2015 of €17 billion.

Updated figures were presented during a conference in Strasbourg in June 2016 (Haniotis 2016). His results built on a simulation of a compulsory IST at EU level providing financial compensation to all participating farmers for a "severe drop in income". This was defined as a drop in income exceeding either 15% or 30% of the average income of the individual farmer in the preceding three-year period. Compensation was assumed to cover 65% of the farmer's income loss (where income was defined as the sum of market revenues plus public subsidies less input costs). Using the 30% income loss threshold, some 30% of EU farmers would receive compensation each year (with the annual figures ranging between 21% and 43% simulated over the years 2007-2013). Arable, intensive livestock and horticulture

³¹ Previous Commission estimates had put the cost at between €8 and €12 billion annually ((European Commission 2008); DG AGRI 2009).

farms would mainly benefit, and dairy farms to a smaller extent. Beneficiaries would be concentrated in four Member States Italy, Poland, Spain and Greece. However, overall budget costs of such a scheme were not provided in this presentation.

Problems with income stabilisation tools. In their review of US experience with government insurance programmes, Sumner and Zulauf (2012) highlight (a) their public cost, (b) the supply response of farmers to insurance subsidies and impacts on the quantity produced and thus on commodity markets, (c) the geographic distribution of subsidies and resulting impacts on spatial distribution of production, (d) the distribution of subsidies across farms and the impact on the size distribution of farms, (e) environmental impacts, and (f) the potential effects on obligations under international trade agreements, including potential challenges in the WTO. All of these issues are also relevant in evaluating the greater use of insurance programmes within the EU. We can note the following issues:

- Determining income for the purposes of income insurance or an income stabilisation scheme on a consistent and harmonised basis across the EU would be a challenge as farm accounts are not available for all farms.
- More generally, there are fundamental differences in the structure of EU agriculture compared to its structure in those countries where income stabilisation tools have been more widely adopted. In the US, over 90% of US payments to risk management schemes went to just three crops—maize, wheat and soybeans. However, the Canadian income stabilisation scheme is seen by some as an attractive model for the EU to consider (House of Lords, 2016).
- High budgetary variation and uncertainty: this uncertainty is difficult to reconcile with the strict limits on the EU budget (which is required to balance revenue and expenditure on an annual basis and works under pre-determined annual ceilings set out in the MFF).
- The Commission simulations show that compensation as a percentage of total output would vary greatly across individual Member States, and farmer participation across Member States might also be variable. Member State agricultures face very different risk profiles and there would thus be different levels of interest in pursuing this option.³²
- Administrative costs for insurance programmes can be high. Mahul and Stutley (2010) found that, in 29 sampled countries with subsidised insurance programs, delivery costs averaged about 25–30% of the gross (unsubsidised) premium. Delivery costs include marketing and acquisition costs (including commissions paid to agents and brokers), administrative expenses, and loss adjustment expenses. When insurance companies are involved in the delivery of agricultural support some of the support intended for farmers may benefit the companies instead (Glauber 2015; Smith, Glauber, and Dismukes 2016).
- A comprehensive subsidised income stabilisation scheme is likely to alter farmer behaviour. There is a risk it would reduce incentives for the farmer to undertake on-farm strategies to minimise risk, and could encourage farmers into taking more risky decisions. Farmers might be less likely to spread risk through diversification, for example, because it would lower the possibility that the farmer would be compensated from the scheme, as all agricultural production activities would be

³² The UK House of Lords committee investigating responses to price volatility and ways to create a more resilient agricultural sector decided not to support the substitution by subsidised insurance schemes of the current provision of direct income support through the CAP because of uncertainty over costs and administrative complexity (House of Lords 2016).

taken into account. This would have negative environmental effects and could potentially slow necessary adaptations to climate change.

- Payments could only be made to farmers once the financial year had ended and their total income could be assessed, meaning that the compensation payment for a drop in income would always be made with some delay, possibly up to a year, compared to when the crisis occurred (although if there are clear rules about future payments, banks should be willing to lend on the strength of such future payments).
- While WTO rules do not set limits on public expenditure on income safety net programmes, to qualify for the green box exemption the Agreement on Agriculture specifies quite stringent conditions. Only schemes which cover losses greater than 30% of previous income and which compensate for no more than 70% of the income loss are eligible for the green box exemption. Such strict criteria might limit the attraction of participation for many farmers.

Relative roles for the EU budget and Member States. The argument for an EU-wide income stabilisation scheme is that it would help to pool price risks across Member States and thus make the operation of such a scheme more feasible. But this function of risk-pooling can also be achieved through reinsurance. The two main arguments for a more limited involvement of the EU budget have to do with the heterogeneity of risks across Member States and budget uncertainty. The heterogeneity argument recognises that farmers in different Member States face income risks of different kinds because the composition of agricultural output and inputs differs, there are different levels of exposure to production variability, and there are differences in the income gearing of farm businesses. This means that there are very different appetites for risk management in different Member States, and larger EU expenditure in this area would lead to a substantial redistribution of resources among Member States. This leads some Member States to argue that income stabilisation should be handled primarily through national schemes supported with state aids under a harmonised set of EU rules. The relatively inflexible nature of the EU budget points in the same direction, although it does not rule out specific EU support for such national schemes.

Bardají and Garrido (2016) in making their recommendation to shift expenditure on the BPS to support for insurance products urge a phased approach, taking into account the relative lack of experience in the EU with these schemes. They suggest two alternative ways forward. Under their gradual reform option, they envisage introducing an Article 68-like possibility for those Member States that wished to use part of their BPS national envelope to start making use of income stabilisation tools to do so, along with state aid. In their view, *“this would permit advancing in the right direction, and contrast the efficacy and validity of the instruments”* (p. 100). Under their radical option, the EU would give a greater push to the re-orientation of support by lowering the BPS national envelopes and transferring the funds to a budget specific for each Member State to support a menu of income stabilisation tools, including a national mutual fund to cope with crisis situations. Under either option, they recognise that a large measure of gradualism and experimentation would be required.

4.3. Model 3. Revisiting the greening payment ('sustainable countryside')

The question whether the necessary greening of agricultural policy should be pursued by tweaking the greening payment regulations (as in Section 4.1.4) or abandoning the greening payment and pursuing alternative strategies was raised in Chapter 3. There are a number of persuasive arguments about the benefits of starting again.

The greening payment requires uniform implementation of the three greening practices across the whole of the EU territory. This is very unlikely to be an efficient outcome.³³ While EFAs are definitely needed in some areas, they may not be in other areas. Maintaining the ratio of permanent grassland may be an unnecessary restriction as regions try to adapt to climate change. As the Commission admits, much of the greening payment goes to farmers for practices they are pursuing in any case, often for very good business reasons (Tangermann 2012). The requirement that the conditions for the greening payment must be simple and generalisable means that they can never be more than the lowest common denominator. There is no link between the payment amount and the costs incurred by farmers in different parts of the EU. The approach is prescriptive and rules-based and does not encourage the support and commitment of farmers to better environmental management.

The Model 3 discussion starts from the assumption that a part of CAP direct payments should focus on land management and environmental improvements, but that the greening payment will never be an appropriate instrument to achieve these goals (Section 3.3). So there is little point in tinkering around with marginal changes to the current rules. A more ambitious strategy is needed.

Four possible approaches are discussed in the literature:

- Transform the greening obligations into cross-compliance standards.
- Transform the greening obligations into a menu-driven approach at Member State level.
- Replace the greening payment by a requirement to enrol in a shallow AECM in Pillar 2 (the 'conditional greening' or 'orange ticket' approach).³⁴
- Transfer the greening payment to Pillar 2 and pursue greening solely through voluntary AECMs as part of RDPs.

Each of these approaches assumes the continuation of a significant basic payment for income support in Pillar 1. All of these approaches were also widely discussed in the debate on the 2013 reform (Matthews, 2012 has a fuller discussion).

³³ Amongst ecologists, the need for overall coverage is reflected in the land-sharing versus land-sparing debate. The debate is whether biodiversity is best protected by reserving specific areas of land for nature and allowing the remaining land to be farmed with a focus on food and fibre productivity alone to maximise the area available for nature (land-sparing), or whether agricultural land should be farmed with the dual objectives of both protecting nature and producing food and fibre, recognising that there may be a trade-off (land-sharing). Even with a land-sharing strategy, it may still make sense to put more emphasis on one or other of these objectives in different localities.

³⁴ The 'orange' description comes from the distinction between a red ticket policy (where farmers are obliged to meet certain environmental conditions to obtain the basic payment), a green ticket policy (where an additional subsidy is paid for environmental actions on top of the basic payment) and an orange ticket policy (where there is an obligation to participate in another voluntary environmental programme in order to qualify for the basic payment (see Baldock 1993)).

4.3.1. Revert to cross-compliance

The arguments in favour of this approach are greater flexibility for Member States and thus the possibility to require more ambitious environmental standards, as well as administrative simplification. The flexibility arises because it is Member States that set farming standards in relation to EU regulations and directives (Statutory Management Requirements or SMRs) as well as defining GAEC standards. In implementing GAEC, Member States play a decisive role as it is up to them to define the precise content of a GAEC minimum requirement taking into account local conditions.

*“Member States shall ensure that all agricultural area, including land which is no longer used for production purposes, is maintained in good agricultural and environmental condition. **Member States shall define, at national or regional level, minimum standards for beneficiaries for good agricultural and environmental condition of land on the basis of Annex II, taking into account the specific characteristics of the areas concerned, including soil and climatic condition, existing farming systems, land use, crop rotation, farming practices, and farm structures.***

Member States shall not define minimum requirements which are not established in Annex II.” (Article 94 of Regulation (EU) No 1306/2013, bolding added)

The level of greening ambition could be increased by expanding the current list of GAEC standards with a view to increasing the baseline for AECMs. Including green measures as part of cross-compliance is the approach adopted in Switzerland which has shown that it is possible to incorporate quite sophisticated environmental conditionalities into cross-compliance rules (Matthews, 2012). Simplification would occur because there would be no need to have separate monitoring, verification and controls for the greening payment.

The Commission considered and rejected this option in its impact assessment of the 2013 reform. It argued that the simplification argument hid the complexities inherent in Member States defining and administering GAECs tailored to regional specificities. Controls of how Member States implement cross-compliance are much less strict than for the greening payment, and uneven implementation by Member States would both limit its effectiveness and give rise to an uneven playing field between farmers in different Member States. Tellingly, it argued that “it would meet with considerable resistance from farmers as it would be framed as a requirement rather than an incentive, and arguably do away with the political visibility of greening direct payments that is one of the main drivers of this reform” (European Commission 2011a).

This last point underlines the political difficulties there would now be in abolishing the greening payment in order to maintain or increase the basic payment, even if at the same time cross-compliance standards were redrawn to include the existing greening conditions plus possibly more. Even if it led to simplification and a better environmental outcome, it would be very difficult to explain to a sceptical European public.

4.3.2. Transform into a menu-driven approach

This approach would maintain the greening payment but instead of the three greening obligations it would require each Member State (or region) to develop its own version of equivalence to replace them. This would ensure that the requirements on farmers were more precisely tailored to the needs of particular locations and agronomic systems. The advantage of this approach is that Member States would no longer be tied to measures that have to meet the criteria of being ‘simple, generalisable, annual and non-contractual’ but could choose from a much wider range of practices. For example, additional measures to

further climate change mitigation and adaptation objectives or the 'green economy' could be included. This would, in principle, ensure a much higher degree of environmental effectiveness from the greening payment.

The Commission also considered this approach in its impact assessment but rejected it.

"For the greening to be effective, it is key not to go for a 'menu' approach with a list of measures, offering choice to Member States and/or farmers. Such an approach would very much water down the greening effect, especially if the payment does not match the efforts required by farmers, leading them to choose the measures with which they comply already or the measures with the least cost, thus bringing less environmental benefits. In addition, the more choice offered in Pillar I greening, the more complicated it becomes to ensure coherence with the cross compliance especially GAEC (risk for having too various baselines between Member States) and subsequently with Pillar II: risk for having double payments. Therefore, an approach to greening with only a few measures which yield significant environmental benefits is to be favoured." (European Commission 2011a)

These criticisms apply because of the nature of the greening payment in Pillar 1. It is a fixed payment to which farmers feel they are entitled, and thus all efforts go into minimising the accompanying obligations. The incentive structure is completely wrong. How this anomaly might be addressed is discussed further in Chapter 5.

4.3.3. Conditional greening

The basic idea behind this approach is that farmers would be required to enter a base-level (shallow) agri-environment scheme in Pillar 2 in order to remain eligible for the basic payment in Pillar 1. A version of this idea was included in the initial draft report of the rapporteur Mr Albert Deß to the AGRI Committee on the Commission's Communication *The CAP towards 2020* during the debate on the 2013 reform but removed in the Committee's final report. In the Deß proposal, Member States would be required to offer a minimum of at least two basic programmes, which might combine a number of measures. Greening would be achieved by compulsory participation in a minimum of two priority resource protection programmes in the second Pillar. In this approach, farmers would be reimbursed for the costs they incur as well as receive compensation for any loss of income. The greening payment would be transferred to Pillar 2 to pay for these efforts.³⁵

In many ways, this has similarities with the menu approach. It would allow Member States to design a menu of greening requirements appropriate to their agronomic conditions and needs. The major difference with the menu approach is that there would be a closer link between the nature of the measures which farmers undertook and the associated payments. In the menu approach, the size of the payment is decided in a top-down fashion (a certain proportion of the direct payments ceiling) and then divided evenly across all eligible hectares, but there is no obvious rationale for this proportion. The conditional greening approach links the payments made to the cost to the farmer of undertaking them.

³⁵ In the Deß proposal, it appeared that the greening payment would remain in Pillar 1 even though farmers would enrol in Pillar 2-type schemes.

4.3.4. Transfer the greening payment and its obligations into Pillar 2 AECMs

This was the option advocated in the Parliament's 2010 Lyon report to pursue the greening of the CAP by strengthening AECMs through increased funding and increasing their attractiveness to farmers. AECMs have been part of the CAP since 1992 and are a well-accepted part of the agricultural policy landscape. In the 2014-2020 programming period, some 49% of total resources have been allocated to agriculture-environment-climate objectives (including payments to farmers in areas of natural constraints and organic farmers as well as to those enrolled in AECMs) (DG AGRI 2016a). This money would add to the resources available to expand schemes already operating in each country. As noted by the Commission in its impact assessment of the 2013 reform, AECMs have the advantages that payment levels are differentiated according to cost incurred and income foregone, and they give discretion to Member States to tailor them as much as possible to their specific situations (European Commission 2011a).

Various obstacles stand in the way of this approach. The flexibility given to Member States again leaves open whether Member States would go for the least demanding options in the design of their schemes. Their voluntary nature means that they will not cover the entire EU territory. Schemes tend to be more attractive to farmers who are already farming in a less-intensive way, and it has been difficult to attract more intensive farmers and farmers in more intensively-farmed regions to participate. Also, targeting agri-environmental policy mechanisms is a complex and resource intensive exercise both for the administrative body delivering the scheme and the farmers carrying out the management. Finally, under current rules transferring funds to Pillar 2 could require a co-financing obligation although this is not necessarily the case.

These alternative proposals reviewed in this Chapter form the background for the proposals for the recommended future structure for direct payments in Chapter 5.

5. A RECOMMENDED FUTURE FOR DIRECT PAYMENTS

KEY FINDINGS

- The current system of direct payments is **neither sustainable in the long run nor designed to address the challenges facing farmers and land managers** in Europe today and in the future.
- A recommended structure for the future of direct payments is proposed, based on **the following set of principles**.
- Payments should be **targeted on specific objectives** with a clear results orientation.
- Payments should be restructured around a one-pillar, programmed, multi-annual CAP.
- **National co-financing should be required** for all CAP expenditure.
- Decoupled direct payments should be **gradually phased out over a pre-announced transitional period**.
- **Savings should be redirected** to increasing spending on risk management, competitiveness, climate action and environmental public goods.
- **Payment entitlements should be replaced** by a contractual framework between farmers and public authorities.
- Cross-compliance and the greening payment **should be replaced with 'conditional greening'** whereby the receipt of public support would be conditional on enrolling in a basic (shallow) environmental scheme determined by the Member States.
- The allocation of budget resources should be incentive-based so that CAP funding is allocated to Member States **based on performance as well as needs**.

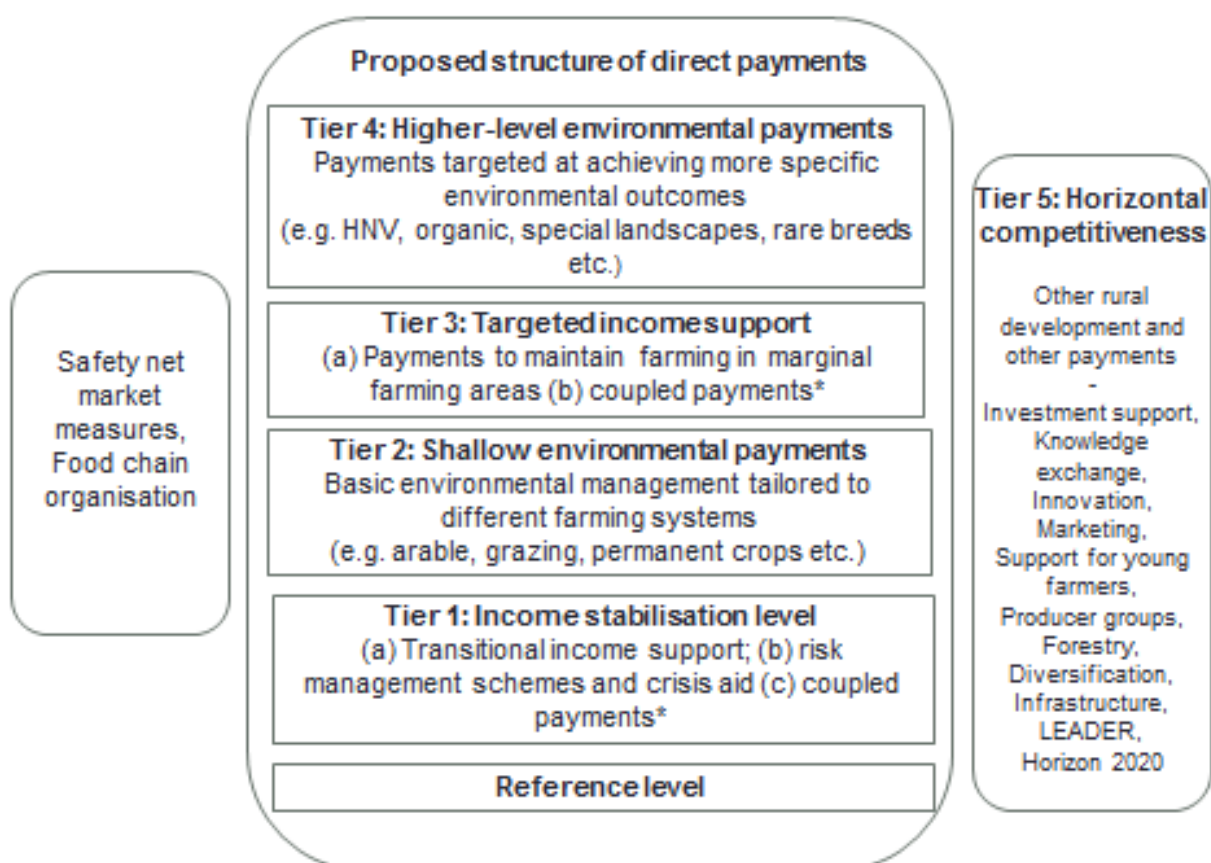
The future model for direct payments proposed in this chapter draws on the analysis of different options made in Chapter 4. It is based on the following principles set out in the Key Findings.

- Payments should be targeted on specific objectives with a clear results orientation.
- Payments should be restructured around a one-pillar, programmed, multi-annual CAP
- National co-financing should be required for all CAP expenditure.
- Decoupled direct payments should be gradually phased out over a pre-announced transition period.
- Savings should be redirected to increasing spending on risk management, competitiveness, climate action and environmental public goods.
- Payment entitlements should be replaced by a contractual framework between farmers and public authorities.
- Cross-compliance and the greening payment should be replaced with 'conditional greening' whereby the receipt of public support would be conditional on enrolling in a basic (shallow) environmental scheme determined by the Member States.
- The allocation of budget resources should be incentive-based so that CAP funding is allocated to Member States based on performance as well as needs.

5.1. Outline of the recommended system

The structure of the recommended system of payments to farmers is shown in Figure 6. There would be five levels or tiers on top of a Reference level.³⁶ It would be an integrated system with some flexibility to switch funds between the tiers, as outlined below. All payments in all tiers would be co-financed by Member States as part of this integrated system using flexible co-financing coefficients as today. Thus, each of the different direct payment tiers would be funded by Member States as well as from the EU budget.

Figure 6: Outline of proposed direct payments structure



Note: *The finance for coupled payments is maintained in the Tier 1 budget in this presentation to make comparisons with the current structure easier, but it would be programmed with Tier 3 Targeted Income Support in practice.

Source: Own compilation based on graphic idea adapted from Hart et al., 2016

- The Reference level includes all obligations and requirements that farmers must respect regardless whether or not they are in receipt of direct payments or other public support. It would refer to statutory obligations under EU or national law or local bye-laws. Some existing cross-compliance standards may be included in these statutory requirements. Others would become part of the Tier 2: Shallow Environmental Payments (see Section 5.7).

³⁶ These might also be called pillars, but to avoid confusion with the existing two-Pillar structure of CAP, we stick with the term 'tiers' in this note.

- The Tier 1 Income Stabilisation Scheme is intended to provide risk-related income support to farmers. It would thus embrace an extended risk management toolkit as currently funded under Pillar 2 including income stabilisation schemes or margin protection programmes. It would also include crisis and disaster payments, which would be mainly funded by Member States under state aid rules. In the early years, it would also include the continuation of decoupled payments per hectare in the form of a transitional income support payment. However, the latter would be gradually phased out over time as experience was gained with the risk management instruments.
- The Tier 2 Shallow Environmental Payment corresponds to the role of the greening payment in the current CAP. It would be a payment to maintain and restore a basic level of public goods across a wide area of farmland. Unlike the current greening payment, which is based on a limited set of simple, non-contractual and annual practices which are applied EU-wide, this payment would be based on a menu approach and a wider use of equivalent schemes. The intention is to allow Member States and regions to design the most appropriate schemes for their particular conditions.³⁷ Member States would be encouraged to pursue ambitious schemes through the incentive funding mechanism described below. Organic farming would be assumed *de facto* to meet the conditions for the Tier 2 Payment in addition to any further supports it might receive under Tier 4 payments.
- The Tier 3 Targeted Income Support would comprise a number of schemes. The ANC scheme would continue as the current scheme now mainly funded under Pillar 2. It would be based on the new biophysical criteria to be fully introduced from 2018. The objective is to support farming in marginal farming areas through the provision of area-based payments. In some cases, governments may wish to use coupled payments to maintain farming activity in these areas, so it seems appropriate to include the coupled payment option in this tier. Coupled payments should be confined to supporting production in ANC areas. There is no case for coupled payments for crops or livestock on prime agricultural land.³⁸ Some might also wish to include income support for smaller farms in this tier, perhaps capped to a certain amount of money per person employed instead of a fixed amount per hectare (as recommended by Vogelzang et al. 2016). However, it is not the case that all farmers with low farm incomes are poor, and low-income farmers are best helped through national social safety nets. If policy-makers wish to support small farms because they provide other valued services, these should be remunerated directly under Tier 4 and not through a generalised income support scheme.
- Tier 4 Higher-Level Environmental Payments would correspond to the agri-environment-climate measures currently funded under Pillar 2. These would address a range of specific environmental challenges and needs, for example:
 - Support for organic farming;
 - Protection of Natura 2000 areas and Water Framework Directive measures;
 - Protection of semi-natural grasslands.

³⁷ This proposal has similarities to the ideas put forward by Luxembourg at the AGRIFISH Council on behalf of a group of Member States in 2012. See "Greening Instruments - menu for Member States within EU framework", available at <http://data.consilium.europa.eu/doc/document/ST-9283-2012-REV-1/en/pdf>, accessed 22 June 2016.

³⁸ It is a separate issue whether coupled payments are an efficient way to achieve particular objectives, such as maintaining open landscapes in upland areas. Participants in Tier 3 schemes would also be required to enrol in a Tier 2 scheme which would help to guard against any negative environmental effects arising from schemes in Tier 3.

- Support for natural structural landscape elements such as flowering strips, field margins, buffer strips along waterways, trees and hedges.
- Support for agro-forestry, afforestation and forestry management
- Support for carbon sequestration activities
- Support for agro-ecological initiatives, green economy, etc.
- Tier 5 combines the non-land-based payments in the current CAP such as investment aids, support for knowledge exchange, support for young farmers, strengthening producer groups and, since the 2014-2020 MFF, agriculture, forestry and food research funded as part of Horizon 2020. These schemes are primarily concerned with improving the competitiveness of agriculture and rural areas. Expenditure in these areas would form a distinct Competitiveness tier. Payments in this tier do not provide public goods, but they help to improve the structure and competitiveness of the agricultural sector and would be open to all farmers.
- Eligibility for public support under any of Tiers 1, 3, 4 and 5 would require enrolment in a Tier 2 Shallow Environmental Scheme to ensure wide area coverage of practices beneficial to climate and the environment. This is the adoption of the 'conditional greening' approach (Section 4.3) in that eligibility for public support in the remaining Tiers is linked to enrolment in Tier 2. Unlike under the current system of cross-compliance, farmers would be compensated directly for the practices they undertake as part of this scheme.

5.2. Payments should reflect a clear results orientation

The new payments model should reflect a clear results orientation, building on the progress already made particularly in Pillar 2 programming and now extended to CAP Pillar 1 in the 2013 reform. The results orientation has also been introduced into the European Structural and Investment Funds (including the EAFRD) in the Common Provisions Framework. It is also at the core of the EU Budget Focused on Results initiative launched by the European Commission Vice-President Kristalina Georgieva in 2015 to maximise the Union's budget effectiveness in supporting growth, jobs and stability in Europe and beyond.³⁹ The results orientation depends on a clear articulation of the objectives of programmes and the establishment of clear and measurable milestones and targets to ensure progress is made as planned (performance framework). It would be consistent with the policy principles agreed by the OECD Agricultural Ministers following their meeting in April 2016:⁴⁰

"Be transparent (with explicit objectives and intended beneficiaries), targeted (to specific outcomes), tailored (proportionate to the desired outcome), flexible (reflecting diverse situations and priorities over time and space), consistent (with multilateral rules and obligations) and equitable (within and across countries), while ensuring value for money for scarce government resources."

Linking direct payments to specific objectives was also supported in the Cork 2.0 Declaration 2016 *A Better Life in Rural Areas*. Its recommendations included a call that *"The architecture of the CAP must be based on a common strategic and programming*

³⁹ For more details on this initiative, see DG BUDGET "EU budget focused on results", available at http://ec.europa.eu/budget/budget4results/index_en.cfm, last accessed 22 June 2016.

⁴⁰ "Declaration on better policies to achieve a productive, sustainable and resilient global food system", Meeting of the OECD Committee for Agriculture at Ministerial Level 7-8 April 2016, available at <http://www.oecd.org/agriculture/ministerial/statements/>.

framework that provides for targeting all interventions to well-defined economic, social, and environmental objectives.” (p. 4).

Targets set out for the CAP would relate primarily to ecosystem management, water management, nutrient management, soil management, air pollution, biodiversity protection, climate action, risk management, farm household income and competitiveness. Direct payments should be related to the achievement of specific objectives within each of these domains rather than provided as a general decoupled entitlement to farmers.

5.3. Require national co-financing of all CAP expenditure

An important element of the proposed new model for direct payments is to encourage Member States to adopt a high level of ambition in their CAP spending programmes not only through controls and sanctions but also through the provision of incentives. Requiring national co-financing of all CAP expenditure is one way to ensure that agricultural funds are more efficiently used.⁴¹ When local taxpayers fund 30-50% of a specific agricultural or rural development programme, they have a greater interest in ensuring value-for-money. Co-financing is an accountability mechanism which needs to be introduced across the whole CAP. The proposed model would therefore require that all CAP spending, and not only EAFRD spending, would be co-financed. The level of co-financing required would be reduced for spending with clear EU value added, and increased where mainly national interests were being served.

Co-financing of CAP spending would have a significant knock-on effect on the overall EU budgetary framework, given the importance of CAP Pillar 1 spending at present. For example, total expenditure in the adopted 2015 EU general budget was €141.2 billion, of which expenditure on CAP direct payments in Pillar 1 (Chapter 05 03) was budgeted at €40.9 billion. Assuming no change in total (EU + MS) spending on agricultural policy and if, on average, 33% of this were co-financed by Member States, this would release €13.5 billion for non-agricultural spending or, alternatively, the overall EU budget could be reduced by this amount.⁴² Returning a significant proportion of agricultural spending now financed through the EU budget to Member States would also have consequences for the net transfers from the EU budget to and from Member States. These broader consequences of co-financing the CAP budget for the overall EU budget framework are not discussed in this note.

A corollary of national co-financing is that Member States in future would also be free to increase their national agricultural spending in the form of ‘national top-ups’, as is the case today. Under the Pillar 2 RDPs, for example, national top-ups over and above Member State co-financing in the 2014-2020 period amount to €10.7 billion compared to €50.9 billion in

⁴¹ One important mechanism here is that national spending must be approved through a budgetary process where the national Ministries for Finance play a role, and there is thus some oversight by non-agricultural interests of how agricultural funds are used. In the case of money which is 100% received from Brussels and earmarked for agriculture, decisions are made solely by Ministries for Agriculture which are principally accountable to their agricultural constituencies.

⁴² My preference would be to maintain a single % co-financing rate for all Member States and regions in sectoral policies such as agricultural policy, and to address distributional issues separately through adjustments in the revenue side of the overall budget. Otherwise the incentive for Member States to manage these resources effectively is blurred. As this is unlikely to happen in the near future, I assume a continuation of the differentiated pattern of co-financing similar to that set out in Article 59 ‘Fund contribution’ in Regulation (EU) 1305/2013. The 33% is close to the average co-financing rate by Member States for EAFRD funding in the current MFF period (national public expenditure of €51 billion excluding national top-ups compared to EU expenditure of €96 billion (initially) or €99 billion (after transfers between direct payments and rural development envelopes) (DG AGRI 2016a).

obligatory co-financing (DG AGRI 2016a). Member States also make a variety of income support payments to farmers under risk management schemes and crisis payments as state aids governed by State Aid Guidelines rules. In 2014, agricultural state aids reported to the Commission amounted to €7.6 billion.⁴³ The State Aid Guidelines ensure that national payments do not distort competition to any significant extent within the single market. Within that constraint (and subject to respecting the EU's international obligations on agricultural support), Member States would be free to make additional payments to their farmers if they so wished.

5.4. Phase out decoupled direct payments

Decoupled income support payments do not meet the criteria of a targeted policy. In the future direct payments model, general, non-targeted payments would be phased out in favour of targeted payments linked to specific and identifiable market failures and needs. However, the current BPS/SAPS cannot be eliminated overnight, given the high dependence of many farms on the payment as a major source of income. Thus, provision is made for Transitional Income Support payments which would continue (perhaps over two programming periods) on a gradually decreasing basis until they are phased out.

5.5. Use savings to increase spending on risk management, competitiveness and public goods

The intention in phasing out decoupled income support is to free up resources which can be more effectively used to address the challenges farmers will face in the coming decade. The EU and its Member States need to increase spending in areas to do with risk management, competitiveness and the provision of public goods including helping farmers to adapt to and mitigate climate change. Proposals on the most appropriate measures under these headings are made in the companion notes prepared for this workshop (Mahé and Bureau, 2016; Dax, 2016).

5.6. Replace entitlements with a contractual framework.

Decoupled payments give a right to receive a payment provided an active farmer observes the minimum requirement of maintaining land in good agricultural and environmental condition (meeting cross-compliance requirements) and maintains a minimum level of activity on that land. Nothing more is asked of farmers in return for this payment. Yet cross-compliance standards are often seen in a negative light and parodied as interference by mindless bureaucrats in Brussels in a farmer's right to manage their land in the way they see fit. The greening payment is perceived in a similar light. Not only does this system give woefully bad value to the taxpayer, but it also sets up perverse incentives and creates negative attitudes among farmers to the delivery of public goods. Instead of seeing the greening payment in a positive light as remuneration for performing a service, farmers (or their organisations) complain that the restrictions limit their production and income-earning potential. The presumption is also that direct payments are an entitlement to additional income, and that any associated obligations should be minimised (farmers are even allowed to transfer or sell this right to a benefit granted by the taxpayer and retain the proceeds, something unheard of in other sectors).

⁴³ Details on state aid expenditure are reported in the State Aid Scorecard which can be found on the internet at http://ec.europa.eu/eurostat/tgm_comp/table.do?tab=table&init=1&plugin=1&language=en&pcode=comp_ag_01.

This entitlement culture must be brought to an end. Instead, farmers should be offered the option to enter into a contract with the public authorities to provide stated services (which will mostly be of an environmental nature but not necessarily so). These contracts should be as flexible as possible, provided that the payment reflects the cost to the farmer of providing them. The farmer would thus have complete choice as to whether to opt in or not, and the extent to which he or she wanted to opt in. There would be no compulsion, and if a farmer did not like the conditions, he or she could remain outside the scheme. This flexibility refers to meeting standards or engaging in farm practices which go beyond the reference standard set by statutory requirements (see later discussion on cross-compliance). It goes without saying that meeting statutory requirements would be required of every farm.

Voluntary contracts are an agreement between two parties, and the state (EU) would also have the right to set conditions. The condition proposed for this future model of direct payments is that a farmer would not be eligible for any public support unless they also enrolled in a Tier 2 Shallow Environmental Scheme. The purpose of this requirement is to ensure that the majority of agricultural land is covered by a basic level of sustainable agricultural practices beyond the statutory minimum requirements. Farmers would be remunerated for the additional costs of undertaking these practices through a Tier 2 payment, but experience shows that enrolment in voluntary shallow agri-environment schemes in Pillar 2 was uneven and only involved a minority of farmers. This was one of the Commission's justifications for proposing the greening payment in the last reform. In this model, the possibility to gain access to income stabilisation tools under Tier 1 schemes, natural constraints support (including coupled payments) in Tier 4 schemes, or competitiveness payments in Tier 5 schemes, would be a strong incentive to ensure a much broader uptake of Tier 2 shallow environmental schemes.

These schemes should be designed using a menu approach as used in some agri-environment schemes.⁴⁴ They should reflect local needs and conditions and respect local agronomic practices. Returning the design of schemes to Member States should in itself lead to a considerable simplification of the CAP.

One consequence is there would be less consistency on a European level which some might fear would have negative competitiveness and environmental consequences. Competitiveness fears due to an uneven playing field within the EU are groundless. Tier 2 environmental payments would reflect the costs which are related to the farmer's efforts. Member States which go for more ambitious schemes ('gold-plating') would have to offer higher payments. So there would be no reason why farmers in those countries should feel discriminated against. In any case, as the schemes are contractual, farmers are at liberty to decide whether to enrol in the scheme or not, albeit if they do not enrol they forego the right to any form of public support. Thus no competitiveness concerns arise.

The environmental fear is that allowing Member States the flexibility to design their own environmental schemes and associated obligations would mean that they would seek out 'soft options' with minimum environmental impact, when the EU objective is to raise the level of ambition in meeting environmental goals. The response to this concern is to insist on building in appropriate incentives based on a results-based system. These incentives should be put in place both at the Member State level and at the EU level. One possible

⁴⁴ Points can be given for different sustainable agricultural practices and a minimum number of points would be needed for enrolment in the scheme. Developing this points system would be the responsibility of Member States.

approach is to require both farmers and Member States to bid for funds, with funds flowing to those farmers (and Member States) which show the highest level of environmental ambition (or the highest level of environmental performance).

5.7. Replace cross-compliance and the greening payment with 'conditional greening'

The obligation of keeping land in good agricultural and environmental condition refers to a range of standards related to soil protection, maintenance of soil organic matter and structure, avoiding the deterioration of habitats, and water management. But cross-compliance standards sit uneasily with the idea that there is a single standard of good agricultural practice which provides a reference level for how society expects farmers to farm as part of their normal business activity. If farmers fail to meet these reference standards, then the polluter-pays-principle kicks in, and farmers are responsible for meeting any damage that results from failure to farm to this standard. If farmers provide non-market goods and services valued by society as a result of farming above the reference standard, then they are entitled to remuneration for this provision under the provider-gets-principle.⁴⁵

The reference level is determined by the statutory obligations a farmer must meet. Additional cross-compliance standards (those requiring land to be maintained in good agricultural and environmental condition) are implicitly remunerated because they are deemed to be requirements to receive the Basic/SAPS payment. This fundamental distinction is blurred when the farmer believes that he or she has been awarded a payment to which they are entitled, and cross-compliance standards are thus seen as just annoying rules developed by bureaucrats which get in the way of the business of production. It also means that farmed land not in receipt of direct payments is under no obligation to observe the cross-compliance conditions. This is now one-sixth of EU farmland. Small farms enrolled in the small farmer scheme are exempted and represent 5% of the total agricultural area. A further 11% of the EU agricultural area does not receive direct payments and is also not covered by cross-compliance (DG AGRI 2016b). If the Basic/SAPS payment were to be reduced further, this figure would be expected to rise. Thus, it would seem sensible to return to the original idea of a single reference level which represents the dividing line between what farmers are expected to achieve on their own, which would be set down in regulations, and what they can expect to be remunerated for, which would be funded by direct payments.

This reference level is a political determination by society at any point in time, and indeed is likely to move over time. Setting the level will always be highly contested. Should higher animal welfare standards be part of the baseline, or should farmers be compensated for improving animal welfare? Should farmers be allowed to cut their hedges during birds' breeding and rearing season or should they receive compensation for not being allowed to do this? Is recreational access to non-arable land a public right or a private right for which farmers should be remunerated? These questions are often answered differently in different Member States depending on their political and legal traditions. It is the role of the CAP to move towards a common minimum reference level in all Member States, though Member States should be free to impose higher standards reflecting different political preferences at national level if they so wish.

In the proposed structure, farmers would no longer be remunerated indirectly for cross-compliance requirements as at present. Instead, the costs of complying with cross-compliance standards (that is, those not included the regulatory baseline) as well as basic greening obligations would be reimbursed through the Tier 2 Shallow Environmental

⁴⁵ These concepts are clearly explained in DG AGRI "Integrating environmental concerns into the CAP", available at http://ec.europa.eu/agriculture/envir/cap/index_en.htm, accessed 22 June 2016.

Scheme on the basis of actual costs incurred. It would be up to Member States to define the standards required, within a framework set down in EU legislation.

5.8. Restructure payments around a one-pillar, programmed, multi-annual CAP

The two-Pillar CAP architecture introduced in the Agenda 2000 CAP reform has served the CAP well, but no longer makes sense in the proposed direct payments model. Hart et al. (2016) have summarised the main distinctions between the two Pillars; their summary is reproduced as Table 5. The proposals made in this chapter would eliminate many of the remaining distinctions between the two pillars: direct payments would be programmed, they would be discretionary, they would be co-funded by Member States and they would emphasise a menu approach to ensure that differences in national and regional conditions are best taken into account. For these reasons, it is recommended that the two-pillar distinction be abolished in favour of a single-pillar, integrated, multi-year, programmed CAP. The programming requirement is important because in this model national agricultural spending becomes much more significant. Requiring this spending to be notified in national programmes ensures that the Commission, Council and Parliament have full oversight over the total amount of support going to farmers.

Table 5: Characteristics of Pillar 1 and Pillar 2 of the CAP

Pillar 1	Pillar 2
No programming, broad objectives.	Programmed and justified against EU strategic objectives
Annual	Multi-annual
By right if eligibility criteria are met	Discretionary
100 per cent EU funded from EAGF	Co-funded by the EU from EAFRD and Member States – co-financing rates vary by measure and region/MS.
Payments per hectare – calculation varies but no formula is imposed as for Pillar 2	Area payment rates (e.g. for AECMs) are based on calculations for each measure of income foregone plus additional costs and can include an element of transaction costs
Differential payment rate regions for some components of payments	Regionally defined in most cases
Most measures are obligatory to implement (exceptions are: coupled support, ANC, small farmers scheme)	Most measures are optional for Member States to implement (exceptions: agri-environment-climate measure and LEADER)
Some implementation choices for MS/Regions	Menu driven, choices made by MS/Regions
Focussed mostly on farmers and agricultural production	Wider rural application, embraces forestry and socio- economic priorities
Remaining market support measures e.g. intervention buying in fruit and veg sector	Some market support under insurance schemes but only where MS/regions choose to put this in their RDPs
No programming, broad objectives.	Programmed and justified against EU strategic objectives

Source: Hart et al, 2016.

EAFRD expenditures (including the land-based measures) are currently programmed as part of the European Structural and Investment Funds (ESIFs) (which also include the European Regional Fund, Cohesion Fund, Social Fund, and Maritime and Fisheries Fund). The Common Provisions Regulation establishes a hierarchy of objectives in which thematic objectives, based on the Europe 2020 strategy, are common to all five ESIFs.⁴⁶

The precise organisational relationship between the new single-pillar CAP and the other ESIFs would need further consideration but is not pursued in this note which is concerned only with direct payments. Two possibilities suggest themselves. The first would be to include the entire CAP fund, and not just the EAFRD element, in the ESIF framework. This would recognise that the proposed CAP is much less an income transfer mechanism than in the past, but is structured to achieve specific targets and results where it would make sense to align efforts with the other ESIFs. If there were objections to this option, then the Competitiveness tier (which corresponds to the current EAFRD responsibilities stripped of their land management and income support elements) could continue to be programmed as part of the ESIFs.

5.9. Allocate CAP funding to Member States based on performance as well as needs

Improving performance and accountability is one of the ten goals of the Cork 2.0 rural development declaration, but the question is how best to achieve this. A performance-related CAP budget allocation mechanism would ensure that Member States are incentivised to raise their level of environmental ambition as well as improve the quality of their schemes in the other tiers. Member State allocations from the overall EU budget for the CAP should be related to their success in meeting the targets set out for the CAP. In the first instance, this principle should be applied to the environmental tiers in the proposed direct payments model.

At the moment, Member States are given a pre-allocated envelope for rural development spending. Member States then prepare their Rural Development Programmes with dialogue with the Commission, but the amount of funding they receive is not dependent on the quality of the programmes that they submit. The only incentive in the current system for Member States to raise the level of their ambition in their RDPs is the fact that some of their own money is going to fund these programmes in the form of national co-financing. While it is important to maintain this incentive, it would also be desirable to ensure that more money goes to those Member States which submit more ambitious RDPs.

In the new model of targeted direct payments proposed in this chapter, this incentive mechanism would apply at least to spending in the environmental and competitiveness tiers in the proposed one-pillar, programmed, multi-annual CAP (it makes less sense to apply it to Tier 1 Income Stabilisation Level and Tier 3 Targeted Income Support where other allocation criteria will apply). It will be particularly important to apply it to environmental spending where the risk of a low level of ambition is greatest.

Because this idea is new, it should be introduced gradually. In the next programming period, a proportion of the CAP budget (10 or 20%) allocated to environmental and competitiveness spending should not be pre-allocated to Member States but placed in a

⁴⁶ The different ESIFs and the role of the Common Provisions Regulation is explained in this European Parliament Research Service Briefing, "The European Structural and Investment Funds", July 2015, available at [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/565873/EPRS_BRI\(2015\)565873_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/565873/EPRS_BRI(2015)565873_EN.pdf).

separate fund or funds (perhaps one fund for each tier). Member States would then be invited, either individually or collectively, to submit projects under each tier that might be financed by these funds. The Commission would assess applications, assisted by a committee of experts as is currently the case in deciding on the funding of applications for research support under Horizon 2020. Project applications would be ranked by the level of their ambition with respect to the EU targets for environmental improvement and improved competitiveness and the quality of their design. Not all projects would be funded, but those that are selected (regardless from which Member State) would be those that are most likely to contribute most to the achievement of the EU targets in these areas. Member States that can demonstrate a track record in achievement (through positive evaluations in independent ex-post assessments of previous initiatives) would be given preference. This would encourage Member States to initiate projects using their own national funding, designed to strengthen their case for EU funding in the next bidding round.

As another example, Member States that propose more ambitious (and thus more expensive) shallow AECMs for their 'conditional greening' programmes, and which succeed in enrolling a higher proportion of their farmer population in their schemes, would be entitled to a higher share of the EU funding devoted to environmental public goods. This could be done by rewarding Member States which submit ambitious programmes by raising the level of EU co-financing of these schemes, again selected on a competitive basis (thus decided separately from the differentiation of co-financing due to cohesion status). Again, the intention is to move away from pre-allocated national envelopes to a results-based incentive budgeting system linked to EU targets.

One of the challenging aspects of this proposal would be the design of the results-based indicators. There are a wide variety of variables and parameters that could potentially be considered in any such incentive-based budget allocation formula. No attempt is made in this note to present a formula or to compare possible outcomes with the current distribution of CAP funds. For this reason, it is suggested that this approach be introduced on a pilot basis in the next programming period. As confidence grew that the bidding system was indeed sending the appropriate signals and rewarding those Member States with the most ambitious programmes, this cap on the performance redistribution could be substantially increased.

This proposal builds on, but greatly extends, the idea of a 'performance reserve' introduced for the ESIFs in the current programming period. The performance reserve amounts to 5% or 7% of the total resources allocated to these Funds (excluding the European territorial cooperation goal and the Youth Employment Initiative). The main intention of the performance reserve is to reallocate, in the final year of the programming period, resources within a Member State and Fund from priorities performing poorly to priorities performing satisfactorily.⁴⁷ Interim payments can also be suspended if a priority is not performing satisfactorily but will be lifted without delay when the Member State has taken the necessary corrective actions. Under rather stringent conditions, a financial correction can be applied if there is a serious failure to meet targets within a priority due to clearly identified implementation weaknesses. This takes the form of a disallowance of the reimbursement of expenditure at the end of the programme period.

⁴⁷ The way in which the ESIF performance framework and performance reserve work in the current programming period is explained in the Commission's Guidance Fiche "Performance Framework Review and Reserve in 2014-2020", Version 3, 19 July 2013, available at http://ec.europa.eu/fisheries/reform/emff/guidance-performance-framework-review_en.pdf.

The proposal here for incentive-based budgeting in the CAP builds on this idea but goes well beyond it. Its principal objective is precisely to redistribute resources among Member States within programming periods, based on their relative ambition in meeting EU-wide goals. It responds to the challenge issued by Commission Vice-President Kristalina Georgieva when launching the consultation on the next MFF: "Do we need to make the budget more agile and flexible, in particular in relation to pre-allocated envelopes?"⁴⁸ The whole point of incentive-based budgeting is to move away from the sense of entitlement that arises also for Member States when resources are allocated solely on the basis of eligible land area, or labour force, or some other pre-determined factor in an automatic way. These are EU resources, and the aim should be to get the maximum possible added-value across the EU in terms of the declared objectives and targets, not simply to return resources to Member States in an automatic fashion.

5.10. WTO considerations

Any proposed scheme for the future of direct payments must ensure that the EU's WTO commitments are observed. Currently there is a large gap between the EU's use of trade-distorting support as measured by its Current Total AMS and its permitted total under its WTO commitments (its Bound Total AMS). However, negotiations continue under WTO auspices to reduce further the amount of trade-distorting support that WTO Members can use, even if these negotiations do not look like producing a result in the near future. As part of these negotiations, the blue and green box criteria for exempting payments may also change. This has already been proposed for counter-cyclical payments for example, and it may also be relevant to seek changes in the criteria for exempting agri-environment payments on green box grounds if it is felt that the current criteria make it difficult to exempt genuine AECMs in this way. Some income stabilisation schemes may not meet the green box criteria if they seek to cover shallow losses.

The individual measures under each of the tiers should be designed such that they would be minimally trade-distorting and meet the criteria for WTO green box exemption but this may not always be possible (e.g. coupled support). Because the 'conditional greening' proposal is new, its WTO compatibility should also be clearly established. If enrolment in an AECM were made contingent on participating in a non-exempt measure, this could be seen as also making the AECM non-exempt under green box rules. However, this is not what is proposed. Rather, the eligibility for a non-exempt measure (e.g. coupled support) would depend on the farmer enrolling in a green box-compatible AECM. There is no reason why this linkage would threaten the green box exemption of the AECM.

5.11. Direct payments in 2025

All of the elements in the proposed direct payments structure are familiar and arguably part of the CAP after the 2013 reform. Whether the CAP post-2020 would be recognisably different from the current CAP depends not only on the content of the measures funded within each tier (where some significant reforms are advocated in this chapter) but on the balance between the tiers. The specific shares allocated to the five tiers in the proposed direct payments model would reflect the political priorities accorded to the specific objectives and targets of each tier. This is fundamentally a political choice to be made by the Council and Parliament about the relative priority to be given to the different objectives

⁴⁸ Speech by Commission Vice-President Kristalina Georgieva at the EU Presidency Conference on the Multiannual Financial Framework, Amsterdam, 28 January 2016, available at http://ec.europa.eu/commission/2014-2019/georgieva/announcements/speech-vice-president-kristalina-georgieva-eu-presidency-conference-multiannual-financial-framework_en.

of the CAP. Farm groups, for example, would be likely to prioritise expenditure under the Income Stabilisation, Targeted Income Support and Competitiveness tiers, while environmental groups would want to prioritise the two environmental payment tiers.

In abstract terms, the size of the CAP budget allocated to each tier should be calibrated so as to be in line with the economic benefits expected from the achievement of the targets under each tier. This could involve, for example, comparing the benefits from risk reduction or from improved competitiveness to the benefits from promoting positive environmental externalities and good husbandry of the countryside. Over time, impact assessment and evaluation reports may help to build up a knowledge base of the relative returns to spending at the EU level under the different tiers. However, this information is not currently to hand. The distribution in the next programming period would likely be shaped by recent history with the current distribution taken as the starting point.

One possible model would start with the existing distribution of spending in the 2014-2020 MFF period, adjust it for co-financing, the linear phase out of the BPS/SPS over a ten-year period, and increased expenditure on risk management and environmental public goods, under the assumption that total (EU + MS) expenditure on agricultural policy would remain unchanged in the next programming period (see Table 6). The comparison is made with Year 5 of the new programming period for illustration purposes.

Table 6: Distribution of direct payments expenditure under specified assumptions, 2020 and 2025

Tier	Scheme	2020				2025			
		EU	MS	Total	Total	EU	MS	Total	Total
		€ millions	€ millions	€ millions	%	€ millions	€ millions	€ millions	%
Tier 1	BPS/SAPS payment/ Income stabilisation	28,699.7		28,699.7	45.8%	9,566.6	4,783.3	14,349.9	22.9%
	<i>: Of which coupled payments</i>	4,220.5		4,220.5	6.7%	2,110.3	2,110.3	4,220.5	6.7%
	Risk management	232.1	116.1	348.2	0.6%	2,321.4	1,160.7	3,482.2	5.6%
	Young farmers payment	844.1		844.1	1.3%				
Tier 2	Greening payment/ Shallow environmental payments	12,661.6		12,661.6	20.2%	8,441.1	4,220.5	12,661.6	20.2%
Tier 3	ANC payments/ Targeted income support	2,225.8	1,112.9	3,338.8	5.3%	2,225.8	1,112.9	3,338.8	5.3%
Tier 4	AECM/Higher level environmental payments	4,465.3	2,232.7	6,698.0	10.7%	12,505.4	6,252.7	18,758.0	29.9%

Tier 5	Competitiveness payments	6,732.2	3,366.1	10,098.2	16.1%	6,732.2	3,366.1	10,098.2	16.1%
Total		55,860.9			100%	41,792.5			100%
	National co-financing		6,827.8				20,896.2		
	Total agricultural spending			62,688.7				62,688.7	

Source: Own compilation. 2020 young farmer's payment assumed at 2% and the greening payment at 30% of the Pillar 1 envelope, with the BPS/SAPS payments accounting for the balance, including 10% of the Pillar 1 envelope for coupled payments. ANC, AECM and competitiveness payments from DG AGRI (2016a). MS co-financing rate assumed at one-third. All CAP payments co-financed in 2025. Greening, coupled, ANC and competitiveness payments held constant at 2020 levels in 2025 and young farmer support moved to the Competitiveness tier. Risk management expenditure increased 10-fold. BPS/SPS Transitional income support payments phased out by 50% assuming elimination over a 10-year period. Balance of expenditure transferred to AECM measures assuming overall spending on agricultural policy held constant.

The assumption that total public transfers to agriculture should or would remain the same may be questioned given other demands on the public finances but is maintained here as a technical assumption. There would be a significant increase in Member State financing which, depending on whether the overall MFF ceiling was adjusted to reflect this or not, might be partially or wholly reflected in lower contributions to the EU budget. Expenditure on coupled payments, Tier 2 greening payments, Tier 3 ANC payments and Tier 5 competitiveness payments are held constant at 2020 levels in 2025 to avoid introducing too many additional arbitrary assumptions.

Risk management payments are currently a very small part of overall agricultural spending. With the envisaged reduction in decoupled direct payments and the expectation of continued volatility in agricultural markets, there is likely to be a rapid increase in experimentation with agricultural insurance products over the next decade. US crop insurance subsidies (consisting of premium subsidies, subsidies to reimburse the administrative and operating costs of insurance companies, and the government's share of underwriting gains and losses of insurance companies) have varied between €4.2 billion and €12.1 billion during the 2008-2014 period, for an average annual outlay of €7.4 billion (converting the US\$ values to euro at the average 2015 forex rate).⁴⁹ It is unlikely that the EU would introduce as extensive a range of insurance programmes across 28 Member States within a decade. Also, the US crop insurance programmes are heavily criticised for being very poor value for money. The Commission's latest estimate of the annual cost of a WTO-exemptible income stabilisation scheme with 100% participation was between €4 and 7 billion. On the assumption that any new EU programmes would be more cost-effective than the US model and that there would still be significant expenditure on decoupled payments in 2025, a total expenditure of €3.5 billion has been assumed for 2025.

The gradual phase-out of untargeted income support would be initiated and Tier 1 payments are reduced by 50% over a 5-year period. These payments include both decoupled payments and voluntary coupled support. There will still be a requirement to

⁴⁹ US expenditure on crop insurance programmes is taken from Zulauf, C. and D. Orden. "U. S. Crop Insurance Fiscal Costs and WTO Notifications under Current Rules." *farmdoc daily* (5):139, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 30, 2015, available at <http://farmdocdaily.illinois.edu/2015/07/us-crop-insurance-fiscal-cost-and-wto-notifications.html>.

provide some coupled support in the future to “*those sectors or those regions where specific types of farming or specific agricultural sectors undergo certain difficulties and are particularly important for economic and/or social and/or environmental reasons*”. Coupled support should not be available to enterprises in the fertile core farming regions of Europe, so in the longer-term it would make sense to move this support to Tier 3 addressing problems in marginal farming areas where the continuation of production is desired. Coupled support should not be used to increase production, and because of the high risk of distorting competition within the single market as well as with a view to meeting the EU’s WTO obligations, there should continue to be a limit on the total amount of coupled support that can be provided in the EU.

Under the maintained assumption that overall agricultural spending would be held constant between 2020 and 2025 there would be a significant increase in spending on higher-level environmental public goods including climate action. Total (EU + MS) spending on this Tier could almost treble under this assumption. Given the scale of the challenges that the EU faces in protecting and enhancing its natural capital, some increase in public spending is clearly warranted. Whether a tripling of expenditure can be justified would depend on the quality of the programmes submitted by Member States and the evidence that these interventions were yielding a significant return.

Funds would be allocated to Member States based on the incentive-based distribution method that might be agreed. There remains the question how much flexibility Member States would have to move resources between the tiers in programming their national envelopes under this integrated CAP model. In the current programming period there are restrictions on how Member States can dispose of CAP funds. Member States receive separate funding for Pillar 1 income support schemes and Pillar 2 rural development programmes, with some flexibility to move funds in either direction. Basic income support to farmers is obligatory. Moreover, 30% of the Pillar 1 envelopes must be allocated to the greening payment, and up to a further 2% to the young farmers’ payment. There is also a requirement that at least 30% of Pillar 2 funds should be used to support environmental and climate initiatives.

CAP spending in the new model would be focused on EU priorities. The allocation of funding across the tiers would reflect the relative weightings given by EU policy-makers to these priorities. Funding allocated to successful projects from the discretionary funds would, by definition, have to be spent in the relevant tiers. For the remaining pre-allocated funding, it would not make sense to give Member States a totally free hand to allocate these resources as they might wish. On the other hand, flexibility allows the heterogeneity of Member States to be taken into account (e.g. some have larger areas of land with natural constraints than others, agriculture in some Member States faces higher risks than in others, etc.), and the efficiency of spending is likely to be improved if Member State preferences are factored in.

The fundamental dividing line is between those tiers that are primarily oriented towards farm policy objectives (Tier 1 Income Stabilisation, Tier 3 Targeted Income Support and Tier 5 Competitiveness payments) and those tiers that are oriented towards environmental policy goals and other public goods (Tier 2 Shallow Environmental Payments and Tier 4 Higher-level Environmental Payments). To avoid Member States programming their resources predominantly around farm policy goals, there should be a requirement that a minimum

proportion of the resources should be programmed for environmental goals.⁵⁰ Member States should be free to move resources between the farm policy tiers and between the environmental policy tiers. Member States should also be allowed to transfer resources from the farm policy tiers to the environmental policy tiers but not vice versa.

5.12. A path to transition

As already noted, all of the elements in the recommended structure for future direct payments to farmers are familiar in the current CAP. What is proposed is to redesign these payments so that they are more effective in achieving their objectives, more understandable to farmers, give greater flexibility to national authorities, and provide greater value-for-money to the taxpayer. Policy-makers can decide the pace at which the transition can take place. What is important is that individual reforms to any element of the direct payments regime are consistent with the proposed long-term direction of travel.

For example, some Member States have not made use of the risk management toolkit introduced in Pillar 2 because their RDP ceilings were too low and it would have crowded out other measures. Even with the current direct payment structure, Member States could be allowed to use part of their direct payments ceiling for risk management measures (as was the case under the Article 68 arrangements following the Health Check reform). Greater use of equivalence schemes and a menu approach to qualify for the greening payment could help to prepare the way for the introduction of 'conditional greening' in the future. Integrating the two Pillars into one would also be possible without adopting the other recommendations at the same time.

However, the gains from shifting to a more targeted approach are sufficiently compelling that it would be a pity to delay.

⁵⁰ This decision would most appropriately be taken by the European Council in the context of agreeing a new MFF Regulation. Currently, the MFF Regulation sets out the ceiling on commitment appropriations for Heading 2 "Sustainable Growth: Natural Resources" and for the sub-ceiling "Market-related expenditure and direct payments". Under the proposed model, the sub-ceiling would be replaced by "Market-related expenditure and expenditure ceilings for Tiers 1,3 and 5". Of course, some more elegant phraseology should be found.

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DIRECTORATE-GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

**RESEARCH FOR AGRI COMMITTEE - THE
FUTURE OF MARKET MEASURES AND
RISK MANAGEMENT SCHEMES**

STUDY

This document was requested by the European Parliament's Committee on Agriculture and Rural Development.

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STUDY

Abstract

Recent booms and crises have shaken the farm sector strongly enough to question the adequacy of the new CAP to cope with market disturbances. Drawing lessons from the dairy crisis in particular, this study makes policy recommendations to AGRI Committee Members concerning the possible future for market measures and risk management schemes in next CAP reform. It develops 27 proposals to improve the current CAP tools. The study recommends that a third CAP pillar for market measures, risk management schemes and Basic Payments should be created, that delegation should be given to an independent Authority for the MFF duration under a detailed mandate drafted by the EU institutions of the Trilogue, and that eligibility to Basic Payments should be conditional on farmers participating in EU risk management and market schemes.

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LIST OF ABBREVIATIONS

ACRE	Average Crop Revenue Election
ARC	Agricultural Risk Coverage
CCP	Countercyclical payments
CMO	Common market organisation
EAGF	European Agricultural Guarantee Fund
ECOFIN	Economic and Financial Affairs
EMB	European Milk Board
FADN	Farm Accounts Data Network
FNVA	Farm Net Value Added
GMOFC	Gross Margin over Feed cost (revenue + subsidy - feed cost)
GMOOC	Gross Margin over Operational cost (revenue + subsidy - operational cost)
MEQ	Milk equivalent (kg of milk to produce one kg of dairy product)
MEQ Price	Milk Equivalent price (based on butter and skim milk powder prices)
MMO	Milk Market Observatory
MS	Member States
PLC	Price Loss Coverage
PSA	Private Storage Aid
RDP	Rural Development Programme
RMP	(Farm gate) raw milk price
RMS	Risk Management schemes
SMP	Skim milk powder
STO	Short Term Outlook
USA/US	United States of America

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EXECUTIVE SUMMARY

Background

The CAP has deeply changed its approach to agricultural markets since 1993. Market orientation and direct payments instead of tight price or supply controls are the new principles. The changes in the EU budget structure clearly reflect this evolution and the 2013 reform confirmed this trend. Market measures were kept alive but nearly dormant for most commodities, available for activation in exceptional circumstances. A Reserve for crisis was installed. Assistance to insurances and Mutual Funds was made possible in the framework of the second pillar. Member states have made an uneven use of them and, in particular, a very limited implementation of the Income Stabilization Tool. In spite of these new risk management tools, recent booms and crises have shaken the farm sector strongly enough to question the adequacy of the new CAP to cope with market disturbances.

1. Market disturbances: new challenge for the CAP

Financial balance of farm operations is increasingly sensitive to price instability, first, because net incomes are a small fraction of turnover due to outsourcing of intermediate inputs, labour and capital, and because of specialisation; second, because EU farm prices are not only closer to world prices but they also move in parallel. The EU is a net exporter for most commodities. A large use of export refunds is now out of question, because of international commitments. Due to its world size, both as a producer and as an exporter, the EU now influences world prices, as well as it bears their influence.

Lessons from developed countries experiences: a mixed record

Countries in similar situations have adopted policies to mitigate the implications of world price instability. In developed countries instability is mostly a producers' issue; and policies and politics focus on price drops, rarely on price booms. In net importing developing countries instability is a consumers' issue; and policies focus on price booms hurting their population plagued by poverty. All attempts at international coordination to moderate commodity price volatility have so far failed to deliver significant results.

The US has now implemented a variety of payments that clearly protect farmers from most adverse conditions, including low yields and prices. The potential distortions of competition with respect to the EU are a source of worry. However, one must warn against the simple idea that "the US does it, Europe should follow". Indeed, the US system is itself plagued by many undesirable aspects.

First, because of the countercyclical nature of marketing loans, insurance programs and shallow loss payments, the budgetary costs of the program vary a lot. The cost to the taxpayer of the crop insurance program can exceed \$10 billion certain years, for example. It is hard to imagine how such a program could fit in the present EU Multiannual Financial Framework, which largely relies on fixed annual endowments.

Second, the cost efficiency of the US insurance program is poor. Analyses conclude that every time a US farmer receives one net dollar through the insurance system, it costs two dollars to the US taxpayer. The efficiency of shallow loss payments programmes is also questioned.

Third, because of this protection, even a risk-averse producer has an incentive to specialize and produce more. Hence, the US programmes make farms less resilient to adverse conditions and more dependent on payments. The environmental consequences are also negative: monoculture is something that the recent CAP reform aims to deter.

2. Market measures and crisis management: dairy as a study case

The EU dairy market works as a study case to illustrate the mechanics of a rather typical agricultural crisis. In the last two crises, price collapses in 2009 and 2015 occurred after price booms in 2007-8 and 2013-14. The magnitude of the last crisis can be sensed by the magnitude of the price drops from peak to trough over the 2013-15 period (-36% for monthly prices and -16% for yearly data, at farm gate).

The Commission took a few market measures and proposed to use temporarily the Reserve for crisis to cover the costs. This attempt was met with strong opposition from farm organisations, the Council and the Parliament. Although at this stage, the cause of the crisis was viewed as political (the Russian ban) rather than economic, it reveals an EU institutional problem. Political institutions (the Council, the Parliament and the Commission to some extent) are too closely involved in day-to-day policy implementation, and this does not always ensure it works in a time consistent manner and for the common good.

In reality, the main engine of the crisis soon appeared to be the fast growing production of milk in the EU, as a surge of deliveries of 4% in 2014 was under way, although quotas were still in place up to March 2015. That is, the downfall in 2014 was already work in progress when in August 2014 Russia declared an embargo on EU imports of dairy and other products. This precipitated the price fall because the Russian outlet accounted for about 1.6% of EU production, a significant shock in a tight market. These developments also show how difficult it is to implement financial solidarity within the farm sector, in general, and even in the midst of a crisis.

In September 2015 the Commission proposed new measures including a €500 million aid package, an increased aid to private storage to milk powder and a programme of private storage aid for cheese. Several other measures were of a qualitative nature or hindered by uncertain and delayed effects, such as aid to promotion or using Rural Development Programmes through advance payments and measures to promote product quality and competitiveness, developing financial instruments and Income Stabilisation Tools, encouraging the improvement of Producers Organisations and "improving an exchange of experiences regarding unfair trade practices".

The measures did little to end or alleviate the crisis since production continued growing fast and prices stayed depressed. Two features of adopted measures in 2015 are worth pointing out as they illustrate the wrong signals given to producers regarding their expectations of future public policies. Indeed, 80% of the €420 million emergency aid was distributed in proportion to quota references; and previously in March the Commission had decided to postpone the collection of the "superlevy" (amounting to €409 million) on quota overshoot and to spread it over three years, thus alleviating the cash flow shortage of some dairy farms in eight Member States. With hindsight, this initiative appears as unfortunate since it gave the wrong signal to the Member States where milk supply was growing fast, particularly to Ireland and the Netherlands where production increased most in 2014 and 2015. This initiative is one illustration of a recurrent conflict in the CAP: in addressing adverse income situations, the short run approach is to cope with emergency, but at the cost of fuelling further long run or delayed disturbances. The philosophy of the package

also conveyed the message that market orientation was the principle and that mitigation of market disturbances consequences was to be largely handed over to Member states in the new context of increased flexibility of National Rural Development Plans. But at present, income stabilisation tools are nearly absent of Member States Rural Development Plans.

The Council of 14 March 2016 decided to double the quantity ceilings admissible in public storage for skim milk powder and butter, and to allow Producer Organisations to regulate production on a voluntary basis for a limited period with the help of special envelopes financed by Member States. This was an ill-conceived device since it created a non-cooperative behaviour between Member States and a new budget externality between countries. We show that a "prisoner's dilemma" (i.e. a non-cooperative equilibrium detrimental to everyone) is bound to emerge from this policy scheme.

The decisions of July 2016 partly corrected some of the flaws pointed above with an EU-wide scheme to finance directly production reductions when Member States do not have a scheme in their National plans, and to co-finance from the EU budget Member states plans of supply moderation. But a basic externality still persists, at least between producers; and the benefits from the inelastic demand and price effects will remain largely untapped, at the cost of taxpayers. The EU institutions failed to agree on clear economic or political criteria to define where production could expand, with or without public support. A stronger system of *crisis prevention cross compliance* between basic payments, market regulation and risk coping instruments is now required.

Lessons from simulations of alternative policies over the recent period.

To illustrate the working of the dairy market and simulate counterfactual policy scenarios, we built an *ad hoc* simplified model just calibrated on years 2013-15. Scenarios included the Russian ban, public storage defined as in March 2016 decisions and *ex post* supply reduction (both mandatory and voluntary-subsidised). The results support the capability of market measures such as public storage and supply reduction to offset part of the price collapse and its consequences. The main driving force is the implicit inelasticity of the aggregate demand for dairy products and therefore the vivid price response to a restoration of market balance. Because of this effect, subsidies to small supply reductions appear unjustified if the programme is enforced across the whole EU. Focusing on gross margin over feed cost reinforces this finding. Then, gross margin over feed cost is nearly the same in both mandatory supply containment and intervention scenarios. If the subsidy is granted, overcompensation is likely, because the price effect more than offsets volumes cuts.

The simulations also illustrate how intervention benefits our foreign competitors; and enlighten the new constraint on market measures due to these leakages. Results point out significant exports losses from price enhancing market measures.

Using an averaged benchmark as reference – i.e. a more normal market situation than 2013 - to evaluate simulations results, brings further light. The three market measures of our scenarios do bring gross revenues virtually to benchmark level. However, they cannot neutralize the gross margin losses from benchmark level, although they reduce the losses quite significantly. This exemplifies the depth of the crisis even in comparison to an "average" market situation. This also shows that, when inputs have been committed to surplus production that is bound to be later under-priced, market measures are coming late and stay off the mark. To illustrate the point, a crisis prevention limiting supply growth to 4% over 2014 and 2015, announced *ex ante*, appears to fare better than all curative *ex post* market measures considered. However, under the present institutional setting,

stakeholders and political forces do not express any demand for public action in periods of price booms to limit the pace of future supply developments. Asymmetrical demand for public action along the price cycles is a major problem in designing well-conceived market policies.

3. Taking stock at the overall CAP system to cope with disturbances

Agriculture is turning sensitive to price disturbances, but part of this sensitivity is caused by current public intervention. Several causes make the financial balance of farms increasingly sensitive to prices. Income and profit margins are narrower due to increased outsourcing of inputs. Large farms exposure to price risks is often greater. Moreover, the dynamics of farm investment in fixed assets, either in productive capital or in real estate, exacerbates the issue. High prices induce high investments, future bills on loans, and less cash flow for coping with the bad years of the production cycle. This dynamics is more pronounced in the larger farms with large variations of net incomes and because of the concentration of direct payments.

By feeding the mechanics of supply response, current direct payments are part of the problem. Direct payments provide a buffer of income for farmers, but do not reduce the variance of income and do not solve the price volatility problem. Moreover, their concentration on large farms adds to increasing risk exposure and even to market disturbances. The skewed distribution of CAP direct payments fuels the drift of farm structures to higher sizes and to more outsourcing of inputs and services, which have sticky prices. The resulting narrower share of net income in turnover means exacerbated risk exposure, and a need for further public safety nets. Evidence is that large farms, with large direct payments, invest and grow faster than average in good years, and thus boost the dynamics of supply response, and destabilise markets rather than the contrary. This means that the EU budget is boosting supply on the one hand and is later caught in covering the withdrawal of surpluses it contributed generating in the first place.

The Reserve for crisis is too weak a tool to cope with market disturbances. The transfer of budgetary resources from Basic Payments is necessary to make financial means legally secure, and more adequate to the challenge of price volatility. The Reserve should not single out its role of bailing out farms in financial stress; it should also give message for the future. Emergency envelopes should not aim only at rescue, regardless of past and future producer behaviour regarding risk exposure. They should not condone risk exposure in the past, and therefore encourage risk loving in the future. ***Lessons are to be drawn from the crisis of the bank system to discourage risky business plans*** and non-prudent supply behaviour, and reward risks mitigation initiatives among farmers.

Ex post curative market measures can be effective, but they are hardly a first best solution. The fact that withdrawals from market are effective in raising prices in the short run is not doubtful, although leakages are unavoidable. ***But effectiveness does not mean efficiency.*** If the true objective is strict stabilisation, the best option is for the institution in charge to sell public stocks when prices pick up. This is clearly what the CAP of the 1970s and 80's was unable to do with a minimum of success.

The major flaw of withdrawals is that they come too late in the economic process when goods have already been produced and have cost resources. Advocates of intervention should be reminded of the lasting excesses of the pre-1993 CAP, and of the poor incentives given to value creation. The stated objectives of public storage in the single Common

Market Organisation need redrafting. Wider objectives than “avoiding any disturbance on the market” need be spelled out.

The system must be able to give financial incentives only to producers willing to coordinate in crisis avoidance and mitigation. Intervention raises prices for all producers in a single market, thus provides another kind of public good. Public goods are nevertheless prone to free riding; hence, intervention is a poor instrument for delivering the right incentives.

Private Storage Aid: more flexibility and targeting.

Although who is eventually benefiting from Private Storage Aid (PSA) is unclear, this measure seems to have some of the virtues of public storage without curtailing demand. It could help develop outlets in foreign markets, but gains in foreign market shares for basic products are easily reversible, when the price edge is lost. PSA could more durably ensure foreign outlets if more high-quality processed goods were eligible. A more flexible implementation of PSA could help seizing commercial outlet opportunities.

Food aid is far less extensive in the EU than in the US, where the intent is to expand demand while helping the poor. Food aid can hardly be a tool for dealing with disturbances, since primary welfare purposes are different. Domestic food aid could develop if cohesion between peoples and nations becomes high enough in the European Agenda. Campaigns of promotion of food products attract our skepticism regarding efficient use of public funds and welfare benefits.

Risk Management and Income stabilisation schemes: too much subsidiarity.

Up to now, Risk Management schemes in the EU are undeveloped, particularly regarding income stabilisation. While insurances covering natural risks are extensive in some Member States, mutual funds hardly exist and there is no obvious willingness to take up the new ‘income stabilization’ tool available under CAP Pillar 2 (only two Member states and one region have so far decided to use it). Devices covering natural risks of usual magnitude could be kept in Pillar 2 in view of their frequent local character. Price risk management and regulation however are too closely connected with market measures to be designed, financed and monitored under subsidiarity. They should be conceived and administered in conjunction with market measures, and even with the Reserve for crisis.

Article 39 of Regulation 1305/2013 needs revision and extension. The income definition is too general and could entail undesired distribution effects between farmers and Member States, and undermine level playing field in the single market. Simulations for dairy suggest that Gross Margin over Operational Costs would have barely triggered compensations during last crises and that moving average of net incomes raises other problems.

The term “Mutual Funds” is misleading; price shocks being systemic in a single market, they cannot be insured by pooling contributions from farmers who face the same price shocks in the same time. We favour a “Matching Fund” Scheme where EU funds would match farmers contributions when compensations are triggered; consider that reference to an index based notion of income is simpler to administer than actual incomes from accounts; and propose a base income coverage chosen by farmers with incentive compatible contributions.

Towards an integrated EU system of Market measures, IST and Basic payments combining mitigation, prevention and curative actions

A detailed empirical analysis of other sectors was not feasible in the framework of this study, but we point that patterns of fluctuations vary across sectors and may evolve in the future with less regulation. The variability of incomes is also heterogeneous according to farm orientations. Moreover, some sectors endure mostly exogenous random shocks, from natural or economic origin; others exhibit irregular cycles due to production lags and to the inner dynamics of investment and supply response to prices and policy incentives.

Mitigation is the main strategy to cope with exogenous shocks. Main tools are participation in IST, precautionary savings, limiting risk exposure that comes from excessive specialisation or bold financial behavior. Intervention and withdrawals have limited scope, with the exception of products such as fruit and vegetables, where volatility is exceptionally high, and mainly due to natural and exogenous causes.

Preventive strategies are possible for cyclical sectors and are the most efficient. But they require circumventing coordination failure between producers and producer groups, and this can only be done with policy tools that are strong enough to influence behaviour, but soft enough to avoid the political failure associated with production quotas.

POs contract and market power balance

A promising future for EU agriculture reaches out beyond improved price and incomes stability. Value creation and value sharing in the food chain, operation of the single market to ensure level playing field competition, price and non-price competitiveness of the EU farm sector are strategic issues. The CAP and the single CMO partly address some of them, although the CAP excessively focuses on agriculture rather than on food industry matters. The CAP has a history of conflicting with competition policy and of hesitation to allow farmers to group supply in order to increase market power. The special regime for the fruit and vegetables sector has long given strong powers to Producer Organisations. It partly inspired contract relations and the provisions on Producer Organisations in the single CMO. But contracts on their own cannot ensure a balanced market power between dispersed farmers and extreme concentration of downstream industries and of the distribution sector. Producer Organisations and collective negotiations are a progress on that standpoint. However, the CAP and competition authorities should fetch a better welfare option than building oligopoly to check oligopsony. Empirical information on rents due to market power of downstream purchasers is lacking, while anecdotal evidence of unfair trade practices is rife. Competition authorities have enough power to monitor cartels, but seem lenient toward mergers and concentration of buyers groups in the distribution sector, whose economic logic is debatable. They seem to have only weak tools to reveal and curtail unfair trade practices, although such practices are known to be widespread. Institutional rules to ensure that dispersed competitors do not transact with oligopolies are in need.

4. Recommendations

Our general approach is “soft ruling”; that is, to ensure market failures are tackled, but government failures avoided as well. Essential is the incentive that a policy gives to agents.

We propose that all policy instruments influencing prices and income instability, directly or indirectly, be reassembled in a unified framework such as a third pillar.

For Market measures, the Reserve for crisis, support to price Risk Management Schemes and Basic Payments to buttress rather than contradict each other, *crisis prevention cross compliance* between policy benefits and participation in disciplines should be the principle. In particular, eligibility to Basic Payments and to emergency aids from the Reserve must be conditioned on subscribing to an Income Stabilization Tool and on abiding by policy rules set up to tackle or to prevent market crisis, such as supply containment during price booms. Lessons from the too "big to fail" syndrome in the bank crisis showed the impact of lenient regulation on risk loving behaviour and on resulting crisis repetition.

To ensure time consistency in public action, to cope with asymmetric demand for public action, and to establish a political balance between the institutions of the Trilogue regarding market regulation, separating implementation from policy design, would build a more resilient institutional framework. This distinction is considered as necessary in key policy domains to safeguard the achievement of the common good. The Trilogue institutions would draw up objectives and rules of actions, under the *veil of ignorance* to warrant fairness of rules, at the beginning of the multiannual financial framework. An **independent authority would implement** the programme laid down in the *mandate* given by the Trilogue.

Failure to strike a balance ensuring limited but fair regulation of farm markets would lead to problem solution through deep crises, political tensions, and to loss of trust in the European institutions.

A few of the 27 proposals that are made in the study are highlighted below:

- Introduce a new pillar structure more consistent with subsidiarity and the distinction of European vs local public goods,
- Reorganize direct payments and empower the Reserve for crisis,
- Set up an independent Administrative Authority for market measures and assistance to Risks Management Schemes, endowed with a mandate derived from a redrafted CMO,
- Integrate market measures with IST and remaining Basic Payments into a comprehensive, mutually strengthening system of Crisis prevention and mitigation,
- Implement *crisis prevention cross compliance* and incentive-compatible aid distribution to ensure mutual reinforcement of policy tools,
- Shift the focus of crisis management on preventive measures and act during price bubbles as well as in collapses.

INTRODUCTION

KEY FINDINGS

- Engaging into new schemes to cope with market disturbance should build on the experience of the initial CAP. It relied essentially on market measures and guaranteed prices, and had fundamental flaws. Attempts to go back to such a system would be misplaced. *Ad hoc* stabilisers, without price adjustments, did not prevent surpluses to develop; hence, fast growing expenditures on market measures and restitutions.
- The switch to lump sum payments per hectare does provide an income safety net, but market disturbances are still felt deeply by farm sectors increasingly tied to world market conditions
- Although the 2013 reform maintained instruments in the single CMO, created a Reserve for crisis and allowed Member States to initiate Risk Management Schemes supported by the EU, stakeholders have questioned the adequacy of the system in place.

To fulfil the objectives of the Treaty of Rome, the initial CAP used market measures and border protections as essential means to support and stabilize agricultural prices in the EU market. Guaranteed prices and rapid technical change soon ensured self-sufficiency in staple farm products. By the time the UK was joining, the EEC had become a net exporter and, after a pause, this exporting position developed over the 1980s. Market intervention multiplied agricultural expenditures by a factor of three from 1980 to 1992, to reach over €30 billion equivalent. Limited measures such as co-responsibility levies and “budget stabilizers” in the 1980s tried without succeeding to curtail growing expenditures, public stocks and surpluses. The 1984 reforms introduced production quotas, to cut surpluses and avoid cutting support prices.

Up until 1993, market measures accounted for the largest part of the farm budget. The 1992 reform introduced “compensatory” payments, essentially for traded crops, soon extended to silage maize and later on to beef, then to dairy and sugar, and eventually most sectors. In parallel market measures dwindled. In 1995, expenditures for market measures fell back to about €15 billion equivalent, close to their level of 1980, while coupled direct payments approached €20 billion. This structure of outlays lasted ten years save for export restitutions, which decreased regularly to vanish in 2013. The Fischler reform of 2003 made another major step by decoupling direct payments per hectare from production choices and increasingly from historical references of individual farmers. In 2012, the reshuffled structure of the first pillar of the EU budget included lump sum payments per hectare (about €30 billion) and coupled payments. Market measures were reduced to less than €10 billion. During the whole period structural policies, rural development and environmental measures caught momentum to become the second pillar. In 2012 the three main components of the agricultural budget were 12% for market measures and coupled direct payments (half each), 62% for decoupled direct payments and 25% for rural development.

The large budget costs and surpluses occasioned by market measures over the 1970s and 1980s are evidence of the underlying CAP problems. The reforms of the last 25 years to restore the functioning of markets were often painful. Engaging into new schemes of market management should build on this historical experience.

The 2013 Reform focused on three broad axes for action: reorganizing Direct Payments, laying down a single regulation for Common Market Organization covering all products, defining EU assistance to Risk Management Systems and creation of a Reserve for Agricultural crises.

Direct payments (Regulation (EU) 1307/2013) target farmers according to farming practices (greening) and focus on designated situations (young farmers, areas with natural constraints, small farmers), give up historical references and reduce internal and external differences in payment rates per hectare. However, Basic Payments are still the bulk of the outlays in Pillar 1 and totally financed by the EU budget. These decoupled payments provide a mattress of safe income independent of farmers' options and of market situations.

The single Common Market Organisation (hereafter CMO, Regulation (EU) 1308/2013) collects most policy instruments that relate to agricultural markets. It maintains traditional market management tools, creates the Reserve for crises, defines special clauses for action in case of serious market disturbances and grants a whole range of competences to producers organizations in order to improve farmers' market power in the food chain without being exposed to litigation from competition authorities.

The Reserve for Crises in the agricultural sector is defined in Articles 226 of Regulation 1308/2013 and 25 and 26 of Regulation 1306/2013. The total amount is €2.8 billion for the period 2014-20, with equal "instalments" of €400 million, established by applying at the beginning of each year a reduction of direct payments. This reserve fund is "intended to provide additional support in case of major crises". This envelope appears as rather small and precarious since it is available on a transient basis. Article 7 of the CMO sets "reference thresholds", which in practice are prices instrumental to trigger market measures, for the whole Multiannual Financial Framework period without definite rules for adjustment⁵¹.

The EU Assistance to Risk management Schemes is covered in the Rural Development Regulation (Regulation (EU) 1305/2013), on the expectation that devices will be launched or developed by Member States to be co-financed by the EU budget. Four articles (36 to 39) define assistance to Crop Insurance, to Mutual Funds for natural risks, and to Mutual Funds for Income losses (Income Stabilisation Tool). The regulation lays down a few rules for recognition and subsidization.

In the MFF for the period 2013-2020, the general picture regarding the allocation of European funds confirms the market orientation of the post 2013 CAP. "Market related measures" now account for a few percent of the budget and direct payment for the largest share. However, the 2013 reform provides assistance to tools of risk management to mitigate the consequences of market disturbances that appear in Pillar 2. Still these tools and the earmarked financial means address the same objectives as the operation of market measures of Pillar 1. This is particularly the case for the Income Stabilization Tool (hereafter IST) supposed to work as a Mutual Fund designed to cope with risks due to market disturbances and price volatility. As a part of Pillar 2, the IST will get financial envelopes insofar as Member States chose to do so in their Rural Development Plans.

⁵¹ But are "kept under review by the Commission" and "shall be updated according to ordinary legislation procedure".

Direct Payments prevalence, cautious trigger of market measures given their past record and limited diversion of funds to a newly created Reserve for crises reflect implicit reliance on Basic Payments to provide adequate safety nets for agricultural incomes. The 2007-10 boom and collapse of agricultural prices for grains and for milk turned into a crisis, for milk particularly. It triggered the appropriation of emergency funds and a reflection on means to reinforce farmers' market power in the food chain through contracts and producers' organizations. From 2013 through 2016, a similar price scenario occurred on the European milk market and developed into a long crisis, together with prolonged low prices on the pork market. These market developments include several components elaborated in chapter 1: world market conditions, the Russian embargo, and internal EU supply demand changes.

At this stage in its long history, the CAP has achieved a progressive but vigorous change of orientation regarding market regulation and income support, but the occurrence of severe market disturbances on several farm products calls for scrutiny of the new devices offered in the 2013 reform. The 2007-9 crises were early warnings of the future problems the CAP is to face. They provided a stimulus to focus more on the consequences of price volatility. The EU institutions designed policy tools and earmarked financial means for that purpose in the 2013 reform, but these are still at an experimental stage.

This report aims to assess the adequacy of the new Basic payment and risk management systems to cope with market disturbances. How are fixed decoupled payments performing as regards securing more stable farm incomes? Do the risk management tools of the 2013 Regulations provide an adequate policy response? Is there a margin for progress in the use and design of market measures? Is the institutional framework for decision making regarding market disturbances adequate?

The Common Agricultural Policy has started a new learning process. In this report, we envisage significant changes that take on board constraints on the feasibility of undertakings regarding stability, such as the economics of policy tools and the closer connection of the EU to world markets. We review how far policy tools are consistent and give the right incentives, and reconsider the logic of the CAP institutional design.

1. MARKET INSTABILITY: A MAJOR EMERGING ISSUE IN THE CAP

KEY FINDINGS

- Instability of agricultural prices is of greater concern for producers today than in the past. Due to globalisation, the historic negative correlation between harvests and prices in domestic markets has become less relevant; with a lower share of agricultural products in the food basket, consumer demand is less sensitive to price variations; the retail sector is concentrated and sluggish transmission of farm price variation is the rule. Indebtedness and sticky maintenance costs of modern equipment increase the sensitivity of farmers' income to price variations.
- Sharp price fluctuations and price volatility have always plagued world commodity markets. Natural and economic shocks on supply or demand are bound to occur. The resulting price shocks also fuel supply and demand reactions, which often destabilise markets in the medium term. Price bubbles and bursts are rife.
- One should keep in mind that policies that attempt to stabilize domestic markets in large entities have consequences abroad. Commodity price instability is even more serious in the context of developing countries where agriculture is an important part in national income and food a major part of consumer budgets, not to mention hunger and famines.
- Several concerted attempts at stabilising world prices were experimented by international Commodity Agreements, with little success. Some analysts think that room still exists for international cooperation provided ambitions for progress are realistic.
- Several developed countries have developed insurance schemes for natural risks and toolkits for risk management to deal with price and income instability. The US program is particularly ambitious. However, the US has developed a complex system of risk management schemes that barely qualifies as efficient. It can hardly be a source of inspiration for the EU.
- If shocks occurring in one part of the world are to be absorbed in a most efficient manner, progress in trade rules and in international cooperation are still to be made, especially regarding export restrictions in periods of high prices.
- For a large agricultural region of the world such as the EU, which both influences and has impact on markets worldwide, there are constraints on effective tools available to reduce market disturbances. There is nevertheless a margin for action towards better allocation of financial resources between support and risk mitigation.

1.1. Market instability and the post 2020 CAP

The debate whether price volatility on world markets gained momentum over the recent period is still unresolved. Several authors have pointed out that, on a historical basis, the fluctuations observed for agricultural prices since 2006 are somewhat limited, compared to what took place in the 1970s and 1980s (Gilbert and Morgan, 2010). Another controversial issue is whether price fluctuations actually have a negative impact on consumers and producers. A result of the academic literature is that only limited aggregate welfare gains can be expected from price stabilization policies; that price volatility matters mostly for affluent producers (see Gouel, 2010 for a synthesis). Recent literature stresses that the level of prices matters more than price volatility, especially in developing countries. Barrett and Bellemare (2011) for example show that, political unrest is associated to high level of food prices because of their impact on nutrition, not to price volatility *per se*. In a similar way, Gouel (2010) shows that for producers, the issue is more the downward price drops than volatility *per se*.

Still, for farmers' organizations market instability is a problem for producers. For EU farmers who faced decades of stable administered prices, coping with market instability is a new challenge. Price volatility affects their investment and production decisions. Price volatility can induce large swings in realized profit, and therefore in the marginal utility of income. Price volatility may lead to defaults of producers that would be "on average" economically viable. Hence it can, in the absence of a perfect credit market, induce bankruptcies that do not qualify for the "creative destruction" praised by free marketers for making the sector productive; nor for playing a major role in agricultural and economic development as described by Acemoglu and Robinson (2012).

For most "modern" production systems net income margins are highly sensitive to even small price changes because of size increase, capital deepening, heavy borrowing, recourse to wage earners, greater outsourcing of purchased services, and also specialization in a smaller number of outputs. This is a marked difference with other sectors where prices are stickier and where adjustments occur through labour lay-off or/and failures, save for banks and large corporations perceived as systemic national strategic assets. Farms having less recourse to outsourcing and to purchased inputs, even though they often have a lower average income, tend to be more resilient to crises than the ones with a high level of capital, often associated with a heavy debt burden. Large farms are often financially more profitable but shocks have a larger impact on them. This argument was used to maintain the large direct payments and to oppose ceilings on individual envelopes.

The relation between personal wealth and farm capital has also changed. To avoid adverse spill over of business failures on personal equity and patrimony, farmers in some Member States have adopted the status of incorporated companies with limited liability. Good years occurring, incomes allow savings to move to personal equity, often in illiquid assets such as housing. Once pegged in real estate, these financial investments are no longer available to help coping with a market crisis.

Price developments, technical capability of farmers - and technological change induced by economic fundamentals - have driven these asymmetrical effects. However, the income tax system tends to exacerbate these effects. Larger farms do get a decent income in good years, which means higher income taxes unless investments and outsourcing are pushed up as high as feasible can be. Moreover, special favourable rules for farms (tax deductions) are rife in many countries, thus providing an advantage to attract into farming non-farm

capital eager to pool non-farm benefits with farm low returns or temporary losses to avoid income tax, with the purpose to build up more equity and later on benefit from capital gains.

That instability of farm-gate prices does not recede in developed countries should not be a surprise. Demand for food is increasingly distant from farming. The share of primary products in the consumer food basket is now very small and still decreasing with income growth (Engel effect). Even a large farm gate price variation, with full transmission to the retail level, would mean a tiny consumer price change due to the small farm gate price share of processed food products in the retail price; hence, a limited demand response anyway, save probably for farm products sold fresh. If price transmission is sluggish and imperfect, which is most likely given the extreme concentration of the retail sector and the ensuing excess market power, demand adjustment offers negligible prospects for market to clear at acceptable farm gate prices.

One consequence is that in developed countries agricultural price instability has become a supply side more than a consumer issue because of consumer prices stickiness. The perspective in developing countries is quite different, particularly in net food importing countries where world price spikes harshly hurt the poor and have proved to destabilize the politics itself (Gouel, 2013).

Regarding the EU, the reformed CAP substituted fixed duties for variable levies thus linking internal and foreign markets. World price disturbances now strongly influence EU prices and *vice versa*. Restitutions being now unused, upsurge or gradual increases in EU domestic supply are no longer managed by diversion to the export market outlet. To sum up, the tools used by the EU are no longer prone to destabilize world markets as they may have done in the past. Rather, the EU does participate into dampening and absorption of world disturbances, at the cost of increased domestic instability. One exception is nevertheless the capacity of the EU to lower its applied tariffs below the (high) level of bound duties in periods of high world prices.⁵²

1.2. Experience of world price stabilization

Keynes' advocacy of International Commodity Controls in the 1940s and the 1974 UNCTAD plead for a New Economic Order, viewed the stabilization of world prices as desirable. However, the willingness to act has never led to put together a strong enough endowment to influence market forces and countervail actors with considerable resources that act strategically; and no consensus was found on best methods to limit price volatility.

The various attempts to stabilize markets relied on several instruments. Supply management was a frequent one. It was the instrument behind marketing boards, that several countries implemented, as well as the "*caisse de stabilisation*" favoured in many former French colonies. Buffer stocks were another instrument, but because they did not provide incentives to limit supply in times of chronic excess production, they often required supply control as supplement. Large exporting countries have restricted exports to raise depressed international prices, thus improving their terms of trade. In a surplus situation, producers with a market power are better off when they collectively reduce their exports, even though individually they have incentives to deviate and not cooperate.

⁵² Setting EU tariffs to zero for coarse grains such as in the mid-1990s or late 2000s contributed to world price swings.

These instruments face considerable limitations well described by Gilbert (2011). Clearly, incentives to deviate impede the functioning of export controls. Information about the adequate price, the lack of resources to keep within price ranges impedes the functioning of buffer stocks. Often, stock management faces physical (or financial) limits, and if the latter become exhausted, price soar and nullify previous efforts. In practice, all international price agreements on commodities have collapsed (see Gilbert 1996 for a *post mortem* analysis). This is particular the case of the international agreements that have dealt with agricultural commodities through public intervention (e.g. cocoa, rubber, sugar, and wheat agreements that were initiated between 1949 and 1972). Few operational agreements resulting from the UNCTAD negotiations in the 1970s, which sought the stabilization of commodity prices for cocoa, coffee, cotton, jute, rubber, fibre, sugar and tea were formally enforced. And by 2000, all commodity agreements had collapsed. However, there is no unique reason for this outcome. Some of them collapsed because they were ineffective (cocoa, sugar), others because members played deviant strategies (coffee), others because of the difficulty of designing a target price and adjusting it over time (rubber). Most of the "*caisses de stabilisation*" collapsed because of the increasing power of the private sector and speculators that could counter government attempts to regulate markets (Gilbert, 2011).

Key members of the G20 that dealt with agricultural issues in 2011 largely rejected international attempts to coordinate regulation of world markets. Efforts focus on the sharing of information in particular through the Agricultural Market Information System (AMIS) initiative; the forum for rapid reaction that was also created after the G20 declaration has limited means for action. The World Bank has nevertheless launched a program for coping with risk through insurance systems that have been successfully implemented in a few developing countries, but it deals with climatic and phytosanitary risks.

While multilateral initiatives to regulate markets display a poor record, after several decades of progressive liberalization of agricultural markets, the trend to go back to instruments such as market price support is growing again, in particular in emerging economies. The case of the United States developed below also shows that some OECD countries have had second thoughts about leaving market forces play in this sector.

1.3. Other countries experiences: focus on the US

The successive reforms of the CAP have consistently pursued a clear orientation towards direct and increasingly "production neutral" (or decoupled) payments⁵³. Such transfers provide income support with minimal interference on production decisions. Economists who believe that market prices provide the right signals of abundance and scarcity consider that such payments are less distorting; and that they should be preferred to market price support or coupled payments. Save for evident cases of market failures, the latter payments provide perverse incentives in the sense that they do not lead to produce the right quantities requested by consumers, generating market imbalances and poor allocation of resources. In addition, with direct payments, a larger share of public money reaches producers' pockets than when budgets are used to support prices, in particular through instruments such as export subsidies or market withdrawal characterized by a low transfer efficiency (see for example Gardner, 1982). Finally, because they have little impact on world markets, decoupled direct payments impose fewer externalities on third countries

⁵³ The 2013 reform introduces some voluntary coupled payments, but they are limited, and associated with restraints and conditions. They do not alter fundamentally the orientation of the CAP that has prevailed since the 1992 reforms.

producers, and are more in line with the spirit of an international cooperation, such as the one undertaken under the auspices of the World Trade Organization.

However, recent figures on farm programs and support published by the OECD show that, by sticking to these "righteous" policy principles, the EU is becoming a sort of exception (OECD, 2016). Indeed, many countries have increased their support to agriculture in ways much more linked to production and prices than the ones followed by the EU. The US is a case in point. The US has taken a different path from the EU since its 2002 agricultural legislation, with a large set of instruments likely to enhance production. The OECD annual monitoring report on agricultural policies shows that in China, Indonesia, Russia, Kazakhstan, government support in agriculture increasingly takes the form of policy instruments better qualified as "market distorting", i.e. production linked payments and price support.

Focus on US experience

In the US it is the Congress (Senate and House of Representatives) which mostly defines farm legislation. The US administration has a rather minor control on the design of the agricultural legislation (while in the EU the Council still has large prerogatives) and there is no equivalent to the EU Commission⁵⁴. The influence of local organizations and interest groups on the Representatives and the Senators seems more pronounced than in the EU Parliament. As a result, the recent US agricultural legislations have resulted in multiple layers of subsidies that benefit vested interests. They required to secure approval from different interest groups and geographical areas but the institutional process has generated overlapping and, in some cases, cost inefficient policies.

Historical developments in US agricultural policy show that Farm Bills have evolved considerably according to market circumstances. Constant features remain, including the large nutrition programs, i.e. social programs that are formally part of US agricultural policy (they represent close to 80% of the total Farm Bill budget). Ambitious conservation programs are still a significant component of the US farm legislation over the recent decades. But farm legislation in the US has evolved in a much less steady manner than in the EU. The low prices experienced in the 1930s led to the development of support programs. The policies during the great depression also relied on public stocks, which were an instrument of farm assistance as well as an instrument of welfare. When the US lost market share because of supply control and high loan rates policy in the late 1970s and 1980s, farm support was modified to ensure that US exports could compete effectively. Farm bills lowered price support, ended supply control (quotas) and increased deficiency payments to restore world market shares. In the late 1980s and in particular in the 1996 Farm Bill led the shift towards decoupled direct payments in order to make US farm support less distorting for world markets and more efficient for US taxpayers. The EU imitated and then consistently followed this evolution. Ironically, at the same time, the US policy experienced a complete turnaround. Starting in the early 2000s, US farm support reverted to instruments more linked to market conditions and yields.

Over the recent period, the US legislation moved toward more directly addressing price instability, perceived as threatening farm incomes. The 2008 and 2014 Farm Bill developed a complex set of measures protecting farmers from adverse situations. One major orientation is that the 2014 legislation replaced direct payments with new policies tying

⁵⁴ See the report for the European Parliament (Bureau, 2012) for more details and an extensive description of the recent US farm programmes.

payments to market prices and yields and enhancing the existing crop insurance programmes. These changes were expected to significantly reduce budgetary outlays, but reality turned out different. Because market conditions differed from those expected by Congressional Budget Office, US policy has caused higher budget outlays than anticipated by lawmakers.

The current farm support programs contain several layers of instruments (see Box 1). They combine traditional payments *de facto* ensuring a minimum price to producers, several types of "shallow loss" payments, and a complex set of insurance programmes helping producers to get rid of almost any kind of risk, *i.e.* harvest, drought, rain, yield, price, gross margin loss, revenue loss, *etc.* Some of the programmes described in Box 1 are exclusive and not all crops and productions are covered in all states, but the set of instruments available to farmers has grown considerably over last years.

In spite of the denomination of "insurance", the government heavily subsidizes the set of programmes that protect farmers output and income against adverse conditions. Insurance policies are sold through private companies, but USDA's Risk Management Agency subsidizes the insurance premiums as well as a portion of the companies' administrative and operating expenses and shares underwriting gains and losses with the companies under the Standard Reinsurance Agreement. Public funds also provide "Administrative and Overhead" payments to private crop insurance companies to cover (largely) the cost of administering the program. The federal government also acts as a reinsurer by providing overall stop-loss coverage and, to some extent, co-payments for losses on each company's aggregate book of business, and by accepting most of the risk for policies placed in an assigned risk. For example, in case of a drought, after a certain level of payments to farmers by insurance companies, taxpayers end up picking up most of the costs.

The amount of support granted to EU producers remains much higher than the amount granted to US producers as a whole (the situation is different if one considers support per farmer (see Butault et al., 2012; OECD, 2016)). However, the form of support is now clearly more production enhancing in the US than in the EU. The US has implemented a variety of payments that now clearly protect farmers from almost any adverse conditions, including low yields and prices. This protection gives a risk-averse producer an incentive to specialize and produce more. In terms of international competition, policies such as the US has implemented provide significant advantages to farmers, in particular regarding incentives to produce and export.

The potential distortions of competition with respect to the EU are a source of worry. However, one must warn against the simple idea that "the US does it, Europe should follow". Indeed, the US system is itself plagued by many undesirable aspects. Moreover, in certain areas, such moves would be inconsistent with the structure of the EU budget.

First, because of the countercyclical nature of the marketing loans, the insurance programs and the shallow loss payments, the budgetary costs of the program vary a lot. The cost to the taxpayer of the crop insurance program can exceed US\$10 billion certain years, for example. It is hard to imagine how such a program could fit in the EU Multiannual Financial Framework, which largely relies on fixed annual endowments.

Second, the cost efficiency of the US insurance program is poor. Babcock (2012) estimated that every time an American farmer receives one net dollar through the insurance system, it costs two dollars to the American taxpayer. The efficiency of shallow loss payments programmes is also questioned. Smith et al. (2015) among several authors, are particularly

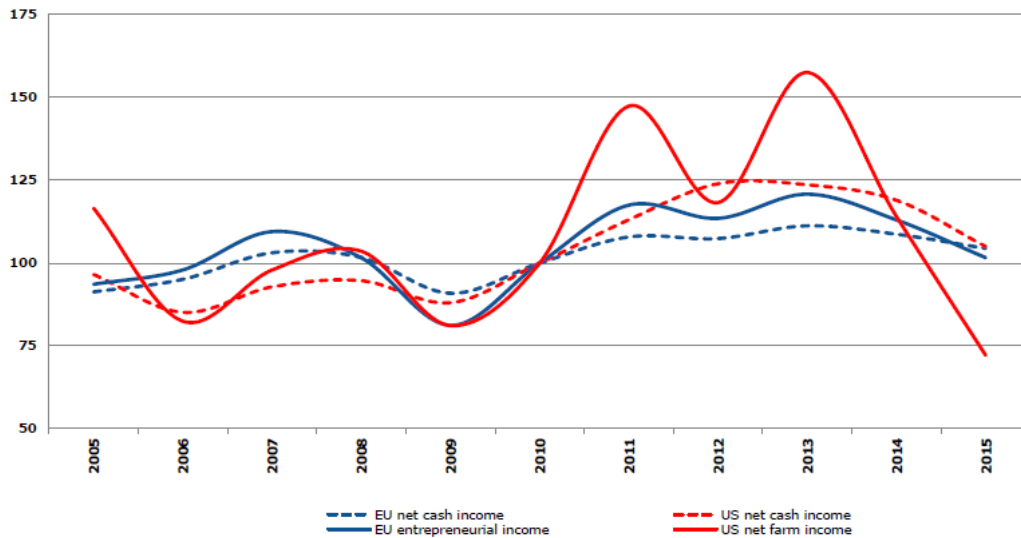
critical in their assessment of Price Loss Coverage and Agricultural Risk Coverage programmes described in Box 1. Wright (2015) is also very critical of “insurance” programmes of the 2014 Farm bill.

Moreover, the principle of countercyclical payment (varying according to the market situation) would *de facto* involve returning to a rationale of aid by product. Indeed, prices of different animal and plant products do not vary together. This would lead to go back to those policies that had driven artificially supply and resulted in the considerable market imbalance that the successive CAP reforms have managed to solve. In addition, insurance-aid and countercyclical payments such as in the US reduce risk and hence provide incentives for farm specialization. Hence, they make farm less resilient to adverse conditions and more dependent on payments. The environmental consequences are also negative: monoculture is something that the recent CAP reform aims to deter.

Another point is that if payments vary, and can become very small certain years, there is little room for *crisis prevention cross compliance*. Hence, a shift to insurance/shallow loss payments would undermine efforts of greening the CAP through the first pillar, at least.

It is also noteworthy that in spite of all their layers of support, farm incomes in the US still tend to vary more than in the EU where natural hazards are of smaller magnitude and the large level of fixed payments provides a solid buffer (**Figure 7**).

Figure 7: EU and US farm income fluctuations (2010 = 100)



Source: AGRI calculations based on ESTAT and ERS/USDA data.

Source: Haniotis, European Commission, February 2016.

Finally, from the strict point of view of farmers, insurance-or counter-cyclical systems could well be a bad deal. The defence of these systems by the agricultural profession is usually subject to two conditions; firstly, that taxpayers cover most of the costs; second that the funding comes in addition to and not instead of current aid. But, at least due to the constraints of the EU budget, an insurance system financed "in addition to" the current system of payments is unlikely. Introducing countercyclical or insurance-aid and would lead to lower other payments for example. Given the small share of taxpayers money that ends up in farmers' pockets with the US insurance systems, EU producers could be better off on average with the EU system of direct payments, *ceteris paribus*.

Box1: Farm support in the 2014 US agricultural legislation

If we focus on price and income support programmes, the 2014 Farm Bill officially eliminated the former Direct Payments (a small set of fixed payments rather similar to the EU "Base payment"), the countercyclical payments (CCP and ACRE, for Average Crop Revenue Election). It nevertheless created several new programmes.

A first layer of support, the traditional Marketing loans and Loan Deficiency Payments, have been maintained.⁵⁵ In practice, these programs allow USDA to guarantee that farmers receive at least the loan rate as a producer price for their crop without the need for government to actually take possession of crops. Note that a difference from a traditional system of guaranteed prices (like the one that prevailed in the EU until the early 2000s) is that market prices are free to adjust downward to clear domestic and international markets. This system also has the advantage to make exports more competitive than what public storage ensuring the same producer price would do. Producers are subsidised but market prices are kept lower, thus allowing for demand response and avoiding surplus accumulation. Support to the dairy sector has been revised and the system of Milk Income Loss Contracts was abolished. Milk Marketing Orders set minimum prices paid by milk processors; and Dairy Production Donation Program triggers public purchase of dairy products for donation to low income groups when dairy margins fall below a certain threshold. The Margin Protection Programme for Dairy (that we include below as an insurance program) triggers payments when the difference between the US price and average feed costs fall below a threshold.

A second layer of support is the (complex) system of shallow loss payments. Crop producers have the choice between a Price Loss Coverage (PLC) and an Agricultural Risk Coverage (ARC) programme. Each of the chambers in Congress proposed these two "shallow loss" programmes independently and both ended up in the final compromise in spite of somewhat redundant objectives. Under PLC, participating producers receive a payment when national season average farm prices fall below fixed reference prices. Under the ARC, payments for a program crop occur when revenues per acre for the crop fall below a reference based on moving five-year Olympic averages of prices and yields.⁵⁶ Producers can choose PLC or the county version of ARC on a crop-by-crop and farm-by-farm basis, or they can choose an individual version of ARC for all the crops on a farm. ARC payments are capped at 10% of crop benchmark per acre revenue, while PLC payments can cover the difference between the crop reference price and the loan rate. It is noteworthy that the level of the loan rates increased significantly with the 2014 Farm Bill, hence the possibility of large PLC and ARC payments.

⁵⁵ "Loan rates" are administratively set prices for each program crop. Farmers use the loans to finance their upcoming crops, with those crops used as collateral. If the market price for the crop is above the loan rate, the producer can repay the loan and keep the balance. If the market price falls below the loan rate, farmers can obtain the loan rate rather than the (lower) market price. The government is obliged, at the farmer's option, to receive the crops tendered as collateral into public stocks as full repayment for the loan (termed a "non-recourse loan"). But there are several options left to the farmer that avoid the government to buy production (see Bureau 2012, for details). In particular, if the farmer immediately pays back the loan the payment is called a Loan Deficiency Payment (LDP).

⁵⁶ To add complexity, there are two versions of ARC. A County version, under which payments are triggered when the county revenue per hectare for the crop falls below 86% of a reference calculated using moving average of national price and county yields. And an individual version, where the weighted average individual revenue of all program crops grown on the farm falls below 86% of a benchmark tied to moving average of national prices and farm level yields. Producers choosing the county version are paid on 85% of their base acreage, while those choosing the individual version are paid 65% of their base acreage. PLC are also paid on 95% of base acreage.

A third layer of support is the system of farm insurances. Crop insurance programs make indemnity payments to producers based on current losses related to either one of two indicators: below-average yields (crop yield insurance) or below-average revenue (revenue insurance). Several types of crop yield and revenue insurance are available:

- Yield insurance plans include the minimal Catastrophic Risk Protection program. This is a cheap option, since taxpayers bear the total cost of the premium for this coverage, producers paying only a limited administrative fee. Beyond that, producers can buy higher levels of coverage, with different options. The main yield-based policy is the Actual Production History (APH) crop insurance. It insures producers against yield losses due to climatic or phytosanitary conditions. The amount of the payment a producer receives depends on the level of yield loss and price protection the producer has elected. The Area Risk Protection Insurance plan uses county yield as the basis for determining a loss. A fourth program, the Dollar Plan coverage is limited to some fruit and vegetables. It insures against yield declines based on the cost of growing a crop in a specific area. The High Risk Alternate Coverage Endorsement is an extra option available for arable crops.
- Revenue-based insurance policies insure a target level of revenue based on the market prices of the covered crop and the producer's yield history. As with yield-based policies, the producer can select higher levels of revenue insurance (Summer and Zulauf, 2012). The producer receives a payment when his or her actual revenue falls below the insured target level due to loss of yield, decline in prices, or some combination of both. The government also funds the operating and delivery costs. Revenue insurance programmes include numerous options. The Revenue Protection policies insure producers against yield losses, and revenue losses caused by a change in the harvest price from the projected price. The main plans are:
 - (i) The Actual Revenue History plan, which protects growers against losses from low yields, low prices, low quality risks for each crop;
 - (ii) The Adjusted Gross Revenue, which insures revenue of the entire farm rather than in individual crop by guaranteeing a percentage of average gross farm revenue, based on tax forms;
 - (iii) The Group Risk Income protection, a risk management tool, which insures against widespread loss of revenue from the insured crop in a county, on the basis of the county yield and the harvest price (that is, an individual might not be covered if it suffers decline in yield while there is no average decline in the county). An option (Harvest Revenue Option) makes it possible to use the higher price and a higher coverage level.
- The Supplemental Coverage Option offers additional area based insurance coverage to producers in combination with coverage by traditional crop insurance policies. The program provides coverage based on county average yield or revenue and was available beginning with the 2015 crop. Subsidies cover 65% of producers' premiums.
- Specific schemes are available for livestock. They include the Livestock Gross Margin, which provides protection against loss in gross margin (output value minus feed costs) in particular for dairy farmers. The Livestock Risk Protection provides protection against price declines.
- STAX provides area-based revenue insurance policies to producers of upland cotton beginning with the 2015 crop. STAX policies can supplement Federal insurance coverage or be purchased separately.

2. RECENT MARKET DEVELOPMENTS, AND THE CHALLENGES FOR THE FUTURE CAP: THE DAIRY CASE

KEY FINDINGS

- Rather than reviewing a large set of sectors, we chose to focus on the dairy sector and to explore in some details the recent crisis, policy intervention, and the potential for new instruments.
- Whilst the Russian embargo was long singled out as the explanation of the recent price fall in the EU dairy market, it played only a minor role; and the main causes were domestic. They include a non-coordinated surge in production – an excessive response to the 2013 price boom - that proved detrimental to all producers.
- The policy response to the crisis was largely inadequate; and thus reveals essential weaknesses in the EU system. The initial row between the Commission and a coalition of farm organisations, the Council, Member States and the European Parliament managed to block the use of the Reserve for crisis and to delay action. The Commission later stuck by the letter of the CMO in the use of intervention and market measures. But several decisions, such as delaying the levies on quota overshoot, under the same political influences, gave a wrong signal to expanding producers. This combination of factors explains why expected soft landing from the quota period turned rough.
- Aggregate demand for dairy products is little sensitive to wholesale prices, even if exports respond much more. Hence, the sharp price reaction to small supply or demand shocks. It works both ways: slight shortages yield explosive booms, and supply surges price collapses. Conversely, market measures (withdrawals or supply cuts) have a high potential for redressing prices.
- One last March Council decision - voluntary supply reduction left at the initiative of and financed by Member States - was a particularly ill-conceived policy move. Subsidiarity is the wrong reference in that case, and prisoner dilemma is the foregone result for producers or participating Member States. The July 2016 new support plan corrected some of the flaws of the March plan, but the operation of the single market is now at risk while the crisis persists, and adding new expenditures is the easy but inefficient solution. Market intervention can raise prices but faces a number of limitations, such as export losses.
- Our analysis points to the potential for mandatory supply reduction or containment to deliver benefits to producers without requiring large budget expenditures like intervention and subsidised supply cuts. True for short run reduction, because price more than offsets volume cuts, it is even more so for *ex ante* containment because non-produced surpluses are obviously “cheaper to be disposed of” and “cheaper to produce” than those already on the market. The simulation exercise also reveals the likelihood of overcompensation for income losses in a programme of subsidised supply containment.
- Adjusting supply growth to demand developments can only be carried at the EU level to capture the benefit of price effects. When there is an externality like a rise in prices when controlling production, voluntary measures reward those who do not participate and cost the taxpayers of those Member States that do.

- *Ex post* curative measures like intervention or late supply reduction programme cannot be first best policies. To tackle deep market disturbances, action must be taken in a coordinated manner at the EU level with enough budgetary or regulation teeth to impact producer behaviour.
- Although difficult to achieve, crisis prevention is a better approach. In some cases, as when aggregate trends over 2013-15 were clearly diverging, early and drastic preventive moves could have avoided the deepening of the crisis. This requires time consistency, long run perspective and agreement on political and economic objectives in the EU, and strong tools to give the right incentives. Without such accord, problems find resolution in recurring and damaging crises, which would have brutal and unfair consequences for many farmers.

With the liberalization of a global market, price fluctuations in principle should dampen. Thanks to the large size of the market, supply shocks should more easily be absorbed. However, if large countries depart from cooperative solutions, those who play a cooperative game may be the losers. The failure of the "Agricultural" G20 to agree on ambitious measures to regulate world markets and the rise of government intervention in emerging countries show that the ambition of developing international coordination that emerged with the 1994 Agreement on Agriculture has recessed. Indeed, The EU has consistently opted for non-distorting forms of farm support, in the spirit of multilateral cooperation. However, many other countries have opted for more production enhancing forms of support during the last period. The status of a virtuous leader tends to become uncomfortable if no one follows the leader.

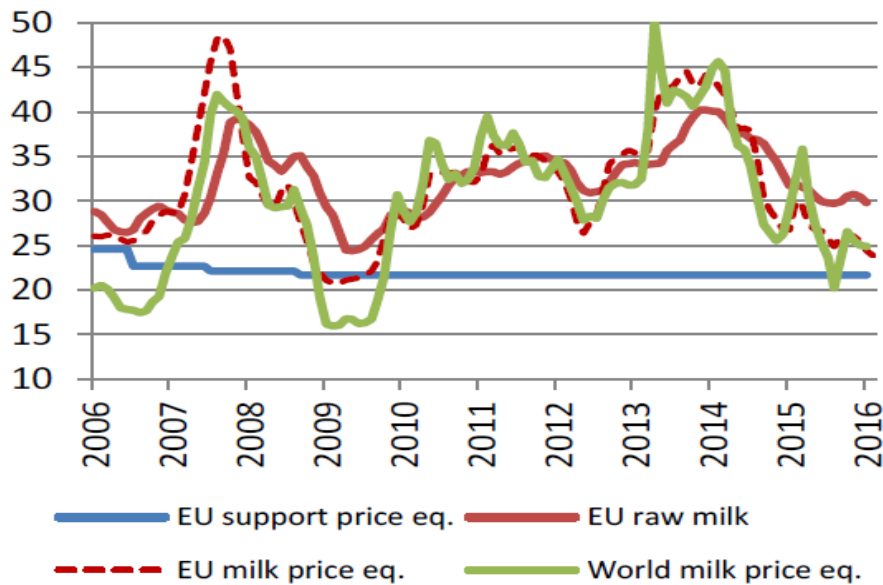
The fact that the US Congress passed a legislation that opens the possibility of budget outlays far higher than expected, and turns out to be largely cost ineffective is also a source of lessons for the EU. This, as well as the experience of market imbalances under the « old » CAP, shows that the design of policy instruments should rely on evidence based simulations. Precise examination of potential policy impacts on market conditions would require a considerable effort in gathering data and designing reliable simulation tools. In this chapter, we focus on the dairy market, which is has been largely deregulated and has experienced a series of crises.

2.1. The 2015 dairy market crisis in brief

In the last decade, the EU milk sector withstood two major crises, one in 2009 and the second, even longer and probably deeper, started in 2014 and is still going on in 2016. Dairy product prices fell below or near intervention prices. The downfall of monthly dairy prices⁵⁷ from peak to trough, in milk equivalent, was dramatic from 2008 to 2009: more than 50%. From 2014 to 2016, the collapse is of the same magnitude (Figure 2.1). Although year-to-year farm gate prices are less volatile (**Figure 8**), gross margins variations also reveal a drastic picture. Time series also disclose two major features of EU milk price behaviour: quasi simultaneity with world price fluctuations and the occurrence of a sharp price boom a year or two before the crisis developed and intensified.

⁵⁷ Prices in milk equivalent are derived from Butter and SMP and display larger volatility than farm gate milk price reported statistics.

Figure 8 : EU raw milk price versus EU and world milk price equivalent



Note: based on SMP and butter prices

Source: EC (2016) Short term outlook N° 14, Winter

The high correlation between EU and world prices (**Figure 8**) is first a sign of EU integration into the world market. The EU dairy market is highly influenced by world market situation, but the EU also has influence on world prices. Being a major world producer (from 32% of world production for butter to 53% for cheese) and a major net exporter (particularly for cheese and SMP), the EU cannot avoid being a determinant factor of world prices, although in a different manner after termination of variable restitutions. This newly created situation is bound to have strong implications on the efficiency of market intervention instruments such as public and private storage or supply restrictions.

Table 1 : EU Self-sufficiency rates for dairy products 2000-2015 and share in world trade (EU-28)

DAIRY PRODUCTS	SELF-SUFFICIENCY RATIO 2000	SELF-SUFFICIENCY RATIO 2015	SHARE IN WORLD PRODUCTION 2012 (%)	SHARE IN WORLD EXPORTS 2012 (%)
Cheese	105	107	53.8	33.2
SMP	123	190	32.6*	28.6*
WMP	298	203	17.2*	16.2*
Butter	105	108	38.2	13.9

Source: European Commission: Balance Sheets; Agriculture in the EU, 2014 Report. * data for 2011.

The current crisis started in early 2014 (January for butter, March for SMP), mostly due to an increase in supply driven by the surge in world prices in 2013. EU deliveries which had been nearly stable since 2000, increased by 2% in 2010 and 2011, only 0.7% in 2013 but 4.4% in 2014 and another 2% in 2015 (details in Annex 1 Table 1)⁵⁸. Per capita consumption of fresh dairy products was stable or slightly down. Both milk powder consumption and exports increased in 2014 and 2015. Butter production and domestic use evolved nearly in parallel.

In the quoted Short Term Outlook of winter 2015, the crisis was yet expected to recede, and possibly prices to "stabilise faster than expected before recovering in the coming months". Dairy processors in France had reduced the possibility to deliver more milk and "main cooperatives applied a price system limiting the incentive to produce more than the agreed quantities". In 2015, the first year without quota, milk production was expected to increase by a moderate 1%, as a decline in cow herds in Poland, Estonia and Denmark tended to partly offset the increase in some EU-15 countries (Ireland, +4%, Netherlands, +0,6%, Germany, +0,7%). In December 2014 cowherds "were stable compared to 2013, putting an end to the exceptional rise observed in that year".⁵⁹

On 7 August 2014, Russia introduced a ban on imports from the EU and other countries such as United States, Canada and Norway. The ban targeted dairy products, beef, pork, fruit and vegetables. This ban was a potentially hard blow on the EU market as exports to Russia represented 1.5% of EU dairy production in 2013, and was even much more important for Baltic Member States (European Commission, 2015b). The Russian ban further exacerbated the emerging unbalance in the EU domestic market.

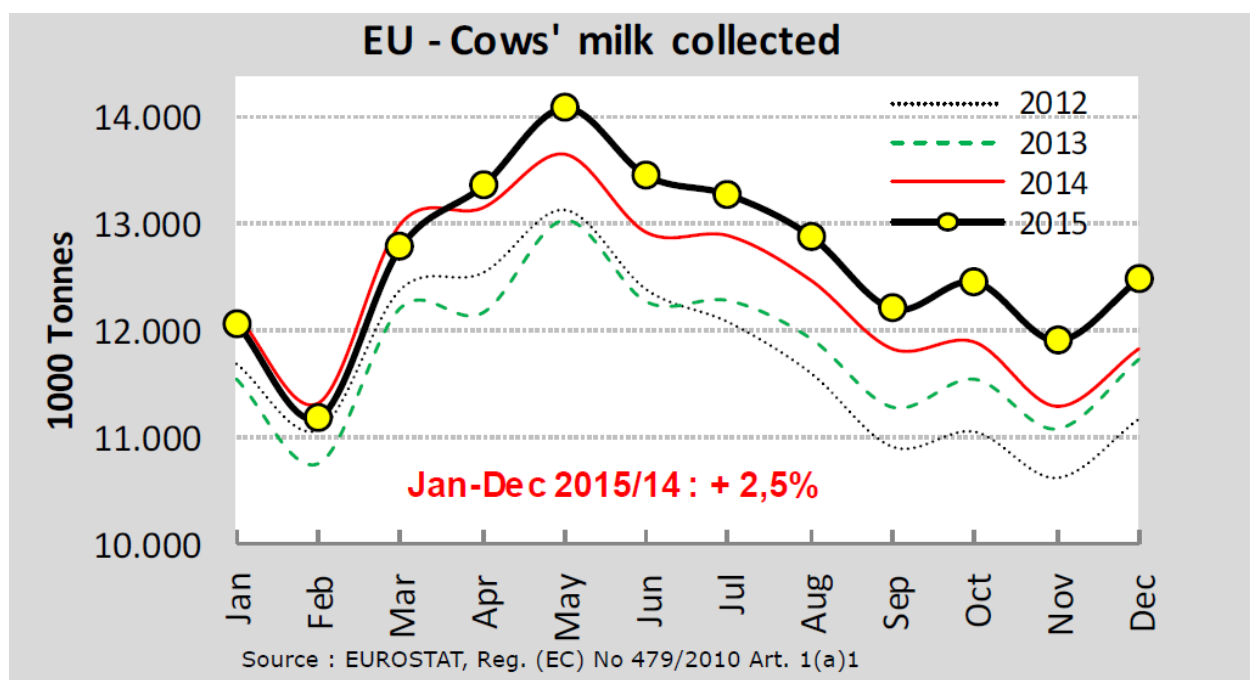
On July 25 2015, Russia announced the extension of the ban until July 2016. From August 2014 to July 2015, overall EU agrifood exports to Russia decreased by 43% from 11 to 6.3 billion euros. By July 2015 the two major export positions, i.e. cheese and Butter had virtually vanished (-97 and -99% respectively). Whole and skim milk powder exports fell to naught, but the initial volumes were negligible.⁶⁰ For dairy products, the loss in EU exports was over €1 billion. Over a year and half (August 2014 to December 2015), the volume reduction of Russian imports of butter and cheese approached 2.5 million tonnes in Milk Equivalent to be compared with the additional 1.6 million tonnes that a 1% growth in milk production can put on the EU market (Annex 1). The shock was indeed considerable, as illustrated below by a scenario of absence of the Russian ban (fruit and vegetables, pork and beef were the other major positions hurt by the Russian ban).

⁵⁸ Data based on EU-28 Balance sheets, 2000-2016, DG AGRI and Short Term Outlook (STO of winter 2016. SMP domestic use responded to price falls in 2014 and 2015 (9 and 4.5% increase), but far from the increase in SMP production (29% in 2014 and another 8% in 2015). SMP exports surged quite significantly (50% increase in 2014, stable in 2015). Butter production increased by 7% in 2014 and 5% in 2015. Butter exports did respond strongly to EU internal price developments (at 180 million tonnes in 2015, they are 55% higher than in 2013, in spite of the Russian embargo).

⁵⁹ Quotations are from (European Commission, 2015b).

⁶⁰ EU Commission (2015a).

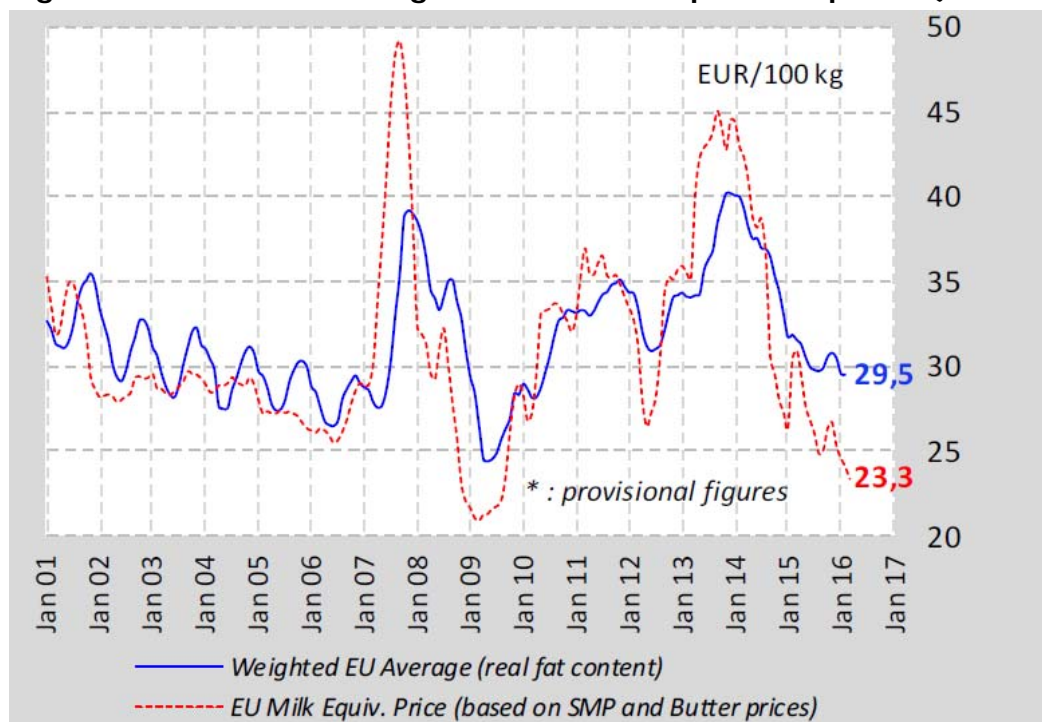
Figure 9 : Development of monthly milk deliveries (2012-15)



Source: European Commission, Dairy dash board 2016 03 17.

The rather optimistic prospects of the winter 2015 Outlook on the milk market soon turned less attractive. The continuation of growth in deliveries although at a slower pace and the magnitude of the Russian embargo concurred to extend the crisis longer than in 2009. The January 2016 meeting of the Milk Market Observatory confirmed the visibility of the impact of the Russian embargo, which developed its strength over 2015,⁶¹ the slowing down of China's imports and the steady EU production growth outstripping reductions in other regions of the world.

⁶¹ See Annex 1 and European Commission (2015b) for more details.

Figure 10 : Evolution farm gate milk & Milk Equivalent prices (2001-15)

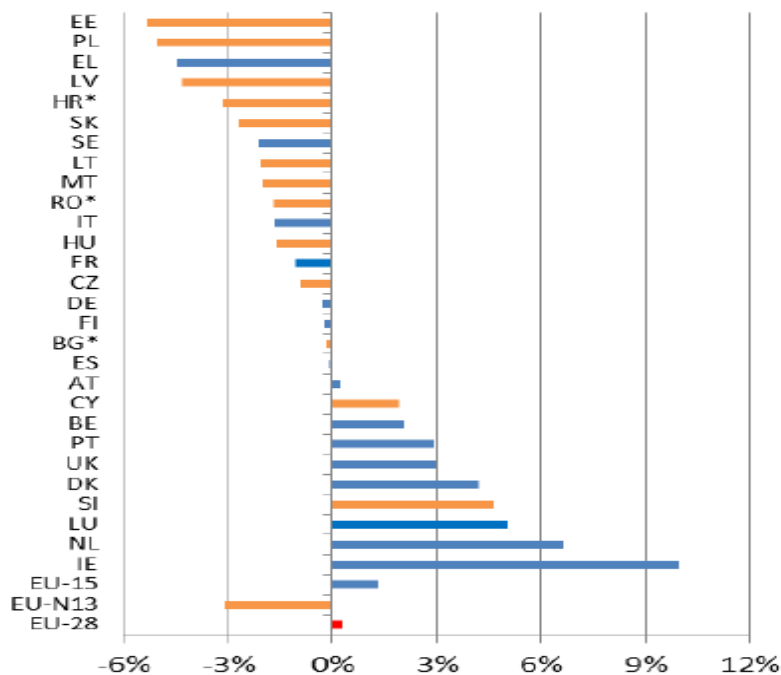
Source: European Commission, Dash board Dairy, 2016 03 17.

Figure 10 shows the magnitude of the current crisis revealed by monthly price quotations, where volatility appears more clearly. From the second half of 2013 to January 2016 EU average raw milk prices fell from a spike of 400 €/t to 255 (-36%). Wholesale prices of milk based on Butter and SMP fell even more sharply from 450€/t to 233 (-48%). Even on a yearly basis, the magnitude of the price drop is drastic: -36% for price of milk equivalent based on Butter and SMP and -16% for farm gate EU average quotation (Annex 1).

Further details and prospects are available from the Short Term Outlook of winter 2016. Most main producers in the world also increased production in 2015: while New Zealand decreased less than expected (-1%), United States increased by +1.2% and Australia by 2%. With a new hike of 2% in the EU, it is an addition of 5 million t of milk supply in the world, while import demand for dairy products was stable. As the EU is by far the largest producer there is little doubt that the outstripping of world demand by supply hikes is largely attributable to the EU.⁶²

The prospects for 2016 are a further increase of EU production by around 2 million tonnes as cowherds have increased in 2015 by 1.2% in EU-15 (but fell by 3% in EU-N13). As an increase is also expected in the US (1.6%, 1.9 million tonnes), milk and dairy products prices are expected to remain low in 2016. The reaction of EU Member States to the end of milk quotas in April 2015 has been strikingly heterogeneous as illustrated in **Figure 11**. While dairy cow herd size was quickly declining in most EU-N13 (herd fell by up to -5% in Poland) and were slightly down in big EU-15 producers such as Germany, France, Spain and Italy, sharp herd increases occurred in Ireland, Netherlands and Denmark. Such differences are likely to translate into widely different views regarding approaches to the need for regulation of the European milk market.

⁶² The winter STO issue points that from 2007 to 2015 the addition to world supply was: 15 million tonnes from the EU (+10%), 10 from the US (+12%) and 5.5 from New Zealand (+36%). Even with a slower growth the EU had a larger impact on world supply because of its size.

Figure 11 : EU 2015/14 change in Dairy cow number

Note: * estimated

Source: DG Agriculture and Rural Development based on Eurostat

Source: European Commission, Short Term Outlook, Winter 2016.

2.2. The policy response to the dairy market crisis

2.2.1. Russian ban and the Reserve for crisis

When in August 2014 Russia declared its embargo on agrifood imports from the EU, the dairy crisis had already been developing since spring. As expected, the fall in prices for dairy products accelerated. On August 28, the Commission announced the opening of public storage for butter, skim milk powder (hereafter SMP), and some cheeses. It extended the intervention period for Butter and SMP until the end of the year. On September 3, the Commission confirmed an addition of €30 million to the existing 60 million annual budgets for promotion.⁶³ In the draft budget for 2015 the Commission proposed to use €344 million of the Reserve for crisis to cover the estimated costs of measures already adopted. The Commission insisted that it did not mean that farmers would bear the costs of measures as they could be reimbursed of all or part of the reserve, depending on under-implementation of EAGF credits and on assigned additional revenue collected during the year.⁶⁴

The Commission stance attracted strong protests from the agricultural profession on the argument that the crisis was due to political causes and should be financed by general funds. At the 10 November Council, several Ministers expressed concern regarding the Commission Proposal. A group of Agriculture Ministers from 22 Member States⁶⁵ issued a

⁶³ Council of the European Union (2014).

⁶⁴ European Commission (2015c).

⁶⁵ Not including UK, Germany, Ireland, Netherlands, Sweden and Denmark; see "Common declaration on the economic impact of the Russian ban on European agricultural and agrifood products"; https://www.eerstekamer.nl/overig/20141116/common_declaration_on_the_economic/document.

declaration in which they “were opposed to the Commission’s proposal to reduce the EAGF appropriations by €448 million in the 2015 budget and request that these appropriations be used to finance the crisis measures related to the Russian embargo”. The President of the Agricultural Council was to write to the President of the ECOFIN Council to express these concerns. The ECOFIN Council expressed its will to see the reserve for crisis “to be used for its genuine purposes”. In November, several Members of the Agricultural Committee of the Parliament pointed that because the Russian embargo was the result of a political decision the aids granted to the most hit producers should not be financed by across the board cuts in direct payments. The Commission accepted these demands in the Second draft budget and it turned out that, given the uptake of emergency measures, having recourse to the Agricultural crisis reserve was unnecessary (Matthews, 2014).

While there is some validity in the arguments that the demand shock on EU markets was due to political causes rather than to economic or natural events, a large supply shock (the growth of EU deliveries by 4% in 2014) was also underway and looked over in this debate. These political developments show the extreme difficulty in the CAP decision process to implement the principle of financial solidarity within the agricultural sector itself, as foreseen by the 2013 CAP reform, by reducing direct aids in order to establish a reserve for agricultural crisis. It reveals one of the weaknesses of the whole post 2013 CAP system. It is not possible to address serious market crises because direct payments freeze large budget resources independently of market imbalances. Further, the EU institutions cannot adjust these payments to serve as incentives and messages to induce producers to participate in prevention programmes or to comply with possible demands from the Commission. To condition payments on growth moderation for example, in order to act on markets in a preventive or even a curative manner is not possible. The current CAP system is lacking incentives to channel producer response when market signals clearly move out of balance as we have seen in 2007-8 and 2012-13. This situation has to evolve if the institutions are keen to reduce the extent of EU agricultural market exposure to extreme disturbances.

2.2.2. The dairy crisis deepens and more actions are requested

As dairy products prices fall deeper, demonstrations and protest develop in several Member States up to the summer of 2015. At the Agricultural Council of 7 September, ministers examined the measures in the package proposed by the Commission⁶⁶ and asked for further details on the distribution of the envisaged €500 million Commission package. At that meeting, some ministers also mentioned other possible measures or initiatives such as temporary increase in the intervention price, negotiation with Russia, targeting the most hit Member States etc. The Commission measures were further examined and “warmly welcomed” by the ministers at the informal agricultural Council of 15 of September in Luxemburg. 420 of the €500 million aid package were announced to be distributed⁶⁷ taking into account “levels of milk production and the short term impacts such as the Russian ban and drought”.

Advanced CAP payments would be allowed up to 70% from mid-October. Aids to private storage for SMP were increased by 100% and the shelf life of private stocks extended. An additional PSA programme for cheese was introduced as a supplement to the initial Commission proposal of 7 September 2015 with a foreseen quantity of 100 000 tonnes. Promotion measures would be taken to win new markets for European products while a

⁶⁶ European Commission (2015c), European Commission (2015d).

reformed promotion policy is underway and €30 million were earmarked for distribution of milk to refugees. The Commission package also included a number of measures, better characterized as “qualitative” or laden with “delayed effects” such as: using Rural Development Programmes through advance payments and measures to promote product quality and competitiveness, developing financial instruments and Income Stabilisation Tools, strengthening the Milk Market Observatory (MMO), encouraging the improvement of Producers Organisations and “improving an exchange of experiences regarding unfair trade practices”. The Commission also announced it was working with the European Investment Bank on financial instruments “where payments schemes are linked to commodity price developments” and that a High Level Expert Group would be convened to advise the Commission (European Commission, 2015c). The Commission list also included the intent to widen the School milk programme and reminded that Member States could use state aids in the framework of *de minimis*⁶⁸. It further mentioned the possibility for Member States to give state aids, outside of the rural development programmes, to investments, agri-environment-climate and organic objectives...or to cover promotion, closure of production capacity etc. Noticeably, earlier in March 2015, it had been decided to postpone the collection of the “superlevy” (amounting to €409 million) on quota overshoot and to spread it over three years, thus alleviating the cash flow shortage of some dairy farms in eight Member States⁶⁹. With hindsight, this initiative appears as having given the wrong signal to the Member States where milk supply was growing, particularly to Ireland and the Netherlands where production increased most in 2014 and 2015. This initiative is one illustration of a recurrent conflict in the CAP: in addressing adverse income effects in the short run, the approach is to cope with emergency, but at the cost of fuelling further long run or delayed disturbances.

Save for exceptional direct aids and potentially for private storage aid to SMP and Cheese, this long list of measures was unlikely to have a significant impact on the market situation, in the short run most certainly and probably also in the long run. It also seems to convey the message that mitigation of market disturbances implications is to be largely handed over to Member States in the new context of increased flexibility of National RDPs content and that market orientation was the principle.

The Chair of the Parliament's Agriculture Committee welcomed the Commission's package of measures aimed at helping EU's dairy and meat farmers with the current market crisis as “a step in the right direction”, but stated it was not enough to alleviate impacts of falling prices and to stabilise food production in Europe. He also added that “We also need to look at ways to stabilise our agricultural markets in the long-term. We need a more responsive safety net and new market instruments that would help to tackle price volatility and market instability”⁷⁰. Demonstrations and protests continued in several countries up to the first months of 2016. On 12 November 2015 the European Milk Board coordinated a Europe wide “day of action” and pushed the idea it had already floated before of a short run temporary supply control.⁷¹ On 8 February 2016 the secretariat of the Council issued a Memorandum from the French delegation including proposals to intervene more firmly on the situation of milk and pig markets.⁷² The suggestions included temporary increase in the

⁶⁷ Member States allocations can be found on http://ec.europa.eu/agriculture/newsroom/223-allocation-ms_en.pdf. 80% were allocated according to quota references and 20% to the MS most hit by the Russian ban.

⁶⁸ €15 000 ceiling per holding and a maximum of 200 000 for Marketing and processing activities over 3 years.

⁶⁹ See European Commission (2014) and Press 11 03 2015, http://ec.europa.eu/agriculture/newsroom/195_en.htm

⁷⁰ Source Agra Europe, 9 09 15.

⁷¹ Matthews and Soldi (2016).

⁷² Council of the European Union (2016a).

intervention price coupled with commitments in the volume produced, exceptional promotion programmes and “genuine export credit tools” to supplement Private Storage Aid. One of the conspicuous measures was a mechanism of EU support to producers who voluntarily reduce supply, “based on a model adopted by a Dutch cooperative”. In the February meeting of the Agrifish Council, Member States were invited to make explicit proposals to be examined in the 14 March Council of Agricultural ministers. On 3 March 2016 the Secretariat of the Council issued a Note to the delegations to prepare this Council and produced a summary table of the proposals. Among many potentially innovative directions were the reinforcing of market support measures both in the short and medium terms, the design of new risk management tools and the mechanism to support farmers who “voluntarily reduce supply” in times of falling prices⁷³.

The presidency conclusions of the Council ⁷⁴ of 14 March 2016 “urged the Commission” to enable production of milk to be regulated on a voluntary basis for a limited period, subject to demand from recognised Producer Organisations, their Associations, Interbranch Organisations and cooperatives; to propose a temporary doubling of the quantity ceilings admissible in public storage (from 109 to 218 000 tonnes for SMP and from 60 000 to 100 000 tonnes for Butter)⁷⁵. It also called the Commission to consider the possibility for MS to grant €15000 per farmer per year and to review the *de minimis* ceiling, with a view to raise it from 15 to €30 000.⁷⁶ The list also mentions, promotion, export credit, negotiation with Russia, reinforcing the bargaining power of farmers in the food chain, financial instruments and risk management tools. The Council presidency conclusions also “call on the Commission to consider the availability of additional resources, including the possible activation of the crisis reserve as a last resort, to support market measures (including the above market measures) at the appropriate time.” At this stage, the voluntary supply reduction scheme left to Member States initiative and finances appeared questionable from an economist standpoint since it was prone to generate a prisoner’s dilemma (see section 2.3.3 and Annex 2).

In July 2016, the Commission announced a new support package amounting to an additional €500 million (which brings the total emergency aid up to €1 billion in less than a year). This envelope includes

- €150 million for “EU-wide scheme to incentivise supply reduction”,
- €350 million (plus national cofunding up to an equivalent amount; MS shares of envelope are defined) for “conditional aid to be defined and implemented at MS level from a menu offered by the Commission” (including aids to extensive methods and to small farms, support to “further production reduction measures),
- a number of so-called “technical measures”. Member States who have coupled payments get derogation from the obligation to maintain herd sizes in 2017. Member States may advance Direct Payments as in 2015. Intervention period for public storage (ceiling unchanged at 350 000 tonnes) and private storage aid for SMP is prolonged beyond September to February 2017. The Commission would also update the support to withdrawals in the fruit and vegetable sector.

The commission took the second set of measures because “some farmers maintain or even increase their production to maintain cash flow”. Its declared intention is “to provide new

⁷³ Council of the European Union (2016b).

⁷⁴ European Union Presidency (2016).

⁷⁵ European Commission (2016a).

⁷⁶ European Commission (2016b).

funds linked with specific commitments while securing market stability". This is a reinforcement of the voluntary supply reduction scheme of March 2015. The large participation of producers in this measure will bring some relief to the unbalanced market conditions. The EU funding or cofunding of the supply reduction scheme is a partial response to the clear weakness of the March scheme, based on a voluntary approach.

2.3. Simulations of shocks and envisaged market measures: impact scenarios

To help revealing both potentials and limits of the market instruments available to mitigate the consequences of the disturbances observed from 2013 to 2016, we carried several simulations on the dairy market. We performed counterfactual scenarios to provide quantitative illustrations for the assessment of market measures taken to tackle the crisis. The purpose is first to better understand the strength and origin of the recent shocks on the EU dairy market, second to compare the impacts of the measures decided or envisaged last March and thirdly to identify guidelines for conceivable new policy frameworks or instruments which would offer good economic properties.

For that purpose, we built a simplified and *ad hoc* model of the EU dairy sector linked to the world market. Although it does grossly simplify real world, it is still demanding information on economic parameters such as demand response to prices on both domestic and export markets, which are not available. It should also give global coherent outcomes. Annex I provides details of model content, assumptions and simulation results. The parameters rely on calibrations on both price and quantity changes observed in the recent period and on external sources.

2.3.1. Simulation of the 2013-15 dairy market developments

First, the model was used to describe the events over two full years from 2013 to 2015. The drop in farm gate market prices as a result of supply growth and the Russian ban is of similar magnitude as the observed one (- 18%), and it is almost twice as much for the wholesale milk equivalent market price (MEQP) based on butter and SMP prices (details in Annex 1). A first counterfactual scenario (n° 1 in Annex 1) explores the impact of the Russian embargo on imports from the EU on the dairy market. It suggests that the Russian ban explains nearly a quarter of this price shock and may have cost dairy producers more than €2 billion in gross revenues out of a total of the €7.3 billion losses from 2013 to 2015. This confirms first the severity of the Russian embargo but also that the main cause of the crisis is interior to the EU dairy sector, supplies having outstripped aggregate demand outlet developments over 2014 and 2015.

A second counterfactual scenario (n°2) applies the intervention buying as decided on 15 March 2016 for butter and SMP, assuming it had occurred in 2015 and that all offered quantities had been fulfilled.⁷⁷ The resulting correction of market unbalance is quite vivid. Farm gate price regain 16€/t, about one fourth of the price drop from 2013. Regarding dairy producer prices and revenues intervention of the March 2016 magnitude would have more than offset the impact of the Russian ban. This bears a significant reduction of dairy producers' revenue losses, which become about a third smaller than what actually occurred from 2013 to 2015.⁷⁸

⁷⁷ The buying in of 218 000t of butter and 100 000t of SMP are treated as a withdrawal of 2.5 million tonnes of MEQ.

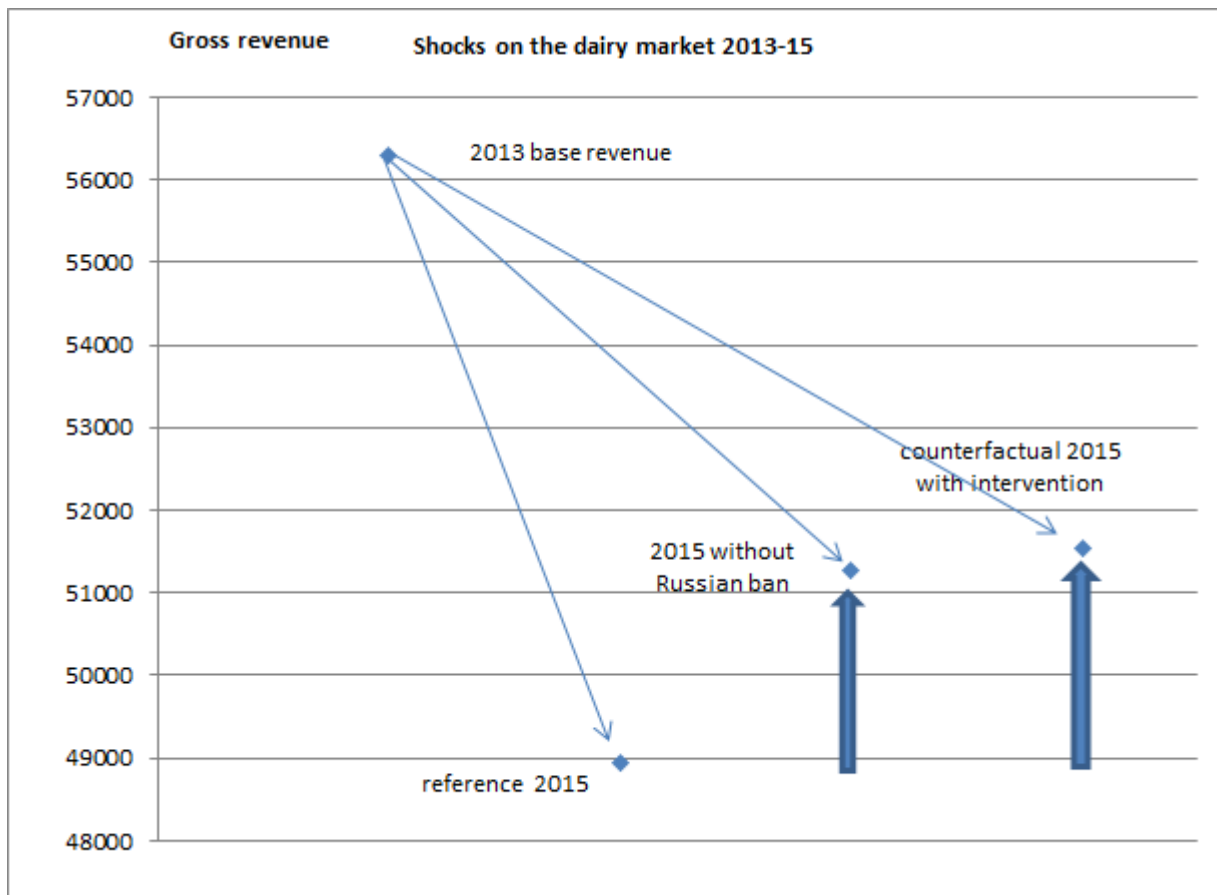
⁷⁸ Revenue changes from 2013 to 2015 combine volume increases and price falls, being partly offsetting.

A less attractive side of the coin is twofold: budget costs of the measure and the impact of higher EU prices on exports, which become less competitive. Budget costs (€600 million) are calculated as purchases of offered quantities at the relevant intervention prices of butter and SMP. The costs eventually falling on the EU budget depend on a number of implementation modalities such as the cost and duration of storage, the way stocks are disposed of, the possible decay in quality etc. As export restitutions are no longer feasible under recent international commitments, three modalities for disposal are possible. First, stocks may be progressively released on the internal market when prices pick up and are seen to be above a chosen reference. A condition for this to happen is that intervention has not been too strong in supporting prices above long run equilibrium, thus creating incentives to supply growth and lasting surpluses. In the present institutional decision making framework where Member States delegations and hence farm interests have a say into the short-term management of market measures, it will be difficult for the Commission to make decisions bound to depress market prices whenever they start recovering. This is one of the arguments in favour of our proposal laid down below to ensure that political institutions set long run objectives for the public interest, and delegate the day-to-day interpretation of these objectives to an independent authority. If stocks are thus sold at good prices, budget costs might be lower than purchase expenditures, provided storage and administration costs are low. Given past EU and international experiences and in light of empirical case and theoretical studies, the prospects for efficient use of public storage in a systematic manner for stabilisation are not encouraging. The two other obvious modalities are to allocate the stored goods to domestic and foreign food aid.⁷⁹

The second misgiving due to heavy-handed public storage is export losses. About 2 million tonnes of exports in milk equivalent are given up due to EU domestic prices picking up after intervention. The trade-off between higher EU market price and additional exports is becoming unavoidable with the emerging strong position of the EU as an exporter of dairy products. When the EU tackles a serious disturbance with market measures raising market prices, negative consequences are to be expected on export volumes and to some extent on domestic outlets.⁸⁰ Consequently, it is fostering the sales of EU competitors on the world market. **Figure 12** illustrates the two counterfactual scenario impacts on gross revenue losses.

⁷⁹ According to Article 16(2) of R1308/2013, products bought can be made available for food distribution to the deprived. In that case, the “accounting value” is the intervention price.

⁸⁰ Other authors, at least based on qualitative elements (e.g. Keane and O’Connor, 2013), share this argument. It is to be taken with some caution due to the simplified and aggregate approach we used. As cheeses in particular account for more than a third of EU exports in MEQ, their response to wholesale MEQ prices in the model needs qualification. One would expect that being quality products with brands, differentiation signs and reputation, European cheese exports would be less sensitive to prices than commodities such as butter and SMP.

Figure 12 : Simulated impacts of Russian ban and of intervention scenarios in 2015

Source: Simulation results from Annex 1

2.3.2. Comparing three ex post market measures to no action in 2015: intervention vs short run supply containment

We supplemented the three latter scenarios by simulating other policy measures such as a short run supply reduction. Two more counterfactual scenarios are then introduced to compare alternative market measures with the intervention scenario (N°2), taking scenario 0 (no action in 2015) as reference. In Scenarios 3 and 4, two supply-containing measures are introduced. These policies are variants of proposals circulated for example by the European Milk Board (2009) or by the French memorandum (Council of the European Union, 2016a). They greatly differ however, in that short run reduction of deliveries here is regarded as reachable through a reduction of cow yields. This option is technically feasible when the magnitude of yield adjustment is limited to a few percentage points. Recognising this possibility allows to take into account in policy assessment both the revenue effect of the price rise due to supply reduction and the feed cost savings due to lower intake of concentrate. Annex 1 reports technical details and assumptions. In the simulation we assume that the last units of milk are obtained by feed concentrate optimisation. This is the basis for cost savings evaluation. This assumption corresponds to the most intensive dairy farms with high potential herds. For farms relying essentially on grass and on-farm produced forage, the marginal feed cost would be smaller.

In both scenarios 3 and 4, producers engage into a 1.6% reduction of deliveries. This size of supply containment is chosen to produce the same reduction of surpluses as the public purchase decided in the last March Council. Hence, the comparison of instruments is made easier. Scenario 3 is called mandatory because participation is obtained through various

conceivable ways such as, with proper adjustments of the CMO regulation, making such participation a condition for benefitting from various EU budget funds. Therefore, supply reduction in scenario 3 is not achieved by an additional subsidy. Scenario 4 is similar to last March Council decisions to give Member States the possibility to grant subsidies from €15 000 up to €30 000 per farm participating in supply reduction schemes. Technically, it is represented by a subsidy of €219 per tonne of milk withdrawn from deliveries. This is the Milk Equivalent intervention price of butter and SMP intervention prices. It is lower than the average cost of production, contrary to what EMB suggested, as we consider that many reasons can motivate this choice such as marginal production does not cost more than marginal variable cost.

Box 3: One reference and three policy scenarios

One reference (no action) and three counterfactual policy scenarios applied to 2015:

- Scenario 0 = reference = projection from 2013 to 2015 with all actual shocks
- Scenario 1 = projection from 2013 to 2015 without the Russian ban
- Scenario 2 = Intervention (withdrawal of 2.5 million t of MEQ)
- Scenario 3 = mandatory supply containment (-1.6% of cow yields)
- Scenario 4 = voluntary subsidised supply containment (-1.6% of cow yields)

Several indicators are provided in Table A1.5 of Annex 1 to compare the three main market instruments, either decided (intervention) or envisaged (voluntary cuts of deliveries) to address the crisis. The three instruments have expectedly the same impact on market prices, since surpluses are reduced by the same amount in the short run. Farm gate price pick up 16 €/t from the level in the reference scenario 0, which corresponds to 2015 without any significant market intervention.⁸¹ This is a 5.3 % increase, which means a significant retrieval of revenue losses observed from 2013. With mandatory and voluntary supply reductions, the retrieval of gross revenues is smaller than in the intervention scenario, since the positive price effect has to offset a loss in volume produced and sold.

However, because of low demand elasticity, the gross revenue effects are close in the three scenarios (+€1.8 billion for supply reduction and €2.6 billion for intervention). To get a better view on implications on incomes, we used an indicator of gross margin over feed cost (GMOFC) to account for the technical relation between cow yields and feed intake. The savings on feed cost due to curtailing intensity can be significant, for intensive dairy farms in particular. It turns out that the ranking of the market instruments is not the same with this indicator. Market Intervention and mandatory containment have a very close impact on gross margin and voluntary (subsidised) containment is the most attractive policy for dairy producers in spite of the loss of milk volumes, since gross margin is about €400 to €500 million greater than in the other two scenarios.

The three market measures have similar consequences on domestic demand and exports, since they deliver a similar market price. They differ significantly regarding budget outlays however. With our assumptions regarding unit cost of public purchases and containment subsidies, public expenditures are in the range of €500 to €600 million and similar in both

⁸¹ In the reference scenario 0, public purchases of SMP of 2015 were taken into account but not the impact of private storage for which the empirical evidence was not available, although it probably had some effect. Including this effect would have driven the projected price closer to the observed one, i.e. in the right direction.

scenario 2 (intervention) and 4 (voluntary). The levels of required expenditures in the three scenarios need further discussion however and may change to some extent depending on implementation modalities, such as the way public stocks are disposed of in the case of intervention and the search for minimal level of subsidy to ensure participation in the case of voluntary containment.

Our analysis points to the potential for mandatory supply containment to deliver benefits to producers without requiring large budget expenditures like intervention and subsidised supply containment. This is because non-produced surpluses are obviously “cheaper to be disposed” of and “cheaper to produce” than those already on the market. The simulation exercise also reveals the likelihood of overcompensation for income losses in a programme of subsidised supply containment (such as the modalities envisaged at least in the early versions of EMB proposals) in which both the King effect (i.e. low demand elasticity) is probably underestimated and the cost saving effect have been overlooked.

Comparing mandatory to voluntary scenarios throw some light on problems which are bound to arise from the last March 2016 Council decisions regarding the possibility granted to Member States to conduct short run supply reduction programmes in the framework of pillar 2. In scenarios 3 and 4, all farmers are supposed to participate in the yield reduction effort and all producers also benefit from the resulting price hike. This price effect was seen to be the major cause of retrieval of revenue losses relative to scenario 0 (reference, year 2015, no action save for crisis envelope), hence this market effect is of great value to all farmers. In the present voluntary scenario 4, we assume that the incentive given by the subsidy is able to enrol every producer into the supply reduction programme. The price effect is the same and benefits to all. Now suppose that only half of Member States with only half of the EU production use their Rural Development Plan tools to entice their farmers to reduce yield by 1.6%. The volume impact on EU supply will only be 0.8% and the price restoration only half of the 16 €/t per ton obtained in our scenarios.

2.3.3. A critical view of the voluntary (subsidised) supply containment scheme

The possibility to adjust supply down not only without income losses but on the contrary with a gain seems to have been overlooked by the proponents of short run containment measures.⁸² Furthermore, when a subsidised supply containment scheme is only left as a possibility for Member State in the context of their Rural Development Plans,⁸³ an additional layer of market and political inefficiency will be introduced in the CAP approach to market regulation.

In Annex 1, we elaborate the problem of supply containment coordination and present analytical conditions showing that a spontaneous movement of supply reduction at the initiative of Producers Organisations across Europe is very unlikely to occur. This is true even though our simulation results show that it would be in the interest of all producers provided all of them would participate. The reason is a common feature of economic situations whereby a public good may be produced to the benefit of everyone, but where no one has the incentive to start making a financial contribution. Since anyone will benefit from it anyway if the good is provided, and if one person starts contributing and is not followed, he/she will be the loser. These situations are known as prisoner’s dilemmas or coordination failures. In our case the public good is a better market price and the individual

⁸² As shown in Box 1 Annex 1, even with a very unlikely demand elasticity (relative to wholesale milk price) close to -1, a supply reduction would have at worst a neutral effect on receipts, but still a positive effect on gross margin since variable and particularly feed costs can be reduced.

⁸³ European Commission (2016b).

contribution to public good provision is own supply reduction. Clearly if better prices prevail on the market, it is impossible to deprive any producer from benefiting. Hence, every individual has an interest in waiting for others to cut supplies. Thus the non-participant will be able capture the gains from better prices without bearing the cost of cutting his own deliveries.

If a minority of producers⁸⁴ enter the programme they will not get a benefit from higher prices since the positive price effect will be smaller than their negative volume effect. Hence, such a minority has no interest in being enrolled in a voluntary unsubsidised scheme. It will therefore not happen. The likely result is already observed on the present market crisis: no concerted movement of supply restraint has emerged either in the 2013 price boom or in the present crisis, in spite of the possibility given in Article 222 of the single CMO, although it requires Commission implementing acts to be safe regarding competition rules (Article 101 of TFEU).

A subsidised voluntary scheme can however ensure participation of some producer groups in some Member States. National governments may circumvent the lack of coordination of Producer Organisations and provide an incentive in the form of a subsidy that makes individual supply reduction beneficial even for the front-runners. A subsidy is capable of changing the observed equilibrium and a minority of producer groups may then enrol the programme, and generate benefits regarding price hikes. These benefits will however be limited by the partial participation of dairy producers and the subsequent small price restoration compared to the available potential.

A major consequence of such a scheme is that part of European dairy producers helped by their national taxpayers will reduce their deliveries and by ensuring better prices will provide non-participant farmers and Member States with an immediate gain in revenue. This will generate a further incentive for supply increase in dairy farms of non-participant Member States. Eventually, taxpayers of participant Member States will subsidise production growth in the rest of the EU.

The Commission has issued a non-paper spelling the conditions for "State aid support during the 2016 crisis" to be deemed compatible with Art 107 of the Treaty (European Commission, 2016b).⁸⁵ Temporary grants, loans and guarantees are accepted in the context of production freeze or reduction schemes. "Reasonable" amounts with regard to single market are up to €15000 per holding. Governments can also pay *de minimis* support, which is not considered as state aid.⁸⁶ Aids should relate neither to existing production nor to prices and should not discriminate foreign and national markets, nor be indirect assistance to exports.

These conditions are not consistent with the approach of yield and intensity moderation as considered in our scenario 4, where a proportionate supply reduction applies to every producer. The Commission guidelines do not quantify curtailment obligations required from farmers. The condition is only no-increase from last year, which is not a demanding counterpart. Windfall gains accruing to people having decided to reduce or stop production

⁸⁴ Precisely if participants account for only a third of EU supply (and even for a higher share if non participants respond to better prices), they will still be losing.

⁸⁵ Other possibilities exist to alleviate liquidity gaps. The current regime of State aid can also be for rescue, restructuring and closure of production capacity.

⁸⁶ *De minimis* support to a single undertaking « shall not exceed €15000 for any period of 3 fiscal years, provided the global amount of such aid does not exceed 1% of annual agricultural output". European Commission (2016b) http://ec.europa.eu/agriculture/stateaid/legislation/index_en.htm.

anyway will be hard to avoid. The scheme appears as a cure for tackling financial stress situations rather than a market measure built on market dynamics and mechanisms. It will be time consuming to administer.

One important feature of the State aids allowance introduced in March similar to our case study is that taxpayers in some Member States will end up supporting supply developments in the rest of the EU. Non-participating dairy producers will be the great beneficiaries of this ill-conceive policy game, and this at no cost in terms of volume loss nor for the national treasury. Farmers in participating Member States will cash-in both the price effects and the subsidy (mainly financed by national budgets presumably). They may even benefit as much as the non-participants because price rise, subsidy and feed cost savings all add up. But, the clear losers are taxpayers in the participating MS and the clear gainers at no cost are producers and Member States who do not participate and free ride on the voluntary scheme.⁸⁷ Such a flexibility granted to Member States is nearly a worst-case scenario of policy design. A clear incentive to free ride on the policy is built into the system. This is an example of ill-conceived implementation of the principle of subsidiarity, which aims to internalise externalities in decision-making and in the financing of public goods, and not to introduce new ones into the system. The externality is artificial and avoidable in the present case. It comes from failing to recognise that single market is a European public good and hence has to be managed, regulated and financed at the EU level. This is the reason why we have already proposed to bring together market measures and tools of price risk management in a third pillar for reason of policy design and good governance.⁸⁸ Further, we think that if the EU really wants to make good use of limited but adequate market measures, basic payments to non-participants in supply regulation and risk coping programmes could be suspended, at least when a market crisis is brewing.

Once more, the CAP has generated a prisoners' dilemma, with the resulting consequences on production inefficiencies and spoiled budget expenditures. It further seems paradoxical that the Commission has laid down conditions for these aids to be compatible with the functioning of the single market as required in the Treaty, but the institutions seem to overlook that in such a voluntary scheme participants indirectly subsidise production of other Member States, a sort a reverse market distortion.

This appears as a case of government failure and a contradiction with the general principles of the single market, whatsoever legal conditions regarding decoupling and non-discrimination rules in the State aid Regulation are reminded to Member States.⁸⁹ Such scheme is unlikely to result in efficient allocation of production across Europe. Such a course of events makes sense only because of political agendas, excessive pressure of lobby groups in favour of short run solutions in some Member States, and because the EU is unable to agree on clear objectives for agriculture policy. One can only regret that with flexibility given to Member States in Pillar 2 policies an additional externality was to be added in the CAP decision making thus generating inefficient policies and misused fiscal resources.

The above analysis was written before the last Commission proposals of July 2016 and the new €500 million package of support. Interestingly, the new support from the EU budget focuses on measures to "incentivise supply reduction". The new scheme is a clear response to the flaws mentioned above of the March 2015 scheme, which was optional and left at the initiative and finances of the Member States, with a reminder to Member States that

⁸⁷ With the exception of consumers in the latter.

⁸⁸ Bureau and Mahé, 2015; Mahé, 2012.

⁸⁹ And in the Commission « non-paper » (European Commission, 2016b).

restrictions on State aids were to apply. The new device is still voluntary but the EU budget now finances or co-finances the programme thus reducing the extent of externalities between Member States that we pointed out previously. A next step will be to introduce *crisis prevention cross compliance* between basic payments and participation in EU market measures and risk coping programmes.

2.4. The crisis in light of a benchmark and curative vs. preventive policy

2.4.1. The crisis relative to benchmark and market measures effects

To grasp another view of the crisis since 2010 and to set the deep shocks of the last two years into a longer time perspective, we compared exceptional market situations of 2013 and 2015-16 to a more meaningful benchmark reflecting less extreme market conditions. The benchmark is defined as a “virtual 2013” with actual quantities but with the farm gate price replaced by the average price of years 2011-2015, which is 336 €/t. Then we assess the actual (reference) 2015 situation and the outcomes of the three policy scenarios taking the benchmark year 2013 as a reference. Selected indicators are gross revenues as in preceding simulations, but also gross margin over feed costs. Since production increased by over 6.5% in the last two years, taking at least part of variable costs into account will provide insights into income developments. **Table 11** of Annex 1 shows the details of indicators derived from the simulations.

Compared to the benchmark, gross revenue losses in 2015 are less than €3 billion, about a third of the actual shock undergone between the actual 2013 peak and the 2015 trough of prices. This is just an elaboration of the evidence that the 2015 crisis occurred after an exceptional price boom in 2013 and therefore that, when looked at from “normal” average market situation, 2015 year is less dramatic although the disturbance remains serious and exceptional. This illustrates how deeply dairy farmers feel a price drop as observed in 2015, even if the distance from an average year is less than the actual collapse from 2013 peak to 2015 trough.

With the three envisaged policy actions the sum of revenues and subsidies bring total receipts back in the vicinity of the benchmark, intervention being more favourable for producers than mandatory supply reduction (because the same price applies to higher volumes with intervention than with supply containment). Hence, according to our simulations, the three market measures decided in March 2016, if applied in 2015, had the potential of maintaining dairy farm receipts close to a benchmark year.

However, total receipts changes are not adequate indicators of income changes. To provide some insights into how incomes would have fared relative to benchmark, first without market measures and second under the three policy scenarios, Gross Margin over Feed Cost is again used as an indicator. This margin is expectedly further away from benchmark than revenues because operational expenditures have increased with production from 2013 to 2015.

First, gross margin in 2015 in the reference (no action) scenario is well below benchmark, and further down than gross revenues because of variable feed costs. With a conservative

assumption about feed costs, margin losses would be at least €3.4 billion⁹⁰. In all three policy action scenarios, the situation is much better but still in the negative side. Gross margin remains significantly below benchmark ⁹¹ by about €1 billion. Hence, while market measures at stake are sufficient to restore farm receipts, they are inadequate to bring gross margin back to benchmark. This reflects the magnitude of the 2015 market disturbance.

Four salient features of dairy farms situation emerging from the previous analyses are worth pointing:

- from 2013 to 2015-16, the shocks on receipts is considerable but market measures are fairly good at alleviating revenue losses (up to a third for intervention) thanks to low demand elasticity;
- when an “average” 2013 is used as benchmark, the 2015 situation looks much less dramatic regarding gross revenues, and with the help of the three market measures and crisis envelopes total receipts are nearly or above benchmark;
- however, gross margin over feed cost in 2015 is significantly below benchmark, not only in the no-policy action scenario but also in the three scenarios where market measures are actioned;
- budget expenditures -market measures and crisis envelope- are around €1 billion (save for mandatory supply containment), but do not have enough clout to prevent gross margin from remaining about one billion below benchmark;
- supply containment left to Member States initiatives as an anti-crisis device appears to be flawed by exposure to free riding, prisoners dilemma and political failure.

In the light of these simulations and keeping in mind the limits of the exercise, it seems appropriate to examine first the potential of complementary approaches to cope with market crises and to design safety nets. We propose qualitative discussion of other approaches in chapter 3, but it may be relevant to illustrate a preventive policy through a final simulation.

2.4.2. Merits and weaknesses of curative market measures and potential for prevention

To summarise the economics of the main market measures decided in March 2015 once the crisis was established, it turns out that such *ex post* policies have the capacity to restore prices significantly. This may translate into export losses, but gaining export shares thanks to prices well below benchmark and probably under average production costs is not sustainable either. Intervention has the power to raise prices by withdrawing from the market goods which have already been produced and for which an outlet has to be found and possibly paid for. But both intervention and late supply reduction in the middle of crisis have in common a major deficiency, they are curative policies and come late in the dynamics of farmer decisions and market behaviour. Resource waste and more taxpayer contributions are the resulting sanctions for society as a whole.

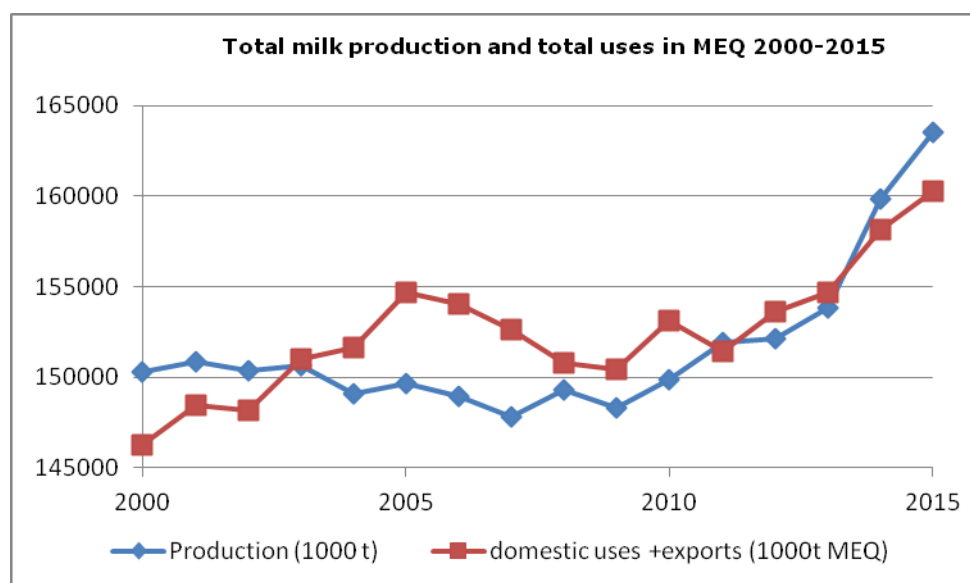
That crisis mitigation by *ex post* policy action implies a social cost or deadweight loss does not come as a surprise. Hence, before discussing feasibility, it is worth exploring the impact

⁹⁰ By conservative we mean taking the average feed cost ratio in turnover in FADN dairy farms. To give a sense of magnitude of this loss in margin, it would be in the range of 10% with these assumptions.

⁹¹ Details are in Annex Table 11 (GMOFC loss estimates are 0.79 billion for voluntary, 0.83 for intervention and 1.3 for mandatory scenarios). We also considered a more pessimistic option for feed costs changes, where by additional milk comes from concentrate. GMOFC loss is then 4.8billion€ in reference scenario.

of preventive measures. Such measures could have been envisaged in 2013 for example, when signs of diverging trends in production and total uses were already appearing. Forecasting is a deceiving exercise in economics and rewriting history is too tempting not to call for caution and modesty. However, as illustrated in **Figure 13**, the growth rates of aggregate demand and global production exhibited strong signs of divergence. With supplies accelerating and sluggish development of dairy products use (save for cheese), overcharge of markets was to be expected with fairly high probability, thus anticipating downward pressures on prices.⁹²

Figure 13 : total supply-demand developments in Milk Equivalent 2000-2015



Source: Own calculations based on Balance sheets and historical price series; European Commission (2016f)

Taking measures in 2013 when prices were soaring, with the aim of restricting future deliveries, was somewhat inconceivable in the current policy making setting of the CAP. There was no demand for action to start slowing down future production coming from the most active stakeholders and particularly producers and even collectors. An example can be found during the 2007-9 market developments. Early efforts by think tanks to make contributions to the upcoming 2013 CAP reform started in 2007-8 in a period of booming prices for many farm commodities. In sessions where stakeholders were invited to discuss reform orientations, the constant position of farmer organisations was to dismiss any phasing of payments on the argument that the world was underway to lasting shortages and that it therefore was the time to enhance production capacity.

When the crisis is there, it is common to forget about the recent boom during which high prices meant high revenues and exceptionally high margins. The mirror image of exceptionally low revenues suffered in 2015 is exceptionally high revenues enjoyed in 2013. For purpose of illustration, with data used in the simulations, gross revenues in 2013 were between 4 and 5 billion € over benchmark. Hence, because gross margin and income are a fraction of receipts (see Annex 2) amplification meant a greater relative boom in net incomes.⁹³ It is striking that the various stakeholders and analysts hardly mentioned this

⁹² As we observe data after short run price adjustments have taken place, which reduce supply-demand gaps, truly exogenous indicators of likely future market unbalances should be even more visible.

⁹³ In the 2014 Dairy farm report 2015, gross margin was in 2013 about nearly 30% above 2012, European Commission (2016c).

evidence during the crisis. The dissymmetry and the inclination to forget recent events and to focus on the harmful consequences of adverse market events is a hardly avoidable consequence of pressure groups actions in a democratic system, but it is also a liability in good policymaking.

We then ran two additional scenarios, one of which is both preventive and designed and triggered before the crisis and hence in the midst of the price boom. Scenario 3' is an *ex ante* supply containment whereby in 2013 supply growth over next two years had been limited to 4 %. With quotas still active, it was feasible with super levy applied as a convincing argument.⁹⁴ In absence of quotas, firm enough demand from an empowered European authority to Producer Organisations to limit production would be required to deliver such a result. Detailed results in Annex 1 suggest that farm gate prices would then have stayed fairly close to benchmark and higher than in the intervention scenario. Gross revenues would have virtually been at benchmark levels and gross margin over feed cost not far from benchmark if the crisis envelope had been maintained. The voluntary subsidised ex post reduction scenario 4' has the same price and revenue effects, but coming late it is seen as requiring aids for revenue foregone. Depending on the subsidy rate⁹⁵, it may appear as a costly option for taxpayers and prone to overcompensation.

Depending on the priorities of policy makers and on legal powers given to EU market monitoring institutions, the course of events and the choice of policies will reflect, at least in qualitative terms, the relative merits and weaknesses of the displayed scenarios. A preventive scenario such as 3' is appealing as it saves budget resources and maintains incomes. But the institutional context to make it prevail is demanding if the darker sides of production quotas are to be avoided.

The economics of market measures shows that they have the power to prevent or mitigate deep price disturbances, but when coming late they do not address properly the waste of productive and budget resources. Selling surplus production below cost as with ex post intervention in particular implies a welfare loss. Preventive policies look attractive at first glance, but implementation raise political and institutional issues.

Because of these limitations, market measures, and in particular the ones taken *ex post*, do not seem to offer a sufficient response to address the implications of price volatility. The possibility to combine market measures with risk management to both prevent and alleviate deep market disturbances is a natural route to explore. Other policy instruments such as direct payments are also candidates to bring into the picture.

⁹⁴ When prices and revenues start falling, the Commission is tempted to delaying the enforcement of the superlevy which may be counterproductive in the long run regarding policy credibility (see section 2.2.2).

⁹⁵ This is 219€t in our case study.

3. TAKING STOCK AT THE CURRENT CAP SYSTEM TO ADDRESS MARKET CRISES: WIDER LESSONS FROM DAIRY AND OTHER CASES

KEY FINDINGS

- Market orientation gives useful incentives for long run supply response to demand developments; but booms and bursts also reflect market failures.
- Disturbances in EU agricultural markets can be caused by exogenous and random determinants. However, farmers' behaviour and ill-conceived policies fuel market disturbances. Decision makers seldom address price booms, and demand for intervention from stakeholders is asymmetric in the cycle. Request to address "volatility" *de facto* only means demand for public support in times of low prices.
- Farmers' excessively optimistic expectations during price booms boost production capacities and future supplies. Investment and borrowings respond strongly to outlook and worsen the financial stress when prices collapse. Even land acquisitions compete with precautionary savings.
- Direct payments do not reduce income variance but only provide a buffer. They are still excessively concentrated in the larger farms. By their financial leverage, they contribute to boost supply in larger farms when market conditions are good. They are part of the problem rather than the solution.
- The Reserve for Crisis is clearly inadequate. It needs more legal security. Reduced Basic Payments could make more funds available for Risk Management Schemes and for the Reserve. Emergency envelopes from the reserve should not single the rescue approach adopted in the banking sector. Distribution criteria should incentivise risk prevention behaviour and discourage risks-loving business plans.
- Public storage can be effective as a curative measure but it now faces constrained disposal of stored goods and has perverse effects on lost exports. Buying prices should not give a lasting outlet for low cost producers. Private storage, although not transparent, has the advantage to avoid thwarting outlets. Food aid is clearly underdeveloped in the CAP, but its primary goal cannot be to tackle surpluses.
- Risk coping schemes in the new CAP is clearly undeveloped. Insurances and mutual funds for natural hazards can stay in the second pillar within subsidiarity. This is not possible for income stabilisation schemes since price risks are systemic, and market measures and Risk Management schemes can either boost each other or conflict. Triggers of compensation from the 2013 CAP Income Stabilisation Tool (IST) depend on market intervention. Price risks being systemic, pooling risks is not possible. "Matching Fund" is a better approach than the (misnamed) current "Mutual" fund of the CAP. Article 39 (Regulation (EU) 1305/2013) needs extension, and precision.
- Income or margin definition is key factor in the triggering of compensations from IST. Our simulations over last 15 years suggest that an IST with income defined as Gross Margin Over Operational Costs would have barely activated compensations in crises. Net Incomes raise other problems. Benefit distribution from IST as well. Producer Organisations would gain market power if in charge of Matching Funds.
- Good policies first require shifting focus from immediate assistance towards giving the right signals and incentives to farmers. Policies should favour business and

financial choices limiting future risk exposure, holding precautionary savings and participating in Matching Funds.

- Integration of all relevant policy tools is a necessity. *Crisis prevention cross compliance* should tie eligibility for Basic payments to participation in Risk Management Schemes, and in supply restrictions when needed.
- An independent Authority would be more able to ensure time consistent and efficient implementation of instruments, to prevent deep market crises, to limit risky behaviour and to mitigate effects of truly exogenous and unavoidable shocks.

3.1. Market orientation and price disturbances

Market orientation is the principle founding the single CMO. Still, price disturbances were expected, and the CMO foresee ways to tackle them; but the vision of how markets function tends to focus on exogenous shocks, natural or economic. Hence, the policy approach is mainly palliative.

When crises occur, the temptation is to single the random or exogenous causes of disturbances. It was obvious during the current dairy crisis. The Russian ban was long seen as *The* problem. Hence, the choice for mitigation of effects with limited intervention and emergency aids.

It took time to trace back the causes of the price drop to abundant supplies, and even more to trace these abundant supplies to the favourable market outlook and prices of the early 2010's. Hence, a truly preventive approach to regulation hardly emerged.

However, price instability is also the consequence of the behaviour of agents responding to price signals and other incentives such as subsidies. As already mentioned, in 2013 margins of dairy producers were well over previous years due to the immediate price effects on revenues; hence, producers' plans for strong expansion.

This dynamics of supply response is a well-known feature of farm commodities. Extensive research has explored and empirically verified the pattern, particularly in livestock markets.⁹⁶ It tends to generate cycles of high and low prices. Cycles are irregular because random shocks disturb the inner dynamics of markets. External shocks tend to rekindle fluctuations, since price expectations of farmers rely excessively on observed prices. If expectations were rational, high price levels sticking out of the normal frame would not lure farmers. However, over-reaction persists and empirical studies do not support rational expectations.⁹⁷

Recently Nobel Prize winners Akerlof and Shiller (2009) focused on the concept of "animal spirits", already called upon by Keynes to account for erratic variations of commodity prices. They stress the importance of a "non-rational" and instinctive component in economic behaviour. They argue that this imitation of neighbours, in spite of rational awareness that prices are forming a bubble in contradiction with economic fundamentals, has played a major role in the global crisis initiated in 2008. This type of behaviour is

⁹⁶ The so-called Cobweb model of Ezekiel has been widely applied. For example, Mahé (1976, 1977), Drouet and Mahé (1978) have explored the pork and beef markets.

⁹⁷ Nerlove and Bessler (2001).

certainly a contributing factor to fuel speculation and exceptional price fluctuations on agricultural markets.

Moreover, excessively optimistic response to price booms implies further destabilisation of farmers due to financial behaviour. Boosted investments and borrowings in good years lead to financial stress when market conditions reverse.

Hence, market orientation has merits but also limits. The question is not whether but how to regulate markets. Great hopes were placed on Direct Payments to provide income safety; but their implementation, in dairy for example, seems part of the problem rather than of the solution.

3.2. Amplification of price disturbance effects on farmers' incomes

Because of the dynamics of markets, crises and price collapses often come after a boom. Hence, this sequence amplifies the shock and makes the perception more dramatic. In relation to an average year as benchmark, the shock looks less profound; but with prices below benchmark and larger volumes, losses in gross margins are larger than losses in revenues, because variable inputs have increased.

In the very short run, a given price shock has an impact on gross revenues of similar magnitude, but its impact on incomes is amplified. Production structure is rigid and factor prices are sluggish, the margin after paying for external inputs has to absorb the shock.⁹⁸ The larger is the cost share of purchased inputs, the smaller is the share of income in revenues (see Annex 2). Hence, income being the bottom line, it takes the brunt of the revenue shock. At one extreme, a farmer relying only on family labour and owning capital and land- and with hardly any purchased raw materials- will spread the revenue shock on all owned inputs save purchased intermediate inputs. His income has nearly the same percent shock as his revenue and the prices he faces. At the other extreme, for a highly intensified farmer relying on paid labour, borrowed capital and rented land, income is a narrow fraction of revenues, close to a notion of profit. A given percent shock on revenues has much larger percent impact on profit, which can easily turn negative and lead to bankruptcy.

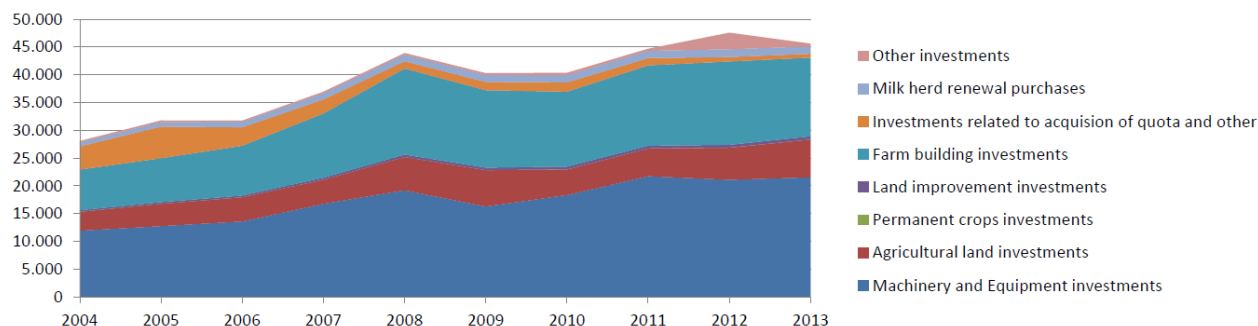
Farm structures have differential implications regarding the ultimate beneficiaries of market measures in the short run. It will also be an issue for assistance to income stabilisation tools. Price support goes to labour in family farms. It goes mainly to capital in commercial farms. Aids to IST based on a unique definition of income such as gross margin would have differential implications of a similar kind (section 3.4, and Annex 2). Therefore, the impact of farm structures on the distribution effects of new support schemes to tackle crises and mitigate risks needs scrutiny. The problem is apparent for direct payments, although not properly addressed. It is an issue for assistance to emerging risk management schemes.

Amplification of impacts also comes from the dynamics of investment and capacity building in response to favourable market conditions. Farmers planning to push up their output in reaction to perceived profits or income opportunities decide to invest in production

⁹⁸ In the case of dairy farms there is apparent evidence however that operating costs are influenced by milk price developments (MMO board meeting 24 05 2016, see Figure 8 below). This may be a sign of a rather flexible short run production structure which should bear on short run intensity and elasticity; and a potential stabilising force for gross margins.

facilities, machinery, herds and sometimes land. This mechanism is so strong that it is visible on time series. To illustrate the case in point, Figure 8 shows times series of investments in specialised dairy farms based on data from FADN⁹⁹.

Figure 14: Evolution of investments in specialised dairy farms 2004-13 (EU-15)



Source: FADN, special communication

Evidence is that in periods of fat years expectations are so optimistic that a surge of investment is visible with a little lag on time series. In 2007-8 and recently in 2011-12 investments reached a peak and then dropped significantly both in 2009 and 2010 to start rising again.¹⁰⁰ Noticeably, these investment rushes and declines correspond to times of high and low prices for several products but for milk especially. More remarkably, the most sensitive investment component to market conditions is machinery (bottom dark blue). Even investments in land respond to the income situation.

The role of fiscal and subsidy incentives as well as direct payments are worth considering in European FADN analyses to better understand investments in the dairy sector while permanent negative "net economic margins"¹⁰¹ seem to prevail on average.

With investments in the rise, new borrowings follow suit. Times series of from FADN sources show that new borrowings in specialized dairy farm increased threefold in 2008-9 from 2004 and dropped sharply (Figure A2.2, Annex 2). Young farmers recently started in a context of good market conditions probably undergo an accentuated form of swing in their financial situation based on optimistic expectations. Clearly, a reversal of market conditions is particularly threatening for the financial situation of beginners and farms with a large indebtedness. Dairy farms have large debts in Member States such as Denmark (Commission, 2013). Their exposure to price risks is high, even if on average they rank high in efficiency and profitability.

To sum up, price and income booms seem to generate overly optimistic expectations, investments and borrowings. This dynamics of supply behavior can induce destabilising

⁹⁹ Cooperation of the FADN staff is acknowledged for doing a special exploration. Evidence of response of investment to income situation in the whole farm sector is shown in Annexe 2 from (Ministère de l'agriculture, 2015). Gross value added is often a very good explanatory variable of investment behaviour e.g. Mahé et al. (1983).

¹⁰⁰ FADN data for 2014 and 15 (not yet available) should show a drop for specialised farms as can be seen for the whole farm sector in France (Annexe 2, figure)

¹⁰¹ As reported in the 2015 Dairy Report Annex, European Commission (2015f). The 2013 Dairy Report European Commission (2013) displays data on Farm Net Value Added (FNVA) per Annual Working Unit (AWU) where the share of direct payments appears, and data on Farm Net Income per AWU but only for family farms. One wonders why the analysis of distribution issues does not cover indicators such as FNVA and FNI per owner of the farm enterprise. This would clear up financial risk exposures and distribution issues in risk management and market measures.

mechanisms, deeply felt when the market outlook turns red. This is why the whole system of policymaking should act preventively during booms, and give right signals and incentives to dissuade farmers from excessive risk exposure.

3.3. General CAP policy instruments and market instability

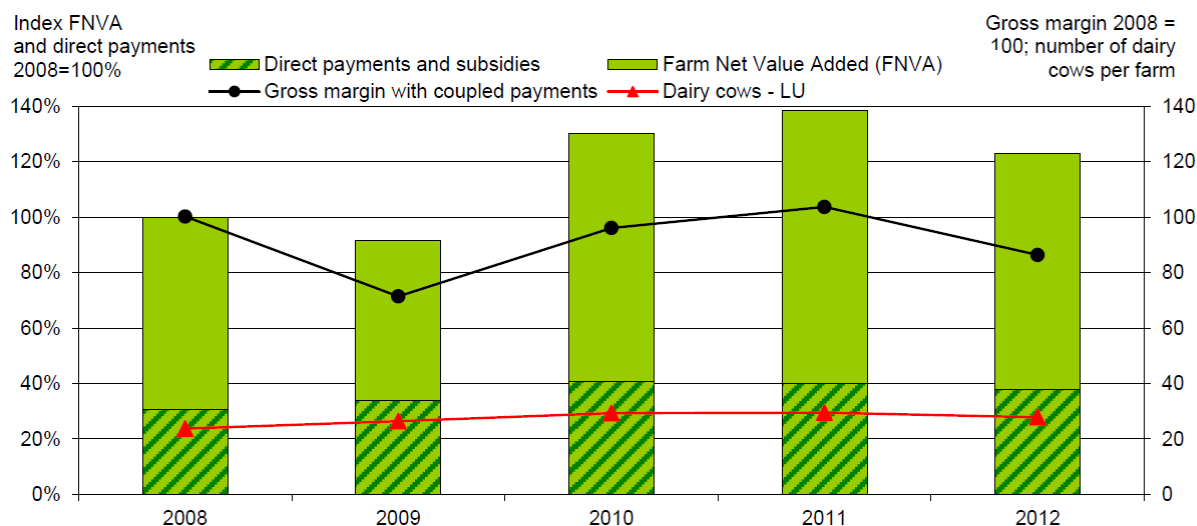
Several CAP instruments interfere with market disturbances, directly or not. Direct payments, although decoupled, are bound to influence producers' plans. Emergency envelopes of crisis aids help mitigation, but which signal do they give? Are Risk Management Schemes such as the IST able to smooth impacts and change producers' attitudes *vis a vis* risk exposure? The challenge is to ensure that all instruments are consistent and self-reinforcing.

3.3.1. Direct payments

Direct payments were supposed to contribute to stable farm incomes.¹⁰² However, adding a constant to a random variable does not change its variance. Hence, in absolute terms, direct payments increase the mean of variable incomes but do not make them more stable.

In relative terms however, the ratio of the standard deviation to the average income is smaller with direct payments because of the larger denominator. Thus, some agents may perceive the reduced variability of income in percent as a progress. Nevertheless, shifting the mean income to the right does not change the probability a given amount of losses, losses being the gap from average income. The only merit of direct payments is to provide a floor of safe income - unless risk exposure for some farms is large enough to make losses larger than payments, and financial failures more likely. Dairy farmers' demonstrations during the last two crises suggest that this fixed component of income is unable to mitigate financial stress.

Figure 15: Direct payments and "income" in dairy farms (EU-27)



Source: European Commission (2015e)

¹⁰² This misconception is widespread e.g., the High Level Group Report (European Commission, 2010, p.19) states "...according to most Member States direct payments should be maintained to reduce income volatility".

Figure 15 shows how the relative variability of incomes derived from direct payments and from production. The latter component almost doubled from 2009 to 2011. Direct payments on average account for around 30% of Farm Net Valued Added and for a larger share of Farm Net Incomes after paid wages. The 2013 dairy report shows how heterogeneous is the dairy sector across Europe, and within Member States (European Commission, 2013). This heterogeneity is also particularly large in Denmark and The Netherlands, to a lesser extent in Belgium and Ireland. The “good performers”¹⁰³ are so high above the average of producers that 75% of farms are below average. The report shows that the small minority of “good performers” have collected good “incomes” defined as FNVA/AWU in the range of €65000 to 90000€ over the 2004-11 years. Unfortunately, according to this Commission's income criteria, good performance index includes direct payments and does not only reflect cost effectiveness.

Explorations¹⁰⁴ on latest available 2013 data suggests that correlation between farm sizes, Net Farm Income per undertaking, Net Farm Income per unit of family labour, and direct payments per undertaking is quite strong. The evidence is that incomes and payments concentrate in largest farms. In 2013 Net Farm Income per undertaking in the 20% largest dairy farms was over €100 000, of which direct payments accounted for €45 000 while the 60% smaller units had only €27000 of Net Farm Income and €12600 of Direct Payments. These net incomes vary over years and market conditions, but sharp response of investments to income and market conditions as mentioned above is not a surprise. From the same data, investments in larger farms are not only larger but also more responsive to market conditions. The largest farms increased their investment in machinery faster than average dairy farms¹⁰⁵. Difference in response for land investment is even larger. Data on dairy cow numbers also show a jump in 2008, in the 40% larger dairy farms.

We usually look at issues of direct payment distribution per undertaking from an equity standpoint. However, payment concentration is also an efficiency issue because it fuels investments, specialisation, risk exposure and future demand for relief in market crises. When such larger farms are efficient as the “good performers” mentioned above, farm net income of the owner may fall sharply but also rocket in good times. Savings rate is an increasing function of income, and investments follow suit. Direct payments concentration most likely carries a decisive strength in the financial resources, and provides further leverage for investments and expansion plans. Once an investment boom occurs, new assets are little reversible and not available in the future to cope with bad years. If farmers have no incentive to hold precautionary savings in good years and to limit risk exposure, and expect government to come as a last resort, there is a built-in mechanism of inefficient use of budget resources to cope with market disturbances.

Without serious capping of payments, the conjecture is that they play a significant role in pulling farm sizes upwards, and in boosting up investments in fixed assets rather than in precautionary savings. In a period of major policy change with the end of quota preceded by good market conditions, direct payments added a push for expansion to market forces. This means that the EU budget was boosting up supply on the one hand and is now caught in covering the withdrawal of surpluses it contributed generating in the first place. Since market measures raise prices for everyone including those responsible for the glut, there is

¹⁰³ Defined by high Farm Net Value Added (FNVA) per Agricultural Working Units (European Commission, 2013, p.27).

¹⁰⁴ We thanks FADN cooperation for these explorations, made available before completion of this report (Annex 2 Figures A2.3 to A2.7).

¹⁰⁵ 73% for the 20% largest against 61 % for the whole sample from 2004 to 2008.

no incentive in the current system to ensure an orderly development of production. From this evidence, there must be a way to improve incentives in the CAP system for the benefit of public interest. This also extends to the design of risk management tools.

Without further evidence, the distribution of CAP direct payments as it stands now fuels the drift of farm structures to higher sizes and to more outsourcing of inputs and services, which have sticky prices. The consequences are a shrinking net income share of turn over, an exacerbated risk exposure and further needs for public safety nets through market measures or subsidised income tools. The skewed distribution of direct payments appears as destabilizing markets rather than the contrary.

3.3.2. Reserve for crisis

Following the Commission proposals, the last reform introduced a new financial instrument to deal with market disturbances: the Reserve for crises in the agricultural sector¹⁰⁶. This reserve fund is "intended to provide additional support in case of major crises". The wording of Articles 25 and 26 is highly constraining however as regards the possibility to build up a fund reserve of a significant magnitude. The envelope of €2.8 billion for the financial period is somewhat misleading since the drawings from the basic payments envelope are limited to a modest €400 million per year. The current crises have clearly shown that, in the case of one or two markets under deep depression of prices, this envelope is far from the mark. Whatever provisional are our simulations, the magnitude of revenue losses in the last dairy crisis count in several billions.

The effectiveness of emergency envelopes such the €420 million decided in early stages of the crisis has been limited by implementation problems not yet identified and potentially due to learning process in the Commission and in Member States. In his response to Oral question the Commissioner for Agriculture mentioned that in February 2016 "only €120 million allocated to Member States in September had been spent in 14 Member States".¹⁰⁷ Moreover the Commission prescribed to allocate up to 80% of the €420 million envelope according to quota references, with top ups targeted to most hurt farmers by the Russian embargo and lower prices. Curative measures such as emergency envelopes could provide better incentives. Distribution in proportion to farm sizes and without any signal or incentives for producers to adopt either preventive or risk mitigation actions does not prepare for resilience of the sector in the long-run.

The Reserve for crises cannot really build up over several years into a significant war chest available any year to cope with major crises. The drawings from Pillar 1 are just provisional and must be reimbursed if the funds levied in a year are not used before October 16. Hence, the reserve cannot really build up to the €2.8 billion ceiling as announced. Moreover, the Commission lacking independence from political pressures in the management of crises, the prospects for a self-financed fund from direct payments under the current Regulation are unlikely, as the saga of addressing the Russian embargo has shown (section 2.2).

Our early proposals ¹⁰⁸ to build up a multi-annual fund to cope with market crises were hardly compatible with budgetary rules that require annual appropriation and spending. However, when legitimate economic arguments require unexpected budget outlays to face exceptional drastic circumstances, a legal solution must be found. Recent history shows

¹⁰⁶ Defined in Articles 226 of Regulation 1308/2013 and 25 and 26 of Regulation 1306/2013.

¹⁰⁷ Commissioner Hogan (2016).

¹⁰⁸ Bureau and Mahé (2008).

that the European Globalisation Adjustment Fund was set outside the Multiannual Financial Framework, and such a solution should be possible for the Reserve for Crisis.

The EU approach to adapt budget appropriation to market circumstances is in contrast with the more flexible adjustment of financial resources in the US farm programmes. The US budgetary procedure first allows swapping further spending for programmes that fall short of financings, with savings in other budget lines. It is true that this budgetary flexibility also makes it possible to design policies involving somewhat unpredictable outlays due to exceptional market and natural conditions. This procedure requires emergency designation by Congress and the Administration, but it was used extensively and may be abused over the last twenty years (see Bureau, 2012). It was one of the reasons for shifting to a rather rigid multiannual framework in the EU. However, it is possible to design an institutional mechanism to avoid the political capture observed in the US.

The EU lacks financial resources in times of market crises. Several authors have suggested to use the large outlays devoted to Basic payments to build up instruments more targeted towards market instability.¹⁰⁹ This would help finance the EU contribution to Mutual funds and IST compensations, and to grant exceptional aids when IST and safety nets in place cannot alleviate farm financial losses. The funds of the reserve could partly solve the contradictory push-and-cure effects of the sequence direct payments, emergency aids and withdrawals. The reserve funds could be used as incentives given to producers to minimise risk exposures and to participate into risk mitigation schemes. Contrary to what was done with the banks, emergency aids should help improve behavior rather than covering excessive risk exposure.

Contrary to market measures that act on prices which benefit to all, aids from the Reserve could help EU institutions in crisis prevention and mitigation. The way is to make eligibility for emergency payments conditioned on participation in prevention programmes. They could be better targeted at family labour, thus providing safety nets to farm labour incomes rather than to net incomes, capital return and profits of farm owners as price support or hectare payments do.

3.3.3. *Ex post curative market measures*

The High Level Group 2010 report reviewed market measures in the aftermath of the dairy crisis. Among the long list of possible market measures in the annex, three were seen as essential: (i) intervention, (ii) private storage for butter, (iii) export refunds. With the change in EU attitude toward export refunds over the last decade and the recent agreement in WTO to put an end to export subsidies, the list is shortened to the first two. In the note of Council of March 3 2016¹¹⁰ a list of possible measures summarises the Member States delegation proposals they had been requested to formulate. The list includes 18 short-term actions and 19 medium to long-term initiatives. Most of the short-term suggestions consist of marginal adjustments of the two main tools just cited above. Several are financial measures that connect to the use of the Reserve for crises. Some others do not focus on stabilisation but rather on enlarging outlets and expanding demand. Others are more novel at this decision level although they had been floated for some times, such as export credit and temporary supply reduction.

¹⁰⁹ Shifting Basic Payments to the Reserve and to risk mitigation tools was proposed by (Mahé, 2011; Cordier, 2015; Bardajj et al., 2016). The recent French proposal at the Ministers Council in Amsterdam to freeze part of Basic Payments in good years on beneficiaries accounts appears as a cautious version of this move. The opposition of political forces and farmers' union to implement solidarity within the farm sector after the Russian ban show that stronger legal rules are necessary for good use of fiscal resources.

¹¹⁰ (Council of the European Union, 2016b).

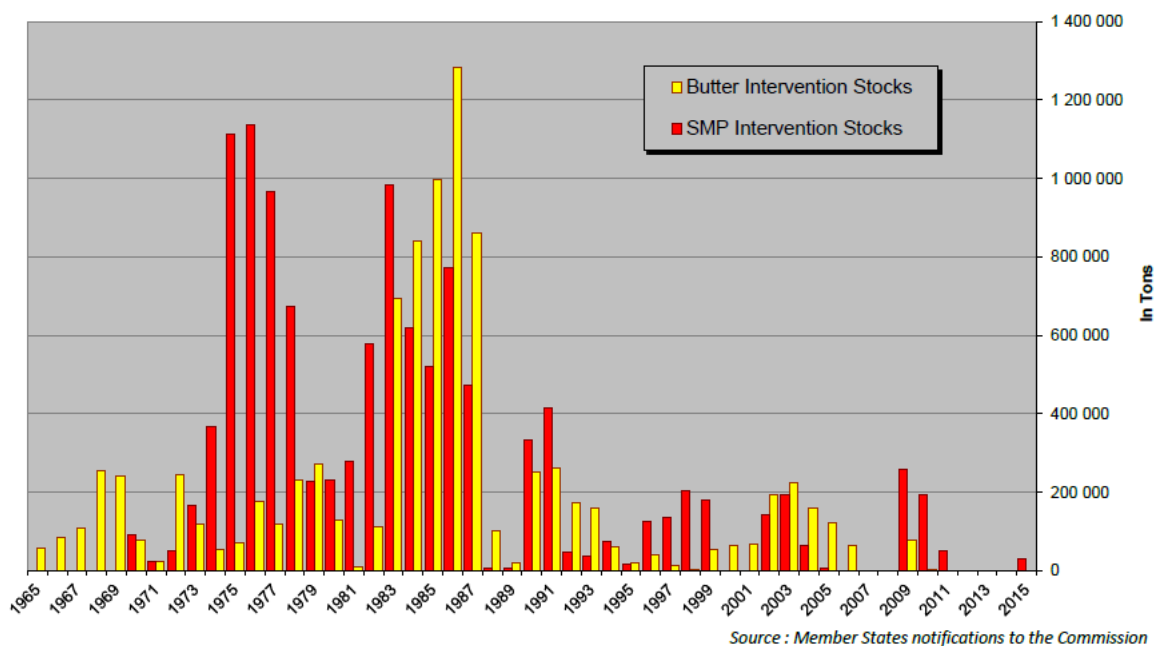
3.3.3.1. Withdrawals and public storage

That withdrawals from market are effective in raising prices in the short run is not doubtful (see section 2.2. and European Commission, 2011b). Effectiveness in this context means capability to deliver a desired impact. The important question however is economic efficiency of this instrument regarding the use of public funds and the functioning of markets. Hard evidence and evaluations regarding this particular point does not seem easily available if it exists.

First, note that the linkage between EU and world prices and the size of the EU imply that, in absence of restitutions, intervention also supports world prices when supporting EU prices. Reaction of foreign producers to the EU policy should be considered.

Second, the evident flaw of withdrawals is that they come too late in the economic process when goods have already cost resources to be produced. If a strict stabilisation objective is pursued the best option is for the institution in charge to sell public stocks when price pick up. This is clearly what the CAP of the 1970s and 80's was unable to do with a minimum of success and it may be appropriate to recall the empirical evidence so that the darker sides of attractive instruments are not looked over during the crises of today. As **Figure 16** shows, public inventories have reached unbearable amounts when support prices were set at levels supposedly reflecting production costs but fueling large surpluses to be exported with restitutions or dumped with further subsidies onto the domestic market as intermediate inputs in pastries or animal feed. It is not necessary to argue about the wide-ranging spoilage of resources in terms of value decay or destruction this policy generated. During these years, a number of dairy plants were producing butter and SMP for public storage outlet, which offered a basic reward thus delaying the development of higher value products. Similarly, the best cuts of beef meat were sent to public storage, long frozen and often sold at lower price on world markets. Systematic intervention to support grain prices up to the 1993 reform clearly led to production incentives to high yield but low quality varieties, mainly good for feed, thus curtailing the takeover of high value food outlets and, on the demand side, closing the large and price elastic feed market and triggering the cereals substitute imports surge.¹¹¹ Intervention on ordinary wine surpluses diverted to distillation is another historically documented case of ill designed policies, which with hindsight had a surprisingly long life.

¹¹¹ This was a central theme of the project called Disharmonies in Agricultural policy measures, which the Commission launched to pave the way to the 1993 CAP reform (European Commission, 1988).

Figure 16 : Intervention on dairy products 1965-2015

Source : Member States notifications to the Commission

Source: European Commission (2016d)

Thanks to dairy quotas the recourse to public storage has declined massively and without the vent offered by restitutions it is now bound to play a minimal role and be restricted to truly exceptional circumstances. To be fair with the EU institutions regarding intervention, the management of public storage has become much more defensible over the last ten years or so. During the last 2008-9 dairy crisis purchases jumped from nil in 2008 to more than 80 000 tonnes for butter and 270 000 tonnes for SMP. These public stocks were progressively released over 2010 to 2012 on the market. The release was apparently carried out with a profit margin for SMP as "negative expenditures" on public storage over three following years are greater than the amount of purchases in 2009. Regarding butter, selling prices were almost enough to recover 2009 outlays (European Commission, 2014c). These facts are to be highlighted in view of the drastic changes operated in market regulation over the last two decades.¹¹² Contrary to what is often observed in stabilisation schemes based on public storage, the system has apparently worked as a moderate stabiliser in the price rise from 2009 to 2013. Large stock impact on prices usually through two channels: first, when released to get stocks down to "normal" levels they add to supplies; second, just by their very existence they send a message to operators and speculators that the market is not tight, hence fears and speculations of price hikes lose ground and are cooled down. With hindsight the 2013 dairy price bubble might have been kept under control had more stocks been available. On that regard Article 16 of R1308, dealing with stock disposal, should be redrafted to make room for really stabilising objectives. It now focuses only on "avoiding any disturbance on the market". Wider objectives could include contribution to prevent bubbles, slowing price hikes, and assisting the food aid programmes and other non-solvent demands or promotion of exports.

¹¹² Data shown by Matthews (2013) points a similar management of grain public stocks from 2008 to 2012.

Table 2: Dairy expenditures in Budget years 2005-2014

Million €	2005	2009	2010	2011	2012	2013	2014
SMP intervention	-60	61	-6	-73	-10	0	0
SMP disposal	283	0	0	0	0	0	0
Butter storage	-56	26	-20	8	8	7	4
<i>Of which intervention</i>	-86	8	-31	0	0	0	0
<i>Of which private storage</i>	30	18	11	8	8	7	4
Butter disposal	283	8	1	0	0	0	0
<i>Of which pastry</i>	211	1	0	0	0	0	0
<i>Of which non profit organisations</i>	22	7	1	0	0	0	0
Refunds	1141	181	186	5	0	0	0

Source: European Commission (2016d)

As our simulations have suggested and as noted by several authors (e.g. Keane and O'Connor 2013), intervention in the EU can no longer avoid penalising EU exports to the benefit of competitors. Note that, for high value specialty dairy products, the issue is nevertheless somewhat different from butter and SMP. Foreign market for cheese with a high quality image are often developed through a learning process and their trade is probably less price sensitive than demand for basic commodities.

Support prices have been considerably reduced in the EU for most staple products from 1991 up to now. The 2008 Health Check reform ended intervention for some products and set quantitative limits to purchases at intervention prices (wheat, butter, SMP) but the Commission could open intervention on the basis of tendering procedure "if the market so requires".

As reflected in Matthews (2013) and Kovacs et al. (2015), in the 2013 CAP reform process, the European Parliament held positions in favour of strengthening intervention further than the commission proposals which foresaw an end of intervention for durum and of Private Storage Aid (PSA) for cheese. The final political agreement maintained the Commission proposals with modifications influenced by the European Parliament requests (such as increase of volume limit for butter to 50 000 tonnes and eligibility of PDO/GIs cheeses to PSA). In the recent dairy crisis several statements calling the Commission to act more vigorously were issued by the COMAGRI.

In spite of the recent positive developments in intervention mentioned, prudence against excessively attractive intervention price should be the principle. The key element is to avoid intervention to be a profitable outlet for low cost producers, account being made in assessing low cost of all the assistance they receive regarding input costs of fiscal regimes. A criterion for establishing buying-in prices would be useful, to decide whether the level of reference prices set into the CMO regulation are too low or not. It is also doubtful that it should be cast in iron for seven years and revisable only according to an institutional process, which is not only complex but also politically exposed to asymmetric special interest pressures. A better solution would be to define clearly the goals pursued by the floor level of support prices in relation to market fundamentals and to costs developments. Moving average of prices are often mentioned in that context since it embodies both history and updating, but casual simulation for yearly dairy prices show that moving average and

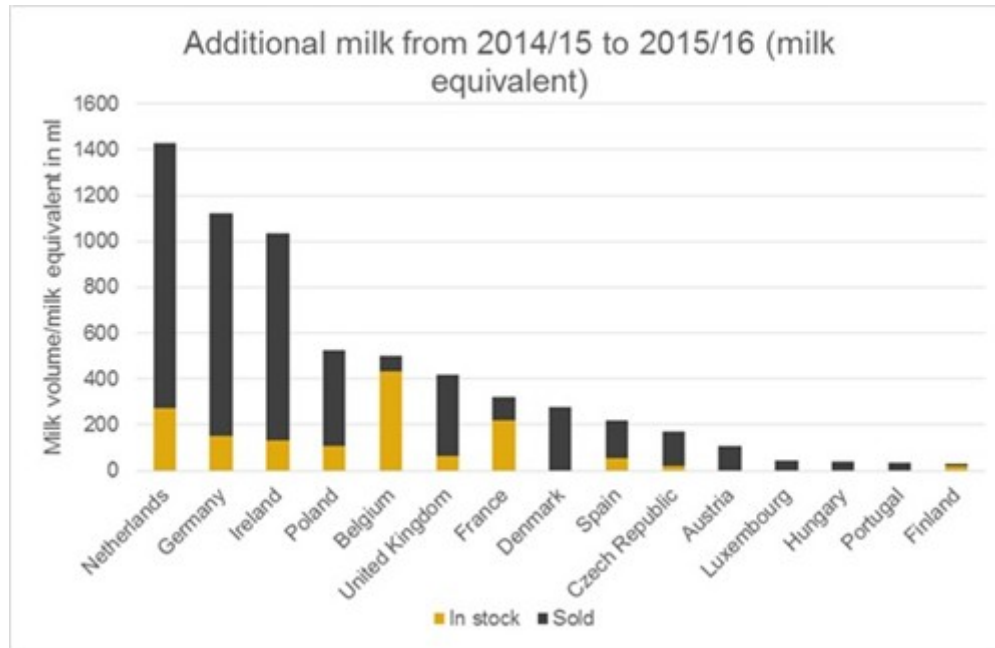
even olympic average¹¹³ can display bounces due to random shocks rather than smooth evolution due to long term changes in fundamentals. Better smoothing rules, for example discounting outlier prices, need empirical investigation. Further, rules for adjusting intervention price over time could be discovered; such as being reactive to long run fundamentals, predictable, resilient to short run pressure, and consistent with other policy tools, and in particular with Income Stabilisation Tool and even direct payments.

The CMO Regulation is rather imprecise on this regard and the upcoming CAP reform could improve rules definition for withdrawals. This would require further analysis and policy engineering and simulation efforts to tune rules and parameters. Guidelines could be that intervention prices should not offer a lasting outlet to dairy farmers and not be significantly higher than average variable cost of the lowest cost producers in the EU.¹¹⁴ Otherwise, it is profitable for these units to go on producing for intervention in periods of gluts since they still cover part of their sunk costs. For purpose of illustration only and with the risks of casual calculations, one could look at the ratio of operating costs or specific costs (as proxies for variable costs) to a "smoothing average" of farm gate prices as used for the benchmark in chapter 2. With the average ratios derived from FADN data (Annex 2, Table14/A2.2), such a reasoning would lead to a surplus-proof floor price for milk ranging from 164 to 215 €/t. The Milk Equivalent intervention price derived from Butter and SMP buying-in prices set in article 7 of the single CMO is about 219 €/t, i.e. higher than the upper bound of the range eschewed above. Further elaboration would clearly be required to account for farm heterogeneity, but the current intervention price level is not obviously out of scope if preventing surplus accumulation is the objective pursued.

Moreover, coherence between intervention and IST when they are in place is to be closely monitored. In section 3.4 below, a rough simulation of an IST operated with the 30% income loss trigger and using gross margin as income concept would have barely activated compensation in 2015 given the observed market price. More active intervention and higher buying-in price, would have prevented the trigger of compensations. Such possible outcome produced by policy inconsistencies is not what an IST is supposed to bring about in mitigating market disturbances. Although these explorations are fragile, they call for careful and joint design to ensure that market measures and price risk management schemes achieve high-level performance regarding consistency.

¹¹³ The term "Olympic mean" is often used for a mean over the previous 5 years where the highest and lowest observations are dropped. It applies to data such as incomes, production or prices etc. The intent of this simple rule is to find a benchmark of past data which is smooth enough and not too sensitive to exceptional market situations. The notion is mentioned in the Uruguay round Agreement on Agriculture, without using the term, however. Our short experience with recent dairy prices tells that such an average is still fairly unstable and may cause problems whenever used as a concept of "normal conditions". Article 37, 38 &39 of Regulation (EU) 1305/2013 refer to this concept to trigger compensations, without using the term, either.

¹¹⁴ And be lower than average total costs.

Figure 17: Growth in milk deliveries and recourse to intervention

Source: AHDB (2016)

That intervention should not provide a lasting outlet for dairy producers and dairy industries is hardly debatable from the public interest standpoint. This issue will become important and politically sensitive insofar as the EU is to pursue market orientation while preventing major disturbances and conflicting national interests. Under the quota regime, Member States tried to protect national market shares. If some regulation is to take place to prevent deep crises, the EU institutions will have to agree on criteria to allow expansion in times of emerging shortages, possibly to require marginal reductions during deep crises, and to define intervention parameters.

An illustration of the issue is the given in **Figure 17** from drawn from AHDB (2016).¹¹⁵ The figure and comments suggest that countries with the largest growth in milk deliveries have not used intervention and PSA as much as other Member States. If this evidence is attested, it reveals the crux of the policy problem of the soft landing path to move out of the dairy quotas. In the case of the Pork crisis, intervention buying was particularly active in Member States where production increased rapidly.

EU policy makers have both to find a balance between CAP objectives regarding farm incomes on one hand and efficiency in value creation on the other, account being taken of externalities and animal welfare. Producers and dairy products which find rewarding market outlets, either internally or foreign located, should not be penalized. Neither should dairy producers who have developed on farm production of speciality cheeses and fresh products and are not at all users of market support measures.¹¹⁶ This will be a major challenge to pursue.

Another issue is to discover the ultimate beneficiaries of public storage aids and to find out how far transmission to farm gate prices occurred. When public storage can only deal with processed farm products, intervention first benefits processing firms controlling that level of

¹¹⁵ A figure giving similar evidence appeared in the June presentation to the MMO Meeting of 28 June 2016.

¹¹⁶ On this regard the limitations put on direct sales during the quota period had little if any economic foundation. It probably was inspired by main channels to preserve market power and curtail competition.

the food chain. The transmission of these benefits upwards to producers depends on relative bargaining powers, hence on how farmers organise the marketing of their products. Farm cooperatives in principle transmit these benefits upwards as long as their business plan is efficient. Sectors where farmers organized to control the first processing stage hold an advantage on that regards. When downstream private firms control slaughterhouses or dairies, farmers have lost a further opportunity to act on farm gate prices. Individual contracts will not do much to help farmers in such cases.

The other major weakness of intervention raising prices evoked in chapter 2 is the public good nature of support prices. No producer can be excluded from the benefits of higher prices. If the thinking of the future CMO is to strike a balance between unfettered market orientation and stringent regulation such as quotas, the system must be able to give financial incentives only to dairy producers willing to coordinate in crisis avoidance and mitigation. Intervention is a poor instrument for that purpose. Whether it would be conceivable to restrict intervention to dairies and producer organisations under conditions of participation in EU policies aimed at avoiding crisis occurrence and consequences is a question worth considering.

To sum up:

- The goals pursued and rules of action by market intervention need more precision than those of the current CMO;
- Intervention is better used as a last resort tool for mitigating deep crises either due to drastic exogenous shocks or to inadequate prevention policies;
- Intervention price should not offer a lasting outlet for low cost producers;
- Buying-in price should be adjustable to fundamental economic changes but in a smooth manner that a three year moving average is unlikely to offer;
- Intervention has to be compatible with rules under which IST schemes operate e.g. not prevent trigger of compensation by the IST;

3.3.3.2. Private storage aids

Private stocks of SMP and butter benefited from the Private storage aid (PSA) scheme since 2014, and more recently for cheese (only from Protected Designation of Origin). Although quantities are sizeable,¹¹⁷ hard evidence on the impact on market situation is not readily available. One would expect short run positive impact on prices from a new demand effect, as long as subsidized stocks do not crowd out commercial storage. Statistical evidence on the issue was not found. The Study on Evaluation of CAP measures relating to dairy (European Commission (2011b) provides description of aids rates but no conclusion of impacts and it points out the difficulty to conclude because of the lack of counterfactuals.

Our conjecture is that PSA does have an impact but some questions would need clarification regarding what part of the dairy food chain is benefitting most from the scheme. One would expect a large portion of the support to fall elsewhere than on farm gate prices.

In spite of these reservations, PSA schemes are tools to be maintained and even developed because of the margin of flexibility conveyed to processors in times of gluts. Making storage less costly provides means to buy time, and to prospect and acquire new market outlets. In contrast with intervention by public storage, PSA has the potential advantage to make exports easier rather than harder, because of a less direct impact on market prices at

¹¹⁷ Recent evidence is in the latest MMO meeting report 24 05 2016 (European Commission, 2016e).

the wholesale level. It gives more chance to dairy firms to identify and prospect market opportunities while keeping selling prices at a competitive level.

At the margin, PSA could be operational in making all outlets and in particular export development more effective, without being a direct export subsidy. The logic of the scheme would be to extend it to products for which domestic and world demand prospects are favourable. The logic of restricting intervention by PSA to basic products such as butter and SMP gives too much weight on the market withdrawal purpose inherited from the traditional CAP. Even if basic products gain commercial outlets thanks to competitive prices, markets will easily be lost when price ratios will turn against EU exports since price is a key selling argument for products lacking identity and image in consumer habits. The current scheme does not embody to a sufficient degree the combination of stabilisation and market acquisition objectives as it was the case in the USA programmes on non-recourse loan deficiency payments, which provided some crisis relief but avoided the choking effect of raising market prices relative to foreign competitors. This would argue for extending PSA to all cheeses, most of which are not rapidly degraded by storage and sometimes improved.

These arguments vote for more flexibility in the design and management of the implementation. The Commission has extensive leeway in these regards, in collaboration with the Council for the fixing of prices, aids and quantities. Overly constraining length of time in storage may preclude firms from seizing new market opportunities identified thanks to the time bought up with the help of the PSA scheme. On this regard, requests from the industry for more flexibility deserve attention.¹¹⁸ For example, it is conceivable that duration could be shortened upon request at the cost of some partial discounting of the credited aid and some flexible rule like sliding level of storage allowing to remove goods from storage as soon as an outlet is found and replaced by equivalent amount of dairy products.

3.3.4. Demand enhancing measures

As this report focuses on disturbances, we just briefly mention market measures geared toward developing outlets. Demand enhancing can target potential consumers who are not active in the core market. We do not envisage a structural programme to subsidise the use of dairy products as intermediate inputs in the food and feed industries as in the past. Without a clear argument of positive externality on health or the environment such subsidies have no economic foundation and are just adding a correcting and costly layer to distortions of incentives from other policies.

Promotion and export credit programmes are certainly worth considering as far as developing new markets on the foreign or domestic markets could generate value creation opportunities in the long run. This is true on foreign markets. Making foreign potential buyers in emerging or recently world-connected countries better acquainted with high quality products, like European cheeses or specialty fresh products, can ensure lasting market developments (e.g. yoghourts, which have potential for a growing market in emerging countries). It is less the case for commodities such as butter and milk powders, even though it is conceivable that the valorisation of technical or sanitary attributes of EU products benefit from such promotional programs.

Promotion through advertising on the domestic market in Europe is a likely different issue. This market – at least for its predominant solvent component – does not show positive trend except for cheese and whole milk powder, and decline for skim milk powder.

¹¹⁸ See for example the letter from Eucolait (2014) to the Director for CMO.

Effectiveness of publicity messages “subsidised by the European Commission” as sometimes heard, is first doubtful and hard evidence of impact was not found. Whether it has a justification regarding welfare and public interest is questionable for most dairy and meat products, and except for selected healthy fresh dairy products such as yoghurt. Fruit and vegetables are a different case, in view of their health benefits. It would be regrettable that such promotion programmes would essentially benefit the firms operating the schemes more than citizens or producers, as it was the case in the farm insurance programmes in the US. Harder evidence is needed. A recent report suggested that the implicit objectives of the programme to “support demand and consumption of European agricultural products [...] should be mentioned explicitly in the Regulation together with the potential benefits for the producers and the consumers” (ADE, 2011). That benefits for consumers should be present is an evidence for a public policy goal, but taxpayers are forgotten, as too often in this context. If these programmes were revealed to be little effective, the use of European funds would require scrutiny to find justification.

Allocation of public funds to domestic food aid programmes should in the first place be in proportion to the welfare, ethical or nutritional objectives pursued. Their first purpose is not to solve agricultural crises that may be due to excessive response of producers to profit opportunities. Domestic food aid schemes have to respond to permanent needs of people who are poor or financially stressed, and often single parents with children or elderly with low or inexistent retirement allowance. These needs, being permanent, have to be continuously addressed, and not only during agricultural crises. This is what the EU is doing with the School milk scheme. It reached more than 19 million children and made use of more than 300 000 tonnes during the campaign 2013-14 (European Commission (2016d). This is also the case with the funds distributed by the Fund for European Aid to the Most Deprived¹¹⁹ for the period 2014-2020, which has succeeded the previous “Most Deprived Programme”. €3.8 billion were committed to this scheme for the MFF period. This programme is largely decentralized to Member States who cofinance at least 15% of the actions they choose and work in connection with national non-government organizations. The Commission approved in February 2015 the Member States National Operational Programmes to fight poverty. Food package distribution and food meals are present in most countries action programmes (European Commission, 2015g).

As for health motivations in food aid, withdrawals and intervention, being operated through basic commodities, cannot fulfil balanced diets for need people and children. If domestic food aid is to be a systematic tool to enhance demand, public storage should then be extended to goods other than basic commodities. This would entail logistics consequences and not clearly be more efficient than working through financial aid to specialised NGOs as it is currently done. Distribution of food in kind rather than financial aids to the deprived people could in principle help upgrading nutrition habits and diet balance, but foreign experiences are disappointing. As food aid works through organisations that distribute food packages or meals, the implementation of food aid, mainly through financial means rather than in kind, seems to be the pragmatic and relevant approach.

Is the current EU programme developed enough? One striking observation is the very small proportion earmarked for food aid in Europe of the financial envelope granted to farm programme in comparison to the situation of the US, as mentioned in chapter 2. It probably reflects the relatively weak political strength of social groups such as the deprived compared to farm organisations. It may also reflect the still low degree of integration of the

¹¹⁹ Regulation (EU) No 223/2014.

EU, which makes redistribution of incomes between Member States a hardly accepted goal for the upper level of government, i.e. the institutions of the Trilogue in the EU case.

3.4. Risk management and Income Stabilisation Tools

3.4.1. Overview and previous works

When hazards are distributed randomly over the population, such as abnormal weather (e.g. hail) or local pest attacks, probabilities of occurrence can be estimated and risk pooling or insurances are feasible. Private markets can make a contribution. When a random damage affects the whole population (systemic risk) such as an epizootic or an economic shock, the sheltered cannot cover the damaged; hence, risk pooling by mutual funds cannot be the answer. There are other possibilities such as risk spreading over time and risk shifting (e.g. to financial institutions that also manage other forms of risk, i.e. outside agriculture), but evidence is that private schemes are not developed for such hazards.¹²⁰

Strictly private schemes seem unlikely to develop up to a satisfactory level of risk coverage for agricultural products. Indeed, government is involved and supports crop or disease insurances in many countries. Still, is a generous taxpayer contribution to insurance and other Risk Management Schemes (RMS) justified without conditions? Would an overly zealous collective risk management system not face moral hazard by inducing farmers to adopt risky strategies and shift the burden to taxpayers? Market instruments aim to tackle price collapses, and RMS to mitigate their effects, but would they conflict or buttress each other, given shocks can be both exogenous and endogenous to the market?

Public support to the management of risks due to prices is more akin to market policies than to Pillar 2 instruments, left to subsidiarity. Still, RMS instruments eligible for support are defined mainly in the Rural Development Regulation 1305/2013: 1) insurance covering losses due to climatic, disease-related or environmental incidents; 2) mutual funds covering similar incidents; and 3) income stabilisation tools.¹²¹ The general rate of subsidisation is 65%. However, rules for the fruit and vegetable sector are exposed in the Single CMO Regulation, which states that harvest insurance can be part of operational programmes (up to one-third of the programme expenditure) and that producer organisations can manage mutual funds.¹²² In the Single CMO Regulation, the wine sector can benefit from support for setting up costs of mutual funds and from up to 80% of subsidies of the harvest insurance premiums in case of natural disasters.

Several weaknesses in the EU system to cope with market risks and price instability were pointed out (Mahé, 2011). It was suggested that an independent Agency with a carefully thought mandate would be in a better position to jointly manage market and RMS tools than politically sensitive institutions (Bureau and Mahé, 2008). Most market crises are hardly predictable; hence, needs for financial resources are irregular and at odds with a yearly budget. The separation of closely related tools, such as market measures in pillar 1 and RMS in pillar 2 at the willingness of Member States, was seen as ill-adapted to both pursuing consistency and avoiding distortion of the single market. We raised the point in particular that Income Stabilisation Tools and market measures pursuing the same goals

¹²⁰ For a review of issues related to farm risks and insurances, see Moschini and Hennessy (2001), Cafiero et al (2005), Cordier (2016), Bardaj et al. (2016) and the literature cited.

¹²¹ Except for the latter, the instruments were already defined in similar terms in the Single CMO Regulation 73/2009.

¹²² Regarding fruits and vegetables, the two risk management tools were in R1182/2007 but not in R2200/96.

would be better supervised, implemented and financed at the EU level, for example in a third pillar devoted to market volatility (Bureau and Mahé, 2015).

The US experience should warn us against costly programmes, and highlights the gap between the unborn EU system of RMS and the complex and well developed US counterparts. Cordier (2015) recommends 1) coordination between public safety nets and private risk management tools, and supports the need for an Agency, 2) Flexible funding and increased reserve funds and 3) a learning process with experimental devices and public-private partnership.

Bardaj and Garrido (2016) point out weaknesses of the risk management tools set in place in 2013 such as likely uneven implementation due to the flexibility granted to Member states and competition for funds with other Rural Development Programmes, thus resulting in under-procurement. They found large heterogeneity across Member States regarding coverage and subsidisation. An estimated 635 000 farms will enter Risk Management Schemes, but the most part is insurance and natural risks coverage. Only two Member States, Italy and Hungary, and one region in Spain (Leon) have planned to develop IST tools. Preliminary figures suggest that out of the €2.7 billion total expenditures (63% financed by EU funding) earmarked for RMS in Rural Development plans, only 130 million are for IST devices to help secure incomes. In view of the size of revenue losses evidenced in the dairy sector alone in the recent crisis, it is clear that the CAP system to mitigate risks due to market price crises is far from meeting the challenge at stake, in spite of the magnitude of direct payments.

Bardaj and Garrido's recommendation is that "the European Commission should coordinate and harmonise with the formulation and [...] overseeing common standards for regulating the use of publicly supported risks management instruments", and they point "Pillar 2 does not provide the most adequate mechanism". However, they also consider that "the new CAP reform should permit MS to rely on their own system and instruments, helping MS improve them and broaden them." Further their recommendation is that "insurable market risk should be covered by privately provided instruments" and to supplement IST/Mutual Funds with income insurance. They also propose tools to address different layers of risks, the highest risks layer being managed and financed by the public sector. A Market Observatory would issue early warnings and Producers Organisations would have more power to "effectively ensure that production is adjusted to demand, in terms of quantity and quality". Direct payments could be converted into vouchers to cover farmers' contributions to IST/Mutual funds. And, "a crisis reserve outside the budget should be implemented."

We agree with several of these recommendations. However, we consider that leaving the design and implementation of price RMS to Member States initiative will endanger the single market; and if market measures remain unpredictable as they are today, either RMS will fail or the two instruments will be inconsistent.

3.4.2. Competence level, natural vs price risks or random vs systemic hazard

Natural risks are often rather local and randomly distributed and thus accessible to private schemes of insurance or to mutual funds. The coverage for crop insurance and other natural risks firstly relates to volume hazards. Hence, national instruments under EU common rules to avoid hurting the single market can be a relevant approach. Insurance and mutual funds which cover natural risks, could in principle be kept in the present second pillar, while the design and monitoring of price risk management schemes (i.e. the IST in practice) would be in the competence of the EU level.

Converting volume losses into Euros is a more delicate question. Since insurances have to provide coverage for value losses, calculation of risks in designing contracts is contingent not only on natural hazard probability distributions, but also on market volatility, on natural hazards impact on market prices, and on policy interventions. Hence, crop and other natural hazards insurances would be safer to insure quantity losses and to calculate compensations with benchmark prices and indices, such as the envisaged three-year moving average mentioned in Article 39 of R1305/2013 or other smoothing rules.

As market risks are of a systemic nature they are in principle better managed at upper level of government to avoid externalities. A particular case of systemic risks such as epizootic, demand health panic or climate disaster, needs scrutiny however, since natural and price hazards are then intertwined with either stabilisation (King effect) or cumulative (health scares) impacts. The Reserve for crisis appears as the appropriate tool to cope with such events, which combine low probability with large and widespread damages.

Quasi-systemic risk occurs when EU production is localised in specialised regions or when natural conditions affect most areas. This is often the case for a number of fruit and vegetables. The major source of hazards comes from weather and pest effects on yields. In the case of some vegetables, abnormal weather conditions tend to cumulate their destabilising impacts. For example, warmer than normal weather in wintertime boosts growth and supply availabilities; but in the same time it chokes consumer demand. Such cumulative destabilising effects can drive prices to virtually zero for all producers.¹²³ Such reasons may justify granting specific market management powers to producers organisation in the fruit, vegetables sectors.

Moving IST out of Pillar 2, and of subsidiarity and to EU competence, would also facilitate coherence with market measures. Otherwise, compensations by IST would depend on how reactive EU institutions are at activating market measures; hence inconsistencies between interacting policies run at different government levels are bound to occur. To design and tailor IST schemes, institutions in charge of a scheme – e.g. Producer Organisations - need to know the rules of the game: how and when the EU will use of market measures and alter prices. It is not enough to expect 65% support for 70% compensation of individual farmers income losses larger than 30% of a three year average ("Olympic" or not), incomes being "all revenues including direct payments minus input cost". Suppose for example that market prices fall near the level that makes the "income" gap at 29 % from the three-year average, used as reference for triggering compensation. If intervention is decided, it might prevent IST funds to deliver compensations to members and the EU to subsidise these compensations. Tools will evidently interact and may conflict in a variety of ways. Moreover, as prices move together across the EU but differ in levels and in speed of variation, activation of market measures may make producers benefit from national IST in some countries and not in others, thus altering the single market.

To sum up, there are good arguments for keeping current schemes for management of natural risks and therefore Article 37 and 38 of the Rural Development Regulation of 2013 within the Pillar 2 decentralised system, and to ensure that common rules will prevent Member States to indulge in distorting supports. Article 39 would better fit in the Single CMO Regulation and need further developments to make the scheme more attractive,

¹²³ In a study on cauliflowers and artichokes in Brittany, Cordier and Mahé (2000) found that simulation of market forces, in the absence of withdrawals, was on occasions spontaneously generating negative prices, which is an indication of failing unregulated markets.

efficient budget wise, fair regarding benefit distribution and consistent with market measure management.

3.4.3. Income definition and likelihood of compensation trigger: a rough simulation exercise

Article 39 of Regulation (EU) 1305/2013 lays down IST in very general terms, apparently first inspired by desire to avoid overstepping WTO green box requirements. Support to income losses will be “granted when the drop of income exceeds 30% of the average annual income of the individual farmer in the preceding three year-period” (or the Olympic mean of preceding 5 years). Income is defined as the “sum of revenues he receives from the market, including any form of public support, deducting input costs”. “Member States shall define the rules for the constitution and management of the mutual funds”.

A first issue is the reference to the income of the individual farmer in a particular year for defining compensation. This entails compensations granted only ex post, with a time lag, and based on farm accounts. Several implications follow:

- heavy administrative costs to manage and control the enormous amount of information, with an incentive for creative accounting at the margin to ensure eligibility;
- delay in delivering compensation after account closure and thus extending the duration of the financial stress (possible partial anticipation entailing further administration costs);
- communication of certified farm accounts to a third institution, after fiscal authorities and farm management service providers.

The reference to actual incomes offers the advantage of better reflecting actual losses, sales being spread over the year. Actual incomes also have two other favourable features: 1) acceptance by third countries as well as compliance with EU international trade commitments might be easier since the base for compensation would cover several products and not be explicitly linked to prices; 2) the observed income would reflect the immediate response of input prices or quantities.

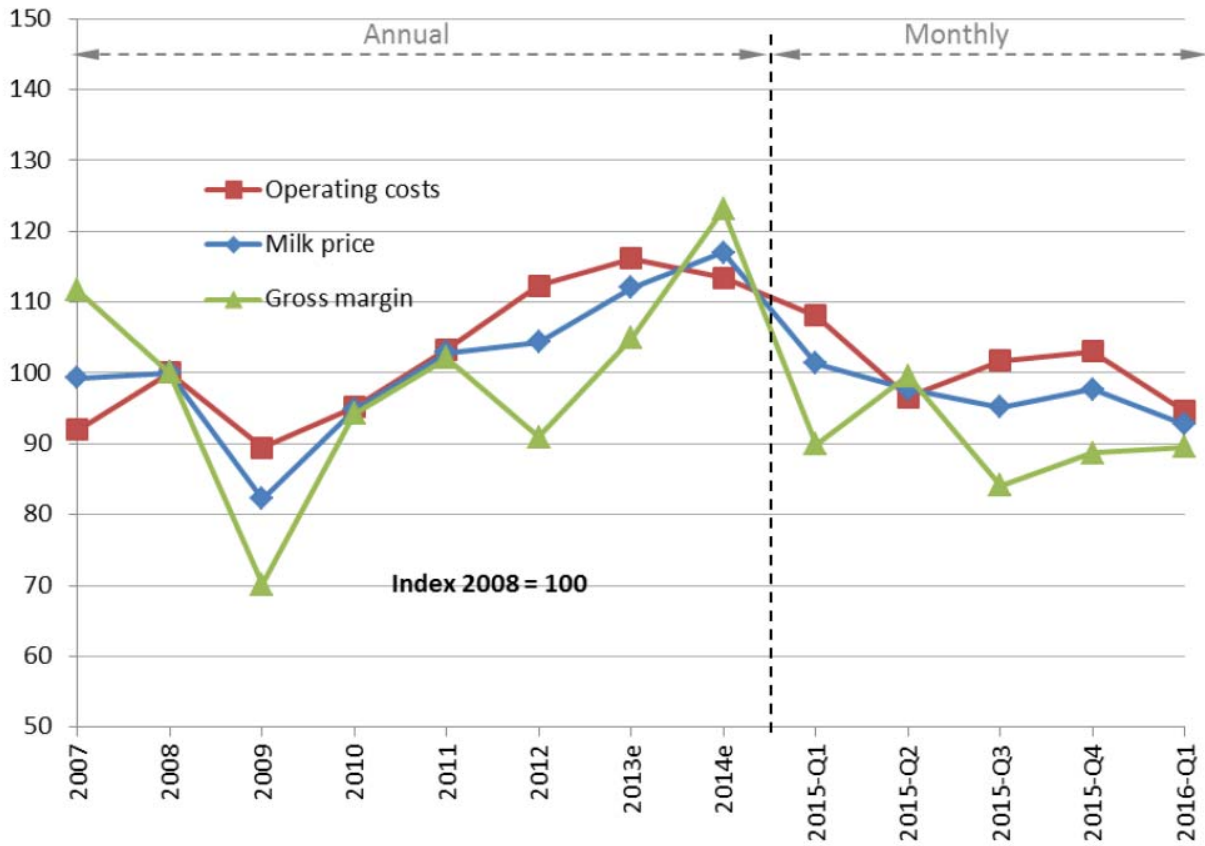
Figure 18 displays time series of milk prices, operating costs and margins. Two facts appear, 1) operating costs on a yearly basis are correlated with milk prices (and this is probably more relevant to annual than monthly data) and this contributes to smooth margins; 2) margins on operating costs are still displaying a wider variability than market prices (and gross revenues).¹²⁴

However, in spite of the positive features just mentioned, such a system based on actual individual yearly incomes will be complex to design, implement and control. In view of the wide heterogeneity of farm structures and status, it would be hard to grant farms with equal treatments across the EU. Contributions of natural causes and stewardship errors to farm incomes losses will be harder to distinguish from truly market price risk, hence moral hazard and adverse selection be harder to tackle. Moreover, mutual funds in such a case will suffer from perverse effects of pooling contributions. Therefore, discipline of free riding

¹²⁴ This empirical observation suggests that the amplification effects from revenues to incomes considered in Annex 2 are somewhat overestimated. This short run reaction of operating costs also suggests that dairy producers respond to milk prices by adjusting the most easily variable factors and can therefore adjust supplies. Purchased feed is a candidate for adjustment, with implications on yields, as was assumed in chapter 2. It offers arguments for low cost supply reduction possibilities.

will be harder. For these reasons, we favour another solution based on indices and on principles more adequate to deliver an incentive-compatible and fair system of market risks coverage (section 3.4.4).

Figure 18: Short run response of operating costs to milk prices 2007-15



Source: European Commission, MMO Meeting 24 05 2016

A second and major issue relates to the imprecise definition of income in article 39. Depending on farm structures and the extent of input outsourcing, selected definitions of margins or incomes may translate into different final available income for the farm operator. The concept of income retained in the price risks management schemes will influence the probability of meeting conditions for triggering compensation (Annex 2 further explores the issue). For purpose of illustration, Table 3 (Table 14/A2.2) displays the very short run impact of selected price shocks on income for various income indicators used in FADN accounts based on financial ratios derived from the average of years 2007-13 of the same source.¹²⁵ The assumption is that, in the very short run, inputs prices and volumes do not react to output prices. As expected, the narrower the concept of income, the larger the impact of an observed price shock. While a 5% price fall would generate an "income" shock of about -6 % when the income indicator refers to the margin over purchased feed, it would entail nearly 56% drop when it refers to the net margin.

Accordingly, the operation of an IST scheme would require a price drop of about 20% below benchmark for triggering compensation to farmers if the insured margin is the "margin over specific costs"; but if the covered notion of income is the "net margin" a price

¹²⁵ European Commission (2015f).

drop below benchmark smaller than 5% would be sufficient. Accordingly, the IST scheme will be active more frequently when a narrow definition of income is used.

If actual individual incomes are used as indicators to trigger compensation and if the contributions are pooled, a serious distribution problem would emerge as intensified farms relying on purchased inputs are likely to be eligible more often than the more self-sufficient family farms. The latter are likely to be structurally net contributors to the stabilisation fund, and risk-exposed farm structures and status net beneficiaries. Eventually, the system cannot work this way, either farmer participation will be low or IST schemes be scarce, or financial crises will develop.

The current IST framework will also be prone to give birth to distorting support. Suppose, thanks to flexibility and subsidiarity, Member State A with a large proportion of commercial farms develops subsidised IST for incomes defined as net margins and Member State B develops an IST based on incomes defined as Gross margin over specific costs. When prices are 10% below benchmark dairy producers of Member State A will get compensation with an EU budget subsidy of 65%, while Member State B producers get nothing. Not only serious distortion of competition occurs but also, an additional systematic transfer between countries is generated along with ensuing political problems, thanks to flexibility introduced in the 2013 CAP. To ensure fair competition in the single market, the alternative is either a strictly private self-financed IST scheme or a subsidised system, harmonised across Member States, and monitored at the EU level.

The inclusion of direct payments (see Annex 2) as foreseen in Article 39 of Regulation (EU) 1305/2013 would reduce the percentage shock on income, but the notion of income remains the key factor. This would require nuancing if direct payments are a larger proportion of receipts in highly outsourced commercial farms.

Table 3: Per cent change in income (DP included) for selected % product price shocks

Income concept	Margin/Feed*	Margin/specific costs**	Gross margin**	Net Margin**
Income/revenues	78%	61%	36%	9%
	0,78	0,61	0,36	0,09
% price shock				
-1	-1,3	-1,6	-2,8	-11,1
-5	-6,4	-8,2	-13,9	-55,6
-10	-12,8	-16,4	-27,8	-111,1
-15	-19,2	-24,6	-41,7	-166,7
-20	-25,6	-32,8	-55,6	-222,2

*Gross margin over purchased feed

**FADN Definitions (details in Annex 2)

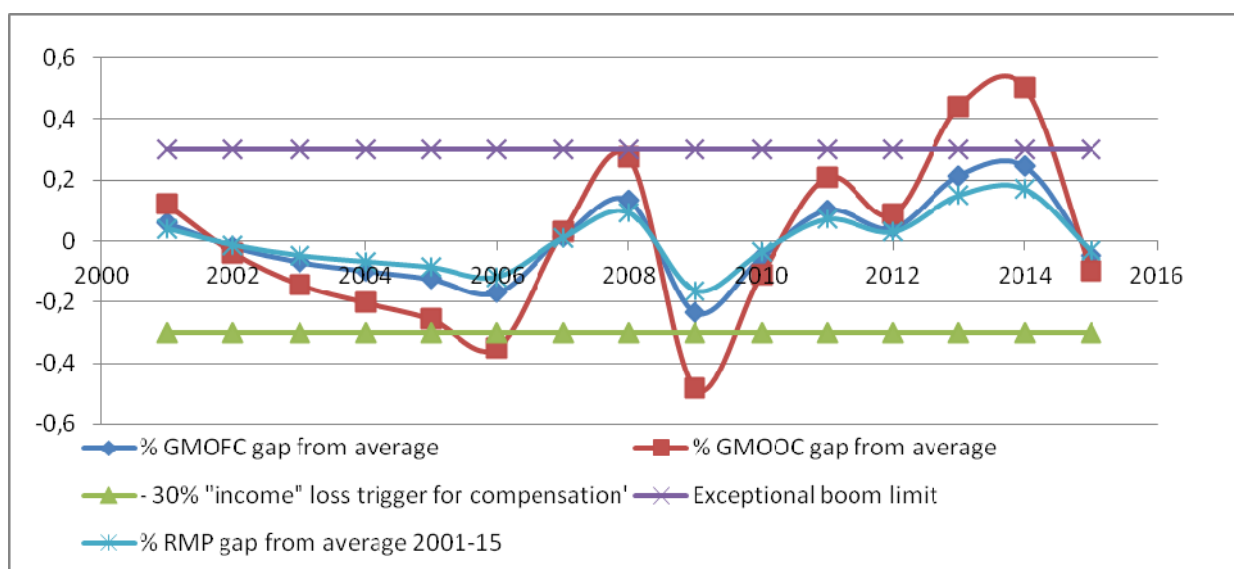
Source: own calculations based on FADN (European Commission, 2015f)

A simple counterfactual scenario on past years further illustrates the importance of income definition in IST schemes as envisaged in Article 39. Figure 183 shows how unlikely would an IST have triggered compensations during the recent crises. We tried two income indicators: Gross margin over Feed cost and Gross margin over all operational costs (which covers primary factors rewards). Average ratios for the 2001-15 period were used, no input adjustments taken into account, and Direct Payments not included. Results suggest that Gross Margin over Feed Cost would not have made dairy producers eligible to IST

compensation during the last two crises. Margins over Operating Costs however would have crossed the -30% "income" loss line in 2009, but not yet in 2015. Direct payments inclusion would clearly reduce likelihood for losses to trespass the 30% bottom line. Using a moving average as benchmark instead of the longer period average used in the present case would give more weight to recent history and, depending on circumstances, make crossing the threshold more or less likely.¹²⁶

A casual attempt at improving realism of the illustration made use of recently available data on dairy-specific input prices and of a three year moving average of margin as benchmark. Figure 26/A2.8 of Annex 2 shows the outcome. That margin over feed cost is unlikely to trigger compensation with the 30% loss threshold is confirmed. Regarding gross margin over operating costs the novelty is that compensation would have been actioned in 2015 as well as in 2009. Incidentally, the simulation also obviates the exceptionally high levels of margins in 2008, and in 2013 and 2014. Such simulations based on detailed information are necessary to ensure better engineering and design of performing IST tools.

Figure 19: Margin definition and probability of compensation from IST to occur



Source: Own calculations based on annual EU data

3.4.4. A "Matched Fund" rather than a Mutual Fund for IST schemes

Canada, Australia, New Zealand and to a certain degree the USA have implemented a variety of instruments for income stabilisation. An extensive literature is largely critical of the US and Canadian experiences in particular¹²⁷. For example, Anton et al. (2011) note that the Canadian farm income stabilization system "is overcrowded with policies and unable to signal risks layers in which farmers should take their own responsibility of management".

These reviews suggest that a good system of price risk management should have some features:

- Not exposed to free riding,

¹²⁶ This long period reference may explain why the year 2006 appeared as eligible; It also makes the benchmark more stable than a three year average. An Olympic average over five years seems to produce jumps that sound artificial.

¹²⁷ Bardaj and Garrido (2016), OECD (2011), Anton et al. (2011).

- Incentive compatible,
- Parsimonious in administration and efficient in financial resources use,
- Fair regarding eligibility for compensation,
- Equitable across farm family labour beneficiaries,
- Equitable across Member States and compatible with the single market,
- Consistent and congruent with market measures and other CAP tools

The term "mutual funds" for the envisaged IST is unfortunate. It implies a random distribution of market risks over participants, but this is untrue for systemic price risks. This is why "Matching Funds" would be a better name. In a Matching fund, when farmer contributes now a given amount to the fund, the compensation he will receive in bad years will be matched by a contribution from the EU budget.

To avoid perverse effects and the ensuing lack of trust, it is important to prevent some participants from being permanent losers due to the pooling of contributions. Further, to ensure that large commercial farms with narrow and risky income definition would impose an excessive burden on the scheme and draw excessive benefits, the rate of contribution should increase with the covered income and with the attached risk. This condition is necessary for the farmers to reveal their demand for coverage and to incentivise their search for all means to spread risks.

To keep the amount of information low, it would be simpler to offer a risk coverage that is not an exact but an approximation of actual loss, highly correlated with it, easy to evaluate through objective market indicators and declared account structures in benchmark period. For example, participating farmers could choose a fraction of their income in a reference period as the base they want to cover. Their contribution rate would be an increasing function of this income base. Market price indices for outputs and inputs weighted by the ratios of the declared account structure in the reference period would provide a rapid, objective and acceptable indicator of income loss. Adjustment of factor and product combination in the benchmark would be open to periodical revision. Calculation of an index to trigger compensation would be rapid and predictable.

The design of parameters laid down in Article 39 of Regulation (EU) 1305/2013 to make it stick to the letter of annex 2 of the 1994 WTO Agreement on Agriculture does restrain "matching funds" to stay in a strait jacket. Moving away from actual individual income reference and to indices may potentially conflict with the "green box" of the 1994 Uruguay Round Agreement on agriculture (domestic support provisions). Two responses are possible: either bet on "amber box" notification or on *de minimis* to offer schemes for addressing shocks small enough to preclude eligibility to the 30-70 trigger-compensation rules. This would be a move toward the shallow losses schemes of the US policies, with their liabilities. A second avenue is to ensure that compensations are not linked to current farmers' decisions and to prices.

The threshold inherited from the WTO for green box compatibility might not be constraining if the income reference contracted for coverage is clearly defined on past records. The reference to price indices in the index to trigger compensation is apparently more problematic. However, this is not so readily obvious if one reads carefully Annex 2 of the 1994 WTO agreement and takes its wording for granted. Regarding compensations, Annex 2 item 7 (c) of the WTO Agreement on Agriculture goes:

“The amount of any such payments shall relate solely to income; it shall not relate to the type or volume of production (including livestock units) undertaken by the producer; or to the prices, domestic or international, applying to such production; or to the factors of production employed.”

In the scheme envisaged above it is the trigger that may be in contradiction with this wording but not the compensation *per se*, since its basis would be a declared and past reference of income coverage. The absence of link to the type of production raises a more difficult issue as it seems to preclude Matching Funds organised by sectors. However, even specialised farms rarely run single production and the income reference declared for coverage could well involve all sources of farm incomes as well as direct payments;

This raises the question of the best-suited institutions to organise such IST/Matching Funds. The European Investment Bank was recently asked by Commissioner Hogan to investigate financial instruments to that purpose. On the face of it, banks and insurance firms would have the experience to offer such services. On the other hand, the record of the insurance programmes in the US shows that service providers have been excessively beneficiaries of the system.

One argument to have producer groups and cooperatives running IST schemes is first the knowledge they have of their members' sales and purchases. Secondly, Producer Organisations providing such a service would enhance their bargaining power, considered as the weakest in the food chain. Providing such a service might further be considered as an undertaking that improves the efficiency of the supply chain and therefore make POs more easily compatible with competition rules.

If income stabilisation and market disturbance mitigation is to become a serious goal of the CAP, there is an important work for designing and experimentation of instruments. And as the experience of federations of countries operating a single market shows, such policies are to belong to upper level of government.

3.5. Remarks on other farm sectors

Milk as a case study revealed important features of markets and policies, but at the cost of distancing from the general picture. On the other hand, such a general picture is likely to lose practical relevance as the EU market situations differ greatly according to products under scrutiny. Agricultural policies of countries comparable to the EU in the world include a number of different commodity programmes. This complexity stands as a warning that simple and uniform schemes for all farm products may simply be out of reach.

3.5.1. EU trade position is a constraint for market measures

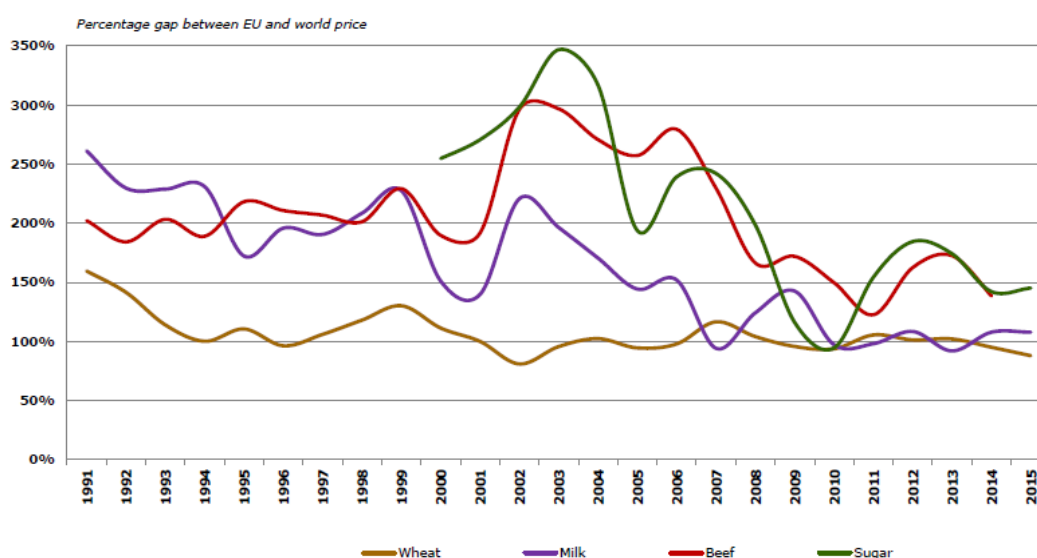
The simulation exercises for dairy pointed the external leakages of market measures, our competitors benefiting from price hikes. The EU combines positions of large world producer and large exporter. Unilateral market support cannot help undermining EU price competitiveness. Although strict tariffication should have the same implications for large net importers, it is a fact that last Uruguay Round WTO negotiations have been harsher on export subsidies than on tariff-rate import quotas. The domestic price for butter in the US for example is lastingly higher than in main dairy producing countries (European Commission, 2016e). Accordingly, the US have extensive regulation and support programmes. New Zealand, main actor worldwide in dairy, could not afford regulating domestic prices. It has carried limited income insurance tools but mainly developed a

dominant dairy cooperative. It concentrates supplies, and thus gains market power in dealing with importers.

The EU has become a net exporter for many farm products and sometimes with high self-sufficiency ratios.¹²⁸ Wheat (126), barley (122), cheese (108), butter (105), SMP (126), whole milk powder (213), pig meat (111), poultry meat (104) are structurally net exporter. Maize (89), rice (64), sugar (89), sheep and goat meat (86) are the net importing sectors. Beef and veal (100) have stayed about self-sufficient for last decade. Eight sectors are net exporters and four net importers, together which feed proteins. Even without export restitutions, the EU is now a permanent exporter for most staple basic agricultural commodities. To a certain degree, the exporting position reminds us how the United States modified its public storage programmes in the 1980s to avoid their undermining effects on exports.

Figure 20 displays both the narrowing gap between EU and world prices for selected farm commodities. Moreover, the remaining independent component of EU prices fluctuations is apparently vanishing over time, and particularly so for the net exporter wheat and milk sectors.

Figure 20: Long term trends and fluctuations in EU-world price gap



Source: AGRI calculations based on European Commission AGRI and OECD data.

Source: Haniotis (2016)

3.5.2. Patterns of risks and price disturbances across sectors

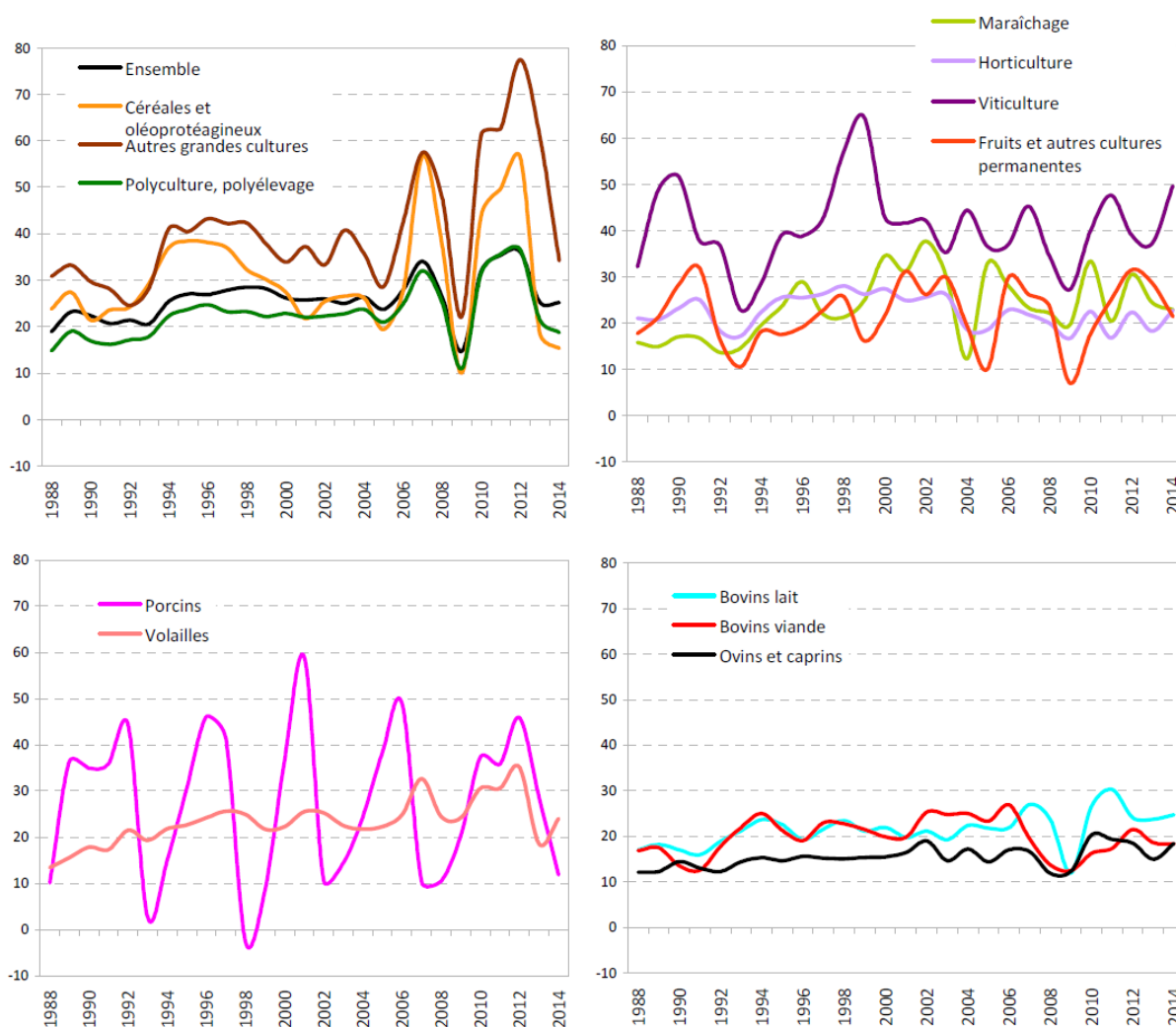
Figure 21 displays the pattern of net income¹²⁹ fluctuations over three decades for selected farm orientations in the case of France. Production cycles prevail in several sectors, long for fruit and wine, or shorter but still significant in beef, milk, pork and even poultry. Annual crops are more erratic. Pork and poultry have been long unregulated save

¹²⁸ Figures are for 2013 and come from Matthews (2014a). Data display self-sufficiency rates from 2004 to 2014. Data suggest significant increases for Cheese, SMP, pigmeat and sheep and goat meat; stability for wheat and barley, whole milk powder, beef and veal, and poultry; decline for butter, sugar and to a lesser extent for maize and rice. Oilseeds, and vegetal proteins which are largely imported, are not quoted.

¹²⁹ The Figure is drawn from Ministère de l'Agriculture (2015) and the income definition is close to net income per unit of family labour before income tax.

for the use of export restitutions, and the regularity of the pork cycle is rather striking. Less regular are the quasi cycles in fruit and wine but signs of delayed effects of price response and of price reversals are present. This evidence is consistent with the underlying market forces in the presence of significant production lags. The patterns for milk and to some extent beef, suggest that cyclical behaviour could emerge again with the end of dairy quotas. Productions with annual periodicity such as crops and vegetables do not display such regularity, although economic cycles influence commodity markets and linkages of grains with oil prices have been pointed.

Figure 21: Types of fluctuations of “net incomes” for selected farm orientations in 1000 euros of 2014 (France: 1988-2014)



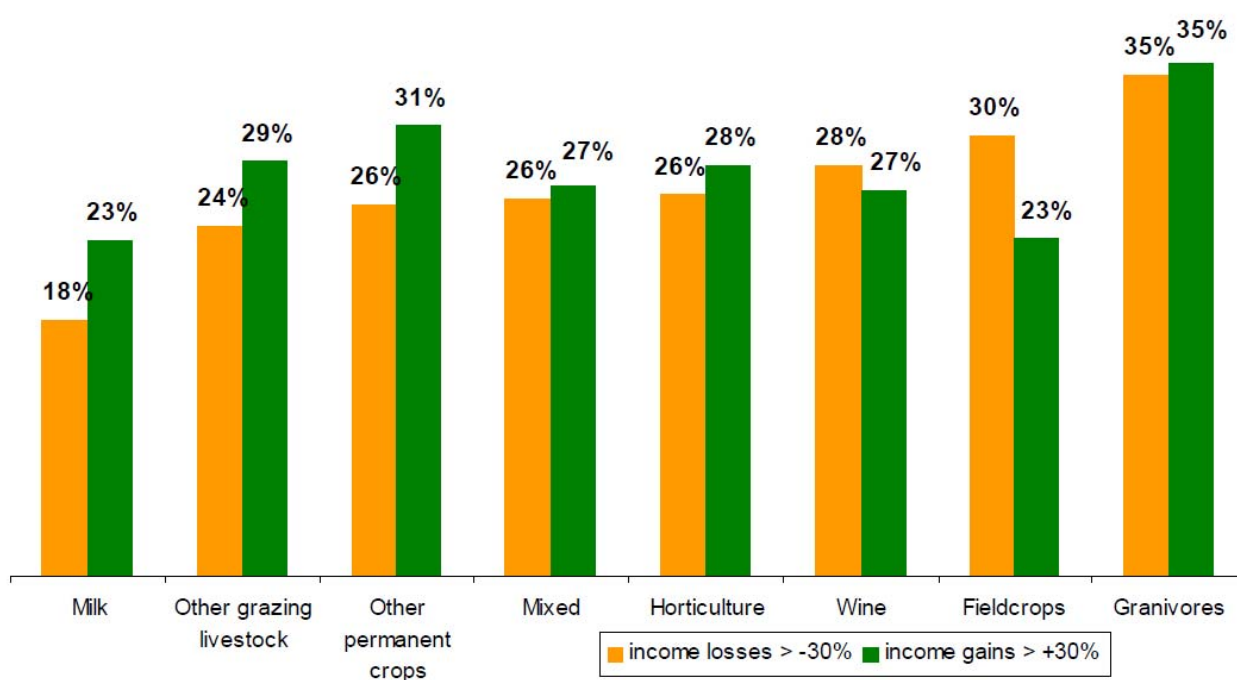
Source : SSP RICA

Glossary: Ensemble=All sectors; Céréales et oléoprotéagineux= cereals and oilseed crops; autres grandes cultures=other arable crops; maraîchage= fresh vegetables; fruits et autres cultures permanentes=fruit and other permanent crops; porcins=pork; volailles=poultry; bovins lait= dairy cattle; bovins viande=beef cattle; ovins et caprins= sheep and goat.

The magnitude of income variability varies across farm sectors. High income and price variability is prevalent for fruit, vegetables and wine producers. Pork and poultry, which face both output and input price volatility, are exposed to high risks. These sectors (save for ordinary wine) have been much less regulated than main crops and grazing livestock. However, the decline of straitjacket market management and restitutions changes the picture for main crops, and for beef and milk. Cordier (2015, p.25) reports own calculations

of coefficients of variation for year 2008 and Value at Risk¹³⁰ at 5% probability level for selected farm sectors. He found for Value at Risk (in 1000€): -14.2 for fruit tree, -19.7 for pig, + 16.9 for main crops and + 22.3 for bovine milk. Fruit tree are exposed to both natural and price shocks, which are interrelated due to demand effects. Pig sector seems affected with endogenous price variability, caused by internal dynamics of market that still reminds us of the Cobweb model. The quoted figures of Value at Risk for crops and milk would clearly need updating to account for the decline of market intervention, as the time series displayed in **Figure 21** strongly suggest.

Figure 22: Share of farms with a variation of farm income* greater than -30%/+30% by type of farming (1998-2006)



Notes: *income is defined as FNVA per farm

Source: European Commission (2009)

Figure 22 documents the variability of farm incomes defined as FNVA per farm over the 1998-2006 years based on FADN data (European Commission, 2009). In this period, the most striking observation is that no sector is sheltered from sizeable income risks. Granivores, horticulture, permanent crops with little CAP support are among the most exposed to recurring significant losses. Arable crops are close to this group in spite of benefitting from relatively important direct payments at the time. Dairy was benefitting from more stability since quotas were still enforced.

Figure 22 reveals an asymmetry in the occurrence of positive and negative shocks. For milk, other grazing livestock, other permanent crops and horticulture, high incomes are more frequent than low. Strong market regulation in these sectors is the likely explanation, but also the asymmetry of public intervention, as we pointed out. Governments and the EU respond to demands for regulation from organised producers, but these pressures occur

¹³⁰ The calculations were derived from income indexes and price shocks simulations. Coefficients of variation were "0.74% for fruit tree, 0.84% for pig, 0.41% for main crops and 0.39 for bovine milk".

when price collapse, not when they boom. The other important finding in the 2009 Commission study is that compensating losses according to the 30%/70%-rule would have cost around €10 billion in most years with sizeable annual fluctuations both in the total amount and in benefiting Member States. Such explorations are a must, if the EU is serious about coping with market failures and ready to reshuffle the logic of rights to hectare payments inherited from 1993 to tackle price disturbances.

Dell'Aquila and Cimino (2012) simulated the implementation of an IST over FADN farm accounts of Italian farms for the 2007-2010 years. Their results document the sensitivity of such an IST scheme to the concept of income used, as we found in our own simulations. Their results confirm that farm orientations with highest risk exposure are granivores and horticulture. Another interesting result is that largest farms, and particularly granivores, would capture large compensations from an IST. This exemplifies the possible regressive effects of a one-size-fits-all IST scheme as we anticipated in Annex 2 and in section 3.4.3. The latter two studies provide evidence of the need for experimentation and empirical validation of IST schemes with different parameters to avoid undesired effects.

Interestingly in 2000, the European Commission (2001, p.30 and 2000) proposed to launch a regulatory fund for pig producers funded by levy collection in good years and compensations during crises. There was no political support from Member States. This is further evidence that political demand for crisis management is asymmetrical and vanishes when prices are good or booming. Since farm organisations expect that *ex post* measures will be taken anyway, they have little incentive to get organised and involved in preventive schemes such as ISTs.

The overall picture of price and farm income instability across sectors is that of a rigid system. Excessive preference for the present and myopic perception of the future by economic agents put the market system at risk.¹³¹ Producers fail to coordinate production plans and flood a saturated market at the cost of their own losses. Unbalanced market power along the food chain is another factor of market crises. To tackle these well-known market failures requires strong and consistent policy tools.

Nobel Prize winner Jean Tirole (2016), reminds us that market failures exist and that the real question is finding the right balance between market mechanism and regulation by the State. One neglected market failure occurs when agents do not make good decisions for their own future. This is why contributions to social security, basic health insurance, or basic retirement schemes are mandatory in most developed countries. But the same author, with others, also points to evidence of government decisions twisted to benefit pressure groups; hence, the necessity to design regulation schemes resilient to the political influence of narrow special interests.

A voluntary system amounts to rely on economic agents' foresight and clear perception of future risks. However, experience shows that this does not happen. In good years, farmers invest instead, sometimes in excess, or in land and real estate, and are not prepared to make the savings available to soothe crises. All this is to justify a mandatory scheme, since lenient addition of a new layer of expenditures is hard to justify for European citizens in view of average farm incomes and ownership.

¹³¹ On this regard the proposal of France at the May 2016 Council for a mandatory precautionary savings, i.e. to freeze a proportion of direct payments in a blocked account is a positive step in that direction, although the approach is not comprehensive and does not foresee to reshuffle payments and integrate all the market and risk coping tools in a unique pillar.

3.6. Good properties for Market Safety Nets and Risk Management schemes

Policy tools should provide the right incentives to economic agents (farmers in particular), be compatible with legal context although institutions may evolve, be politically resilient and have social and political legitimacy.

3.6.1. Instruments should provide economic agents with the right incentives

One of the most fertile breakthroughs of economic theory of the last decades is the concept of mechanism design in policymaking¹³² (Hurwicz, 2007). Broadly speaking, it aims at giving agents the right incentives, which lead them to pursue the public interest in making their own "self-interest" decisions. Incentives may consist of prices, taxes, norms, rules and therefore institutions. This "soft ruling" strives to lead the whole system - markets, market policies and RSM - to operate almost "by itself".

For Market Safety Nets and RMS to operate efficiently, other policy instruments such as subsidies should not induce contradictory incentives.

Policy incentives should induce agents to avoid risky business plans, and to adopt prudent financial behavior and use Risk Management instruments. If, in a context of market crisis and depressed prices, agents see governments as compelled to provide generous support and to curb income losses, whatever the equity position of farmers and their past risk-loving strategies, the latter have no incentives to look for prudent strategies and to avoid risk exposure. The parallel with the "too big to fail" syndrome of the risky behaviour of banks (Stiglitz, 2010) is appropriate.

In both cases, expectations are that government will be a last resort rescuer and crowd behavior during booms lead to excessive risk exposure. Hence, hyper-specialization to capture economies of scale, excessive borrowing, neglecting liquid financial reserves, undeveloped private RMS or low producer participation.

Public support through market measures and emergency aids from the Reserve should target those who have adopted risk spreading and precautionary saving behaviour, as well as participation in income stabilization schemes. The bonus of support to POs in the fruit and vegetable sector who developed Risk Management Schemes is an example of good incentive in the single CMO.

Market measures raising prices are hardly appropriate, because a better price is for producers a public good by nature. It is available to everyone, whatever past strategies. Hence, the lack of incentives for the individual farmer to restrain supply boosting plans in periods of booming prices.

The Reserve for crisis and emergency aids should embody this incentivising perspective. Emergency aids from the Reserve working through budget can select beneficiaries, for example those who participate in a risk-mitigating scheme. If the EU distributes aids in proportion to quotas, as recently done, no signal of caution is given. The Commission's decision to delay the cashing of superlevy in 2014 is another illustration of wrong signals.

¹³² Chapter 5 of J. Tirole (2016) gives a clear and accessible presentation of how to best combine market and government for the purpose of serving the "common good".

Aid to private storage or even access to public storage could be restricted to “firms” or POs who have installed an IST for their farmers. But, it is not the case today. Intervention by storing basic commodities is also a poor incentive to enhance quality and value creation from consumer demands.

Such rules should naturally be announced in advance to allow rules-based expectations to form, and time be given to agents to adjust their future behaviour and strategies accordingly.

3.6.2. Instruments have to comply with the EU legal framework and with its external obligations, but institutions may evolve

The design of EU support to ISTs and crop insurance schemes in the last reform aims at eligibility to the green box or to the *de minimis* clause. Overzealous abiding to WTO constraints should not be the EU attitude by excessive fear of complaints and panels, as long as policies have a high standard of achievement regarding public interest in the EU. Ways and means exist to design such programs with side conditions that ensure greater compatibility with the blue or green boxes; and the EU has large degrees of freedom before hitting the current Aggregate Measure of Support ceiling under the Domestic support provisions of the WTO agricultural discipline.

Internal compatibility of new tools with the EU legal setting is an obvious requirement; but routine is to be avoided. Making market regulation both moderate and effective requires two institutional innovations. One is to reshuffle pillars to define the right sharing of competences between the EU and national governments.

Another, more significant change, is the delegation for several years of implementation of policies drawn by political institutions. As the European Parliament is not supposed to participate in the fixing of policy parameters (price and quantities) according to Article 43(3) of the Treaty, one solution to rebalance powers between institutions of the Trilogue is that they all three focus on laying objectives, principles and rules; and, delegate implementation to an independent authority.

3.6.3. Political resilience, good governance and social acceptability

Many examples in the history of the CAP show that, whenever short-term decisions are under political influence, interest groups and national pressures from the Council or the Parliament will bias the decision procedure in favour of protecting vested interests, generally at the expense of EU taxpayers.

Better decisions could result if the political institutions define general rules and principles of policies before problems arise. This is called policy design “under the veil of ignorance”. This means that stakeholders’ decisions on rules are more likely to be fair and efficient, as only circumstances, not easily predictable, will determine ultimate beneficiaries. A party will avoid rules that could possibly hurt himself, and therefore anyone else. Such a process occurring away from crises and pressures could design rules in line with public interest and less influenced by special interest groups.

For European citizens to have faith in the European project, social acceptability of policies is a concern to take more seriously. This requires more transparency of the beneficiaries of European policies; ensuring that the single market is not only a question of free movement of goods but also of level playing field and of balanced market power along the food chain. Improving European institutions concern for those under stress or in relatively weak position are means to enhance the legitimacy of European policies.

3.7. Towards an integrated system of market measures, IST and Basic Payments, combining preventive and curative actions

The EU system of market regulation has several instruments, but it is dispersed, lacks coherence and even allows for contradictions. In the CAP, push and pull incentives are rife. There is no adequate tool to prevent crises or mitigate their impact, only curative measures through market intervention and exceptional envelopes. The decisions are *ex post* responses occurring late and are mostly occasions for political tensions. Producers expect the EU to come into play as a last resort to prevent failures. The policy tools are present, but not integrated to induce producers to adopt less risky business plans or to participate in price risk management schemes.

3.7.1. Coping with price risks: objectives and instruments

To tackle market disturbances, policy measures have different roles. Mitigation consists in attenuation of impacts on farmers' incomes. It does not act on the causes of the crises but on effects. Market measures, acting after the shock, are curative and occur *ex post*. Prevention consists of precluding farmer behaviour from fueling market crises (supply response) and from indulging into risk exposure (specialisation, speculative investments).

Instruments for Mitigation of consequences of price collapses

- Income Stabilisation Tools /Matching funds
- Precautionary Savings
- Emergency aids from the Reserve for crisis

***Ex post* curative measures raising prices**

- Intervention and withdrawals from market
- Short run supply reductions (under *crisis prevention cross compliance*)

Preventive measures during price booms

- Preventing excessive exposure to price risks and future exposure to financial stress due to investments in fixed assets
- Encouragement to precautionary savings
- Supply containment (under *crisis prevention cross compliance*)

When the production cycle is short, the potential for prevention is limited, since production plans can be quickly adjusted to market conditions. Prevention is not possible either when shocks are due to nature or external events. Hence, annual crops are hardly eligible for true preventive policies.

Still, future financial stress could be alleviated if, during booming prices all support instruments did not concur to exacerbate investment and borrowing responses. It would be desirable to issue warnings, to modulate over time farmers' contributions to Matching funds and to freeze part of Basic Payments in a savings account.

When price booms reflect clear divergence of supply and demand trends, prevention of supply surge and investments euphoria is the sensible approach. Productions with a long cycle offer a larger potential for acting on causes of market disturbances, and this in a timely manner. Hence, true prevention is possible for animal products and tree crops. This is the most efficient policy from public interest viewpoint, as shown in the dairy case.

3.7.2. Integration of all policy instruments

- *Crisis prevention cross compliance* of Basic Payments with Risk management and market measures

To induce participation in IST/matching funds, which benefit to all farmers, stronger policy tools are required. The EU institutions should condition eligibility to Basic Payments on this participation.

When exceptional price collapses occur, and short run supply reduction is required, Basic Payments to non-participants could be suspended as a means to circumvent free riding and prisoner's dilemma. Contrary to regulation by quotas, farmers wanting to maintain their output levels, presumably profitable at the margin and therefore competitive, could do so, but forego public support. Inelastic demand and price response will more than offset quantity losses; hence, further EU subsidies to induce voluntary programmes have no economic justifications, but result from programme misconception. In contrast with heavy-handed supply control by quotas, mixed up with price support and political failure in quota allocations, *crisis prevention cross-compliance* is the readily available tool to differentiate producers who want to rely on free market and those who need support.

Noticeably, this *crisis prevention cross compliance* already exists in the single CMO under a different form for the fruit and vegetable sector. The extension of rules, hence mandatory participation in operational programmes of non-members of Producer organisations, is just a way to circumvent free riding and to ensure efficacy of these programmes, which otherwise would fail like International Commodity agreements.

- Time consistency and public interest ensured by independent authority

Another way to make policy instruments more consistent is to ensure that time consistency and public interest are pursued by decentralizing management to an Independent Authority. Simulations in the case of the dairy sector suggested that inaction during booms is "the worm in the fruit". Only an independent Authority having a mission will act in a consistent and precautionary manner, including when prices boom and demand for regulation has disappeared. An Independent Authority is not a board of stakeholders. Its mission is to pursue public interest, and ensure competition prevails.

Our view is that the possibility, for all three political institutions,¹³³ to interfere into details such as changing prices or volumes of intervention is not the best framework for good policy making. The set of articles referring to the necessity for the Commission to take delegated acts and implementation acts (notably articles 227,228,229) makes the single CMO text, and the system, complex. More importantly, it provides for an excessive involvement of political channels and pressure group influences, which pursue special or vested interests more than the common interest.

On this regard, we think that the CMO could be simplified and that together with the design of the CAP and the fixing of the budget for the MFF period, a mandate for implementation of market measures would be written down and given to an executive body. Whether it was a branch of the Commission or a separate Agency, it would be accountable to institutions of

¹³³ The Commission being considered as both a political and an administrative body.

the Trilogue but empowered to act within the mandate. It is a paradox that regarding trade negotiations, monetary policy, health etc. this is the case, but not for agricultural markets.

Objectives pursued and results expected would need to be clearly drafted, which is not really the case today. Several expressions in the 1308 regulation mentioned to justify action from the Commission are simply not defined. Among examples are: "exceptional market circumstances", "urgency situations", when the "market situation so require", "avoid any disturbance on the market",¹³⁴ etc. Moreover, the CMO could include rules to avoid the system to go astray, such as safeguards for budget outlays,¹³⁵ self-financing requirements, rules for revision and accountability of the mandated institution.

The current situation reflects the difficulty at the political level to define clear and consistent objectives for policies regarding agriculture. It leaves the Commission with the burden to take delegated acts but appreciation of the opportunity to act is left to judgment. The consequence is political exposure of an institution in times when the essential part of its mission is executive. With more precise mandate drafted away from hard times and bad years, better "rules of commitments and action" would be produced by the political level of government and consequences of these rules better assumed and not passed on to "Brussels scape goats".

To summarise:

- Absence of integration of policy tools and incentives blurs the function of mitigation and prevention of crisis, and chokes the emergence of an efficient risk coping system.
- Political institutions should lay down the rules and objectives of strong market measures for the MFF duration and not interfere into day-to day management.

3.8. Long-run perspective: value creation and value added sharing in the food chain

This report focused on issues of market disturbances and price risks mitigation. Time constraint did not allow addressing properly long-run challenges such as value creation, competitiveness, level playing field competition in the single market, and competition regulation in the food chain. Still, several CAP instruments mingle with these issues, which are of utmost importance for European Agriculture and food industry to thrive in the future. The Regulation on national aids, support to investments in rural development programmes and many articles in the single CMO – Protection of Denomination of Origin, contracts, Producer's Organisations- do affect these matters. Competition Authorities, both at Member States and EU levels, do monitor competition rules across Europe, and tend to focus on the discipline of mergers and of price fixing cartels.

The CAP has a long history of conflicting with competition policy. Exemptions from Article 101 of the Treaty are possible under some conditions, one being the satisfaction of (all) the CAP objectives of Article 39, but this condition is hardly feasible in practice since for example "increasing individual [farm] earnings" and reasonable consumer prices can easily become contradictory. The atomistic structure of the farm sector makes it prone to be crushed by the pressure of upstream and downstream oligopolies, and forces it to absorb most of the price adjustments.

¹³⁴ Article 16 (a) CMO states: "disposal of products bought in under public intervention should take place in such a way as to avoid any disturbance on the market". But isn't slowing down price hikes by resale a small disturbance?

¹³⁵ Such a rule exists for operational programmes in Fruit and vegetables.

The fruit and vegetable sectors already benefited from an increased power in times of crises, thus sheltering POs from the scrutinising arms of competition authorities. The force of the POs in this sector comes from the power they hold for withdrawals and green harvesting, with EU budget support up to 4.7% of turnover, but under the implementing acts of the Commission. The balance of market power relative to the distribution sector is still not achieved however, at least if we have faith in the numerous anecdotal threats of dereferencing and of unilateral denials of long term contracts by purchasers, which are reported by PO agents in times of low spot prices.

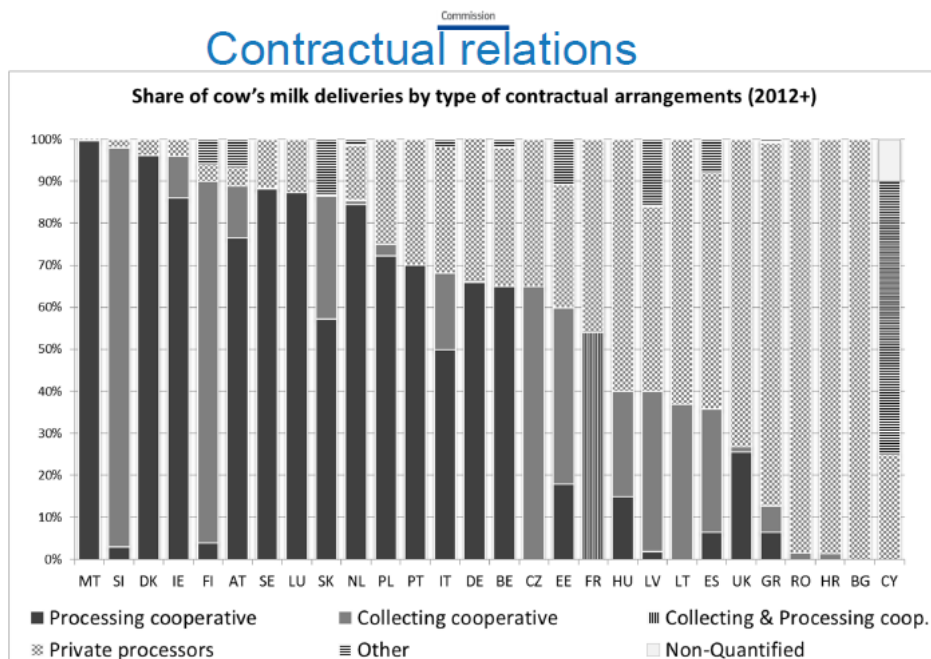
The 2009 dairy crisis and the phasing out of the quotas led to clauses in the CMO Regulation that would allow farmers to organise and negotiate contracts with collectors, whereby written conditions include prices. Both farm organisations and policy circles expressed high expectations regarding the ability of contracts to strengthen on their own the bargaining power of dairy farmers. However, to anticipate that written contract by an individual farmer would ensure a fair price and secure commercial relations with the collector was only wishful thinking, as we pointed out before. The ability of a farmer acting alone to sue the dominant purchaser is void given the dissuasive cost-benefit ratio of any legal action and the threat of retaliation he/she may face, particularly if no alternative collector is readily available or if the sunk cost into the contractual relationship is significant.

Fortunately, the single CMO provided for collective negotiation of contracts on behalf of farmers through recognised Producer Organisations and their Associations. The power granted by the new regulation to producer organisations to negotiate contracts, including on pricing rules, without falling under the scrutiny of national and European competition authorities, could change the odds for an atomistic sector such as agriculture. The CMO provisions ensure legal security from competition Authorities, even if negotiations include "similar prices for all" and if there is no transfer of property of goods to POs. Recognition of POs is mandatory in the dairy sector and a few others¹³⁶, but it is up to Member States to decide to make formal contracts compulsory. The recent report on the Milk Package (European Commission, 2015i) reveals that only 13 Member States have made contract compulsory, and notes that these MS have a notably limited cooperative structure.

When dairy cooperatives are considered similar to POs regarding contracts, since they dispatch value added to their members, more than half of Member States hold at least 50% of deliveries covered by organised contractual relations with collectors (**Figure 23**).

¹³⁶ Fruit and vegetables, olive oil and table olives, silk worms and hops.

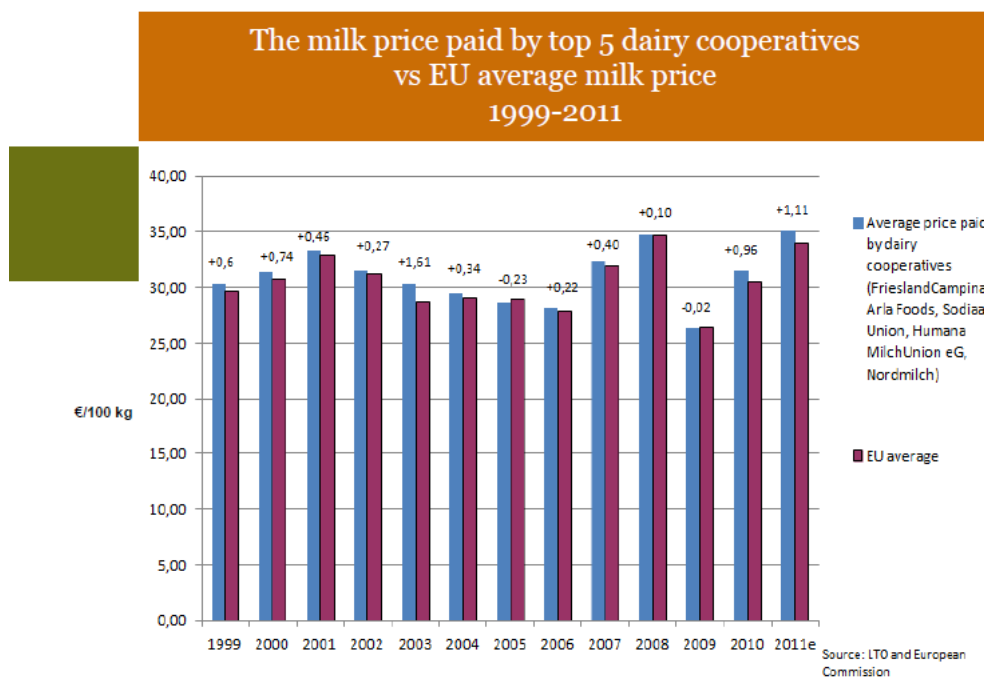
Figure 23: The current situation of contractual relations in the dairy sector



Source: http://ec.europa.eu/agriculture/milk/milk-package/slide-show-implementation_en.pdf

Hard evidence that this organisation has produced better prices for dairy producers is not readily available and would need further analysis, since price levels in different Member States also depend on costs of production and on the value of the product mix of dairies. The presumption is however that the provisions of the CMO in favour of collective negotiations and supply concentration have improved dairy farmers' position in the food chain; but the evidence is also that this is not adequate to prevent lasting price drops.

Figure 24: Premium price per paid by main cooperatives



Source: http://ec.europa.eu/agriculture/milk/background/jm-2012-03-06/10-copa2_en.pdf

Figure 24 gives partial evidence that big cooperatives may provide better milk prices, but other sources also point that cooperatives often have a less valuable product mix or higher costs, and hence are not able to ensure best reward for raw milk. It remains to find out whether it is size and the resulting negotiating position or value sharing rules that matter, but this evidence further shows that the price premium of cooperatives is slim. Given the importance granted to this issue in the CMO, further investigations on the impact of contract relations on farm gate prices are clearly in need.

The powers given to producer organisations in most farm products have raised concerns that abuse of dominant position by the farmer side could also occur. It is not good policy to try solving excess market power from oligopolistic behaviour of purchasers downstream the food chain by installing oligopolistic marketing of farm products. With the current focus on making the farm sector stronger, the risk of double marginalisation with the ensuing costs for consumers could become reality.

The thresholds of market share for producer organisations to negotiate without coming under fire from competition authorities are set in fixed numbers, which are different across sectors. Thresholds are mostly defined as proportion of national production. They may be plausible and easy to monitor, but their logic is still obscure and a better alternative could be to refer to absence of dominant position in the "relevant market" as defined in Article 207. However, competition authorities badly need to upgrade their effectiveness in monitoring dominant position and unfair practices as well; including when they emerge from buyers groups.

Besides the clauses targeting products under geographical indication, the Commission has issued guidelines for implementation making explicit that barriers to competition, dominant position, price fixing, and entry deterrence shall be avoided and that producer organisations providing services for efficiency gains in the food chain are less likely to conflict with competition rules.¹³⁷ The Commission rightly resisted the requests from some farmers' organisations to grant inter-branch organisations powers to establish a sort of reference price. Such a possibility would have ruined the role of prices as a means to channel upstream the differences in collectors' efficiency to transform and market the raw material. The possibility for inter-branch organisations to act as mediators is worth mentioning as it might help improve the situation of smaller organisations or individuals, but the powers of inter-branch organisations to monitor and dissuade unfair commercial practices regarding large retail companies or collectors remain quite elusive.

The excess of market power granted to farmers by the CMO has not yet shown signs of developing. On the contrary, the concentration both in sections of the food industries and particularly in the distribution sector are still so prominent that excess of market power downstream is the base assumption to make. Hard evidence on these issues is not available however, and a widespread view is that excessive margins and dominant position are not visible enough to be a real problem¹³⁸.

This is in sharp contrast with the numerous anecdotes of small suppliers forced to accept dire conditions under threat of being banned from further purchases. How is it that the several major distribution firms were able to offer a significant envelope of €100 million

¹³⁷ The Commission has launched a consultation on these matters and issued guidelines to implement Articles 169, 170, 171 (http://ec.europa.eu/competition/consultations/2015_cmo_regulation/index_en.html).

¹³⁸ This is the usual conclusion of the French Observatory of prices and margins, and we have strong doubts regarding the system to reveal price and margin premiums due to market power of the distribution sector.

under the pressure of French pork producers, if competition was strong enough to ensure the absence of exceptional profit margins during the period of price collapse? The same question applies to the dairy firm Lactalis who was able to promise milk price increases by about 10% over three months, also under the pressure of demonstrations. There are several pieces of evidence across the world that both distribution firms and owners of department stores have accumulated wealth that innovation cannot explain, but most probably that profit rents due to market power have allowed. Unfair trade practices (UTP)¹³⁹ are known to be widespread when buyers are concentrated such as in the French distribution sector and in other Member States as well, and the European Parliament has recently called attention on the issue.

The competition authorities may show some efficiency in using legal arguments to break cartels and limit mergers, but they do not carry a lot of clout to acquire proofs and to discipline abuse of dominant position by the concentrated retail sector. Discipline of unfair trade practices should be a priority. On this regard, anonymous reporting of disloyal practices to Authorities - and confidential reporting on margins as in the United States for Dairy - should help improve transparency and bring about more restraint and better balance in trade negotiations.

Many articles about contracts (e.g. Article 148(4) for milk) refer to the requirement that contract "shall be freely negotiated", in particular regarding prices. This sounds like wishful thinking in regard of the little choice a typical dairy producer has in most areas. This clause is impossible to implement and to monitor. Similarly, dispositions in the CMO to make easy and costless for farmers to switch to another purchaser are absent¹⁴⁰, and other items even tend to tie firmly the farmer to his collector. It suggests that competition Authorities have not fully grasped the implications of the major asymmetry in trade negotiation due to the difference in concentration and sizes between successive layers of the food chain.

Moreover, the significant strengthening of the farm sector's bargaining powers can hardly replace the much needed effectiveness of competition policy downstream in the food chain and in particular in the retail sector, which has become increasingly concentrated over time. The Commission and the competition authorities need to improve their toolbox to produce proofs of excess profit margins and of dominant position with a more solid legal basis; and to be more cautious in letting mergers happen both in the farm input industries and the retail sectors. Moreover, preoccupation with consumers should not lead competition authorities to neglect scrutiny of buyer group practices, which are particularly frequent in the retail sector (Carstensen, 2010). Excess concentration of buyers group in food distribution is a problem that competition authorities are reluctant to address. Such buyer groups may be justified when distribution firms face multinational firms with famous brand names and strong market power, but what is the rationale for allowing a large department store to negotiate its procurements from small and medium size enterprises through its high power buyer group instead of directly? If large department stores were required to negotiate directly with small and medium size enterprises instead of bargaining through their threatening buyer group, this would greatly restore balance in an asymmetric trade relation.

Another area needing scrutiny, which seems largely neglected, is the concentrated farm input industry where the suspicion of unbalanced market power is clear.

¹³⁹ In its response to the survey of UTP.

¹⁴⁰ Such dispositions in the cellular phones and the bank sectors have seriously improved consumers positions.

4. PROPOSALS FOR ADJUSTMENTS

4.1. A new pillar structure more consistent with subsidiarity and fiscal federalism

The proposed pillar structure draws its rationale from subsidiarity and fiscal federalism, which provide logic for competences allocation to various levels of government and for sharing finances. The principle is to match government level with the scope of the public goods it provides.

Proposal 1: Pillar 1 gathers funding for the global commons (Global Environment and Climate or Pillar GEC) and is 100% financed by the EU budget. It would cover European and global public goods such as global warming prevention and general biodiversity.

Payments for ecological services have their place in Pillar 1. Really redistributive and targeted payments in favour of deprived areas could be eligible. Payments for natural constraints could be kept in Pillar 1 in the name of cohesion. Other payments inherited from price support policy are to move to other pillars. Payments for preserving areas of exceptional value praised by all Europeans could be in Pillar 1.

Proposal 2: Pillar 2 gathers funding for "Quasi local" commons. Like most of current Pillar 2, it is devoted to local public goods. Agri-environmental measures are the archetypes of policies jointly managed and co-financed by the EU and Member States.

Measures currently in Pillar 2 that do not target territorial or environmental public goods, or which interfere with the single market such as aids to investment and to "modernisation", are moved to a third Pillar defined below.

There are arguments to keep in Pillar 2 the RMS instruments dealing with natural risks i.e., crop, disease and environmental insurances of Article 37, and Mutual Funds for natural risks of article 38 of Regulation (EU) 1305. These instruments could be called Natural Risks Management Schemes as opposed to "Price Risk Management Schemes" i.e. the stabilisation toolkit of Article 39, or other income insurance support instruments. Catastrophic events or systemic natural shocks are also addressed by the Reserve for crisis at the EU level.

Proposal 3: Pillar 3 would gather measures for Agricultural Risks Schemes, Market Measures and Support.

A third pillar is created for Market Measures, Price Risks Management Schemes, Reserve for crisis, and Basic payments. Its aims are crisis mitigation and prevention, competitiveness and the single market. Pillar 3 also collects all policy tools coping with competitiveness and resilience of the farm sector facing serious market disturbances. It involves both curative measures to mitigate crisis consequences and preventive measures aiming at avoidance or attenuation of major disturbances. Basic payments are moved to Pillar 3. Inter-annual flexibility of budget appropriation is introduced.

Market Measures, Direct Payments and Reserve for crisis, now in Pillar 1, are financed 100% by the EU budget. This makes sense both for Market Measures, because price

support benefits to all European farmers, and for Emergency aids from the Reserve, as they may benefit anyone under exceptional stress. However, to be consistent with declared EU principles, such as cohesion, aids from the Reserve should be distributed with fairness and avoid increase the skewness in Direct Payments benefits. This issue is even truer for Basic Payments. Their financing 100% from the EU budget and distribution have been questioned, discussed at the political level, but eventually upheld. All these instruments determine the operation of the single market and should ensure fair competition and common prices, which are public goods for farmers. Hence, they must be closely monitored at the upper level of government.

The initial logic of the previous "pillar" structure is now blurred. Pillar 1 now covers payments to the environment, a traditional Pillar 2 issue. Support to producer organisations and risk management schemes are in Pillar 2, but funds for market support in case of disturbances are in Pillar 1. Also in Pillar 1 is the Reserve for crisis financed by retrievable tapping of funds from direct payments. In practice, the distinction between pillars tends to narrow to cofinancing and to specific management procedures. Overlapping is a source of inconsistencies between pillars as the debate on double funding showed (Knops and Swinnen, 2014).

The next reform process offers a good opportunity to reorganise the present pillar structure. In the last reform, provision of environmental public goods justified the new targeted payments. But, the reform failed to embark the implications of public goods theory for sharing competences and finances between the EU and Member States.

The supply of goods that market mechanism does not provide adequately, is best organised and financed by matching decision levels and the scope of the population using the public good. Typically, a municipality best runs a local public good, such as a recreation park, while upper government better assumes national defence and security.¹⁴¹ This approach is clearly akin to the principle of subsidiarity.

Pure public goods have value for the whole population; exclusion of someone from their benefit is impossible or very costly; and everyone accesses the whole thing (no rivalry in consumption). The upper level of government best procures and pays for pure public goods. Local public goods belong to the "impure" kind in the sense that exclusion is possible and only a subgroup of the population is concerned. More subsidiarity - competence at a lower level of government - is appropriate in that case.

The CAP is supposed to foster public good provision by European agriculture. Agriculture may provide a number of environmental services under certain conditions: agricultural landscapes, farmland biodiversity, water quality and availability, soil functionality, climate stability, air quality and resilience to flooding and fire are in the list of Cooper et al. (2010).

Climate stabilisation (carbon storage and reducing greenhouse gas emissions) and general biodiversity are typical pure public goods and their scope is global; hence, the strong argument to have the relevant policies designed at the supranational level and totally financed by the EU budget. They should belong to Pillar 1.¹⁴² Basic Payments do not target European public goods. They have no place in such a new Pillar 1.

¹⁴¹ Musgrave (1959), Begg (2009); see also "The added value of the EU budget" (European Commission, 2011).

¹⁴² In Article 59 of Regulation 1305/2013 (Rural Development) the issue raised here is implicitly recognised by applying different rates of EU co-financing which reflect assumptions on the different scopes of the public goods targeted. Climate mitigation and adaptation can benefit from up to 100% EU financing, which amounts

Most of the other environmental services regarding water, soil and air, save for cases where transboundary effects occur, are local in use, and some degree of exclusion is possible at least through the travel cost of access. Hence, local governments should be better equipped than EU institutions in information to tailor their supply and be more parsimonious in local taxes to finance them at the appropriate amount. This is the expected virtue of subsidiarity, where the financial responsibility of local institutions is expected to respond both to social demand for local public goods and to taxpayers' desire that the financial burden be just enough for efficient procurement. Several agri-environmental measures of Pillar 2, where co-decision and co-financing of rural development programmes prevail, fit well in the fiscal federalism framework.

By the same logic, the single market and common prices are European public goods for farmers. All farmers benefit from similar good prices, as long as free markets or market policies ensure good prices. Hence, all policy instruments that have direct or indirect influence on price levels should be ruled and financed at the EU level. Subsidies to price risk management schemes and emergency aids from the Reserve are dependable on common prices, hence, on market measures. Basic payments affect supply dynamics. All these instruments give signals and incentives together with support. They all affect supply behavior, and therefore markets. They require joint supervision. Hence, the third Pillar.

4.2. Reorganize direct payments and empower the Reserve for crisis

Proposal 4: Move Basic payments to Pillar 3. Establish a ceiling on Basic payments per unit of family labour or per member of farm cooperatives, in proportion to Member States Gross National Product per capita.

Proposal 5: Transfer the remaining Basic Payments to build up a sizeable Reserve for crises.

Targeted payments should be managed in the pillar relevant to the scope of public goods at stake, and brought closer to additional costs incurred from environmental requirements. Young farmer payments should be targeted to avoid exacerbating pressures on land prices in favoured areas and fueling rent transmission to outgoing farmers.

The current distribution of Basic Payments is obviously regressive in spite of marginal corrections introduced in the last reform. However, economic effects should also be a concern. Generated rents are partly dissipated into land and farm assets. One direct consequence is the large capital required from new entrants to access farming, the need for borrowing, and the exposure to financial stress and even bankruptcy when market situation turns to red. The accumulation of rent in the larger farms generates sizeable incomes. Hence, marginal income tax induces more outsourcing or over-equipment as farmers make their plans based on after tax outcomes. Large farms and large incomes on average allow for large savings, and thus for investments either within the sector or outside. This contributes to make life harder to young farmers. Further, the separation of business and personal equity gives little incentive to build reserves or to keep liquid capital in the farm accounts for later harder times.

to moving these measures to Pillar 1, except for granted flexibility in local management. This approach is an alternative to pillar reshuffling, but it does not solve the odd treatment of the basic payments inherited from the past.

There is no economic rationale for distribution of Basic Payments in proportion to farm sizes. Only history and collective action of pressure groups, within and between Member States, can explain this skewed distribution. For large farms, a difference should be made between true partner or cooperatives, and commercial farms. Uncapped Basic Payments to commercial farms are not an aid to farm labour but an aid to capital and to real estate. The use of payed labour employed as an argument to raise the ceiling of payments per farm was ill-founded and unfortunate. It is the labour market in the Member State or in the EU, not farm payments, that determine wages in agriculture. The argument that ceilings would harm competitiveness is ludicrous as competitiveness is a question of costs, efficiency, value creation and resilience. Untargeted subsidies do not make farm more competitive, just more profitable.

Putting a limit on farm size is not a solution, but the advantage of a large farm should be based on economies of scale and value creation on the market, not on public support. Hence, time should come soon to consider again eligibility for corporate farming to benefit from CAP support and from the tax privileges attached to the farmer status in most Member states.

Proposal 6: To cope with exceptional disturbances, allow the Reserve for crisis either to accumulate unused funds over several years of the MFF or to have a status similar to the European Globalisation Adjustment Fund¹⁴³.

The Reserve for crises is currently established in Pillar 1 and its resources are appropriated annually and temporarily for a year. That both tools and financial resources were not ready to cope with the current crisis should not be a surprise.

The simulation of an IST along the principles of Art 39/R1305 by the Commission (2009) based on individual incomes from FADN data suggest a frequent occurrence of compensation with the 30/70 trigger/compensation rule. Although the results may be contingent on the concept of income used, it supports the assumption that natural and economic shocks on agriculture occur often enough to motivate a sizeable Reserve and to expect that in most years one of the farm sectors will trigger its use.

Proposal 7: The Reserve for crisis is first used to cover the EU contribution to compensation to farmers paid by the IST/Matching Funds.

Proposal 8: In exceptionally deep crises, where compensations of IST leaves farms exposed to bankruptcy, emergency payments to producers can be paid and financed by the Reserve.

Proposal 9: Emergency envelopes are lump sum per farm or unit of partnership labour. Only family labour, members of true cooperatives or workers sharing the net farm income may be considered as partners.

Proposal 10: Implement emergency aids under *crisis prevention cross compliance* and bonuses for risk avoiding and mitigation behaviour

¹⁴³ The European Globalisation Adjustment Fund (EAGF) is defined in Regulation (EU) 1309/2013. According to "whereas" (3) "Given its purpose...the EAGF should remain outside the Multiannual Financial Framework". "Whereas" (20)" provides that "The Interinstitutional Agreement determines the budgetary Framework of the EGF".

Avoiding distribution of exceptional emergency aids in proportion to farm size is necessary to signal large farms with low net income/turnover ratios they have to avoid risk exposed business strategies or adopt private risk coverage; this incentive is one way to hinder future demand from public protection and budget outlays.

As noted in section 2.2.2, the distribution of the €420 million aid package for coping with the crisis “taking into account levels of milk production” not only raises distributional issues but also more seriously hinders efficient public policy because it gives a wrong signal to large producers that governments and the EU will eventually intervene in proportion to business size. Such signals curtail incentives to adopt less risk exposed production plans. The criteria used to distribute this emergency envelope from the EU budget is in contradiction with the way the Commission insisted on a ceiling of €15 000 per holding, regarding aids Member States are allowed to give producers participating in voluntary supply reduction initiatives (European Commission, 2016b; European Union Presidency, 2016).

4.3. Separate competence for the definition of objectives and rules from competence for implementation

Proposal 11: Set up an independent Administrative Authority for market measures and assistance to RMS: the European Market (Instability) Moderation Agency (EMMA)

Separation¹⁴⁴ of powers is an old democratic principle. Political institutions are constantly exposed to the biased influence of pressure groups and have to balance the pursuit of public interest with the risk of not being elected. Independent authorities were created to implement rules and monitor firms and agent behaviour. Legislative frameworks define objectives pursued and powers to act granted to such independent authorities, but the latter, and not the political institutions, are in charge of day-to-day actions to ensure that markets, banks and firms work in pursuance of the common good. Central banks, competition authorities, commissions to regulate public utilities are few conspicuous of many examples of modern democratic societies.

Tirole (2016) explains how this method can protect citizen representatives who have to be elected from excessive influence of special interests. He reminds us that central banks across the world were granted independent status after accumulated evidence that at the approach of elections governments controlling money supply often take inflationary measures to boost the economy. The narrower are the issues, the more technical the policy tools, the stronger the influence of special and concentrated pressure groups is likely to be. Collective action theory (Olson, 1965) shows how general interest and the largest groups of citizens, taxpayers and consumers are unlikely to weigh on politicians and policies, and how small organised groups are able to capture rents. Inefficient and inconsistent policies may be the predictable outcome. Independence and expertise are valuable assets for administrative authorities in carrying their missions toward the common good.

Principles such as absence of conflict of interest for appointing members of the authority board are resources to prevent authorities to go astray from public interest.

¹⁴⁴ In our early proposal (Bureau & Mahé, 2008), we referred to the experience of independent Central Banks. Others have also proposed such an Agency but mainly on arguments based on stakeholder representation.

The role of political institutions of the Trilogue (European parliament, Council, Commission) would be to lay down a mandate given to the Agency for the duration of the Multiannual Financial Framework. This mandate could be revised at mid-term as are other policy measures, but the Trilogue institutions would not come into play to face market events and fall into political wrangling over detailed parameters such as buying in prices for intervention or duration of private storage aids, or amount and country distribution of ad hoc envelopes etc. The Trilogue would spend efforts in writing the objectives, the rules, the parameters before the events take place. Experience of market instability is long enough to inspire rules and regulations appropriate to most cases. As already mentioned such rules and regulations, when settled in advance, are likely to focus on public interest since they will be conceived under “the veil of ignorance” i.e. without knowing a priori who will be the gainers and the losers of policies since exact nature of shocks is not known since they are random by essence. For preventive measures, dealing with endogenously fuel disturbances, rules can be laid down ensuring equity and fair distribution.

The concept of EMMA is not much more than a significant extension of the procedures of delegated acts already included in the 2013 reform Regulations – and in particular in Article 227 to 229 of Regulation (EU) 1308/2013 - but with a major difference to the purpose of delivering sustainably efficient policies. Delegation should be given for a length of time similar to the MFF and relate to actions required to deliver specified written objectives, and taken according to rules included in a mandate.¹⁴⁵ At present on the contrary, delegated acts are taken for specific technical decisions under the pressure of events, in particular for implementation acts taken under Art 229. In many cases, this is to solve problems that could have been avoided if economic agents and farmers had received clear signals from governments. In the current setting of Article 227 and 229, the Commission can take actions but such actions cannot avoid having a political content. This is because the objectives and definitions of crises and of market disturbances are not precise enough and need interpretation. However, such interpretations are carried under specific circumstances where identified short run interests mingle with the grand view that government is supposed to pursue. Similarly, the conditions under which the delegation to an independent Authority could be suspended by the Trilogue institutions, should be made objective and predictable; and less arbitrary than the current unilateral revocation by the Council or the Parliament of delegated acts taken by the Commission under Art 227.

Such an approach based on a mandate would cut off the current expectation from farmers that, whatever their business plans, governments and the EU will come into play with aids or market intervention. Suppressing the expectation that governments and the EU will intervene as a last resort will induce private undertakings to moderate risks exposure and mitigate price shock consequences.

Article 14 of the single CMO holds that policy parameters are fixed in accordance with Article 43(3) of the TFEU. During the preparation of the 2013 Reform the European Parliament expressed discontent¹⁴⁶ from Article 43(3) of the TFEU which gives power to the Council, under proposals from the Commission, to fix prices, levies, limitations on quantities etc., i.e. the parameters of market measures. The European Parliament was keen to increase its influence on these parameters and favoured the procedure of delegated acts in which its role is stronger. However, Article 7(2) of the single CMO will have to be

¹⁴⁵ This would also simplify the CMO Regulation where references to specific delegation of powers are repeated in many sector specific provisions, loading the CMO with a complexity that necessity does not seem to justify.

¹⁴⁶ Knops & Swinnen (2014).

changed after the recent ruling of Court of Justice. The establishment of a mandate would bring more balance in the powers of the institutions of the Trilogue.

4.4. Make IST incentive compatible and impose *crisis prevention cross compliance* with market measures and Basic Payments

Proposal 12: Prefer matching funds for IST to mutual funds, which are ill suited for systemic price risks and prone to free riding.

Proposal 13: For swift and objective activation of compensations from IST, rather than actual *ex post* incomes, adopt an indexed concept of income based on declared past accounts structure and on observable price indices; prefer approximate to perfect but delayed compensation.

Proposal 14: Base compensation on subscribed covered income tied to past records. Rates of premiums and contributions by farmers to IST are an increasing function of covered income.

The reference to individual income in Article 39 (1) (presumably actual incomes as reflected in farm accounts) is far too demanding in terms of information, control and administration, both in terms of quantity, timeliness and credence in some parts of Europe. Moreover, if actual individual income is the reference for compensation, the separation of commercial insurance for natural hazards from IST and Matching Funds covering price risks by is hardly a possibility.

For a system to be light in administration costs, it should require little need for control and little incentive to fraud; be based on objective observable and closely related (correlated) and publicly available indicators as a base for calculations. A scheme based on "self-declared insured income" and on observable indicators would offer attractive features in term of monitoring and administration costs.

The notion of income in the wording of Article 39(1) includes "all revenues from the market and any form of public support, deducting input costs". It is subject to interpretation regarding inputs deduced in particular. Simulations have shown how likelihood of triggering compensation would depend on the options retained. Unequal distribution and infringement on single market are the most likely outcome.

Proposal 15: Develop an institutional engineering program for experimentation and fine tuning of detailed schemes of market risk management devices.

Proposal 16: Experiment various formulae of IST design to the purpose of discovering information-parsimonious and robust devices.

Proposal 17: Perform Full-fledged counterfactual simulations of what the schemes would have delivered during the last crises.

Proposal 18: Consider revising the olympic mean as bench mark and identify better smoothing rules for reference.

Europeans farmers and institutions have to acquire experience and knowledge of Risk Management Schemes, which for obvious reasons were absent from our tradition. Both institutional design and experiments in pilot programmes would help identify pitfalls. A priori well thought schemes might reveal technical or practical flaws, upon experimentation

of simulation. For example, the separation of natural from price risks may not be the best approach for farm orientations where natural hazards are the major cause of price shocks.

Full-scale counterfactual simulations of various IST schemes based on FADN and statistical data of the last decades or so, along the lines of the Commission study (European Commission, 2009), are necessary for this learning process to bear fruit. Such analysis should make more obvious the specifics of market circumstances, of farm orientations and of farm structures and their consequences on the merits and weaknesses of envisaged schemes. Focusing on the issues at stake in the definition of incomes and margins retained for IST as they relate to farm structures and status is viewed as a must; and the implications on budget outlays and on distribution effects as well.

4.5. Integrate market measures with IST and Basic Payments into a comprehensive system of Crisis prevention and mitigation.

Proposal 19: Make EU budget rate of contribution to Matching Funds contingent on farmers and Producer Organisations participation in exceptional market measures launched by the independent authority for market regulation

Proposal 20: For intervention, establish surplus-proof criteria to define reference and buying-in prices and updating rules based on economic fundamentals trends

Proposal 21: The Institutions of the Trilogue give a mandate to the independent Agency the duration of the MFF with revision procedures at mid-term.

Proposal 22: Define “exceptional market circumstances”, for both spikes and troughs in prices, based on objective and observable market indicators related to economic fundamentals and trends.

Proposal 23: Make Private Storage Aid more flexible in the Mandate of the Agency

Proposal 24: (curative measures): During long and severe exceptional market crises, allow the Agency to require Producers’ Organisations to ensure short run reduction in deliveries through less intensive processes or yields reductions. Allow the Agency to suspend part of Basic Payments to non-participants farmers.

As an illustration of this logic, the management of the dairy crisis could have been different if the objectives of market measures and rules for actions had been more precise in the CMO Regulation and not left to excessive arbitrariness in the appreciation of the depth of the dairy crisis. The Commission could have acted more swiftly before the March and July 2016 decisions according to Article 221 (with Committees procedure under Article 229) and proposed to curtail rapid supply growth. The latter instrument would then be considered as an emergency measure “to resolve specific problems, and on duly justified imperative grounds of urgency, relating to situations likely to cause rapidly deterioration of production and market conditions which would be difficult to address if the adoption of measures were delayed...”.

Such supply reduction measures do not seem available under Article 219 and the rapid procedure of Article 227 since the list of measures mentioned in Article 219(1) is limited to

extending market measures and trade tools provided in the Regulation, and this wording does not open the door to new measures.

Article 222 also needs revision. Currently, it amounts to suspend Article 101 of TFEU on competition during period of "severe imbalance in markets". For a 6-month period and under the MS consultation procedure (Article 229), it allows recognised POs, APOs and IBOs to resort to strong actions such as withdrawals and "temporary planning of production taking into account the specific nature of the production cycle". The weak points are several:

- the judgment based on market situations of the necessity to trigger or not Article 222 lacks objective and factual grounds, of which market indicators are however well equipped;
- POs and their groups are just "allowed" to limit supplies without being sued by competition authorities, but they have no individual incentives to do so, as we amply showed in Annex 2;
- for this initiative to restrain production to happen, two possibilities exist: further subsidies and EU budget outlays (as in July 2016) or compulsory compliance to harvest the benefits of the King effect which does not need subsidies to deliver price restoration (as we propose);
- the procedure is on Committees (Article 229), is therefore overexposed to politics, to opportunistic national and to lobby pressures; and therefore unlikely to deliver decisions and rules in the general European interest, as it could if rules of actions had been designed under the veil of ignorance and not under the pressure of known circumstances.

Proposal 25: (prevention measures): During price bubbles, empower the Agency, to freeze part of Basic Payments, and in case of predictable future unbalances, to require supply growth containment and introduce *crisis prevention cross compliance* for Basic payments.

A noticeable defect of the CMO Regulation is that it offers little room for crisis prevention. The focus is on price falls rather than on booms. Article 219 (1) does mention price rises as well as falls. However, the tools of actions are restricted to "extension of market provided for under this Regulation"; hence, limited to reduction of duties or implicitly to releasing of stocks, which is not much. Article 221(1) only refers to deterioration of market conditions, whereby prevention is no longer a relevant option.

This is why the integrated approach would allow to act in advance by making use of all the tools available and in due time. *Crisis prevention cross compliance* imposed on Basic payments would allow to prevent major endogenous market disturbances to occur and to give incentive to farmers and their POs to enroll into ISTs to mitigate price risk consequences.

4.6. Close supervision by EU of the working of the single market and enhancing value creation in the food chain

4.6.1. Balance of power in the food chain and competition authorities

Proposal 26: To trace better the effects of market disturbances and price volatility, require large operators in the food chain to report confidentially the

developments in their product mix and their margins, to an independent authority.

It is a paradox that, on one hand, the discipline of market power in the food chain is the subject of recurring policy debates and of extensive policy design efforts and, on the other hand, that full empirical evidence seems to be unavailable, regarding possibly excessive market power and profit rents at various stages of the food chain. More evidence and transparency is needed to find out whether the weak and dispersed actors at the two extreme of the food chain, consumers and farmers, bear or not the brunt of farm price volatility.

4.6.2 Single market for farm prices and/or single market for farm inputs, policy distortions of level playing field

Proposal 27: Perform on a regular basis a full-scale empirical analysis of the operation of the single market, including impact assessment of non-farm policies on production costs in different Member States.

More transparency regarding level playing field conditions of competition in the single market would suppress the often ill-founded complaints by farm organisations that fellow producers in other Member States benefit from distorting advantages. Reporting the list of national measures and subsidies to the Commission under the State aids Regulation does not hit the target. A thorough analysis of impacts is needed. Hiding a politically sensitive issue is not the best way to ensure cohesion in the building of Europe.

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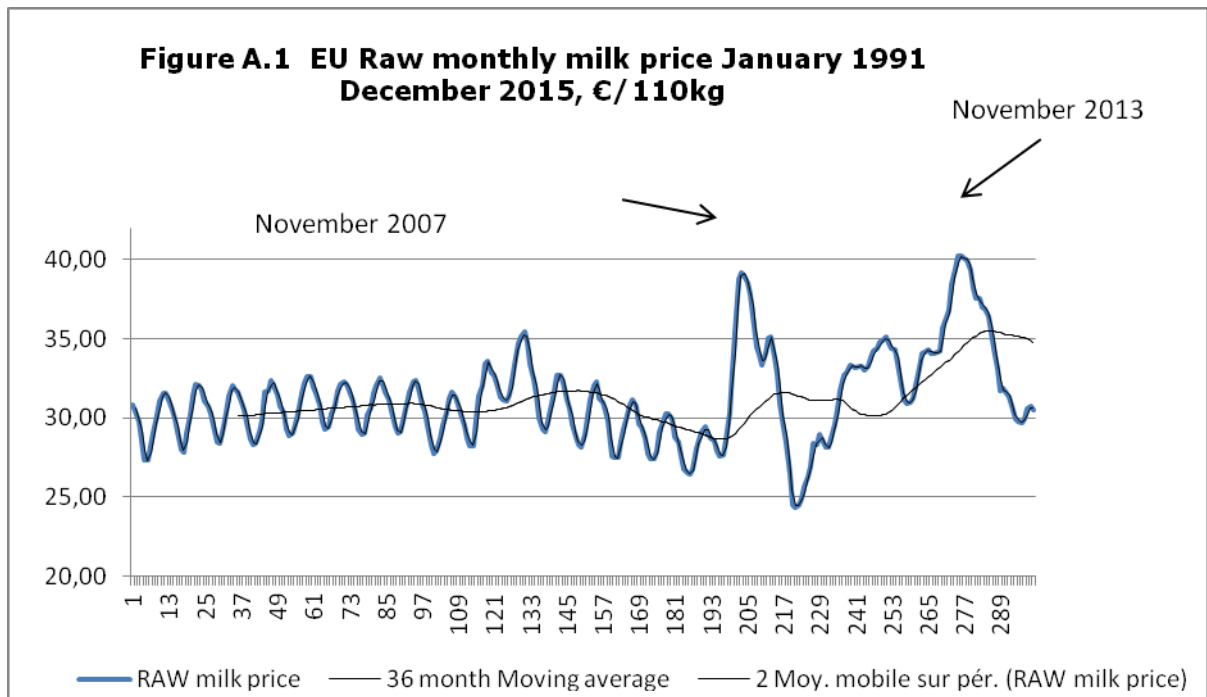
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ANNEX 1

Dairy crisis 2007-2015: Selected price-quantity developments and illustrative simulations of market measure impacts with a simplified model

The expected virtue of market orientation in the new CAP is to make agriculture more sensitive to economic signals such as exogenous changes in consumption habits, and new opportunities in industrial or foreign outlets. But, this virtue may be constrained by the working of the commodity market itself. The capacity of the dairy market to fare well over time, without excessively frequent “exceptional disturbances”, depends to large extent on the existence of stabilizing forces within the system. A supply shock (e.g. positive) may be absorbed without dramatic price falls if the various demand components are responsive to price. A demand surge (e.g. positive) will not result in an exceptional price boom if supply is able to respond quickly. But, over reaction or wrong expectations on the producer side in the latter case are likely to fuel severe imbalances later.

Figure 25/A1.1: EU raw monthly milk price January 1991 December 2015, €/100 kg



Source: data from European Commission (2016f)

The dairy sector has a long history of stiff regulation by supply control. This context is not a conducive factor to identify underlying behavioural parameters. Supply and demand responses to prices are not well known. This appendix is a very crude and daring attempt at making the times series of the last decade speak a little. The following explorations are very rough indeed and can only provide informed impression on relevant market parameters.

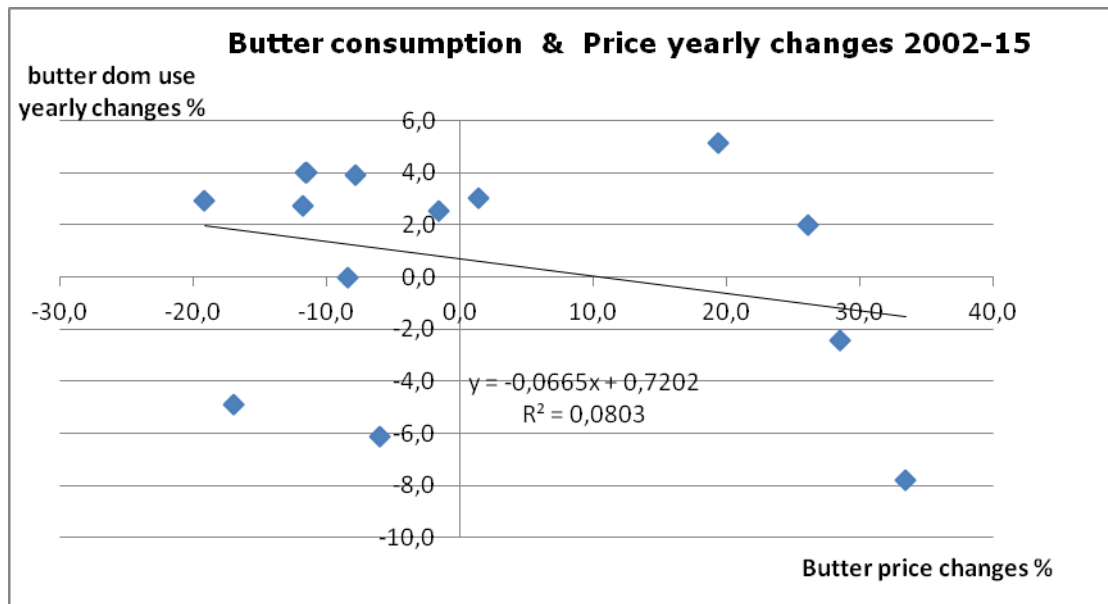
Table 4/A1.1: Dairy Market: selected quantity changes and milk price 2011-15

Year	Units	2011	2012	2013	2014	2015e
Delivered to dairies (mio t)	mion t	140,3	140,6	141,6	147,9	151,6
<i>change over previous year</i>	%	2,2	0,2	0,7	4,4	2,5
Raw milk price annual average	€/100kg	34,0	32,7	36,5	37,2	30,7
<i>change over previous year</i>	%	11,2	-3,9	11,7	1,8	-17,4
Human consumption cheese	1000t	8497	8628	8639	8855	8979
<i>change over previous year</i>	%	0,4	1,5	0,1	2,5	1,4
Cheese Exports	1000t	673	768	787	720	718
<i>change over previous year</i>	%	0,8	14,1	2,5	-8,5	-0,2
Domestic use ¹ fresh dairy products	1000t	46458	46217	46453	46144	45631
<i>change over previous year</i>	%	-0,5	-0,5	0,5	-0,7	-1,1
consumption of SMP(1)	1000t	809	792	719	768	764
<i>change over previous year</i>	%	2,2	-2,1	-9,3	6,9	-0,6
Exports of SMP	1000t	516	520	407	646	683
<i>change over previous year</i>	%	36,9	0,9	-21,8	58,8	5,8
consumption butter	1000t	1954	2011	2052	2134	2192
<i>change over previous year</i>	%	-7,8	3,0	2,0	4,0	2,7
Butter Exports	1000t	124	124	116	134	180
<i>change over previous year</i>	%	-21,5	0,1	-6,2	15,6	34,0
MEQ Price (B+SMP) €/t	€/t	356	318	417	365	273
Raw milk price EU an. Av. €/t	€/t	340	327	365	372	307

Source: derived from Balance sheets and historical price series; European Commission (2016f)

While deliveries increased sharply in 2014 and 2015, after two years of stable quantities and high milk and dairy product prices, domestic consumption and other uses of dairy products did not respond much to the wide price fall from 2013 to 2015. Fresh dairy products were stable and even declining. Cheese consumption has been growing slowly but steadily over the 2000-2015 period. Response to price is small though, but may be progressing. Butter and skim milk powder reacted more in the last two years in spite of a stable per capita human consumption. One would expect that uses as inputs in the food industries are more price responsive, hence the modest response of total domestic uses. But, when performed over the entire 2000-15 period, correlation between domestic use (net of stocks) and price changes is vanishing for SMP and very small for butter.

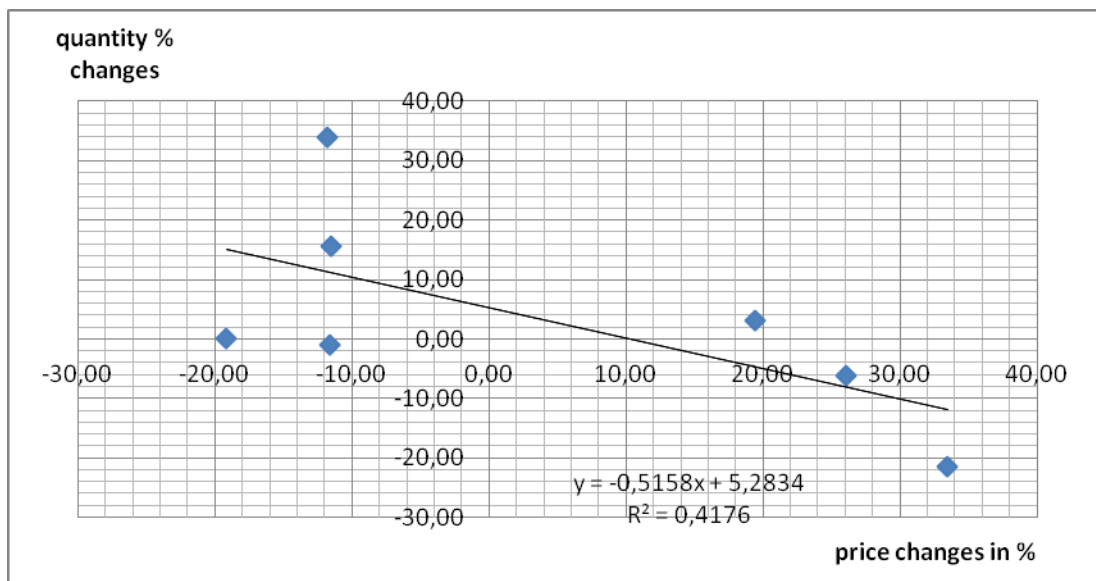
Figure 26/A1.2 : Butter consumption response to prices



The largest changes in quantities are in exports of butter and SMP, with around a 50% cumulative increase over the last two years. Cheese exports are also up, but the change is small, and this has to be assessed in view of the Russian embargo, which particularly hit cheese exports (see infra). These casual observations from global indicators suggest a sluggish price response of domestic uses but a much more buoyant response to EU price of the foreign demand for butter and SMP from the EU. To explore further the matter a few correlations over the volatile period 2000-2009 were carried, keeping in mind that this partial evidence is very fragile and is just an indication to be scrutinized further with more time and more data, when available, generated by a less regulated EU dairy market. Exchange rates relative to EU export markets and competitor prices should in particular be brought into the picture.

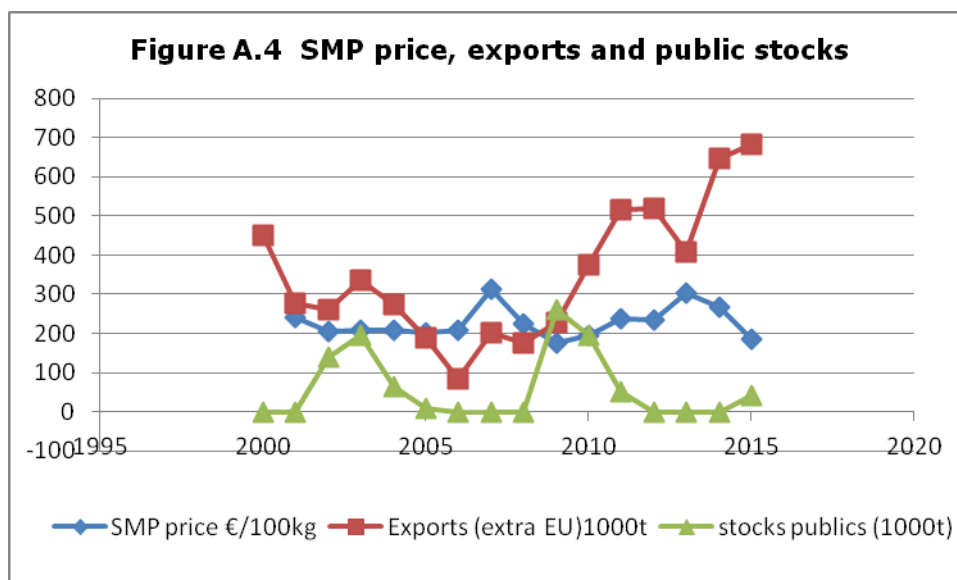
Data from the 2000-15 periods reveal poor or absent correlation of butter exports with EU butter prices changes. But, the statistical relation (with only a few points though) seems to get stronger since the previous 2009 crisis ($R^2 = 0.4$ and elasticity of -0.5).

Figure 27/A1.3 : Butter exports response to EU prices 2009-15



A similar exploration revealed no negative correlation between SMP exports and EU domestic prices over the 2001-2015 timespan, although the last few years suggest a much stronger (negative) relation. The export regime has changed from the early 2000 years when public storage and refunds were more significant and seemed to affect SMP trade flows, as illustrated on Figure 28.

Figure 28/A1.4 : SMP price, exports and public stocks



To summarize, domestic uses of major dairy products show a rather small response to wholesale price changes. With all necessary caveats and given the lack of empirical evidence, elasticities of foreign demand for EU exports in the range of -0.5 to -2.5 would be the preferred guess for the years until harder evidence is available.¹⁴⁷

The implications are that we expect significant demand response to lower prices on the domestic EU market mainly coming from exports, domestic uses and consumption being sluggish. This suggests that in case of a supply shock, EU final demand will not offer a major contribution to absorbing and stabilizing the domestic market. Conversely, intervention by public storage could have a significant impact on EU prices, but at the cost of a leakage of the benefits of price support onto the foreign market. Higher domestic and world prices will reduce EU exports, for the benefit of EU export competitors in terms of both prices and market share.

The Russian embargo on EU agri-food exports

We expect the impact of the Russian embargo on the EU dairy market developments to be quite significant. The sharp fall in butter and cheese exports to Russia over two years (2014 and 15) amounts to a loss of outlet equivalent to 1.5% of EU milk production.

Table 5/A1.2 : Changes in EU-28 agri-food exports and the Russian ban

EU28 agri-food exports (in million €)	Extra-EU28			Russian Federation		
	Aug 2013 - July 2014	Aug 2014 - July 2015	%	Aug 2013 - July 2014	Aug 2014 - July 2015	%
Bovine sector (total)	1.374	1.685	23	221	95	-57
Pig sector (total)	5.729	5.753	0	810	42	-95
Poultry sector (total)	2.015	2.121	5	132	44	-67
Butter	653	671	3	164	2	-99
Cheese	3.892	3.346	-14	964	34	-97
Skimmed milk powder	1.825	1.645	-10	58	0	-100
Whole milk powder	1.657	1.259	-24	13	0	-100
Fruit &Vegetables	6.991	6.160	-12	1.900	210	-89

Source: European Commission (2015a)

¹⁴⁷ From his review of literature on indirect sources, Matthews and Soldi (2016) retained elasticity values of -2.0 to -4.0, which is in the range often assumed in the model simulations. See also Bouamra Mechemache Z. and V. Réquillart (2000) and Bouamra Mechemache et al. (2008).

Table 6/A1.3 : Impact of the Russian embargo on dairy products

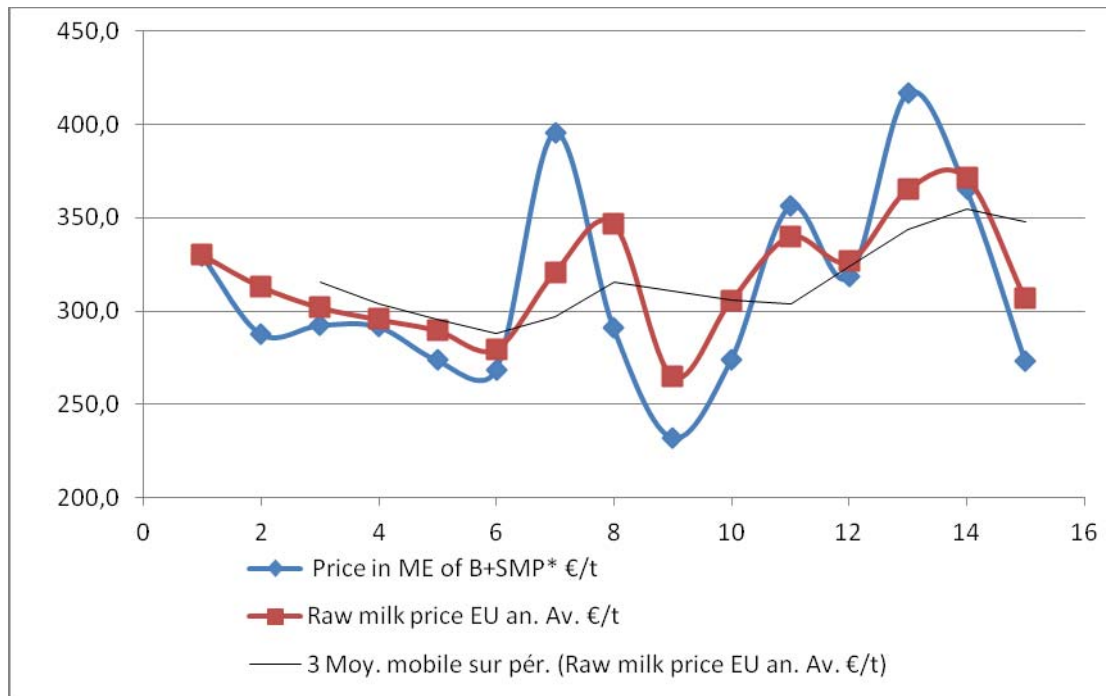
EU 28 exports to Russia 1000t	Total 2013	Total 2014	Total 2015	Change 2015-2013
Milk and cream	37,95	26,20	0,31	-37,65
Milk & cream concentrated	26,66	11,05	0,00	-26,65
Yogurt, buttermilk etc.	29,60	19,09	0,06	-29,53
Whey	27,47	18,13	0,20	-27,27
Butter	35,34	22,68	0,00	-35,34
Cheese	256,65	133,25	2,56	-254,09

Source: extraction from Eurostat

While the Russian embargo cut in cheese exports was a very large shock (nearly 25% of exports), the positive trend and EU prices made European cheese more competitive on other markets and offset two thirds of the loss to Russia.

Simulation of the dairy market over 2013-2015 and intervention

For illustration purpose both the current crisis developments and the possible impacts of measures recently decided, we built a rather rudimentary simulation model of the EU dairy market. It relies on assumed price elasticities and trends of the demand for various dairy products, both domestic and foreign. Supply response in the short run is neglected although the suspicion is that yields per cow may respond to the price/feed cost ratio, as feed intake of concentrates can be adjusted easily within a small interval without harming the potential. All demand outlets are converted into Milk Equivalent (MEQ). Starting from a reference situation in 2013 where production and all uses are balanced, the model projects all quantities to the end of 2015. Supply changes and the impact of the Russian embargo are set in exogenously and all other quantities adjust according to their trends and price response, conditional on price changes, which balance the market at the end of 2015. The key endogenous price is the price of MEQ based on Butter and SMP, and called MEQ Price. Farm gate raw milk price (RMP) which is less unstable is derived from a regression, which suggests that about half of the MEQ Price fluctuations are transmitted to the farm gate price.

Figure 29/A1.5 : Milk price developments 2001-15

First, we calibrate the model with a projection over the period 2013-15 and assess its plausibility. This projection includes the two actual shocks, i.e. the supply hike of 6.5 % and the negative export demand shift due to the Russian ban of 2.5 million t of ME. The projected fall of the farm gate price is 18 % (34 % for the MEQ Price). Actual Raw milk price fell from 365 to 307€/t from 2013 to 2015. The calibration of the model led to quantity responses close to actual changes, but this is a test of plausibility rather than a validation. The following elasticities were assumed: (i) foreign demand for EU exports: cheese, -1.21; fresh products, -1.65; WHMP, -0.33; SMP, -1.87; Butter, -2.42; (ii) domestic demand: cheese, -0.11; fresh products, -0.0; WHMP, -0.253; SMP, -0.22; Butter, -0.275. The numbers are small, particularly for domestic uses since the endogenous price is the wholesale price i.e., the most variable price index of dairy products. Consumer prices are known to adjust slowly and imperfectly to wholesale prices.¹⁴⁸

¹⁴⁸ Bouamra Mechemache Z. and V. Réquillart (2000) have reviewed the literature and after model calibration find an even lower implicit elasticity of aggregate demand relative to farm price (they find prices fall by 4.5% for a quota increase of 1%, while we have 3% in our case). Bouamra Mechemache Z. et al. (2008) give more detailed results on demand elasticities.

Table 7/A1.4 : Impacts of the Russian embargo and of intervention on changes from 2013 to 2015

	Base situation	Scenario 0	Scenario 1	Scenario 2
	2013	Reference =projection with actual shocks	Reference w/o Russian embargo	Reference+ intervention (Butt & SMP)
Production (Mion t MEQ)	154	164	164	164
Total Export (Mion t MEQ)***	9,8	11,9	13,2	10,9
Domestic disappearance (Mion t MEQ)	144	151	150	150
MEQ Price (€/t)	417	272	303	306
Farm gate price (€/t)	365	299	313	315
Revenue change from 2013 (Mion €)*		-7343	-5008	-4749
Total Budget costs (Mion €)**		0	-0	592

*Not adjusted for the €420 million exceptional aid

**Only purchased outlays at intervention price

***Based on fat content

Table 7 /A1.4 displays the first three scenario results. Indicators focus on changes from actual 2013 year to 2015. Both supply increase (6.5%) and the Russian embargo (1.5% of ME supply) induce a sharp price fall (slightly overestimated). These two shocks cumulate their destabilizing effects. Of the 18% drop in farm gate price, the Russian ban impact explains about 4%, a major source of disturbance as expected. However about three quarters of the price fall are due to the rapid supply expansion over two years, while demand outlets trends are negligible save for cheese. Hence, the crisis development is to a large extent explained by the rapid expansion EU production in 2014 after the price boom of 2013, and to some extent in apparent anticipation of the end of production quotas in 2015. The magnitude of the shock on the industry is visible first on the impact of producer gross receipts. Revenue loss from 2013 is in the range of 7-8 billion, which is about 13% of 2013 (price drop effect partly offset by volume increase) of which about 2 billion could be due to the Russian embargo

Measures decided at the last March Council were also simulated to investigate how much of the shocks could have been offset by the buying-in of public stocks (218 000t of SMP and 100 000 of butter), if it had occurred, say, late in 2015. This is summarised in the intervention scenario (N°2) in which public storage shifts total demand by +2.5 million t of MEQ in the same period 2013-15. As a result, farm gate prices regain 16€/t and the price drop from 2013 is about 14%. The loss in gross revenue from 2013 to 2015 is then cut by more than one third (4.7 instead of 7.3 billion€) but the cost to the EU budget reaches nearly 600 million (taking the intervention price as the net unit budget cost- actual costs would depend on how and when stocks are disposed of, how long goods are kept in store

etc.). This intervention scenario however supposes that all quantities offered for butter and SMP are put into public stocks, but only SMP prices hit the intervention price late in 2015.

Comparison of three market measures proposed last March based on counterfactual scenarios for 2015

Two more counterfactual scenarios are introduced to compare alternative policies with the intervention scenario (N° 2), now taking scenario 0 (no action in 2015) as reference. In Scenarios 3 and 4 two supply containment measures are introduced. These policies are a variant of proposals circulated for example by the European Milk Board¹⁴⁹ or by the French memorandum (Council of the European Union, 2016a). However, they greatly differ in that short run reduced deliveries here are reached through a moderation of cow yields. Such a policy is not easy to monitor and requires conditions to deliver outcome. They would in particular require strong involvement of Producer Organisations and supervision at the EU level. Scenario 4 can also be viewed as a variant of the possibility given to Member States in the last March Council to run a programme of subsidized short run supply reduction. The 1.6 % supply reduction introduced is meant to correct market imbalance by the same volumes of MEQ as in the intervention scenario,¹⁵⁰ hence market price effects of the three policies are expectedly the same. Then, only deliveries and feed costs are smaller in the supply containment scenarios 3 and 4 than in the intervention scenario, in which action takes place after additional output has occurred and is on the market.

Box A.1: List of scenarios

- **One reference (no action) and counterfactual shock and policy scenarios**
 - Scenario 0 = reference = projection from 2013 to 2015 with actual shocks
 - Scenario 1 = reference and absence of Russian ban
 - Scenario 2 = Intervention (withdrawal of 2.5 million t of MEQ)
 - Scenario 3 = mandatory ex post supply reduction (-1.6% of cow yields)
 - Scenario 4 = voluntary ex post subsidised supply reduction (-1.6% of cow yields)
 - Scenario 3' = mandatory ex ante supply containment in 2013 (growth contained to 4%)
 - Scenario 4' = voluntary ex post subsidised supply reduction (-2.5% reduction in 2015)
- **Analysis of scenarios**
 - Scenario results compared to base year 2013: Table A1.4
 - Scenario results of policy actions compared to reference scenario 0 (no action) in 2015: Table A1.5
 - Scenario results of three policy actions compared to a benchmark "2013" year; scenarios 2,3 and 4: Table A1.8
 - Scenario results of three policy actions compared to a benchmark "2013" year; scenarios 2,3'and 4': Table A1.9

¹⁴⁹ European Milk Board (2009). EMB has subsequently issued new versions of its plan to retrain supply in case of market disturbances.

¹⁵⁰ However this equivalence with intervention is acceptable only as long as quantities offered for butter and for SMP are in proportion to what a ton of milk can produce of both. According to our conversion rates intervention was biased in favour of SMP.

Accordingly, in scenario 3 a mandatory short run reduction of cow yields is implemented so that deliveries shrink by 1.6%. In scenario 4, an identical yield reduction is compensated with a subsidy (in the present simulations the unit subsidy per tonne is the intervention price of MEQ, i.e. 219€/t). Hence, it is called the voluntary scenario: shortcut for voluntary yield reduction scenario. The simulations summarised in Table 8/A1.5 point the basic economic aspects of such supply containment policy scenarios. Farmers can reduce cow yields within a limited range by acting on feed intake. In most cases, to take advantage of high performing cow potential, the last litres are obtained with feed concentrate, and the optimum ration depends on the milk/feed price ratio. On the basis of nutrition prescriptions by animal scientists¹⁵¹ and provided that the base ration is near optimal for the cow potential, the marginal kg of concentrate brings nearly one additional kg of milk (0.8 to 0.9 is the relevant range¹⁵²). For this exercise, the assumed price of concentrate for cow milk is 258€/t. Over time this price is variable according to raw material prices.

Table 8/A1.5 displays selected indicators¹⁵³ of counterfactuals of market situation in 2015. Supply containment scenario 3 and 4 are most relevant to situations where the last units of milk are due to concentrate. Hence, reducing yields by a few percent also means a reduction in feed costs. This reduces the loss of gross margin from reducing output, particularly when milk prices are low relative to feed concentrate price. Hence for the most intensive dairy producers the loss of revenue due to smaller volumes delivered is partly offset by feed cost savings.

In both scenario 3 and 4 the price rise (+5%) more than offsets output volume reduction (-1.6%). Hence, gross revenues in 2015 are significantly higher than in the no action scenario 0 (this is an illustration of the so-called King effect due to inelastic demand, and incidentally is the reason why increased production from 2013 to 2015 is met with much lower gross revenues). This revenue effect (nearly €2 billion) is more than two thirds of the positive revenue effect of intervention in scenario 2, in spite of the lower volumes delivered. Because of this smaller volume of milk, containment has less positive impact on gross revenues than intervention although the price is the same. With the subsidy though, scenario 4 results in total receipts close to intervention case.

Feed cost savings give an indication on income effects. Gross margin over feed cost (GMOFC)¹⁵⁴ is greater in the mandatory scenario than in the reference "no action" scenario 0 (by 2.4 billion). This gain is virtually the same as what vigorous intervention (scenario 2) can provide to alleviate the crisis impact, but at the cost of financing public storage. In Scenario 4, producers benefit from the same price effects of holding back yields and the same feed cost savings as in mandatory. Subsidies to entice producers to comply in scenario add a complement to farmers' receipts. With our assumptions, this is the most attractive solution for dairy producers.

Budget costs are significant for the intervention and voluntary (subsidised) scenarios.¹⁵⁵ The voluntary scenario does offset about two thirds of the revenue loss during the crisis,

¹⁵¹ (INRA, 2007).

¹⁵² Portier et al. (2003), Vergonjeanne R. (2014).

¹⁵³ We focus on dairy farmers' situation and budget. Consequences regarding value added distribution along the food chain and to consumers could not be addressed in the time constraint.

¹⁵⁴ Defined by gross revenues plus subsidies less feed costs.

¹⁵⁵ The relative costs of intervention and subsidized supply reduction are contingent on the rate of subsidy for supply reduction relatively to unit costs of intervention buying, of storage and resale price. Ranking intervention and voluntary scenarios based budget costs would require further elaboration on options for stock disposal.

but this is at a budget cost of about 550 million€. Intervention is able to produce a similar effect on revenues, and its primary budget outlays are of the same magnitude as in the voluntary scenario. But, its costs can also be large, depending on how stocks are disposed of. Similarly, if the unit subsidy to supply containment is larger than intervention price, outlays will overshoot the 550 million mentioned. The mandatory scenario avoids the taxpayer burden and still provides a relief to producer incomes (here the GMOFC) fairly close to the intervention scenario, at no budget cost.

Table 8/A1.5: Results of three policies relative to reference 2015 scenario 0 (no action)

		Scenario 0	Scenario 2	Scenario 3	Scenario 4
		Reference	Intervention	Mandatory	Voluntary
		2015	2015	2015	2015
Production	million t MEQ	164	164	161	161
Total Export ***	million t MEQ	12	11	11	11
Domestic disappearance**	million t MEQ	151	150	150	150
MEQ Price	(€/t)	272	306	306	306
Farm gate price	(€/t)	299	315	315	315
Revenue change/ scenario 0*	million €	0	2594	1805	1805
Total Budget costs*	million €		592	0	549
Feed cost savings/scenario 0	million €		0	647	647
GMOFC change/scenario 0	million €		2594	2452	3001

*Not including the €420 million exceptional aid

**Excluding stocks

***Based on fat content

The three policy actions have in common better producer and wholesale prices, and they bear the unavoidable reverse of the coin of price-enhancing policies. Domestic consumption recedes by 1%, a significant drop although much smaller than the production withdrawn from the market. Expectedly, exports also lose ground compared to the reference scenario 0 and about 2 million tons of MEQ exports are lost.¹⁵⁶

The major economic fact emerging from this simulation of typical market measures to solve a crisis after it has occurred is the sensitivity of prices at farm and whole sale levels to limited shocks. In view of the large swings of prices observed in the last two dairy crises, it is not a surprise. Given our assumptions and the result of calibration exercises, the implicit flexibility of global demand for milk with respect to farm prices in the EU would be as large as - 3. This combines low domestic demand price response to much higher foreign demand elasticity.¹⁵⁷ If this is close to real world, then two facts are worth reminding: any random shock will bear large price effects as markets show, and coordination in supply

¹⁵⁶ This is a 1 million t loss in export in MEQ based on fat as indicated in Table 8/A1.5, to which about 1 million t MEQ is to be added when SMP exports are included.

¹⁵⁷ Because domestic disappearance is about 15 times exports, its low price response dominates the aggregate response of demand.

developments does offer a large potential whenever used as curative or better as preventive device.

Comment on overcompensation: because of the King effect on revenues, the subsidy for supply containment does not appear as necessary since there is no revenue loss and taking into account feed cost savings it is even more true. But, that is contingent on a large participation of dairy producers to the scheme for the price effect to occur. Hence, the subsidy appears as a device to circumvent lack of incentive for a minority to restrict supply, but it can also add a new layer of policy failure. It is also contingent on the assumption that last units of milk come from concentrate intake.

Ex post mitigation of a crisis through voluntary supply containment: likely coordination or political failure

Scenarios 3 and 4 reveal the severe weaknesses of the voluntary option of supply containment to restore prices. To make the case clearer we take the pessimist although not unlikely case in which only a minority of Member States or of Producer Organisations decides to participate in the programme of supply reduction. Suppose also that non-participants can respond to higher prices by increasing their own production. This is likely to happen both as a short run reaction on yield intensification and even as an anticipation of future investments.

In such a case the incentive for PO participation (before any subsidy) may just not exist at all. If the share of EU production held by participants is small enough (see Box A.2), their supply reduction of say $-x\%$ may well produce a deceiving price effect in $\%$ (dp/p) of less than $+x\%$, although still positive. Hence, their revenue change in per cent is the sum of $dp/p < x > 0$ and $-x$ and can be negative. Hence when group 1 participates and group 2 does not (south west cell in Table 9) group 1 suffers a revenue loss while group 2 benefits from better prices and this gain is larger than the participant loss since it cumulates price and volume increases (or at worst stable). Only when both groups participate in supply containment (south east cell) will they benefit from a price increase large enough to offset by a King effect the loss in volumes suffered by both groups, as the simulation in scenario 3 showed.

Table 9/A1.6: Free riding and likely failure of voluntary (no subsidy) supply containment left to MS

Producer Organisations group 1	Producer Organisations group 2	
	No participation	participation
	No participation	0 ; 0
participation	- ; ++	+ ; +

Numbers and signs reflect gains of dairy producers; in each cell, the left sign is the gain of group 1, the second of group 2.

In such a situation, no group is induced into participation, since whatever the strategy of the other group, it is less well off in participating in supply reduction. The equilibrium of the game is the stand still no action cell in the north-west. Hence, a voluntary supply reduction is not likely to occur since most producers have to be involved for everyone to benefit. Then, no group has incentive to start the process alone since it loses from this action. Thus, a voluntary but unsubsidised programme of short run supply containment is unlikely to happen if left to PO's or to Member States' initiative, without a subsidy. However, this

subsidy will raise a clear problem for value creation, efficiency losses, single market operation and eventual welfare loss for Europe.

Table 10/A1.7: Subsidies to voluntary supply containment left to MS may favour participation (but free riding persists and welfare losses are to be expected)

		Producer Organisations group 2 Do not receive a subsidy	
		No participation	participation
Producer Organisations group 1 (receive a subsidy)	No participation	0 ; 0	++ ; -
	participation	+ ; ++	+++ ; +

Numbers and signs reflect gains of dairy producers; in each cell the left sign is the gain of group 1, the second of group 2. In this game only group 1 producers receive

If participating producers in the minority (say, group 1 in Table 10) receive a subsidy large enough to compensate the losses, as it has been foreseen in last March Council decisions, then the solution to the game in Table 10 is the south west cell where only Producers Organisations of group 1 do participate. POs of group 2 who do not get a subsidy will not participate since whatever group 1 does they are worse off in reducing their supplies voluntarily and without a subsidy since it depends on national governments. Eventually, they will benefit from higher prices and (possibly) larger volumes, and probably more than the participating POs (unless the subsidy granted to the latter is large enough). If taxpayers of participating Member States pay the subsidy, it is most likely that the aggregate benefit for the participating Member States will turn out to be a net welfare loss. Taxpayers in participating Member States will in this way finance the boosting up of the dairy sector of other EU countries. This may have long run implications as both producers and processing industries of non-participating Member States will be able either to enlarge or to better utilise their production capacity, thus capturing market shares and gains in competitiveness for the future. Production allocation across Europe will be biased and a further notch be made into the single market operation.

A new transfer between Member States is introduced which is likely to create political tensions and bias EU political decisions. The only way this could happen is by political agenda of governments and actions of pressure groups in any country deciding participation. But, this is at the cost of a loss in national product and global welfare, not to mention the additional burden placed on indebted economies.

This analysis illustrates how difficult it is to design efficient policy instruments interfering with markets, particularly when EU institutions take action at a late stage when surpluses have accumulated. It suggests that to tackle deep market disturbances action must be taken in a coordinated manner, at the EU level and not left to Member States flexibility, with enough budgetary or regulation teeth to impact producer behaviour. These arguments vote for a reunion of all the policy tools such as market measures, production subsidies, and risk management devices into one pillar to avoid inconsistencies and to catalyse self-reinforcement of positive outcomes of policies.

Box A.2: How likely is a prisoner's dilemma such as in Table 6 to occur?

First, consider the implication of a supply shock on a market with inelastic demand, known as the King effect. In the very short run supply respond little to prices in most cases (not all however) and natural factors often produce a shock say, $dQ_s = x Q_s$, where x is the % shock and Q_s is supply volume. Gross revenue change in % from the shock is $dR/R = d(pQ_s)/pQ_s = dP/P + dQ_s/Q_s$, where p is market price. Demand Q has to absorb the shock, hence $\mu dP/P = dQ/Q = dQ_s/Q_s = x$. Hence $dP/P = x/\mu < 0$ if x is > 0 and $dR/R = x/\mu + x$. This is negative if demand is inelastic ($-\mu < 1$) when x is positive (glut) and conversely with shortage. Gross revenue is unchanged if $\mu = -1$.

Short run Supply containment

Consider two groups of Producer Organisations (1 and 2). Suppose only group 1 reduces its production and deliveries on the market by x_1 %. What is the condition for this group to end up losing revenue, hence not being able to capture the benefits of price hikes large enough to over-compensate the volume losses as in scenario 3 and 4?

Assume a supply reduction by group 1 $dQ_1/Q_1 = -x_1$ % ($x_1 > 0$). Producers of group 2 may respond to the price rise dP/P resulting from the move from group 1 and increase their deliveries by $dQ_2/Q_2 = e dP/P$ where $e > 0$ is the relevant supply elasticity (short run or medium run if the scheme is supposed to last). Total disappearance in the market will also react according to the aggregate demand elasticity ($\mu < 0$; $-\mu < 1$), hence by an amount $dQ/Q = \mu dP/P < 0$.

The new market balance which determines price variation will be given by equating changes in supplies and uses:

$$dQ_1 + dQ_2 = dQ$$

Replacing each terms by its relation to dP/P will solve for the price change
 $-x_1 Q_1 + Q_2 e dP/P = Q \mu dP/P$

Dividing through by Q and calling s_1 the share of group 1 in EU production gives:
 $-x_1 s_1 + (1-s_1) e dP/P = \mu dP/P$, hence a solution for dP/P
 $dP/P = x_1 s_1 / [(1-s_1) e - \mu] > 0$

Group 1 will lose revenue if the % price rise dP/P is smaller than x_1 , the percentage supply reduction. If supplies of group 2 is inert ($e=0$), the condition is $s_1 < -\mu$. If the share of group 1 in total production is smaller than aggregate demand elasticity, group 1 will lose revenue from participation. With the parameters of the model, aggregate demand elasticity is about -0.33 , hence if group 1 participants account for less than a third of deliveries they lose revenue. If non-participants have a positive response, the price increase will even be smaller for a given reduction of x_1 by group 1. Hence, a revenue loss for group 1 is even more likely and a larger share of participants would be required to avoid revenue loss by participants POs. If all do participate in reduction ($s_1 = 1$; $x_1 = x$), the price rise is $-x/\mu$, the percent aggregate supply reduction times demand flexibility, as in simulations of scenarios 3 and 4.

The crisis in the light of a benchmark year based on average prices

To look at the crisis with some distance and throw light on the design of new approaches to tackle market disturbances, we replace the 2013-15 events on the dairy market in a longer time perspective. Surely, year 2015 corresponds to a deep shock on revenues and the market disturbance was profound. However, what would revenues and margins look like in reference to a more normal year based on prices smoothed over several years? This exercise is necessary to better approach conditions for farmers to break even and for markets to operate more efficiently. We consider that a price average over several years is a more useful indicator of breakeven costs than references to average accounts in which many components are rather endogenously determined and responsive to price ratios and payments than made of a solid objective content.

However large are the observed shocks, their magnitude is partly due to exceptionally high level of prices in 2013, faring largely above a three-year moving average. Such an average price as the mean or Olympic mean over 5 or 6 years is closer to a normal market situation and it will be useful to consider it as a benchmark in order later to further reflect on the crisis development from 5 years ago. To get a better sense of the impact of decided and envisaged policies on the milk market, scenario results were therefore compared to an "averaged 2013" year with same quantities but with a farm gate price of milk averaged over the 2010 to 2015 time span. Note that this is not a pessimistic view of "normal" receipts, as this average price is 336 €/t, hence significantly higher than the average over the last decade (319€/t)¹⁵⁸. This more normal 2013 will be called the benchmark against which policy measures are to be better evaluated in our view.

Table 11/A1.8: The 2013-15 market crisis in a wider time perspective: Changes in gross revenues, total receipts and GMFOC in 2015 relative to benchmark 2013

	Scenario 0	Scenario 2	Scenario 3	Scenario 4
Million €	Reference	Intervention	Mandatory	Voluntary
Gross revenues	-2724	-130	-919	-919
Aid to supply containment	0	0	0	549
Public storage outlays	0	592	0	0
crisis subsidies *	420	420	420	420
Total budget outlays	420	1012	420	969
Revenue + subsidies	-2304	290	-499	50
Feed cost increase (option1)**	1120	1120	839	839
GMOFC change (option1)	-3423	-830	-1338	-789
Feed cost increase(option2)***	2579	2579	1932	1932
GMOFC change(option2)	-4883	-2289	-2431	-1882

*initial Commission package

**based on average feed cost

***based on marginal concentrate cost at 258€/t

In Table 11/A1.8 the outcomes of the four main counterfactual scenarios are now assessed relative to the benchmark year. First, with this benchmark, the actual 2015 farm gate price (307€/t) is only 20 € less than the 6-year average and consequently the calculated revenues in 2015 is about 2.7 billion (i.e. 6%) below benchmark, far less than the shock

received from prices bouncing between their 2013 peak and the 2015 trough (€7.3 billion revenue drop). The mirror image of this fact is that gross revenues were exceptionally high for dairy producers in 2013 (and 2014). An order of magnitude is €4.6 billion over a benchmark year.

When compared to the benchmark 2013 rather than to the high price 2013 year, the situations resulting from either early intervention (scenario 2), mandatory yield reduction (non-subsidised) in scenario 3 or (subsidised) voluntary reduction in scenario 4 all look much better than the actual shock. Intervention alone through the price restoration up to 315€/t drives gross revenues back to their benchmark level (-130 million), since percent output increase from 2013 is close to the percent price gap from the benchmark. In both supply containment scenarios, gross revenues are 0.9 billion below benchmark because production volume is not as large as under intervention. Taking crisis and containment subsidies into account gross receipts are close to benchmark save for mandatory scenario 3 (0.5 billion below).

Changes in gross margin over feed cost (GMOFC) offer a better, and less optimistic, indicator of changes in farmer incomes. As the change in output from 2013 is not strictly marginal (6.5%), a basic option assumes feed costs have increased in proportion to the average feed cost share of revenues.¹⁵⁹ With this assumption GMOFC (including crisis subsidies) is 3.4 billion below benchmark¹⁶⁰ in the reference (no action) scenario 0, of which two thirds are due to the price effect and one third to the feed cost effect. While the gross margin remains in the grey side in 2015 (even taking average year benchmark as a reference), it is worth pointing out that the reason is not only the revenue drop as was reflected previously when looking only at the implications of the crisis on the turn over losses from 2013 to 2015. The gross margin is also lower because of additional feed cost outlays. Again, this exemplifies the consequences of resource commitments made on the basis of 2013 prices, soon to be denied by market glut.

Incidentally, for purpose of illustration, an alternative option for feed cost is presented in the bottom last two rows of Table 11/A1.8 where all additional milk produced from 2013 to 2015 is due to concentrate. Additional feed cost is more than twice as much as in the basic option. Then the gap in GMOFC from benchmark in scenario 0 (actual 2015) would have been more severe and margin losses due equally to feed cost increase and gross revenues losses. This option would only be relevant to extreme cases of dairy farms highly intensified or without adequate grass resources.

When taking feed cost changes into account and an average year as reference, the dairy farm gross margin situation appears as less severe than the picture reflected in Table 7/A1.4 that looked only at gross revenues and used actual boom year 2013 as a reference. However, GMOFC in 2015 is still quite below benchmark, reflecting a major stress on incomes. Expectedly the three policies in action scenarios 2 to 4 seem capable of limiting these losses quite significantly, particularly regarding the intervention and subsidised voluntary containment scenarios.

¹⁵⁸ The "Olympic mean" over 5 years, which drops two extreme values, does not seem as smoothed as often presented. It fluctuates between 344 and 324 over the 2008-15 time span.

¹⁵⁹ Partial evidence from accounting data suggest a share of 33% and FADN Dairy farm report data on feed cost shares (the calculated average is 32% from 2011 to 2014). (European Commission, 2016c).

¹⁶⁰ With the average feed cost assumption this is a drop of about 10% of GMOFC.

Preventive policy option: monitoring conditional supply containment vs ex post supply reduction

Now suppose that, when a price boom occurs, it were possible for an EU institution such as an Agency with a mandate to obtain from producers organisations of dairy farmers they limit their supply expansion plans when required to do so. Such an initiative would seem attractive when outlook information available establishes the likelihood of a forthcoming gap between limited expected demand developments and rapid herd growth over Europe as a whole (Figure 13 of main text).

A counterfactual scenario illustrates the implications in Table 12/A1.8. Table 12/A1.8 is quite similar to Table 11 (columns regarding reference scenario 0 and intervention are unchanged), with two exceptions regarding column 3 and 4. Scenario 3' reflects an ex ante limitation of supply growth from 2013 to the end of 2015 to 4% instead of the observed 6.5%. Scenario 4' is an *ex post* voluntary supply reduction by 2.5% in 2015. The two supply containment scenarios 3' and 4' are a variant of 3 and 4 which now differ by the time they are enforced but end up with same output increase from 2013 to 2015.

Table 12/A1.9: The 2013-15 period, with preventive action: mandatory containment to 4% growth from 2013 and ex post curative supply reduction of 2,5% in 2015 (changes in total receipts and GMOFC relative to benchmark 2013)

	Scenario 0	Scenario 2	Scenario 3'	Scenario 4'
	No action	<i>Ex post</i>	<i>Ex ante</i>	<i>Ex post</i> ***
Million €	Reference	Intervention		Voluntary
Farm gate Milk price €/t	299	315	323	323
Production increase 2013-2015	6.5%	6.5%	4%	4%
Gross revenues changes	-2724	-130	12	12
Aid to supply containment	0	0	0	842
Public storage outlays	0	592	0	0
crisis subsidies *	420	420	420	420
Budget outlays	420	1012	420	1262
Revenue + subsidies	-2304	290	432	1274
Feed cost increase (option1)**	1120	1120	689	689
GMOFC (1) change (option1)	-3423	-830	-257	585

(1)Gross Margin over Feed Costs

*initial Commission package

**based on average feed cost

****ex post* reduction by 2.5%

As can be seen in column 3, a preventive policy would have kept gross margin very close to benchmark 2013 and this result would have been obtained at minimal costs for the EU taxpayers (only the 420 million€ crisis envelope). The reason behind is a farm gate market price of 323€/t closer to benchmark (336) and higher than with ex post intervention ¹⁶¹(315). Comparatively, the intervention scenario turns out to be costly budget wise and does not offset margin losses to dairy farmers which remain in the vicinity of 0.8 to 0.9 billion€. The voluntary subsidised ex post reduction scenario 4' has the same price effects as the unsubsidised preventive scenario of column 3 and takes margin well over benchmark thanks to the large subsidy which now applies to a larger output reduction than in previous

¹⁶¹ To ensure same price in the intervention scenario would have required larger public storage purchases.

scenario 4¹⁶². The main interest of this simulation is to show that an *ex ante* containment is better than intervention to maintain margins close to benchmark and that subsidised ex post reduction is likely to be costly and prone to overcompensation.

¹⁶² For this subsidised ex post supply reduction scenario 4', feed cost increase from initial 2013 is based on average feed cost share as in the other scenarios of Table 9/A1.6.

ANNEX 2

Income definition, income instability and likelihood of IST compensation

Income definition and instability

In the very short run, as long as prices and levels of purchased inputs cannot be adjusted, a shock in output price will have amplification effects on income which may be of considerable magnitude depending of farm structures and legal status. A family farmer who owns his capital and purchases only raw materials will keep the whole of value added for family factors reward (his income). Commercial farms relying on waged labour, borrowed capital and rented land will keep a small fraction of revenues as entrepreneur's income. Same price shocks will entail drastically different relative shocks on their "incomes". As a consequence if in IST schemes participants are free to cover the farmer income corresponding to their status, a given price disturbance is more likely to cross the 30 % threshold and trigger compensation if purchased inputs are a larger share of revenues. This is more likely the case for large farms relying on purchased feed, waged labour, borrowed capital and outsourcing.

To see this, define income I as Revenues R (prices p times volumes sold y) minus purchased inputs x_i paid p_i . This difference is the return w_0 to factors x_0 that the farmer owns.

$$R = py = \sum [w_i x_i + w_0 x_0] \quad (1)$$

$$I = py - \sum [w_i x_i] = w_0 x_0 \quad (2)$$

$$\text{Let } dz/z = z'; (z' = I', p', w'_i, w'_0) \quad (3)$$

When all purchased inputs cannot adjust to % price change p' , the variation of I in percent is given by :

$$I' = dI/I = (ydp) / (py - \sum w_i x_i) \quad (4)$$

Dividing through numerator and denominator by py gives a simple expression of I' in terms of shares of purchased factors defined as $a_i = w_i x_i / py$, namely:

$$I' = dI/I = p' / (1 - \sum a_i) \quad (5)$$

Note that the share of own factors of the farm operator is $a_0 = w_0 x_0 / py = 1 - \sum a_i$. This shows that when the income definition is narrow, i.e. close to 1 and therefore when "income" concept is close to entrepreneurs' income or profit, the relative change in income I' will be multiplied $1/a_0$ which may quite large. When direct payments are accounted for, the relative income change is softened and the more so as Direct Payments account for a large share of turn over.

$$I' = dI/I = p' / (1 - \sum a_i + \delta) \quad (6)$$

With δ the share of Direct payments (coupled and decoupled) in turn over.

Table 13/A2.1 presents the calculated immediate impacts, i.e. before any adjustment in input quantities or prices could occur, of an output price shock on various income concepts related to farm model, structures and status is simulated. This is just an application of equation (5). Note that for a farm with 50% share of purchased inputs, a 15% price shock is required to cross the 30% trigger of the IST according to Article 39 R1305. But a price shock smaller than 5% would allow eligibility for compensation for a farm where purchased input share is 90 of turn over. Hence the likelihood of trigger is highly dependent on farm status and business model.

Table 13/A2.1: Change (%) in “income” for selected product price (%)shocks according to income definition and farm structure/status

Purchased input share*	50%	80%	90%	95%
“Income” share	50%	20%	10%	5%
% price shock				
-1	-2	-5	-10	-20
-5	-10	-25	-50	-100
-10	-20	-50	-100	-200
-15	-30	-75	-150	-300
-20	-40	-100	-200	-400

*% of purchased inputs in total revenues (Direct Payments excluded)

Table 14/A2.2 presents the same exercise with ratios and income concepts borrowed from FADN data. With income defined as margin over purchased feed the 30% trigger for compensation is unlikely as the required price shock below benchmark would have to be larger than 20%. Less than 5% price shock would suffice for net margin concept of income.

Table 14/A2.2: Per cent change in income (DP excluded) for selected % product price shocks (dairy farms)

Income concept	Margin/Feed*	Margin/specific costs**	Gross margin**	Net Margin**
Income/revenues	78%	61%	36%	9%
	0,78	0,61	0,36	0,09
% price shock				
-1	-1,3	-1,6	-2,8	-11,1
-5	-6,4	-8,2	-13,9	-55,6
-10	-12,8	-16,4	-27,8	-111,1
-15	-19,2	-24,6	-41,7	-166,7
-20	-25,6	-32,8	-55,6	-222,2

DP= Direct Payments;* Gross margin over purchased feed;** FADN Definitions¹⁶³,

Source: own calculations based on FADN (European Commission, 2015f):

Would taking Direct payments into account as it clearly should be the case for IST designed according to Article 39 R1305) change the outcome? The trigger is then somewhat less likely but mainly for the narrower definition of income by the net margin. A better picture would need to use the real share of Direct Payments relevant to commercial farm structures for which net margin is the most relevant concept of entrepreneur’s income. However the choice of the notion of income seems to be the crucial parameter in the probability of activating compensation of IST.

¹⁶³ Details are given in Annex 1 of the EU Dairy farms report 2013 (European Commission, 2015f): specific costs include feed and costs related to herds; Gross margin is based on operating costs which include the latter and energy, machinery, contract work, taxes etc.; Net margins are based on all operating costs and purchased other inputs (rents, wages, interest, depreciation). Coupled payments are included in receipts.

Table 15/A2.3: Per cent change in income (DP included) for selected % product price shocks(dairy farms)

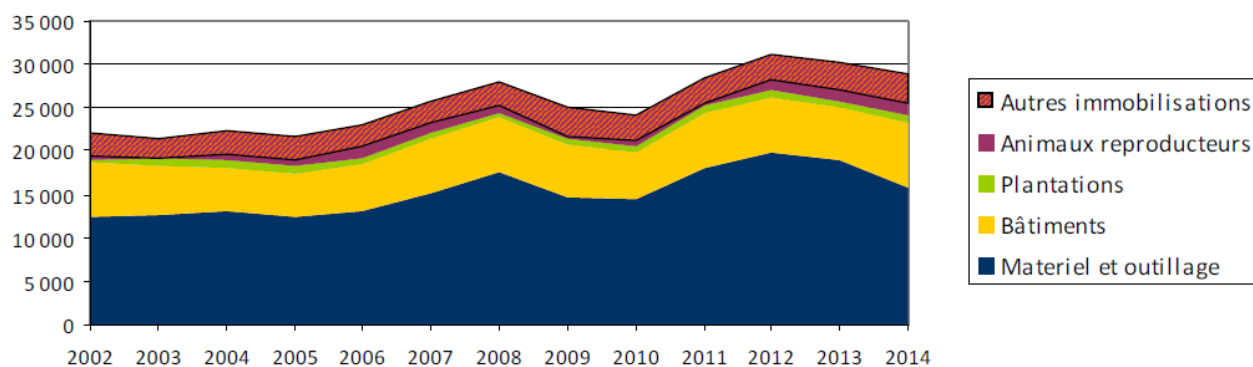
Income concept	Margin over Feed*	Margin over specific costs**	Gross margin**	Net Margin**
Income/revenues	78%	61%	36%	9%
Income+DP/revenue+DP	0,80	0,65	0,42	0,17
% price shock				
-1	-1,2	-1,5	-2,4	-5,7
-5	-6,2	-7,7	-11,9	-28,6
-10	-12,5	-15,5	-23,8	-57,2
-15	-18,7	-23,2	-35,7	-85,7
-20	-25,0	-30,9	-47,6	-114,3

DP = direct payments;* Gross margin over purchased feed;** FADN definitions.

Source: own calculations based on FADN (European Commission, 2015f)

Amplification of disturbance effects for farmers' incomes, investments and direct payments

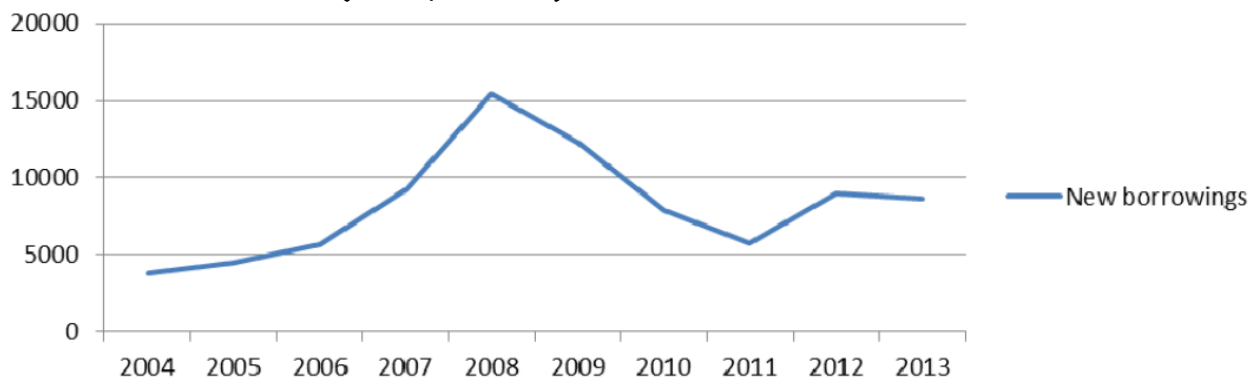
Figure 30/A2.1: Developments in investment outlays by farmers (France 2002-2014)



Source : SSP RICA

Source: Ministère de l'agriculture (2015), Agreste

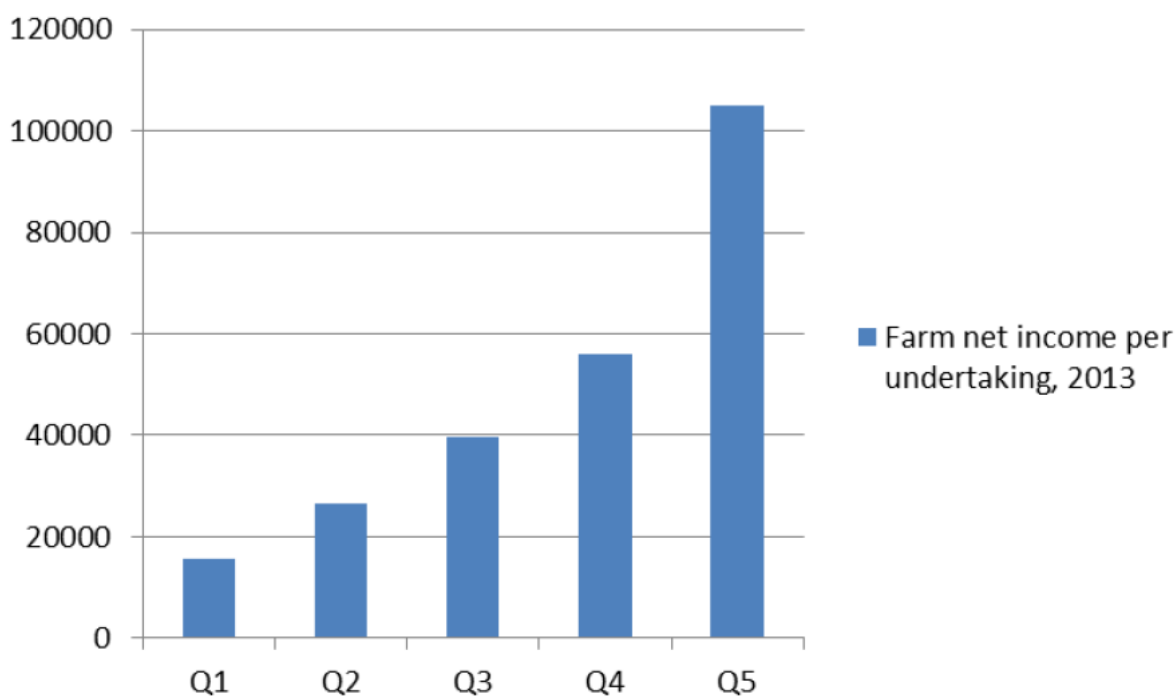
Figure 31/A2.2: Evolution of new borrowings in specialized dairy farms 2004-13 (EU15, €/farm)



Source: FADN, AGRI based on SO, special communication.

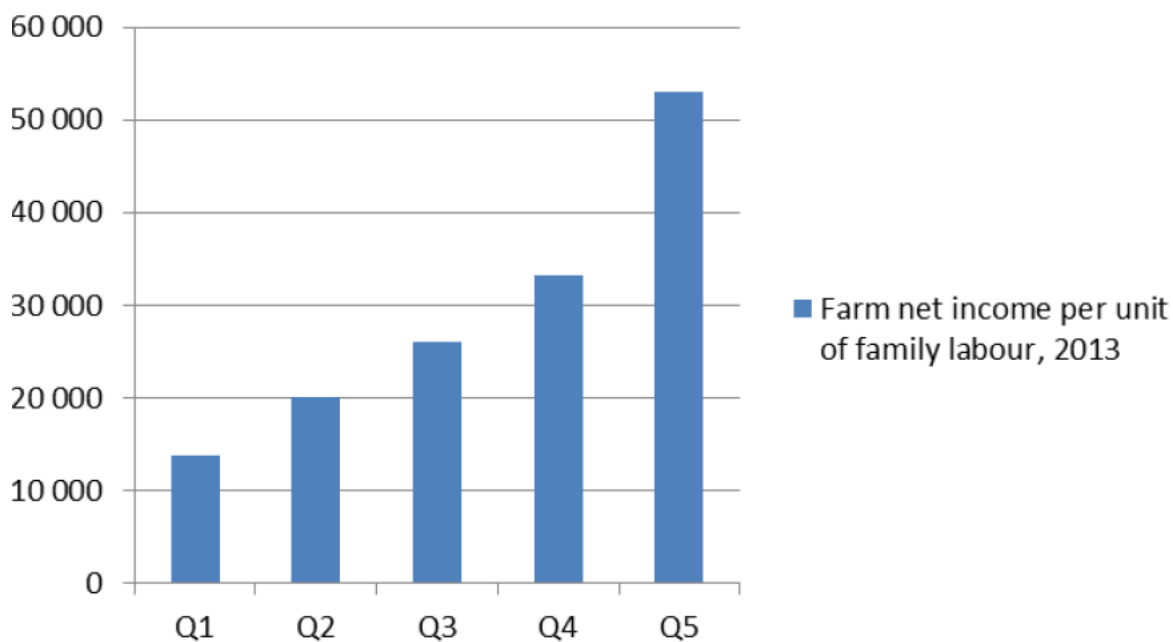
Incomes per size groups and direct payment concentration

Figure 32/A2.3: Farm Net Income in € per farm unit in the 5 quintiles of all dairy farms (2013)



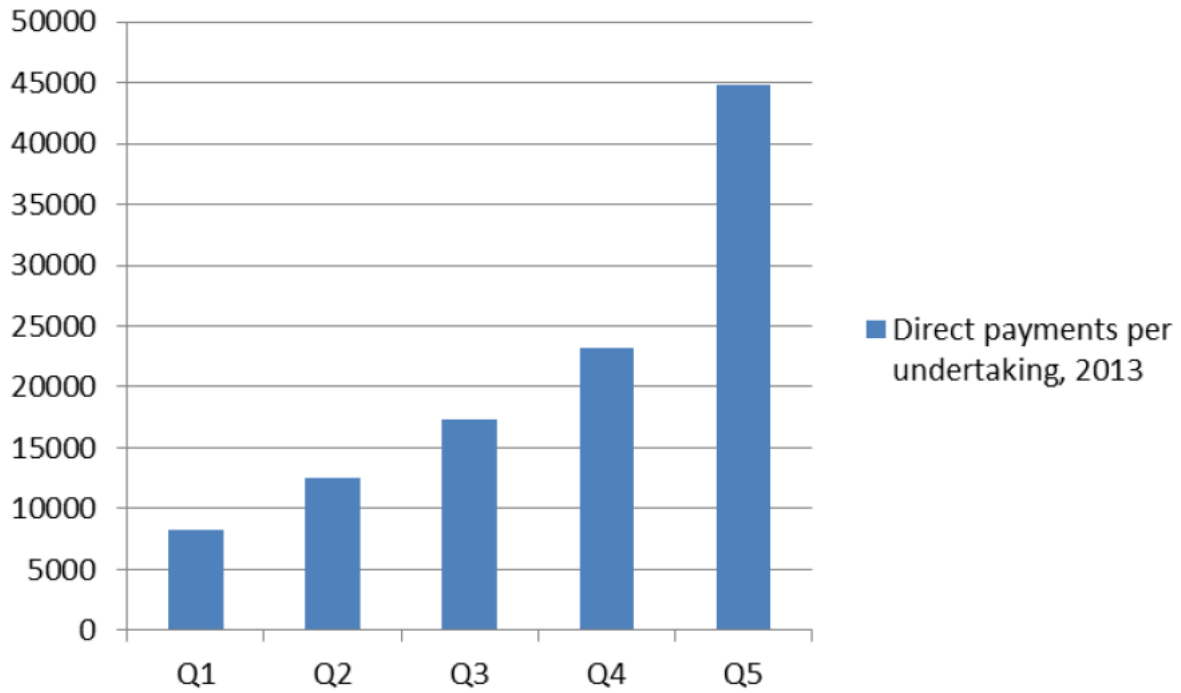
Source: Special FADN Communication 2016; Quintiles are defined according to economic size.

Figure 33/A2.4: Farm Net Income in € per unit of family labour in the 5 quintiles of all dairy farms (2013)



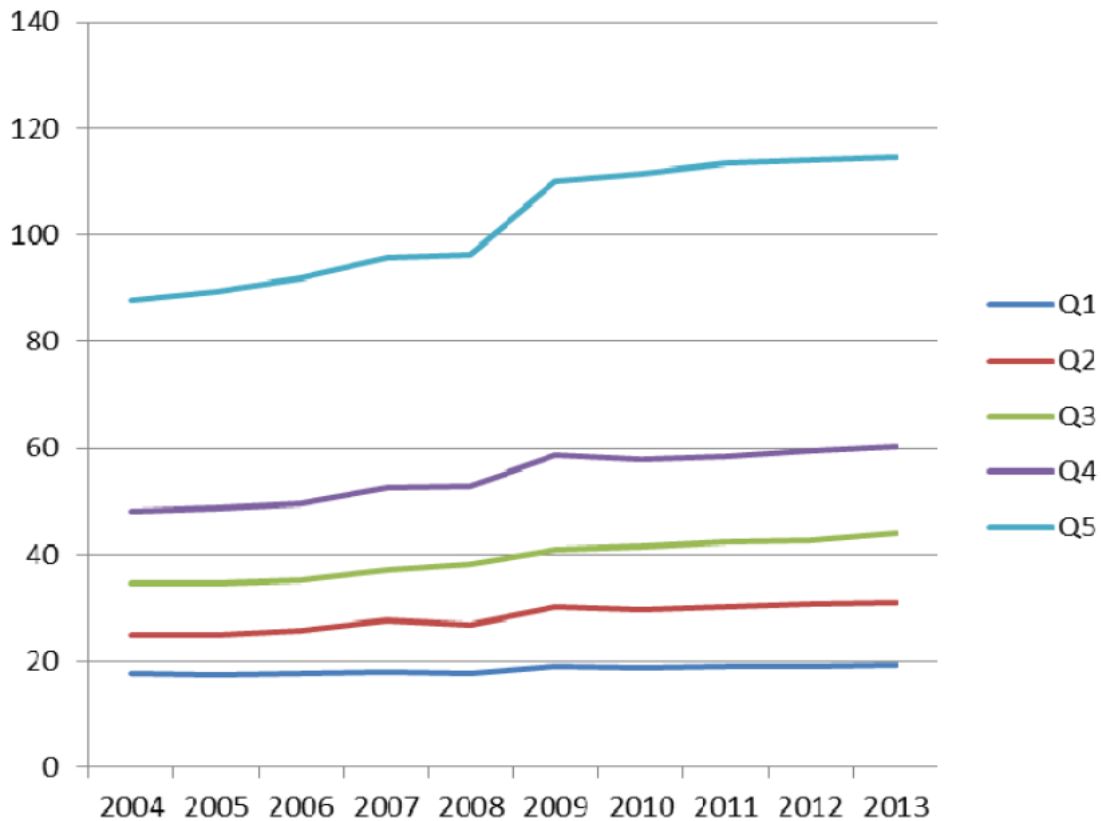
Source: Special FADN Communication 2016; Quintiles are defined according to economic size.

Figure 34/A2.5: Direct payments in € per farm in the 5 quintiles of all dairy farms (2013)



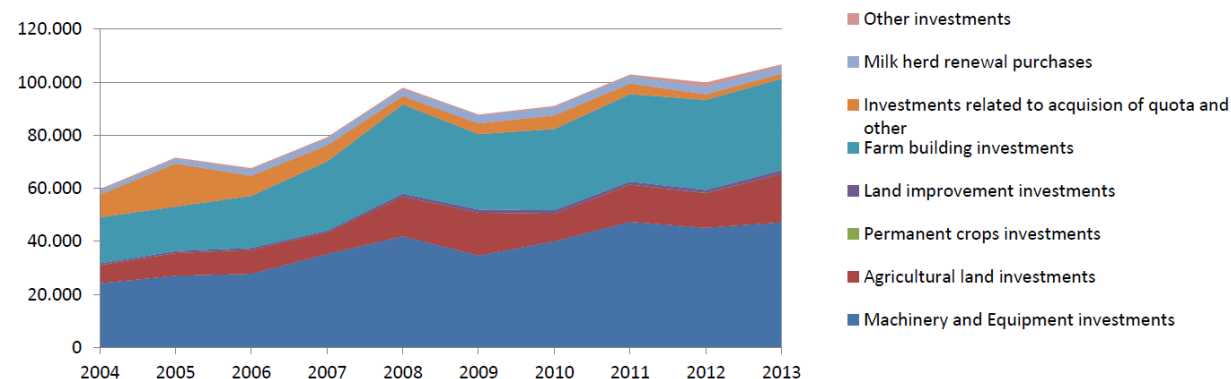
Source: Special FADN Communication 2016; Quintiles are defined according to economic size.

Figure 35/A2.6: Herd size increases per farm size groups



Source: FADN, AGRI based on SO, special communication.

Figure 36/A2.7: Evolution of investments in the 20% largest dairy farms (EU15, €)



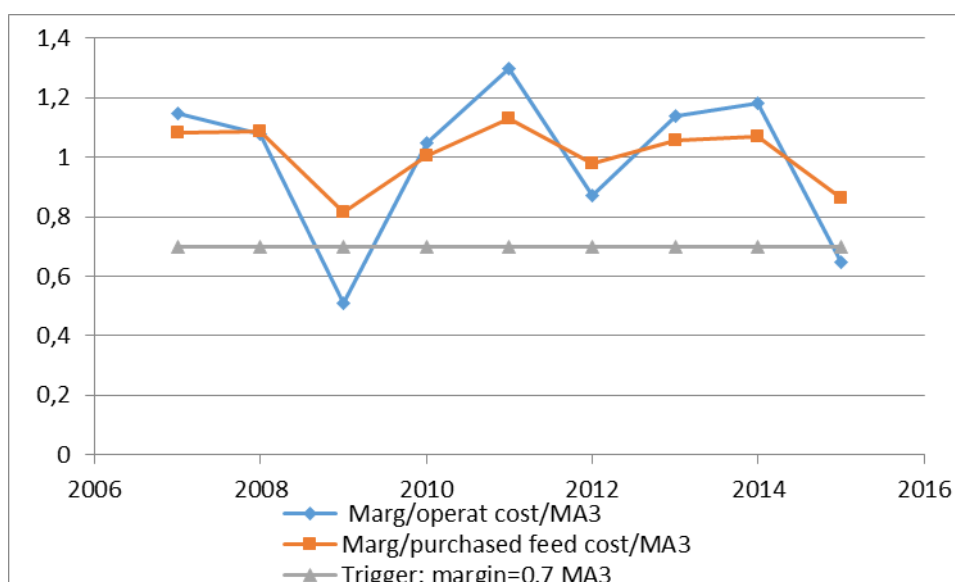
Source: FADN, AGRI based on SO, special communication.

Machinery Investment from 2004 to 2008 increased by 80% in the largest farms and only 60% in the whole sample.

Income definition and likelihood of IST compensation

A similar exercise was made on the 2005-15 period for milk producers to see on a counterfactual how often would have an IST been made active. This assumes that the current income is defined as an index based on input price indices and an average cost structure for the reference period. For practical reasons and since the exercise is only illustrative, various notions of incomes (i.e. of margins) were calculated on the basis of EU Raw milk price and input price indices and weights from French milk-specific input price indices.

Figure 37/A2.8: Ratio of current Margin to 3 year moving average of margin



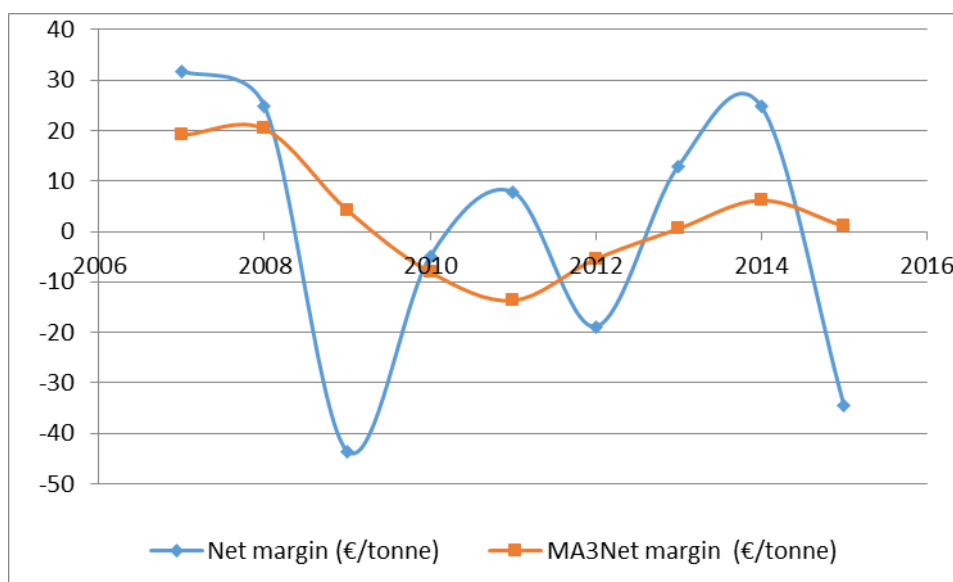
Marg/operating cost/MA3= current margin over operating costs divided by 3 year moving average
 Marg/purchased feed cost/MA3=current margin over feed costs divided by 3 year moving average

Source: Own calculation based on EU Raw milk price and French dairy input indices

Figure 37/A2.8 is similar to Figure 19 of the main text reflecting the most likely occasions for triggering the IST, i.e. in 2009 and in 2015. Figure 26/ A.2.8 shows further that using moving average for the benchmark margins has the advantage of updating market and general economic developments and therefore to make trigger possible in 2015, which was not the case with a longer period average as in Figure 19 of the main text. The other message from Figure 2531 above is to confirm that margin over feed costs would be very unlikely trigger for IST with the parameters defined in Article 39.

A similar exercise illustrated in Figure 289 regarding net margin showed that trigger parameters similar to the 30-70% of Article 39 would not make sense because of the volatility of net margins which easily turn negative (and their moving average as well), making the ratio of current to moving average margin meaningless from an operational standpoint.

Figure 38/A2.9: Net margin and net margin 3 year average (milk; 2007-15)



Notes: Net Margin = current margin with the FADN definition, €/tonne; MA3 Net margin = 3-year moving average of net margin, €/tonne.

Source: own calculations based on EU Raw milk price and French dairy input indices

DIRECTORATE-GENERAL FOR INTERNAL POLICIES
**POLICY DEPARTMENT B: STRUCTURAL AND COHESION
POLICIES**

AGRICULTURE AND RURAL DEVELOPMENT

**RESEARCH FOR AGRI COMMITTEE –
THE FUTURE OF RURAL DEVELOPMENT
POLICY**

STUDY

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STUDY

Abstract

The post 2020 rural development policy will build on the wealth of experience and commitment of a wide scope of rural actors. To increase effectiveness, it will have to respond to a host of drivers and changes of rural regions. Rural policy should concern all economic sectors, strengthen social action and environmental considerations and be targeted at harnessing place-specific development opportunities. This complex policy field thus addresses far reaching societal challenges that need to be tackled by territorial differentiation and high engagement of local stakeholders.

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LIST OF ABBREVIATIONS

AEM	Agri-Environmental Measures
AWU	Agricultural Work Unit
ANC	Areas facing Natural Constraints
CAP	Common Agricultural Policy
CLLD	Community-Led Local Development
CPR	Common Provisions Regulation
CSF	Common Strategic Framework
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agricultural Guidance and Gurantee Fund
EIP	European Innovation Partnership
EMFF	European Maritime and Fisheries Fund
ENRD	Euroeapan Network for Rural Development
ERDF	European Regional Development Fund
ESDP	European Spatial Development Perspective
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESPON	European Observation Network for Territorial Development and Cohesion
FA	Focus Area
HNV	High Nature Value
LAG	Local Action Group (LEADER)
LEADER	Liaisons Entre Actions pour le Developpement de l'Économie Rurale
LFA	Less Favoured Areas

MRS	Macro-regional Strategies
MS	Member State
MTR	Mid-Term Review
NMS	New Member States
NRP	New Rural Paradigm
NUTS	Nomenclature of territorial units of statistics
NWFP	Non-wood forest products
OECD	Organisation for Economic Co-operation and Development
RD	Rural development
RDP	Rural Development Programme
RDR	Rural development Regulation
SGI	Services of General Interest
UAA	Utilised Agricultural Area

EXECUTIVE SUMMARY

Background

In the course of the start of discussions on preparation of the next CAP reform a workshop presentation and an 'In-Depth Analysis' on the subject of the future of the rural development policy was commissioned by the European Parliament Committee on Agriculture and Rural development (AGRI Committee). This has been prepared by the two authors from the Federal Institute for Less-Favoured and Mountainous Areas in Austria; and from NORDREGIO, Sweden/ The James Hutton Institute, UK. The aim is to highlight key points for the discussion on the future of rural development policy, and to reflect on challenges for the post-2020 policy reform.

The analysis is based on a review of studies and policy analyses, on the history of rural development policy, - including the first experiences from the start of the 2014-2020 programming period - and discussion with experts on the implementation of Rural Development Programmes.

The analysis of the evolution of European Rural Development Policy reveals that its emergence dates back almost three decades. With the formulation of the **Second Pillar** by the Agenda 2000 decisions rural development became a discrete structural part of the wider CAP. The subsequent evolution of Rural Development Policy implies a gradual increase in its political priority.

Due to the broad scope of non-agricultural policies impacting on rural areas the tensions between sectoral and territorial measures and the aspect of **coherence** between CAP and Cohesion Policy has remained crucial throughout all programming periods.

This led to repeated discussions about objectives, priorities, scales and organisational issues of Rural Development Policy, and to ambitions for a more **strategic and integrated approach**, focused on sustainable and balanced territorial development.

The challenges for the next reform are, in particular, concerned with adapting the regulatory framework to support more effective implementation, exploiting territorial assets and potentials at the regional level, and providing incentives for strategies that enhance innovation and shape the amenities of rural regions.

Rural Development in the European Union

Rural areas are increasingly characterised by integration into their wider spatial contexts. These developments have intensified over the last decades due to on-going socio-economic and technological changes, impacts on ecological performance and, in general, a web of inter-relations transforming the challenges and opportunities of rural areas.

In particular, forces of globalisation and the strengthening of rural-urban interlinkages have placed 'relational aspects' of rural regions and 'proximity' relationships on top of the agenda. The multitude of drivers involved in this complex structure demand a perspective on rural areas that includes an assessment of policy action from a wide set of sectors and enhanced efforts for coherence of those actions.

Rural areas have been classified at the international level to enable comparative assessment of rural contexts and policy achievements. The first internationally agreed classification provided by OECD (1994) has been revised and refined by the European Commission/Eurostat, and subsequently re-adopted by the OECD. Many other typology studies have underlined the limitations of clear-cut spatial categories (for rural and urban

areas), indicating large spheres of transition between them, and the relevance of rural-urban interrelations. What is even more important for future rural development policy is that among rural regions significantly different types can be discerned, which probably should be acknowledged in policy approaches.

The analysis of implementation of RDPs concentrates on the lessons learned at the start of the present programme period 2014-2020. Studies reveal that rather gradual changes of RDPs predominate, underpinning the assessment that CAP and rural development is a policy area of high path-dependency and inertia, when compared to needs assessment. The new structure of Pillar 2, with six priorities against formerly three (or four) 'axes' of programme activities, did not lead to significant changes in the allocation of financial resource to instruments.

There are some shifts of programmes (MS and regions) with regard to the previous period which were made possible through a fund-switching mechanism between the two pillars of CAP allowing increased funds for Pillar 2 in a number of countries, and leading to an increase in overall EAFRD financial resources of about 3%.

The most salient finding from assessing the current application of RDPs is that within the common policy structure significant national and regional variation in programme strategies and priority setting is accomplished. This high diversity of application is understood to reflect the divergent needs of rural regions, but also result of different strategic considerations.

There is little evidence that CAP Pillar 2 delivers significant beneficial impacts in terms of reducing territorial disparities. Rural development is an issue that is at the cross-roads of political discussion of the CAP and Cohesion Policy. Support for development of areas with natural constraints (ANC) and orientation towards sustainable agriculture will remain at the core of RDPs. In addition, aspects of policy coherence between CAP and other policies impacting on rural regions will gain in importance.

In this complex and contested policy arena it is not a simple task to distil key implications for the reform discussion. Diverse stakeholders perspectives and country strategies imply a range of distinct expectations on the future of rural development policy; from substantial continuity of RDP and the CAP architecture (with only minor revisions for Pillar 2), at one extreme, to a shift to a multi-sectoral "Rural Cohesion Policy", focusing on endogenous development of the full range of territorial capital, at the other.

Guidance in the upcoming discussion will require a clarification of "rural" objectives, the discussion of relevant criteria to assess programme needs, a focus on options that reflect the various positions and development opportunities, intensive considerations on the future programme structure and framework to enhance targeted application and effective administration procedures, and a detailed analysis of revision of priorities of future RDPs.

Orientation for the post-2020 reform

From all the discussions and evidence available a high interest in continuation and future adaptation of RDPs emerges. A radical restructuring of the ESIF fund arrangement is probably not a realistic goal. Instead the pre-reform discussion should focus upon re-balancing the intervention logic within the current Pillar 2 structure. There is for example, increasing concern about lack of "targeting" and effectiveness of implementation. In particular, the following main issues are considered crucial for the future reform of Rural Development Policy:

The **diversity of rural areas** and the different **needs and opportunities** should be increasingly reflected in RDP programming. A "place-based" approach could enhance the relevance of actual contexts for the selection of priorities in RDPS.

Moreover, **increased territorial focus** in distribution of funds is **required** to address region-specific challenges, e.g. articulated through land abandonment, marginalization trends and rural regions of particularly high poverty risk. Such situations are above all relevant in “New” Member States, regions in Mediterranean Countries and ANCs as well as remote regions in other EU countries.

Besides the territorial aspects, RDPs need to show much clearer than until now that they are beneficial **to all people** in rural regions and impact the whole societies. This (on-going) shift in the focus of beneficiaries should secure respective effects for the local economies and societies and provide significant (positive) impact on well-being in rural regions.

In order to enhance programme up-take, particularly in regions with gaps in participation, specific attention should be paid to capacity building, knowledge development and participatory local development action. These **“soft” support measures** need an increased priority in specific regions to overcome the “downward spiral” and outmigration tendencies.

A number of **“social” measures** have been included in RDPs already; to become more effective a considerable priority and share of funding as well as further elaboration of these measures is required to achieve (measurable and meaningful) effects for the various types of rural regions.

The LEADER and CLLD approach, and the cooperation measure represent tools of high potential for **participation, local development strategy** processes and identity creation. On-going consultation and learning processes of their application should feed into the future reform process.

Above all, rural areas should no longer be understood as only places of development problems and sub-ordinated to urban areas, but that they also have significant opportunities which should be continuously nurtured, in order to achieve desired impacts (see also discussions of Cork 2.0 conference). A wise and carefully adapted land management system that enables **sustainable development and the focus on social innovation** aspects are core to make use of these (place-specific) potentials.

1. INTRODUCTION

KEY FINDINGS

- In the course of the start of discussions on preparation of the next CAP reform a workshop presentation and an 'In-Depth Analysis' on the subject of the future of the rural development policy was commissioned by the European Parliament Committee on Agriculture and Rural development (AGRI Committee). This has been prepared by the two authors from the Federal Institute for Less-Favoured and Mountainous Areas in Austria; and from NORDREGIO, Sweden/ The James Hutton Institute, UK. The aim is to highlight key points for the discussion on the future of rural development policy, and to reflect on challenges for the post-2020 policy reform.
- The analysis is based on a review of studies and policy analyses, on the history of rural development policy, - including the first experiences from the start of the 2014-2020 programming period - and discussion with experts on the implementation of Rural Development Programmes.
- The analysis of the evolution of European Rural Development Policy reveals that its emergence dates back almost three decades. With the formulation **of the Second Pillar** by the Agenda 2000 decisions rural development became a discrete structural part of the wider CAP. The subsequent evolution of Rural Development Policy implies a gradual increase in its political priority.
- Due to the broad scope of non-agricultural policies impacting on rural areas the tensions between sectoral and territorial measures and the aspect of **coherence** between CAP and Cohesion Policy has remained crucial throughout all programming periods.
- This led to repeated discussions about objectives, priorities, scales and organisational issues of Rural Development Policy, and to ambitions for a more **strategic and integrated approach**, focused on sustainable and balanced territorial development.
- The challenges for the next reform are, in particular, concerned with adapting the regulatory framework to support more effective implementation, exploiting territorial assets and potentials at the regional level, and providing incentives for strategies that enhance innovation and shape the amenities of rural regions.

Rural Development has been a discrete element of the Common Agricultural Policy (CAP) since the Agenda 2000 decisions separated out certain instruments to form a separate "policy domain". Since then it has become customary to refer to Rural Development Policy measures in the EU regulatory framework as *the Second Pillar of CAP*. It will be helpful before proceeding with the review of the evolution of CAP Pillar 2, and options for the future, to be clear, firstly, about what distinguishes Pillar 1 from Pillar 2, and, secondly, how the latter is positioned in relation to the broader conceptual discourse about rural, territorial and spatial development.

According to the European Commission the main objectives of the CAP¹⁶⁴ are “to provide a stable, sustainably produced supply of safe food at affordable prices for consumers, while also ensuring a decent standard of living for 22 million farmers and agricultural workers” (EC 2016). The CAP is thus essentially a sectoral policy, for the support of agriculture and related activities. This applies particularly to Pillar 1, which supports farmer’s incomes and, where necessary, intervenes in markets for agricultural produce. The Second Pillar has broader objectives, relating to the economic, social and environmental conditions of rural areas. However, although the “end” is not, strictly speaking, sectoral, it has thus far been assumed that the principal “means” through which it should be achieved are various forms of intervention relating to agriculture and closely related activities. It is fair to say that the number of measures, and the proportion of the budget, targeted on non-farm beneficiaries has always been, in most Member States (MS), relatively small.

Thus according to the CAP Pillar 2 perspective “rurality” is defined by association with land-based activities, and rural development is achieved by supporting these activities. This contrasts with an increasingly popular view, particularly in academic circles, that rurality is conferred by territorial context and defined primarily in terms of geographical or cultural characteristics, such as population density, distance from cities, or the self-perceptions and allegiances of inhabitants. Proponents of these perspectives argue that rurality and remoteness are associated with a range of particular challenges, both in terms of doing business, and in terms of daily life and well-being (Copus and Dax 2010). These include (for example) more costly manufacturing inputs, tenuous connections to business networks, absence of agglomeration advantages, poor access to, or increased cost of, services, narrower employment opportunities, poorer choice of entertainment and cultural activities, and so on. Moreover, they argue that rural areas are increasingly differentiated, and that every rural area possesses a unique set of territorial assets which constitutes its potential for development. From a cultural or sociological perspective, rurality could be defined in terms of social mores, community characteristics or forms of behaviour. Addressing such economic constraints and cultural characteristics implies more broadly based, even diffuse, forms of intervention, more akin to regional or social policy than agricultural policy.

There are a number of explanations for the continued popularity of the sectoral approach to rural development in a European policy context:

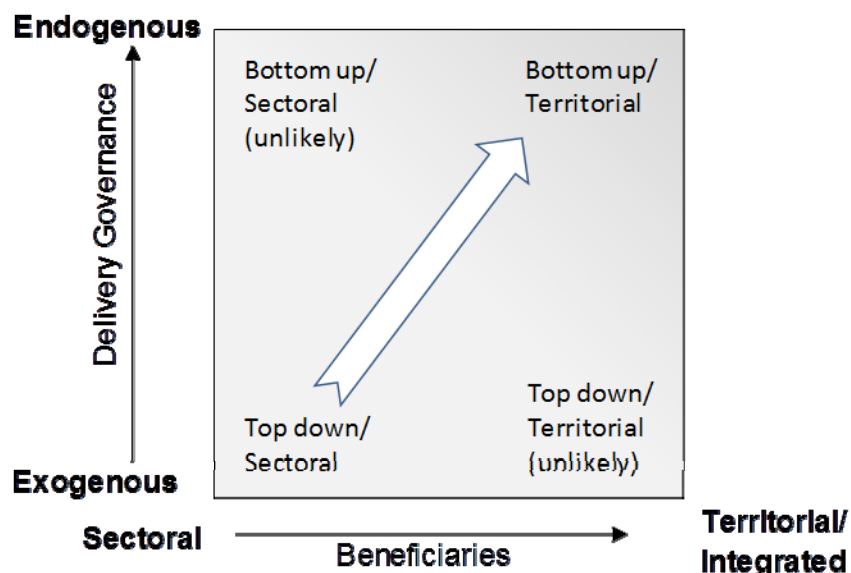
- Since, with the exception of places which are marginal for agriculture in terms of climate or soils, farming is still the dominant rural land use, the environmental objectives of the CAP may be well served by measures directed mainly to agriculture.
- The same is true in relation to social and economic objectives where farming remains a core element of the rural economy. Even where this is not the case, it may be argued that land-based activities justify support because, unlike other elements of the economy they are intrinsically immobile, unable to relocate and to follow emerging or shifting opportunities.
- From a different perspective, although there are considerable swathes of Northern and Western Europe where rural economies have diversified away from agriculture, such regions tend to have relatively strong economic performance, whilst those in the south and east of the Union where agriculture still plays a relatively important role, tend to be weaker performers.

¹⁶⁴ CAP objectives are included in the CAP regulations (article 110.2 of Regulation 1306/2013) and refer to the objectives of the EU Treaty (article 39 TFEU).

- Territorial or sociological approaches to rural policy are intrinsically harder to specify and manage than sectoral approaches. The latter engages with a narrower set of stakeholders and beneficiaries, whose activities are less diverse, and as a result it is easier to design forms of interventions.
- The implementation of sectoral forms of intervention can utilise the pool of expertise associated with agricultural policy. Territorial approaches require a more diverse skillset.

Different views of rurality and the associated policy approaches are sometimes referred to as “paradigms”. Within the European rural development discourse, particularly among academics, there has been an increasing emphasis upon territorial approaches, whilst at the same time favouring “bottom-up” or endogenous forms of implementation and governance (Copus and Dax 2010).

Figure 1: Shifts in Rural Development Paradigms



Source: Copus and Dax 2010

The key characteristics of the “place-based” and “integrated” rural development approaches which are increasingly popular across the developed world have been summarised by the OECD (2006) under the heading “New Rural Paradigm” (NRP). According to Nemes *et al* (2015, 213f.) “The ‘newness’ of the NRP derives from its contrast with the previous productivist paradigm ... NRP is a shift from an approach based on subsidising declining sectors to one based on strategic investments to develop an area’s most productive activities. It is rooted in the active participation of local people and aims to unlock local assets as development resources. Thus, it is characterised by a focus on places instead of sectors, and on investments instead of subsidies.”

Thus, when considering ‘rural policies’ from a territorial perspective it becomes essential to extend our view to include non-agricultural policies affecting rural areas recognising that a host of additional activities are relevant for rural areas and have substantial influence on the performance of these regions. In a European policy context this means that all of the European Structural and Investment Funds (ESIF) contribute (to a greater or lesser extent) to European rural development goals. The European Regional Development Fund (ERDF) and the Cohesion Fund are particularly important in this respect.

This working paper looks for options for further elaborating the CAP Pillar 2 rural development policy beyond the current programme period (2014-2020). In order to frame the discussion, a brief overview on the evolution of European Rural Development Policy will be presented as an important backdrop to understanding the present policy setting and its underlying objectives. Moreover, arguments for policy reform might draw on experience and evaluation of past programmes and associated assessment of policy delivery. This will provide the context for initial considerations for the future of rural development policy. Although there are several years left until the next programming period, the increasing role of stakeholder consultation and enhanced participation in the EU political decision-making process makes it important to initiate a dialogue for the next adaptation of rural development policy as soon as the last period's programmes have started. As Rural Development Policy sits at the intersection between different policies, the challenges and coordination issues not only with regard to CAP's Pillar 1 but also with Cohesion Policy must be addressed appropriately.

1.1. The evolution of Rural Development Policy

Rural development is still very closely linked with low density areas and a particular focus on land use activities, comprising both agricultural and forestry activities (Hubbard and Gorton, 2011). Thus – despite the option for support of non-farm actors through LEADER and other RD instruments - a considerable dominance of farming stakeholders is presupposed for rural policies. However territorial development of rural regions is, as explained above, increasingly shaped by a multitude of different sector policies, involving regional governance processes that go well beyond CAP rural policy schemes established so far. Rural development policy understood in its broad sense (Vihinen 2007) includes all regulatory frameworks and interventions which have an impact upon the rural economy and quality of life. Nevertheless, owing to the historical origin of the policy, the primary focus of the following outline of the policy evolution¹⁶⁵ will be upon experiences with establishing the *Rural Development Policy*, summarized in CAP's Pillar 2 programmes, and relevant implications by EU *regional* and *cohesion policy*. Table 1 presents the evolution of the main documents, changes and reform steps for the two policies in a timeline, starting from the first steps of EU's CAP and Regional Policy through to the present day.

The following account will of necessity focus on Pillar 2, but will need to take account of the overarching framework of the wider EU and Member State policy context with an impact on rural areas as appropriate for the reform discourse. We therefore prefer to refer in this presentation of long-term changes of the policy remit, contents and general features to the term "rural policy" instead of focusing merely on the scope and development of "Rural Development Programmes". Against this European perspective it should be emphasised that, in terms of specific outcomes in different parts of Europe, it is also important to recognize the influence of policy rationales and implementation styles at the Member State level.

The following account is summarised in Table 1, which should be read from the bottom up.

¹⁶⁵ This overview on the history of Rural Development Policy is particularly based on Dax (2015).

Table 1: Rural Policy evolution and Cohesion policy in the European Union

	<i>Cohesion Policy</i>	<i>Date</i>	<i>CAP</i>
Phase 4: Strategic Frameworks		Period 2014-20	
		2016 Common Strategic Framework (CSF) 2013	Cork 2.0 Conference
	Territorial Agenda 2020	2011 Europe 2020 2010	CAP towards 2020
	Green Paper: Territorial Cohesion	2008	LEADER Mainstreaming; new fund: European Agricultural Fund for Rural Development (EAFRD)
		2007	
Phase 3: RD Second Pillar of CAP	European Union's Territorial Agenda	Period 2000-06 2006	
	European Spatial Development Perspective (ESDP)	2003 1999 Agenda 2000	CAP Health Check (‘Fischler Reform’)
Phase 2: Integration of RD policy		Period 1994-99	Buckwell report: Towards a Common Agricultural and Rural Policy
		1997	
		1996	Cork Conference
Phase 2: Integration of RD policy	Objective Areas (1-5)	Period 1989-93	Objective 5b area; LEADER
		1992	CAP reform (‘MacSharry Reform’)
	Structural Funds Reform	1988	
	EC-document „The Future of Rural Countryside“		
Phase 1: The precedents of rural policy		1985	CAP Perspectives Green Paper
	Integrated Mediterranean Programmes	1981	
	creation of European Regional Development Fund (ERDF)	1975	Less-Favoured Areas (LFA) regulation
		1962	Establishment of the European Agricultural Guidance and Guarantee Fund (EAGGF)
		1958	Common Agricultural Policy (CAP)

Source: based on Dax 2015, 37

a) The precedents of rural policy (Phase 1)

Until the mid-1980s no discrete EU rural policy can be discerned. This *first phase* (pre-1987) is therefore labelled as “the precedents of Rural Policy”. The origins of European rural policy are usually seen in the agricultural structures policy of the CAP. At that time the main distinguishing feature of rural areas was recognized to be their agricultural structures. This is directly referred to in the foundation legal text of the CAP, which stated that: ‘In working out the common agricultural policy [. . .] account shall be taken of the particular nature of agricultural activity, which results from the social structure of agriculture and from structural and natural disparities between the various agricultural regions (Treaty of Rome, Article 39, paragraph 2; European Union 1957). The launch of the Less Favoured Area (LFA) scheme (Dir. 268/75/EEC) in 1975 aimed at compensating farmers for the production difficulties of farming in mountainous and other less-favoured areas. Thus nationally designed ‘Compensatory Allowances’ became the first instrument of selective direct income support to farmers. What is interesting in the long-term perspective is that the LFA legislation referred in its objectives to the tight interrelationship between agriculture and the environment, an issue that has since been intensified in agricultural reform debates and its territorial dimension. However, at least two decades passed between the introduction of LFA support and a more general appreciation of agriculture’s impact on environmental performance, best visible through the emergence of Agri-Environmental Measures (AEM) during the 1990s.

Prior to the establishment of European Cohesion policy the national instruments of early “regional policies” targeted assistance on specific geographic regions and internal spatial disparities, such as the Mezzogiorno in Italy, northern peripheral areas in Scandinavia, and mountain regions in Alpine countries. Many of these regional problem areas were rural in character. With the creation of the European Regional Development Fund (ERDF) in 1975 (the same year as the LFA scheme), a basic financial instrument for European regional policy was created. However, no common policy concept was elaborated, and the new fund hardly changed national approaches of regional policy. Yet, rising criticism about ineffectiveness of scattered and *ad hoc* regional support led to more carefully conceptualised pilot schemes and ‘integrated development programmes’ (Integrated Mediterranean Programmes; Programme for the Western Isles, Scotland). These new programmes turned out to be important as they demonstrated the value of a concerted “place based” approach for addressing the situation of lagging rural regions.

The early 1980s was a time of growing concern and increasing discussion of rural problems. Delgado and Ramos (2002, 3) have described it as ‘the period of implicit debate’. It was also a period of experimentation with integrated approaches. The LFA and Integrated Development Programmes had limited budgets, but nevertheless raised awareness of the specific problems of (peripheral) rural areas, and the advantages of *integrated* territorial approaches designed to tackle a range of development challenges in a coordinated way. In the next phase “integration” was to be further developed in the form of programmes targeted on defined territories with close collaboration of the three “Structural Funds” (see below).

b) Integration of RD policy (Phase 2)

The *second phase* (1987-1999) was a period of integration of Rural Development Policy, i.e. a shift towards combining interventions from relevant policy areas and local aspirations, aiming at greater coherence of programme activities, enhanced utilisation of rural resources, and addressing more directly the specific needs of local populations (Nemes 2005). The late 1980s were characterised by vigorous debates and substantial changes to EU policies and frameworks. This is particularly visible in the Commission’s

The future of rural society document (CEC 1988) which is considered the starting point for a genuinely territorial Rural Development Policy. Being discussed at the same time as the reform of the Structural Funds (1987), it paved the way for an “integrated approach”. This went beyond the early mono-fund programmes of the previous period, by requiring the three Structural Funds - the Regional Development Fund (ERDF), the European Agricultural Guidance and Guarantee Fund (EAGGF, Guidance Section) and the European Social Fund (ESF) - to work together in multi-fund development programmes

Another big step forward was the Single European Act of 1986 whereby economic and social cohesion became a competence of the European Community. It asks that the ‘Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least-favoured regions’ (Art. 130a, EU 1986). Moreover, Article 130a of the Maastricht Treaty (1992) added the words ‘including rural areas’, thereby relating to the territorial dimension, which later gained particular relevance through the concept of ‘territorial cohesion’ in the EU regional policy debate (CEC 2008). This reform also introduced four enduring principles of Cohesion Policy (Manzella and Mendez 2009, 14): *concentration* in spatial terms; *programming* of interventions; the role of *partnerships*, and the *additionality* of funds.

This reform of structural funds set a number of enduring precedents: a series of organizational structures were created “that (despite considerable makeovers) are the direct antecedents of today’s rural development programmes (RDPs)” (Dax 2015, 40). These include the Community Initiative LEADER, specifically introduced (in 1991) to strengthen innovation and local development within rural regions. Despite all the changes and shifts in priorities of the following reforms, LEADER has become the ‘cornerstone’ of the EU’s Rural Development Policy, leading to its inclusion (‘mainstreaming’) within the RDPs. It remains the instrument that generates high expectations of addressing territorial needs, and best manifests the integrated approach.

It should be noted that the CAP reform of 1992 (‘MacSharry reform’) installed direct aids for producers and a series of so-called ‘accompanying measures’ (support for environmental conservation, afforestation aid, and early retirement scheme) which, together with agricultural structures support, would later constitute the building blocks of the menu of Pillar 2 rural development measures.

Integration had a great effect in practical terms for rural regions, enhancing wide-spread efforts for cross-sectoral activities and increasing appreciation of rural amenities. As it was noted that “integration and holism of rural spaces will be difficult to achieve” (Marsden 1998) significant concerns for realizing effective governance arrangements at the regional context emerged. This led to enhanced interest in rural research and policy considerations. The (first) ‘Cork Declaration’, emanating from the European Conference on Rural Development (1996) made a strong plea for establishing a single programme devoted to rural development, the RDP, and, at the same time supported the claim of the CAP as the policy field responsible for rural development issues. Simultaneously, an Expert Group argued that there was an urgent need for a reformulated Common Agricultural *and Rural* Policy for Europe (CARPE; author’s emphasis), a concept that has provided orientation and targeting for CAP reforms ever since. The report ‘stressed throughout that rural development and rural policy involve more than agriculture and agricultural policy alone’ (Buckwell *et al.* 1997).

During the 1990s, motivated by treaty commitments to economic and social cohesion (Nuñez Ferrer 2009), a perceived need to counter the agglomerative tendencies associated with the Single Market, and the increasing disparities associated with successive enlargements, the Reform of Structural Funds provided an opportunity for

integration between (CAP) rural development, the regional (Cohesion) Fund, and Social Fund policy, within the context of territorially targeted programmes. In some ways this could be described as a “golden age” for integrated and territorially targeted policy, during which many enduring principles and structures originated. Since the mid-1990s, and partly in response to calls for “simplification”, rural policy has to some extent “retrenched” back into the CAP, with the Regional and Social segments of the EU policy/administrative “machine” focusing more on urban areas, and former industrial regions.

c) RD Second pillar of CAP (Phase 3)

The reform package entitled Agenda 2000 reflected the Cork Declaration’s principles by introducing RDPs as a *Second Pillar* of CAP. This realignment of Rural Policy to agricultural policy and the complementary role to market support and general agricultural policy indicate a new era of rural development policies. This *third phase* thus includes both a re-integration into the CAP structure and its extension to cover all rural areas of the EU. This may be viewed as a shift away from “place based” geographical targeting of support on areas of particular need, in favour of a more strongly sectoral/horizontal ethos. Even if the pooling of relevant measures into dedicated Rural Development Programmes marked an increased visibility of rural policy, associated with an opportunity for stronger needs assessments of rural territories (Talbot *et al.* 2007, p17f.), the instruments remained more or less the same and implementation was not accompanied by significant changes in priorities. In general, the selection of measures adopted in the RDPs reflected previous national/regional experiences, rather than objective appraisals of rural needs (Dwyer *et al.* 2002).

While the establishment of RDPs had been thought of as a substantial incentive towards intensifying appropriate instruments, the actual implementation of Agenda 2000 was seen as “a wasted opportunity” (Lowe and Brouwer 2000) compared with contemporary expectations of increased priority for rural action. A mid-term review (MTR) in 2003, termed the “CAP Health Check” addressed the relevance of the new policy structure and continued the slow shift of resources from Pillar 1 towards rural development measures. Moreover, it provided a perspective for the enlargement in 2004, which presented a particular challenge for the CAP system, as the ten accession countries are characterized by high agricultural employment and significant disparities in regional economies, particularly relevant for rural areas. But the MTR not only set out rules for accommodating enlargement, it also laid out the concept for CAP reform for the following period (2007–13), being implemented from 2005 onwards.

The core blueprint of the reform, referred to as the ‘Fischler Reform’ - after the then European Commissioner for Agriculture, - addressed both parts of the CAP and their interrelation: Pillar 1, by the decoupling of direct payments and cross-compliance to fulfil statutory management requirements, and Pillar 2, by strengthening the rural development measures through modulation and a more balanced implementation of the available policy measures to address the wide scope of rural development options more comprehensively (Henke *et al.* 2011).

d) Strategic Frameworks (Phase 4)

Programme period 2007-2013

Although there was only modest adjustment to the structure of CAP Pillar 2, the efforts to *enhance policy coherence* and to take account of societal needs by placing a much higher weight on strategic considerations in the preparation of the 2007-2013 programmes prompt us to speak of a new step in rural policy (*phase four*). Member States had to formulate strategic frameworks that address the three core objectives of the RDPs (CEC 2006a, 3): (i) 'improving the competitiveness of agriculture and forestry', (ii) 'supporting land management and improving the environment' and, (iii) 'improving the quality of life and encouraging the diversification of economic activities'. The three objectives of the RDPs were supported by three so-called "axes" with associated groups of measures. In addition, the former LEADER Community Initiative was integrated into the RDPs (as a fourth axis) through a 'mainstreaming' process. The substantial increase in the LEADER budget was intended to strengthen the territorial dimension and raise overall effectiveness of rural development action. However, in most European regions the new administrative prescriptions hampered local action groups from making full use of the local potentials and fulfil the overstretched expectations (Dax *et al.* 2016).

As with previous CAP reforms, in practice the new intervention priorities were adapted 'on the ground', within the Member States, by means of small, incremental adjustments. Analysts discerned a pervading pattern of inertia in the application of the EU Rural Development Policy system (Dwyer *et al.* 2007).

Programme period 2014-2020

The focus on coherent national strategies, across what are now known as the European Structural and Investment (ESI) funds, has increased during the period 2014-2020. The Europe 2020 strategy and the Common Strategic Framework translates an overall vision into detailed priorities for all policy areas including Pillar 2 (Annex I of the Common Provisions Regulation – CPR; Regulation (EU) No 1303/2013). The new legal framework substantially enhances the principle of coordination between the ESI Funds and with other EU instruments. With the requirement of a single common document for the strategy of ESI Funds at national level, i.e. the Partnership Agreement, common standards for all programmes are defined. This harmonization is intended to raise the likelihood of policy coherence, both horizontally, across policies, and vertically through all levels of administration.

However, the reality is that, as in the period 2007-2013, in many countries rural development is restricted to a narrow uptake of instruments mainly targeted at the farming community, and largely neglecting the potential for stronger coherence with regional development issues. The dominant rationale for Rural Development Policy rests on the concept of 'multifunctionality' and the provision of specific "goods" by land use activities. As such RDPs appear to become a means of justifying continued support *for agriculture* (Lowe *et al.* 2010). There continues to be little scope within Pillar 2 for place based approaches (in the geographical targeting sense), and bottom-up approaches are restricted to LEADER and the new Community Led Local Development (CLLD) arrangement.

Path dependency remains very evident in many of the RDPs of the current period, reflecting significant adjustment difficulties, especially in the New Member States, who generally have a legacy of low institutional capacity and less experience of the available

set of RDP measures. Targeting in the New Member States and southern European countries (still) favours investment measures and the modernization of farms.

Despite the persistence of a sectoral focus of policy implementation, the background discourse on the nature of rural development and the need to take account of increasing changes and interrelations affecting rural regions has intensified. This has accentuated the widening gap between the academic/policy discourse on rural development and European policy practice (Copus and Dax 2010). The discourse (involving both academics and policymakers) has broadened its horizons, embracing a range of new concepts and approaches (Brown and Shucksmith 2016). It has focused increasingly on the differentiation and dynamics of rural areas, a reflection on spatial interrelations, including urban–rural interaction, the awareness of rural assets and opportunities, the crucial role of innovation and creativity, and issues of multi-level governance.

With regard to Cohesion Policy the “Territorial Agenda” discussion had already started a policy adaptation process for the programme period 2007-2013 (CEC 2007). This has continued in the targeting of EC objectives for 2020 through the document “Territorial Agenda 2020” (EC 2011), which is highly relevant for rural regions. With its focus on harnessing region-specific ‘territorial capital’, to make better use of urban–rural partnerships, elaborate integrated development approaches for different kinds of geographic area, the need to improve territorial connectivity and to enhance the territorial dimension within the various EU policy processes, it addresses the need for spatial differentiation and targeting, and assessment of rural areas performance within spatial dynamics.

The emphasis upon geographical targeting shows a similar evolution. Both CAP rural development and Cohesion policy have become more “horizontal” in their implementation over the past decade or so. However, at the same time there has also been a recent rekindling of interest in place-based approaches, under the buzz words “strategic concentration”. This sharpened strategic approach is hence an important base for considerations of a post-2020 rural development reform.

1.2. The context for the reform post-2020

The above account of the historical evolution of Rural Development Policy in the EU highlights the increased concern for rural action and intensified focus on addressing the needs and opportunities of all rural regions. Before discussing details of analysis on the spatial contexts and the policy background it seems important to highlight that the policy evolution is the effect of intensive discussions not only in the periodic reform steps, but also in scientific analysis, experts’ assessment, considerations of practitioners and administrators at all levels and diverse stakeholder groups. These provide a large body of evidence and ideas on the contents of spatial targeting, institutional development and policy focus. The reform discourse is therefore highly complex, involving actors of different influence spheres in this process and a high differentiation of positions and roles in the policy cycle. However, it is not the task of this report to analyse the background of the “policy design” process. What can be observed is that the recent discussions are increasingly orientated towards a more strategic approach considering how integration between different policy sectors can be enhanced.

It will be shown in the following chapter that detailed analysis suggests that there remain substantial obstacles to more effective implementation. The challenge is how the operational framework for the next programme period can be adapted to the changing demands of society and large scale drivers of global concern. There is no doubt that globalization trends, climate change and resource use implications, new communication

technologies and increased interaction between localities, in association with technological development in general, are of great importance to the future of rural regions. It will be particularly important to address the following issues:

- How to reconcile quasi-horizontal forms of intervention with growing evidence for/interest in territorial patterns of inequality, and how to recognize in future reform considerations that territorial processes are crucial for effective policy action.
- What is the impact of globalization and increased connectedness of spaces on rural economies? How can we address the issues of marginalisation and the challenges embodied in the phenomenon of “Inner Peripheries” in rural development programmes?¹⁶⁶
- How can (increasing) rural-urban relationships be taken better into account, and how can rural regions respond to the drivers and societal demands from outside?
- How can RDPs respond to the effects of economic crisis and austerity on the different types of rural regions?
- How can social innovation processes be stimulated in order to bridge gaps in the provision of Services of General Interest (SGI) in rural areas?
- How can aspects of climate change, green growth, and the circular economy be addressed appropriately in future RDPs?
- What is the impact of demographic changes in rural areas, in particular taking account of the increasing pressure from immigration in specific rural regions and out-migration trends in other rural areas (e.g. NMS)? Can future RDP offer significant answers and instruments to cope with the increasing migration challenge?
- What are the likely implications of Brexit? (e.g. medium-term impacts on trade and supply chains, and economic changes)?

For the initial discussion of post-2020 adaptations it is crucial to focus on inputs on how to enhance momentum for rural action and to provide appropriate resources and implementation structures for rural regions that nurture action to overcome development obstacles and realise potential. Although strategic considerations are in the foreground, we must not neglect the need to adapt the allocation of financial support to context-specific needs. These considerations have to be set also in the context of policy coherence and linkage to European objectives.

¹⁶⁶ Inner Peripheries is a recently emerging concept of spatial development which argues that weaknesses in economic and socio-cultural performance are not only due spatial remoteness, but might evolve through changes in accessibility of services and relational positions to centres of political power and economic development (VVAA 2016).

2. SHAPING RURAL DEVELOPMENT IN THE EUROPEAN UNION

KEY FINDINGS

- Rural areas are increasingly characterised by integration into their wider spatial contexts. These developments have intensified over the last decades due to on-going socio-economic and technological changes, impacts on ecological performance and, in general, a web of inter-relations transforming the challenges and opportunities of rural areas.
- In particular, forces of globalisation and the strengthening of rural-urban interlinkages have placed 'relational aspects' of rural regions and 'proximity' relationships on top of the agenda. The multitude of drivers involved in this complex structure demand a perspective on rural areas that includes an assessment of policy action from a wide set of sectors and enhanced efforts for coherence of those actions.
- Rural areas have been classified at the international level to enable comparative assessment of rural contexts and policy achievements. The first internationally agreed classification provided by OECD (1994) has been revised and refined by the European Commission/Eurostat, and subsequently re-adopted by the OECD. Many other typology studies have underlined the limitations of clear-cut spatial categories (for rural and urban areas), indicating large spheres of transition between them, and the relevance of rural-urban interrelations. What is even more important for future rural development policy is that among rural regions significantly different types can be discerned, which probably should be acknowledged in policy approaches.
- The analysis of implementation of RDPs concentrates on the lessons learned at the start of the present programme period 2014-2020. Studies reveal that rather gradual changes of RDPs predominate, underpinning the assessment that CAP and rural development is a policy area of high path-dependency and inertia, when compared to needs assessment. The new structure of Pillar 2, with six priorities against formerly three (or four) 'axes' of programme activities, did not lead to significant changes in the allocation of financial resource to instruments.
- There are some shifts of programmes (MS and regions) with regard to the previous period which were made possible through a fund-switching mechanism between the two pillars of CAP allowing increased funds for Pillar 2 in a number of countries, and leading to an increase in overall EAFRD financial resources of about 3%.
- The most salient finding from assessing the current application of RDPs is that within the common policy structure significant national and regional variation in programme strategies and priority setting is accomplished. This high diversity of application is understood to reflect the divergent needs of rural regions, but also result of different strategic considerations.

- There is little evidence that CAP Pillar 2 delivers significant beneficial impacts in terms of reducing territorial disparities. Rural development is an issue that is at the cross-roads of political discussion of the CAP and Cohesion Policy. Support for development of areas with natural constraints (ANC) and orientation towards sustainable agriculture will remain at the core of RDPs. In addition, aspects of policy coherence between CAP and other policies impacting on rural regions will gain in importance.
- In this complex and contested policy arena it is not a simple task to distil key implications for the reform discussion. Diverse stakeholders perspectives and country strategies imply a range of distinct expectations on the future of rural development policy; from substantial continuity of RDP and the CAP architecture (with only minor revisions for Pillar 2), at one extreme, to a shift to a multi-sectoral "Rural Cohesion Policy", focusing on endogenous development of the full range of territorial capital, at the other.
- Guidance in the upcoming discussion will require a clarification of "rural" objectives, the discussion of relevant criteria to assess programme needs, a focus on options that reflect the various positions and development opportunities, intensive considerations on the future programme structure and framework to enhance targeted application and effective administration procedures, and a detailed analysis of revision of priorities of future RDPs.

Rural development has emerged as an important policy area since the late 1980s. Future adaptation needs to reflect the rising recognition of both the challenges and the opportunities for rural areas, the need to define eligible rural spaces, and to take account of spatial inter-relations. The great diversity across European rural regions, also augmented by the various waves of EU-enlargement, adds to the complexity of driving patterns and methodological issues relevant in conceptualizing the framework for EU rural development activities. In this chapter, first the main challenges for rural areas will be discussed and then a brief overview on the most relevant typologies of rural regions will be presented. Building on this general outline of the diversity of rural regions, the status-quo of rural policy in Europe, as reflected in the implementation of RDPs across all EU Member States (and regions) will be summarised. This overview of the application of rural development policy will provide insights into the present focus and policy adaptation so far.

2.1. Challenges for rural areas in the EU

2.1.1. Increasing challenges

Meta-narratives and increasing rural diversity.

Rural Europe is becoming more diverse and EU Rural Policy needs to adapt and adjust to reflect this. It is very important that interventions are designed in the light of changing rural realities, and are not based upon "stylised fallacies" (Hodge, 2004). According to Copus and de Lima (2014, 3) "...rural Europe has "outgrown" many of the stereotypes usually associated with it. It is wrong to think of it simply as a provider of food and fibre, as the recreational resource for city residents, as the residential area for commuters, or as a source of water, alternative energy or carbon capture. It is also incorrect to assume that rural entrepreneurs and residents are "locked in" to the surrounding "city region", in terms of markets, or access to goods and services. In all but a few parts of Europe the

rural economy is increasingly diversified, interdependent and outward looking, interacting not just with adjacent urban areas, but across a continental or global context. It is obviously not right to assume that rural areas are always lagging or disadvantaged. Indeed, some are flourishing, and boast a higher level of material prosperity, demographic and social vitality, than nearby cities."

The EDORA project (ESPON 2011) synthesised a large body of previous research, describing how current processes of economic, social, and environmental change, together with evolving patterns of spatial interaction, and the impacts of policy, build several common rural development "meta-narratives". These were labelled "agri-centric", "rural-urban" and "global competition". Paradoxically these common drivers of change are creating diversity. All rural areas are affected, to a greater or lesser extent, by these groups of processes, but exactly how these complex forces for change play out depends upon local configurations of "territorial capital". These comprise the full range of hard/tangible (physical, economic) assets and softer/less tangible (human, social, cultural) capitals, and both private and public goods. The result is infinite variety: Every rural area is following a unique development path, has distinctive potential, and specific policy requirements. The challenge is to turn this differentiation into assets.

Only connect...The importance of networking in a globalised environment

The second big challenge for European rural policy is "the gradual reconfiguration (or disruption) of urban-rural and centre-periphery interaction patterns as new communication and information technologies facilitate national, international or even global connections." (Copus, de Lima, and Dax 2015 p1). What is happening to rural Europe is a "step-change" in the degree of interconnectedness, and in the importance of linkages and flows (both rural-urban and rural-global). Such linkages take a variety of forms, including flows of goods, services and people associated with increased mobilities related to migration, daily commuting, and leisure and tourism, aided by advances in transport and communication technologies resulting in an increase in economic transactions, flows of information and knowledge, and interactions between different actors and different levels of governance or institutions.

The spread of new communications networks, new technology, and new ways of doing business has been more gradual, and more constrained; - both by human capital limitations, and by a lack of scale economies in sparsely populated areas, - than some "death of distance" visionaries expected. Instead, what is happening is a selective, incremental, but cumulative process of divergence between geographical and "organised" proximity, whereby different aspects of the rural economy and society become less constrained by distance, leading to a partial reorganisation of patterns of activity. Empirical evidence for this is very clear in relation to rural business networks (Dubois et al 2011). In terms of conceptual frameworks, it has led to intense interest in neo-endogenous development theory (Bosworth 2012, Bock 2016) which emphasises the need for *both* local "bottom-up" processes *and* well-developed links to exogenous sources of information and support for innovation. Globalisation is thus a challenge and an opportunity for rural areas, not just a threat (Woods 2013).

The implications for rural development policy are clear. Assistance should support not only the infrastructure networks which allow interaction (high speed broadband etc.), but should facilitate the human and social capital, and the institutions upon which "networked rural development" (Murdoch 2000, Shucksmith 2012) depends.

Rural Poverty and Social Exclusion

The ESPON TiPSE project established that although income poverty is both an urban and a rural phenomenon, in the majority of European countries, especially those of the East and South, low incomes are associated with rural, remote, sparsely populated, insular and agrarian regions. Furthermore, low income is not a “fail-safe” indicator of subjectively experienced poverty, since basic living costs also vary considerably between different areas, often exacerbating both urban and rural income disparities. The key EU 2020 indicator, the At-Risk-of-Poverty (ARoP) rate fails to capture this interaction.

Social exclusion is a much more difficult phenomenon to define and measure than income poverty. Data is scarce and difficult to interpret. There are a number of different dimensions of social exclusion, which are not spatially correlated. Bearing in mind all these challenges the TiPSE project cautiously concluded “that urban-rural disparities, together with complex place-specific disadvantages, may have increased.”

The (rural) policy implications of these findings are not immediately apparent. Variations between Member States in terms of Welfare State context render top-down prescriptive approaches inappropriate. A much stronger evidence base is required if rural poverty and social exclusion are to be effectively tackled by rural policy.

2.1.2. Typologies for rural regions

In order to assess performance in rural areas, and to achieve a differentiated insight into challenges and opportunities of rural regions a spatial framework categorizing spatial units is required. Such a delimitation and categories of rural areas are not just an interesting empirical observation; they also point to the need for differentiated (targeted) policy. While socio-economic need for specific action might be deduced from local and regional characteristics, expressed through a SWOT analysis at the regional level, it is simplistic and misleading to assume that “need” is tightly related to physical geographical characteristics. In-depth analysis will be required in the place-specific application of policies, including the detailed weighing of challenges and opportunities and the capacity of the specific regional actors to interact with other areas. The following overview on typologies for rural areas is therefore meant to provide a background to observation and place-specific “needs” assessment, and not indicating any direct suggestion for policy programmes according to geographical characteristics (see also discussion in Gløersen et al. 2016).

In the early years of the CAP regional distinctiveness and differentiation of eligibility of interventions was not accorded a high priority. Only with the introduction of the LFA scheme in 1975 was a concern for areas with significant production difficulties addressed, and thus a spatial differentiation of the CAP introduced. However, with increasing interest in rural development and the rise of respective policy instruments in the late 1980s it was argued that a better targeting of application of measures is needed. At that time national definitions of rural regions predominated and, due to seemingly unsurmountable data constraints, no agreement on a common definition seemed feasible.

The first internationally agreed typology of regions (OECD 1994) therefore had to overcome a high level of scepticism but did so on the basis of demonstrating the advantage of an international comparative framework. Its neutral definition of ‘rurality’ as being based solely on a simple measurement of population density, and a hierarchical system to organize local and regional attribution of rural spaces, enabled a first comparison of rural areas beyond Europe. As a very simple concept it was highly

contested by analysts, but served as frame for international elaboration of rural studies and for EU rural context analysis. More recent updating and improvements of the original concept led to the current Eurostat urban-rural typology (2011). The Commission's input into refining the concept and making use of the meanwhile highly advanced data availability is an important contribution to intensifying the debate about regional differentiation of rural policies. A particular advance involved taking account of the accessibility of (rural) regions to cities as the main provider of services (Dijkstra and Poelman 2008).

Following many calls to integrate the diversity of influences more comprehensively numerous other typologies have been elaborated for specific purposes and a significant body of literature deals with the creation of typologies. Much of this research focuses on capturing the variation in the spatial distribution of indicators and its change over time. Differences are mainly related to indicators measuring the degree of accessibility, natural resources and human capital, the socio-economic structure, networking capacity and land use patterns. Some of the typology work is closely related to RDP assessment (e.g. Weingarten et al. 2010) and land use (Feliú 2014), other literature is associated with studies of the European Observation Network for Territorial Development and Cohesion (ESPON) addressing spatial dynamics more generally (e.g. Copus et al. 2011, van Eupen et al. 2012.; ESPON 2011). The need to address the territorial dimension appropriately within rural research is highlighted in recent research such as ERA-Net RURAGRI (Meredith and Salas Olmedo 2012) which aimed to address the diversity of contexts within pronounced spatial frameworks (e.g. in the "strategic approach to agricultural research and innovation", EC 2015).

As the OECD's initial typology provided the rationale for addressing contextual specificities of rural regions, the conceptual framing of different types and considerations on linkages between the different types (rural-urban) expressed through the three-type structure of classification remained in place for the more recent adaptations. Albeit the current Eurostat methodology (Map 1) uses territorial grids (instead of administrative units) as the basic dimension, the final results of the classification has hardly changed between the two. Thus categories seem rather robust and to characterize typical features of spaces quite adequately.

The classification (Eurostat 2011) is based on the density of population within the basic grid units (of 1 km²), identifying the units as urban areas if the density of inhabitants is more than 300 per km², and above a minimum size threshold (of 5,000 inhabitants¹⁶⁷). The remaining grids, not meeting these two criteria, are attributed as rural areas which account for 32% of EU population. In a second step, the NUTS 3 regional level is characterized according to the portion of rural population within the region as either *rural* (if the share is more than 50%), *intermediate* (for a share of 15-50%) or *urban* (if rural share is less than 15%). The distribution of national populations to these three regional types can easily be compared to the previous OECD definition¹⁶⁸, and differences are for most European countries not excessive. As the differentiation of regions into accessible and remote areas has proven to be very instructive for context analysis, this feature, derived from work of DG Regio (Dijkstra and Poelman 2015), is taken up to split rural

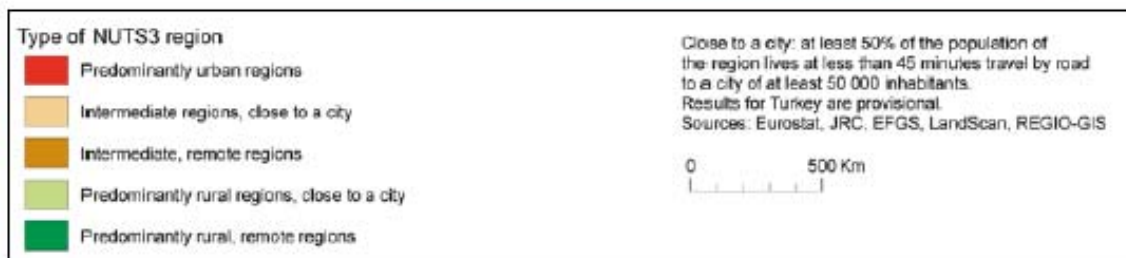
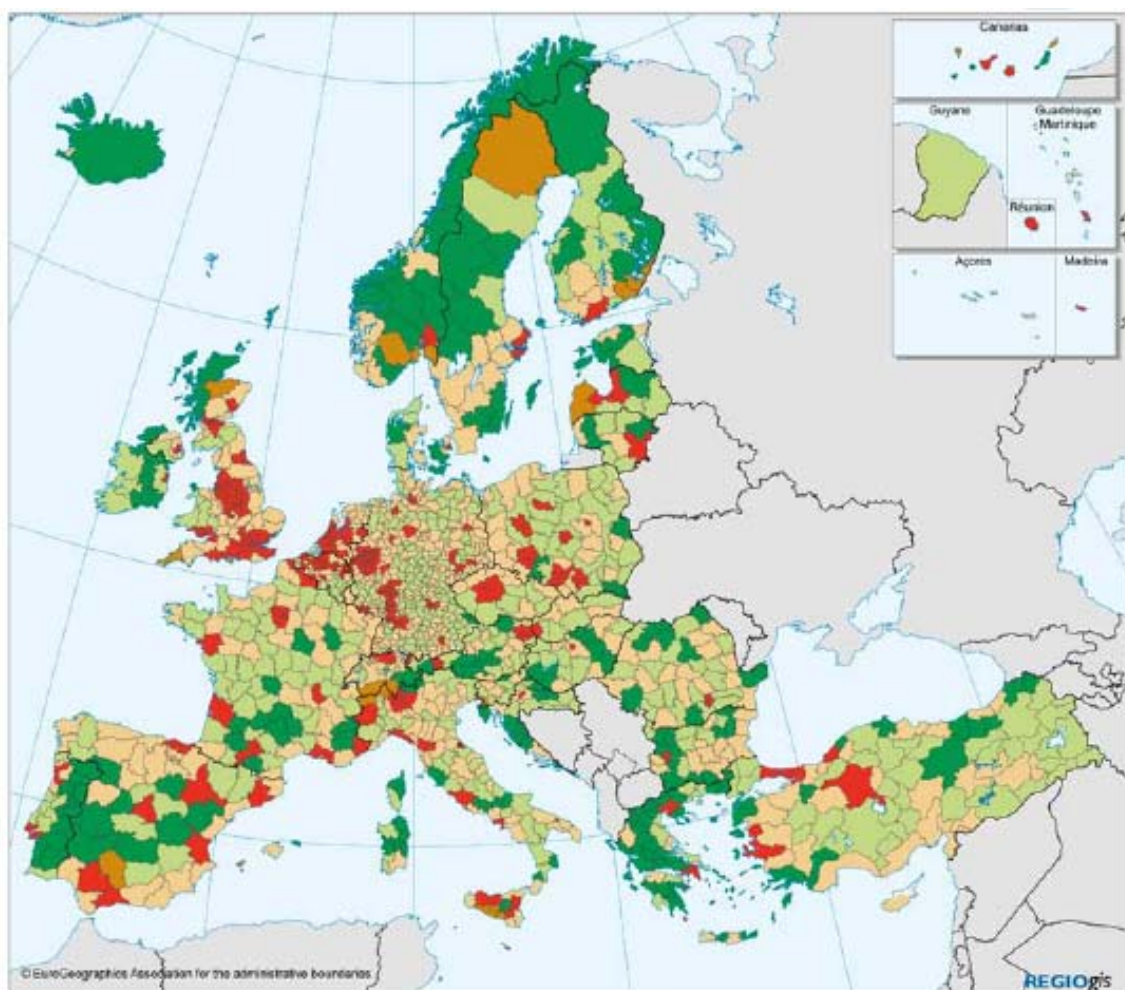
¹⁶⁷ The minimum size threshold of 5 000 inhabitants is applied to grouped grid cells above the density threshold applied to grouped grid cells above the density threshold.

¹⁶⁸ The OECD Working Group on Rural Areas decided in 2015 to make an effort to adapt to the EC/Eurostat system and apply the grid-system for its Member Countries as well. Adaptation work is still underway and not yet finished.

and intermediate regions into two sub-groups. Accessible regions are those in which 50% of the population lives within 45 minutes travel time of a city of more than 50,000 people.

The large variety of classification approaches for rural regions also underpins the need to select the appropriate scale according to the specific analytical purpose and/or policy target. In cases linked tightly to the resource use the NUTS 3 level might be too crude to provide a reasonable and distinctive disaggregation of areas. Land use typologies tend to apply a finer grid of analysis whereas frameworks for economic integration in general refer to a larger spatial level, represented by the urban-rural classification suggested by international organisations and Eurostat (see also the numerous examples of different typologies for rural areas in Meredith and Salas Olmedo 2012).

Map 1: Urban-rural typology including remoteness



Source: Dijkstra and Poelman 2015

The high diversity of regions, and particularly of rural regions, led to continuous efforts of classification at national or other levels to seek clarity and attribution of areas to homogenous zones. These delimitating activities were mainly oriented at thematic definitions and used to be applied at very fine geographical levels, in general due to data availability at municipal level. This is the case for the delimitation of Less-Favoured Areas (LFA) introduced in 1975. In its revised wording, Council Regulation (EC) No 1305/2013 addresses these areas as “areas facing natural or other specific constraints” (ANCs), comprising the three categories mountain areas, other areas of natural constraints and areas affected by specific constraints (Annex, Figure A1). There is long-time discussion on the revision of the second category, following the review of the European Court of Auditors (2013) and the agreement to put in place the revised classification by 2018 (see 2.2.5). The revision places a much stronger focus on the natural constraints and by excluding the socio-economic perspective as relevant criteria for the delimitation establishes ANC as an integral part of agricultural policy rather than rural development.

Other classification work addressed the geographical specificities of rural spaces and focused on physical features, and elements of social and economic development relevant to those areas. In particular, that work animated by ESPON studies aims at analyzing the specificities of different types of regions in order to assess more adequately the socio-economic diversity of regions and to facilitate strategic targets to address the local and regional opportunities of rural regions. The categories highlighted in a synthesizing ESPON report (Gløersen et al. 2012) are: Mountains, islands, sparsely populated areas (SPAs), coastal zones, border areas, outermost regions (ORs), and referring to significant overlaps of these categories, the emerging category of inner peripheries (see Pérez-Soba et al. 2013).

These additional categories provide useful insights into spatial characteristics, and are particularly relevant for different parts of EU-28. However, implications for development policies cannot be derived directly from these (without further analysis). Their main contribution is in addressing the particular opportunities and action-oriented analysis of regional potential and thus they can contribute to place-specific actions. A European comparative approach has to be built on the assessment of regional need that is not just led by physical characteristics but based on the socio-economic analysis of regional options.

Building upon the DG Regio typology the ESPON EDORA project (Copus et al 2011, Copus 2014) developed a pair of socio-economic typologies of the non-urban NUTS 3 regions of the EU. The first of these distinguished different kinds of rural economy: agrarian, consumption countryside, diversified with a focus on secondary activities, and diversified with strong private services. The second focused upon socio-economic performance, distinguishing rural regions which were “depleting” at one extreme, and “accumulating” at the other, and two intermediate categories above and below the mean. Cross-tabulation of these two typologies (and the DG Regio typology) highlighted a number of important relationships between rurality/accessibility, economic structure, and socio-economic performance. The key point here (in terms of policy implications) is that the typologies are regional. In other words there are clear relationships between different *kinds* of rural region and their level of economic performance. This strongly points towards a rationale for place-based, rather than “spatially blind”, forms of intervention, not only because some types of rural areas are performing very poorly, whilst others are prospering, but also because the processes which cause these disparities in performance appear to be rooted in territorial characteristics and structures.

2.2. Assessing Rural Development Programmes 2014-2020

2.2.1. The current framework for RDP

Discussions for the current Rural Development Policy framework (for the period 2014-2020) started very early, and were particularly inspired by the assessment of the Mid-Term Review in 2010. As with other ESI-Fund policies, the CAP is targeted at the EU2020 strategy for smart, sustainable and inclusive growth. The underlying guiding principles are integrated into the foundation of rural development policy for this period, Regulation (EU) No 1305/2013 on support for Rural Development by EAFRD (Rural development Regulation – RDR), and Regulation (EU) No 1303/2013 laying down common provisions on the ERDF, ESF, Cohesion Fund, EAFRD and EMFF (Common Provisions Regulation – CPR). These regulations are the basic acts for the preparation and the implementation of RDPs¹⁶⁹ in the Member States for the period 2014-2020.

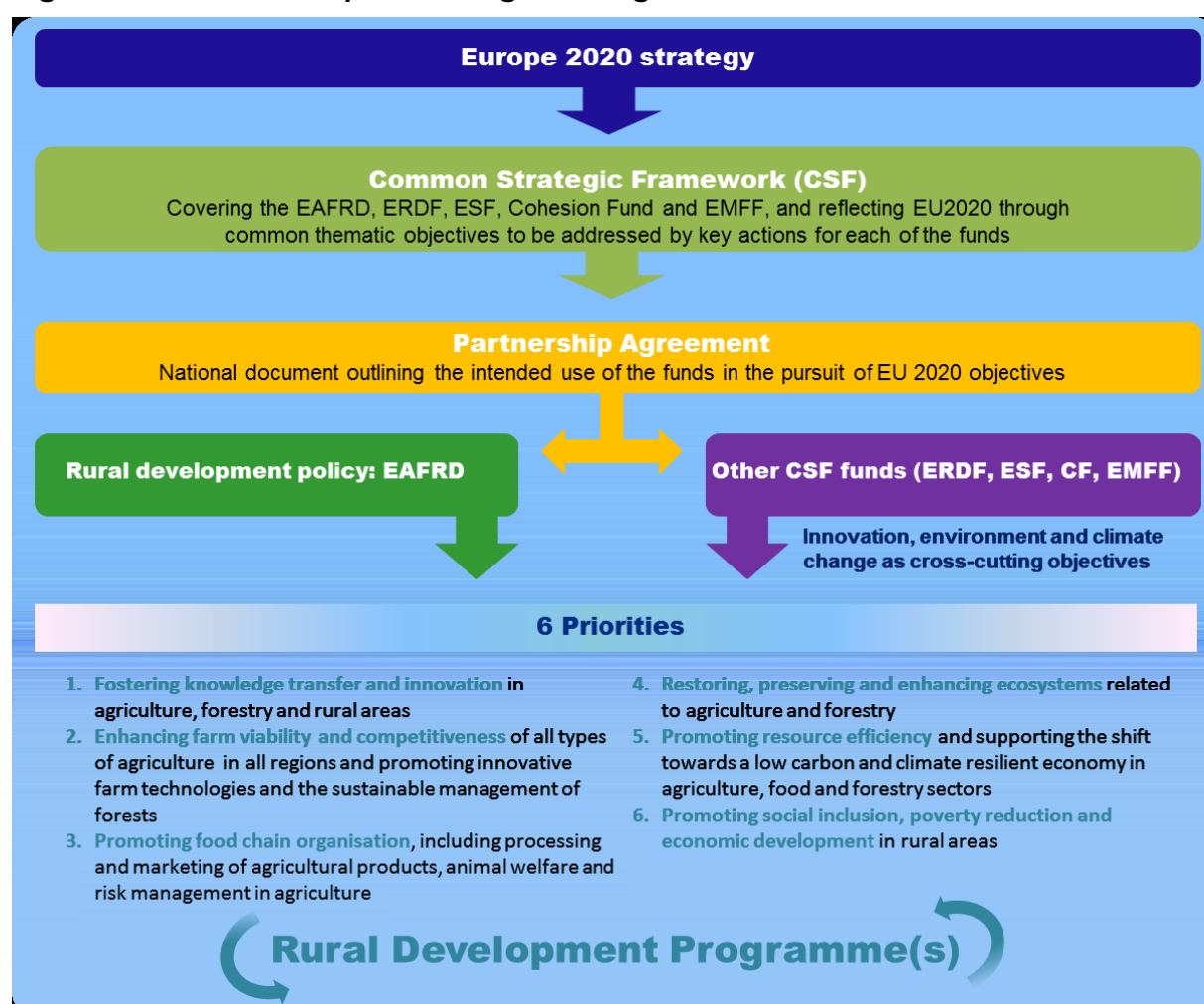
As in previous reforms, the new CAP builds on past reforms to meet new challenges and objectives. It maintains the two pillar structure, but stresses the links between them, thereby aiming at a more integrated policy support for agriculture and rural development. The discussions on Rural Development programming itself were set in a framework that reflected an enhanced level of aspirations with regard to policy coherence and inclusion of different stakeholders and institutions. This is important as it has implications for the negotiation process and will also be taken as reference for future debates. New or adapted elements in the reform elaboration were:

- The strong reference to Europe 2020 objectives as an overarching guideline to shaping the reform (EC 2010);
- An enhanced role for strategic considerations to achieve coordination between the different sectors and Funds impacting on a specific region and, at the same time, an increased awareness of the need for multi-level governance approaches;
- The publication of the Commission's vision of agriculture and the challenges and priorities for the future CAP, finally leading to presentation of legislative proposals;
- The invitation of stakeholders and experts to contribute to the proposals and the reform options within a public date;
- A different decision-making process from previous reforms, as the European Parliament was for the first time acting as co-legislator with the Council.

The intensive negotiations led to an agreement in 2013, both on the CAP's content and budget. The new CAP 2014-2020 agreed by the Council and the European Parliament retains the structure and objectives of the approaches proposed for the reform by the Commission, however with a significantly lower budget for rural development than previously envisaged by the proposals. Due to the possibility of fund-switching between the two CAP Pillars, and a resulting positive balance for Pillar 2 of about 4 billion Euro together with provisions for additional national financing (so called national top-ups), the end result for the financial resources available through RDPs is a slight increase in nominal terms. The EAFRD budget for 2014-2020 (Annex Table T3) is 3% higher; compared to the total allocation of funds in the previous programming period 2007-2013.

The framework for rural development programming links each RDP to Europe 2020 objectives. Linking each programme activity to the overarching strategic considerations at national and European level, is a firm foundation for the various priorities set in RDPs. The policy design strives to enhance integration particularly through the adoption of a Common Strategic Framework (CSF). The requirement for the national Partnership Agreements to link to the CSF resulted in intensive discussions of coordinated use of the funds, and EU2020 objectives. Figure 1 presents an overview on the European goals and the way RDP priorities are linked to these overarching goals. This frame of European goals and strategy seeks to secure an effective contribution of rural development policy to the European Strategic Goals and enhance coherence and cooperation with other CSF Funds. Coordination with other funds is particularly important for rural regions as all areas are affected increasingly by support from a combination of different funds and the impact of other funds should have complementary effects on rural development.

Figure 2: Rural Development Programming



Source: EC DG AGRI 2014

The core characteristics of the concept and structure of Rural Development policy remained very much the same in the 2014-2020 period. RDPs continue to represent the Second Pillar of CAP, albeit with a stronger relationship to Pillar 1 and reinforced linkages, both to Pillar 1, and the other ESI funds activities. This is reflected through a

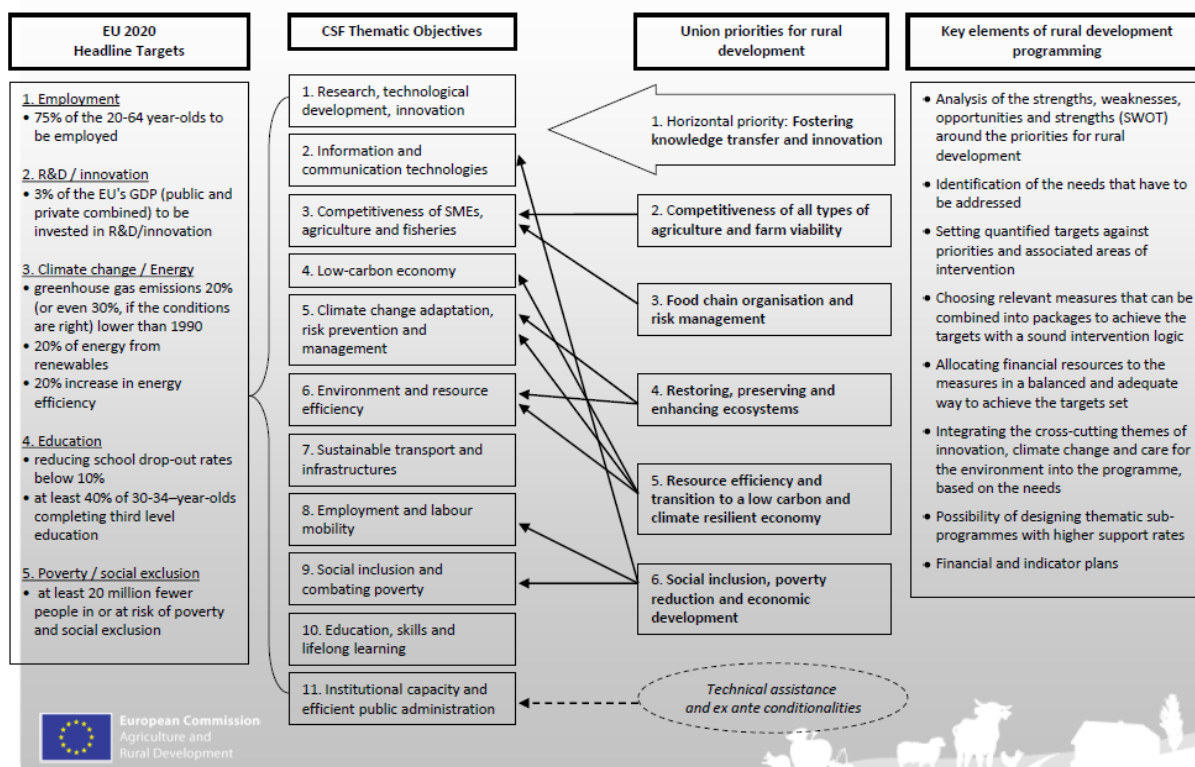
¹⁶⁹ In addition to the basic acts the legal framework includes a number of implementing and delegated regulations of which the Commission Implementing Regulation (EU) No. 808/2014 is particularly important.

change in the programme architecture of RDPs from the former three 'Axes' of activities (plus the axis focusing on the horizontal LEADER approach) to the organisation of the programmes along six Priorities. The six Priorities are:

1. Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas
2. Enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and the sustainable management of forests
3. Promoting food chain organisation, including processing and marketing of agricultural products, animal welfare and risk management in agriculture
4. Restoring, preserving and enhancing ecosystems related to agriculture and forestry
5. Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors
6. Promoting social inclusion, poverty reduction and economic development in rural areas

The complex linkages of the Priorities of the RDPs to EU2020 targets and CSF Thematic Objectives is illustrated in Figure 3. This shows that rural development priorities contribute to various and overlapping aspects of the high-level objectives. Almost all 11 Thematic Objectives are addressed by one or more of the rural development priorities.

Figure 3: The link between the EU2020 and Rural Development programmes



Source: Loriz-Hoffmann 2011, 101

RDPs are not only set into a tightly inter-linked framework with regard to common strategic European goals but also in the details of programme architecture itself. For each of its six priorities two to five Focus Areas (FA) are foreseen (Table 2; Annex, Figure A3). The idea of the FAs is to specify different types of activities and thematic action areas

and to combine them into groups of a specific thematic focus that underpin the various options for approaches within the RDPs. The main reason for splitting up priorities is to take account of different areas and focus within these and to allow the direct monitoring of its contribution towards Thematic Objectives (Table 2; third column). It allows also to summarize programme targets (see Annex Table 5) and will substantially contribute to monitor outcomes and programme performance.

Table 2: Union Priorities for rural development (Reg. 1305/2013, art. 5)

Priorities	Focus areas	Relevant Thematic Objectives of CSF
1: Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas	1A. Fostering innovation and the knowledge base in rural areas 1B. Strengthening research and innovation links in agriculture and forestry 1C. Fostering lifelong learning and vocational training in agriculture and forestry sectors	1 ; 10, 2, 3
2: Enhancing the competitiveness of all types of agriculture and enhancing farm viability	2A. Facilitating restructuring of farms facing major structural challenges 2B. Facilitating a balanced age structure in the agricultural sector	3 ; 8, 1, 9
3: Promoting food chain organisation and risk management in agriculture	3A. Better integrating primary producers into the food chain through quality schemes, promotion in local markets and short-supply chains, producer groups and 'inter-branch' organisations 3B. Supporting risk management on farms	3 ; 8, 1, 9
4: Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry	4A. Restoring and preserving biodiversity and the state of European landscapes 4B. Improving water management 4C. Improving soil management	5 ; 6, 2, 4
5: Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors	5A. Increasing efficiency in water use by agriculture 5B. Increasing efficiency in energy use in agriculture and food processing 5C. Facilitating the supply and use of renewable sources of energy, of by-products, wastes and residues and of other non food raw material, for the purposes of the bio-economy 5D. Reducing green house gas and ammonia emissions from agriculture 5E. Fostering carbon sequestration in agriculture and forestry	4, 6 ; 5, 1, 7, 3
6: Promoting social inclusion, poverty reduction and economic development in rural areas	6A. Facilitating diversification, creation of new small enterprises and job creation 6B. Promoting local development in rural areas 6C. Enhancing accessibility to, and use and quality of ICT in rural areas	2, 8,9 ; 10, 11

Note: abbreviated terms for Focus Areas, according to ENRD; main Thematic Objectives of CSF referred to are highlighted in bold letters.

Source: Regulation 1305/2013; ENRD

Individual measures or sub-measures are then defined and can be used to deliver support within one or more different Focus Areas, and respectively, the programme Priorities. This generates a matrix of funding choices between measures and sub-measures and on the other axis the relevant Focus Areas (and Strategic Priorities) for each RDP (Table 3).

Table 3: Matrix of relationship between Strategic Priorities and Focus Areas, and measures and sub-measures for RDPs 2014-2020

Measure	Strategic Priority						
	2, Focus Areas			3, Focus Areas		4, etc.	
and sub-measures:	2A	2B	2C	3A	3B	4A	4B
Measure 1 knowledge transfer							
Sub-measure 1.1 training		X	X		X	X	
Sub-measure 1.2 demonstration	X			X			X

Note: X denotes where some funding for these purposes is planned, for a hypothetical RDP

Source: Dwyer et al. 2016, 18

In their efforts to provide a comprehensive programme addressing the diverse needs of rural areas RDPs include a perspective on all land management activities. In particular, Europe's forest areas are receiving growing attention, focusing on the multifunctional role of forests and the need to enhance sustainable forest management by broader cross-sectoral policies. The RDP framework for the period 2014-2020 explicitly addresses forestry activities in Priorities 1, 2, 4 and 5 (and implicitly in the other parts of the programme) and all the RDPs have programmed about 8.2 billion Euro of public expenditure for measures relevant to forests and forestry, including afforestation, investments, prevention of damage and restoration measures (Gafo Gómez-Zamalloa 2016). Sustaining the economic viability of the forest sector is regarded as a crucial base to provide major climate, environmental and social benefits associated with forests. In addition to the production of forests other functions (protection, welfare and recreational) linked to forest areas are of crucial importance to address societal demands. Moreover, a comprehensive view on opportunities of forests underpin the rising relevance of non-wood forest products (NWFP). According to a recent study more than 150 NWFP are of importance within international trade and these reach a total value of about 2.8 billion Euro (about 10% of the value of Roundwood) in Europe (Wolfslehner et al. 2014). This underlines the comprehensive view on land management as an important objective of the RDP concept.

Efforts to increase the strategic considerations of RDP programming and to achieve enhanced implementation and effects, are also discernible in a series of detailed key elements of the rural development programming process:

- The elaboration of the Partnership Agreements at national level should provide closer coordination and cover all support programmes from European Structural and Investment (ESI) funds within the Member State concerned.

- Pillar 2 funds are affected by modifications at Member State level which were made possible through a fund-switching mechanism between the two pillars of CAP and through national top-up funding (with no EU co-financing).¹⁷⁰
- While the six new Strategic Priorities for rural development are only slightly different from the previous goals for the 2007-2013 period, a careful programming process should analyse respective strengths, weaknesses, opportunities and threats for priorities and all parts of RDPs.
- Accordingly, needs are to be identified which should impact on the planning of programme activities and choice of instruments to be used.
- Quantified targets are of enhanced relevance and gain particular attention in programming and assessment.
- RDPs can be organized through a number of focused “sub-programmes” for specific themes or challenges such as young farmers, small farms, mountain areas, short supply chains, women in rural areas, and climate change mitigation and adaptation and biodiversity (see Annex, Table T1).
- Greater cooperation between agriculture and research is a particular aim, which is highlighted by elaborating a new European Innovation Partnership (EIP), with activities at the European and national level, and the particular priority of innovation (Priority 1) as one of the cross-cutting themes.
- A number of further cross-cutting themes must be taken into account, i.e. promotion of equality between men and women, sustainable development, as well as climate change mitigation and adaptation.
- A minimum of allocation of 25% of the EAFRD budget to environmental and climate goals (P4 and P5) and of 5% to LEADER measures is required.
- Interactions between the two pillars are strengthened, in particular addressing the following targeted actions: environment, young farmers, areas with natural constraints, small farmers and producer cooperation (EC 2013, 9).
- In general changes of instruments refer to slight changes (splitting-up or new grouping of activities), but for several aspects more substantial changes and/or new measures are foreseen: New measures are established for risk management aid (previously included under Pillar 1) and an enhanced cooperation measure. For areas with natural constraints the new delimitation will be applied from 2018 onwards and the LEADER approach is potentially extended beyond rural areas by enabling contributions by other EU funds to Community Led Local Development (CLLD), following a multi-fund approach.

The long list of detailed changes reflects the concern to integrate the rural development policy into the overarching framework of Europe 2020 objectives. At the same time, it provides a complex set of choices for MS which strived to achieve a balance between fulfilling the administrative requirements of programming and targeting effectiveness in programme implementation.

2.2.2. RDP implementation and first lessons

As the European decision-making process for the policy reform 2013 stretched beyond the end of the former period, the delay was taken into account by applying an extension

¹⁷⁰ In detail, all MS could transfer up to 15% of financial resources from direct payments (Pillar 1) to Pillar 2, and conversely any MS with an average direct payment per hectare below 90% of the EU average is allowed to transfer up to 10% of their allocation to Pillar 2 to direct payments (Pillar 1).

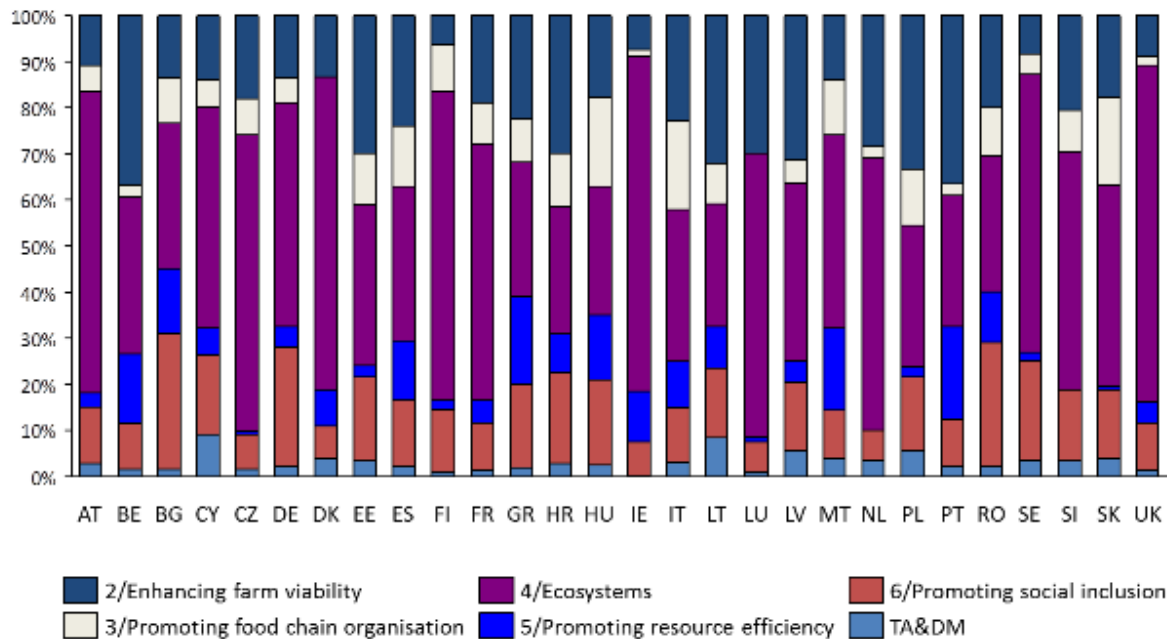
of the period 2007-2013 through applying an interim year (2014). Official adoption of the 118 RDPs of all MS was achieved between December 2014 and the end of 2015.

In preparation for future reviews of the Rural Development Policy the assessment of the current period's programming and implementation is of particular interest. In this regard lessons from the synthesis of the ex-ante evaluations (KANTOR 2015), the initial assessment of implementation of the programmes 2015-2020 (Dwyer et al. 2016) and information about the administrative adaptation to the new framework provided by selected experts were used as important source of information for this report. The detailed assessment of the application of the different instruments and their relation to the CAP objectives expressed in these studies are a particularly helpful background for future reform discussions. Much of the detailed information in the following chapters outlining programme application and priorities derives from these sources.

2.2.3. National choices vs. scope of Rural Development Policy

The choices made by EU Member States in applying the rural development policy framework to their specific contexts is, of course, influenced and inspired to a large extent by the experiences of actors and the institutional capacity for dealing with the rural challenges and opportunities. As outlined above much of the discourse, programme preparations and policy elaboration is based on the institutional development that is shaped by previous – and often long-term – experience in policy design and negotiation. It is no surprise that aspects of path-dependency feature high on the agenda of respective policy analysis and gradual adaptation is understood as the key characteristic of policy change. With expectations that go well beyond the small steps of adaptation, the process is often alluded as a system of policy “inertia” where the needs for reform are acknowledged scientifically but respective action is delayed. While the “Buckwell Report” two decades ago suggested a shift towards rural development and agri-environmental measures within two programming periods (c.f. Annex, Figure A2; Buckwell et al. 1997) the resources for the respective support instruments have been raised only gradually. In most countries except for the NMS and some MS of the EU-15 (Austria, Finland) the majority of CAP resources are still very much oriented to Pillar 1. However, due to the decline in CAP Pillar 1 funding in the period 2014-2020 (compared to the previous period) the share of Pillar 2 has risen to some extent for the new period and will account on average for about 25% of total CAP resources (Dwyer et al. 2016, 31; see Annex Table T4).

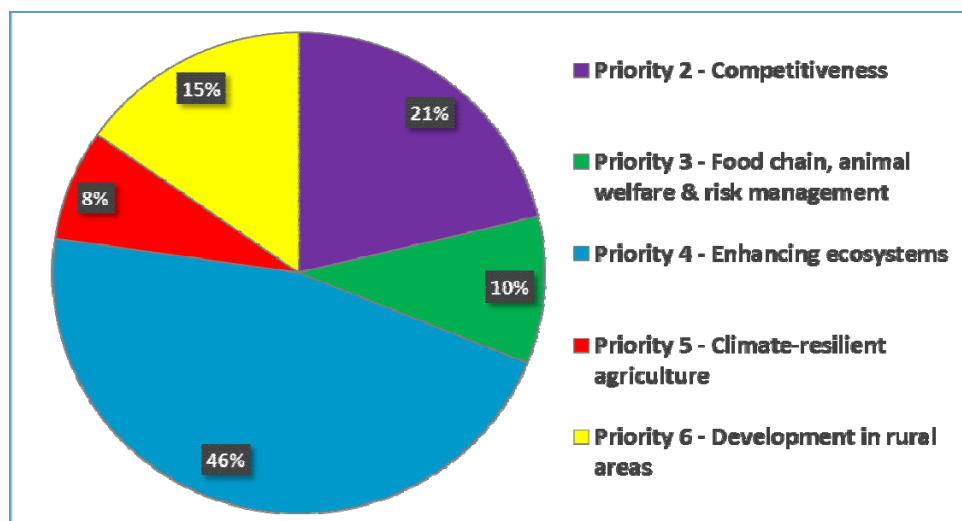
There is hence much continuity in programming compared to the previous period. However, the first study on the implementation by Member States points in its summary also to “some notable changes, including more funding for knowledge and co-operation and greater focus upon the goals of environmental management and investments for primary sector competitiveness, with less for rural diversification” (Dwyer et al. 2016, 2). It highlights at the same time “weak evidence of targeting of relative needs at EU level, but some evidence of a more strategic approach, learning from past experience, within Programmes”.

Figure 4: RDP funds by Strategic Priorities of MS (%)

TA: Technical assistance; DM: Dissemination
 Source: KANTOR Management Consultants 2015, 46.

Funding Priorities in the RDPs

Although the strategies for RDPs vary significantly between MS (see Figure 4; respectively in Annex Table T2) there are some important features of implementation visible from the analysis of the measure structure of RDPs developed by the MS (and regions). The overall expenditure across all the Member States of EU-28 in Figure 5 illustrates the situation for 2014-2020. Almost half of expenditure (46%) is allocated for Priority 4 on *restoring, preserving and enhancing ecosystems related to agriculture and forestry*. The strong focus expressed through this allocation is complemented by financial allocation of further 8% to Priority 5 (promoting resource efficiency and low carbon and climate resilience in agriculture and forestry). Priority 2 on *enhancing farm viability and competitiveness of all types of agriculture* receives the second largest funding allocation (21%). Similar to the specific focus on agricultural and forestry competitiveness, funding for Priority 6 on *promoting social inclusion, poverty reduction and economic development in rural areas* has been intensified to some respect and accounts for the third biggest amount of all priorities (15%). Like funds for Priority 5 the financial allocations for Priority 3 which assembles a mix of support for promoting food chain organization, animal welfare and risk management have, in comparison, received lower allocations.

Figure 5: overall Expenditure by Strategic Priority, 2014-2020 (EU-28)

Source: RDP Expenditure Data 2014-2020, quoted from Dwyer et al. 2016, 36.

However as mentioned above there is considerable variability across the Member States at the level of Strategic Priorities, and even more at regional level within MS. Moreover, changes of application of measures are influenced by a wide range of allocation specificities and national (and regional) targeting reflecting national strategic considerations. These relate to very specific developments for financial allocation of measures and, for some cases, substantial increases or decreases of funds allocated to specific measures (sub-measures) within some MS.

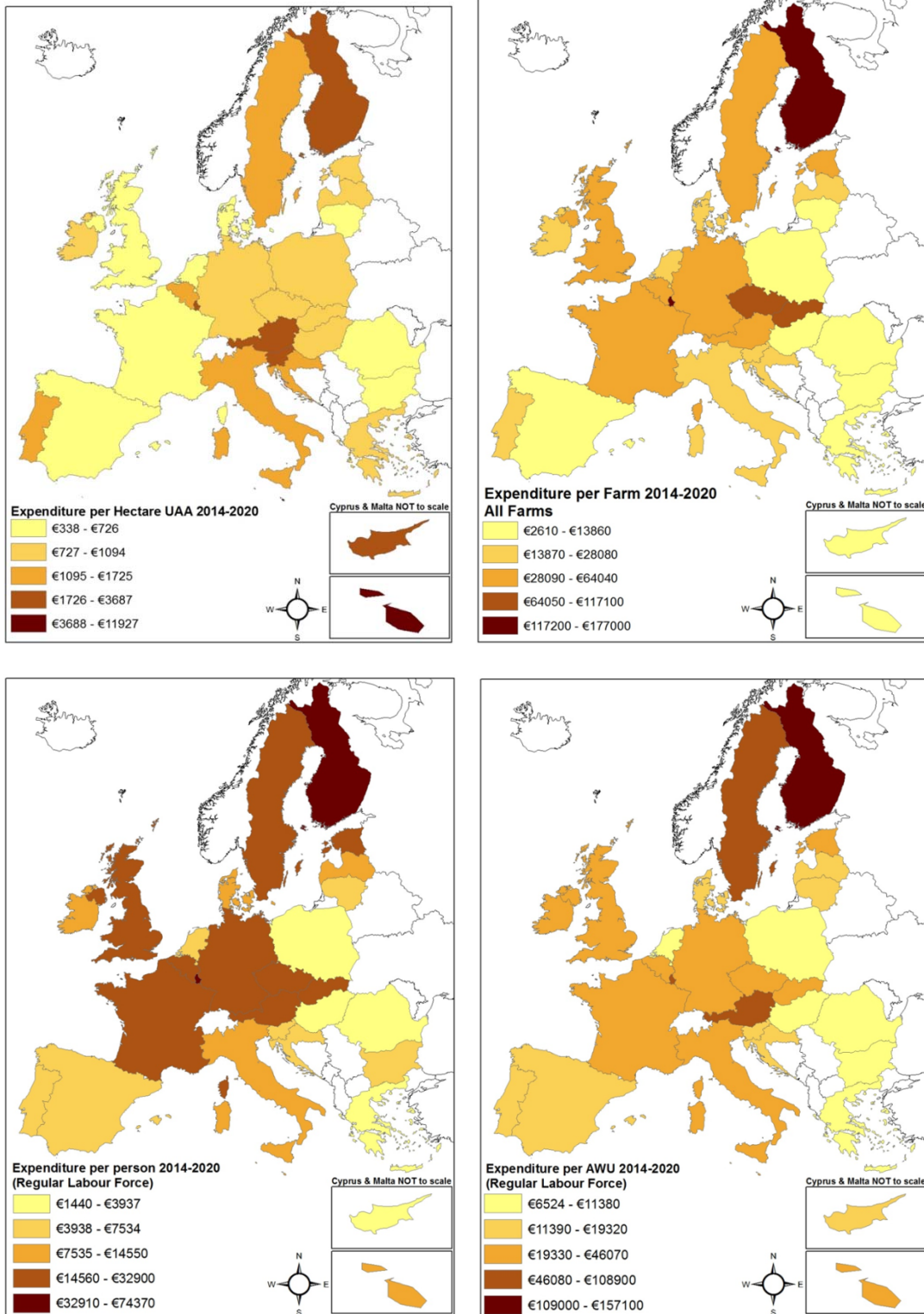
National and regional variation in application of RDPs

In order to assess the variation in application of RDPs an overview of findings analyzing expenditure intensities is presented. All the relevant studies suggest sector-specific indicators that highlight the variation of RDP funds per hectare of farm land or per farm worker, and don't relate to the total rural territory or the full scope of employment in rural areas. This is mainly due to two constraints: First, the internationally agreed definitions on rural areas largely diverge from nationally defined "rural areas" in which the respective measures of RDPs are applied, and second, the majority of funds are targeted to and spent to farmers which makes a relation of intensity measurements to general economic indicators less meaningful.

The analysis of the funding allocation for the period 2014-2020 provides insight into the most recent application and variation of RDPs (Dwyer et al. 2016)¹⁷¹. The following maps (Maps 2-5) indicate intensity of Pillar 2 support at the national level. The reference bases selected are the utilized agricultural area (UAA), the farm holding unit, farm labour unit and Agricultural Work Unit (AWU). Although there are some similarities for high-intensive application of programmes across the different presentations there are important differences highlighted by the indicators used in these maps.

¹⁷¹ See also similar findings for the previous period (2007-2013) documented in the analysis of the FP7-project RuDI (Copus 2010).

Maps 2-5: Expenditure of RDPs 2014-2020 by: Hectare UAA; Farm holding unit; Farm Labour; AWU



Source: RDP Expenditure Data 2014-2020, quoted from Dwyer et al. 2016, 34.

The reasons for variation are not always apparent but mainly relate to national specific situations, farm structure patterns and farm labour intensity. Many of these aspects are interrelated and overlap each other, and national values might be blurring differences in regional contexts within MS. Interpretations are particularly relevant for the extreme values, such as the high levels of funding intensity for Finland and Austria with regard to the expenditure per hectare of UAA (Map 2) which is linked to the specific commitment for rural development measures in these countries, following high levels of agricultural protection prior to their accession to the EU. On the other hand, the high level for Malta and Cyprus might be due to the micro-scale of farms in these countries. The specific farm structure of large farm holdings may explain the high level of expenditure per holding (Map 3) in Czech Republic. Intensity levels with regard to labour input are influenced by the combination of the numbers of agricultural workers, respectively work units and the degree of capitalization of farming (replacement of labour by machinery and reliance on area-`intensive` or area-`extensive` land use systems). When calculating expenditure per person working on farms (Map 4), high intensity of RDP funding is found in Finland, Luxembourg, Austria, Czech Republic and Slovakia, while some central EU countries with a large agricultural labour force such as Poland, Hungary, Romania, Cyprus, and Greece have the lowest levels. The measurement by AWU even accentuates the differences between countries and highlights the relation to area-`intensity` of diverse farming systems (Dwyer et al. 2016, 33ff.).

As described in the discussion on the classification of rural areas and the delimitation of ANCs socio-ecological systems are, in general, relevant at a lower level than the national one. The analysis of RDPs intensity at lower levels is, however, restricted due to data constraints. A comparative analysis by regions is available in those countries where RDPs are established at the sub-national (regional) level, i.e. Italy, Germany, Spain and France. The finer geographical programming for these countries allows a regional differentiation and highlights internal differences within MS (Dwyer et al. 2016). It points not only to the observation of the level of intensity of application of RDPs, but also reflects the great variance in selecting priorities and measures of the RDP. This relates to the objective to take into account specific rural needs according to regional contexts. One of the countries where the discussion on the programming framework was particularly intensive is Italy (see Box).

Box: Main trends in regional programming of RDPs in Italy

Analysis of RDPs 2014-2020 of all the Italian regions suggests three main trends: first, there is a reduction in the focus on rural diversification; second, a major focus is placed on combining agricultural and agri-food competitiveness with sustainable land use within the budget of RDPs; and third, in some regions a strong shift towards a more environmental strategy can be observed.

These changes were influenced by the reduction of resources in the first pillar, strengthening the sector focus of the second pillar in allocation of resources by policy makers; a stronger emphasis on the sustainability of agri-food processes, climate change issues, food safety, etc. supported by "increased bargaining power among political forces and social actors promoting more radical orientation for sustainable agriculture in Italy"; and strong pressures to favour measures with higher spending capacity and less burdensome procedures, so as to improve spending efficiency in the new programming period.

Further discussion elements in programming represent more 'progressive' drivers of change in Italy, in particular:

- "a recognition of specific rural needs in some fields (broadband, partnership creation and co-operation, social farming, etc.)
- strong pressure to retain integrated approaches in agri-food chains, where a series of interesting interventions were tested in the previous programming periods;
- a shift towards a more important role for the State (Ministry of Agricultural Policy), not only as a provider of general rules and programming design (as in the Partnership Agreement) but for the first time in years, in the day-to-day management of specific measures (irrigation and risk management). This new role is also supported by an improved reputation of the central State, when compared against the administrative failures and deficiencies of regional structures, over time and particularly in 2007-13;
- some interesting processes of collaboration between sector administrations at the national level, in territorial approaches explored by ERDF and EAFRD in the most marginal and remote areas. This is related to a new political climate promoting targeted, place-based rural policies (a new National Strategy for Inner Areas)".

Source: based on Dwyer et al. 2016, 60f.

A comparative analysis of the application of CAP funds, including the relative position of Pillar 2 (2000-2006) was initiated by the ESPON programme. Not surprisingly, it revealed that Pillar 1 support was not in favour of territorial cohesion aspects, and Pillar 2 hardly could compensate for those effects (Shucksmith et al. 2005). The divergent experiences of rural development support observed at that time (Dax 2006) are still relevant as more recent studies suggest. In particular, regional RDP expenditure data for 2007-2011 (at NUTS 3 level) was used in the FP7-project SPARD, highlighting over- and under-representation of groups of measures in specific regions of MS. The findings suggest that specific regions focus more on stabilization measures, respectively others more on the use of natural capital measures (Zasada et al. 2015). This high variance of RDP application across EU regions, and within regions, can only be revealed through in-depth analysis below the programming level.

2.2.4. CAP Pillar 2 and Cohesion policy

As we saw in Section 1.1 the evolution of the CAP rural development policy and Cohesion policy have been closely entwined since the early 1990s. Arguably both of these could take responsibility for "territorial rural development" - understood here as interventions which support all elements of rural communities (not just agriculture), and to address increasing inequality between rural areas. In the current period this area of potential "overlap" equates roughly to the sixth strategic priority associated with Pillar 2, i.e. "*promoting social inclusion, poverty reduction and economic development in rural areas*". During the 2007-13 period it roughly equated to the measures grouped under "Axis 3".

Territorial Rural Development - A Contested "No-man's land" Policy Arena?

Over the past three decades the "*modus operandi*" of both CAP Rural Development policy and Cohesion Policy have evolved, and in some ways converged. This has had implications for the way in which the interaction between them is handled.

During what we have termed "Phase 2 - Integration of RD Policy" (1989-99) this contested area was addressed through integrated multi-fund programmes (supported by

ERDF, ESF and EAGGF) targeted on regions deemed to exhibit a “low level of socio-economic development” (Objective 5b) and (from 1995) “very low population density” (Objective 6)¹⁷². Although in some ways an attractive solution from a theoretical perspective such integration and multi-fund working was found to be very complex administratively, and led to calls for “simplification”. These were given added urgency by the prospect of the 2004 enlargement, which anticipated to add 20% to the population of the EU, almost all of this eligible under Objective 1.

During the third and fourth phases (2000-13), following the Agenda 2000 reforms, there was a greater separation between CAP Pillar 2 and Regional Policy, with the former championing the idea that rural development interventions should be available in all rural areas, across the EU, whilst the latter retained a (simplified) spatial targeting approach. As part of this simplification the former Objective 5b, which was by definition rural, was merged with the Objective 2 (restructuring former industrial areas). The areas designated under the new Objective 2, “*supporting the economic conversion of areas facing structural difficulties*” were proposed by Member States subsequent to the Commission defining national population allocations. Thus the Agenda 2000 reforms both established CAP rural development as a horizontal delivery mechanism, and at the same time removed the specifically rural eligibility criteria for Structural Fund programme areas.

Nevertheless some of the new Objective 2 regions *were* rural, and there remained a need to coordinate Structural Fund and CAP Pillar 2 interventions. The Community Strategic Guidelines of 2005¹⁷³ explained: “*The synergy between structural, employment and rural development policies needs to be encouraged. In this context, Member States should ensure complementarity and coherence between actions to be financed by the ERDF, Cohesion Fund, ESF, EFF and EAFRD on a given territory and in a given field of activity. The main guiding principles as regards the demarcation line and the coordination mechanisms between actions supported by the different Funds should be defined at the level of national strategic reference framework/national strategy plan.*” Cohesion fund support should be focused for example on improving services of general economic interest, transport and communications, product marketing, tourism and so on. Within these guidelines the final decision lay with the Member State authorities.

During the 2007-13 period, there was continued discussion about the shared responsibility for territorial rural policy. The then Director-General of DG Regio of the European Commission Dirk Ahner (2009) claimed that €71bn of Structural Fund expenditure would go to rural areas during the 2007-13 period. This compared with €91bn through Pillar 2¹⁷⁴. Estimations on the use of Structural Fund expenditure for rural areas (Dalhammer et al. 2009) revealed that 28% of Objective 1 and 24% of Objective 2 expenditure during the 2000-06 period went to projects located within NUTS 3 regions classified as rural. A further 52% (Obj 1) and 41% (Obj 2) went to Intermediate areas. However it is important to point out that although that study conceded that some of this expenditure was through projects with an “urban focus”, no figures for the urban-rural breakdown within the (NUTS 3 based) totals above could be provided (Dalhammer 2009).

¹⁷² At that period EU’s structural policy was organised by programmes addressing different objectives. With regard to rural regions Objective 5b, 6, and 2, but also the large-scale regional development programmes of Objective 1 in less-developed regions were relevant and provided the framework for targeted support.

¹⁷³ http://ec.europa.eu/regional_policy/sources/docoffic/2007/osc/050706osc_en.pdf

¹⁷⁴ It is not clear how the figure for Structural Funds was arrived at, or how “rural areas” were defined. The same statistics feature in the presentation by Piskorz (2009), at the same seminar.

Before moving on to consider the current programming period it is perhaps worth noting that by the close of the first decade of this century Cohesion policy was firmly on the side of “place-based” (Barca 2009), rather than “spatially blind” policy. Soon after, the concept of “smart specialisation” became popular. Clearly such an “intervention logic” is, in general terms, very compatible with territorial rural development, but faces significant obstacles in operationalization.

More specifically, the topic of rural-urban interlinkages received increasing attention. In particular, during 2008-09 DG Regio sought to establish a distinctive approach to rural development (Copus and Van Well 2014) through a series of seminars on the topic of rural-urban relationships, building upon ideas which had been circulating since the European Spatial Development Perspective in 1999, and which had also featured in the Territorial Agenda and TA2020 documents (COPTA 2007, 2011).

In the first seminar Shucksmith (2008) drew attention to the anachronistic nature of many of the common assumptions and introduced the concept of rural businesses operating within “non-Euclidean” or “relational” space¹⁷⁵. The second seminar focused upon environmental aspects. In her introductory speech Loretta Dormal Marino, the then Deputy Director-General of DG Agri, acknowledged that “(t)he old hierarchical relationship between rural and urban areas – where rural areas were viewed simply as suppliers of food to more developed urban areas – has gone. Rural areas are multi-functional. They still provide resources, both commodities and the less tangible natural and cultural resources we increasingly value such as biodiversity and traditional landscapes. But they are also the location for economic activities such as knowledge-intensive services. This more complex reality should be reflected in the way we conceptualize the relationship between rural and urban areas.” (Dormal Marino 2009, 1). The third seminar considered potential links between rural-urban relationships and social cohesion.

Subsequently a joint research initiative between the OECD and the European Commission, was initiated, under the title “RURBAN”. This culminated in two conferences, in Metz in 2012 and in Warsaw in 2013. During 2012, DG Regio produced a series of short promotional videos¹⁷⁶, providing specific examples of how rural-urban relationships could be enhanced for the benefit of both rural and urban areas. These examples, and the reports produced for the RURBAN initiative (Kawka et al 2012, OECD 2013) show that the concept materialised predominantly as a form of territorial integration of governance. In other words, the technical or economic content of the exemplar interventions, (for example rural broadband infrastructure facilitating electronic healthcare services in Finland, local food marketing in Germany, and payments to rural municipalities in return for urban water supplies in Italy) were viewed as less important as innovations than the way in which Cohesion funding had facilitated better coordination between a diverse range of public bodies and stakeholders, spanning rural and urban environments.

In a separate strand of the discourse, it has been argued that increased interrelations are crucial for the European perspective of regional development and “Macro-regional Strategies” (MRS) could be a useful instrument to increase effectiveness of EU policy investment and address common problems without border restrictions more efficiently.

¹⁷⁵ By this he meant that business networks are becoming more globalised, geographical distance is now less of a constraint than various forms of social and institutional relationships (sometimes termed “organised proximities”).

¹⁷⁶ Available through its website:
<http://ec.europa.eu/avservices/video/player.cfm?ref=I074254&sitelang=en&videolang=INT>

Such large scale strategic frameworks have therefore been developed for several Macro-regions of the EU (for the Baltic Sea Region – 2009; for the Danube Region – 2010, for the Adriatic and Ionian Region – 2014; and for the Alpine Region – 2015). The experience of elaborating common strategies at the trans-national scale for the MRS might be instructive for coordinating different policies for rural development.

The Current Programming Period

In the 2014-2020 programme the “coherence” issue is less visible, due to the integration of both ERDF and EAFRD in the ESIF framework. Coherence is handled through the governance structures set up by the Common Strategic Framework (CSF), and again places the responsibility upon national governments, in the context of their “Partnership Agreements” and programmes. An appropriate division of responsibility was assumed to arise from the process of tailoring both Rural Development and Cohesion policy programmes to address the selected (EU 2020) strategic priorities.

In their review of the new Pillar 2 programmes Dwyer et al (2016, 12) suggest that “(t)his may have encouraged a more disciplined and strategic approach to inter-fund co-ordination and complementarity than previously.” It seems that part of this coordination may, in some countries and regions, have been achieved through the CAP rural development programmes partially withdrawing from territorial development, in favour of a more sectorial/environmental focus: “...a combination of higher administrative burdens and more co-ordinated planning within the Partnership Agreements has led Member States and regions towards refocusing their RDPs on primary sector and environmental aims rather than rural economies more generally”(op cit, 41).

Reflections

Territorial rural development is a contested space and remains weak in its operationalisation. Both Cohesion policy and the CAP have been active in this context over the years. The divergence of rural areas across Europe, some performing relatively well, others apparently requiring support, perhaps points to an integrated, area-based, rather than “horizontal” approach. To some extent this could be more compatible with the overarching ethos of Cohesion policy rather than Pillar 2. In addition, initial evidence suggests that the increased flexibility allowed by Pillar 2 programming rules for the current period has resulted in some Member States “downsizing” territorial development within their RDPs in favour of sectoral and environmental issues. This begs the question whether a clearer territorial/sectoral distinction between cohesion policy and the CAP might not be worth considering for the post-2020 programming period.

2.2.5. RDP: a policy delivering for areas with natural constraints?

The differences in the production potential and the specific challenges linked to farm management in a wide range of regions resulted in the acknowledgement of “less-favoured” contexts for the design of CAP measures. Since 1975 a system of compensatory allowances has been applied in relevant regions of EU Member States. The areas eligible for Less-Favoured Areas (LFA) support have been classified by national authorities according to the EU framework regulations. The high variation in climate and production situations between the different European regions (North/South) called for country/region-specific application of the scheme by MS, and even regions. The categories and the criteria for the demarcation of the LFA have been defined in EEC Directive 75/268 (Art. 3, para 3-5), and after several adaptations the respective instrument is now set in Regulation 1305/2013 (Art. 31 and 32). The classification of the LFA for each Member State comprises the following three types (Dax and Hovorka 2007, 25f.):

- *Mountain areas* where altitude and slopes reduce the growing season and the scope for mechanisation. Areas north of the 62nd parallel and certain adjacent areas are considered under this category as well. These areas make up about 17% of the total UAA.
- *'other' LFAs* (also referred to as *'intermediate LFA'* and *'other natural constraints'*) which were originally marked by poor soil conditions (low agricultural productivity), low agricultural income levels and low population densities or depopulation tendencies¹⁷⁷. These areas account for 36% of the UAA.
- *LFAs with 'specific handicaps'* which are restricted to small areas with specific handicaps relating to the environment, landscape development or coastal areas and islands where agricultural activity should be preserved in order to maintain the countryside. Member States can classify up to 10% of their total area under this category. About 3% of UAA are classified under this type.

In the early years of the LFA measure, the policy scheme had the overarching objective to 'ensure the continuation of farming'. Thereby the two sub objectives, namely to 'maintain a minimum population level' and 'conserve the countryside' should be achieved as well. These objectives were designed to address a number of place-specific needs, which are particularly relevant for areas characterised by least favourable production conditions. These included the need to avert the threat of the large-scale depopulation of farming areas, which would jeopardise their viability (often termed as 'rural viability') and continued settlement in this areas. In the longer term, this would lead to the abandonment of previously maintained land. The logic of intervention was to maintain farming management systems that allow continuation of land use activities under these production constraints and would, at the same time, prevent the process of rural depopulation and mitigate abandonment of agricultural land or contribute to conversion to alternative land uses.

The core objectives of the LFA measure were therefore concerned with securing public goods, and its application provides examples of the need to take care of a multitude of functions by land use management, and the possibility to base local action on the beneficial outputs of agricultural and forest activities and attractiveness of natural resources.

The LFA objectives are particularly relevant in mountain regions "because to a large extent, the environmental and related public goods that are of value in the countryside stem from appropriate land management, and specifically agricultural management over large areas" (Cooper et al. 2006, 239). Under these conditions, it is revealed that the continuation of agricultural management has the largest influence on shaping the countryside since it supports the maintenance of highly-valued open landscapes, semi-natural habitats and biodiversity; it assists in the control of forest fires; or contributes to good soil and water management. Furthermore, features such as grazed semi-natural grasslands and hillside terraces stem from farming practices" (Cooper et al. 2006, 13).

In general, it is particularly High Nature Value (HNV) farming areas which are under natural constraints and not appropriate for more intensive management practices. Farms in these areas are therefore suffering from these handicaps in terms of low competitiveness and under the threat of decline and cessation of management. A decline in land management might lead to eventual abandonment and might imply the risk of environmental values linked to the specific production systems.

¹⁷⁷ In the current review the definition of the category is restricted to 'bio-physical criteria' as socio-economic weaknesses are esteemed as non-permanent and non-inherently linked to a specific area.

Beyond these beneficial aspects of LFA policy in areas of higher handicaps, the scheme has attracted increasing interest (by national stakeholders) which has resulted in the gradual extension of the area eligible as LFA (reaching about 56% of total UAA) and the high allocation of total public funding for Measure 13, the respective instrument of support for "Areas of natural constraint" (ANC) as this category is termed in the current period 2014-2020. It is the instrument with the second highest allocation of funding (15.83%) of all RDP measures.

The topographical features of European regions find its expression in the particularly high portion of mountain areas in some Member States (Austria, Greece, Slovenia and Finland) and the predominance of 'other ANCs' in others (Luxembourg, Latvia, Cyprus, Portugal, Ireland, Poland, Germany, United Kingdom and Spain).

Following criticism by the Court of Auditors (2003), particularly fuelled by the extension of the eligible area and divergences in the delimitation and application of the scheme, a long discussion to review the intermediate LFA took place. All MS will apply the reviewed system for other ANCs from 2018 onwards which will be based on the assessment of bio-physical criteria to define the natural constraints for agriculture in Europe (Van Orshoven et al. 2013). While there is a great variation within ANCs we can in general observe,

- a high coincidence of ANCs with HNV farming systems, low intensity farm management, and nature protection areas;
- a strong reliance on extensive farming and small-scale farming structures under threat of marginalisation, however in some cases with intensification of farm management;
- an increasing threat for the continuation of low intensive farming systems in these areas, leading to either land abandonment or intensification.

Extensive agriculture production methods are particularly widespread in the new MS which imply a high relevance of the LFA scheme. For these countries the review of the intermediate LFAs is most important and the upcoming revisions of the delimitation in 2018 will have significant implications for these areas. Due to a "phasing-out" period for currently eligible areas that will drop out of the system for other ANCs in the future, farmers in these regions will experience the full effect only in the post-2020 period. It might be important to realize "better targeting" at farm situations which are most in need of support through this revision of the intermediate category of ANCs.

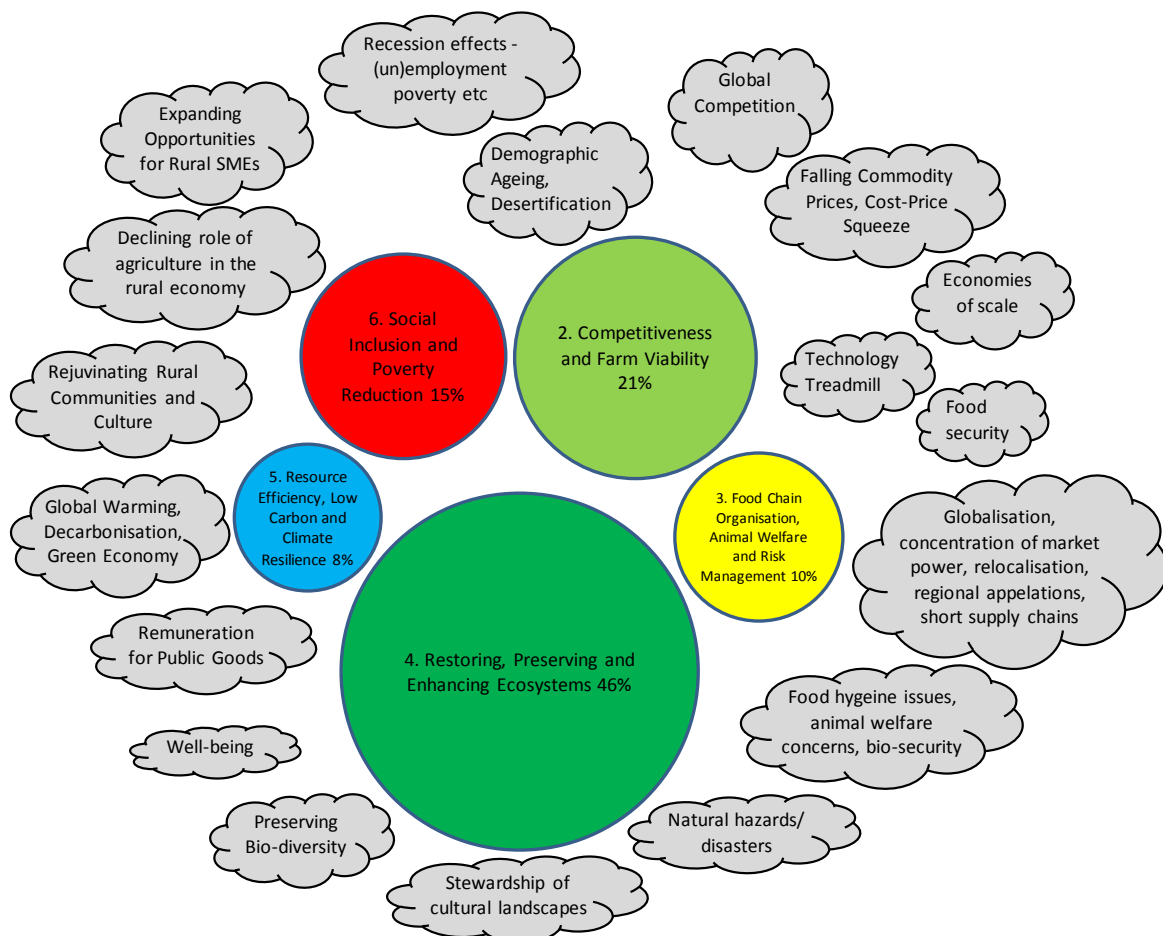
The situation of LFAs has been assessed as highly relevant for the preservation of HNV farming areas, and maintenance of specific land use systems in these areas must not be limited to production aspects, but has to include the relevance for public goods provision, in particular with regard to environmental services (e.g. biodiversity), highly valued landscapes, mitigation of natural risks etc. (Baldock et al. 1994). These aspects have been addressed in particular in mountain environments and policy action focusing on these aspects has developed according to specific national implementation schemes (Dax and Hellegers 2000, Crabtree et al. 2003). More recently the specific requirements for policy action focused on the situation in mountain areas (EC 2009) and the necessity to apply a comprehensive assessment including the various policies contributions to support mountain development (Gløersen et al. 2016). The analysis highlights the potential of specific support schemes, including RDP instruments, and a significant change in the common perception of these regions. They are increasingly perceived as areas which are characterized by limited agricultural production potential, but at the same time possessing opportunities which can be realized and nurtured due to their specific amenities.

2.3. A Post-2020 Rural Development Policy

In this and subsequent sections the focus shifts from the past and present towards the future, as we consider options for the post 2020 programming period. Within the highly complex policy context of European rural development there is continuous discourse on adaptation and improvements of common policy arrangements. It seems important to start reform discussions very early and give careful thought to exploring whether a shift from the current framework is needed and what goals (and benefits) would be targeted by any amendment. Although political considerations may be influential at a later stage, our task in this report is to attempt to set out with a degree of clarity the main choices which need to be considered as a basis for rational and appropriate adjustments to the CAP Pillar 2 policy structure.

We begin by framing the debate through a set of key overarching issues which require to be considered. This is followed by a description of the key ingredients for a successful reform, and by an overview of recent discussions, leading to the presentation of five options for change. The next sections deal with the important issues of coordination between CAP Pillar 2 and Cohesion Policy, and the future of the two pillar structure of the CAP. The final section describes various adjustments within the Pillar 2 envelope which have been proposed in recent reform discussions.

Figure 6: The Strategic Priorities in the Context of Issues they Address



Note: The first Strategic Objective (Fostering Knowledge Transfer and Innovation) is not shown, since it is cross-cutting and has no separate budget.

Source: draft by authors.

The key questions which underlie the reform debate include:

- (i) Does the distribution of expenditure between the 5 strategic objectives (Figure 6) represent an appropriate balance between the numerous issues which Pillar 2 policy is expected to address? What “rebalancing” is required in order to address current requirements, or anticipated future shifts in priorities?
- (ii) To what extent is the RDP/Partnership Agreement implementation structure efficiently/effectively fulfilling its task in relation to EU 2020 goals, and the needs of rural communities and farmers in different parts of Europe?
- (iii) Is there a need to reconsider the balance of responsibilities for rural areas between CAP Pillar 2 and Regional/Cohesion Policy?
- (iv) Is the current quasi-horizontal arrangement the optimal way to respond to substantial disparities in economic and social performance between rural areas in different parts of Europe? Do other approaches/models exist in the EU policy portfolio, which might prove more effective?
- (v) Have there been particular calls for changes to specific measures, which could have a significant impact upon the overall orientation of Pillar 2?

Our approach to these questions will be both to summarise the debate so far, and also to draw implications of own analysis, from our knowledge of the development path of Pillar 2 and from current and emerging issues. In reality the five key questions above are inter-related in a complex way, and it is not easy to discuss them sequentially without repetition. The answer we arrive at for one of them will have ramifications for the others. However, it is very important to be explicit about the wider implications of apparently minor shifts in programme or measure detail. A concerted set of minor changes could (beneficially) adjust the trajectory of the policy as a whole. On the other hand, piecemeal and contradictory changes could have a negative impact on its capacity to achieve overarching goals.

As we have shown (in previous chapters), there is a great diversity of situations, a wide variety of drivers for rural changes and diverse perspectives on challenges and opportunities for Europe’s rural areas. Any contribution to enhancing conceptual clarity and recommendations for future rural policy will have to address the multitude of visions and the divergent perspectives of the many stakeholders. The following assessment of policy options suggests a need for a stronger evidence base, a greater reliance on careful and timely appraisals of the economic, social and ecological changes in rural regions and the implications of territorial interrelations. Without this, it is difficult to suggest detailed amendments, or a specific set of policy measures. Rather we will attempt to develop appropriate guidelines, an enabling framework for rural policy, which should mobilise relevant actors, respond to place-based needs, develop territorial potential, and enhance participation, across the European countryside.

The “elephant in the room” for this discussion is the long-running debate about where “Rural Development” policy best fits within the overall EU policy framework. The on-going discussions, the various reforms and shifts in policy design and the continuing search for ‘coherence’, all underscore an implied question about the appropriate place for rural development policy. However, it is important to consider nuanced rather than “all or nothing” solutions. Some aspects of Pillar 2 are well adapted to the current “quasi-horizontal” arrangement, others would benefit from greater regional or local flexibility and targeting.

2.3.1. Ingredients for a successful reform

Past experience suggests that among the most important pre-requisites for successful reform are clarity about goals, an open transparent and inclusive debate - involving a

broad range of stakeholders from all segments of rural society, - and a pragmatic approach to implementation.

At this stage it is important to achieve clarity and consensus, or at least balance, in terms of the overall trajectory of rural development policy. Several alternative perspectives are favoured by a range of stakeholder groups, who have rehearsed them in the contexts of previous reforms. The problem is that during the reform discussion clear "intervention logics" tend to become subordinated to compromise and incremental changes, both at the EU and national implementation levels, so that the conceptual basis and "theory of change" becomes obscured. As an illustration of this, although the current RDP preparation process (in particular the "needs assessment") recognised the wider "needs" of rural areas (EC 2014), and the significant socio-economic changes which are taking place, evidence of alterations of policy approaches at the programme level is, as we have seen, quite limited.

A more thorough investigation of appropriate rationale and guiding principles for policy reform should of course address the *objectives of rural development*. As long as "rural development" is considered the second pillar of "Agricultural Policy" it is inevitably steered by sectoral objectives. Even if the considerations in the Regulation establishing the EAFRD (Council Reg. 1290/2005; and later Reg. 1305/2013) argue for action and instruments that go well beyond the remit of agricultural policy, the focus of Pillar 2 is likely to remain on supporting land use management, adaptation and coherence with environmental demands and economic challenges. This structural formulation will probably always constrain its capacity for developing the broader potential of rural areas, through territorially rooted activities across all sectors.

Such a focus on an extended/revised set of objectives, specifically addressing territorial rural goals, is hardly within sight in the current discourse. It would require a more radical reassessment of various rural contexts, policy scope, and impact, mindful of these broader policy objectives.

Evidence of the different perspectives on rural development can be identified in all the various parts of the policy cycle: the policy and regional context, the policy design and implementation processes and effectiveness. As has been shown by several analyses, changes of policies are characterized by iterative processes, that need long time-frames to achieve significant amendments or a new orientation. In this regard, a concentration on activities to inform and enhance awareness, participation, networking and reorientation is crucial.

Formulating appropriate "theories of change" for European rural development policy in the third decade of the century will require an open and transparent discussion of a number of issues, including, for example:

- How can the achievement of *rural* (as opposed to agricultural) objectives be enhanced by specific policy support of European programmes?
- How can coherence between different EU policies with impacts on rural regions be secured? How can synergies between European policies and national/regional development support be realized?
- Is the existing set of policy measures contributing effectively to the envisaged impacts, particularly in view of balanced territorial development, actions overcoming marginalization trends, and land use systems with ecologically beneficial outcomes and activities to reduce rural poverty?
- Is rural policy contributing adequately to territorial cohesion and responding to societal challenges, particularly with regard to long-term and emerging rural changes?

- How can the assessment of main policy drivers, outlined by a host of studies and analyses, be “translated” into recommendations and policy advice that tackle the “source” of action and achieve effective policy response?
- What are appropriate scales for action, governance and programme design, or in other words, what degree of territorial differentiation is required to address local/regional specificities?

The elaboration of rural policy also faces the challenge of enhancing participation, an increased level of involvement of different groups of actors in rural areas, in different phases of the policy cycle. This will require the identification of the various stakeholder groups in society at large, and the inclusion of different groups, especially those less well represented in policy discourse so far.

The effectiveness of rural policy will not only depend on the selection of a useful approach and the design of the programmes and its policy measures, but also requires the organization of implementation processes, and issues of administrative performance and adequate control. As the multitude of demands on rural policy and historical experience underlines, there is no straightforward outline for a reformed rural development policy at hand – on the contrary, the diverse perspectives of actor groups, economic and social developments and changes, and institutional differences between national/regional contexts point to the need to consider a range of options for future reform.

2.3.2. Reform options

In this section we begin with a review of recent suggestions about how CAP Pillar 2 should evolve, and then summarise these in a set of specific (but not necessarily mutually exclusive) options for reform.

As we have seen, at present, rural development policy is closely aligned with agricultural policy, and is manifested in specific frameworks for action developed by Member States and regions (RDPs). Generally speaking, a shift towards a more territorial policy framework, focusing on broader development potentials, rather than addressing sectoral issues, has long been recommended by analysts, practitioners and many policy-makers. Actually, it might be more appropriate to speak of a spectrum of different visions and recommendations for rural policy adaptation, ranging from minor adjustments to radical re-orientation. It therefore seems useful to discuss the main proposals arising in the recent debate before outlining specific options for the post-2020 reform.

Important contributions in this regard have focused on the specific remit and place of rural development policy within European Union’s policy framework. The current identification of rural development action with RDPs in public perception is taken very often as a supporting indicator to continue presently established application experiences. Yet, a series of studies underlined the much wider scope of activities and potential for rural action and policies impacting on socio-economic development and realization of rural opportunities (e.g. Copus et al. 2011). It has been stated that the specific design and focus of the Rural Development Regulation hardly pays attention to the challenges of the least developed regions and to rural areas of new MS (Gorton et al. 2009). At least since the debate of OECD’s “New Rural Paradigm” (2006b) the notion that “rural” embraces a wide range of non-agricultural policies has been widely accepted. From the appraisal of a series of rural development country reviews OECD concluded that progress in realizing the approach and policy changes recommended through this paradigm shift is limited. More recent discussions have underlined the need for policy advances in a range of policy fields and which have the potential to raise the contribution of rural regions to national growth (OECD 2015). Such a wide perspective relates to the perception of rural

development practice as expressed by Shucksmith in a synthesis analysis on future directions for rural development. He argues that "rural development practice, and our understanding of it, has evolved towards a networked approach, characterised by dynamic interactions both within a locality and also between local areas and the wider political, institutional, trading and natural environments" (Shucksmith 2012, 21). He notes the substantial obstacles facing bottom-up development and a need to address the broader forces acting upon the local actors. Increasingly the discourse has shifted from "problem"-orientation to a search for ways to realise the specific assets in rural regions and make use of economic potentials of rural areas. Innovation is thus no longer achieved exclusively in urban contexts, but can be nurtured in rural regions as well. Going further in this reasoning, social innovation in particular may become a core aspect of rural development, and driver of rural change.

Any consideration on the future of rural development policy is closely linked to raising the territorial implications of its measures and to clarifying the position between agricultural and regional policy. As Perrier-Cornet (2015, 321) suggests "a longer term reflection is required that overcomes the constraints of short term inertia. It could, and should, enable the anticipation of the lasting changes which policy will have to deal with" (translation by author). According to the scope to which different actors will be addressed in rural programmes, various options for changes to rural development policy seem possible (Perrier-Cornet 2015). One approach could be to increase internal coherence of the CAP and to attach rural development policy more closely to the objectives of agricultural policy. A second option might imply a much stronger relevance of rural development policy for the socio-economic changes of rural regions, aiming at greater efficiency in addressing place-specific targets. This would mean a refocusing of Pillar 2 with a stronger application of "territorial" measures rather than agricultural ones. The third option considered is a strict focus of rural development policy to enhance public goods provided in rural regions and support for provision being available for all actors and potential providers, not only land use managers.

The expectations for the last CAP reform in 2013 seem to remain partly unfulfilled, at least there is concern about reduction of environmental targeting in the final policy decisions. Matthews (2015, 503) highlights that several groups of stakeholders might be dissatisfied of different reasons: Environmental groups would be disappointed by the outcome on CAP greening and will push for a greater focus on public goods; farm groups might seek stronger market crisis instruments and less regulation of farming practices; and rural actors might wish for stronger territorial measures. As these criticisms are at least partly in contradiction they cannot all be satisfied simultaneously. This observation supports arguments for a limited scope of the next reform.

This conclusion is also supported by the analysis of implementation of the current (and former) RDPs and by recent discussions on the outline for future reform considerations. National discussions started in spring 2016 show that there is a tendency to increase focus on "food policy" and to treat the "territorial issue" mainly as an aspect of securing beneficial outcomes of land use across space particularly referring to areas with natural constraints (Le Foll 2016) or to enhance "liveable rural areas" through social innovation and relocation of agricultural industries (Vogelzang et al. 2016). This coincides with Buckwell's (2015) assessment of a high probability for an evolutionary reform that would hardly address the conceptual aspects and scope of a "grand reform". The Cork 2.0 Conference (September 2016) seeks to cover the concerns of a multitude of stakeholders and aims at broadening the development perspective of rural development further. However providing an overall orientation for future reforms, it is not explicit on the operational details.

It has to be noted that rural development and the evolution of Pillar 2 is seen in this discussion as a supplementary aspect to agricultural policy and firmly linked to land use as the main actor shaping “rural” areas. A wider perspective reflecting different options (as outlined above by Perrier-Cornet’s framework) and the challenges and opportunities of rural regions would call for a more comprehensive set of objectives and instruments. It might for example, be based on an approach like the “Rural Cohesion Policy” elaborated on the basis of an analysis of rural changes (Copus and De Lima 2015).

Table 4: Reform Options by Fund and Sector

Type of approach Source of funding	SECTORAL	HYBRID	TERRITORIAL
EAFRD	Option 1: Sectoral Retrenchment	Option 2: Enhanced Status Quo	Option 3: Territorialised Pillar 2
Multi-Fund			Option 4: Multi-Fund Territorial
ERDF			Option 5: Rural Cohesion Policy

Based on the challenges and opportunities for rural regions and the institutional framework implementing rural policies across Europe, the following set of options indicates the range of the discussion for further adapting rural policies to changing societal needs:

- Option 1: Sectoral Retrenchment** - A strict focus of “rural development” measures on the CAP-objectives and orientation towards increased internal coherence of agricultural policy. This would be fully funded by EAFRD.
- Option 2: Enhanced Status Quo** - Continuation of the present framework and linkages of Pillar 2 and only slight revisions of the policy set and available instruments, with the particular aim of improving the implementation process. This would be fully funded by EAFRD.
- Option 3: Territorialised Pillar 2** - Re-orienting rural development measures towards an “integrated approach” that aims at a programme serving the different objectives of sector and territorial policies through a targeted programme, conceived and operated by coordinating the different sectors’ activities, but still fully funded by EAFRD.
- Option 4: Multi-Fund Territorial** – In this approach the focus would be on a distinction of responsibilities between agricultural, regional and social policies, achieving a clear separation of the involved instruments into specific sub-sets of Pillar 2 and allocating the various instruments to the respective Structural Funds/policy framework.
- Option 5: Rural Cohesion Policy** – The final option would adopt a new conceptual framework that addresses the specific needs of rural areas and rural residents, through re-orientating measures towards inclusive growth (rather than competitiveness), realising the potential of rural areas by exploiting their (differentiated) territorial assets, and maximising their interaction with both

rural and urban areas. This would not necessarily involve a new programme structure, or integration into regional policy frameworks, although it would seem to imply a degree of detachment from agricultural policy, and the EAFRD.

A cross-cutting change, which could be added to Options 3, and 4, and would probably be intrinsic to option 5, relates specifically to allocation of funding and macro-regional differentiation in terms of the programme balance. This is founded upon the observation that there are still very clear differences in rural development situations, needs and potentials, between macro-regions of the EU space (Copus et al 2007). For example agriculture is still a very important component of the rural economy in several of the Member States of the East and South of Europe, whereas the majority of regions in the North and West have rural economies which are much more diverse (Copus 2014). The Mediterranean regions of the EU confront a distinctive set of challenges and opportunities. Although the current manifestation of Pillar 2 incorporates an allocation of resource which is to some extent related to “need”, and the menu-based approach allows each Member State to select a set of measures best suited to their situation, it is worth considering whether macro-regional policy targeting could result in programmes better tailored to national or regional rural characteristics. This might be achieved, for example through some form of link to the Interreg programme (c.f. experience of the elaboration of the existing EU’s Macro-Regional Strategies).

As discussions on potential reform options (see e.g. Buckwell 2015 and Perrier-Cornet 2015) reveal, and the bulk of analyses on implementation and previous reform characteristics suggest, amendments in rural development policy tends to be highly path-dependent, and radical changes in conceptual framework are very difficult to achieve. Moreover, the recently started discussion on the future development of CAP reveals a strong priority among many stakeholders for issues of food security and administrative adaptations, suggesting that strengthening the territorial dimension will be seen as a supplementary task (and not a core issue) in the next reform. However, the discussion at the Cork 2.0 Conference urged for a stronger shift towards a more cross-sectoral programme and increased inclusion of social development aspects in future Rural Development Policy. Moreover, it highlighted very clearly that a stronger focus on “wider rural development” measures and more effective implementation processes will be decisive for the future success of RDPs. Obviously the discussion raises the momentum for respective changes, but nevertheless it seems that this start of the discussion resembles very much to the features of previous reform experience.

2.3.3. Coordination aspects between CAP and Cohesion Policy

As indicated throughout this report rural development is placed at the crossroads between agricultural (CAP) and cohesion policy. Traditionally closely associated with agriculture and land use, since the first Cork Conference (in 1996) and particularly in realization of Agenda 2000, rural development is, however, also formally integrated into the CAP structure. While the nexus around land use, food policy, and the impact on rural environment and society is a contested policy field and leads to controversies, the even larger scope of rural development is much fuzzier, and conceived differently according to institutional backgrounds, stakeholder positions, awareness and experience of challenges and opportunities, as well as national (regional) discourse settings.

There is intensive rhetoric on enhancing coordination between the different policy areas involved, but this aim usually remains a high-level concern (e.g. OECD 2006a) and is realized at the local level only by good practice. The long-term aspiration to increase attention and to increasingly address the territorial dimension in CAP, in particular through changes of its Pillar 2, was so far hardly effective when assessed in terms of the

portion of funds dedicated to “territorial measures” (see e.g. Copus 2010, Zasada et al. 2015). There is, however, no consensus about whether the future Rural Development policy should be oriented more strongly towards such measures, or if other models of coordination between CAP and Cohesion Policy are more appropriate. Hence, the decision on the above-listed options for Rural Development trends/orientation and a concluding selection of one of the options cannot be supported in a rigorous manner from this aspect. As most analysts observe there is no “neat catch-phrase” (Buckwell 2015, 526) on future reform for CAP, nor for rural development policy that suggests higher weight for either of the two big EU-policies. Additionally, inertia in the institutions and the decision process underscores the predominance of continuation and minor policy changes.

On-going programme application emphasises the diversity in contents and focus of support measures between RDPs. Coordination with other policies, thus achieving distinction between different operational programmes (and avoiding overlap) is an important aspect in this regard. As agricultural and rural policy are interlinked in many respects it is important to address how these two key policies are changing in response to societal challenges with regard to food safety, food security, animal welfare, environmental performance and rural vitality. Policy coherence is looking for the most effective European, national and local coordination mechanisms to enhance synergies between activities of different policies. In its reflection on rural development OECD indicated “that coherence is needed among *all* policies directed to rural areas, including those that are labelled as ‘rural development policy’ and ‘agricultural policy’ but also other sectoral and territorial policies that impact on rural regions” (OECD 2006a, 23). This view was substantiated by further studies (e.g. Copus and de Lima 2015) and is taken up in the new instrument for multi-fund local development support (CLLD)¹⁷⁸.

Given the different characteristics of RDP measures, regional development support and other policies impacting on rural areas, substantial difficulties in integrating such diverse instruments into one operational programme reflect administrative concerns. Coordination aspects seem therefore of high priority, if options for separate operational programmes (as currently applied) are selected. It would be an important feature in future programming to elaborate governance mechanisms that address particular attention to coherence aspects in the complex framework of rural development. The need to increase and operationalize coherence is also influenced by the modest impact of agricultural policy on the viability of rural areas and the high diversity of rural areas’ challenges and opportunities.

As indicated, a “big” reform achieving coherence through integrated multi-fund programmes is probably not realistic ambition, and given practical constraints, even not desirable and meaningful. In absence of such general solutions, focus in the future of RD policies should be placed on adjusting and re-balancing the intervention logic of Pillar 2 and better coordination of the supplementary function of various policies, impacting on rural areas. A framework defining the multi-level governance systems and enabling contributions from different policy sectors as well as the combined monitoring of actions and effects of activities could increase place-specific impact.

¹⁷⁸ Following the widespread experience of local development in rural regions over the last twenty years, the approach of enhancing local initiatives through an inherently « bottom-up » approach was extended from rural regions to all spaces for the programme period 2014-2020 (Reg 1303/2013, Art. 32-35). The concept of « Community-Led Local Development » (CLLD) explicitly addresses all types of areas in the European Union. Its core idea is that « local people take the reins and form a local partnership that designs and implements an integrated development strategy » (EC 2014, 9) whereby the European Structural and Investment Funds ERDF, ESF or EMFF might be used, in addition to LEADER support under EAFRD, to provide targeted, subregional development incentives (multi-fund support scheme).

Nevertheless, the debate on this complex interrelations of policy fields and spatial effects underlines the value of small-scale coordinated programmes of CLLD, including the LEADER approach, action programmes in Fishery Areas and in Urban Areas, and also trans-national cooperation. A wealth of good-practice examples suggests that there is high awareness and commitment for local development action that should be further harnessed to serve as a role model for coherent and cooperative activities in rural regions. There are many ways of attaching specific priority to this approach, but the European added-value has to be transmitted through financial priority and focus on incentives to increase the weight of such local action instruments/programmes.

In addition to CLLD it would be important to make activities and support for non-agricultural actors in rural regions more clearly visible. This means that, even if programmes continue to work under different funds, as seems quite probable, specific action for rural regions would be highlighted by a specific label¹⁷⁹ referring to the territorial focus, respectively different actors group as main targets of instruments. The "rural" indication in programme delivery would allow joint monitoring and assessment processes, and increased accountability on the effectiveness of (all) policies for rural regions' performance and effects on viability.

2.3.4. The future of the two-pillar structure?

The two-pillar structure of CAP goes back to Agenda 2000, and defines rural development as a distinct policy area within EU's Common Agricultural Policy. Though research and policy analysis is critical of the effectiveness of the established policy regime of RDP to cope with the multitude of societal challenges, external drivers and changes of rural regions, there is widespread recognition that RDPs have an effect on rural economies and societies, and partly compensate the less positive effects of Pillar 1, with regard to cohesion, employment and social effects on rural regions (e.g. Shucksmith et al. 2005, Dargan and Shucksmith 2008, Schuh et al. 2016). This assessment calls for further consideration about how to improve the Pillar 2 structure, policy implementation and application at programme level.

While the recent changes for the period 2014-2020 underlined the interrelation to Pillar 1 and required a stronger commitment to policy assessment of the combined effects, it should be emphasized that such discussion trends should not lead to conclusions for a dissolution of the pillar structure of CAP. On the contrary, allocating specific amounts of funds to Pillar 2 underpinned political priorities at various stages in the past and supported gradual shift of resources towards Rural Development. This will be an important feature also in future reform steps.

It might, however, be increasingly relevant to review the rates of co-financing and the difference in financial allocations between Pillar 1 and Pillar 2. Difficulties in match funding in new MS and/or regions with particular need of rural development support engender a specific concern on the influence of the different regulation basis which can result in a distorted composition of RDP spending in poorer countries and regions. Support schemes to overcome these implementation difficulties are not only limited by financial rules, but include also an incentive of networking activities, social capital development and explicit priorities for Pillar 2 action.

¹⁷⁹ Recent examples for such a territorial focus of activities by different funds can be seen in the new Strategy for Inner Areas in Italy (Barca et al. 2014).

2.3.5. Priorities for adjustment within the Current Pillar 2 Envelope

Following the discussion on the need for coherence and the role of the second Pillar in EU's overall policy structure, the debate about rural development policy has to sort out the main potential for improvement, the programme fields for adaptation and priority areas for changes that could contribute to increased beneficial outcomes for rural areas and socio-economic development. As mentioned above, the various conceivable trajectories should be analyzed in terms of their specific impacts for stakeholders and social groups, as well as national and regional specific impact. Against criteria depicting the objectives and common strategies for rural development future priorities might imply a more or less strong alteration of the current orientation and framework of RD policy. The following recommendations are based on the assumption that the overall two pillar-structure of CAP will stay and only adjustments within this framework seem realistic. Some of the topics for discussion have long been recognised, other issues emerged more recently. Action on any of the aspects does not preclude activity in other spheres, but are seen much more as complementary concepts.

- The initial task is the analysis and concentration on aspects for improved implementation of the current set of instruments. Important targets are to reinforce the role of the second Pillar within the CAP.

The policy debate is very much targeted at issues how to support transformation of European land use management towards sustainable agriculture (Dwyer 2013) and the concern to increase agri-environmental effectiveness and biodiversity. RDPs aspirations in the new CAP to achieve a substantial "greening" is not assessed as sufficient, leading to the statement by a recent study that "the new environmental prescriptions are so diluted that they are unlikely to benefit biodiversity" (Pe'er et al. 2014, 1090). It is recommended that the orientation to design improved guidelines for agricultural sustainability is taken up through shaping the scope and conditions of agri-environment-climate schemes (AES) more effectively.

The second large and long-lasting area of support within RD priorities is the concern for securing development options for ANCs. Here it is particularly important to recognise that different land use management systems have a specific function and potential to cope with marginalization trends and to provide beneficial outcomes, like the management of HNV farmland.

As there will be an adaptation of the interim category of LFA in 2018, some concentration on support for the most disadvantaged contexts is in sight. Further assessment and focus, particularly on high-mountain areas with most severe production difficulties and high ecological sensitivity, is needed (Gløersen et al. 2016). With improved technical measurement of context conditions, better targeting on production difficulties and the positive effects achieved through specific types of farm management, should be achieved.

These two schemes, the AES and ANC support, should be viewed as cornerstones of the future RDPs in some contexts and relative budgetary share should be continued to be a priority (though, of course, taking account of specific territorial contexts).

There are other issues, highly relevant to the outcome of RDPs, which are particularly closely linked to horizontal aspects. Knowledge management, support of innovation and cooperation, as well as collective action (in particular through LEADER activities), and support to 'rural vitality' particularly in remote regions, should be further elaborated and enhanced (including in budgetary terms). The specific aim is to attach priority for these issues as they could provide important input to governance and decision processes, and to motivation for uptake of specific measures.

Market integration, increased value-added for farm produce and diversification of agricultural activities have long been specific priorities. The increased concern for improved value-chain organization, high-quality production and utilization of region-specific assets for marketing activities of farm production should be retained, and relationships to local and regional opportunities should be intensified.

- The ex-ante evaluation and assessment of the initial implementation of RDPs pointed to some crucial changes and challenges for the realization of the programmes. In particular, the preparation process for RDPs 2014-2020, and the increased requirements for administration are seen as critical by the personnel involved and policy analysts. While simplification has been a permanent concern, which was discussed in the previous reforms, there is an increased urgency to tackle the issue and enable more focus on contents than on the need to comply with administrative prescriptions. Improvements are quite difficult to achieve, since rules have to apply for all partners concerned and administrations under different institutional settings; but the target of a swift and effective realization of RDPs is of particular priority. This might include less detailed rules (where decisions could be taken at programme level), clear roles, distinction of measures, allocation of responsibilities, rules of amendment, accountability of actions etc.
- The relative weight of the RDPs within CAP budget should be further enhanced. The internal shift of CAP budget that has taken place rather slowly since the establishment of Agenda 2000 should be continued. One possibility, used for the current period 2014-2020, was the voluntary shift of budget between the two pillars of CAP by national authorities. Beyond this, the preservation of the general level of financial support for rural development and adaptations in resources available should reflect the aim of sustainable land management in a European and global context, and a more explicit focus on public goods. In relation to these challenges the effectiveness of Pillar 2 activities is seen most clearly in ANCs. Being included in CAP since 1975 those measures are of crucial relevance to balanced territorial development and are not to be released. On the contrary, synergies with other CAP-measures (and regional development support) have to be sought and intensified (EC 2009).
- One of the initial experiences from applying the RDPs 2014-2020 is a perceived lack of priority on "social measures" and a stronger focus on social measures is therefore suggested. This could be achieved by a further elaboration of newly established instruments for this period, enhanced activities in cooperation measures, and knowledge building and dissemination, continuing the EIP process.
- The growth potential and socio-economic development of rural regions depends on their capacity to modernize their economic base and societal context and to initiate innovative processes making use of the specific amenities and opportunities of rural contexts (OECD 2014). Whereas in public discourses innovation is often understood merely as an urban phenomenon it is crucial to realize this potential in rural regions. Often, the contents of innovation activities are different and address simultaneously the processes of innovation and regional governance aspects. The thrust of initiatives to overcome the urban bias of past innovation policies stress in particular the social dimension in the generation of rural growth and on the influences on rural changes. This goes beyond a narrow understanding of regional innovation systems and calls for inclusive processes that underpin "social innovation" as a prerequisite for institutional development; active rural policy that supports action to overcome defensive attitudes and enable new initiatives for rural regions (Rosa Pires et al. 2014).

- From the analysis of the type of measures realized under RDPs so far, it emerges that the “territorial dimension” is claimed in theory to be a specific priority but actual support remains limited. Focus should therefore be improved and centre on considerations how and which funds can be provided for targets of spatial differentiation. The activities for local development through the multi-fund programmes are examples in this direction. As these activities are at the inter-linkages between the relevant funds, and several General Directorates, continuation/amendment of existing programme structures have to be scrutinized carefully. One aspect is to continue the widely supported practice of “local development” through the LEADER approach within RDPs. With a perspective on securing the long-term effectiveness and “outcomes” of action, a clearer separation of activities against other Pillar 2 measures and Regional Policy Operational Programmes might be desirable. The structure of CLLDs as a facilitative design is to be nurtured by best practice examples, monitored and assessed against the potential towards developing into such a support structure.
- In similar terms, rural poverty issues are a major policy area where action is needed for a more balanced social development. Priority 6 of the current RDPs underline this concern, yet uptake of the measures is limited. In particular there is a need for enhancement of human and social capitals through skills learning, development of organisational and social competences and entrepreneurial development. There is evidence that the need for action is very high in specific regional contexts (see Copus et al. 2015) which is hardly taken up in RDP conceptual approaches. A more intensive consideration of the issue is seen as an emerging issue, particularly also with the linkages to migration processes, demographic changes and interrelation to urban areas.

All the issues of specific priority in future reviews are based on assessment studies and resulting findings. However, they need further monitoring and assessment of all programme areas and measures (from all funds) with an impact on rural areas. Such an integrative perspective is quite difficult to achieve due to the variability of approaches, focus, rules and monitoring between programmes. Aiming at coherent frameworks could raise the potential of collaboration and effectiveness in the long-term.

3. CONCLUSIONS AND RECOMMENDATIONS

KEY FINDINGS

- From all the discussions and evidence available a high interest in continuation and future adaptation of RDPs emerges. A radical restructuring of the ESIF fund arrangement is probably not a realistic goal. Instead the pre-reform discussion should focus upon re-balancing the intervention logic within the current Pillar 2 structure. There is for example, increasing concern about lack of “targeting” and effectiveness of implementation. In particular, the following main issues are considered crucial for the future reform of Rural Development Policy:
- The **diversity of rural areas** and the different **needs and opportunities** should be increasingly reflected in RDP programming. A “place-based” approach could enhance the relevance of actual contexts for the selection of priorities in RDPS.
- Moreover, **increased territorial focus** in distribution of funds is **required** to address region-specific challenges, e.g. articulated through land abandonment, marginalization trends and rural regions of particularly high poverty risk. Such situations are above all relevant in “New” Member States, regions in Mediterranean Countries and ANCs as well as remote regions in other EU countries.
- Besides the territorial aspects, RDPs need to show much clearer than until now that they are beneficial **to all people** in rural regions and impact the whole societies. This (on-going) shift in the focus of beneficiaries should secure respective effects for the local economies and societies and provide significant (positive) impact on well-being in rural regions.
- In order to enhance programme up-take, particularly in regions with gaps in participation, specific attention should be paid to capacity building, knowledge development and participatory local development action. These **“soft” support measures** need an increased priority in specific regions to overcome the “downward spiral” and outmigration tendencies.
- A number of **“social” measures** have been included in RDPs already; to become more effective a considerable priority and share of funding as well as further elaboration of these measures is required to achieve (measurable and meaningful) effects for the various types of rural regions.
- The LEADER and CLLD approach, and the cooperation measure represent tools of high potential for **participation, local development strategy** processes and identity creation. On-going consultation and learning processes of their application should feed into the future reform process.
- Above all, rural areas should no longer be understood as only places of development problems and sub-ordinated to urban areas, but that they also have significant opportunities which should be continuously nurtured, in order to achieve desired impacts (see also discussions of Cork 2.0 conference). A wise and carefully adapted land management system that enables **sustainable development and the focus on social innovation** aspects are core to make use of these (place-specific) potentials.

The paper has sought to examine the history and current application of the Rural Development Programmes and “rural policy” in general as a background to the “needs” and discussion of the future of rural development policy.

Our discussion of the main impetus and focus of rural development policy has emerged from a concern for providing balanced conditions for socio-economic development throughout all European areas. As many rural areas suffer from limited opportunities and their development was assumed to be bound to a “downward spiral” tendency, efforts to revert such negative trends are long established. This compensatory ethos must increasingly be complemented by pro-active identification of local territorial assets, and upon interventions to support the realization of their full potential.

The current framework of Rural Development Policy in the EU is primarily provided by the RDPs which have been elaborated since Agenda 2000 by MS (or regions) for multi-annual programme periods. A total of 118 RDPs for the period 2014-2020 have been established and implemented in the current funding period.

Ideas for changes in Rural Development Policies should not be sourced from the programme assessment discourse alone, but should reach out to include more general policy analysis, needs assessment and alternative pathways for territorial development of rural areas. A number of studies are referred to as sources of assessment on specific development aspects of rural areas, and indicators of where and how changes to RDP might be required. Recently the debate culminated in the Cork 2.0 conference (5-6 September 2016), held 20 years after the first Cork conference, which marked the introduction of rural development, through Agenda 2000, into the CAP. Reflecting on the policy evolution and intensive discourse on improving Rural Development Policy over the last two decades, participants supported a new 10-point policy Declaration on future policy orientations for rural development (Annex, Table T5). The main perspective provided through this conference’s discussion is a continuation of the policy development of the RDPs, striving to address global challenges, a much broader scope of activities (than just farming), and impacting on all people in rural areas and highlighting relevance for the urban population as well. It seems important to note that important challenges for achieving such a vision have to be overcome and effectiveness of implementation of RDPs, in particular with regard to the different types of rural regions, has to be raised.

While discussions of rural development policy (like at the Cork 2.0 conference) in general demand a stronger orientation towards stronger participation and more effective implementation of RDPs, there is also concern that the wider policy aims of balanced territorial development are weakly addressed, both in the legal framework and in implementation. The increased concern for a more balanced territorial development approach, a stronger connection to the needs and societal demands of specific areas, as well as the recognition of large-scale changes affecting rural regions, only very gradually find their way into the RDPs structure and operational focus. In general, implementation of previous and the current programming period is largely characterized by country-specific (regional-specific) experiences and focus of application. This strong reliance on previous policy outline has been summarized as the “path-dependency” of a model of policy reform that is limited to incremental adaptations.

The main objectives for the post-2020 period should be targeted at a refinement of the current policy orientation. As the strategic considerations with regard to integrating RDPs into the set of Europe 2020 objectives has been strengthened for the programmes 2014-2020, perspectives for future amendments should seek enhanced effectiveness and balanced development across European rural regions. It seems therefore particularly important to address specifically the following general objectives in the preparation of the future activities of Rural Development Policy:

- Territorial balance of the activities of RDP should address both the large scale of European regional adaptation, but should include the different types of rural regions and their respective performance levels as well.
- Rural development policy should aim at the strengthening of its spatial dimension and focus on territorial cohesion aspects, aiming at the provision of high-qualitative living spaces and improving aspects of well-being in rural areas.
- Since territories have become increasingly inter-related, interlinkages to other regions are of specific relevance for development options and spatial strategies. This includes in particular rural-urban interlinkages as well as rural-rural partnership approaches.
- Rural poverty is an important issue in many rural regions. The social dimension (including skills development) should be more effectively addressed in future programmes, and efforts to secure access to services in rural regions should be intensified.
- Rural development policy should nurture the natural resources and the valuable amenities present in those regions, and (continue to) aim at high-quality environmental performance and sustainable trajectories. This should secure maintenance of high-value nature areas, one of the most specific assets in rural regions.
- Land use in different types of rural areas, including areas of natural constraints, is often a challenge and threatened by limited productivity potential. The specific effects of land use in ANC's and the public goods they provide should play an important role in the aim of overcoming marginalisation trends in large parts of rural regions of Europe.

As these objectives are very place-specific, and diverse policy objectives frequently prevent generalizations in programme application, thorough monitoring and assessment of regional needs, opportunities and impacts of specific measures and instruments is required. It should be a particular focus of future programme preparation, that the place-specific needs and potentials would be carefully identified, and that programmes strengthen the effectiveness of the use of local/regional territorial assets.

Based on the challenges and opportunities for rural regions and the institutional framework for implementing rural policies across Europe a set of five different options is presented that indicates the range of the discussion for further adapting rural policies to the societal needs. The options:

- (i) Focus of "rural development" measures on internal coherence of agricultural policy
- (ii) Continuation of the present framework and improvement of the implementation process
- (iii) Strengthening an "integrated approach" within a broadly similar Pillar 2 framework
- (iv) Clear definition of responsibilities between agricultural, regional and social policies, and separation of Pillar 2 into specific policy sub-sets, and
- (v) Introduction of a new conceptual framework emphasising inclusive growth, territorial specificity and the importance of interactions between areas ("Rural Cohesion Policy"), offering greater scope for differentiated "place-based" intervention. The overarching objective will be to address the role of rural regions in European social and territorial development so that land use targets and cohesion objectives can be reconciled.

In view of this objective, a framework for the future programme period is required that takes account of the (long-term) experience of RDP implementation, the diversity of its application in different Member States and types of rural regions, and at the same time strengthens the link between programme conception and both societal changes, and the place-specific needs and opportunities of rural regions. The following recommendations aim to highlight aspects that should be kept in mind in the preparation for future activities of rural development policy:

- The initial task is the analysis and concentration on aspects for improved implementation of the current set of instruments. An important target is to reinforce the role of the second Pillar within the CAP. This involves an increased focus on the outcome of policy action and on orientation towards a place-based policy framework.
- As the shift from a "horizontal" programme structure to a "place-based" approach will face a number of obstacles; enhanced support for assessing policy outcomes, and relevant programme actions for rural areas, differentiated by the types of rural regions and Member States, will be required.
- One of the most wide-spread concern of evaluation studies and comments by experts is the high complexity of the administrative organisation involved with the implementation of CAP and RDPs. Policy reforms have to avoid further administrative demands. This is a particularly critical aspect with regard to integration/coordination of different sector policies which lead to a preference for proposals with clear distinctions in implementation procedures (but with sufficient attention towards coordination aspects, particularly in the conceptual phase). It seems particularly important to investigate how to secure effective steering and administration of programmes, paying sufficient attention to regional differentiation, and not only focus on strategic considerations, priorities and issues of contents in the reform discussion.
- In general, evaluation and policy assessment of the current programme support the orientation of objectives, the framework of RDP, and the set of measures available for application by MS and regions. There is an awareness of the high diversity of rural regions across Europe, and hence strong support for maintaining, and even extending, region-specific implementation priorities.
- It is important that these priorities are closely linked to the "needs" and opportunities of rural regions. This involves both the internal appreciation of the territorial situation and societal demands, and a European comparative view on divergent levels of development needs in different rural regions (focus on convergence regions, and different types of rural areas, including aspects of most peripheral regions and "Inner Peripheries").
- Pillar 2 practice has achieved strong support for agri-environmental development and for ANCs in many rural regions. It should be a target of future reforms to even improve environmental effects, relevance for the development of HNVs and effectiveness of the programmes to cope with marginalisation threats in peripheral and/or ANCs. In this regard, synergies with other CAP-measures and regional development support should be sought and intensified.
- In respect of programme up-take, specific attention should be paid to regions and Member States having difficulty providing co-funding for RDPs and hence lack basic requirements to engage in development action. Budgetary requirements for regions most in need of development action should be analysed carefully.

- The analysis of up-take of newly established measures for the period 2014-2020 revealed a rather limited use of these options (e.g. cooperation measure, risk prevention etc.). It might be necessary to allow for learning processes with regard to applying these instruments (in some MS and regions) and to carefully prepare application of these in the next period.
- A specific focus should be on elaborating further the use of social measures within RDPs. The increasing awareness for this type of instrument and the strong support by stakeholders for prioritizing such action will need further experience with regard to best-practice and institutional learning for implementing them in different regional contexts.
- The growth potential and socio-economic development of rural regions depend on their capacity to modernize the economic base and to initiate innovative processes making use of the specific amenities and opportunities of rural contexts. There is a need for addressing "social innovation" as a core prerequisite for institutional development and active rural policy.
- The further elaboration of LEADER and CLLD approach is a potential for addressing the territorial dimension and providing visible results to local communities. The strategic approach to prioritise the respective instruments should be sustained and even extended by designing "local development" as a specific objective and action field.
- Besides LEADER, also the cooperation measure includes the option for supporting "soft" measures that are particularly targeted at awareness raising, capacity building and networking activities. A focus on such measures seems highly relevant for the long-term enhancement of rural regions.

According to the analysis presented, the post-2020 rural development policy will be driven by strong, but territorially diverse needs that call for a continued and intensified action for rural policy support. The complex governance issues suggest that a completely different framework that would pay attention to the call for an "integrative" approach may not be feasible or realistic. Nevertheless, there are a number of considerations highlighted that would allow a stronger focus on a place-based approach, a more direct reference to rural needs and regional diversity, as well as a stronger focus to appreciate and nurture the resource potential and social innovation aspects in rural regions of Europe.

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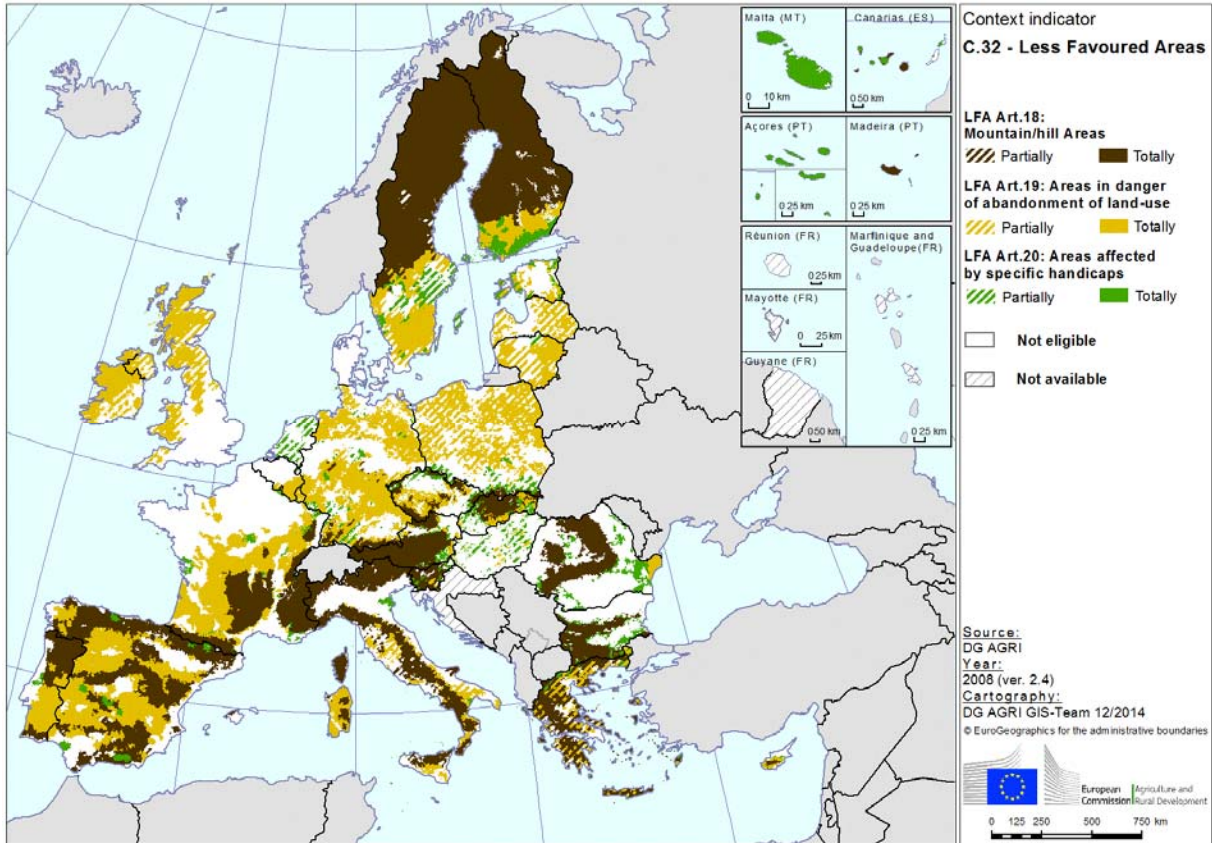
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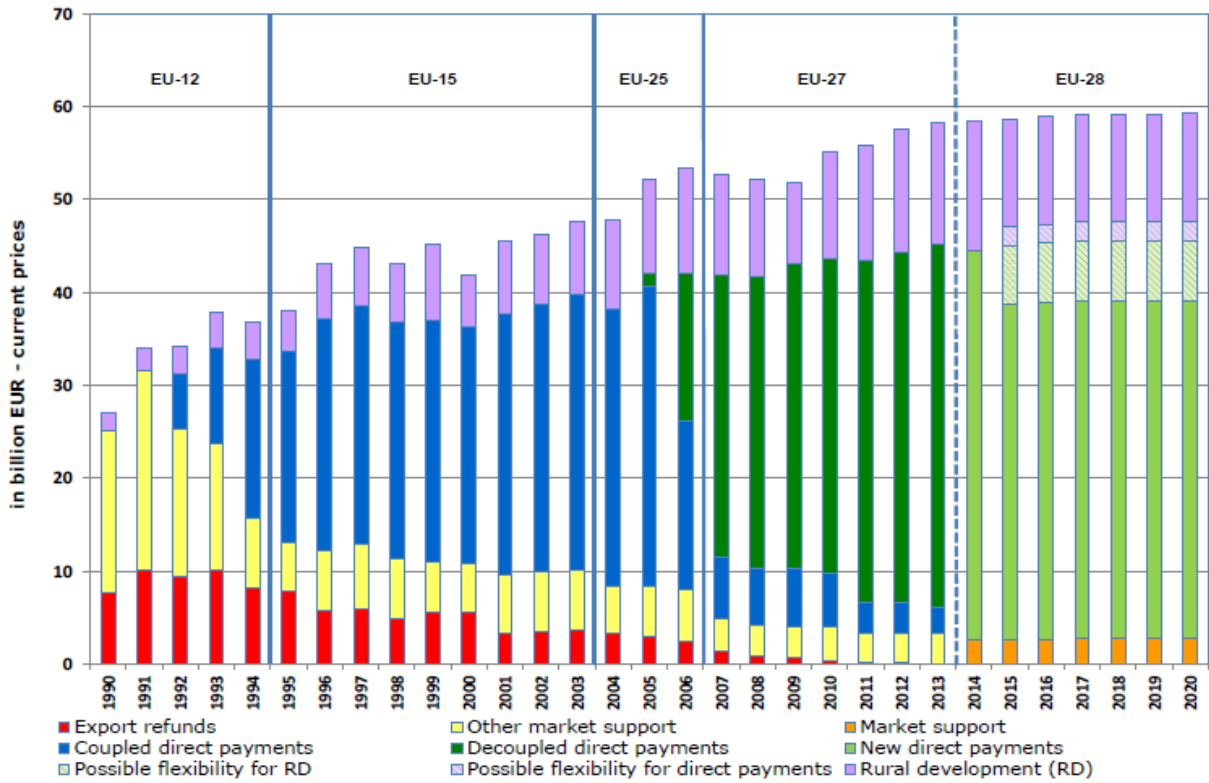
ANNEX

Figure A1: Less-Favoured Areas in EU-28



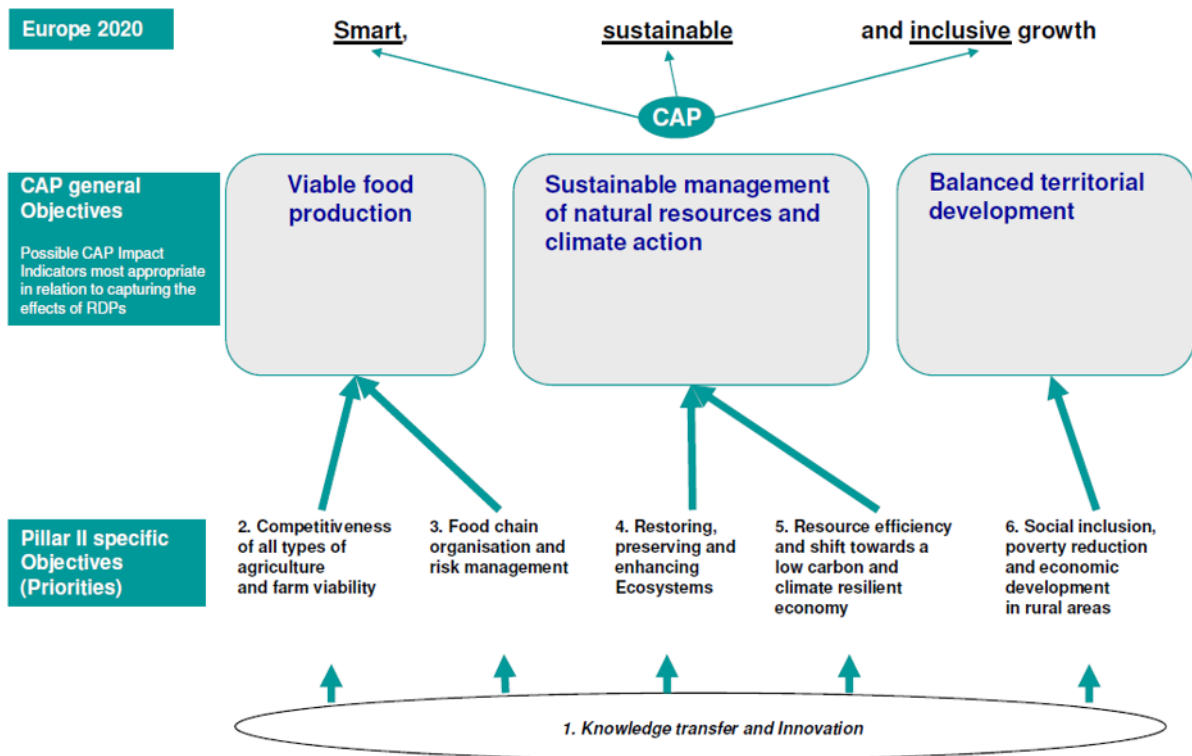
Source: EC 2014, context indicator 32, map 1.

Figure A2: Rural development expenditure within CAP, 1990-2020



Source: EC, Overview of CAP Reform 2014-2020, Agricultural Policy Perspectives Brief No. 5, Brussels, December 2013, 4.

Figure A3: Intervention logic for Pillar 2



Source: according to Resch and Hofer 2012, 7

Table T1: Indicative List of Measures with relevance to Priorities for Rural Development (Annex VI) and with relevance to thematic sub-programmes (Annex IV)

Reg 1305/2013	Measure	Relevant Priorities	Relevant thematic sub-programme
Article 14	Knowledge transfer and information actions	P1	young farmers, small farms, mountain areas, short supply chains, women, climate change/biodiversity
Article 15	Advisory services, farm management and farm relief services	Several priorities;	young farmers, small farms, mountain areas, short supply chains, women, climate change/biodiversity
Article 16	Quality schemes for agricultural products and foodstuffs	P2	small farms, mountain areas, short supply chains,
Article 17	Investments in physical assets	Several priorities;	young farmers, small farms, mountain areas, short supply chains, women, climate change/biodiversity
Article 18	Restoring agricultural production potential damaged by natural disasters and catastrophic events and introduction of appropriate prevention actions	P3	climate change/biodiversity
Article 19	Farm and business development	Several priorities;	young farmers, small farms, mountain areas, women,
Article 20	Basic services and village renewal in rural areas	P6	mountain areas, short supply chains, women, climate change/biodiversity
Article 21(1)(a)	Afforestation and creation of woodland	P4 and P5	
Article 21(1)(b)	Establishment of agroforestry systems	P4 and P5	mountain areas
Article 21(1)(d)	Investments improving the resilience and environmental value as well as the mitigation of potential forest ecosystems	P4 and P5	climate change/biodiversity
Article 24	Prevention and restoration of damage to forests from forest fires and natural disasters and catastrophic events	P3	
Article 26	Investments in forestry technologies and in processing in mobilising and in the marketing of forestry products	P1	
Article 27	Setting up of producer groups	P3	non-agric. activities, mountain areas, short supply chains,
Article 28	Agri-environment-climate	P4 and P5	mountain areas, climate change/biodiversity
Article 29	Organic farming	P4 and P5	climate change/biodiversity
Article 30	Natura 2000 and Water framework directive payments	P4 and P5	climate change/biodiversity
Article 31 -32	Payments to areas facing natural or other specific constraints	P4 and P5	mountain areas, climate change/biodiversity
Article 33	Animal welfare	P3	
Article 34	Forest-environmental and climate services and forest conservation	P4 and P5	climate change/biodiversity
Article 35	Co-operation	Several priorities;	young farmers, small farms, mountain areas, short supply chains, women, climate change/biodiversity

Article 36	Risk management	P3	climate change/biodiversity
Article 37	Crop, animal, and plant insurance	P3	
Article 38	Mutual funds for animal and plant diseases and environmental incidents	P3	
Article 39	Income stabilisation tool	P3	
Article 42 - 44	LEADER	Several priorities; P6	(young farmers), non-agric. activities, mountain areas, short supply chains, women

Source: Regulation 1305/2013

Table T2: Total public expenditure by priorities of RDPs (Million €), 2014-2020

MS	P2: Enhancing farm viability	P3: Promoting food chain organisatio n	P4: Ecosystem s	P5: Promoting resource efficiency	P6: Promoting social inclusion	Technical Assistanc e & Dissemi- nation	Total
BG	371.9	272.9	983.1	430.6	815.2	44.1	2,917.8
CY	34.0	14.9	112.2	25.7	42.5	32.3	261.5
EL	1,099.1	503.0	1,640.6	488.1	883.6	79.7	4,694.1
IE	291.5	56.0	2,873.0	439.0	250.0	10.9	3,920.4
LV	476.1	82.0	574.6	75.1	263.3	87.5	1,531.6
LT	608.6	163.5	571.5	185.5	290.8	157.8	1,977.8
NL	432.6	54.0	675.9	0.0	110.5	43.4	1,316.3
PL	4,474.8	1,659.6	4,160.6	301.0	2,148.9	768.3	13,513.3
RO	1,864.2	995.4	2,813.7	1,025.8	2,563.7	209.8	9,472.6
SE	358.6	189.2	2,624.3	76.8	895.3	156.1	4,300.3
HR	573.2	279.0	657.6	200.6	468.2	166.9	2,345.6
CZ	552.1	240.0	1,976.7	24.2	231.3	50.0	3,074.2
DK	157.1	0.0	576.1	71.3	54.8	25.2	884.6
EE	283.5	105.0	365.6	23.8	176.0	38.9	992.8
HU	716.0	772.0	1,203.4	629.2	753.2	99.3	4,173.0
LU	113.4	0.0	236.0	4.0	11.1	3.6	368.1
SK	374.3	400.4	896.5	19.2	310.1	79.1	2,079.6
SI	223.6	101.9	554.8	0.0	168.0	38.6	1,086.8
AT	850.5	467.0	5,085.8	242.2	823.8	231.0	7,700.3
MT	17.7	15.9	52.5	25.3	13.3	5.2	129.8
IT	5,169.0	4,113.2	6,989.9	1,598.1	2,434.2	569.5	20,873.9
FR	3,402.3	775.4	8,983.0	1,014.3	1,929.6	238.0	16,342.6
BE	560.9	40.4	578.9	240.4	135.1	23.2	1,579.0
DE	2,074.5	744.9	6,917.1	650.5	3,419.1	330.8	14,136.9
FI	1,033.9	562.0	5,743.3	150.4	763.6	71.3	8,324.6
UK	886.1	2,234.0	5,155.5	465.3	755.7	129.0	7,625.6
PT	1,726.0	117.2	1,340.4	962.9	469.1	103.9	4,719.5
ES	2,912.7	1,788.8	4,456.9	1,758.0	1,582.5	272.6	12,771.3
EU Total	31,638.3	14,747.3	86,799.6	11,127.4	22,735.3	4,066.0	153,114.0

Source: Dwyer et al. 2016 (calculation of total public expenditure for 118 RDPs)

Table T3: Final allocations to RDPs by MS, EAFRD funds, 2014-2020

Member State	Total EAFRD funds 2007-2013	Total EAFRD funds 2014-2020	change 2007-2013 to 2014-2020 (in %)
Belgium	487,484,306	647,797,759	33
Bulgaria	2,642,248,596	2,366,716,966	-10
Czech Republic	2,857,506,354	2,305,673,996	-19
Denmark	577,918,796	918,803,690	59
Germany	9,079,695,055	9,445,920,050	4
Estonia	723,736,855	823,341,558	14
Ireland	2,494,540,590	2,190,592,153	-12
Greece	3,906,228,424	4,718,291,793	21
Spain	8,053,077,799	8,297,388,821	3
France	7,584,497,109	11,384,844,249	50
Croatia		2,026,222,500	-
Italy	8,985,781,883	10,444,380,767	16
Cyprus	164,563,574	132,244,377	-20
Latvia	1,054,373,504	1,075,603,782	2
Lithuania	1,765,794,093	1,613,088,240	-9
Luxembourg	94,957,826	100,574,600	6
Hungary	3,860,091,392	3,430,664,493	-11
Malta	77,653,355	97,326,898	25
Netherlands	593,197,167	765,285,360	29
Austria	4,025,575,992	3,937,551,997	-2
Poland	13,398,928,156	8,697,556,814	-35
Portugal	4,059,023,028	4,058,460,374	0
Romania	8,124,198,745	8,127,996,402	0
Slovenia	915,992,729	837,849,803	-9
Slovakia	1,996,908,078	1,559,691,844	-22
Finland	2,155,018,907	2,380,408,338	10
Sweden	1,953,061,954	1,763,565,250	-10
United Kingdom	4,612,120,420	5,195,417,491	13
Total EU	96,244,174,687	99,343,260,365	3

Source: European Commission, 2016; quoted from Dwyer et al. 2016, 22.

Table T4: CAP Pillar 1 and Pillar 2 funding by MS, in '000 EUR

Member State	Pillar1 national ceiling ^{180*} in 2019	% change Pillar1 from 2007-2013 to 201020	Average RDP/year, 2014-2020 after national adjustment**	Approximate Pillar2 as % of CAP total***
Belgium	481900.0	-21.63	92.54	0.02
Bulgaria	792500.0	36.61	338102.4	29.90
Czech Republic	856700.0	-5.78	329382	27.77
Denmark	818300.0	-21.99	131.25	0.02
Germany	4792600.0	-18.12	1349417	21.97
Estonia	143900.0	42.19	117.62	0.08
Ireland	1211000.0	-9.69	312941.7	20.54
Greece	2022400.0	-8.76	674041.7	25.00
Spain	4953100.0	-3.62	1185341	19.31
France	7189500.0	-15.63	1626406	18.45
Croatia	316200.0	n/a	289460.4	47.79
Italy	3702400.0	-15.28	1492054	28.72
Cyprus	48600.0	-9.16	18.89	0.04
Latvia	279800.0	90.99	153657.7	35.45
Lithuania	517000.0	36.02	230441.1	30.83
Luxembourg	33400.0	-9.97	14.36	0.04
Hungary	1273900.0	-3.42	490094.9	27.78
Malta	5200.0	1.96	13.90	0.27
Netherlands	700800.0	-21.94	109.32	0.02
Austria	691700.0	-7.97	562507.4	44.85
Poland	3430200.0	12.67	1242508	26.59
Portugal	599400.0	-1.09	579780	49.17
Romania	1903200.0	50.51	1161142	37.89
Slovenia	134300.0	-6.87	119.69	0.09
Slovakia	448700.0	15.58	222813.1	33.18
Finland	524600.0	-8.05	340058.3	39.33
Sweden	699700.0	-9.24	251937.9	26.47
United Kingdom	3200800.0	-19.74	742809.4	18.84
Total EU	41771800.0	-7.30	14,192,501	25.36

All data sourced from CREA study, Henke et al, 2015 (tables 1.5 and 1.6)

*Allocation revised in the light of transfer between pillars, transfer to RDPs of amounts from degressivity/capping and national implementation (the latter as in Regulation (EU) no. 994/2013)

** Figures in table 4 divided by 7, to indicate average levels of annual spending over the period

*** Figures calculated by dividing the RDP/year figure in column 2 by the sum of columns 2 and 4, for each MS

Source: Henke et al. 2015; quoted from Dwyer et al. 2016, 31.

¹⁸⁰ Note: this includes *all Pillar 1 expenditures*, including Pillar 1 decoupled direct payments, remaining coupled aids and specific support for young farmers, ANCs and other targets. The proportion of this ceiling that is devoted to decoupled area payments varies from 12% in Malta to 68% in the UK.

Table T5: Quantitative targets of RDPs, 2015-2020

Priority	Indicator	Target
1	Training places	3.9 mio.
	Share of RDP budget	3.9%
	Cooperation projects	12,250
2	Farm holdings with investments in restructuring or modernisation	335,000 (2.8% of holdings)
	Holdings with business development plan/investment for young farmers	175,500 (1.5% of holdings)
3	Holdings participating in quality schemes, short supply chains or producer groups	300,00
	Holdings in risk management schemes	645,000
4	Agricultural land under contracts supporting biodiversity or landscape	17.7%
	Forest area under contracts supporting biodiversity or landscape	3.5%
	Agricultural land under contracts to improve water management	15.0%
	Forest land under contracts to improve water management	4.3%
	Agricultural land under contracts to improve soil management/prevent erosion	14.3%
	Forest land under contracts to improve water management/prevent erosion	3.6%
5	Agricultural land under contracts targeting reduction of GHG or ammonia emissions	7.6%
	Livestock units concerned by investments to reduce GHG or ammonia emissions	2.0%
	Land switching to more efficient irrigation systems	15.0%
	Investment in energy efficiency (in bio. €)	2.8
	Investment in renewable energy (in bio. €)	2.7
	Agric. and forest land to foster carbon sequestration/conservation	4.0%
6	Non-agricultural jobs created	117,500
	thereof in relation to diversification and SMEs	73,000
	thereof through LEADER groups	44,500
	Rural citizens benefitting from improved services (Mio.)	51.0
	Rural citizens affected by a Local Development Strategy (Mio.)	153.0
	Rural citizens benefitting from improved access to ICT and infrastructure (Mio.)	18.0

Source: EC, overview of the 118 different RDPs for 2014-2020.

http://ec.europa.eu/agriculture/rural-development-2014-2020/country-files/common/rdp-list_en.pdf

Table T6: Policy Orientations and Conclusion of the Cork 2.0 conference Declaration**CORK 2.0 DECLARATION 2016****A Better Life in Rural Areas****Policy Orientations**

We, the participants at the Cork 2.0 European Conference on Rural Development, declare that an innovative, integrated and inclusive rural and agricultural policy in the European Union should be guided by the following ten policy orientations.

- Point 1: Promoting Rural Prosperity**
- Point 2: Strengthening Rural Value Chains**
- Point 3: Investing in Rural Viability and Vitality**
- Point 4: Preserving the Rural Environment**
- Point 5: Managing Natural Resources**
- Point 6: Encouraging Climate Action**
- Point 7: Boosting Knowledge and Innovation**
- Point 8: Enhancing Rural Governance**
- Point 9: Advancing Policy Delivery and Simplification**
- Point 10: Improving Performance and Accountability**

Conclusion

We, the participants of the cork 2.0 European Conference on Rural Development, urge the policy makers of the European Union to:

- Improve public awareness of the potential of rural areas and resources to deliver on a wide range of economic, social, and environmental challenges and opportunities benefitting all European citizens;
- Invest in the identity of rural communities, the potential for rural growth and to make rural areas attractive for people to live and work in throughout the different stages of their lives;
- Build on this momentum and further develop the agricultural and rural policy towards a result-oriented simple, and flexible approach, based on partnership and reflecting Union objectives as well as the needs and aspirations on the ground;
- Systematically review other macro and sectorial policies through a rural lens, considering potential and actual impacts and implications on rural jobs and growth and development prospects, social well-being, and the environmental quality of rural areas and communities;
- Support this 10-point programme and incorporate its vision and orientations into future policy development.

Source: Cork 2.0 Declaration 2016

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