

# APPENDIX 1

## Why further reform?

Alan Matthews

### Introduction

The EU will spend €363 billion in 2011 prices on the Common Agricultural Policy (CAP) during the period of the 2014-2020 Multiannual Financial Framework (MFF), accounting for 38% of EU spending during this period (European Commission, 2016e). The CAP's share in the total EU budget has been falling, but it is still high. This high share is explained on the grounds that the CAP is the EU's only truly common spending policy. But as the EU faces another set of bruising negotiations on the next MFF post-2020, it is inevitable that this budget will again come under scrutiny. Indeed, the then Commissioner for Budget and Human Resources Kristalina Georgieva indicated as much in her presentation at the EU Presidency Conference organised by the Dutch Presidency opening the debate on the next MFF in January 2016. In her address she questioned whether the CAP as reformed in 2013 is achieving a sufficiently high degree of European value added and whether the greening of the CAP is working.<sup>1</sup>

This chapter seeks to respond to the challenge in the first part of the Budget Commissioner's question. It asks whether the current design and scale of the CAP is fit for purpose and whether the European taxpayer gets value for money from current CAP expenditure. When measured against the objectives of the CAP, the answer must be a resounding no, and this provides the basis for arguing that further reform is required. This chapter sets out the evidence behind this conclusion.

The CAP's formal objectives were set out in the Treaty of Rome and have not been updated since. As set out in Article 39 of the Treaty on the Functioning of the European Union, they are to increase agricultural productivity, to ensure a fair standard of living for farmers by increasing the individual earnings of persons engaged in agriculture, to stabilise markets and to ensure food security. The CAP is also expected to contribute to the higher-level and wider commitments into which the EU has entered over time. These include, for example, commitments to improve the

quality of Europe's waters, to combat air pollution and to halt the decline in biodiversity.

The CAP 2013 reform recognised that the challenges to EU agriculture have become broader and more complex. Among the factors contributing to this, the Commission identified **economic pressures** such as the deterioration in agricultural terms of trade, the erosion of the sector's competitive potential and the challenge of further liberalisation of agricultural markets; increased **environmental threats** such as climate change and the loss of biodiversity; and **territorial needs** such as keeping the great diversity of rural areas in the EU vital and attractive (European Commission, 2011b). Based on this analysis, the Commission put forward three broad policy objectives for the future CAP linked to the overall objectives of smart, sustainable and inclusive growth in the Europe 2020 strategy:

- **Contributing to a viable, market oriented production of safe and secure food** throughout the EU by acting on drivers related to income derived from the market (improving farmers' capacity to add value to their production, improving the functioning of the food supply chain in a pro-competitive way, providing a safety-net in case of excessive price drops), promoting sustainable consumption, enhancing the competitiveness of agricultural holdings (innovation, modernisation, resource efficiency, addressing production difficulties in areas with natural constraints) and helping farmers to deal with income volatility and the below average income and productivity of the sector (income support, risk management for economic and public health risks).
- **Ensuring the sustainable management of natural resources**, such as water and soil, and the provision of environmental public goods such as preservation of the countryside and biodiversity, integrating and promoting climate change mitigation and enhancing farmers' resilience to the threats posed by a changing climate, fostering green growth through innovation and reducing environmental damage by agriculture.
- **Contributing to the balanced territorial development** and thriving rural areas throughout the EU by responding to the structural diversity in farming systems and assuring positive spill-over effects from agriculture to other sectors of the rural economy and

<sup>1</sup> [http://ec.europa.eu/commission/2014-2019/georgieva/announcements/speech-vice-president-kristalina-georgieva-eu-presidency-conference-multiannual-financial-framework\\_en](http://ec.europa.eu/commission/2014-2019/georgieva/announcements/speech-vice-president-kristalina-georgieva-eu-presidency-conference-multiannual-financial-framework_en), accessed 26 December 2016.

vice-versa, improving their attractiveness and economic diversification" (European Commission, 2011b).

Since the conclusion of the last CAP reform in 2013, three further important political commitments have been made. First, the Juncker Commission took office in October 2014 on a political platform based on, among other priorities, jobs and growth (Juncker, 2014). In his mission letter to incoming Commissioner for Agriculture and Rural Development Phil Hogan, President Juncker stressed the need for the CAP to contribute to the jobs and growth agenda as well as the need to pursue flexibility and simplification of the CAP instruments.<sup>2</sup>

Second, world leaders adopted at the 70th UN General Assembly on 25 September 2015 a new global sustainable development framework: the 2030 Agenda for Sustainable Development having at its core the Sustainable Development Goals (SDGs). The 17 SDGs and their 169 associated targets are global in nature, universally applicable and interlinked. These 2030 goals now form the basis for the EU's long-term planning including sectoral policies such as the CAP for the next MFF period (European Commission, 2016b).

Third, in December 2015, the United Nations Framework Conference on Climate Change, COP21, set out a global action plan in the Paris Agreement to put the world on track to avoid dangerous climate change. It sets out a long term goal to limit global warming to well below 2°C above pre-industrial levels – and to pursue efforts to limit the temperature increase to 1.5°C. It will require significant changes in behaviour and incentives across most areas of human activity, especially agriculture.

The CAP has undergone significant changes in a series of reforms since 1992. Support to farm products through market regulation has been replaced by support to individual producers through direct payments. Expenditure on rural development, including farm modernisation and land management, has grown in importance. However, the bulk of CAP expenditure is delivered in the form of (mostly) area-based decoupled payments. Direct payments make up 72% of the CAP budget and account for 28% of the EU budget (Table 1.1). Border protection through the EU's Common External Tariff as well as Common Market Organisation (CMO) regulations are also important instruments of agricultural policy, but it is particularly the predominant role played by area-based direct payments which attracts controversy (Matthews *et al.* 2017).

**Table 1.1: The importance of direct payments in EU agricultural policy**

	2003-05	2013-15
	€ million	€ million
Direct payments	31,075.09	40,850.22
CAP budget	45,474.80	56,880.72
EU budget	98,510.71	145,403.05
Memo items	%	%
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: Matthews (2016a). The successive enlargements of the EU in 2004, 2007 and 2013 should be kept in mind in interpreting these figures.

Leading figures have expressed different views on the future role of direct payments. Commissioner Hogan has declared his "determination that basic income support and an effective safety net will continue as an essential element of any new CAP through a system of direct payments".<sup>3</sup> On the other hand, the report of the Agricultural Markets Task Force noted: "The potential of such a targeted [risk management] policy and the shortcomings of the current direct payment regime, in particular its blanket nature which does not target actual needs and its effect on land and input prices, are such that we suggest exploring a resource shift to an approach which channels CAP money into a genuine and predictable safety-net for farmers to apply in times of market imbalance" (Agricultural Markets Task Force, 2016).

For these reasons, this paper focuses particularly on the role played by direct payments in achieving the objectives of the CAP. Direct payments were introduced into the CAP in 1995 as compensation for lower market price support. This was an important change which, over the following two decades, facilitated the move to more market-oriented producer prices. Today, however, it is very hard to justify such continued compensation for policy change. Various other justifications have since been supplied to legitimise maintaining the system of decoupled direct payments. We examine the most important arguments in this paper and find them unconvincing. There is an urgent need for a further reform of the CAP.<sup>4</sup>

3 Speech by Commissioner Phil Hogan at the Agricultural Outlook Conference - 6th December 2016, Brussels, [http://ec.europa.eu/commission/2014-2019/hogan/announcements/speech-commissioner-phil-hogan-agricultural-outlook-conference-6th-december-2016-brussels\\_en](http://ec.europa.eu/commission/2014-2019/hogan/announcements/speech-commissioner-phil-hogan-agricultural-outlook-conference-6th-december-2016-brussels_en), accessed 10 December 2016.

4 This paper draws on and extends the analysis contained in my report on the future of direct payments for the AGRI Committee of the European Parliament, see Matthews (2016a).

It is helpful to clarify the meaning of direct payments before we proceed. This term is used more or less broadly in discussing agricultural support measures. In the broadest sense, direct payments refer to all budgetary transfers to individual farmers from the government. They include, for example, payments for income support, agri-environment schemes, investment aids and less favoured area payments; in fact, all agricultural support with the exception of market price support paid for by consumers. Within the CAP, direct payments are usually defined more narrowly to mean payments to farmers under Pillar 1 of the CAP. Since the 2013 reform, these include the Basic Payment, the greening payment, the redistributive payment, coupled payments, the small farm payment and young farmers' payment. This is the definition used in showing the importance of direct payments in EU agricultural policy in Table 1.1.

Within the CAP Pillar 1 direct payments, particular attention is paid to decoupled payments, which accounted for 93% of the total in the 2015 financial year (DG AGRI, 2016). In this chapter, our critique of direct payments is directed at direct payments financed by Pillar 1 of the CAP. This critique accepts fully that budgetary transfers to farmers can be justified on the grounds of various forms of market failure, grounds which are developed more fully in other chapters of this report. Indeed, the purpose of this chapter is to argue that the objectives which are now partially and wastefully addressed by CAP Pillar 1 direct payments could be addressed more effectively, efficiently and equitably by a redesigned system of contractual payments explicitly targeted to specific outcomes for which society is prepared to pay.

## 1 Do direct payments increase farm incomes?

The combination of low labour productivity in agriculture, leading to low returns to agricultural labour, a reduction in the agricultural labour force, growing farm consolidation and an unbalanced age structure, forms the backdrop to agricultural policy in the EU. These trends are, not surprisingly, resisted by those who continue to work in the sector, not least because, once a farmer takes over a farm, he or she is less likely to change occupations or to retire early than workers in other occupations.<sup>5</sup> For those remaining in the sector, 'exit' becomes an increasingly difficult option, so they turn to 'voice' (Hirschman, 1970). This translates into political action demanding the transfer of resources from the rest of society to compensate for lagging living standards. In terms of EU agricultural policy,

5 Admittedly, empirical evidence for this statement referring to European farmers is hard to identify. It is also the case that, in many European countries, part-time off-farm employment provides an alternative route to occupational change when a farmer seeks additional income. Nonetheless, in other sectors, self-employed persons faced with a low or falling income are more likely to seek alternative employment than in the case of farm occupiers for whom handing on the farm to another family member is an important motivation.

this has manifest itself in high border protection against low-cost imports and budgetary transfers in the form of direct payments which are claimed 'for income support'.

Together with the desire to promote a high level of food self-sufficiency to guarantee food security (an issue taken up in a later section), an important argument for agricultural support in the EU has thus been to provide income support to farmers whose incomes are assumed to fall behind incomes in the non-farm sector because of these structural characteristics of agricultural production. It has been a central objective of the CAP since its initiation to achieve "a fair standard of living for the agricultural community".

### 1.1 High dependence on direct payments

Farm groups have been spectacularly successful in attracting public transfers. 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 facing natural constraints are added, the total rises to 33%.<sup>6</sup> For individual countries the percentages can be higher, and for individual enterprises within countries (e.g. beef farming) the percentages can be much 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 Rural Development Programme payments, or other types of state aids. These payments can be compared to farm net income in the FADN database (similar to the concept of entrepreneurial income in the economic accounts for agriculture). Farm net income is the amount left over for farm families or entrepreneurial income after paying for external factors of production. It is arguably a better indicator of the return *from farming* for farm households than is agricultural factor income in countries where agricultural production is organised in family farms.

6 Figures from DG AGRI, "Share of direct payments and total subsidies in agricultural factor income", available at [http://ec.europa.eu/agriculture/cap-post-2013/graphs/graph5\\_en.pdf](http://ec.europa.eu/agriculture/cap-post-2013/graphs/graph5_en.pdf), accessed 24 May 2016.

**Table 1.2. Importance of direct payments by farm system, EU-27, 2011-2013**

	Field crops	Horti-culture	Wine	Other permanent crops	Milk	Other grazing livestock	Grani-vores	Mixed	Total
<b>Farm income depending on direct aids</b>	55%	7%	9%	29%	41%	70%	22%	61%	44%
<b>Farm income depending on other subsidies</b>	13%	3%	5%	7%	17%	31%	8%	21%	15%
<b>Farm income depending on market factors</b>	32%	90%	87%	64%	42%	-1%	69%	18%	41%

Source: Own calculations based on 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.<sup>7</sup> 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) (Matthews *et al.* 2017).

The importance of public transfers differs greatly across farm systems (Table 1.2). 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 arable and 'other grazing livestock' farms. Indeed, for the latter group, total public transfers (101%) actually slightly exceeded farm net income. 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.

This apparently high dependence of farm income on direct payments understandably makes farmers nervous if there is a suggestion that these payments might be reduced. However, there are several reasons why these figures overestimate the likely impact of a reduction in payments on farm income. Also, given that there is a case for making direct payments to farmers, are decoupled area-based direct payments the right way to provide these?

### 1.2 Total farm household income

To assess the relative income of farmers and non-farmers, 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"*.

7 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 due to the capitalisation effect mentioned in the chapter. Despite these caveats, this partitioning provides useful insights into the dependence of different types of farming on the different components of income.

Of course, the statistics on which the relevant comparisons were made reflect the income transfers included in farm income.

### 1.3 Direct payments and structural change

As a way of solving the low-returns problem in agriculture, political transfers can only act, at best, as a temporary palliative. Despite the assumption of limited mobility in the short-run, the agricultural labour force does respond to the differences in returns between the farm and the non-farm sector. Returns to farm labour are lower than in the non-farm sector, but there is no evidence that this disparity is increasing over time. It is thus not too big a stretch to think of agriculture as a perfectly competitive sector in which resources are allocated in accordance with relative returns.

If the political response to industry lobbying is to provide transfers to farmers, what will be the outcome? In the short-run, relative farm incomes will increase. However, this relative improvement in incomes will be short-lived as, ultimately, the effect of the transfer is to maintain a larger number of people working in agriculture than would otherwise be the case. In the longer run, the effect of the transfer is to influence the structure of agriculture rather than improve individual farm incomes.<sup>8</sup>

Direct payments can, in principle, influence the entry, growth and exit of farms. Part of 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 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 from survey intentions and simulation modelling (Bartolini and Viaggi, 2013; Brady et al., 2009) that decoupled payments slow 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 the unbalanced age structure and the need for generation renewal in EU agriculture. The Young Farmers Scheme was introduced as part of Pillar 1 direct payments in the 2013

8 As discussed in the next section, direct payments also lead to an increase in the prices of fixed factors of production and variable inputs. However, to the extent that these are owned or provided by farmers (for example, around half of the EU agricultural area is owner-occupied and the other half rented), this is perceived as an increase in farm income and thus will tend to slow the rate of structural change.

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. 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 generational renewal.

### 1.4 Leakages to unintended beneficiaries reduce the value of support.

Not all payments from the CAP budget show up in terms of higher farm income. There is a considerable leakage of these payments so that farmers are not the ultimate beneficiaries. 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 reason why a great share of direct payments ends up in the pockets of others. The main reason why farmers capture only a proportion of the direct payments is that much of the benefits leak away to the suppliers of farm inputs and the owners of land, many of whom are non-farmers. The latter occurs through the process of capitalisation, in which the benefits of support are bid into higher land rents or higher land values (Latruffe and Le Mouél, 2009).

Agricultural economists refer to the extent to which one euro of support provided by taxpayers and consumers ends up benefiting farmers as the transfer efficiency of support. If farm household income goes up by one euro for every euro of support, then the transfer efficiency of that support would be 100%. In practice, such as perfect measure of transfer efficiency is never achieved. The OECD undertook some theoretical work to quantify the extent of transfer inefficiency across different agricultural support instruments (OECD 2003). In its analysis, area-based payments which required farmers to undertake production was the most efficient instrument (compared to market price support, deficiency payments or input subsidies) at transferring income to farmers but still only one-half of the original support ended up in farmers' pockets. This analysis does not carry over directly to decoupled area payments for which no production is required but it is suggestive of the scale of leakages that arise.

In the case of payments based on area, the major source of leakage is to non-farming landowners although other input suppliers may also benefit. 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 away from those working the land and benefiting those not directly engaged in agriculture 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 (Matthews *et al.* 2017). 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 *et al.*, 2016).<sup>9</sup> 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.

There would be some concern that a sharp drop in land values as a result of removing CAP Pillar 1 direct payments could lead to financial difficulties for farms that are highly-indebted. However, a feature of land prices in EU countries is that they are generally well above what their use value in agricultural production alone would justify. This can be explained by the fact that owning rural land brings with it many aesthetic, social, emotional, investment as well as fiscal benefits in the high population density countries of Europe. Thus, while there would certainly be a short run impact on land prices if payments were reduced suddenly and completely, this impact on land prices would be moderated if it were clearly pre-announced and then phased in over a period of years, and where alternative payments were made to farmers in return for the provision of ecosystem services and environmental assets.

### 1.5 Significant structural heterogeneity

If direct payments were intended to raise farm incomes to “a fair standard of living”, we would expect them to go mainly to relatively smaller farms with lower farm incomes. In practice, however, most payments go to a relatively small number of farms, and these farms tend to have farm incomes well above the median in the EU. This reflects the highly skewed distribution of farm sizes in the EU and is an inevitable consequence of relying on an area-based payment for income support.

There were a total of 10.8 million farms in the EU-28 in 2013; the vast majority of these were relatively small. Romania accounted for one third (33.5%) of these farms, while Poland accounted for a further 13.2%.<sup>10</sup> 4.4 million farms had a standard output<sup>11</sup> that was less than EUR 2 000, while a further 3.1 million farms had an output within the range of €2, 000–€8,000. Together these very small

and small farms accounted for more than two thirds (69.1%) of all the farms in the EU-28, whereas their share of standard output was considerably lower, at 5.0%. Many of these small and very small farms are subsistence holdings that are also below the threshold where they would be able to claim CAP payments. Across the whole of the EU-28, almost three quarters (74.4%) of very small farms (in economic terms) consumed more than half of their own production in 2013, while just over two fifths (42.6%) of small farms were classified as subsistence holdings. By contrast, there were 680,000 farms in the EU-28 with a standard output of at least €100,000; these very large farms accounted for 6.3% of the total number of farms and for 71.4% of the agricultural standard output in 2013. Note that these very large farms may have a significant number of employees, so that on a per capita basis the distribution of support would not look quite so skewed. However, there is no evidence that farm workers receive higher wages than market conditions dictate simply because the farm holding on which they work is a big recipient of direct payments. It is a reasonable assumption to make that the great bulk of payments accrue to those owning the farm and not to those working on it.

Similar heterogeneity is revealed using a definition of farm size based on the physical size of farms, as measured by their utilised agricultural area. This is a more relevant statistic for the distribution of area-based direct payments. In 2013, there were 4.9 million physically very small (< 2 hectares of utilised agricultural area) and 4.5 million physically small (2 – 20 hectares) farms in the EU-28. Together, this group of 9.4 million farms with less than 20 hectares of utilised agricultural area accounted for almost 9 out of 10 (86.3%) farms in the EU and for more than two thirds (68.1%) of the labour force directly working on farms. However, their share of the utilised agricultural area stood at less than one fifth (18.5%) of the total.

By contrast, there were 337,000 physically large farms in the EU-28 - defined as those with at least 100 hectares of utilised agricultural area. Together they accounted for 3.1% of all farms in 2013 and for 12.5% of the total agricultural labour force that was directly working on farms. Their share of the total utilised agricultural area was considerably higher, at 52.1%. Given that these physically large farms occupied more than half of the total agricultural area, the farming practices that they adopt may be considered to be particularly important from an environmental perspective.

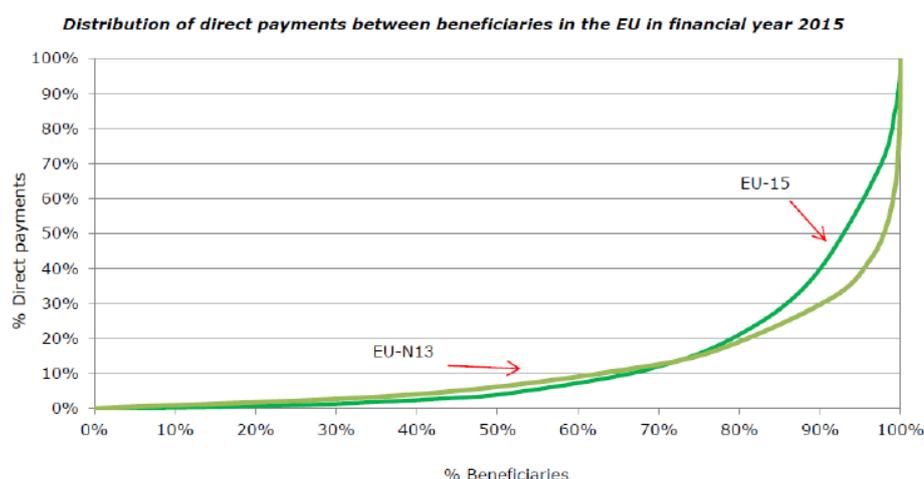
### 1.6 Direct payments are highly concentrated

Reflecting this heterogeneity in farm structures, DG AGRI's annual report on direct payments shows they are not equally distributed among beneficiaries in the European Union. The graph on the distribution of payments from the most recent report for the 2015 financial year (thus covering direct payments made to farmers in 2014 as Member States are reimbursed in the following financial year) is shown in Figure 1.1. It confirms that the oft-quoted statistic that 80% of direct payments go to just 20% of farmer beneficiaries is alive and well; indeed, the

9 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).

10 The statistics in this section are drawn from Eurostat (2016)

11 The standard output (SO) of an agricultural product (crop or livestock) is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock. There is a regional SO coefficient for each product, as an average value over a reference period (usually 5 years). The sum of all the SO per hectare of crop and per head of livestock in a farm is a measure of its overall economic size, expressed in euro, see [http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard\\_output\\_\(SO\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Standard_output_(SO)).

**Figure 1.1: Distribution of direct payments between beneficiaries in the EU in the financial year 2015**

Source: DG AGRI (2016)

distribution is even more skewed in Bulgaria and Romania than in other Member States (DG AGRI, 2016).

Because the 2015 financial year was a transitional year between the previous and new systems of direct payments, it does not reflect the full impact of the 2013 reform. The 2013 CAP reform attempted to reduce the degree of inequality in the distribution of payments through three mechanisms, external and internal convergence, degressivity/capping and the redistributive payment.

External convergence was the process of redistributing support between Member States while taking account of the differences that still exist in wage levels and input costs. Member States that have direct payments per hectare below 90% of the Union average should close one third of the gap between their current level and this level, with all Member States arriving at a minimum level by financial year 2020, representing roughly 75% of the Union average. Internal convergence is the process whereby historical references for decoupled payments are progressively removed. Member States could choose from a range of options, with the aim of reducing divergences in the level of aid per hectare within a Member State or region.

Degressivity required Member States to reduce basic payments over €150,000 per farm by a minimum of 5%. Member States could opt for any reduction percentage up to 100% (capping), 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 degressivity/capping is, in practice, very limited. The total amounted to €109 million in 2015, almost two-thirds of which is accounted for by Hungary (Matthews, 2016a).

A potentially more equalising measure was the 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 amount involved in the redistributive payment is larger than that affected by degressivity/capping, amounting to €1.25 billion in 2015. 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.

### **1.7 Direct payments are concentrated on farms with higher incomes**

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.

This exercise has now been done for the first time using FADN farm data adjusted to take into account the fact that the population of farms covered by the FADN sample excludes the very smallest holdings (see Matthews, 2016b for the methodology and caveats with the approach). In line with the evidence on the skewed structure of agricultural holdings by land use documented earlier, over half of farm income on EU farms is earned by the top decile of farms with an average farm net income of €66,083 in 2013 (Table 1.3). There are around 750,000 farms in this decile. These farms also receive over half of the CAP Pillar 1 direct payments budget. This is partly because direct payments make a bigger contribution to farm net income at higher

**Table 1.3: Direct payments distributed by farm income decile in the EU, 2013**

Farm income decile (lowest to highest)	Average FNI/decile	Average DPs/decile	Total FNI by decile	Total DPs by decile	Cumulative FNI by decile	Cumulative DPs by decile
	€	€	€m	€m	%	%
1	940	313	707	236	0.8%	0.6%
2	940	313	707	236	1.5%	1.1%
3	940	313	707	236	2.3%	1.7%
4	2,371	892	1,783	671	4.2%	3.2%
5	3,089	1,182	2,323	889	6.8%	5.3%
6	4,870	1,990	3,663	1,496	10.7%	8.8%
7	9,444	4,064	7,103	3,057	18.4%	16.0%
8	11,447	5,232	8,609	3,935	27.8%	25.2%
9	22,349	11,324	16,809	8,517	46.0%	45.2%
10	66,083	31,127	49,701	23,411	100.0%	100.0%

Source: Matthews (2016b). FNI is Farm Net Income as defined in the FADN database. Total beneficiaries are 7.5 million farms.

incomes. For the two highest farm income deciles, direct payments contribute 48% of farm net income whereas for the lower farm income deciles the share is between 38% and 48%.<sup>12</sup> Just 5% of direct payments go to farms with incomes below the median farm (i.e. farms in the lowest five farm deciles), while 95% of payments go to farms with incomes from farming above the median. Again, we should note that these larger farm businesses are likely to employ significant numbers of farm workers although, as noted earlier, the way the labour market works for farm workers means that they are unlikely to be beneficiaries of these payments to any extent.

To summarise, if direct payments are intended to support farms with low farm incomes, they are very badly targeted. The data to show the impact of the redistributive elements of the 2013 CAP reform are not yet available, but the initial evidence suggests these new elements will make little difference to this result. Most direct payments go to substantial businesses for which there is no obvious need for 'income support'. For this reason, there is now less emphasis on justifying direct payments because of their role in supporting farm income. It is, of course, the case that there are many farm households with a low standard of living, also relative to average living standards

12 For the three lowest farm income deciles the share is 33% by assumption.

in their region or country. Rural poverty exists and must be addressed. However, Member States are in a much better position to address rural poverty because they have access to the full income situation of farm households and can put the social policies in place to target farm households with low incomes.<sup>13</sup>

## 2. Food and nutrition security

### 2.1 Importance of food and nutrition security

All governments have a responsibility to ensure food security for their populations. This was also one of the original objectives of the CAP in the Treaty of Rome. There has been a renewed focus on food security in the EU in the last decade, driven by the spikes in food prices in 2007

13 An excellent example of such a targeted scheme is the Farm Assist scheme operated by the Department of Social Protection in Ireland. Farm Assist is a means-tested income supplement which provides a top-up for low income farmers to bring them in line with social welfare thresholds. Around 8,000 farm families were in receipt of Farm Assist payments in 2016, compared to around 140,000 farm holdings in total. Details of the scheme can be found at <http://www.welfare.ie/en/Pages/Farm-Assist.aspx> (accessed 25 February 2017).

and 2011 abroad and by the effects of the financial recession since 2008 at home.

Food security has traditionally been taken to mean ensuring the availability of, access to and stability of food supplies. In recent years, there has been an increasing focus on the nutritional adequacy and quality of diets and providing a diversity of foodstuffs not just calorically dense commodities. In EU countries, the importance of nutritional considerations is growing in importance to response to the problems of over-weight and obesity due, at least in part, to excessive calorie intake.

In a Eurobarometer survey of attitudes to food security in 2012, EU citizens were particularly concerned that sufficient food is produced to meet the needs of the world's population. Three-quarters (76%) of all respondents expressed this view, as did a majority of respondents in most Member States. There were lower overall levels of concern about the ability of the EU and Member States to meet the food needs of their populations. However, there were substantial differences between respondents by Member State, particularly with respect to national capacity to meet demand. Ninety-four percent of respondents in Greece were concerned about national food production, whereas only 11% of those surveyed in Denmark or the Netherlands were. A large majority of EU citizens agreed that the EU should help other countries to produce more food (84%); produce more food to reduce its dependence on imports (81%); and produce more food to meet rising demand in the EU and elsewhere (77%) (Eurobarometer, 2012).

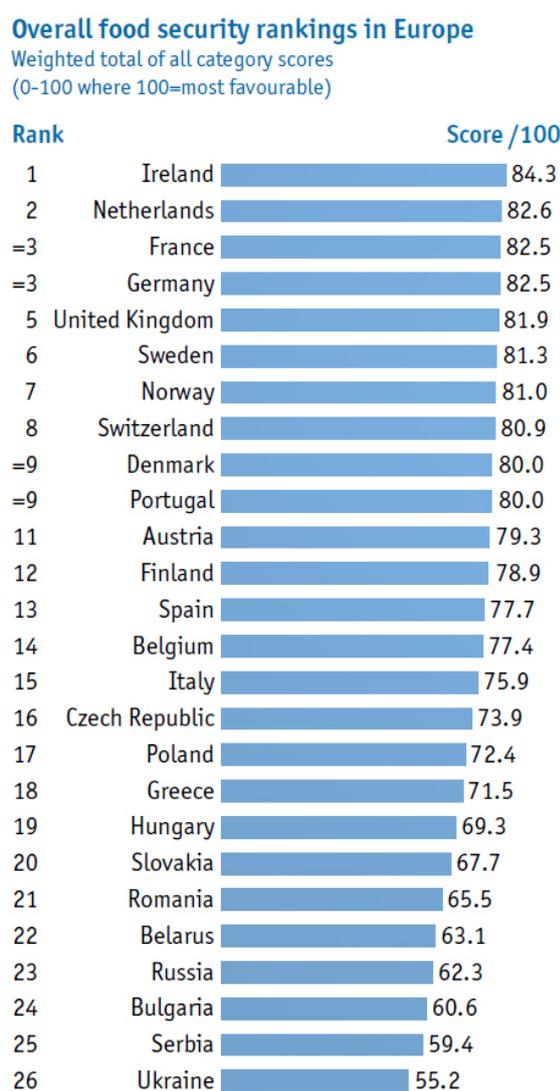
While food security as an objective is not questioned, opinions differ on whether there is a serious threat to EU food security and, if so, on what policies are needed to address this. Also, while there is no doubting the continued existence of hunger and malnutrition in the world, and the world's commitment in the Sustainable Development Goals to eliminate hunger by 2030, the appropriate EU response to this challenge is debated. It is often assumed that meeting both objectives justifies support to EU agriculture in order to increase domestic production. Ensuring food security is not necessarily an explicit objective of CAP Pillar 1 direct payments, but it is certainly implicit insofar as these payments are seen as necessary to guarantee the continuation of EU agricultural production in order to maintain a high level of food self-sufficiency. Whether direct payments are needed for this purpose is evaluated in this section.

## 2.2 Status of EU food security

EU countries generally score well on the Global Food Security Index constructed by the Economist Intelligence Unit (see Economist Intelligence Unit, 2016). This measure is a weighted average of 28 indicators across three categories: affordability, availability, and quality and safety. In 2016, for the first time since the index was launched in 2012, Europe experienced an improvement in its food

security due to geopolitical factors, higher economic growth and favourable crop yields. According to the EIU, falling food prices and high food stocks mean that there is a positive outlook for food security in Europe over the next few years. Nonetheless, there are clear differences across EU countries, with Greece, Hungary, Slovakia, Romania and Bulgaria having significantly lower scores than other EU Member States (Figure 1.2).

**Figure 1.2: Overall food security rankings in Europe**



Source: Economist Intelligence Unit (2016)

The EIU index draws on national-level indicators to draw conclusions about a country's level of food security. However, national indicators are averages and tell us nothing about how food is distributed within a country, or the sufficiency of household access to food. The rise in the use of food banks in many EU countries, especially after the financial crisis in 2008, attests to a growing level of household food insecurity. Almost 11 million people benefited from assistance under the Fund for European Aid to the Most Deprived in 2014 (European Commission, 2016d).

This is borne out by self-reported measures of food insecurity. Analysis of answers to the question ‘Can I just check whether your household can afford a meal with meat, chicken or fish every second day if you wanted it?’ in successive waves of the European Quality of Life Survey reveals a significant (in a statistical sense) rise in reported food insecurity over the period 2003/2007/2011 (from 6.5 to 8.7 per cent between 2003 and 2011 on average), but with considerable variation across Member States (Davis and Geiger, 2016). These authors attribute the differences across countries to the extent to which their welfare regimes protect against risk factors for food insecurity, such as poverty and social exclusion, and how they shield their citizens from the impact of economic crisis. In other words, food insecurity in EU countries has nothing to do with overall food availability, but is entirely a function of households’ purchasing power and their ability to access food.

It cannot be stressed too often that food insecurity is primarily a matter of lack of or insufficient access to sufficient, safe and nutritious food. From the affordability perspective, the share of household expenditure continues to fall in all Member States, with particularly sharp falls over the last two decades in some of the newer Member States (Table 1.4). Indeed, there are those who argue that food has become too cheap given that the external environmental costs of food production are generally not reflected in the market prices paid.

Stimulating domestic food production through further incentive measures in order to increase domestic food availability will do nothing to improve the position of those currently experiencing difficulties in accessing adequate food supplies. Here, the solution needed is targeted public expenditure measures to increase the purchasing power of the food-insecure, such as those supported by the Fund for European Aid to the Most Deprived and similar national measures.

**Table 1.4: Share of food and non-alcoholic beverages expenditure in final consumption expenditure of households**

	1995	2015
<b>United Kingdom</b>	8.6	7.3
<b>Luxembourg</b>	8.9	8.2
<b>Austria</b>	10.1	8.8
<b>Germany</b>	10.6	9.3
<b>Netherlands</b>	11.2	10.7
<b>Denmark</b>	11.5	10.0
<b>EU-28</b>	12.7	11.1
<b>Sweden</b>	12.7	11.2
<b>France</b>	13.0	12.2
<b>Ireland</b>	13.5	8.5

	1995	2015
<b>Cyprus</b>	13.5	13.3
<b>Belgium</b>	13.6	12.2
<b>Finland</b>	13.7	11.2
<b>Malta</b>	14.2	10.5
<b>Italy</b>	15.6	13.2
<b>Spain</b>	15.8	12.3
<b>Slovenia</b>	16.1	14.0
<b>Greece</b>	16.4	15.7
<b>Czech Republic</b>	17.1	14.9
<b>Portugal</b>	17.3	16.1
<b>Hungary</b>	20.5	15.7
<b>Bulgaria</b>	25.6	16.1*
<b>Slovakia</b>	25.7	16.2
<b>Poland</b>	27.1	15.2
<b>Estonia</b>	29.2	19.0
<b>Latvia</b>	34.1	16.9
<b>Lithuania</b>	38.1	21.7
<b>Romania</b>	42.4	27.9

Source: Eurostat [nama\_10\_co3\_p3]. \* Figure for Bulgaria is 2014. Expenditure on restaurants and hotels and catering services is not included in these figures.

### 2.3 EU already enjoys a high level of food self-sufficiency

Nonetheless, the belief that food security is a function of overall food availability, and particularly domestic food production, is deeply ingrained in EU agricultural policy discourse. For a recent example, the report of the Agricultural Markets Task Force notes that “Food security is a strategic asset, like defence capability and energy supply. This gives the EU’s farm sector critical importance: in an unstable world, Europe should attempt to avoid too great a dependence on other countries for the provision of its food. It is possible to imagine scenarios in which food security could play a greater role than we would dream of.”

There are a number of well-known caveats to this conclusion. In the first place, the EU is not currently dependent on food imports for major temperate zone food commodities (Table 1.5). The argument that an increase in food self-sufficiency is needed to underpin the EU’s food security is not supported by these figures. There are, of course, some notable exceptions in the case of sheep-meat, rice and particularly oilseeds and meals imported for animal feed (tropical fruit would probably also show a net import status if data were available). However, the figures in aggregate do not suggest that the EU has an excessive reliance on imported foodstuffs overall.

**Table 1.5: Past and projected EU self-sufficiency rates by commodity**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Common wheat</b>	110.8	108.8	114.2	126.7	127.5	126.2	111.3	119.4	121.4	121.9	123.3
<b>Barley</b>	97.2	106.3	109.4	123.8	124.7	124.8	120.1	115.8	116.5	116.6	116.0
<b>Maize</b>	89.2	101.0	82.0	87.6	102.3	78.1	80.8	87.1	87.9	87.6	87.5
<b>Rice</b>	70.8	73.6	71.2	65.6	62.4	64.0	64.2	60.4	60.1	59.6	59.3
<b>Sugar</b>	83.3	98.9	89.7	88.6	87.3	86.8	88.7	92.8	93.6	94.6	95.6
<b>Cheese</b>	106.7	106.8	107.7	108.2	107.8	107.5	107.4	107.3	108.5	108.7	108.8
<b>Butter</b>	102.0	106.1	105.4	104.3	106.6	108.2	109.0	108.8	109.7	109.4	109.6
<b>Skimmed milk powder</b>	140.6	159.1	163.8	159.1	202.0	207.7	206.8	189.2	176.2	181.8	193.3
<b>Whole milk powder</b>	269.7	227.4	239.0	202.5	202.8	217.0	220.2	221.2	214.4	213.2	211.3
<b>Beef and veal</b>	100.4	102.3	101.2	99.5	100.2	101.1	101.9	101.8	101.3	100.8	100.4
<b>Pig meat</b>	108.9	110.5	110.6	110.9	109.5	110.4	113.0	112.4	112.3	112.1	112.4
<b>Poultry meat</b>	103.0	103.9	103.8	104.1	104.0	103.7	104.3	104.3	104.4	104.3	104.3
<b>Sheep and goat meat</b>	81.3	83.8	86.9	87.6	88.4	86.8	87.8	88.0	86.6	85.9	85.6
<b>Oilseeds</b>	64.4	65.3	61.3	65.4	71.4	63.4	64.4	64.8	64.7	64.6	64.4
<b>Oilseed meal</b>	52.3	51.6	56.2	56.7	57.3	56.1	52.9	54.1	54.0	53.9	53.8
<b>Oilseed oils</b>	91.0	92.8	101.1	101.6	100.4	98.3	95.7	96.4	96.0	96.0	96.3

Source: Own calculations based on DG AGRI, *Prospects for Agricultural Markets and Income in the EU 2016-2026*.

These self-sufficiency rates are based on current levels and patterns of consumption. There is a widespread awareness that Europeans generally are over-consuming, eating the wrong sorts of foods and thus damaging their health. Obesity levels, and with them the attendant problems of heart disease and stroke, diabetes and certain cancers, are rising; one adult in six in the EU is now considered obese (Eurostat News Release 203/2016). Europeans eat more than the recommended amount of meat, dairy products and sugar and do not consume sufficient fruits and vegetables (Westhoek *et al.*, 2015). If all Europeans followed the dietary guidelines issued by national authorities, calculated food self-sufficiency rates would rise, and dramatically so for some commodities.

The role of food waste also needs to be taken into account. The EU and Member States are committed to meeting the Sustainable Development Goal to halve per capita food waste at the retail and consumer levels by 2030. According to the FUSIONS research project, around 20% of the food produced in the EU is wasted (Stenmarck *et al.*, 2016), so halving this amount would be the equivalent of increasing domestic production by 10% when calculating food self-sufficiency ratios. Taking all factors into account, current levels of food self-sufficiency in the

EU do not suggest a need for interventions to further increase domestic food self-sufficiency ratios.

#### 2.4 Threats to food security

While the current situation regarding EU-wide food security may appear satisfactory (we highlight again that this co-exists with a growing problem of household food insecurity which has nothing to do with the overall availability of food supplies), could this change in the future? Concern about the future status of the EU's food security is grounded either in (a) the possibility of a steady rise in real food prices affecting the affordability of food, particularly for low-income households, (b) the possibility of sudden and unexpected shocks to food supplies reflected in food shortages and food price spikes, or (c) a shock to food supplies arising from environmental degradation and collapse.

The first argument has been expressed as "a world where food is available at the prices we have come to expect cannot be taken for granted" (Benton and Thompson, 2016). It became a popular view following the food price spikes of 2007 and 2011 which drew attention to the challenges

of meeting growing food demand under the constraints of limited land and water availability and the threat to yields posed by climate change. While convincing arguments can be made for expecting real food prices to rise, the most probable outcome looking a decade ahead is that real prices will stabilise or continue to fall (OECD/FAO, 2016). Even if real food prices increase, the small share of food in total household expenditure (Table 1.4), the small share of food prices accounted for by farm commodity prices, and the evidence of significant over-consumption of food in the EU, all suggest the consequences for nutrition security in the EU will be manageable.

In the longer-term, it may be that the growth in food demand expands faster than global supply potential and that food prices begin to rise. On the other hand, the large yield gaps in many developing countries and rapid advances in scientific knowledge suggest that there remains considerable potential to increase supply. But if, indeed, global supply is unable to keep up with demand, then rising farm commodity prices would provide the necessary incentives for EU farmers to increase production in any case. The possibility that farm prices might rise in the future is not an argument for providing agricultural support today, though it would be prudent to devote adequate resources to agricultural research and development.

The second argument advanced in favour of support for domestic production is that the world is becoming a more uncertain place and that we can reduce this uncertainty and improve the resilience of our food system by growing more of our own food. Concern that relying on imports is a threat to food security is given credence by the occasional periods of volatile world market prices which lead to importing price instability into EU agricultural markets. But a higher level of EU self-sufficiency, in itself, would have no impact on the transmission of world market price volatility to EU markets. To prevent the import of world market price volatility would require variable border measures such as variable import levies or export subsidies. So long as EU market prices are linked to world market prices, volatility will be imported regardless whether self-sufficiency stands at 40%, 100% or 140%. Increasing the level of EU food self-sufficiency will have no impact on the transmission of world market price volatility.

Excessive world market price volatility is damaging, particularly to consumers in low-income countries and to developing countries with a high dependence on agricultural commodity exports. Initiatives at the international level, such as the Agricultural Market Information System launched by the G20 Agricultural Ministers in 2011, can help to lower global market price volatility by enhancing transparency and policy coordination in international food markets. Excessive world market price volatility is due, in part, to attempts by countries to insulate their domestic markets from variations in world market prices through border measures. This is why the EU, along with all other countries that are members of the WTO, agreed in 1995 to eliminate the use of variable import barriers. Work needs to continue on similar disciplines on export restrictions. There may also be scope for regulation of

non-commercial engagement in commodity futures markets to reduce price spikes (Kalkuhl, von Braun, and Torero, 2016).

Awareness of the impact of potential shocks to our food supply rightly focuses attention on food system resilience (Benton and Thompson, 2016). An important way to build resilience is diversification, thus not relying on a single source of food supply such as domestic production. Advocates of increased EU food self-sufficiency often ignore the potential threats to domestic production from weather or disease, and the balancing role that trade can play in these circumstances. The argument that relying on local production makes us more food-secure assumes that domestic production is less vulnerable to the weather risks, pests and diseases which cause variations in import supplies and prices. In fact, the opposite is the case. Simply because global supplies are more diversified, variation in import availability will always be smaller than the variation in domestic production.<sup>14</sup> Or, to look at it from the producer's point of view, if agricultural prices were determined on the basis of national conditions alone (that is, assuming autarky and no trade), then producer prices would be much more volatile than they are in open economies where trade can help to moderate the extremes of price variability.

While trade helps to diversify weather and disease risks, it might be argued that it is subject to additional uncertainties that do not apply to domestic production which would justify some support to domestic production on food security grounds. Imported produce must usually be transported over longer distances, making it more vulnerable to logistical difficulties. Imported supplies may also be at risk from political disturbances, ranging from politically-motivated export embargoes to war.

Whether domestic food production (with its dependence on imported inputs, particularly energy) would be immune to disturbances which might lead to a disruption of imported food supply chains is an open question. The EU's dependence on a narrow range of energy suppliers means that disruption to energy supplies (and thus domestic food production) is much more likely, and also potentially more damaging, than disruption to supplies of imported foodstuffs. In any case, it is not obvious that mainly-decoupled direct payments are a necessary or efficient instrument to improve food chain resilience.

The third threat to food security can potentially affect both EU and imported supplies alike. There are fears that modern agricultural practices may have sufficiently negative effects on ecosystems that the future resilience of the sector and its ability to respond to shocks may be under

14 This is not to rule out that there can also be variability in import supplies, especially if there are relatively few import suppliers. Cold weather in southern Europe in early 2017 led to a shortage of some vegetables such as lettuce, courgettes and broccoli in UK supermarkets (<http://www.bbc.com/news/uk-38851097>). However, this is also a lesson of what can happen when trade is not allowed to fulfil its balancing role, as high tariffs make it uneconomic to source supplies outside the European Union when such shortfalls occur.

threat. In Section 6 of this chapter, whether CAP Pillar 1 direct payments contribute to greater environmental sustainability is considered in more detail. Addressing this threat means changing the incentives and rewards, and also the knowledge and skills, of the farming sector to do better. We conclude that decoupled area-based payments do not help to promote these changes.

## **2.5 Trade is the ultimate guarantor of national food security**

The possibility of trade is the ultimate guarantor of food security. If the EU really wants to improve its food security (and, incidentally, food security elsewhere in the world), then it should focus primarily on improving the risk-sharing capacity of global food markets. This means encouraging a diverse range of alternative exporters and traded commodities, discouraging the use of export restrictions and other barriers to trade, and ensuring market transparency and a high level of reliable information on supplies and stocks to avoid outbreaks of panic buying such as contributed to the 2007 food price spike.

As the former Commissioner for Agriculture and Rural Development Mariann Fischer Boel put it at the height of the 2008 food crisis: "in the 21st century it is not possible to ensure food security by limiting agricultural trade. The attempt to return to self-sufficiency is a blind alley and would be a disaster both in terms of development and in terms of food security."<sup>15</sup>

Despite the critical role of trade for food security, there is persistent scepticism and suspicion of trade in EU agricultural policy and food policy discourse. This has found expression most recently in attempts to measure the 'external footprint' of EU food consumption, expressed as the number of virtual hectares of land, or the amount of virtual water, or the embedded carbon, embodied in EU food imports. Resource accounting of this type can provide useful insights into the impact of consumption patterns on resource use and can provide warning signals of over-consumption where there is a risk of exceeding planetary boundaries. However, resource use outside a country's borders is often viewed more critically than domestic resource use which, in the case of planetary boundaries, does not make sense.

Exchanging country's resources through trade allows the total resource use of producing a given food supply to be minimised, as each country can specialise in those lines of production where it has a relative cost advantage. Trade is also, in principle, an important route for poor countries, in particular, to raise their living standards and thus improve their resilience and food security. Nonetheless, this literature is right to highlight the conditions for trade to be welfare-enhancing, including proper enforcement of the property rights of current users of land and the avoidance of negative externalities through, for example, de-

15 <http://eu-un.europa.eu/who-will-feed-the-world-the-answers-from-the-eu-%C2%96-speech-by-eu-commissioner-fischer-boel/>

forestation. It should also be clear that trade should not be pursued for its own sake. Local foods are an important source of pleasure for consumers and a premium market for producers. They are a highly desirable part of the mix of food supplies where they are the result of consumer preferences and not a regulatory diktat imposed by governments.

## **2.6 Europe and global food security**

Sometimes, the case for support for EU agriculture is made on the grounds that the EU has a responsibility to increase agricultural output in order to contribute to greater global food security. This is occasionally summarised as Europe's vocation to contribute to feeding the world. The increase in food demand worldwide, driven by a combination of population growth, increasing income per capita and world hunger presents a real test of food security on a planetary scale.

Indeed, the EU has a responsibility for global food security but this is best expressed through providing assistance and incentives to increase food production in those countries which are experiencing rapidly-growing food demand and high levels of food insecurity. An important step in this regard has been the dismantling of the high levels of market price support under the 'old' CAP and which led to the dumping of EU food surpluses on the markets of developing countries with the aid of export subsidies. The EU's leadership in the recent decision of the WTO Ministerial Conference in Nairobi in December 2015 to prohibit the use of export subsidies in agricultural trade was a further commendable step to reducing disincentives for increased food production in net-importing developing countries.

The other important way in which the EU can contribute to global food security is through providing support for agricultural research and innovation and for sustainable food systems in developing economies. However, projections of global food security under climate change emphasise that increased trade flows will be an important response to maintaining global food security. Increased net food exports from the EU can make an important contribution in this respect. But these will be driven by normal market forces reflecting the balance of supply and demand, and should not be driven by agricultural support. Contributing to global food security does not justify the continued transfer of income transfers to EU farmers.

## **3 Risk and resilience**

### **3.1 Variability of prices and incomes**

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 smaller farms are often faced with relatively higher income variability (Vrolijk *et al.*, 2009; Agrosynergie, 2011). In terms of risk management, the trade-off between diversification leading to lower income variability and expected income should be underlined (Abson, Fraser, and Benton, 2013).

There are good reasons to expect that both production and price variability will increase further in the coming years. On the production side, climate change is likely to increase the probability of extreme events such as droughts and flooding. Both climate change and increased trade increase the risks of importing new and damaging pests and diseases. Under the more market-oriented CAP, EU farm prices are now more linked to world market prices and have become more variable as a result (Matthews, 2010). This also tends to amplify income variability as the traditional negative correlation between domestic yields and market prices which provided a natural hedge in the past is now much weaker. Some commentators also argue that the growing concentration among firms buying from and selling to farmers allows these firms to shift risk to the primary producer, thus exacerbating the amplitude of fluctuations at the farmgate arising from market disturbances further along the food supply chain.

### 3.2 Do direct payments help to stabilise farm incomes?

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. Direct payments thus help to improve the resilience of farmers to unexpected shocks to their income from either production or price variability, although they may also encourage more risky behaviour and reduce incentives for farmers to manage risk in other ways (see discussion below). For defenders of the policy status quo, this safety-net function has become one of the main justifications for direct payments.<sup>16</sup> Whether area-based decoupled payments are a good way to help farmers to cope with production and price risks, however, is a question on which opinions differ.

One obvious issue is that the justification of direct payments as a safety-net fits uneasily with the evidence that, at least for some production sectors, direct payments have become the main source of income on these farms. While there may be good reasons to support some of this production (for example, grazing livestock in upland areas for environmental reasons), this is a different rationale to offering a 'safety-net' that becomes the main source of income on many farms.

16 DG AGRI notes: "Direct payments are payments granted directly to farmers to ensure them a safety net. They are mainly granted in the form of a basic income support, decoupled from production, stabilising their income stemming from sales on the markets, which are subject to volatility", [https://ec.europa.eu/agriculture/direct-support\\_en](https://ec.europa.eu/agriculture/direct-support_en), accessed 25 February 2017.

Area-based payments paid to all farms do not distinguish between different lines of production, some of which are more vulnerable to production and price risks than others. Thus, it is not necessarily the case that direct payments make the biggest contribution to risk reduction on those farms facing the largest income variability (Severini *et al.*, 2016). These authors 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 as an income stabilisation measure 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.

That study looks at the correlation between farm (market) income and direct payments across different farm enterprises. It does not take into account other sources of income available to the farmer. Income diversification, including taking up off-farm employment, is one of the strategies open to a risk-averse farmer to reduce his or her exposure to risk. 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).

Another problem with area-based direct payments as a risk management instrument is that they are poorly designed to deal with variations in income over time. Payments are made to farmers when prices are low, but also when prices are high. As noted by the Agricultural Markets Task Force (2016):

*"... farmers do not consider direct payments as a 'risk cover' although direct payments were originally introduced to make up for - as a quid pro quo - decreasing intervention prices (the latter having aimed at stabilising markets). In situations of market crises producers ask for exceptional (market) measures; the existence of direct payments is not considered a crisis response. The latest milk crisis is a case in point: two solidarity packages, together worth EUR 1 billion, have been adopted notwithstanding the existence of direct payments" (AMTF, 2016, p. 51).*

A crisis reserve funded through the financial correction mechanism linked to direct payments was introduced in the 2013 CAP reform. Each year, €400 million (in 2011 prices) is withheld from the overall direct payments envelope and maintained as a crisis reserve. The intention is that this reserve can be called upon to finance emergency payments to farmers which cannot be financed under the Heading 2 sub-ceiling in the MFF. However, this crisis reserve has proved of limited use in practice. It is of relatively modest size and cannot grow over time, as if it is not used in one year it is returned to farmers as part of their direct payments in the following year. Also, the experience during the milk crisis in 2015 and 2016 showed that there was a very great reluctance to make use of this fund given that it implicitly involves a transfer from one group of farmers (who may well have lower overall farm

income) to another group (who despite the market crisis may well have higher overall farm incomes on average).

Another objection to making generalised direct payments available to all farmers as a risk reduction instrument is that it makes farmers less likely to adopt other risk management strategies, and may even encourage them to increase the amount of risk that they take on (for example, the cushion of direct payment may encourage greater specialisation particularly on larger farms, which may also have adverse environmental consequences). All public interventions to reduce risk are likely to reduce farmers' incentives to use other strategies (e.g. insurance or diversification) to reduce risk – a phenomenon known as 'crowding out'. Simulation analyses undertaken by the OECD found that highly decoupled payments (such as the EU's Single Farm Payment/Basic Farm Payment) have very limited crowding-out effects on other risk management strategies but also have a very limited effect in reducing income variability (OECD, 2011). Its conclusion is that *"Overall, simulation analysis implies that policies need to empower farmers to take their own risk management decisions and to have access to a diversity of instruments and strategies, recognising that the farmer has much better information on the nature of his own risk environment than do researchers or governments"* (OECD, 2011, p. 73).

Direct payments (in the broader sense defined in the Introduction) will continue to be needed as part of EU's agricultural policy. They will thus continue to contribute to stabilising farmers' income. For example, agri-environment payments and payments for the provision of public goods can also contribute to stabilising farmers' income. The safety-net function of direct payments could be provided using payments that are much more targeted and used to contract for the delivery of valued services from farmers.

#### 4 Do direct payments compensate for higher regulatory standards?

Another justification put forward for CAP Pillar 1 direct payments is that they are compensation to farmers for the higher production standards they have to meet compared to their competitors. In this context, it is useful to distinguish between technical regulations (e.g. food safety requirements, with which compliance is mandatory) and standards (e.g. organic or fair trade standards, for which compliance is voluntary). In this section, we will refer to these as regulatory standards and voluntary standards, respectively.

EU farmers are required to meet high food safety, environmental and animal welfare regulatory standards. Only authorised medicines and phytosanitary products may be used by farmers. The use of hormones and of  $\beta$ -agonists is prohibited. The range of crop protection products may be more limited than in other countries. Welfare standards for laying hens, broilers and pigs have been strengthened. Farmers must comply with practices that ensure

the conservation of species and their natural habitats, the protection of water resources including nutrient and pest management, and reduce GHG emissions. Traceability rules apply throughout the food chain.

Regulations in the fields of the environment, animal welfare and food safety have the potential to generate a cost increase at the farm level. Hence, the global competitiveness of European agriculture may be adversely affected by these standards. However, standards also raise the quality and reliability of EU food products, enhancing their reputation and making them more attractive to consumers on both home and export markets. They help to avoid disease outbreaks and the loss of consumer confidence. They can also increase efficiency and promote cost-reducing innovations. Standards may thus enable EU producers to obtain a premium price or to avoid the costs of market crises which may offset the cost of compliance with these standards. Moreover, while the EU has been a leader in food standards, similar legislation has often been adopted in third countries that are import and export partners of the EU so that farmers in these countries may equally face compliance costs. Thus, whether EU farmers are disadvantaged by a particular standard or not is an empirical question.

The increasing role of private standards also plays an important role. Although these are not mandated by governments, retailers and processing firms are increasingly demanding that their suppliers comply with private standards which, in many cases, go beyond what may be statutorily required. These standards apply to domestic and imported production alike. The increasing role played by private standards may mean that competitive conditions in food markets are actually more similar than differences in legislation between countries might suggest.

A comprehensive study undertaken for DG AGRI found that there is a wide range of costs of compliance with legislation in the field of animal welfare, environment and food safety with regard to the different products and countries, including third countries (CRPA, 2011). It found that compliance costs with legislation in these three fields for pig and poultry farms varied between 5 and 10% of production costs, as compared to 2-3% of production costs for dairy, beef and sheep farms. Crop farms were less affected by legislation than livestock farms, and typical compliance costs varied between 1-3.5%. It also examined the impact of these compliance costs on the competitiveness of different sectors. In the animal sectors, it noted a considerable cost gap between the EU and third countries which would only experience a limited improvement in the hypothetical absence of food safety, environmental and animal welfare legislation. As in the crop sectors, the differences in costs of production were mainly driven by other determinants such as productivity, labour costs, feed prices and other inputs. This conclusion is supported by other literature which suggests that regulatory differences between the EU and its trading partners have had only a minor impact on competitiveness due to cost increases (Andersson, 2011).

Even assuming that EU producers do face increased costs as a result of higher regulatory standards, this is not always a reason for intervention. In many cases, the regulations are introduced to prevent unintended costs being borne by other groups in society. For example, nitrate regulations prevent the damage to water quality that excessive leakage of nitrogen into waterways would cause. This negative externality of agricultural production needs to be internalised and recognised in farmers' decision-making, and it is not appropriate to compensate farmers for the additional costs of managing their nutrient balance. Many food safety and environmental regulations fall into this category.

There are thus a limited number of regulations which reflect societal preferences and where a case for compensation might be made for the higher costs that farmers may incur. However, it is evident that decoupled area payments are not an efficient way to compensate farmers for these costs. As shown in the CRPA study, the costs of compliance differ significantly across commodities and flat-rate per hectare payments bear no obvious relationship to these costs. Targeted payments may be justified on occasion. For example, when a new regulation or restriction is introduced, temporary and limited support could be provided to help producers to adjust, for example, to invest in new facilities to meet higher animal welfare standards. In other cases, for example, a requirement to manage land to meet special conservation purposes, compensation can be provided through targeted agri-environment payments. The need to meet high regulatory standards does not legitimise the continued payment of Pillar 1 payments to all farmers on all land.

## 5 Do direct payments contribute to environmental sustainability?

### 5.1 Environmental impacts of agriculture

Food production inevitably has an impact on the natural environment. In some cases, farmed landscapes have helped to create valued ecosystems which contribute to biodiversity and the provision of other ecosystem services such as greater resilience to natural disasters such as flooding, drought and fire. On the other hand, changes in land use and farming practices, linked to specialisation and intensification, have also been associated with negative impacts on water, soil, air, biodiversity, habitats and cultural landscapes. At the same time, the abandonment of farming in marginal areas, driven by social and economic factors, can pose a serious threat to the farmed environment and to rural landscapes, although even here there are those who advocate the benefits of rewilding and the return of marginal agricultural land to natural succession (Merckx and Pereira, 2015).

Agriculture is also required to contribute to the EU's climate and energy agenda by reducing GHG emissions, improving energy efficiency, increasing biomass and renew-

able energy production, and protecting and sequestering carbon in soils. At the same time, agricultural production conditions will be increasingly affected by ongoing climate change. Helping to mitigate and adapt to climate change has become a major new challenge for the agricultural sector. Managing scarce resources more effectively and increasing resource efficiency in agriculture in terms of external chemical inputs, water and energy use, land use and waste generation is also one of the goals under the flagship initiative *A resource-efficient Europe* under the Europe 2020 strategy (European Commission, 2011a).

Agriculture thus faces major environmental and specifically, climate challenges. There has been progress in limiting agriculture's negative impacts on the environment as well as encouraging more environmentally-friendly agricultural practices on a proportion of European farmland.<sup>17</sup> Emissions of nitrogen and phosphorous into waterways as well as greenhouse gases have been falling. However, other indicators which point to a continuing decline in the populations of farmland birds, high rates of soil erosion by water and wind, a depletion of soil organic matter, and high levels of water abstraction, particularly in water stressed areas, underline that much more needs to be done to reverse the degradation and loss of natural capital.

### 5.2 What is the CAP doing?

Given that successive investigations of the state of the European environment show that we are not yet meeting environmental standards which are set in legislation, the EU has set ambitious targets for further environmental improvement in connection with water, soils, air, climate and biodiversity. Sustainable management of natural resources and climate action is one of the three objectives of the CAP post-2013. In that reform the new measures to address this objective were the mandatory 'greening' component of direct payments supporting environmental measures which were intended to apply across the whole of the EU territory; plus changes in cross compliance; and through more strategic targeting in Pillar 2, with the environment and climate change as guiding considerations.

The green targets set out in the Member State/region Rural Development Programmes 2014-2020 give some idea of the scope of CAP interventions through Pillar 2 (DG AGRI, 2015):

- 17.7% of agricultural land and 3.45% of forest area under management contracts supporting biodiversity and/or landscape

<sup>17</sup> The environmental impact of agriculture is monitored through a set of 28 agri-environmental indicators (AEIs) maintained by Eurostat based on the foundation set out in the Commission Communication for monitoring the integration of environmental concerns into the common agricultural policy (COM(2005)0508). These indicators are classified according to the Driving force — Pressure — State — Impact — Response (DPSIR) model. These indicators are complemented by the CAP Context Indicators used for monitoring and evaluation of the CAP.

- 15% of agricultural land and 4.3% of forestry land under management contracts to improve water management
- 14.3% of agricultural land and 3.6% of forestry land under management contracts to improve soil management and/or prevent erosion
- 7.6% of agricultural land under management contracts targeting reduction of GHG and/or ammonia emissions
- 2% of Livestock Units concerned by investments in live-stock management in view of reducing GHG and/or ammonia emissions
- 15% of irrigated land switching to more efficient irrigation systems
- 4% of agricultural and forestry land under management to foster carbon sequestration/conservation
- € 2.8 billion total investment in energy efficiency
- € 2.7 billion invested in renewable energy production

These targets are supported by an allocation of 49% of total Pillar 2 funding to environmental and climate objectives (DG AGRI 2015) which works out at an average annual expenditure of approximately €6.2 billion per annum (in 2011 prices) over the period 2014-2020. However, this is only about half of the value of the greening payment in Pillar 1. 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, 2016c; see also Pe'er *et al.* 2014; Hart, Buckwell, and Baldock, 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 agri-environment-climate measures (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 exempt farms at national level. Some 75% of arable land is affected by the crop diversifi-

cation 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, a task made more difficult by the absence of established reference baseline levels of performance. This remains an area without much quantification.

The crop diversification and permanent grassland measures have led to little or 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. Most farmers were following these practices in any event as part of good farm husbandry.

The permanent grassland protection has also had no immediate impact as no Member State breached the limit in 2015 (and, in any case, this measure merely replaced a similar measure as part of cross-compliance prior to 2013). Much of the environmentally-sensitive permanent grassland 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.<sup>18</sup> However, the recalibration of the permanent grassland reference level to a lower 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 ful-

18 “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 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).

filling the EFA requirement. Overall, the area covered by declared EFAs has turned out to be the surprising figure of 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 explanation is the inclusion in the range of EFA options nitrogen-fixing crops (45.4% of the physical area of EFA on the ground) and catch crops (27.7%). The remainder of the EFA is made up by land lying fallow (21.2%), landscape features (4.3%) and buffer strips (less than 1%). Thus, EFAs 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).

To summarise, initial evidence from the implementation of the 2013 CAP suggests that Member States have devoted a substantial share of their RDP Pillar 2 funding to environmental and climate measures and that significant environmental benefits are expected as a result. On the other hand, the expected environmental benefits from the greening payment in Pillar 1 which has twice the funding would seem to be extremely limited. It seems clear that a redesign of this payment could result in significantly greater environmental impact for the CAP budget.

The positive element arising from the introduction of the greening payment is that it recognises the importance of paying farmers for the achievement of environmental objectives. This can be built upon in the next CAP reform.

## 6 A tighter EU budget constraint

Farmers undoubtedly benefit from the transfers from consumers and taxpayers brought about by the CAP. Farm groups therefore have a strong interest in maintaining the status quo. From the point of view of the taxpayer or the public interest, however, the question is whether the additional euro spent through the CAP budget gives a return (in terms of greater food security, a more viable agricultural industry, or more sustainable management of natural resources) than the benefits from using those funds in other areas of the EU budget. While such a comprehensive benefit-cost analysis cannot be attempted here, this section highlights some reasons why the budget constraint facing EU agricultural policy is likely to be even stricter in the future.

### 6.1 Other spending priorities are pressing

The main aspects of implementation of the current MFF since 2014 have been characterised both by concerted efforts to promote economic recovery and the urgent imperative to respond to the refugee crisis and security threats. Some pointers to future EU spending priorities are given in the Commission's MFF Mid-Term Review Communication (European Commission, 2016a). The focus of the Mid-Term Review is on managing the trade-off in constructing the MFF between providing essential medium-term predictability for supporting investment in Europe's priorities and being able to adjust swiftly to changing priorities and unforeseen events. The Communication identifies the most significant challenges facing the EU as strengthening Europe's economy and social fabric; ensuring security inside the EU and at its external borders; managing migration; and addressing the causes and consequences of climate change.

The mid-term review financial package proposes about €13 billion of additional EU funding in 2017-2020 for jobs and growth, migration and security. Closing the investment gap left behind by the financial and economic crisis as well as promoting employment, in particular youth employment, remains a key challenge for the Union. The challenges of migration and security are rooted in geopolitical and societal developments which need to be addressed in the longer-term. The Communication argues that the EU budget must further develop its capacity to support the management of migration flows as well as the protection and integration of refugees and to address the root causes of migration.

The mid-term review proposals are explicitly seen as

a stepping stone towards the next MFF after 2020. The Communication notes that *“They should allow for a considerable further modernisation of the EU budget, paving the way for more far-reaching changes in the next MFF”*. With respect to the MFF after 2020, the Communication provides the following guidelines:

*“The Commission is due to make a proposal for the next MFF by the end of 2017. This proposal will be guided by the BFOR [Budget Focused on Results] initiative and reflect the future challenges and needs of the Union post-2020, assessing both the effectiveness of existing approaches in areas such as cohesion policy, the Common Agricultural Policy and the external action instruments; and the potential for the EU budget to contribute in new areas, such as for example in relation to the completion of Europe’s Economic and Monetary Union, following the roadmap in the Five Presidents’ report, and in defence and security.*

*This will also be an opportunity to look again at the structure, financing and duration of the budget to ensure that they maximise its ability to support Europe’s political objectives.”*

## 6.2 Impact of Brexit

A complicating factor in negotiating the size and composition of the post-2020 MFF is the timeline around the arrangements for the UK exit from the EU (Brexit). The UK is the second-largest net contributor to the EU budget, so Brexit will play an unavoidable role in the forthcoming MFF negotiations. When the net contribution figures are averaged over the four years 2011-2015, the average annual UK net contribution has amounted to €10.3 billion, which compares to total expenditure in the remaining EU-27 member states of €138 billion (Matthews, 2016c). Indeed, if Brexit were to occur as currently planned by March 2019, it could potentially also open a financing gap in the current MFF, depending on future relationships between the UK and the EU.

There are a number of possible ways in which this financing gap might be addressed (the following options are not mutually exclusive):

- In the negotiations on withdrawal under Article 50 of the Treaty, one of the items for discussion will be the UK’s liability for EU budgetary commitments entered into while it was an EU Member. On some calculations this could amount to as much as €60 billion (Barker, 2017). If this amount were paid off over a six-year period, this would imply that the UK’s exit from the EU in budgetary terms would not be noticed until the mid-2020s. Of course, such figures are purely speculative until the negotiations are concluded, and the final figure might be much smaller.
- The UK might continue to make unrequited payments into the EU budget for other reasons after Brexit. Here it is important to distinguish between potential UK

contributions to EU programmes from which the UK will benefit (e.g. Horizon 2020, ERAMUS) and which will not contribute to reducing the loss of its net budget contribution, and payments which the UK might make in return for access to the single market. The payments made by Norway and Switzerland in return for access to the single market are paid directly to the new Member States as part of their development aid budgets and are not paid into the EU budget. Any such UK contributions which followed these precedents would only impact on the overall budgetary balance in the EU if it led to an offsetting reduction in cohesion spending in these countries from the EU budget.

- If after Brexit the UK fails to agree a free trade agreement with the EU, then tariff revenue levied on UK imports into the EU under the Common External Tariff would be additional source of EU budget revenue.
- Other Member States might agree to increase their contributions to the EU budget in order to maintain the existing level of EU expenditure. What might make this option more difficult to implement is that, under current rules, these additional contributions would not be allocated proportionately across the remaining Member States but would be borne disproportionately by four Member States – Germany, Austria, Netherlands and Sweden. This is because these four countries would lose the benefit of the ‘rebate on the UK rebate’ that they currently enjoy under the EU budget rules (Matthews, 2016c).
- EU expenditure could be reduced to avoid increasing the budget contributions of remaining Member States. If this were to happen, it would add to the difficulties in prioritising areas of expenditure in the coming MFF negotiations.

## 6.3 Subsidiarity issues

If CAP spending were reduced in the post-2020 MFF, this could open a debate on allowing individual Member States to increase their national spending on agricultural support. National spending on agricultural policy is already quite significant and has amounted to around €18 billion annually in recent years (Matthews, 2013). This spending takes the form either of Member State co-financing of CAP Pillar 2 expenditures (plus some allowed top-ups of Pillar 1 payments), as well as state aids paid by Member States to their farmers.<sup>19</sup> Some, but not all, agricultural state aid represents Member State spending on measures equivalent to rural development measures which would be eligible for funding under Pillar 2 if the national allocations were bigger, but which are funded instead by national exchequers.

The most obvious way to substitute national spending

<sup>19</sup> In addition, farmers may enjoy concessions in the tax code which are not available to other taxpayers though the value of these tax reliefs is rarely assessed.

for EU budget spending on agriculture would be to require national co-financing of Pillar 1 direct payments expenditure. The extension of national co-financing to all CAP expenditure can be justified on a number of other grounds. First, it is an important accountability mechanism. It would give Member States a greater incentive to ensure that value for money is obtained from CAP spending if they are required to contribute directly to its cost. Second, it would recognise that, unlike the old CAP which was primarily concerned with market regulation which could only be managed in a single market at the EU level, the new CAP attempts to achieve a much broader range of objectives, many of which are primarily of national or even local importance rather than of EU-wide significance. This is particularly true with respect to the provision of environmental services where valuations will differ from region to region because spatial pressures differ.

Under the principle of subsidiarity, it makes good sense to provide Member States with greater flexibility on whether they want to use national resources for these purposes. It will be important to ensure that greater flexibility and national spending on agricultural policy does not undermine the principle of the single market and lead to distorted conditions of competition between farmers in Member States. These disciplines are enshrined in the EU's state aid guidelines which may need to be revised and strengthened if there were to be a significant return to national spending on agricultural policy.

## 7 Conclusions

Direct payments to farmers are the largest single item of expenditure in the CAP budget: they also account for more than one-quarter of the entire EU budget. They were introduced following the MacSharry CAP reform in 1992 as compensation for the reduction in intervention support prices at that time. Their importance has grown with successive reforms of the CAP. While the rules on common market organisations and Pillar 2 rural development programmes are also important components of the CAP, in asking why further reform of the CAP is necessary it is natural to focus on the role of direct payments.

While around 7-10% of the Pillar 1 direct payment envelope is paid as coupled direct payments, the remainder is paid as an area-based decoupled payment (the Basic Payment Scheme in 16 Member States and the Single Area Payment Scheme in the remaining 12 Member States). These payments are variously justified as contributing to higher farm incomes, as a necessary support for food security, as providing a safety net for farmers against unexpected market shocks, as compensating for higher regulatory standards and as ensuring more sustainable management of natural resources. These are all important objectives of farm policy, but there is little evidence that decoupled area-based payments are an effective, efficient or equitable way of achieving these objectives. If

one were designing from scratch an agricultural policy to help farmers better meet the emerging challenges they face, it is highly unlikely that one would arrive at paying a lump sum amount per hectare of agricultural land with minimal conditionality attached as the optimal policy. We conclude by identifying two major flaws in the current system of direct payments.

### 7.1 The need for greater targeting

The first is that paying a (broadly similar) lump sum for every hectare of agricultural area across the EU is a scatter-gun, generalised, approach to making transfers to farmers. Of course, it helps to achieve some of the objectives of agricultural policy, but this is an accidental by-product of the payment. Almost by definition, it is bound to be both inefficient and ineffective because the payment is not targeted on specific outcomes. As shown above, it is also highly inequitable in that the bulk of payments go to farms and farm businesses with substantial incomes and sizeable assets.

Linking CAP payments to specific objectives is one of the recommendations in the Cork 2.0 Declaration 2016 *A Better Life in Rural Areas*. It includes a call that *"The architecture of the CAP must be based on a common strategic and programming 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 the management of ecosystems, water, nutrients and soils, the reduction of air and atmospheric pollution, the protection of climate, biodiversity and cultural landscape, risk management, farm household income and competitiveness. Public interventions to deal with these concerns should be related to the achievement of specific objectives within each of these domains rather than provided as a general decoupled payment entitlement to farmers. Not all such interventions will require direct payments.

Arguing for the replacement of area-based decoupled payments by more targeted direct payments leaves open the relative priorities that should be attached to these targets. The weighting of priorities is a political process and opinions will legitimately differ. However, a listing of the emerging challenges facing agriculture underlines that efforts to promote sustainable intensification and the circular economy, greater protection of natural capital including soils, biodiversity and ecosystems, as well as efforts to mitigate and adapt to climate change are increasingly urgent priorities that require a higher share of CAP resources in the future.

### 7.2 From entitlements to contracts for services

The second major flaw in the current system of decoupled direct payments is that it is based on an entitlement culture rather than contracts for the provision of specific

services. 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. While the receipt of the greening payment requires compliance with a broader set of environmental conditions, the evidence to date suggests most farmers had to make limited adjustments to their farming practices to meet these conditions.

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 that direct payments are an entitlement to additional income, and that any associated obligations should be minimised and simplified (farmers are even allowed to transfer or sell this entitlement to a benefit granted by the taxpayer and retain the proceeds, something unheard of in other sectors).

This entitlement culture should be replaced by a system in which farmers would 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). The farmer would 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. It goes without saying that meeting statutory requirements would be required of every farm.

It is appropriate to finish by asking if such a move to contractual, targeted payments would open the possibility of a more simplified CAP, given that simplification is one of the two objectives of the consultation on the CAP launched by the Commissioner in February 2017. Simplification means that the rules for receiving payments should be clear and easy to understand, and the transactions costs of making payments should be low. There is no doubt that paying agencies find making Pillar 1 payments to farmers simpler and easier than dealing with the more complicated payment arrangements of Pillar 2 schemes. However, the scope for simplification needs to be seen in the context of what the different types of schemes can deliver.

If the objective is simply to make a specific payment to farmers, this can be done very simply as pensions offices in each Member State demonstrate each day. But CAP payments are intended to achieve specific objectives by

changing farmer behaviour. The range and ambition of the objectives sought in the context of land management suggest that the schemes and measures introduced to achieve these objectives will, by their nature, be complex.

This does not mean that simplification should not be pursued. The potential of modern technologies to collect and exchange data should be fully exploited to reduce the burden of 'form-filling' on individual beneficiaries. It should be possible to communicate the rationale of more targeted policies more easily, so that there is greater buy-in among farmer beneficiaries. There is a need for a more proportionate approach to dealing with errors and to permit deviations from the regulations when justified by local conditions. Ultimately, however, simplification cannot be an end in itself. What must count is whether value can be demonstrated for the money contributed by the EU taxpayer to the CAP through the EU budget. On the evidence in this chapter, this is not the case for current CAP Pillar 1 direct payments.

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