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Public Money for Public Goods: Winners and Losers from CAP Reform

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ABSTRACT

To attain fundamental reform of the post-2013 Common Agricultural Policy (CAP), a serious debate is needed in 2009/10 that prepares the decisions to be taken in 2011/12. The paper contributes to this debate, first, by arguing that the Single Farm Payment should not become the mainstay of the future CAP but be gradually phased out. Second, it proposes that the existing two-pillar structure of the CAP should be replaced by a public goods pillar (containing all efficient policies to be preserved) and a discretionary pillar (encompassing all inefficient policies to be removed over time). This would give member states flexibility in how they phase out inefficient policies, while the EU reform agenda would not be clogged with the contentious details of their progressive removal. Third, the paper assesses the criteria likely to guide future allocation of CAP payments, such as GDP per capita, agricultural and forest areas, and areas with Natura 2000 status. Fourth, it estimates member states' share in total CAP payments under different post-2013 scenarios. This reveals surprising differences between the negotiating positions that countries traditionally adopt and the payment receipts they can expect from reform.

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1. INTRODUCTION[1]

Europe's Common Agricultural Policy (CAP) has improved considerably since its first major reform in 1992. Yet, it still distorts the economy, harms poor farmers abroad, and hands out income support to already wealthy recipients. It also fails to effectively address environmental challenges, such as the fight against climate change and the preservation of biodiversity. Studies by the European Court of Auditors, consultancies, think tanks, universities, and international organizations have repeatedly revealed the weaknesses of the CAP. Civil society stakeholders – ranging from environmentalists to pro-development campaigners, from churches to industry federations – are almost univocal in their call for CAP reform.[2] Only those who significantly profit from CAP payments resist change: farmers, landowners, and territories that are net-beneficiaries, paying less for the CAP than they receive.

European agricultural policy will not change considerably before 2014 when the next long-term framework for the EU budget will come into force.[3] But the CAP reform debate cannot wait. Fundamental change will grow only on fertile ground. Now is the time to start considering the reform alternatives for the next spending period.[4]

This paper contributes to the debate by examining how CAP reform might affect the distribution of subsidies across member states. In the upcoming CAP negotiations, distributional issues will be much more visible than in the past. Traditionally, national receipts of CAP subsidies were determined indirectly as member states profited differently from EU-wide intervention prices and production support. But now CAP payments are increasingly being distributed through national envelopes, that is, entitlements to CAP funds which the member states can then spend with some discretion.

The repartition of these national envelopes is heavily contested. First, many member states urge for a thorough redistribution, and the Czech Republic put this issue front and centre of its presidency. The European Commission has expressed understanding for these calls.[5] Second, current national envelopes are largely determined by past payment patterns rather than by rational criteria reflecting the CAP's objectives. As the reference periods date further and further back, they become ever harder to justify. Third, the current distribution is shaped by the EU enlargement process.[6] After 2013, a genuinely European approach that removes the old/new member state divide is due.

Making distributional effects transparent in advance is important. It will help to turn potential reform winners into reform promoters. And it will inspire a serious debate in countries whose subsidy receipts will shrink. This may provoke a backslash at first but offer reform-oriented stakeholders the opportunity to convince the public that the efficiency gains from CAP reform are worth the sacrifice. Such an honest debate that concedes that subsidy receipts will fall, while insisting on the overall benefits of reform, can prevent populist detractors from derailing the reform process with appeals to narrowly conceived national interests. Last but not least, bringing more clarity into the future distribution of CAP payments will help to address other European reform challenges. In particular, reform of EU budget financing is contingent on future EU spending: only if the distributional consequences of spending reform are understood can politically acceptable financing schemes be devised.[7]

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While the ultimate objective of the paper is to estimate national envelopes under different reform scenarios, several preparatory steps need to be taken first. Section 2 gives an overview of the CAP. Section 3 tackles the Single Farm Payment (SFP). This payment is not linked to farmers' current production but based on historic entitlements. Since opinions on the future of this heavy weight in the CAP budget diverge strongly, its case needs to be examined before any estimate of future payment allocations can be undertaken. Looking at economic, environmental, and social consequences, as well as farmers' possibly legitimate expectations on policy stability, the paper concludes that the SFP lacks any justification and will be increasingly under pressure.

Section 4 looks at an alternative CAP structure that could replace the current two-pillar framework. This is an important issue because the overarching structure member states choose for the future CAP is likely to have repercussions on the allocation of payments. The paper proposes to divide the CAP into one 'discretionary pillar' of inefficient policies to be gradually phased out and one pillar for policies that efficiently promote public goods.

Section 5 examines approaches to allocating the CAP after 2013. A fresh take on the issue is necessary because no clear guidance can be derived from past practice. The paper makes the case for a number of criteria, such as agricultural area, forest area, and area with Natura 2000 status.

Section 6 gauges how member states would fare under different scenarios. It proposes allocation formulae drawing on the criteria elaborated before and assesses the resulting distribution of CAP payments across member states. Several scenarios are constructed – some where the current two-pillar framework is upheld and others where an alternative structure is introduced.

The concluding section summarizes the arguments and highlights differences between the negotiating positions that countries traditionally adopt and the subsidy levels they can expect from reform. Some reform skeptics would be well advised to second-think their defensive posture, while some member states promoting reform should acknowledge possible losses.

2. THE CURRENT CAP

Before considering policy changes, the current CAP – its instruments, structure, and expenditures – shall be presented. The CAP encompasses a broad range of instruments. Table 1 presents a brief description with some examples.

TABLE 1: CAP INSTRUMENTS

INSTRUMENT	EXAMPLE
market intervention mechanisms that raise the price on the European market	public intervention buying, export subsidies
coupled subsidies that reward the production of a specific good based on output or utilized area	suckler cow, goat, and sheep premia
direct income support	SFP, early retirement schemes
subsidies that increase farm productivity	farm modernization, training
subsidies efficiently targeted at public goods that promote agriculture's services to society	well-designed agri-environmental payments, research into sustainable farming
subsidies that pretend to promote public goods but whose principal effect is to channel income support to farmers	Least Favored Area payments, poorly designed agri-environmental payments
rural development subsidies unrelated to agriculture	village renovation, economic diversification

The CAP is not directly organized along these instruments but divided into two pillars. One difference between them is that expenses under the first pillar are fully covered by the EU, whereas member states have to co-finance second pillar programs. In addition, the pillars focus on different instruments. While almost any of the CAP instruments can be financed under the first pillar, its emphasis is clearly on market intervention, coupled subsidies, and the SFP. It can thus be described as a farm-income-and-production pillar. Farm modernization, genuine and abusive public goods programs, and rural development are mostly supported through the second pillar. A further distinction, besides the issue of co-financing, can thus be drawn. The first pillar tends to entail relatively blunt measures whose implementation is similar or identical across the EU. The second pillar, by contrast, relies on member states' micro-management (in cooperation with the European Commission that controls programming and monitors implementation). Finally, it can be noted that the second pillar contains more effective policies than the first – but not all second pillar policies are justifiable and not all first pillar policies are detrimental. Table 2 summarizes the main characteristics of the two pillars.

TABLE 2: CHARACTERISTICS OF THE CAP PILLARS

	FIRST PILLAR	SECOND PILLAR
Financing	fully EU financed	co-financed by member states
Main instruments	market intervention, coupled subsidies, SFP	farm modernization, genuine and abusive public goods programs, rural development
Standardization	rather homogeneous across EU	very heterogeneous across EU
EU value creation	mostly very low	from very low to very high

Table 3 shows the expenditures for key CAP instruments for the period 2006-2008. These are market intervention, coupled subsidies, decoupled direct aids (SFP and equivalent payments in the new member states), and second pillar payments.

TABLE 3: CAP EXPENDITURES FOR KEY INSTRUMENTS (IN € MILLION)

	2006	2007	2008
Market intervention	8,148	4,867	4,159
Coupled subsidies	17,893	6,259	5,620
Decoupled direct aids	15,975	30,369	31,208
Second pillar	7,719	10,874	10,529

Source: Yearly Reports on Budgetary and Financial Management, DG Budget
Data on second pillar payments reflects the execution of payment appropriations

It can be seen that the SFP (used in the following to refer to all decoupled direct aids) takes up the lion's share in the budget. The 2008 Health Check reform has further strengthened the SFP by cutting back future market intervention and coupled subsidies. For 2013, the first pillar budget is forecasted to be at €45.0 billion, to be dedicated mostly to the SFP, and the second pillar to amount to €14.8 billion.[8] Any CAP reform will thus have to start with a decision on the future of the SFP.

3. THE FUTURE OF THE SFP

The SFP has been introduced in 2003 as a compensation for the removal of previous subsidies

coupled with production. What should be done with this compensation after 2013 when it will have been paid for an entire decade? Has the time come for immediate abolition or is some transition more appropriate? Leaving the question of political feasibility aside, three welfare considerations – economic, environmental, and social – can inform this choice. In addition, whether farmers hold legitimate expectations that the SFP will be continued is an issue that needs to be examined. Food (in)security, which is often adduced to justify the SFP, is not considered here because it is not a serious threat to the EU.[9]

3.1 ECONOMIC EFFECTS

Though the SFP is formally decoupled from production, it still distorts production through several mechanisms.[10] This prevents market signals from directing the economy's resources to their most productive uses.

Credit: If farmers do not have access to all the credit they would like to have, the SFP increases output by easing capital constraints. First, farmers can directly channel the payments into production. Second, farmers gain better access to credit by reducing bankruptcy risks and driving up land values that can serve as collateral.[11]

Structure: Farms that would not be viable in a free market may stay in business if part of their costs can be financed through support programs.[12] This distorts the structure of production (in favor of less efficient producers, whether small or large) and keeps an excessive share of labor in agriculture. Another distortion is that young farmers who do not inherit farm land find it harder to set up a farm as the SFP drives up land values.

Cross compliance: The SFP obliges farmers to maintain their land in good agricultural and environmental conditions (see below). Some of these conditions, such as avoiding the encroachment of unwanted vegetation, are easiest to fulfill by farming. The SFP thus pushes farmers indirectly to produce.

Another issue is the administrative cost of doling out farm payments. Ministries and agencies have to set detailed rules, verify entitlements and compliance, decide on individual claims, and process payments.[13] Farmers need to inform themselves, engage consultants, file applications, and cooperate in official controls. The costs – for farmers alone – have been estimated to be 6.7 % of CAP payments disbursed in France, while administration costs amount to 8.5% in Italy and 9.3% in Germany. Germany also stands out with €28 of administration costs for farmers per hectare of farm land.[14]

Costs arise not only from distributing but also from raising public money. Some of these costs are evident, such as the cost of running finance ministries and filling in tax declarations. The more insidious distortions brought about by taxes are less visible: citizens work less, save less, and invest less in their education if taxes are high. Companies also invest less in high tax countries.

To be acceptable, the SFP would therefore have to produce highly desirable results in the environmental or social realm. These benefits would have to outweigh the economic distortions the SFP produces as well as its administration and financing costs.

3.2 ENVIRONMENTAL EFFECTS

Agricultural production can preserve open spaces, enhance scenic variety, and maintain traditional landscape characteristics that carry cultural significance. Similarly, agriculture can

promote biodiversity, for instance by offering a habitat to species that depend on (traditional) farming. But agriculture can also lead to water, air, and soil pollution; release of greenhouse gases; water and soil depletion; and the loss of biological diversity as a result of environmental degradation and monoculture.[15] There is no reason to think that the SFP, to the extent that it simply stimulates agricultural production, does more harm than good to the environment.[16]

Admittedly, the SFP is subject to cross-compliance: farmers need to adhere to statutory management requirements (SMR) and to maintain their land in good agricultural and environmental condition (GAEC). The European Court of Auditors has recently lambasted these provisions for the following reasons:[17]

- their objectives are underspecified and neither the Commission nor the member states monitor their effectiveness,
- they overlap with compulsory obligations (so that many farmers do not have to undertake any action beyond respecting the law),
- some member states have failed to specify the vague EU cross-compliance conditions so as to make them fully operational within their borders
- member states control cross-compliance with insufficient frequency and excessive laxity (finding not a single infringement in thousands of controls for important conditions), and they impose ludicrous sanctions.

This makes it unreasonable to expect significant environmental benefits from the SFP – despite the cross-compliance mechanism.[18] Even if one believes that the SFP brings a marginal net gain for the environment, it would be much preferable to invest that money into targeted environmental payments. Such schemes can reward the maintenance of buffer strips, hedges, and stone walls or set incentives for the reduction of fertilizer and crop protection chemicals.

3.3 SOCIAL EFFECTS

Farmers as a group are not a good target for income transfers. In some countries, they have above-average incomes, and in most countries, their average incomes have been increasing in recent years. This trend is likely to continue in the future: output prices are forecasted to move on a long-term upward trend and labor is leaving agriculture, raising the earnings of those who remain in the sector.[19]

Moreover, farmers are asset-rich: they own machinery, farm buildings, and above all land. It is difficult to justify why people who own a lot should receive public money – even if they have low incomes yet do not wish to sell any of their property. Do the working poor of other sectors not have a better claim to public support as they are both income- and asset-poor?

Still another reason why the SFP does not make sense as a social policy is that poor households benefit little. 20% of SFP recipients reap roughly 80% of the SFP.[20] In the Czech Republic, the average beneficiary receives almost € 50,000.[21] Table 4 shows the distribution of the SFP in the EU-25 in 2007 according to the size of individual SFP receipts. It can be seen, for example, that 13.66% of the total SFP goes to farmers that receive between €50,000 and €100,000, and that 27.41% cumulatively goes to farmers with at least €50,000 SFP receipts.

TABLE 4: DISTRIBUTION OF THE SFP ACROSS FARMERS

INDIVIDUAL SFP RECEIPTS	% OF TOTAL SFP	CUMULATIVE % OF TOTAL SFP
≥ 0 and < 500 €	2.22	100,00
≥ 500 and < 1 250 €	3.45	97.79
≥ 1 250 and < 2 000 €	2.66	94.34
≥ 2 000 and < 5 000 €	8.49	91.68
≥ 5 000 and < 10 000 €	11.31	83.19
≥ 10 000 and < 20 000 €	17.12	71.88
≥ 20 000 and < 50 000 €	27.35	54.76
≥ 50 000 and < 100 000 €	13.66	27.41
≥ 100 000 and < 200 000 €	6.55	13.75
≥ 200 000 and < 300 000 €	2.29	7.20
≥ 300 000 and < 500 000 €	2.17	4.91
≥ 500 000 €	2.74	2.74

Source: ec.europa.eu/agriculture/fin/directaid/2007/annex1_en.pdf

If public aid is meant to minimize poverty, it should be directly linked to poverty and not be conditional on agricultural employment or land ownership.

3.4 LEGITIMATE EXPECTATIONS

Farmers' legitimate expectations about policy stability could in principle justify an incrementalist approach to phasing out the SFP. However, any such argument is flawed under the particular circumstances of the SFP. One major reason for this is that the SFP is formally decoupled from current production decisions. This means that farmers' long-term business decisions about investing into farm buildings and machinery, and more generally about whether to stay in farming, should be largely independent of the SFP (though not fully, as seen above). The SFP is not designed to change farmers' business behavior in order to attain societal objectives, so that they could complain if the public changes its mind. The SFP cannot be compared to a policy commitment such as that of the creation of an EU carbon emission market that triggers massive specific investments. In the case of the SFP, there are no policy-induced long-term investments that would have to be protected.

Besides, when farmers were granted the SFP in 2003, they had to know that this subsidy would not last forever. The preceding two decades had seen repeated reform attempts, which had regularly fallen short of the reformers' ambitions, and the next CAP reform had already been scheduled for 2008. Both in 2003 and 2008, the Commission had tried to shift far more money from the SFP to rural development and environmental payments than what was finally agreed. Between these two reforms waited another threat to the SFP: the negotiations of the financial framework for 2007-2013 which could very well have led to drastic cuts in the CAP budget. More generally, compensation payments necessary to facilitate reform at one point in time usually have a deadline. The fact that this deadline was not specified in the 2003 and 2008 reforms should not give reason to believe that they would go on forever. In short, farmers got a very attractive SFP in 2003 and the subsequent budget and CAP negotiations, surprisingly, extended this payment almost in full until 2013. Farmers have no legitimate reason to complain if the SFP is discontinued afterwards.

4. THE FUTURE STRUCTURE OF THE CAP

One approach to CAP reform is to take the existing two pillar structure for granted. This has been done by the 2008 Health Check reform that has shifted money from the first to the second pillar, re-calibrated the first pillar (reducing coupled subsidies and market intervention while expanding the SFP and public goods payments), and focused the second pillar more strongly on public goods (through the so-called 'new challenges'). The alternative approach is to redefine the entire structure before setting spending priorities.

The current CAP structure is incoherent in several regards making it desirable to start from scratch when deciding on Europe's long-term agricultural policies. As seen in Section 2, the pillars partially overlap in the policies they permit,[22] and even the second pillar subsidizes programs that do not create value for the EU. In addition, the fully EU-funded first pillar is an anomaly that contradicts the principles of leveraging EU funds and improving spending discipline through co-financing. Besides mending these substantive flaws, a new beginning could also be a strategically smart choice: radical re-allocation to efficient uses may be easier in the more dynamic context of a new structure than within the boundaries of the existing framework.

That radical changes are indeed necessary has been shown in Section 3. That old-fashioned market intervention and coupled subsidies are counterproductive has long been accepted by most parties. But a switch to the SFP is not the right solution. Neither economic, environmental, and social welfare considerations nor respect for legitimate expectations about policy stability can justify continuation of the SFP after 2013. The SFP was created in 2003 to facilitate CAP reform – it has been a way to buy support from farm lobbies for a policy that is economically less distorting than its predecessor but still wastes public money. This initial and unique raison-d'être has lapsed.

The structure proposed below is only one of many conceivable alternatives to the status quo – albeit a particularly interesting one. The advantages of this structure suggest that the possibility of a new structure in one form or another needs to be taken seriously. Even if a new structure will differ in some aspects from the one developed here, the basic principle of introducing one pillar that is genuinely concerned with public goods may well impose itself (and this is the element that will matter for the allocation criteria and the modeling in the subsequent sections).

4.1 DISCRETIONARY AND PUBLIC GOODS PILLAR

The proposed structure would divide the CAP into a discretionary and a public goods pillar. The discretionary pillar would be progressively phased out, while the public goods pillar would be preserved. Member states would be free to shift as much money as they want from their discretionary to their public goods envelope.[23]

Under the discretionary pillar, member states could finance all the inefficient instruments aimed at supporting farm income and production: the SFP and other income support, coupled payments, and payments for improving farm productivity. Member states would be free to decide how much of this money they use for what kind of subsidy as long as they stay within certain limits. One of the main challenges would be to think of such safeguards that prevent serious distortions without unduly restricting flexibility.[24] Member states could also choose how they distribute the SFP and other income support among farmers. Instruments that have been co-financed by member states under the second pillar in the past would continue to be co-financed under the discretionary pillar.[25]

The other pillar would be dedicated exclusively to public goods related to agriculture. It would

thus be narrower than the current second pillar, excluding farm modernization (as long as it does not significantly contribute to public goods), abusive public goods payments, and rural development programs without a clear link to agriculture. The latter two types of instruments would be removed from the CAP altogether. Payments that pretend to promote public goods but are actually designed to channel income support to farmers would be eliminated – to the extent that is practically possible – by enhancing EU oversight of programming and stricter EU monitoring of implementation. Rural development payments unrelated to agriculture would – to the extent that their continuation is justified by a European interest – be merged into other EU policies.

4.2 ADVANTAGES OF THE NEW STRUCTURE

Such a solution would have several attractive features: it would focus the reform debate on the central challenge – promoting public goods – and relegate quarrels over the treatment of specific inefficient instruments to the sidelines; it would grant governments flexibility in tailoring income support so as to make reform politically feasible; it would permit shifting a maximum of payments to public goods; and it would result in a clean public goods pillar rather than a dirty second pillar.

Political focus on public goods: The objectives of agricultural payments would play a greater role in the debate on future CAP allocation if a new structure were introduced. This is, first, because past reforms have seen repeated fighting over the transfer of money from the first to the second pillar. Any discussion within the old framework will thus elicit deep-rooted support or resistance, while the merits of the final use of the money would remain underappreciated. Second, difficulties likely to arise over the reform of specific inefficient policy instruments could be sidestepped. If, for instance, the few remaining coupled payments cannot easily be removed at the next reform step, it appears pragmatic not to wage a fight over this issue but to permit states to continue existing coupled payments drawing on their discretionary envelopes. Other examples in the same vein are the Less Favored Area scheme and most farm modernization payments. Third, distributional conflicts about the distribution of the SFP to farmers could be shifted to national level. Past attempts by the Commission to change how member states allocate the SFP to farmers have fared poorly. In 2003, the Commission failed to introduce 'progressive' modulation (i.e. a shift from the first to the second pillar that hits large SFP recipients harder), and the progressive component in the 2009 modulation falls far short of the Commission's initial proposals. It is preferable to eschew the complexity of European negotiations on increasing progressive modulation or on ending the historical model for SFP allocation to farmers.[26] Fourth, granting the member states a discretionary envelope avoids part of the pro-reform energy being wasted on pushing for an allocation of the SFP that favors small and poor farmers.[27] It also ensures against the danger of some improvements in this sense being instrumentalized to hail a mediocre reform as a victory.

Flexibility to target the discretionary envelope at political constraints: Governments could use the enhanced leeway in allocating the SFP, together with other income support and farm productivity programs, so as to best respond to the social and political circumstances on the ground.[28] In this way, they could direct the money to those farmers whose losses from reform are a binding constraint on reform.

Flexibility to shift payments to public goods: Every country could shift as much money away from the SFP as is possible under its political constellation. First, more progressive countries that want to make efficient use of public money can adopt bolder phase-out strategies. If, by contrast, EU funds were to be dedicated to a first pillar with a limited scope for public good policies, more money would go to the SFP than necessary: even those countries that would prefer to promote public goods would attempt to get as much EU-funded first pillar money as possible.

Second, a discretionary envelope permits flexibility over time. Countries can thus transfer additional money to public good policies, for instance as water shortages call for investments in water-saving farming practices.

Clean public goods pillar instead of dirty second pillar: Introducing a new public goods pillar instead of attempting to prune the existing second pillar is likely to produce better results. The current array of permissible second pillar payments is excessively broad and the quality of spending deplorable.[29] In the future, the second pillar would run the risk of being abused even more blatantly as the official farm income support instruments are being curtailed. The result could be worse than the SFP, with higher transaction costs in administration and greater distortions.[30] The necessary fresh start would be easier with a formal transition to a new public goods pillar requiring a principled debate without any priors. Furthermore, the leeway granted under the discretionary pillar to temporarily continue established, ineffective policies would facilitate a rigorous selection of policies that qualify for the public goods pillar.

4.3 SFP TOP-UPS

Governments would be free to top up the SFP beyond what their discretionary envelopes can pay for. This is already permitted for the new member states that receive relatively few decoupled direct aids (under the Single Area Payment Scheme). In the future, all member states would have this right, albeit within limits that decrease over time.

A first advantage would be to ease pressure on the EU budget by allowing member states to assist farmers. The discretionary pillar could be scaled back more quickly if additional national money can compensate farmers. Furthermore, such a move would shift political pressure from the European to the national level. The SFP lobby will direct part of its resources at their government to secure additional transition payments instead of throwing their entire weight into blocking EU-level reform. And finally, such a solution would unmask the hypocrisy of those governments that argue for the vital functions of the SFP as long as it is paid for by Brussels but refuse to shift parts of the expenses to their national budgets.

4.4 SINGLE MARKET

There is no reason to fear additional distortions to the single market, neither from the introduction of the discretionary pillar nor from the possibility to top up the SFP. Compared to the current situation, the absolute differences in payment levels of possibly distorting policies would be falling as payment levels decrease over time: if farmers in comparable situations get €20,000 and €10,000 respectively today, this is more worrisome than the gap between €5,000 and €2,500 in the future. What is more, the EU-funded base SFP is likely to be distributed more equally than the current SFP.[31] Finally, current distortions would be scaled back by cutting farm modernization payments (indirectly, by placing them in the discretionary envelope) that are employed highly unevenly across the member states. In sum, the proposed structure would level an already skewed playing field.

5. CRITERIA FOR THE ALLOCATION OF CAP PAYMENTS

So far, it has been argued that fundamental change in the CAP instruments is necessary – including a phase-out of the SFP – and that this could best be achieved by also modifying the structure of the CAP. If change in instruments and possibly also structure materializes, this will increase

the chances that the distribution of CAP funds across countries will also be adapted. This section looks at how national envelopes have been allocated in the past, and it discusses criteria that could reasonably shape allocation of future CAP payments.

The assumption that future distribution, compared to past practice, will be guided more by rational criteria and less by historic subsidy receipts is plausible. Any change on the scale to be expected is hard to imagine without a principled approach. Also, the structural funds – comparable to the CAP in size and nature – are assigned according to a distribution key determined by policy objectives. The arbitrary allocation of CAP payments relying on increasingly outdated reference periods is thus an anomaly likely to be corrected.

5.1 FIRST PILLAR/DISCRETIONARY ENVELOPES

Past allocation

When the SFP was introduced in 2003, the money that was freed up by removing subsidies that had hitherto been coupled to production was transferred to national SFP envelopes in accordance with member states' previous receipts of coupled subsidies.[32] Member states enjoyed some latitude in how they distributed the SFP to farmers. They could choose between three models: the historic model, where payments correspond to the level of subsidies each farmer had received during the 2000-2002 reference period; the regional model, where governments define one or several regions within their borders and pay a regionally fixed rate per hectare that has been eligible for subsidies during the 2000-2002 reference period; and a hybrid model that combines these two approaches. Payments were to be reduced by 3% in 2005, 4% in 2006, and 5% in every year thereafter. The money generated through such modulation was to be transferred to the second pillar of the CAP. The way the money was to be allocated to countries was supposed to take account of agricultural area, agricultural employment, and GDP per capita in purchasing power. However, at least 80% of the money should remain in the country where it has been generated.

The 2008 Health Check maintained this approach although there were complaints about unjust and outdated national envelopes, notably from Eastern Europe. The additional money freed up through reinforced modulation (gradually rising to 10% in 2012 for payments above EUR 5,000, plus an extra 4% for amounts exceeding EUR 300,000) was again shifted to rural development.

Table 5 shows the disparity of the national first pillar envelopes. At the top comes Greece with an astonishing €544 per hectare; at the bottom is Latvia with a meager €83. The 2013 figures reflect the first year when the new member states receive their full envelopes – until then, they are getting even less as their payments are progressively phased in.[33] The data sources for this and all the following tables can be found in the annex.

TABLE 5: 2013 ALLOCATION OF FIRST PILLAR ENVELOPES

MEMBER STATES	€ MILLION	% SHARE	PER HA
Austria	752	1.65	236
Belgium	615	1.35	447
Denmark	1,049	2.30	394
Finland	571	1.25	249
France	8,521	18.70	310
Germany	5,853	12.84	346
Greece	2,217	4.86	544
Ireland	1,341	2.94	324
Italy	4,370	9.59	343
Luxembourg	37	0.08	283
Netherlands	898	1.97	469
Portugal	606	1.33	174
Spain	5,139	11.28	206
Sweden	771	1.69	247
United Kingdom	3,988	8.75	247
EU-15	**36,727**	**80.58**	**295**
Bulgaria	742	1.63	243
Cyprus	53	0.12	366
Czech Republic	909	1.99	258
Estonia	101	0.22	112
Hungary	1,319	2.89	312
Latvia	146	0.32	83
Lithuania	380	0.83	143
Malta	5	0.01	494
Poland	3,045	6.68	197
Romania	1,620	3.55	118
Slovakia	388	0.85	200
Slovenia	144	0.32	295
EU-12	**8,853**	**19.42**	**185**

Bulgaria and Romania: 2015 entitlements

Future allocation

The same factors can be expected to determine distribution independently of whether member states hold on to the current two-pillar structure or move to the proposed new structure. Neither the first nor the discretionary pillar is targeted at public goods; their distribution will be shaped by the staying power of old entitlements, concerns over distortions in the common market, and fairness considerations.

Three criteria, in particular, look likely to influence future allocation of the first pillar/discretionary envelopes: The greater the 2013 first pillar envelope, the greater the agricultural area, and the higher the GDP per capita, the greater the future envelope. Even if member states will not formally follow an allocation formula, one can expect results to reflect these criteria.

2013 first pillar envelope: The official argument will go that a country with a large first pillar envelope in 2013 will have to pay a relatively substantial amount of income-supporting and

productivity-increasing subsidies after 2013 in order to avoid hardship and appease farm protests. This issue could in principle be addressed when reforming EU budget financing by (temporarily) lowering contributions of those countries whose first pillar envelopes are sharply reduced. But since governments find it difficult to shift money within their budget, some responsiveness to past payment levels can be expected. The real importance of 2013 first pillar envelopes will be based on bargaining power: the old distribution will serve as starting point for negotiations, and those who favor change will be the demandeurs.

Agricultural area: One justification for this criterion is that differences in support levels per hectare across farmers threaten to distort competition. Even if distortions are considered to be small, the argument that agricultural area should be rewarded similarly across Europe appeals to basic ideas of equality and the spirit of European integration. In addition, CAP beneficiaries are claiming that even the first/discretionary pillar promotes public goods. To the extent that this assertion wields influence, agricultural area commands supplementary legitimacy as an allocation criterion since the creation of public goods is roughly proportional to agricultural area.[34]

GDP per capita: In richer member states, wages in non-agricultural jobs that are comparable to agricultural employment are higher. So a higher level of income support is needed to ascertain a fair standard of living for farmers and prevent land abandonment. Furthermore, flattening income support across Europe without taking account of differences in GDP per capita would lead to excessively high support in poor member states and thus increase distortions in the economy. The inclusion of GDP per capita may be resented for contradicting the principle of European solidarity. But agricultural policies should not become a tool for accelerating economic convergence in Europe. Structural policies are more effective to this end.[35]

Agricultural employment appears not to be a suitable candidate for guiding future subsidy allocation. The main formal reason against it is that farmers' entitlements to the SFP are based on land independently of the workforce they employ. Maintaining coherence between domestic and European distributional criteria is appealing. Furthermore, Romania and Poland each hold close to twenty percent of the EU's total of 'agricultural work units'. They would thus seize significant shares of CAP funds from other member states. Since these two countries do not wield sufficient bargaining power in the EU to push through such a result (especially as they are strong net beneficiaries of the CAP and the EU budget in any case), inclusion of agricultural employment as a determinant of subsidy allocation is unlikely. A final obstacle arises over measurement issues.

Agricultural output is even less appropriate as an allocation criterion. In principled terms, this would run afoul of the very idea of the Single Farm Payment: decoupling from production. And from a pragmatic point of view, such a criterion would favor more productive member states whose farmers tend to have less difficulty in surviving without income support. It would also be counterproductive because it would entice governments to stimulate production (by maintaining a maximum of coupled payments or investing in farm modernization) rather than promote less intensive, environmentally friendly farming. So there are convincing arguments against the inclusion of an output criterion – and little speaking in favor it. In particular, food security cannot serve as a justification. First, the instruments of the first/discretionary pillar are not geared to enhance food security; the SFP as its main component is explicitly decoupled from production. Second, food security is not at risk in the EU.[36]

5.2 SECOND PILLAR/PUBLIC GOODS ENVELOPES

Past allocation

The guidelines for the distribution of rural development payments under the second pillar are vague, pointing to regional convergence objectives, historic levels of rural development payments, and undefined particular situations and needs as determinants.[37] The actual distribution of rural development payments for 2007-2013 largely reflects member states' 2000-2006 payments. In the EU-15, these payments were made under the European Agricultural Guidance and Guarantee Fund. Their level is itself based on rural development payments and commitments in the 1994-99 period (under various schemes, e.g. the EU's regional policy objective 5b). The new member states received separate payments until 2006 under the Special Accession Programme for Agriculture and Rural Development (Sapard). These were calculated according to farming population, agricultural area, gross domestic product (GDP) per capita in purchasing power, and the specific territorial situation.[38] But the 2007-2013 distribution has also been driven by the political dynamics of the December 2005 European Council (rather than by criteria related to the objectives of the second pillar). The resulting distribution can be seen in table 6.[39]

TABLE 6: 2013 ALLOCATION OF SECOND PILLAR ENVELOPES

MEMBER STATES	€ MILLION	% SHARE	PER HA
Austria	511	4.00	160
Belgium	54	0.43	40
Denmark	62	0.48	23
Finland	272	2.13	118
France	906	7.10	33
Germany	1,131	8.86	67
Greece	619	4.85	152
Ireland	307	2.41	74
Italy	1,258	9.86	99
Luxembourg	12	0.09	90
Netherlands	67	0.52	35
Portugal	564	4.42	162
Spain	1,041	8.16	42
Sweden	239	1.87	77
United Kingdom	267	2.09	17
EU-15	**7,310**	**57.27**	**59**
Bulgaria	396	3.10	130
Cyprus	21	0.16	144
Czech Republic	418	3.27	119
Estonia	113	0.89	125
Hungary	579	4.53	137
Latvia	151	1.18	85
Lithuania	254	1.99	96
Malta	11	0.08	1,032
Poland	1,850	14.49	120
Romania	1,233	9.66	90
Slovakia	317	2.49	164
Slovenia	112	0.88	229
EU-12	**5,454**	**42.73**	**114**

Future allocation

Which criteria could determine the distribution of the second pillar/public goods envelopes

in the future? This depends partly on whether the old or a new structure will prevail (see below). It also depends on which public goods will be promoted.[40] There are four prominent categories of public goods argued to be dependent on agriculture: rural development, food security, the environment, and food safety and animal welfare.

Regarding rural development, it is questionable whether governments should influence where people work and live. But even if one believes that it is a worthy objective to conserve existing settlement structures against the changing preferences of the population, one should not resort primarily to agricultural policies. Efficient approaches to promoting rural development would be non-discriminatory across sectors. This is the case with investment into infrastructure and education. Alternatively, they would be targeted at the particular potential of each region, depending on its location, natural and cultural richness, entrepreneurial spirit, or existing industrial and service structure. Finally and decisively, rural development is not a European public good. If countries wish to subsidize a more decentralized settlement structure, this is a national choice that will not significantly affect European welfare.

Food security is not threatened in the EU. The EU has the purchasing power to source supplies from the world market. In the case of persistent and severe production shortfalls within the EU combined with a blockade of food imports, countries could easily expand cultivated areas, use more intensive farming methods and shift production patterns to increase yields. In particular, curbing the production of meat, milk, and biofuels could free up capacity for growing basic grains. 51 million hectares were used as pastures and permanent meadows in 2005, compared to 100 million hectares of arable land; in addition, much arable land serves feed stuff production.

Whereas rural development and food security do not qualify for EU intervention, several European public goods can be identified in the environmental field.

- The fight against climate change is a joint European challenge that goes beyond allocating national emission ceilings to the member states. Since monitoring the implementation of emission trading in agriculture is difficult, payments may be needed to incline farmers to go beyond legal minimum requirements.
- The protection of biodiversity is an EU task. Animals cross borders, and so does biodiversity-threatening pollution. Besides, preserving biodiversity in Europe can be thought of as a European responsibility on the global stage.
- One can argue that the EU shares an interest in the amenity value of its landscapes. Most benefits of a diverse, traditional, well-kept landscape will be reaped within the country – by direct enjoyment, as an advantage to attract qualified human resources, or through tourism. Still, travelers may not pay for all the pleasure they take in the landscapes of other member states.
- The risk of floods is influenced by agriculture. What farmers grow and where, how they manage their soils, how they handle water courses, such issues are crucial for flood control. And since rivers cross borders, the case for a European dimension can be made.

Another argument for payments is that they can help farmers to implement EU legislation on food safety and animal welfare. There might exist a common EU interest in such assistance in order to enable more demanding legislation – without driving agricultural production to foreign low-standard suppliers – and to enhance compliance. Consumers who almost inevitably eat food from different areas of the common market, and animal rights promoters whose feelings do not stop at borders, stand to benefit.

It is questionable whether this justification is valid or whether farmers should incur the full costs of compliance with EU legislation (according to the polluter pays principle). Several considerations speak against leakage of production to foreign countries with less demanding environmental standards. First, imported food must in any case meet many of the EU's standards, notably those on human, animal, and plant health. Second, the additional costs of complying with environmental standards in agriculture appear generally moderate. Even with regard to animal welfare, where compliance costs are particularly high and cannot largely be recuperated through price premia, pressures to relocate production are mostly minor.[41] Third, land is a key factor of production specific to agriculture – and one that cannot be moved abroad. This limits the extent to which domestic production will be replaced by foreign production.

If some agricultural production is transferred in response to high EU standards, this is not inevitably undesirable. Most environmental problems caused by agriculture are local (for instance, ground water pollution or soil erosion). It is therefore efficient that every country decides on the environmental standards that best conform to its level of development and other characteristics, such as population density and non-agricultural sources of environmental pollution. Even where a global public good is concerned, such as biodiversity or the climate, it is not clear whether a country with higher standards has indeed a better environmental performance. A country with relatively high environmental standards may at the same time employ relatively polluting production techniques – for instance because land is scarcer while agro-chemicals and machines are cheaper than in other countries, or because its cold climate requires using energy to keep animals in stables while animals can graze freely in other countries throughout the year. A transfer of production to countries with lower standards is not necessarily harmful to the global environmental commons.

It is therefore unlikely that food safety and animal welfare will be a dominant factor in the distribution of future CAP payments. It may, however, come into play as a supporting argument for certain allocation criteria.

In order to derive the optimal allocation of EU public goods funds for environmental – and possibly food safety and animal welfare – objectives, one has to determine for each country 1) to what extent these goods would be undersupplied without EU funding, 2) how valuable their supply is for the EU, and 3) how effective EU payments are in promoting their supply. Since EU decision-makers will never ascertain these factors, the distribution of EU public goods funds can be assumed to follow some simple criteria.[42]

Such criteria will have to rest on an unambiguous justification. This makes it improbable that member states will agree on a GDP-based criterion. The ambivalence in this regard is that, on the one hand, one can make a case in favor of investing a relatively large amount of EU resources in poor countries where the production of public goods is relatively cheap (turning Bulgaria and Romania into biodiversity havens and carbon sinks). On the other hand, relatively high levels of EU payments are needed to encourage farmers in rich member states to produce a minimum supply of public goods. Due to this ambivalence, differences in GDP will preferably be accounted for through differentiated co-financing rates.

Furthermore, allocation criteria will have to be easily applicable and resistant to abusive claims. Highly targeted allocation to the member states that have the greatest need or that are undertaking the greatest effort to advance European public goods is thus not workable. For instance, one might believe that high nature value areas deserve additional EU funding. The problem with such a criterion is that it would be poorly defined and open to abuse, leading to inextricable disputes during reform negotiations and resulting in a distorted allocation.[43] The past experience of an EU

average of 57% of agricultural area declared as Less Favored Area should serve as a warning.

Finally, such criteria must not be responsive to the severity of the environmental challenges in the different member states in a way that would reward poor stewardship of environmental goods. In the best case, successful environmental protection is recompensed.

Based on these considerations – unambiguous justification, clear-cut application, and adequate incentive effects – four criteria appear to have the best chances of driving the allocation of the public goods envelopes.[44] The greater member states' agricultural, forest, Natura 2000, and organic farming areas, the greater their future envelopes.

Agricultural area: Agricultural area is loosely related to the need for funds to promote all the European public goods. This relationship is most straightforward when it comes to enhancing the amenity value of landscapes but also reasonably close for climate protection, biodiversity preservation, and water management measures. Agricultural area can similarly serve as a proxy for the funds needed to ensure food safety and animal welfare.

Forest area: Forest land is eligible for second pillar support and would remain so under a public goods envelope. The importance of responsible forest stewardship is increasingly being recognized. Member states with significant forest areas can make a strong case for obtaining payments to enhance the environmental value of their forests. Furthermore, excessively penalizing forest area compared to agricultural area, given the contribution of forests to fighting climate change, should be avoided.

Natura 2000 area: The size of Natura 2000 areas is a suitable criterion for four reasons. First, it is clearly designated and registered.[45] Second, member states that designate Natura 2000 areas pay a price as they have to fulfill strict EU requirements that limit land use. It is thus fair to reward such efforts. Third, the compliance costs make it unlikely that member states grant Natura 2000 status at an excessive scale to bias CAP allocations in their favor. Fourth, if the impact of Natura 2000 areas on CAP allocation nevertheless disposes member states to extend their Natura 2000 areas, this would be a desirable development.

Organic farming area: Organic farming is preferable with regard to all environmental public goods listed above (climate, biodiversity, amenity value, flood control). It also ensures higher animal welfare than traditional farming and possibly produces healthier food. Importantly, the EU-level definition of minimum requirements for organic farming, together with a sophisticated certification and monitoring system, avoids abusive declarations.[46]

Anticipating future subsidy allocation is more difficult if the second pillar is upheld. The problem is that the second pillar has no clear and coherent set of objectives but mixes more or less hidden income support, farm productivity improvements, public goods payments, and rural development programs unrelated to agriculture. It seems reasonable to assume that member states will paper over this incongruity and pretend that the second pillar is about (European) public goods. Distribution would thus be roughly similar but not identical to the public goods envelopes. It can be assumed that forest, Natura 2000, and organic farming areas will receive less weight than under a public goods envelope. Furthermore, one can expect future second pillar envelopes to be responsive to 2013 levels if the old structure is upheld. Continuity in the structure will strengthen the position of those who insist on continuity in the payments.

6. SCENARIOS FOR THE ALLOCATION OF CAP PAYMENTS

What distribution of CAP payments would result if the criteria proposed above were to be applied? This section answers this question for several scenarios, looking at first pillar/discretionary

envelopes, second pillar/public goods envelopes, and the total CAP budget.

6.1 FIRST PILLAR/DISCRETIONARY ENVELOPES

Table 7 shows the characteristics of the EU member states according to the criteria for the distribution of the first pillar/discretionary envelopes identified above. This enables us to appreciate how countries will be affected by giving greater or lower weight to a specific criterion. The table is also helpful in interpreting the scenario results. Due to the many scenarios and member states, not every single estimate can be discussed in the paper. By referring back to this data and the allocation formulae, readers can explain individual estimates.

TABLE 7: MEMBER STATES' CHARACTERISTICS RELEVANT FOR FUTURE ALLOCATION OF FIRST PILLAR/ DISCRETIONARY ENVELOPES

MEMBER STATES	2013 FIRST PILLAR		AGRICULTURAL AREA		GDP/CAPITA
	€ million	% share	million ha	% share	EU=100
Austria	752	1.65	3.19	1.85	124.7
Belgium	615	1.35	1.37	0.80	118.4
Denmark	1,049	2.30	2.66	1.54	117.1
Finland	571	1.25	2.29	1.33	115.5
France	8,521	18.70	27.48	15.93	108.1
Germany	5,853	12.84	16.93	9.82	115.6
Greece	2,217	4.86	4.08	2.36	96.5
Ireland	1,341	2.94	4.14	2.40	143.1
Italy	4,370	9.59	12.74	7.39	99.3
Luxembourg	37	0.08	0.13	0.08	258.4
Netherlands	898	1.97	1.91	1.11	132.2
Portugal	606	1.33	3.47	2.01	75.5
Spain	5,139	11.28	24.89	14.43	104.2
Sweden	771	1.69	3.12	1.81	120.2
United Kingdom	3,988	8.75	16.13	9.35	118.4
EU-15	**36,727**	**80.58**	**124.55**	**72.21**	**110.3**
Bulgaria	742	1.63	3.05	1.77	39.2
Cyprus	53	0.12	0.15	0.08	92.5
Czech Republic	909	1.99	3.52	2.04	81.3
Estonia	101	0.22	0.91	0.53	65.0
Hungary	1,319	2.89	4.23	2.45	62.6
Latvia	146	0.32	1.77	1.03	55.1
Lithuania	380	0.83	2.65	1.54	60.6
Malta	5	0.01	0.01	0.01	78.9
Poland	3,045	6.68	15.48	8.97	56.1
Romania	1,620	3.55	13.75	7.97	44.9
Slovakia	388	0.85	1.94	1.12	70.7
Slovenia	144	0.32	0.49	0.28	90.8
EU-12	**8,853**	**19.42**	**47.94**	**27.79**	**--**

The next step is to combine the criteria into a formula and apply the formula to the data. Whereas the selection of criteria can be analytically explained, the formulae and resulting scenarios are inherently more arbitrary. Justification will be given for their key characteristics but many details

– notably the values given to the parameters – are chosen to produce distinct results rather than being based on predictions of likelihood.

It appears reasonable to assume that the GDP per capita will enter the allocation formula as a correction to the agricultural area:[47] the higher the GDP per capita, the more payments are necessary to keep agricultural area under utilization, to ensure a fair standard of living to farmers, and to appease protesting farmers and land owners. Furthermore, it can be expected that the effect of GDP per capita on subsidy allocation is not linear. Very rich member states will receive less and very poor member states more than what a linear consideration of GDP per capita would suggest. The allocation formula is thus constructed in the following way:

Future envelope = a*2013 first pillar envelope + (1-a)*agricultural area*(GDP per capita)^b + x

The multiplayer a determines to what extent future envelopes are dependent on 2013 first pillar entitlements. The exponent b assigns a weight to GDP per capita that has the desirable non-linear properties for values smaller than 1. The variable x ensures that the shares of all member states in the future first/discretionary pillar add up to 100%.[48]

By varying the values of a and b, four scenarios are set up (see table 8). The conservative and the progressive scenarios assign high (2/3) or low (1/3) values to the multiplier a. Consequently, 2013 first pillar entitlements weigh heavily in the conservative scenario, while agricultural area (together with GDP per capita) are more influential in the progressive scenario. In both cases, the exponent b takes on a medium value (0.5). The other two scenarios differ in the value given to the exponent b, while a is held constant at a medium value (1/2). In the GDP-low scenario, b is at 0.3, so that GDP plays a minor role, whereas b is at 0.8 in the GDP-high scenario.

TABLE 8: SCENARIOS FOR FUTURE ALLOCATION OF FIRST PILLAR /DISCRETIONARY ENVELOPES

SCENARIOS	a 2013 first pillar	1-a Agricultural area and GDP/capita	b GDP/capita
Conservative	2/3	1/3	0.5
Progressive	1/3	2/3	0.5
GDP-low	1/2	1/2	0.3
GDP-high	1/2	1/2	0.8

The results of this calculation can be found in table 9. It first presents the percentage share of each member state in the 2013 first pillar. Then, two columns show for each scenario the member states' share of the future first pillar/discretionary envelopes together with the changes compared to the 2013 levels. For instance, Belgium will receive 1.35% of all first pillar entitlements in 2013 which would be reduced to 1.2% under the conservative allocation formula. This would shrink its envelope by 11%. The scenario in which a country does best is marked in bold (the same will be done in other tables reporting estimates).

TABLE 9: ESTIMATES FOR FUTURE ALLOCATION OF FIRST PILLAR/DISCRETIONARY ENVELOPES

MEMBER STATES	2013 FIRST PILLAR	CONSERVATIVE	PROGRESSIVE	GDP-LOW	GDP-HIGH

	% share	% share	change	% share	change	% share	change	% share	change
Austria	1.65	1.81	10%	1.97	**20%**	1.84	11%	1.97	20%
Belgium	1.35	1.20	**-11%**	1.05	-22%	1.11	-18%	1.16	-14%
Denmark	2.30	2.12	**-8%**	1.93	-16%	1.98	-14%	2.07	-10%
Finland	1.25	1.33	6%	1.40	**12%**	1.34	7%	1.40	**12%**
France	18.70	18.20	-3%	17.70	-5%	17.72	-5%	18.25	**-2%**
Germany	12.84	12.23	**-5%**	11.60	-10%	11.69	-9%	12.21	**-5%**
Greece	4.86	4.06	**-16%**	3.25	-33%	3.65	-25%	3.66	-25%
Ireland	2.94	2.95	0%	2.97	1%	2.84	-3%	3.14	**7%**
Italy	9.59	8.95	**-7%**	8.31	-13%	8.59	-10%	8.67	-10%
Luxembourg	0.08	0.10	18%	0.11	37%	0.09	13%	0.12	**53%**
Netherlands	1.97	1.76	**-11%**	1.54	-22%	1.61	-18%	1.72	-13%
Portugal	1.33	1.49	12%	1.65	**24%**	1.61	21%	1.50	13%
Spain	11.28	12.58	12%	13.92	**23%**	13.11	16%	13.40	19%
Sweden	1.69	1.81	7%	1.93	14%	1.82	8%	1.94	**15%**
United Kingdom	8.75	9.34	7%	9.94	**14%**	9.41	8%	9.96	**14%**
EU-15	**80.58**	**79.93**	**-1%**	**79.27**	**-2%**	**78.41**	**-3%**	**81.18**	**1%**
Bulgaria	1.63	1.47	-10%	1.31	-19%	1.50	**-8%**	1.26	-23%
Cyprus	0.12	0.11	**-9%**	0.10	-18%	0.10	-14%	0.10	-14%
Czech Republic	1.99	1.97	-1%	1.94	-3%	1.98	**-1%**	1.91	-4%
Estonia	0.22	0.29	32%	0.37	**65%**	0.35	56%	0.30	37%
Hungary	2.89	2.61	**-10%**	2.31	-20%	2.54	-12%	2.34	-19%
Latvia	0.32	0.47	48%	0.63	**96%**	0.60	86%	0.49	53%
Lithuania	0.83	0.97	16%	1.10	**32%**	1.09	31%	0.95	14%
Malta	0.01	0.01	**-16%**	0.01	-33%	0.01	-24%	0.01	-26%
Poland	6.68	6.78	1%	6.87	3%	7.20	**8%**	6.31	-6%
Romania	3.55	4.20	18%	4.86	37%	4.97	**40%**	3.97	12%
Slovakia	0.85	0.89	5%	0.94	10%	0.94	**11%**	0.87	2%
Slovenia	0.32	0.30	**-4%**	0.29	-8%	0.30	-5%	0.30	-6%
EU-12	**19.42**	**20.07**	**3%**	**20.73**	**7%**	**21.59**	**11%**	**18.82**	**-3%**

Table 10 presents the same information in a different way. Member states are ranked by the percentage changes they experience in their first pillar/discretionary envelopes. Three groups are distinguished: the winners who increase their share by at least 10%, the losers whose shares fall by 10% or more, and a moderately affected group in-between. The Czech Republic is abbreviated as CZ, Luxembourg as LU, the Netherlands as NL, and the United Kingdom as UK.

TABLE 10: WINNERS AND LOSERS (BY RELATIVE CHANGES IN FIRST PILLAR/DISCRETIONARY ENVELOPES)

CONSERVATIVE		PROGRESSIVE		GDP-LOW		GDP-HIGH	
Winners		**Winners**		**Winners**		**Winners**	
Latvia	48%	Latvia	96%	Latvia	87%	LU	53%
Estonia	32%	Estonia	65%	Estonia	57%	Latvia	53%
Romania	18%	Romania	37%	Romania	40%	Estonia	37%
LU	18%	LU	37%	Lithuania	31%	Austria	20%
Lithuania	16%	Lithuania	32%	Portugal	21%	Spain	19%
Portugal	12%	Portugal	24%	Spain	17%	Sweden	15%
Spain	12%	Spain	23%	LU	14%	Lithuania	14%
Austria	10%	Austria	20%	Austria	12%	UK	14%
		Sweden	14%	Slovakia	11%	Portugal	13%
Moderate		UK	14%			Finland	12%
Sweden	7%	Finland	12%	**Moderate**		Romania	12%
UK	7%	Slovakia	10%	Poland	8%		
Finland	6%			Sweden	8%	**Moderate**	
Slovakia	5%	**Moderate**		UK	8%	Ireland	7%
Poland	1%	Poland	3%	Finland	7%	Slovakia	2%
Ireland	0%	Ireland	1%	CZ	0%	France	-2%
CZ	-1%	CZ	-3%	Ireland	-3%	CZ	-4%
France	-3%	France	-5%	France	-5%	Germany	-5%
Slovenia	-4%	Slovenia	-8%	Slovenia	-5%	Poland	-6%
Germany	-5%			Bulgaria	-8%	Slovenia	-6%
Italy	-7%	**Losers**		Germany	-9%		
Denmark	-8%	Germany	-10%			**Losers**	
Cyprus	-9%	Italy	-13%	**Losers**		Italy	-10%
		Denmark	-16%	Italy		Denmark	-10%
Losers		Cyprus	-18%	Hungary		Netherlands	-13%
Bulgaria		Bulgaria	-19%	Cyprus		Cyprus	-14%
Hungary		Hungary	-20%	Denmark		Belgium	-14%
Netherlands		Netherlands	-22%	Belgium		Hungary	-19%
Belgium		Belgium	-22%	Netherlands		Bulgaria	-23%
Greece		Greece	-33%	Malta		Greece	-25%
Malta		Malta	-33%	Greece		Malta	-26%

Several observations can be made. The main losers are countries whose highly competitive agriculture or specialization in strongly subsidized products has led to disproportionately high 2013 envelopes. This concerns Greece, Malta, Cyprus, the Netherlands, Belgium, and Denmark. Greek suffers the greatest absolute losses, and together with Malta also the greatest relative losses, as its 2003 share greatly exceeds its share in agricultural area, while its GDP ranks slightly below EU average. Germany and France lose a little, while Irish receipts remain about unchanged (thanks to a high GDP per capita). The main winners among the EU-12 are the high-income countries Luxembourg, Austria, Finland, Sweden, and the UK. Spain and Portugal also improve their position as they have low per hectare payments under the 2013 allocation.

Some Eastern European member states lose because of their low GDP-per-capita levels. This is the case for Bulgaria and Hungary. In the case of other Eastern European member states, this effect is dominated by the gains from moving from the disadvantageous 2013 distribution towards

a scheme that pays for agricultural area more equally (Estonia, Latvia, Lithuania, Romania, and Slovakia). Not much changes for the Czech Republic, Poland, and Slovenia.

Few transfers occur between the EU-15 and the EU-12. The redistribution within each group is much more significant and approximately neutral in the balance. Even under the GDP-low scenario which favors new member states most, they increase their receipts only by 11%. In a GDP-high scenario, new member states lose slightly.

6.2 SECOND PILLAR/PUBLIC GOODS ENVELOPES

Table 11 displays member states' characteristics according to the criteria suggested for distribution of the second pillar/public goods envelopes.

TABLE 11: MEMBER STATES' CHARACTERISTICS RELEVANT FOR FUTURE ALLOCATION OF SECOND PILLAR/PUBLIC GOODS ENVELOPES

MEMBER STATES	2013 SECOND PILLAR		AGRICULTURAL AREA		FOREST AREA		NATURA 2000		ORGANIC FARMING	
	€ million	% share	million ha	% share	million ha	% share	1000 km²	% share	1000 ha	% share
Austria	511	4.0	3.2	1.8	4.0	2.3	18.6	1.8	372	5.2
Belgium	54	0.4	1.4	0.8	0.7	0.4	6.0	0.6	32	0.4
Denmark	62	0.5	2.7	1.5	0.6	0.3	5.7	0.6	145	2.0
Finland	272	2.1	2.3	1.3	23.3	13.2	68.4	6.7	148	2.1
France	906	7.1	27.5	15.9	17.3	9.8	89.4	8.8	557	7.8
Germany	1,131	8.9	16.9	9.8	11.1	6.3	67.1	6.6	865	12.1
Greece	619	4.9	4.1	2.4	6.5	3.7	37.8	3.7	278	3.9
Ireland	307	2.4	4.1	2.4	0.7	0.4	9.5	0.9	41	0.6
Italy	1,258	9.9	12.7	7.4	11.0	6.2	84.1	8.2	1150	16.1
Luxembourg	12	0.1	0.1	0.1	0.1	0.1	0.5	0.1	3	0.0
Netherlands	67	0.5	1.9	1.1	0.4	0.2	8.7	0.9	47	0.7
Portugal	564	4.4	3.5	2.0	3.9	2.2	25.3	2.5	233	3.3
Spain	1,041	8.2	24.9	14.4	28.2	15.9	214.8	21.1	988	13.9
Sweden	239	1.9	3.1	1.8	30.9	17.5	82.8	8.1	248	3.5
United Kingdom	267	2.1	16.1	9.4	2.9	1.6	31.7	3.1	660	9.3
EU-15	**7,310**	**57**	**124.5**	**72**	**141.6**	**80**	**750.6**	**74**	**5,767**	**81**
Bulgaria	396	3.1	3.1	1.8	3.7	2.1	55.5	5.4	13	0.2
Cyprus	21	0.2	0.1	0.1	0.4	0.2	1.4	0.1	2	0.0
Czech Republic	418	3.3	3.5	2.0	2.6	1.5	16.9	1.7	312	4.4
Estonia	113	0.9	0.9	0.5	2.4	1.4	13.5	1.3	79	1.1
Hungary	579	4.5	4.2	2.5	1.9	1.1	27.4	2.7	122	1.7
Latvia	151	1.2	1.8	1.0	3.1	1.8	13.3	1.3	150	2.1
Lithuania	254	2.0	2.6	1.5	2.2	1.2	11.8	1.2	120	1.7
Malta	11	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0	0.0
Poland	1,850	14.5	15.5	9.0	9.2	5.2	69.3	6.8	285	4.0
Romania	1,233	9.7	13.8	8.0	6.6	3.7	31.5	3.1	131	1.8
Slovakia	317	2.5	1.9	1.1	1.9	1.1	18.0	1.8	117	1.6
Slovenia	112	0.9	0.5	0.3	1.3	0.7	11.0	1.1	29	0.4
EU-12	**5,454**	**43**	**47.9**	**28**	**35.3**	**20**	**269.7**	**26**	**1,360**	**19**

In order to create scenarios, one needs to distinguish between a situation where the second pillar

structure survives and a situation where a new public goods pillar is established. Table 13 shows two scenarios for the second pillar. In the conservative case, 50% of the future envelope is determined by 2013 envelopes, 20% by agricultural area, and 10% each by forest, Natura 2000, and organic farming areas. In the progressive case, 2013 envelopes account for only 20% of future envelopes, while agricultural area determines 50%. The weights of forest, Natura 2000, and organic farming areas remain unchanged at 10%.

The table also presents four scenarios for the public goods case in which 2013 envelopes are irrelevant. One emphasizes agricultural area, two assign particular weight to Natura 2000/organic farming besides agricultural area, and the last assumes that agricultural area, Natura 2000, and organic farming receive equal weights.

The weight for forest areas is held constant at 10% in all scenarios. Giving greater importance to forest areas is not considered as an option because this would transfer even more money to the main winners from reform;[49] it would thus be politically unacceptable.

TABLE 12: SCENARIOS FOR FUTURE ALLOCATION OF SECOND PILLAR/PUBLIC GOODS ENVELOPES

SCENARIOS	2013 SECOND PILLAR	AGRICULTURAL AREA	FOREST AREA	NATURA 2000	ORGANIC FARMING
Second pillar conservative	0.5	0.2	0.1	0.1	0.1
Second pillar progressive	0.2	0.5	0.1	0.1	0.1
Public goods area-focused	0	0.7	0.1	0.1	0.1
Public goods Natura-focused	0	0.4	0.1	0.4	0.1
Public goods organic-focused	0	0.4	0.1	0.1	0.4
Public goods multifunctional	0	0.3	0.1	0.3	0.3

In all scenarios, the allocation formula is simply the sum, for all criteria, of member states' share in the criterion (see table 11) and the corresponding weight for the criterion (see table 12).[50] Table 13 presents member states' shares of the second pillar allocation for 2013 together with the conservative and progressive second pillar scenarios.

TABLE 13: ESTIMATES FOR FUTURE ALLOCATION OF SECOND PILLAR ENVELOPES

MEMBER STATES	2013 SECOND PILLAR	CONSERVATIVE		PROGRESSIVE	
	% share	share	change	share	change
Austria	4.00	3.30	**-18%**	2.66	-34%
Belgium	0.43	0.52	21%	0.63	**47%**
Denmark	0.48	0.84	75%	1.16	**141%**
Finland	2.13	3.52	**66%**	3.28	54%
France	7.10	9.37	32%	12.02	**69%**
Germany	8.86	8.89	0%	9.18	**4%**
Greece	4.85	4.03	**-17%**	3.28	-32%
Ireland	2.41	1.87	**-22%**	1.87	**-22%**
Italy	9.86	9.47	**-4%**	8.73	-11%
Luxembourg	0.09	0.08	**-17%**	0.07	-23%
Netherlands	0.52	0.66	26%	0.83	**60%**
Portugal	4.42	3.41	**-23%**	2.69	-39%
Spain	8.16	12.05	48%	13.93	**71%**
Sweden	1.87	4.20	**124%**	4.18	123%
United Kingdom	2.09	4.32	106%	6.50	**210%**
EU-15	**57.27**	**66.53**	**16%**	**71.01**	**24%**
Bulgaria	3.10	2.68	**-14%**	2.28	-27%
Cyprus	0.16	0.14	**-16%**	0.11	-30%
Czech Republic	3.27	2.80	**-15%**	2.43	-26%
Estonia	0.89	0.93	**5%**	0.82	-8%
Hungary	4.53	3.30	**-27%**	2.68	-41%
Latvia	1.18	1.31	**11%**	1.27	7%
Lithuania	1.99	1.71	**-14%**	1.57	-21%
Malta	0.08	0.04	**-48%**	0.02	-76%
Poland	14.49	10.64	**-27%**	8.98	-38%
Romania	9.66	7.29	**-25%**	6.78	-30%
Slovakia	2.49	1.92	**-23%**	1.51	-39%
Slovenia	0.88	0.72	**-18%**	0.54	-39%
EU-12	**42.73**	**33.47**	**-22%**	**28.99**	**-32%**

Table 14 provides the results for the remaining public-goods-pillar scenarios.

TABLE 14: ESTIMATES FOR FUTURE ALLOCATION OF PUBLIC GOODS ENVELOPES

MEMBER STATES	AREA-FOCUSED		NATURA-FOCUSED		ORGANIC-FOCUSED		MULTIFUNCTIONAL	
	% share	change	% share	change	% share	change	% share	change
Austria	2.22	-44%	2.22	-45%	3.24	**-19%**	2.89	-28%
Belgium	0.70	**64%**	0.64	50%	0.60	40%	0.59	38%
Denmark	1.37	185%	1.08	124%	1.52	**215%**	1.28	164%
Finland	3.13	47%	4.74	**123%**	3.35	57%	4.35	104%
France	13.79	**94%**	11.64	64%	11.35	60%	10.73	51%
Germany	9.37	6%	8.40	-5%	10.07	**14%**	9.19	4%
Greece	2.78	-43%	3.19	-34%	3.24	-33%	3.36	**-31%**
Ireland	1.87	**-22%**	1.43	-41%	1.32	-45%	1.21	-50%
Italy	8.23	-16%	8.49	-14%	10.86	**10%**	10.15	3%
Luxembourg	0.07	**-26%**	0.06	-34%	0.06	-37%	0.06	-39%
Netherlands	0.95	**82%**	0.87	68%	0.82	56%	0.81	55%
Portugal	2.21	-50%	2.35	-47%	2.58	**-42%**	2.55	**-42%**
Spain	15.19	86%	17.17	**111%**	15.02	84%	16.40	101%
Sweden	4.17	123%	6.06	**224%**	4.67	149%	5.77	208%
United Kingdom	7.95	**279%**	6.07	190%	7.92	278%	6.68	219%
EU-15	**74.00**	**29%**	**74.41**	**30%**	**76.61**	**34%**	**76.01**	**33%**
Bulgaria	2.01	-35%	3.11	0%	1.53	-51%	2.43	-22%
Cyprus	0.10	-40%	0.12	-30%	0.08	-50%	0.10	-40%
Czech Republic	2.18	-33%	2.06	-37%	2.88	**-12%**	2.57	-22%
Estonia	0.75	-16%	0.99	11%	0.92	4%	1.02	**15%**
Hungary	2.26	-50%	2.34	**-48%**	2.04	-55%	2.16	-52%
Latvia	1.24	4%	1.32	11%	1.56	**32%**	1.51	27%
Lithuania	1.48	-25%	1.37	-31%	1.53	**-23%**	1.44	-28%
Malta	0.00	**-94%**	0.00	-95%	0.00	-96%	0.00	-96%
Poland	7.88	**-46%**	7.22	-50%	6.39	-56%	6.45	-56%
Romania	6.45	**-33%**	4.98	-48%	4.61	-52%	4.24	-56%
Slovakia	1.23	-50%	1.43	-43%	1.39	-44%	1.47	**-41%**
Slovenia	0.42	-52%	0.66	**-25%**	0.46	-48%	0.60	-31%
EU-12	**26.00**	**-39%**	**25.59**	**-40%**	**23.39**	**-45%**	**23.99**	**-44%**

Table 15 ranks the winners (whose shares in payments increase by at least 10%), the losers (whose shares fall by at least 10%), and the moderately affected group in-between.

TABLE 15: WINNERS AND LOSERS (BY RELATIVE CHANGES IN SECOND PILLAR/PUBLIC GOODS ENVELOPES)

CONSERVATIVE		PROGRESSIVE		AREA-FOCUSED		NATURA-FOCUSED		ORGANIC-FOCUSED		MULTI-FUNCTIONAL	
Winners		**Winners**		**Winners**		**Winners**		**Winners**		**Winners**	
Sweden	124%	UK	210%	UK	279%	Sweden	224%	UK	278%	UK	219%
UK	106%	Denmark	141%	Denmark	185%	UK	190%	Denmark	215%	Sweden	208%
Denmark	75%	Sweden	123%	Sweden	123%	Denmark	124%	Sweden	149%	Denmark	164%
Finland	66%	Spain	71%	France	94%	Finland	123%	Spain	84%	Finland	104%
Spain	48%	France	69%	Spain	86%	Spain	111%	France	60%	Spain	101%
France	32%	NL	60%	NL	82%	NL	68%	Finland	57%	NL	55%
NL	26%	Finland	54%	Belgium	64%	France	64%	NL	56%	France	51%
Belgium	21%	Belgium	47%	Finland	47%	Belgium	50%	Belgium	40%	Belgium	38%
Latvia	11%					Latvia	11%	Latvia	32%	Latvia	27%
		Moderate		**Moderate**		Estonia	11%	Germany	14%	Estonia	15%
Moderate		Latvia	7%	Germany	6%			Italy	10%		
Estonia	5%	Germany	4%	Latvia	4%	**Moderate**				**Moderate**	
Germany	0%	Estonia	-8%			Bulgaria	0%	**Moderate**		Germany	4%
Italy	-4%			**Losers**		Germany	-5%	Estonia	4%	Italy	3%
		Losers		Estonia	-16%						
Losers		Italy	-11%	Italy	-16%	**Losers**		**Losers**		**Losers**	
Bulgaria	-14%	Lithuania	-21%	Ireland	-22%	Italy	-14%	CZ	-12%	CZ	-22%
Lithuania	-14%	Ireland	-22%	Lithuania	-25%	Slovenia	-25%	Austria	-19%	Bulgaria	-22%
CZ	-15%	LU	-23%	LU	-26%	Cyprus	-30%	Lithuania	-23%	Austria	-28%
Cyprus	-16%	CZ	-26%	Romania	-33%	Lithuania	-31%	Greece	-33%	Lithuania	-28%
Greece	-17%	Bulgaria	-27%	CZ	-33%	LU	-34%	LU	-37%	Greece	-31%
LU	-17%	Romania	-30%	Bulgaria	-35%	Greece	-34%	Portugal	-42%	Slovenia	-31%
Austria	-18%	Cyprus	-30%	Cyprus	-40%	CZ	-37%	Slovakia	-44%	LU	-39%
Slovenia	-18%	Greece	-32%	Greece	-43%	Ireland	-41%	Ireland	-45%	Cyprus	-40%
Ireland	-22%	Austria	-34%	Austria	-44%	Slovakia	-43%	Slovenia	-48%	Slovakia	-41%
Portugal	-23%	Poland	-38%	Poland	-46%	Austria	-45%	Cyprus	-50%	Portugal	-42%
Slovakia	-23%	Slovenia	-39%	Hungary	-50%	Portugal	-47%	Bulgaria	-51%	Ireland	-50%
Romania	-25%	Portugal	-39%	Portugal	-50%	Romania	-48%	Romania	-52%	Hungary	-52%
Poland	-27%	Slovakia	-39%	Slovakia	-50%	Hungary	-48%	Hungary	-55%	Poland	-56%
Hungary	-27%	Hungary	-41%	Slovenia	-52%	Poland	-50%	Poland	-56%	Romania	-56%
Malta	-48%	Malta	-76%	Malta	-94%	Malta	-95%	Malta	-96%	Malta	-96%

Some EU 15 member states see their envelopes sharply reduced. This applies to Greece, Ireland, Luxembourg, Austria, and Portugal. But most experience even stronger increases, namely Belgium, Denmark, Spain, France, the Netherlands, Finland, Sweden, and the UK. Germany and Italy gain moderately under an organic-focused scenario but may lose somewhat in other scenarios.

Almost all new member states lose in all second pillar and public goods scenarios. The only exception is Latvia and Estonia. Latvia is the only consistent winner, especially in the organic-focused or multifunctional cases. Estonia also benefits, except under the progressive second pillar and the area-focused public goods scenarios.

Transfers from the new to the old member states are remarkable. The old member states increase their share by 16% (24%) in the conservative (progressive) scenario and by up to 34% in the organic-focused public goods scenario.

It is important to note that this distribution will change as new member states with relatively small Natura 2000 and organic farming areas catch up. However, they will never increase these areas to such an extent that they will obtain the 43% of any future second/public goods pillar that they are currently being granted under the second pillar.

6.3 TOTAL CAP ENVELOPES

The implications for the future allocation of total national CAP envelopes can be seen by combining the (sub-)scenarios for the first/discretionary and the second/public goods pillars. Three scenarios for the future CAP budget allocation are defined in table 16. In the first case, the old structure is maintained and both the first and the second pillar are distributed according to the respective conservative scenarios (see Sections 6.1 and 6.2). Accordingly, this CAP scenario is labeled conservative.

The other two cases envision more ambitious reform. It is assumed that the structure is reformed, so that the second pillar is replaced by a public goods pillar. These CAP scenarios are dubbed area-focused and multifunctional, respectively, because the public goods pillar is distributed once according to the area-focused and once according to the multifunctional scenario. The discretionary pillar is assumed to be distributed progressively, giving greater weight to agricultural area and GDP per capita and less to 2013 entitlements.

Creating scenarios for total CAP envelopes requires determining which share of the CAP budget will be spent on which pillar. It is assumed that two thirds of the CAP remains in the first pillar in the conservative CAP scenario, that is, if the structure is not reformed and payments for both pillars are distributed conservatively. If reform turns out to be more dynamic, leading to a new structure with a progressively distributed discretionary pillar, it is assumed that two thirds of the CAP budgets are spent on the public goods pillar.[51]

TABLE 16: SCENARIOS FOR FUTURE ALLOCATION OF THE CAP BUDGET

SCENARIOS	SUB-SCENARIO CHOICE		SUB-SCENARIO WEIGHTS	
	First/discretionay pillar	Second/public goods pillar	First/discretionay pillar	Second/public goods pillar
Conservative	conservative	conservative	2/3	1/3
Area-focused	progressive	area-focused	1/3	2/3
Multifunctional	progressive	multifunctional	1/3	2/3

Taking the estimates from tables 9, 13, and 14 and combining them with the weights from table 16 leads to the estimates in table 17.

TABLE 17: ESTIMATES FOR FUTURE ALLOCATION OF THE CAP BUDGET

MEMBER STATES	2013 CAP SHARE	CONSERVATIVE	AREA-FOCUSED	MULTIFUNCTIONAL

		% share	change	% share	change	% share	change
Austria	2.16	2.31	7%	2.14	-1%	2.59	**20%**
Belgium	1.15	0.97	**-15%**	0.82	-29%	0.74	-35%
Denmark	1.90	1.69	**-11%**	1.56	-18%	1.49	-22%
Finland	1.44	2.06	43%	2.55	77%	3.37	**133%**
France	16.16	15.26	**-6%**	15.09	-7%	13.05	-19%
Germany	11.97	11.12	**-7%**	10.11	-16%	9.99	-17%
Greece	4.86	4.05	**-17%**	2.94	-40%	3.32	-32%
Ireland	2.82	2.59	**-8%**	2.24	-21%	1.80	-36%
Italy	9.65	9.12	-5%	8.26	-14%	9.54	**-1%**
Luxembourg	0.08	0.09	**7%**	0.08	-2%	0.07	-11%
Netherlands	1.65	1.39	**-16%**	1.15	-30%	1.05	-36%
Portugal	2.01	2.13	6%	2.02	1%	2.25	**12%**
Spain	10.59	12.40	17%	14.76	39%	15.57	**47%**
Sweden	1.73	2.61	51%	3.42	98%	4.49	**159%**
United Kingdom	7.29	7.66	5%	8.61	**18%**	7.77	6%
EU-15	**75.48**	**75.46**	**0%**	**75.75**	**0%**	**77.10**	**2%**
Bulgaria	1.95	1.87	-4%	1.78	-9%	2.06	**5%**
Cyprus	0.13	0.12	**-8%**	0.10	-24%	0.10	-24%
Czech Republic	2.27	2.24	-1%	2.10	-8%	2.36	**4%**
Estonia	0.37	0.50	37%	0.62	69%	0.80	**119%**
Hungary	3.25	2.84	**-13%**	2.28	-30%	2.21	-32%
Latvia	0.51	0.75	48%	1.03	103%	1.22	**138%**
Lithuania	1.09	1.21	12%	1.36	**25%**	1.32	22%
Malta	0.03	0.02	**-23%**	0.01	-79%	0.00	-82%
Poland	8.39	8.06	**-4%**	7.54	-10%	6.59	-21%
Romania	4.89	5.23	7%	5.92	**21%**	4.45	-9%
Slovakia	1.21	1.23	2%	1.13	-6%	1.29	**7%**
Slovenia	0.44	0.44	1%	0.38	-14%	0.50	**14%**
EU-12	**24.52**	**24.54**	**0%**	**24.25**	**-1%**	**22.90**	**-7%**

Table 18 ranks the member states by the changes in their total CAP receipts and sorts them into groups of winners, losers, and moderately affected countries.

TABLE 18: WINNERS AND LOSERS (BY RELATIVE CHANGES IN TOTAL CAP PAYMENTS)

CONSERVATIVE	AREA-FOCUSED	MULTIFUNCTIONAL

Winners		**Winners**		**Winners**	
Sweden	51%	Latvia	103%	Sweden	159%
Latvia	48%	Sweden	98%	Latvia	138%
Finland	43%	Finland	77%	Finland	133%
Estonia	37%	Estonia	69%	Estonia	119%
Spain	17%	Spain	39%	Spain	47%
Lithuania	12%	Lithuania	25%	Lithuania	22%
		Romania	21%	Austria	20%
Moderate		UK	18%	Slovenia	14%
Romania	7%			Portugal	12%
Luxembourg	7%	**Moderate**			
Austria	7%	Portugal	1%	**Moderate**	
Portugal	6%	Austria	-1%	Slovakia	7%
UK	5%	Luxembourg	-2%	UK	6%
Slovakia	2%	Slovakia	-6%	Bulgaria	5%
Slovenia	1%	France	-7%	CZ	4%
CZ	-1%	CZ	-8%	Italy	-1%
Poland	-4%	Bulgaria	-9%	Romania	-9%
Bulgaria	-4%				
Italy	-5%	**Losers**		**Losers**	
France	-6%	Poland	-10%	Luxembourg	-11%
Germany	-7%	Slovenia	-14%	Germany	-17%
Cyprus	-8%	Italy	-14%	France	-19%
Ireland	-8%	Germany	-16%	Poland	-21%
		Denmark	-18%	Denmark	-22%
Losers		Ireland	-21%	Cyprus	-24%
Denmark	-11%	Cyprus	-24%	Greece	-32%
Hungary	-13%	Belgium	-29%	Hungary	-32%
Belgium	-15%	Hungary	-30%	Belgium	-35%
Netherlands	-16%	Netherlands	-30%	Netherlands	-36%
Greece	-17%	Greece	-40%	Ireland	-36%
Malta	-23%	Malta	-79%	Malta	-82%

Table 19 presents the gains or losses in €million that will result for each member state because of the changes in the distribution key. It is assumed that the post-2013 CAP budget that will be distributed to national envelopes amounts to €55 billion (roughly the current size of the CAP).

TABLE 19: CAP SCENARIOS ABSOLUTE GAINS

CONSERVATIVE		AREA-FOCUSED		MULTIFUNCTIONAL	
Winners		**Winners**		**Winners**	
Spain	996	Spain	2294	Spain	2738
Sweden	482	Sweden	931	Sweden	1516
Finland	339	United Kingdom	725	Finland	1058
United Kingdom	204	Finland	609	Latvia	388
Romania	187	Romania	566	United Kingdom	261
Latvia	134	Latvia	288	Estonia	240
Austria	79	Lithuania	148	Austria	233
Estonia	75	Estonia	139	Portugal	135
Lithuania	70	Portugal	8	Lithuania	131
Portugal	67			Bulgaria	58
Slovakia	14	**Losers**		Czech Republic	46
Luxembourg	3	Luxembourg	-1	Slovakia	44
Slovenia	2	Malta	-12	Slovenia	34
		Austria	-13		
Losers		Cyprus	-17	**Losers**	
Malta	-3	Slovenia	-34	Luxembourg	-5
Cyprus	-6	Slovakia	-41	Malta	-12
Czech Republic	-18	Bulgaria	-95	Cyprus	-17
Bulgaria	-42	Czech Republic	-97	Italy	-61
Belgium	-95	Belgium	-181	Belgium	-222
Denmark	-116	Denmark	-190	Denmark	-226
Ireland	-127	Netherlands	-277	Romania	-242
Netherlands	-143	Ireland	-324	Netherlands	-329
Poland	-179	Poland	-465	Ireland	-565
Hungary	-227	Hungary	-535	Hungary	-571
Italy	-287	France	-586	Greece	-846
Greece	-445	Italy	-765	Poland	-990
Germany	-470	Germany	-1022	Germany	-1089
France	-494	Greece	-1058	France	-1707

The biggest percentage gains go to Finland and Sweden as well as to the Baltic republics. Spain obtains by far the greatest absolute gains. Other countries that stand to gain (though not always under all scenarios) are Austria, Portugal, the UK, and Romania.

Luxembourg, Bulgaria, and the Czech Republic are affected only by minor changes (often with changing signs in different scenarios). Slovenia and Slovakia win in the multifunctional but lose in the area-focused scenario.

Clear losers are Belgium, Denmark, Germany, Greece, France, Ireland, Italy, the Netherlands, Cyprus, Hungary, Malta, and Poland. Especially large changes occur under the multifunctional scenario: Belgium, Greece, Ireland, the Netherlands, Hungary, and Malta would lose more than 30% of their CAP receipts.

There are only very moderate transfers between the EU-15 and the EU-12 countries. The expla-

nation for this is that the shift from the first/discretionary to the second/public goods pillar improves the position of EU-12 countries, while the changes of the distribution key for the second/public goods pillar reduces their share.

7. CONCLUSIONS

The CAP needs fundamental reform indeed. The traditional core of the first pillar, market intervention and coupled subsidies, have long been discredited. But shifting money to the SFP is not the solution – instead, the SFP should itself be phased out. In addition, the various instruments conflated in the second pillar need to be reassessed. Only some of them are in principle appropriate to promote (European) public goods, and even fewer are actually implemented to efficiently attain this end.

The necessary overhaul could best be realized by discarding the old two-pillar structure and replacing it with a discretionary and a public goods pillar. The basic idea of this structure is that countries should enjoy flexibility in how they phase out inefficient policies, while the EU reform debate should not be clogged with the contentious details of phase-out strategies. For instance, progressive modulation, co-financing of the SFP, and reform of the Less Favored Area scheme are all improvements compared to the status quo but should not be attempted in the post-2013 reforms. Instead of amending or scaling back inefficient policies one by one, they should all be grouped in one envelope that is subject to continuous reductions.

A third topic of the reform, besides instruments and structure, is the distribution of the CAP budget into national envelopes. Many member states, especially but not only from the EU-12, urge for the redistribution of national envelopes under the post-2013 CAP. This distributional question is linked to the other two reform topics. If far-reaching changes of the instruments and the structure of the CAP are undertaken, this will make a more thorough re-distribution of CAP payments across member states more likely. By the same token, distributional quarrels between governments and populist appeals to national interests are among the chief obstacles to any efficiency-enhancing reform. It is therefore critical to understand the distributional effects of reform and to come to grips with the future CAP allocation.

This requires identifying criteria that can inform the future distribution of CAP payments. The paper suggests several such criteria whose case can convincingly be made. In the case of the first/discretionary pillar, these are 2013 first pillar envelopes, agricultural area, and GDP per capita. The distribution of future public goods envelopes would probably be determined by agricultural area, forest area, Natura 2000 area, and organic farming area. If the second pillar is upheld, its envelopes can be expected to be also shaped by 2013 second pillar entitlements.

By combining these criteria into allocation formulae, member states' future envelopes can be estimated. Some results from the many scenarios considered in this paper shall be highlighted. It can be seen that several traditional defenders of the CAP are indeed likely to lose from reform. This concerns Belgium, France, Greece, Ireland, and Italy. However, Italy may approximately preserve its share under the multifunctional scenario that strongly rewards Natura 2000 areas and organic farming. If reform is unavoidable, the Italian motto should be: the more, the better. By contrast, the multifunctional scenario is especially undesirable for Belgium, France, and Ireland (compared to their results under other scenarios).

Other countries that defend the status quo would – surprisingly – win from reform. This is especially striking in the case of Spain that would see both its envelopes increased under any reform scenario and that would reap the greatest absolute gains of all member states. Finland would get

the third highest increase under all scenarios just after Sweden and Latvia. For both countries, the benefits would be greater, the bolder the reform. To a lesser extent, this also applies to reform-averse Portugal and Austria.

The opposite case exists as well. Denmark and the Netherlands, who favor CAP reform (albeit less strongly than the UK and Sweden), are likely to be faced with a decreasing share in CAP payments. The same is true for Germany which may turn into a CAP reform promoter in the run-up to 2013 (due to its interest in limiting wasteful expenditures being the main net contributor to the EU budget, its rather liberal convictions in economic policy, and its commitment to environmental protection). Such countries need to engage in a broad-scale debate early on, so that as many actors as possible understand what is at stake, and commit to reform in the name of the larger benefits to European integration, before the street protests and behind-the-door deals come to dominate the final stages of negotiations.

A special though similar case is the UK. This country will likely increase its share in CAP payments but may nevertheless indirectly lose from CAP reform. The hidden drawback is that the UK may be forced to sacrifice its budget rebate. In the budget review consultations, most stakeholders expressed a preference for the removal of all ad hoc/historical corrections and many would like to avoid the introduction of a generalized correction mechanism in their place. Such a change will become harder to resist if the CAP becomes more efficient and is being distributed according to rational criteria.

Sweden endorses CAP reform in line with its liberal economic approach and pro-environmental stance. It appears not to be aware of a more material incentive: it could be the greatest relative winner when it comes to national CAP envelopes.

The Eastern European member states are very heterogeneously concerned. The Baltic Republics stand to gain substantially from CAP reform, most so under the ambitious multifunctional CAP scenario. All other Eastern European member states can expect to gain only moderately (except for Romania in a scenario that heavily compensates agricultural area) – or they even risk to lose. During the next financial framework, most Eastern European member states would probably be served best by advocating fundamental CAP reform while minimizing CAP expenditures.

The logic behind such a move is that this would boost their receipts from European structural funds. The contributions to the Budget Review consultation have made it clear that many stakeholders want to abolish EU payments to poor regions in not-so-poor member states, keeping only an inter-state transfer mechanism to the benefit of the poorest member states. And even among those who wish to maintain the possibility to tap structural funds for all regions, most agree that these funds should be concentrated more strongly on less-developed member states and regions. Eastern European member states therefore have a material interest to back radical and principled CAP reform in the spirit of the Budget Review. Ambitious changes in the notoriously rigid CAP, driven by the leitmotif of promoting European public goods, would strengthen the case for focusing European solidarity transfers on poor (Eastern European) member states and ending the inefficient web of cross-subsidies characteristic of current structural and cohesion policies.

The more Eastern European member states expand their share in the structural funds, the more attractive it becomes to reduce the CAP budget in order to free up money for structural funds. Even if Eastern European member states are surprisingly successful in moving towards a flat rate approach, they will be much better off by shifting the money to the structural funds instead. A further advantageous side effect would arise if CAP reform facilitates the move towards an exclusively GNI-based EU budget (as Eastern European member states apparently have no interest

in the exceptions for certain net contributors).

The hope is that better targeting of EU subsidies at European public goods and sound co-financing will reduce the importance of national envelopes in the future. The final winner would be the EU.

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ANNEX

The data for the tables has been taken from the following sources:

2013 first pillar envelopes: Council Regulation (EC) 73/2009.

2013 second pillar envelopes: Commission Decision 2007/383/EC.

GDP per capita: Eurostat, 2008 forecast (EU27=100) in Purchasing Power Standards.

Agricultural area: Eurostat, agrarea (arable land, permanent grassland, permanent crops, and kitchen gardens), 2007.

Forest: UNECE, forest & other wooded land, 2005.

Natura 2000: DG Environment, Natura 2000 Barometer, Terrestrial Special Protection Areas and Terrestrial Sites of Community Importance, June 2008.

Organic farming: www.organic-europe.net, 2007.

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FOOTNOTES

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2. See the roughly 300 stakeholder contributions of the consultations conducted by the Directorate-General Budget in 2008 as well as the commissioned scientific studies at http://ec.europa.eu/budget/reform/index_en.htm.
3. Farm ministers passed a minor reform, dubbed 'Health Check', in 2008, whose major effect is to dissipate serious reform ambitions arising from within Europe for the duration of the current financial framework. Also, the World Trade Organization (WTO) will not deliver the external stimulus that has been influential in the past landmark reforms of 1992 and 2003: the prospects for concluding the Doha Round are uncertain – and the draft agreement on the negotiating table falls short of requiring fundamental CAP adaptations if it were to be passed. The main change would be the eventual removal of export subsidies.
4. Already in 2008, the European Commission has hosted a conference to present the results of the civil society dialogue and scientific reports conducted as an initial step of the Budget Review. This process is preparing the 'real' budget negotiations by systematically evaluating both EU spending and financing. By the end of 2009, the Commission intends to reveal the recommendations it has derived so far, followed by a communication on CAP reform in summer 2010.
5. See the speech by Mariann Fischer Boel, the Commissioner for Agriculture and Rural Development, at http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/279&format=HTML&aged=0&language=EN&guiLanguage=en.
6. New member states thus received a much larger share in the so-called second than in first pillar payments. See Section 5.
7. For instance, a generalized correction mechanism could be introduced into the GNI-based budget contributions, and subsequently be phased out in step with reductions of wasteful CAP subsidies. See also Nunez-Ferrer (2008) for a proposal on a EU financing scheme that is responsive to the allocation of direct payments under the CAP.
8. See European Commission (2009b).
9. See Section 5.2, which also argues that rural development is not a reasonable objective for the CAP.
10. Some of them increase agricultural production while others decrease it. It is difficult to quantify these effects and estimate net changes in production due to the SFP. But even if their net effect is zero, they still lower economic efficiency.
11. See Vercammen (2007).
12. See Chau and De Gorter (2005). Witzke and Noleppa (2007) show that most incorporated farms in Germany would operate at a loss without the SFP.
13. The British Department for Environment, Farming and Rural Affairs (Defra) estimates the average cost of processing an individual SFP claim in 2007-08 at £742. See http://www.parliament.the-stationery-office.com/pa/cm200809/cmhansrd/cm090126/text/90126w0009.htm.
14. See Ramboll Management (2007).
15. See OECD (2008).
16. Brady et al. (2007) find that decoupled payments do not lead to consistently better environmental outcomes than the coupled payments that have long been criticized for their negative environmental effects. Kaditi and Swinnen (2006) equally find regionally divergent and mixed environmental effects of

untargeted policies.

17. See European Court of Auditors (2008). See also Brunner and Huyton (2008) and www.ccat.wur.nl.
18. The same can be said of those elements of cross compliance that aim to ensure food safety and animal welfare.
19. See European Commission (2009a) and Witzke, Noleppa, and Schwarz (2008).
20. See Velazquez (2008).
21. See Velazquez (2008). See also the list of hundreds of farm-subsidy-millionaires at www.farmsubsidy.org.
22. The Health Check reform has extended the range of instruments eligible for first pillar funding (through Art. 68 of Council Regulation (EC) No 73/2009), further blurring the distinction between the two pillars.
23. So far, the possibility of 'voluntary modulation' is tightly restrained.
24. One such safeguard should be that coupled payments must at least not exceed the 2013 level. Farm modernization subsidies that do not efficiently serve a public good and are thus not illegible under the public goods envelope should remain below a threshold that prevents significant increases compared to 2013 levels (at least in those countries that spend strongly on this item in 2013). And all farm modernization programs should have to comply with stricter conditions that prevent environmental harm.
25. Introducing co-financing for the SFP – albeit an improvement in itself – appears not desirable because it would complicate negotiations. However, the possibility to top up the SFP, as discussed below, would also share the financial burden between the EU and the member states.
26. Re-starting the debate about a bond scheme is not advisable for similar reasons. SFP entitlements can already be sold, and they should receive an end date through the next reform. The SFP comes so close to a bond that the discussion about a new bond instrument would unnecessarily complicate matters.
27. This is not to dismiss the very valuable work on enhancing transparency about payments conducted in the first place by www.farmsubsidy.org. Debunking the myth that the SFP is needed to help small farmers should not primarily lead to claims for different repartition but for the abolition of the SFP.
28. One such form of non-SFP income support that member states could employ to soften the transition and appease protest is the Less Favored Area scheme. This scheme has no justification under a public goods envelope: more targeted programs that preserve environmentally friendly farming in areas where land abandonment would be ecologically undesirable are preferable. In this sense, the long-standing discussion of reform of the Less Favored Area payments points into the wrong direction, both by legitimizing an instrument that should be removed and by restraining member states to employ it for political ends to facilitate overall CAP reform.
29. See BirdLife International (2009).
30. For instance, agri-environmental payments can be coupled to good practices in the production of a specific crop. This will distort production if the payments are high and compliance cheap.
31. See Sections 3.3 and 5.1 on the current imbalances. Future leveling will result from equalizing per hectare payments across member states and among farmers within the same member state (as the historic SFP model recedes).
32. See European Council (2003).
33. For Bulgaria and Romania, where the SFP will be fully phased in only in 2016, data has been taken for the year 2015 as an approximation of their 'time-discounted' entitlements/bargaining power in 2013.
34. The argument that agricultural area is a useful proxy for the delivery of public goods is made in the next section.
35. After 2013, structural funds will probably become even more beneficial to Eastern European countries with low GDP per capita, compensating them for lesser CAP receipts. See Section 7.
36. See the next section.
37. See Council of the European Union (2005).
38. See Commission Regulation (2004) and European Council (1999).
39. The Health Check reform has affected this distribution only slightly.

40. The term 'public goods' is used broadly. Agricultural research and development are not mentioned here. If research is financed through the CAP, it should not be part of the national envelopes but be allocated according to scientific excellence.
41. See Grethe (2007).
42. More fine-grained criteria would be conceivable if EU policies prescribe for which objectives the money should be used. For instance, a country could receive extra funds dedicated to flood management if its flood management efforts significantly affect other member states. Or it could get specific funding for protecting migratory birds.
43. See Institute for European Environmental Policy (2007) on the challenges inherent in indicators for high nature value farmland.
44. See also Mantino (2003). He considers Natura 2000 and organic farming but not agricultural area as criteria linked to environmental public goods. An important difference is that he accounts for agricultural employment, employment/unemployment rates, and GDP per capita in order to respond to economic/social needs. Since the present paper assumes that environmental services will be the key objective of the future second/public goods pillar, such factors play no role.
45. See http://ec.europa.eu/environment/nature/natura2000/index_en.htm.
46. See Council Regulation (EC) No 834/2007.
47. 'GDP per capita' is understood as deviation from EU average (EU=100) as shown in table 7. The Sapard program for the new member states has also used GDP deviations as a correction factor to agricultural area (and agricultural employment). See Article 78 of Commission Regulation (2004).
48. The share of subsidies that is not allocated by the first two components of the formula is distributed across member states according to their share based on the first two components. The problem of non-allocated shares arises because GDP per capita is not expressed as a percentage share (like 2013 first pillar entitlements and agricultural area) and because it is being exponentiated.
49. Spain, Sweden, Finland, Estonia, and Latvia – see Section 6.3.
50. For instance, the Austrian share in the conservative scenario can be calculated in the following way: 4.0*0.5+1.8*0.2+2.3*0.1+1.8*0.1+5.2*0.1.
51. This difference in the allocation of funds to the two pillars may appear excessive. After all, the public goods pillar will be narrower in scope than the second pillar; it would thus receive less money if funding per instrument remains unchanged. The underlying assumption is that funds will be radically re-allocated across instruments under the area-focused and multifunctional CAP scenarios. One also has to take into account that these values are averages over the next financial period. An average of 1/3 for discretionary pillar payments can be attained even if initial payments are higher provided that they fall below 1/3 at the end of the next financial period (presumably 2020).