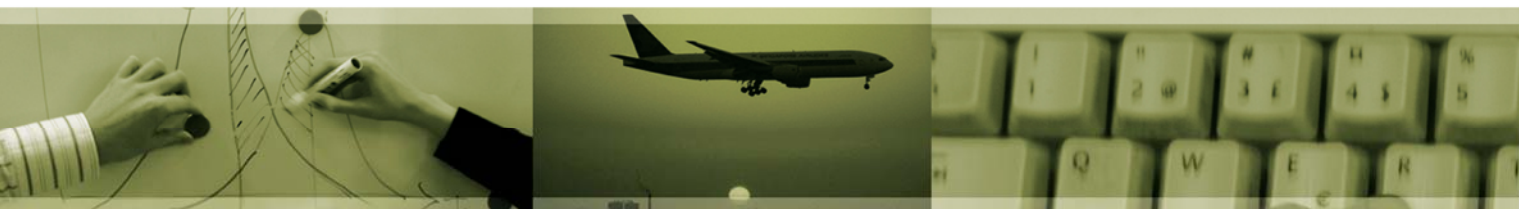


EU BUDGET REVIEW

OPTIONS FOR CHANGE | JUNE 2009

INFORMED DECISIONS



| COLOPHON

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TABLE OF CONTENTS

Preface	5
Outcome document 13th May 2009: summary of experts views	6
Chapter 1 Main findings of the overview study	12
1.1. Three set of criteria for financing policy through the EU Budget	12
1.2. Current budget challenges	12
1.3. Proposed options for reform	17
Chapter 2 A primer on principles for funding policy at the EU level	20
2.1. Political criteria	20
2.2. Public economics.....	21
2.3. Fiscal federalism	22
References	24
Chapter 3 Structural funds	25
3.1. Key facts.....	25
3.2. Matching objectives with the EU decision making structure	28
3.3. The effects of structural funds in practice.....	32
3.4. Options for reform	35
References	41
Chapter 4 Natural Resource Management	46
4.1. Setting the scene for the reform options.....	46
4.2. Key facts.....	46
4.3. Matching objectives with proposed EU spending principles.....	50
4.4. Effectiveness in meeting objectives.....	52
4.5. Options for reform	56
4.6. Summary of the options	63
References	66
Chapter 5 Growth oriented policies	71
5.1. Setting the scene.....	71
5.2. Key facts.....	71
5.3. size of <i>spill-overs</i> , economics of scope and scale	73
5.4. Presenting options.....	80
References	84

Appendix.....	89
Chapter 6 Internal and external security including development assistance.....	91
6.1. From pre-accession assistance to internal support?	92
6.2. Merits of shifting some development aid to EU budget	93
6.3. Migration policies.....	97
6.4. Common foreign and security policies (CFSP)	98
References	99
Appendix.....	103
Chapter 7 A small note on administrative expenditure.....	104

PREFACE

The purpose of this study is to present options for a reform of the EU Budget in the context of the Budget Review that was agreed upon as part of the adoption of the financial framework for the period 2007 to 2013.

Since the completion of the consultation phase last year, the Commission has not yet presented its own assessment. At this stage it is not yet clear whether it will still present a report before the end of this year.

The present study was commissioned by the Dutch Ministries of Finance, Economic Affairs and Agriculture with the following provisos:

“The research project is expected to adopt the method popularised by the Copenhagen Consensus. The underlying principle of this method is simple but nevertheless frequently ignored: whenever resources are limited it is inevitable that priorities are set, whether through rationalised choice or by default. (...)

The method of the Copenhagen Consensus is to use all available evidence on the welfare costs of problems and the costs and benefits of policy interventions in combination with the knowledge of experts to set up a ranking of problems and solutions, with the (broadly defined) welfare effects of each as the ordering criterion.”

Pursuing these methodological aims, the study is built on a clear distribution of roles:

- Copenhagen Economics has attempted to summarise the available evidence in a form that allowed experts to make up their minds about various options on how to allocate scarce resources over a wide range of objectives.
- This evidence was presented at a Priority Setting Meeting in Brussels, 12 and 13 May. First, external reviewers presented their views on the quality and balance of the research. Next, six experts from six different countries were asked to allocate a budget up to 1 per cent of the EU GDP in 2020 (roughly its current size in relative terms) to the different objectives and policy instruments.

The study is, therefore, divided into three parts:

1. An outcome document summarising the view of the experts, and their proposal for a revised budget for 2013 to 2020.
2. Main findings of background papers.
3. The background papers on the main present expenditure areas of the EU: structural funds, natural resource management (including the Common Agricultural Budget), support for research and infrastructure and finally, relatively short notes on EU's spending on external efforts, internal security as well as on administrative expenditure.

| OUTCOME DOCUMENT 13TH MAY 2009: SUMMARY OF EXPERTS VIEWS

The structure of the EU Budget should reflect basic economic principles as well as evolving political challenges and priorities. This calls for a scaling down and improved targeting of agricultural and regional spending. More weight should be given to growth-enhancing policies, including EU spending on basic research and infrastructure, as well as EU policies enhancing internal and external security.

Background and framework

Over 1½ day, six experts within the area of European economic policy met in Brussels to discuss and propose a future structure for the EU Budget. The input discussion for this consisted of the following elements:

- a background study produced by Copenhagen Economics which was reviewed by two scholars with particular expertise in the relevant areas of the EU budget.
- the cumulative knowledge on EU policy held by the experts themselves.

The aim of the exercise has been to provide a clear sense of *direction* for a reformed EU budget, not to deliver detailed assessments of present and prospective future policies. Where are there good cases for either reducing or increasing EU budgetary resources and how should resources be spent within the chosen policy areas?

The experts were asked to provide their view on what the EU budget should look like in 2020, compared to 2013. The latter year constitutes the end of the current seven year period of the current financial framework, while 2020 is the last year of a potential new seven year period for the next financial framework. The purpose was to concentrate the discussion on long-term issues. The discussion focused exclusively on the expenditure side, but there was recognition among the experts that a review of the financing structure was also necessary.

There was a very strong consensus on both the reasoning behind budgetary priorities as well as on the broad magnitude of funds allocated to these priorities. We will list the main conclusions below:

Conclusions reached

Joint EU funding via a common budget can help the EU as a whole to attain its economic and political priorities. But *EU funding will always be just one element of a much broader set of policy instruments that needs to be effectively implemented* to get the desired results. The key elements will be structural reforms in labour markets and product markets to increase employment and productivity, often with little or no implications for the EU budget.

There is a need for a *fundamental reform* of the present structure of the EU budget. The reform needs to be based upon principles determining when spending at the EU level is the right way to support a particular objective rather than EU regulation or action taken at the national level by governments or indeed private firms and employees.

The proposed restructuring can take place within the framework of a *spending level that is just below 1 per cent of GDP in 2020* – the same level as in 2013 – without constraining desired spending levels in relation to the tasks currently assigned to the EU budget.

On this basis two main areas of present spending were agreed to be scaled down. First, the use of *structural funds* targeted at particular countries or regions in EU should in the future be available *only to low-income countries within the EU* (essentially with per capita income below 90 per cent of the EU average). The basic argument is that countries with median to high incomes have ample financial means to support regional development within their borders and efficient national instruments to reach such objectives. It was generally agreed that the present use of earmarking funds for specific purposes, and with recipient countries co-funding the programmes, was not a viable long-term solution for ensuring good use of budgetary resources. As a whole, recipient countries should be provided with *more latitude in deciding local priorities*. However, the counterpart to more flexibility is a *more rigorous ex post assessment* of what these funds achieve over time including improvement of the quality of governance at national and regional level. Failure to use funds effectively or a jump into the league of countries that do not qualify for aid through successful convergence, must at some point lead to serious consideration of reducing support.

The second scaling down of resources concerns *agricultural support*. Over the years, successive reforms have led to more market oriented and better policies – reducing highly distorting market price support schemes and introducing compensatory direct payment (the single farm payment). This course needs to be held.

While the movement from market support to direct payments was instrumental in reducing distorting price subsidies, *the time has come to phase out direct payments as well as remaining market support schemes*. The rationale here consists of four prime arguments. First, Member States have a range of instruments to ensure that farmers – and others – living in rural areas have standards of living that compare with persons in other occupations if they so wish. But this is a choice for Member States to make, with no compelling reasons for the EU to engage in income support for one particular industry. Secondly, current farmers, particularly those having recently started up their farms, receive close to zero benefits from these support schemes which in practice are capitalised on higher prices for land and other business assets. As a result, the higher financing costs largely cancel out the individual benefits of direct payments. Thirdly, compliance and administration costs equal perhaps 10 per cent of

all direct payments. Fourthly, market support schemes distort the EU's own and international agricultural markets, to the detriment of inter alia development countries.

There is a widespread recognition that a phasing out of payments will lead to a considerable fall in land prices in many countries, which risks putting the current generation of farmers into bankruptcy. Hence there was widespread support for the use of mechanisms – such as personalised bonds provided directly to farmers – to compensate for some of the loss resulting from the phasing out of direct payments. Most experts suggested that the financing of such compensation should come from the EU budget, not from national budgets, which is reflected in the suggested spending levels for agricultural support that includes such temporary compensation costs. Beyond 2020 there should be continued and significant falls in budget support for agriculture.

Finally, experts expressed great concern that lower levels of EU funding for agriculture might lead to more national subsidies of a distortive character, requiring strengthened state aid controls as well as an overhaul of state aid in the area of agricultural sector as a counterpart to the proposed phasing out.

Moreover, there was support for discontinuing rural development programmes in their present form. First, they link development in rural areas too narrowly to support for the agricultural sector while rural development, should be integrated into a wider framework of regional development with each country deciding on its' own priorities. Secondly, as for structural funds, little merit was seen in the EU budget supporting rural development in countries with median to high incomes. The conclusion then is that the overall budget for structural funds for lower income countries should be seen as including *potential* rural development objectives. Finally, there was some limited support for the idea that environmental objectives in the area of land management (quality of water, landscape quality) could be supported by the EU budget, but this included the notion that the sums involved would be small if only projects with EU-wide benefits were supported.

As regards expanding EU budgetary support relative to current levels, four main focus areas were identified. First, support for *basic research and technology development* was highlighted: the benefits of R&D undertaken in Munich also benefits innovation in firms residing in Paris and vice versa. If Member States base their decision on the level of funding for research on the level of benefits falling within their borders alone, then too little research may be undertaken. Some experts suggested that there might also be benefits from supporting elements of higher education. However the main emphasis was on support for basic research i.e research that is aimed at achieving fundamental rather than marginal improvements in human knowledge. This is a research area where the market typically will be very reluctant to fund due to high risk and uncertain returns and where the spillover effects to other countries are likely to be the highest. Basic research on *climate and energy technologies* was mentioned as a particularly relevant focus area. Some reservations were expressed as to

the capacity of EU procedures to facilitate high quality research financed effectively out of the EU budget. This had some bearing upon the level of allocations that experts proposed for this area. High administrative costs, selection mechanisms and qualification criteria associated with applying for funding were mentioned as a serious issue.

Secondly, support for *infrastructure* could also be increased with the general proviso that funding should go to projects that really target areas of larger EU interest such as interconnections between EU countries as well as the development of corridors in (freight) rail services, providing also opportunities for reducing environmental and other pressures from road transport. Improvements in selection mechanisms with stronger ex-ante evaluation of projects were called for.

Thirdly, there was some support for expanding the *EU's development aid budget*. EU member countries have committed themselves to increase support over the coming years and there are potential benefits for the EU in joint action rather than Member States running similar bilateral programmes in recipient countries. The effectiveness of the management of EU spending, including project selection, in the areas was questioned. Moreover, Member States in practice maintain different priorities regarding both the objectives for support (health, poverty reduction etc.) and the geographical focus. These concerns caused several experts to hold back on joint funding in this area.

The fourth area for a potential budget increase concerns the *broader internal and external security aspects of EU's policy*. Experts thought that the recent intensification of European integration in areas such as internal security, border protection, foreign and defence policy might require some additional budgetary expenditure over the next decade. The proposed allocation of resources is more an indication of the potential need to mark down resources than any evaluation of precise needs in the event of further development of EU policies within this area.

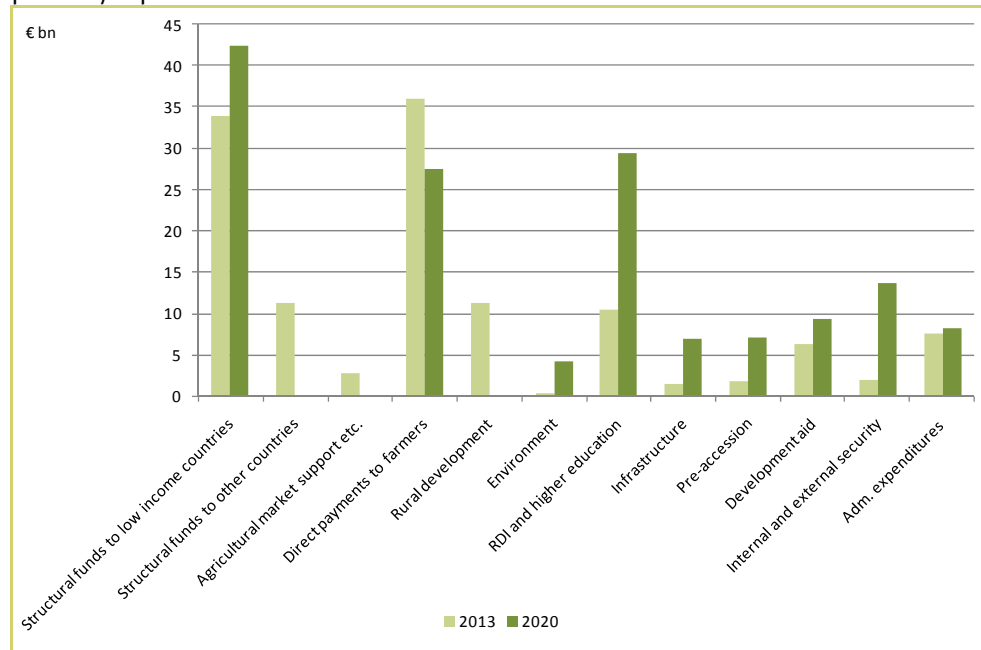
The budgetary outcome

Each expert expressed his opinion on broad allocation of the budget for policy areas. The figure below reflects the average allocation provided by the experts. It would be fair to say that the budgetary proposals reflect a bottom-up approach providing as much funding as was thought productive rather than an exercise where total sums were constrained by an upper limit.

Structure and level of EU Budget spending in 2013 from financial framework and proposed by experts in 2020

	Spending in 2013 (€ bn)	Spending in 2013 (pct of EU GDP)	Result of the Priority Setting Meeting (€ bn)	Result of the Priority Setting Meeting (pct of EU GDP)
Structural Funds	45		42	
To lower income countries	34	0,24	42	0,26
To median and richer income countries	11	0,08	0	0,00
Natural resource management	51		32	
Market support etc.	3	0,02	0	0,00
Direct payments	36	0,25	27	0,17
Rural development fund	11	0,08	0	0,00
Environmental objectives	0	0,00	4	0,03
Growth policies	13		36	
Research, Development, Innovation and higher Education	10	0,07	29	0,18
Infrastructure (transport and energy)	1	0,01	7	0,04
External development assistance	8		16	
Pre-accession	2	0,01	7	0,04
Development aid	6	0,04	9	0,06
Internal and external security (incl migration)	2	0,01	14	0,08
Administrative expenditures incl. small programmes	8	0,05	8	0,05
Total	127	0,90	149	0,90

Structure and level of EU Budget spending in 2013 from financial framework and proposed by experts in 2020



The experts, reviewers and the facilitator

The experts were:

Kai Konrad, professor of public economics and director of the Social Science Research Center Berlin, Germany

Sixten Korkman, Managing Director, Research Institute of the Finnish Economy, Finland

Mauro Mare, Professor at Tuscia University, Italy

Jaques Pelkmans, Director at the College of Europe, Belgium

Jim Rollo, Professor at the University of Sussex, Great Britain

Janez Sustersic, Professor at the University of Primorska, Slovenia

The reviewers were

Søren E. Frandsen, Pro-Vice-Chancellor, Aarhus University, Denmark

Indhira Santos, Research Fellow from Bruegel, the Brussel economic think tank.

The meeting was chaired by:

Professor Niels Thygesen, University of Copenhagen, Denmark,

Chapter 1 MAIN FINDINGS OF THE OVERVIEW STUDY

1.1. THREE SET OF CRITERIA FOR FINANCING POLICY THROUGH THE EU BUDGET

The EU has defined an ambitious policy agenda over a broad range of issues to be delivered upon over the coming years and decades. The central tenet of this study is to evaluate the role that funding over the EU budget should play in attaining such objectives. For this purpose we *define three sets of criteria* which have very broad support in the literature on EU budget principles (see chapter 2).

First, is *public funding preferable to other regulation and effective in practice (“public economics”)*? Example: expansion of structural employment is largely about reforming social security systems and labour market regulations.

Second, if public spending is (partly) the answer, *should this then take place at EU, national or local level (“fiscal federalism”)*? The study suggests that EU spending should be restricted to areas where the following four factors are strongly at play:

- Positive spillovers e.g. benefits of national research accrue to other Member States.
- Public goods at the EU level e.g. security of external borders.
- Economics of scale and scope e.g. operation of large nuclear research facilities.
- Equity / solidarity e.g. “market” outcomes may provide too diverse income dispersion between countries.

Third, is there *a willingness to abandon the policy area wholly/partly at national level?*

1.2. CURRENT BUDGET CHALLENGES

Presently, the EU Budget amounts to slightly less than 1 per cent of the EU GNI, cf. Table 1.1. Over the last decades, spending has increasingly moved in the direction of the so-called structural funds, an item of spending allocated to specific countries or regions in the EU to help deliver on mainly national development goals. Cohesion policy accounts for 0.33 per cent of GNI in 2013 against 0.20 per cent in 1990. Over the same period, spending on agriculture-related objectives has declined from 0.76 to 0.37 per cent of GDP. By contrast, spending on growth related expenditure, notably research and development and infrastructure has risen from 0.05 to 0.11 per cent of GDP over the same period.

A main conclusion of this study is that the EU Budget as a whole only very weakly matches the *proposed four guiding factors for the assignment of public spending to the EU level*. The outcome is summarised in Table 1.1. The basis for this conclusion is provided in the remaining chapters of the study, each of which is devoted to a main current spending area. Below, the main conclusions are presented within each of the main spending areas: ‘Structural funds’, ‘Natural resource management’, ‘Growth policies’, and ‘Internal and external security’ including ‘External assistance’.

Table 1.1 Matching spending with four factors from assigning spending to EU level

	Spending in 2013, billions 2004 prices	Spillovers	EU public good	Economies of scope and scale	Solidarity
Structural Funds	45				
To low income countries	34	Limited	No	No	Strong
To low income regions in median/ high income countries	7	No	No	No	Limited
To other regions in median/high income countries	4	No	No	No	No
Natural resource management	51				
Market support	2-3	No	No	No	Limited
Direct payments	36	No	No	No	Limited
Rural development fund	11	Limited	No	No	Strong
Environmental programmes	½	Limited	Limited	No	Limited
Growth policies	13				
Research	9	Strong	No	Some	Limited
Innovation/higher education	2	Limited	No	Some	Limited
Infrastructure (transport and	1	Limited	Limited	Some	Limited
External assistance	8				
Pre-accession	2	No	Some	No	Strong
Development aid*	6	No	Some	Limited	Strong
Internal and external security	2.0	Some	Strong	Limited	Some
Administration cost	8	Administrative costs are incurred to support goals			
Total	127				
Share of GDP	0.9%				

Note: *Aid disbursed under the EDF is not included. Fisheries programmes included in Natural Resource Management with € 0.9 billions but not shown explicitly. The terminology follows the conclusions drawn in the main chapters of the study. The degree of matching is ranked on a scale from "No", "Limited", "Some", and "Strong". Source: Brueghel, Eurostat, DG Budget and Copenhagen Economics

Structural funds

Structural funds may be divided into three main categories: funds to countries with relatively low per capita income; funds to less affluent regions in countries not entitled to receive funds on the basis of national per capita income; and the financing of programmes in relatively prosperous regions in prosperous countries. For all three categories, it is a formal requirement that Member States co-fund programmes with the aim of ensuring quality of national funding. This is the notion behind this is that the likelihood of an adequate selection and management of these projects is likely to be increased. This is tested through the so-called additionality test: Member States' own funding for the supported activity must not be reduced following the implementation of an EU supported programme.

We find that effective spillover effects are largely absent from structural spending, with the possible exception of subsidies to poorer regions (€37 billions in 2013). On the latter, the

point is that environmental programmes are one of three priority areas for support to low income countries and regions. If the “willingness” to pay for reduced pollution is higher in high than low income countries, then transfer of resources to the latter to pay for a EU public good makes sense.

Effects from economics of scale and scope are weak, perhaps even negative. As a whole structural fund policies tend to move resources from high income, typically urban centres, to low income regions of an often rural nature. Structural fund programmes often encourage the development of research and development in the supported areas, which may come at the price of strengthening fewer and more focused areas of excellence.

Funds to poor regions meet the principle of equity. However, we are not convinced that structural funds programmes are the most important policy to reduce income and productivity disparities within the EU; in fact evaluations do not support expectations of major effects. Real convergence requires reforms of labour and product markets in the relevant Member State and regions. Funds can ease that process but are not substitutes for such largely regulative reforms.

By contrast, we find little empirical merit in providing funds to median and higher income countries. This in practice implies a lot of “churning”: funds moving from Member State budgets to the *EU Budget* and then back to regions in the same Member States. Essentially, this boils down to earmarking richer Member States’ public finances at both central and regional levels for specific regional development purposes. There is no evidence that such re-routing of funds is at level with, let alone superior, to internal redistribution and regional development programmes that Member States run themselves.

This brings us to the issue of the effectiveness of current Structural fund programmes in all EU Member States. This aspect, too, is challenged in a number of studies. First, Member States have at their disposal a wide range of instruments to improve structural performance in less prosperous regions such as tax, social and employment policies as well as budget policy resources at the national level. Second, experience shows that earmarking - providing support for a particular area and then require that the recipient region do *not* scale back its’ own activities – is very difficult to check in practice. So we have a system requiring the formulation of complex programmes at the national level as a pre-condition for receiving support, while the Commission in practice finds it difficult to verify the additionality requirement.

Natural resource management

Spending under this heading within the EU financial framework falls into categories with very different objectives and implications. **Direct payments** to owners of land and other farm assets and remaining **market support** such as price subsidies have the formal objective to provide “a fair standard of living” to farmers. **Rural development** mainly aims at fostering economic development in rural areas with some spending tied to the agricultural sector.

Finally, there has been increasing focus on a **'greening' of the EU budget**, partly by linking receipts of direct payments to farmers to compliance with environmental regulation, partly by supporting more general environmental programmes through rural development programmes and smaller stand alone programmes like Life+. Such environmental spending at the moment still accounts for a very small proportion of the total budget.

The first test is how well EU spending on the above objectives fits with the four factors of EU public finance logic. Providing adequate income levels for a particular group within society such as farmers and other persons living in rural areas is better served by national and regional instruments. National grants to rural areas supporting local infrastructure and social services as well as general social safety nets can be better targeted to different local circumstances and preferences across the EU. Neither are there economics of scale and scope involved nor any positive spillover effects: the best solutions are tailored to each Member State and a farmer in Greece is not much affected by the standard of living of a farmer in the UK.

By contrast, there is increasing recognition of the fact that there may be potential benefits from joint EU financing when combating common environmental problems such as the quality of rivers and other waterways bordering several Member States.

The second test is whether the current policies are effective in actually meeting their own specified objectives. For both market support and direct payments the answer is negative as the main effect of subsidies is to increase the costs of purchasing farm assets, especially land. Farmers know that owning land creates the right to receive direct aid and therefore increase their bids for the price of land. Some research suggest that out of every € 100 spent on support for farmers only 25 per cent ends up as net income support, the rest being capitalised as wind fall gains by owners of farms assets from the moment the programmes were implemented.

Moreover, the support schemes increase financing costs and subject young farmers to increased financial risks. With larger capital requirements for any given farm size, the impact of volatility in financial markets (interest rates, access to loans) will be higher than it would be without the support, in particular for farmers reliant on external financing. This illustrates that the apparent insurance element of direct payments – insuring steady incomes to farmers in the presence of fluctuating agricultural prices – will tend to be partially counteracted by new financial risks introduced by higher debt burdens. Moreover, providing insurance to a particular industry against normal swings in commodity prices can to a large extent be covered in standard financial markets as well as other risk management tools. Finally, the compliance costs of market support and direct payments are large: for each €10 spent, farmers and authorities spend an approximate €1 in administration. This further subtracts from the net gains of the common agricultural policies to new generations of farmers.

Our final evaluation then is that income stabilisation purposes do not meet the proposed tests and that the effectiveness in delivery from direct payments and market support is low.

The effectiveness of delivery in terms of positive environmental effects is arguably also limited. A lot of the environmental benefits from existing measures will be harvested at the local or national level, thus not requiring action in the shape of particular subsidies or sanctions at the EU level. Second, where benefits – national or EU – result from reduced pollution, the question is whether such behaviour should not have been addressed by other measures, such as taxes (“polluter pays principle”) or direct regulation.

Growth policies

With its present financial programme, the EU has stepped up its support for programmes in **research, development and trans-European networks** (mainly railways and gas/electricity grid investment) that *a priori* fit well into two of the basic principles defined: spillover effects and economics of scope and scale.

First, regarding spillovers, there is a wealth of studies that confirm that the benefits of research, basic research in particular, spread well beyond the geographical areas and institutions in which the research is undertaken. Indeed, one of the premises of the public funding of research is that its results should be disseminated widely and preferably free of charge to encourage widespread application in various economic activities, not the least business innovation. As benefits are partly gained by other than those that finance it, reliance on Member State public finance alone may result in too little research being undertaken in the EU relative to its economic potential.

Second, regarding economies of scope and scale, there is also a strong case for concentrating some research activities within a limited number of (co-operating) institutions. Classic cases are large scale nuclear research facilities. However, such concentration may not necessarily require EU funding; it is very much the job of research and higher education institutions to search for such international partnership themselves. Evidence suggest that this may require national governance reforms within higher education and research bodies to allow them to achieve such specialisation and cross-border co-operation as well as focus on high quality.

The arguments for providing support to other growth-motivated policies such as mobility within higher education, private business innovation as well as cross-border infrastructure are positive, if somewhat weaker than for (basic) research. In practice, benefits from activities only very limitedly result in actual “*spillovers*”. Member States can also achieve some of the intended benefits, such as an increased mobility of students and researchers, by letting national study grants follow the student abroad.

As regards effectiveness, we find that research programmes could function better, with special attention given to reduction of administrative costs for participants. There are some doubts expressed in studies on the merits of larger infrastructure projects and too narrow selection criteria or budgeting requirements. Their main claim is that ex-ante project appraisals tend to be both partial and incomplete and therefore slanted towards their desirability.

External assistance and internal security

In 2013, the EU will spend in total €8 billion in this area, with roughly half spent on EU candidate countries and other neighbouring countries, and the remainder mainly spent on EU development and a range of smaller programmes, including a still very small programme to finance nascent EU co-operation on defence and security policies. In addition, (nearly) all EU Member States are at the same time members of the European Development Fund that is to spend roughly €3 billion¹ on development aid in 2013.

Our study on external policy focuses on two relatively pragmatic issues. First, we investigate the consequences for the EU budget if all candidate and potential candidate countries become members within the next programme period. We provide some ball park estimates of the isolated effect of spending on structural funds and agriculture as a share of enlarged EU GDP.

Second, we note on economic grounds EU spending on development aid could be justified from economics of scope and scale. Individual Member States very often run simultaneous programmes in the same recipient countries, supporting broadly the same objectives, such as poverty reduction. *A priori* jointly funded and managed programmes make it possible to reduce administrative costs and increase leverage with recipient countries to overcome barriers to efficiency.

However, despite progress, international reviews of development aid show that development aid by means of the EU Budget still remains in its infancy. Thus, the distribution of aid to recipient countries partly reflects compromises between Member States, with some countries having a focus on countries with historical ties, others wanting a clearer focus on poverty reduction. This creates the risk of spreading resources too thinly and creating a hesitancy among Member States to shift more of the tasks towards the EU.

The EU is also stepping up budgetary support for its Common Defence and Security Policy as well as management of migrations flows, albeit from very low levels. Without doubt such policies can deliver joint EU public goods, essentially a safer EU for its citizens. However, both sets of policies are still affected by a reluctance to transfer policy responsibility to the EU level, partly because underlying national policy positions differ.

1.3. PROPOSED OPTIONS FOR REFORM

While it is relatively straightforward to provide advice on the expenditure programmes based on principles from fiscal federalism and comparative advantage, there is very little strong empirical evidence to support any specific level of support for the underlying objectives.

¹ The exact expenditure in 2013 is not yet programmed for the 10th EDF. Therefore we estimate the level of expenditure in 2013 by dividing the total amount allocated for the 10th EDF by the duration of the program.

The approach proposed in the study therefore is more modest and pragmatic. A menu of options is offered, with the joint characteristics that budget spending options are, well supported by the four guiding factors. The main conclusions flow from this menu of options are as follows:

Structural funds should focus more on the solidarity aspect. This implies less churning of funds within richer Member States, for the arguments provided above. We also suggest changing the conditionality of funding. Rather than linking funding to required co-funding of specific programmes, a move towards more general budget support may improve effectiveness. This would lead to lower compliance costs and conditionality could be attached more closely to structural reform efforts, including implementation of EU regulations in areas with positive spillover effects for other countries. While we are sceptical that non-compliance will lead to a cut of aid, such a setup may create a more result oriented reform process in the Member States where structural funds have a significant size.

For natural resource management we propose, first of all, that the EU asks itself some questions on the purpose of its direct payment systems in a longer term perspective. First, if this system is really providing funds to farmers totally decoupled from production, it cannot at the same time be said to secure EU agricultural production. Second, why spend substantial amounts if the programme fails to provide net incomes to the current and future generations of farmers? Consequently, we propose direct payments to be phased out over time. One variant is to allow EU Member States to voluntarily top-up payments from their national budgets. If again, such top-ups were kept decoupled from production, it is difficult to see an internal market problem with the solution. Indeed the main difference between a country with a high top-up and a country with zero top-up, would be downward pressure on land prices and entry costs for farmers and a potential higher need to compensate existing farmers in the latter country on a one-off basis. But for such top-ups to work within the frameworks of the internal market, strong surveillance of state aid principles would be needed. But then again, similar compliance issues prevail within the industrial sector.

Second, we propose that the recent surge in food prices, and the expectation that they are likely to remain high over the next decade, should be taken as an opportunity to dismantle the remaining price support mechanisms within the agricultural sector. The need to compensate via direct payments on a permanent basis should be reviewed in view of the arguments above.

Thirdly, we propose that rural development programmes should be reviewed from scratch with the underlying objectives treated more explicitly. The rural economic development programme must be realigned with a reform of structural fund programmes, removing any links between funding and particular economic sectors.

Finally, we suggest that the bulk of EU budgetary support for environmental aims should be targeted at projects with well identified *spillovers* across EU countries and only when neither

taxes nor regulation can do the job alone. Examples are subsidies to protect wetlands used by migrating birds travelling across numerous EU countries.

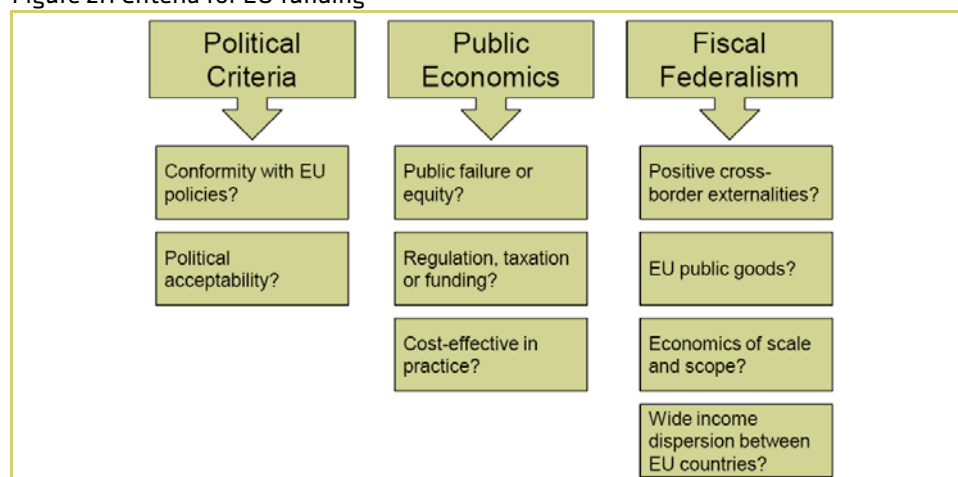
For growth oriented policies, we suggest that the main focus should be to support high quality basic research with little bureaucratic interference or narrow preordained goals. Taken into account that there is no strong empirical evidence for deciding what the optimal level of total tax funded research should be, we outline a number of possible scenarios that differ partly in their ambitions for overall publicly supported research within the EU partly with respect to *spillover* effects. But they will all imply a higher level of EU funding for public research in particular.

For external efforts and internal security policies, we suggest that the current, relatively modest, spending levels could go up after 2013. In practice this is conditional on Member States converging in their views on what such policies should achieve. A number of studies suggest that this is still a constraint in formulating joint policies in these areas.

Chapter 2 A PRIMER ON PRINCIPLES FOR FUNDING POLICY AT THE EU LEVEL

There is a relatively strong consensus in the literature on the key principles that should guide decisions on when to use EU budgetary instruments to further coming political and economic objectives. A recent short paper neatly establishes a set of tests that should all be passed with success before the EU budget is assigned with allocations to pursue such goals.² The tests are illustrated in Figure 2.1 in a somewhat modified form focusing on three aspects related to conformity with (1) political criteria (2) basic principles of public economics and (3) assignment principles within a system of multilayered government levels, such as the EU (the principles of “fiscal federalism”).

Figure 2.1 Criteria for EU funding



Source: *Figueira (2008) and Copenhagen Economics*

2.1. POLITICAL CRITERIA

There are essentially two types of political criteria. First, do spending proposals conform with well-defined EU policies and objectives? Second, is there a political willingness within EU Member States to wholly or partly transfer the relevant policy area to the EU budget? This could be called the political acceptability test.

The first criterion, requiring conformity with EU objectives, will in general not eliminate many proposals by itself, as the EU has signed up to a very wide ranging set of policy objectives. The Lisbon agenda calls for increasing employment rates and boosting productivity and innovation in the EU. The social policy agenda focuses on efforts to deal with the challenges of globalisation, the situation of vulnerable groups within the EU etc. The climate and energy policy agenda has led to the formulation of ambitious targets with respect to a reduction of greenhouse gases, expansion of renewable energy as well as energy savings to deal with climate change and energy security. The EU’s security and foreign policy agenda

² Figueira (2008) The conclusions raised in the four page note fit well with a number of more detailed studies of fiscal federalism, including OECD(2003), “Fiscal relations across government levels”, Begg et al (2008) as well as the EU Commission sponsored study from Ecorys et al(2008).

has led to increased efforts to co-operate with neighbouring countries and regions as well as major global actors.

The second political criterion sets much stronger limits. Essentially, it has to be recognised that any multilayered structure, including the EU, has its own characteristics and its own political history which to some extent determine the character of its power attributes. A comparison between the US and the EU is illustrative. From the very start the development of a non-distorted internal market was seen as a key objective for the EU. Hence, the EU Commission is delegated with very strong legal prerogatives within the area of competition law and the prevention of distortions arising from state aid. In fact these are stronger than what the US constitution has in place for the federal government. By contrast, the EU has only a very limited budget in the area of foreign policy and security policies. This policy area has historically been seen partly as a strong member state prerogative, partly as delegated to the NATO³ while the federal US government from its inception was forced to focus on foreign policy and external defence issues.

2.2. PUBLIC ECONOMICS

Public economics provides answers to whether public funding – be it local, national or the EU – is the proper policy response to a policy challenge. The public economics test should take place through a three step “intervention test”⁴. First, what justifies potential policy interventions: is it a “market” failure (an efficiency argument) or is it about social justice (an “equity” argument)? Defining the nature of a problem has implications for the evaluation of success: a more even distribution of incomes within a country (or the EU) may be a policy objective worth pursuing, even at the cost of higher distorting taxes and a lower aggregate GDP level.

The second test is getting the instrument mix right where increased public spending is of little or no relevance. Two examples may illustrate this point. A part of the variation in employment rates within the EU results from differences in national labour market regulation. Hence, the key to increased employment rates in the EU is a national reform of social security systems and more generally labour market policies. Such regulatory reforms will tend to save, not increase, public funding. As regards mitigation policies to reduce emissions of greenhouse gases, the key element in cost-effective policies is to tax such gases, which will, as discussed later in this study, also sharply increase private incentives to develop low carbon intensive energy use and production. Therefore, what is needed is primarily not more spending, but more taxes.

The third test is practical effectiveness. It is well known that the costs of public failure can be larger than the costs of market failure. One element to consider in this respect is that public funding requires taxes and taxes distort labour markets. A standard assumption in public fi-

³ See for Deighton et al (2006), page 20, literature list for chapter 6.

⁴ Here Figueira’s (2008) proposed methodology is strictly observed.

nance theory for high tax countries, such as the EU Member States, is that the return on publicly financed investments should exceed 20 per cent to be economically viable, though bearing in mind that the return may also include social justice, as mentioned above. Furthermore, compliance costs from running public programmes can be very high. In Chapter 3 this study quote a reference suggesting that compliance costs related to structural funds may amount 10-15 per cent of funding, while Chapter 4 on natural resource management refers to studies that suggest that administrative costs associated with the Common Agricultural Policy may amount 10 per cent of funds disbursed.

2.3. FISCAL FEDERALISM

Fiscal federalism reviews whether four factors are sufficiently in place to suggest that common funding rather than national/local public funding is most effective.

The first factor is about *“Positive cross-border externalities”*. If benefits from economic activities accrue to residents in other regions or countries than those financing them, it makes sense for these other beneficiaries to co-finance such activities. In the absence of such co-financing, local, regional or Member State authorities will hold back marginal financing for such activities in favour of action uniquely benefiting local residents and tax payers. A classic case is basic research where it is neither desirable – nor always possible – to prevent breakthroughs in science to be disseminated widely and at a global level without charging for their use.

The second factor is the presence of **“EU public goods”**. Public goods in general are characterised by the fact that one person’s consumption does not come at the expense of any other person’s consumption. Classic cases are the provision of law and order, defence policies, or enjoying a beautiful landscape (unless too many are walking in the woods). However, the point is that many public goods are very local in nature. The preservation of a lake in East Anglia in the UK provides benefits first of all to those residents in East Anglia in its immediate vicinity. Good policing in Paris is nice for tourists, but first and foremost it allows the Parisians to walk the streets in safety. At the EU level, public goods include the management of external borders, as illegal immigration affects all countries, the development of a foreign (security) policy providing benefits to the EU as a whole, as well as the development and enforcement of the internal market.

The third factor is about **“economies of scope and scale”**. Efficiency of delivery can be enhanced by concentrating production among fewer actors to create sufficient scale to allow specialisation and effective utilisation of expensive capital equipment. This is the reason why nuclear research facilities within the EU are jointly financed. For example, it would clearly be highly inefficient for EU Member States to operate 27 separate prototype fusion reactors for research purposes. However, it is important to bear in mind that the scope and scale argument does not require EU financing of an activity. One example is within the area of university research and higher education. If two or more universities recognise that they can en-

hance their own standing and competitive position vis-à-vis other institutions by agreeing to a certain division of labour in educational programmes, joint funding or the management of large research programmes, they can do so if their governance structures allow it, without necessarily requiring any third party financing.

The fourth factor is about **equity**: excessive income differences between regions and countries within the EU, as well as vis-à-vis developing countries may be seen as being at odds with the political and social model that is being pursued for the federal area, as a whole. This may suggest the use of an instrument to reduce disparities in living standards and encourage a convergence of productivity within the area.

However, such “solidarity” is a tricky concept for budget setting for two reasons. Firstly, distributional outcomes may reflect historical and present policy choices taken at the national level. If member states decide *not* to implement labour market reforms that could increase employment, then they should arguably also bear the consequences. Secondly, the ‘right’ degree of income redistribution is essentially a normative issue.

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Chapter 3 STRUCTURAL FUNDS

Structural funds – largely linked to equity objectives together with agriculture-related policies constitute the largest part of the EU Budget. The future direction of the objectives and the underlying distribution criteria are, therefore, of prime importance.

We discuss these issues in four separate sections:

- Key facts: size of budget over time, objectives, instruments
- Do objectives and instruments fit with principles within a federal budget?
- What can be said about the effects of structural funds in practice?
- What options can be envisaged for the post 2013 period?

3.1. KEY FACTS

Since the 1980s, structural funds have expanded rapidly in absolute terms and as a share of overall community spending. The obvious trigger was the inclusion of new Member States: first Spain, Greece and Portugal with somewhat lower per capita incomes and then, from 2004 onwards, in total twelve Member States with – on average – substantially lower per capita incomes. As a result, spending on structural funds now constitutes one third of the budget, cf. Table 3.1.

Table 3.1 Structure of EU Budget: spending aims as share of EU GDP, 1988 to 2013, per cent of GDP

	1988	1990	1995	2000	2005	2007	2013
Structural funds	0.17	0.22	0.36	0.39	0.36	0.37	0.33
Natural resource management including agriculture	0.73	0.74	0.65	0.53	0.52	0.47	0.37
- of which rural development	N/A	N/A	N/A	0.07	0.09	0.09	0.07
Internal operations	0.03	0.05	0.07	0.07	0.09	0.08	0.11
External action	0.05	0.06	0.07	0.10	0.08	0.05	0.06
Administration, Repayments and Reserves	0.17	0.13	0.08	0.07	0.08	0.06	0.06
Total commitments	1.16	1.20	1.24	1.16	1.13	1.04	0.92

Note: For the first period (1988-1992), "Policies with multiannual allocations" is allocated to the "Internal operations" heading and "Other policies of which non-compulsory" is allocated to the "External action" heading. 2013 numbers are percentage of GNI

Source: EC (2008) table 3.1, 4.1, 5.2 and 6.1, EU Commission (2008) annex 2 and EC (2006)

Bearing in mind that rural development spending under agriculture is equivalent to 0.07 per cent of GDP in 2013 and also partly distributed according to per capita criteria with roughly as much progression as structural funds, equity based funding represents arguably the largest EU budget area. Indeed, a rural development programme was included under the heading of structural funds before 2007. However, for consistency purposes we have included this as part of agricultural policies in the entire period covered by the table, 1988 to 2013.⁵

⁵ Historically, rural development has been funded through numerous financial instruments. During 2000-2006 the system was rather complex with different programmes for different countries. Parts of rural development funds, mainly the EAGGF Guarantee section, belonged to the Structural funds budget heading, whereas the rest belonged to agricultural spending. In 2006, all rural development funds were collected under one single financial instrument,

Simplifying the issue somewhat, the underlying objectives for structural fund policies can be broken down into three main categories cf. Table 3.2.

The first category is convergence. Convergence is delivered through two mechanisms: (1) The cohesion fund (CF) provides €61 billion over the budget period 2007-13 to less affluent EU countries, which are defined as countries with a per capita income below 75 per cent of the EU average; (2) the convergence objective under the structural funds (SF) providing €189 billion over the same period to regions with lower than the average regional per capita income through the two instruments European Social Fund (ESF) and European Regional Development Fund (ERDF).

The second category is regional competitiveness and employment, providing €49 billion to regions that are too affluent to receive funds based on per capita income criteria through the Social Fund and the European Regional Development Fund.

The third is European Territorial Cooperation aiming at enhancing cross-border cooperation, which receives a relatively modest €7 billion with distribution decoupled from any local income criteria through programmes under the European Regional Development Fund. Given the overwhelming dominance of the first two objectives, the remainder of this chapter will be focused on these two.

Table 3.2 Objectives, instruments and effects of between-country transfers, 2007-2013, € billion, 2004 prices

Objective	Instruments	Resources of the fund
Convergence	Cohesion Fund	61
	ESF and ERDF	189
Regional Competitiveness and Employment	ESF and ERDF	49
European Territorial Cooperation	ERDF	7
Total		306

Note: ERDF and ESF constitute the Structural Funds

Source: Eurostat, DG Budget (2009), DG Regio (2009) and EC (2006)

The spending categories that the three instruments can support differ somewhat. Cohesion Funds are to be spent on projects linked to environmental improvement, transport and energy. The Social Fund aims to improve the economic adaptability of the region as well as social policy objectives. The European Regional Development Fund supports projects in all the supported areas defined in table 3.3 below, except economic adaptability. The bulk of

namely the European Agricultural Fund for Rural Development (EAFRD). Under that framework, rural development expenditure was fully transferred to the agricultural budget heading.

funds are spent on (1) economic adaptability followed by (2) transport and (3) research, innovation and information.

Table 3.3 Allocation of cohesion policy budget by categories and territorial destination, 2007-2013, € billion, 2004 prices

	Lagging countries and regions	Non-lagging regions	Territorial cooperation	Total
Research, innovation and information	43.7	12.8	1.8	59
Transport	64.5	2.2	1.0	68
Energy	7.8	1.6	0.3	8
Environmental protection	40.2	3.1	1.2	43
Economic adaptability and social policies	68.8	24.0	2.1	95
Industrial development	26.1	5.4	1.2	32
Total 1)	251.2	49.1	7.8	304

1) Data for table 3.2 and 3.3 comes from different sources which, in addition to rounding errors, explain the small discrepancy in total allocations

Note: Research, innovation and information consist of R&TD and innovation and Information society. Economic adaptability consist of Adaptability of workers and firms, enterprises and entrepreneurs, Access to employment and active and preventive labour market measures, Social inclusion of less-favoured persons, Human capital, Social infrastructure, Partnership and networking, Institutional capacity at national, regional and local level, Reduction of additional costs of outermost Regions and Technical assistance. Industrial development consist of Support to firms' investments, Tourism, Culture and Urban and rural regeneration.

Source: Barca (2009), pp. 63 Table II.2 and pp. 70 Table II.9

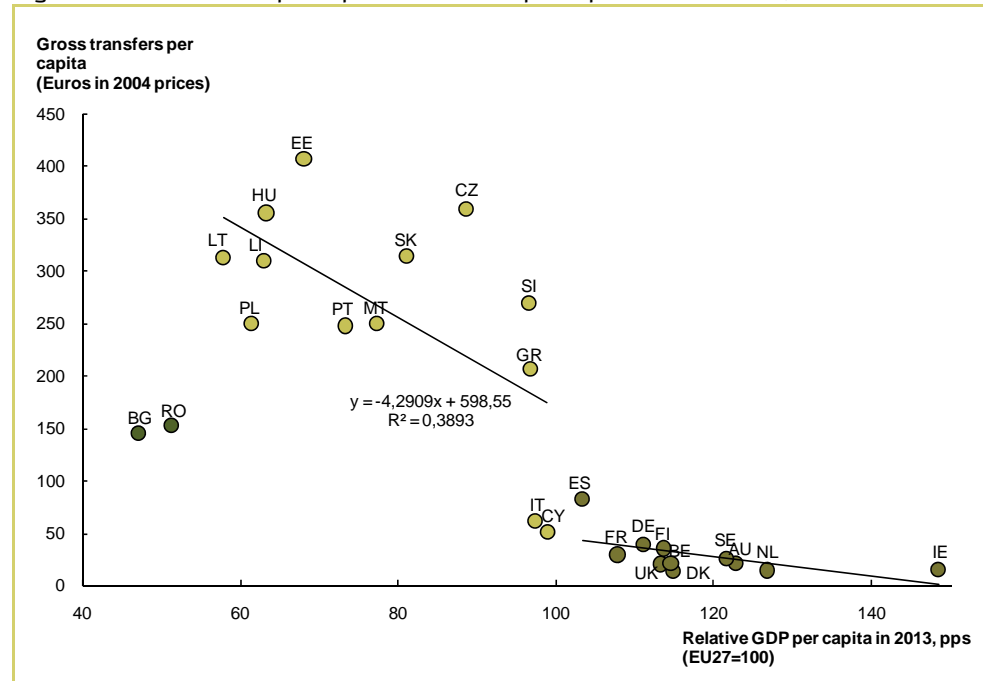
Regions are obliged to co-fund programmes to match EU-funds. For countries entitled to receive cohesion funding, the required co-funding is 15 per cent. For other countries, it is 50 per cent⁶. The requirement of co-funding is in principle tested by the so-called additionality test. Basically, it implies that the recipient is not allowed to reduce its own funding for similar purposes.

Total per capita receipts are grossly linked to per capita income, though with some caveats. For below average income countries, a decline of per capita income from, let say 75 to 74 per cent of the average EU income, triggers additional per capita gross aid of € 4.3, cf. Figure 3.1 (the sharply downward sloping line to the left in Figure 3.1). This is the combined result of the CF and convergence part of the SF. By contrast, for countries with above average incomes, the gross receipts are largely unrelated to per capita income (the nearly horizontal line to the right in Figure 3.1). There are two main outliers: Luxembourg is above the linear regression line and Bulgaria and Rumania are below the regression line. The position of the latter two countries is due to "capping": no Member State can receive total aid in excess of

⁶ EC (2006) Annex III

3.7 per cent of their GDP⁷. We have thus excluded these three countries from our simple distribution rules in the chart.

Figure 3.1 Link between per capita income and per capita structural aid, 2013



Note: The trend line for the countries below EU27 average is calculated without Bulgaria and Romania because these countries are capped. Luxembourg is excluded from the figure and from the trend line, but has a relative GDP of 292 and receives 16 euros per capita. We have assumed GDP growth rates of 4% for Bulgaria and Romania.

Source: ECFIN (2006), Eurostat, Införegio and Copenhagen Economics

The result is a large relative net income effect in recipient countries and more modest relative net expenditure effects in “donor” countries. For seven Member States, net funds represent over 3 per cent of GDP even when their own funding to the budget is subtracted. For net donors, the net effect relative to GDP is much more modest: they constitute 75 per cent of the population and, by definition, are richer implying that each euro provided constitutes a smaller part of the national economy than in the recipients’ less affluent countries.

3.2. MATCHING OBJECTIVES WITH THE EU DECISION MAKING STRUCTURE

Structural funds have two kinds of objectives. At the higher level, structural fund policies should essentially address excessive differences in living standards within the EU i.e. equity concerns. It should be evident that the equity concern is a classic argument for redistribution of funds within (semi) federal systems such as the EU, as argued in Chapter 2. But neither the Treaty nor any other normative text provides a binding or even clear guide as to how

⁷ EC (2006)

such convergence should be achieved, e.g. the weight between better regulation at the national level or receipts of EU funds for economic development purposes⁸.

A recent study⁹ suggests that the standard interpretation of the objectives is that such convergence shall be reached by way of convergence in productivity, e.g. convergence of the effective productive capacity per capita within the EU. Arguably, much of the divergence in living standards reflects the past and present national policies, which Member States have in their own power to address. At the end of the day, the commitment of funds for this purpose must, therefore, be based partly on basic political choices as well as some hard economic analysis of the consequences of specific cohesion policies, including the risk of dependency for recipient countries. This will be further discussed later.

The second set of objectives relates to what kind of expenditure items that funding in principle is limited to. This is the “earmarking discussion”.

First, we will test this earmarking rationale at the EU level based upon the traditional view of public finance principles – mainly economics of scope and scale and spill-overs within a federal structure. We concentrate on three main areas:

- Research, development and innovation (RDI) and infrastructure
- Environment
- Economic development/adaptability and social policies

Second, we will shortly discuss “weak governance” as an additional argument for earmarking within a semi-federal system.

The critical point below is to evaluate the economic rationale for the EU as a whole for providing funds to administrative units defined by national boundaries given the economic decision making structure of the EU in (other) relevant fields.

Research, development and infrastructure

As discussed in Chapter 5 on “Growth oriented spending”, investments in research, development and infrastructure can provide benefits that spread beyond the area in which the activity is located. This is the classic case of positive “**spill-over**” effects. In such cases, there is a risk of underinvestment as firms, local governments and Member States may refrain from undertaking activities, as the local benefits are too small or uncertain to justify the spending, while it may make sense for the EU as whole.

We doubt however, whether it generally makes sense to approach support for such projects at the EU level in the context of funds that are to be distributed based on criteria related to

⁸ Begg (2008)

⁹ Begg (2008)

either geography or per capita income. The crux of the matter is that projects should only be EU co-financed if their benefits also accrue to other regions. Hence, the determining criterion should be a close examination of a broad range of competing projects that potentially offer EU-wide benefits. Projects based on their merit in this regard should be picked. It is difficult to combine selection criteria based upon competition, excellence and large spill-over effects with funds going to the best project irrespective of its geographical location with an approach where regions are provided with funds based upon largely income per capita criteria and then asked to earmark resources for research, development or infrastructure. The latter approach may actually hamper overall economic development by preventing regions from exploiting their natural comparative advantages.¹⁰

Essentially, the point above holds for all regions irrespective of their income level. Different regions have different optimal strategies to encourage growth. It does not seem appropriate for the EU as a whole, or for an individual country, to provide incentives to shift resources away from the use that would offer the country or region the quickest way to converge.

The conclusion in this section is that “classic” spill-over arguments do not justify geographically-based grants to RDI or infrastructure or indeed earmarking of cohesion funds for these two areas.

Environmental support

The focus in this section is on the possible use of structural funds either to reduce negative externalities or to encourage positive externalities arising from activities that affect the environment. These issues are very strongly linked to the discussion in Chapter 4 on “Natural resource management”, where environmental issues have gained in importance.

Cohesion policies are defined by allocating funds to regions and countries based on criteria that are essentially independent of any environmental criteria. The question, therefore, arises whether spending on environmental benefits should be particularly supported within that region by the use of EU funds. Where negative externalities are local, for example noise, there are next to zero benefits for tax payers outside the local region in getting noise levels down. EU-level benefits only arise where pollution transcends borders, such as polluting water entering waterways accessible to several Member States, such as the Rhine, the Baltic Sea or the Mediterranean Sea.

While taxing polluters is the most appropriate solution, a problem may arise if willingness to pay for reduced pollution is markedly different across regions/countries benefiting from reduced pollution. Less affluent countries may price economic growth higher at the margin

¹⁰ De la Fuente (2002) suggests that Spain as a whole had been better off if funds had been targeted at dynamic regions with strong growth conditions rather than spread out to all regions including regions with weaker growth potential. Santos (2008) notes that moving resources to areas with low growth potential within countries hampers overall growth

and joint action may call for transfer of economic resources to such countries to help fund a transition in addition to charging polluters.

Within the EU, this may prove an additional reason for providing funds to poorer Member States and make such aid conditional on such countries' environmental performance in areas of common EU interest. However, for countries of roughly equal economic prosperity such as Germany, France and the UK, the polluter pays principle should be the ruling norm. Potential compensation to affected regions can be provided by the central government as the willingness/affordability to pay should be a non-issue at the national level for the countries.

Hence, we see some logic in earmarking spending in low income EU countries in the attainment of environmental objectives with a joint EU interest

Economic development, adaptability and social policies

Under this item are included, *inter alia*, support for culture, tourism, education, training programmes, urban renewal, social inclusion of weak groups, active labour market policies, etc.

For a number of reasons, this intervention area is not likely to provide significant potential from an EU Budget perspective. First, the spillover effects for other countries should be limited: if programmes are effective they should largely benefit the targeted region and it would be difficult to claim that such programmes have spillover effects in other countries¹¹. Second, the most powerful policy instruments regulating labour markets – social security, tax policies and substantial internal income distribution policies¹² - are vested with member states. It is difficult to see EU Budget funding providing significant value added relative to what member states can do themselves. There may well be scope for exchanging best practice to reach such goals but that is a relatively low cost activity which is supported already by EU's extensive work in various relevant civil servant committees as well as supported by EU research grants. Thirdly, the publicly funded national programmes in member states in this area are extremely exchangeable with EU programmes, making it difficult even under the best of circumstances for the EU Commission to check whether EU funding is in practice additional to existing national funding. As a consequence, a wide range of studies suggest that earmarking funds to labour market and social policies in general should have low priority within the EU Budget.

Weak local, regional or Member State governance

A separate argument relates to whether too little or too ineffective funding is allocated in the particular region given the potential return from it because of a weak local governance structure. The argument about weak governance is essentially that there are goals that would ob-

¹¹ A more formal analysis of the benefits of higher employment as a part of the Lisbon agenda providing the same conclusion of limited spill-over effects is contained in CPB (2008), "International *spill-overs* of domestic reforms".

¹² Begg (2004) provides evidence that such incoming internal transfers for some regions within EU can account for up to 1/3 of total revenues.

jectively serve a member state's fundamental interest but which the governance structure of that country is incapable of delivering¹³.

Particularly in the field of development economics, weak governance within national administrations in poor countries has been advocated as a reason for not only providing foreign aid but also "micro managing" the use of such aid. However, the Commission itself is moving in the direction of providing more "budget support" rather than project or programme-specific support in its own development programmes¹⁴, essentially because it provides better prioritisation within the recipient programme provided that the government has a sufficient level of quality in its governance.

The conclusion from this is that weak governance – which has a very central place in a recent study ordered by the Commission¹⁵ as an argument for EU intervention at the local level – must be a very weak argument when discussing interventions within the countries in the EU with average to high incomes. Moreover, while recognising that low relative per capita income may reflect the result of badly designed policies in EU countries and regions, it may not reflect that present governance structures are weak but rather that catch-up processes take time.

3.3. THE EFFECTS OF STRUCTURAL FUNDS IN PRACTICE

There is a wealth of empirical studies on the effects of structural funds, but they offer very little hard evidence. Before venturing into that discussion, we pose two questions that relate to the two objectives we identified in section 3.2:

- To what extent have receipts of structural funds accelerated the convergence process in productivity within EU?
- To what extent has earmarking resulted in specific improvements in the targeted area?

Convergence in GDP per capita

There has been sustained convergence within the EU since 1980, as measured by the dispersion in GDP per capita. For the EU15, the development was most pronounced from 1980 to around 2000, driven extensively by higher employment rates in Southern Europe as well as some catch-up in productivity¹⁶. The slowing down of the catch-up reflects partly that income dispersion has narrowed, implying less "easy" high growth rates for former lower in-

¹³ Barca (2009) report commissioned by the EU Commission bases a very substantial part of its support for cohesion policies on the notion of weak local governance that necessitates direct intervention at the EU level also in areas where classic spill-over effects do not apply.

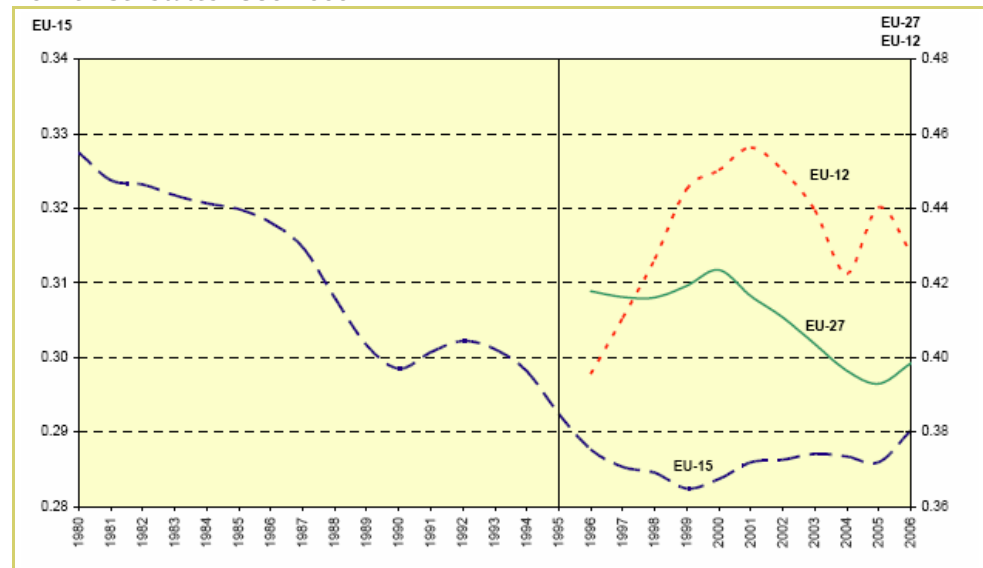
¹⁴ The OECD (2008) in its most recent development assistance (DAC) review of EU development aid commends the EU Commission for its move in this direction.

¹⁵ Barca (2009)

¹⁶ Danish Ministry of Finance (2005) In fact, the countries with marked increases in employment rates such as Italy and Spain had very modest improvements in productivity, most certainly linked to pricing in lower skilled workers.

come countries. Rapid catch-up of the newer Member States (EU12) ensured that convergence in the enlarged EU continued until most recently.

Figure 3.2 Regional per capita GDP dispersion (coefficient of variation) across groups of EU Member States: 1980-2006



Note: Coefficient of variation measured on NUTS 2 Regions.

Source: Barca (2009) pp. 82 Fig. II.11

Undoubtedly, a large part of the convergence process has been generated by economic reforms and market opening. The main cause of the increases in employment rates in Southern Europe and Ireland, that were driving convergence within the EU15, were clearly labour market reforms undertaken e.g. changes in social security rules etc. Moreover, the gradual opening of EU markets to what now are the EU12 countries, as well as internal liberalisation during the 1990s, provided a boost to productivity as well as positive spill-overs from incoming foreign direct investments.¹⁷

But what additional role might have been played by the large increases in structural funds from the late 1980s flowing to these two groups of countries?

Despite a wealth of empirical studies covering many countries and periods, there is very little conclusive evidence on the role that funds from cohesion policies have played in boosting underlying convergence processes. We will argue that this is hardly surprising for a large number of reasons.

Firstly, we do know that, for example, cohesion countries have received large net inflows. But how much was actually spent on growth-enhancing programmes? In particular, to what

¹⁷ Copenhagen Economics (2007) presents some econometric evidence in support of spill-over effects from private direct investment in the new EU member countries.

extent was domestic funding moved from investments to consumption, in which case the cohesion funds are simply equal to transfers of income with limited effect on growth rates?

In principle, this should be prevented by the principle of additionality referred to in the beginning of the text, but this is something that is difficult to check in practice. A very recent study on structural policies ordered by the Commission concludes that the complexity of the programmes, lack of transparency in calculation methods across countries and failure to provide the necessary information has so far “prevented any public debate on how additional targets are set and the compliance with these targets”.¹⁸ Based on the same logic, a second study concludes that “at least some of the transfers indirectly support current consumption rather than investment”.¹⁹ As a consequence, the effect of funds may at least in part equal an income transfer without lasting effects on growth.²⁰

Secondly, if cohesion funds trigger more investment spending, this will only lead to lasting growth if such investments offer above market returns. This more or less requires that the region/country was prevented from financing viable projects due to capital markets imperfections and/or due to weak local governance that failed to identify good projects and get them implemented.²¹ While the former cannot be excluded,²² the latter argument is tricky: the money is partly to be administrated by the same weak governance structure questioning its likelihood to pick good projects²³. Indeed, some studies have highlighted the extent to which effectiveness in the use of the funds is linked to the quality of governance in the recipient region. Bearing in mind the relatively light controls of the Commission in the supervision of the funds, this is a concern that cannot be dismissed.

Thirdly, the rules of co-financing are meant to ensure that only good projects are chosen, but can perversely produce the opposite result: a project that has a negative market return becomes profitable once the EU co-funding is included in the calculation. Thus, it has been argued that such distortions may have led to suboptimal investments in general.²⁴

The essence of sound co-funding rules is that each partner provides a share of financing equal to their part of the benefits. But as cohesion projects as a rule are not conditional on wider benefits to the EU via spillover effects, co-funding risks become an incentive to finance unsound projects.

¹⁸ See Barca (2009) page 97.

¹⁹ See Begg (2008), page 4.

²⁰ See Boldrin and Canova (2003)

²¹ Net inflow of funds may also have an effect on demand that may have short to medium term effects on GDP levels, but hardly lasting effects on growth rates over decades. So the essence is that return on the projects can pay back capital costs and depreciation otherwise the transfer should just be consumed.

²² It does though require local government officials and other programme evaluators in being superior in evaluating projects than private capital market participants.

²³ This has been a controversial point in some of the evaluations. Ederveen (2002, 2006) and Wostner (2008) suggest that institutional absorption capacity in receiving regions is central for good use of income funds while Bradley (2008) is more sceptical in particular about the econometric models employed by Ederveen

²⁴ Molle (2006)

Fourthly, more micro-oriented studies using the evaluation methods recommended by the Commission have been criticised for failing to take into account the “what-if” question. A particular project may well increase investments and provide specific jobs but what is being done to evaluate what would have happened in the absence of the programme? Rather than proper evaluation techniques for defining counterfactuals, the evaluation guides lead to focus on the direct outcome of the projects, such as number of persons employed in the relevant projects etc.²⁵

Counterfactual analysis in general requires a precise description of what drives overall labour market outcomes, such as total employment, in a particular region. As a general rule, such outcomes will not be much affected by marginal job schemes unless they are designed to affect structural employment, a task not easily accomplished for example by the EU Social Fund projects, bearing in mind also the other factors at work such as *de facto* weak tests of additionality and primacy of national regulation in determining outcomes.

Potential EU wide positive effects from earmarking of programmes

As tests of additionality have been difficult to apply in practice, earmarking to more general areas of intervention may not have been that effective. Furthermore, while it is recognised above that funding for specific projects in supported regions/countries can deliver, for example, environmental benefits for the EU as a whole, at least some studies claim that such potential benefits from the use of cohesion funding have not materialised in practice.²⁶

If convergence is the focus, then cohesion policies rightly allow the recipients wide latitude in selecting projects to be funded, given the wide scope of areas that can be supported with a focus on the effects in the supported region.

By contrast, if cohesion policies are also seen as compensation to less affluent countries for committing to more stringent environmental objectives, then more strict conditionality in terms of EU wide benefits from individual projects is required.

3.4. OPTIONS FOR REFORM

The conclusions drawn above have some clear implications for the policy options to be put forward. These fall into two parts, namely the character and conditionality of support and the size of funds allocated to different geographical areas.

Character and conditionality

Earmarking funds for general economic development purposes in the context of detailed development programmes within EU regions has not much evidence to support its continuation.

²⁵ Martini (2008)

²⁶ Cumulus(2008)

Compliance costs in a wider sense are not trivial compared to more budget support oriented schemes, where funds are being provided directly to the authority holding the general purse strings in the supported administrative unit. A recent study highlighted a number of compliance related problems²⁷: The Court of Auditors is reported as having found control failures in all of the audited programmes; this may not reflect fraud or other serious irregularities but may be a result of complexity. More substantially, programmes (1) have a long lead time between project idea and its start-up, up to two to three years (2) are by “wide agreement (...) over controlled” and (3) generate management costs equal to 15 per cent of the overall sum involved.

Furthermore, there is no evidence that more project or programme based provision of funds has *de facto* been particularly effective in boosting growth in the supported regions. This can perhaps be linked to the result of weak governance structures and non-desired effects of co-funding rules that distort investment decisions.

Finally, earmarking of funds allocated by geographical and per capita incomes – the essence of cohesion policies – to Lisbon goals, such as increased research, goes somewhat against the rationale of aiming for high spillover effects and excellence in execution. Cohesion policies have their focus on the recipient country, while spill-over based research policies should to a large extent be “place blind”.

As a result of all these factors a large number of studies have called for reforms that (1) largely decentralise priority making to the local level without earmarking and (2) allocate funds to the national level to allow national priority setting to take place.²⁸

Options could be called “reduce/stop earmarking” and “drop national co-funding”. Co-funding only makes sense for programme support not for budget support.

If earmarking is dropped, what should step in its place? It would be natural to step up a more real, outcome-based evaluation. This is not about reviewing the effects of individual projects on jobs, social inclusion, research, etc. but the countries’ overall progress in raising employment rates, productivity as well as more generally compliance with EU legislation, and thereby having expected EU spill-over effects. The approach is proposed more generally by the Court of Auditors in their contribution to the EU Budget review process and was also proposed in the Sapir report from 2004²⁹. The OECD³⁰ has very recently reviewed the use of

²⁷ Wostner (2008)

²⁸ These points are made inter alia by Wostner (2008), Bruegel (2008), Sapir (2003). OECD(2003) page 195 notes that countries such as Canada, Finland, Iceland, Norway and Sweden have recently reduced their reliance on earmarked grants and replaced by general purpose grants.

²⁹ The EU Court of Auditors (2009) and Sapir et al. (2003)

³⁰ OECD(2009)

performance indicators for the purpose of conducting regional policies. While clearly demonstrating that the implementation of performance indicators as a tool to improve national/regional policies is a hard task, it does point to encouraging experiences. Among several case studies, it refers to the EU's so-called performance reserve within structural funds where some allocations are conditional on "good" performance.

Ultimately, the purpose could be to establish criteria for a double exit strategy for the use of structural funds. Either the country reforms itself up in the league of well performing countries, and thus no longer eligible for aid. Or, it fails over a longer term to improve performance, in which case aid is discontinued at a certain point.

It has been discussed whether lack of "reasonable" compliance with well defined policy requirements or output indicators could ultimately lead to discontinuation of provision of funds. Some scepticism is warranted: (1) can compliance criteria be defined sufficiently precisely to be meaningful for such drastic policy decisions and (2) will they be used in practice given the political ramifications? We would argue that EU should move down that road regardless as it seems in any case more promising than continuing with the present set up.

Options could be called "true outcome based evaluation" with possible "cut off if compliance failure"

Moreover, we suggest that support should be given exclusively to countries, not regions. If additionality is difficult to control, then more EU support for a particular region may trigger less internal transfers within that region. Partly, it is linked to countries as a whole having better overall instruments at their disposal to support general economic development.

Options could be called "Funds provided directly to Member States"

Sizes of fund allocations

Providing transfers to EU's poorer countries is consistent with general principles within a federal structure where some measure of income redistribution is always present. Furthermore, the aim of cohesion is also written into the EU Treaty giving the aim further political legitimacy. However, neither social science nor the EU Treaty provides any guide to the appropriate level of redistribution. That is essentially a normative issue.

A pragmatic approach to discuss the level of solidarity is, therefore, suggested. If we take the actual 2013 redistribution parameters heroically as an expression of the desired level of redistribution between EU countries, we can calculate the level of funds that would be necessary to provide the same level of redistribution in 2020 taking into account a very modest projected level of convergence. Essentially, the level of ambition is defined by the steep sloping line to the left in Figure 3.1. This line represents the combined between-country redistribution effects of the Cohesion and Convergence objectives in particular. For all Member States with a per capita income below 100 per cent of the average, they will get €4.3 for each per-

centage point their income falls below the average. In a business as usual scenario, that adds up to €32 billion against nearly €34 billion today.

However, we also propose an alternative scenario with a more flat allocation line for countries with below average incomes and a 3 per cent cap for funds. We would consider this a natural counterpart to the scenario where all earmarking is dropped; funds are provided as budget support essentially and hence no earmarking. This would also allow all recipient countries to actually receive the funds while structural funds have for many years been characterised by actual payouts being well below the funds reserved for the countries.

In addition to a “something-for-something” approach as suggested above, we also consider long term aid equal to nearly 4 per cent of GDP to be potentially unhelpful for the convergence process. As noted by the OECD referring to experiences from many countries including EU countries³¹, large grants from the central governments to regions can create poverty traps and dependency situations. It may hinder the needed long term adjustment in internal migration flows as well as needed adjustments by firms and employees in the assisted region to changed economic conditions.

Options could be called “to lower income countries, present rules” and “to poor countries, budget support with 3 per cent cap”.

Table 3.4 Total spending on cohesion policy under different scenarios, 2020, € billion, 2004 prices

Recipient area	2013	2020	
		Baseline	Options
Lower income countries(cohesion countries)			
Present rules	34	32	
Budget support with 3 per cent cap			28
Lower incomes regions in median and higher income countries	7	8	0
Other regions in median and higher income countries	4	4	0
Total	45	43	30
Share of GDP	0.33%	0.29%	0.20%

*Note: The methodology are described in a note that can be obtained from Copenhagen Economics
Source: Brueghel, Eurostat, ECFIN (2006), Inforegio (various EC documents) and Copenhagen Economics.*

We see even less merit in providing funds to regions in countries with average or above average incomes. These countries have almost by definition relatively well functioning governance structures implying that specific supposedly earmarked funding for particular areas offers little scope for effects on par with the level Member States can deliver themselves³².

³¹ OECD(2003), see literature list to chapter 2.

³² This approach is also supported by the Sapir (2004), Santos (2008) and House of Lords (2008).

There are two variants. In the first variant, all the roughly flat-rated funds provided to “other regions in median and high income countries”, is discontinued. In the second variant, also funds to low income regions in countries with too high incomes to receive cohesion funds, are discontinued. The basic argument is that such countries should assume the necessary internal distribution themselves. The cost calculations of these scenarios relative to “business as usual” are based upon simplified modelling of the present rules extrapolated into the future. We suggest that discontinuing funds to “other regions in median and high income countries” could save just over €4 billion relative to present budget while discontinuing funds to “lower income regions in median and high income countries” may save €8 billion, cf. Table 3.4.

In option “drop to poor regions in median to high income countries” €8 billion are cut off relative to a Business as Usual (BaU) scenario while “drop to other regions in median and high income countries” saves €4 billion relative to BaU.

Table 3.5 Summing up the options

QUALITATIVE OPTIONS	
Options	Arguments
SFa: Reduce/stop earmarking and drop national co-funding	Co-funding only makes sense for programme support not for budget support.
SFb: True outcome based evaluation with possible cut off if compliance failure	Earmarking does not work and have high compliance costs
SFc: Funds provided directly to Member States	Countries have better overall instruments at their disposal to support general economic development.

QUANTITATIVE OPTIONS					
Status quo objectives	Money spent in 2013 (share of GDP)	Money spent 2020 (Continuation)* (share of GDP)	Options	Argument	Money spent 2020 (Proposal) (share of GDP)
SF I: Transfers to poorer countries	€34 billion (0.25)	€32 billion (0.2)	SF Ib: Continue transferring money to poorer countries	Continue to transfer money to the poorer countries, but take into consideration that less should be transferred due to convergence.	€32 billion (0.22)
			SF Ia: Reduce capping limit to 3%	Less transfers combined with more effective budget support scheme	€28 billion (0.21)
SF II: Transfers to poor regions in rich countries	€7 billion (0.05)	€8 billion (0.05)	Eliminate the transfers to poor regions in rich countries.	Eliminate the transfers to poor regions in rich countries. The rich countries should be able to take care of this themselves.	€ 0 billion (0.00)
SFIII: Transfers to rich regions in rich countries	€4 billion (0.03)	€4 billion (0.03)	Eliminate the transfers to rich regions in rich countries.	Eliminate the transfers to rich regions in rich countries. The rich regions in rich countries do not need the money.	€ 0 billion 0.00)

Note: * The numbers in 2020 are lower than in 2013 due to convergence between the European countries.

Source: Copenhagen Economics

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Chapter 4 NATURAL RESOURCE MANAGEMENT

4.1. SETTING THE SCENE FOR THE REFORM OPTIONS

Since its inception, EU support for the agricultural sector has been controversial and it remains so today. Roughly 40 per cent of the EU Budget is spent on a sector that accounts for a small fraction of the EU economy. In this regard, the EU is not an exception. Most OECD countries provide different types of support to agriculture that accounts for large shares of gross revenues in the sector.

Over the years, an overwhelming number of studies have rather uniformly proposed more or less radical cuts in the budget, as well as reforms to reduce the distortive character of spending. A large number of reforms have been implemented since the early 1990s, primarily shifting from price and production support to direct income aid to individual farms as well as to aid for rural areas. Nevertheless, the EU still has a support system which raises a lot of questions as to the underlying objectives and the efficiency in reaching them. We discuss these issues in four separate sections:

- Key facts: size of budget over time, objectives, instruments
- Do objectives and instruments fit with principles within a federal budget?
- Effectiveness of policies
- What options can be envisaged for the post 2013 period

4.2. KEY FACTS

While community spending on the agricultural sector (widely defined) has been declining over the last decades, it remains substantial in a number of dimensions. As a share of GDP, EU spending has fallen from 0.7 per cent in 1988 to an estimated 0.4 per cent in 2013, cf. Table 4.1. A reduction in support intensity plays its role. While total government support – including both budget and trade import protection – amounted to an estimated 37 per cent of total value added in the sector in 1988, it had fallen to 26 per cent in 2007. Over the same period, the agricultural sector's share of total EU GDP had fallen from 2.6 per cent to 1.8 per cent. In other words, reduced support intensities have been applied to a sector in relative decline. Nonetheless, budget support per full time employed person remains high, at roughly €3.600 per annum.

Table 4.1 Key structural characteristics of agricultural sector in EU

	1988	1990	1995	2000	2005	2007	2013
Agriculture support, share of GDP, per cent	0.7	0.7	0.6	0.5	0.5	0.5	0.4
Agricultural sector share of GDP, per cent	2.6	2.3	2.1	1.9	1.9	1.8	-
Support intensity, PSE, per cent	37	32	36	34	32	26	-
EU Budget support per full time employed in agricultural sector, €	3.100	3.600	4.900	5.600	3.600	-	-

Note: The numbers are expressed as share of GNI (GNP 1988-1995). Number of employed in 2005 is assumed to be the same as in 2004.

Source: EU Commission (2006a), European Union (2008) tables 3.1, 4.1, 5.1B; EU KLEMS (2007); Eurostat (2009a); OECDStat (2009)

The structure of support policy has undergone three major changes. First, following the reforms in the early 1990s, support has increasingly been decoupled: less market support in the form of minimum price guarantees and import tariff protection. Market support within the Common Agricultural Policy works by setting floors for the prices of individual agricultural products. Such single product support has gone down from 94 per cent of total support in 1986-88 to less than 50 per cent in 2006.³³ Since the 2003 reform, market support for rye, rice, dairy and sugar products has been further reduced, most recently in the context of the adopted "Health Check" changes.³⁴ A relatively modest transfer of €200 million from market support to direct payment will be adopted with full effects only in 2013. The remaining aid is concentrated on support for wine production, other vegetable products plus beef production cf. Table 4.2.

Table 4.2 Market support 2007, millions of 2004 Euros

Product supported	Outcome 2007	Draft appropriations 2010
Cereal and rice related payments	-126	76
Refunds on non-Annex 1 products	174	260
Food programmes	235	444
Sugar related payments	949	9
Products of the wine growing sector	1,369	1,185
Other plant products/measures	1,949	1,013
Textile plants	19	26
Promotion	48	51
Meat and dairy products	858	702
Residual	993	840
Total	6,468	4,607

Source: Eur lex 2009 budget Volume 4, line by line and EU Commission (2009e)

³³ OECD(2007a), page 101.

³⁴ OECD(2007) Page 99 to 106 and EU-Commission (2008c).

As a counterpart to less price support, direct aid to farmers has increased substantially and will be roughly 15 times higher than market related payments in the EU Budget in 2013, cf. Table 4.3.

Table 4.3 Structure of natural resource management, 2000-2013, € billion, 2004 prices

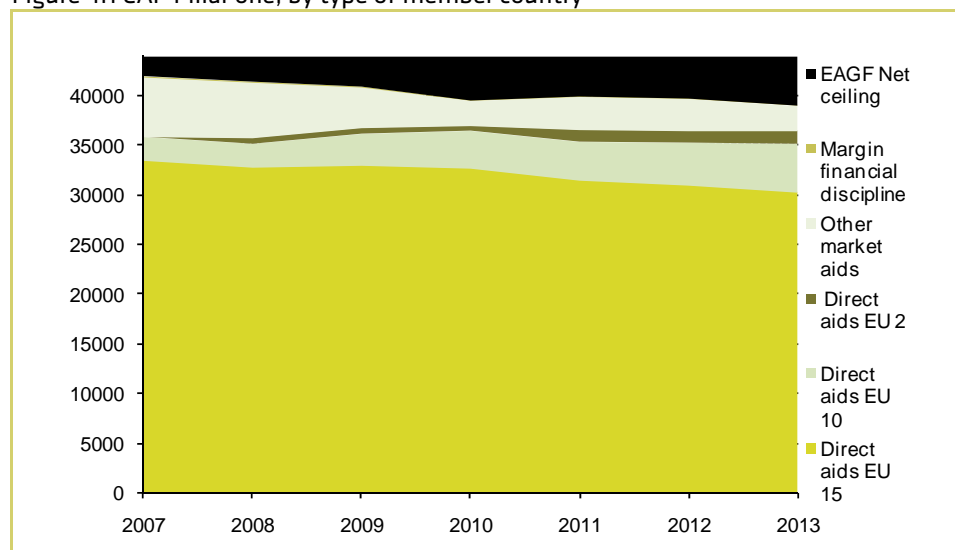
Spending areas	2000	2007	2013
CAP Pillar 1	42.7	43.1	38.8
Agriculture - market related expenditure	6.4	6.5	2.8
Agriculture - direct payments	36.3	36.7	36.0
Rural development	10.5	10.2	11.3
European Fisheries Fund and other programmes related to fishery	0.9	0.9	0.9
Life+ (environment)	0.2	0.2	0.3
Other (Agencies and margin)	0.1	0.1	0.1
Total	54.3	54.4	51.4
Total, as share of GDP (%)	0.64	0.47	0.37

Note: Market related expenditure is assumed to constitute 15 per cent of Pillar 1 in 2000-2007 (European Union (2008) page 262). Receipts after modulation.

Source: European Union (2008) table 5.3 and 6.1 and page 262; EU-oplysningen (2009)

The enlargement in 2004 and 2007 bringing in 12 new member countries was accompanied with an agreed “financial discipline rule”. This implied that the phasing in of 12 new Member States in the Common Agricultural Policy (CAP) budget as well as any other policy change had to be financed within the total budget level for the so called Pillar 1 of the CAP in 2006. As consequence, funding for the EU15 Member States had to fall, cf. Figure 4.1.

Figure 4.1 CAP Pillar one, by type of member country



Source: EU Commission (2007b)

A second change has been to increase rural development. With the aim of encouraging rural development more broadly and more directly than by providing direct aid to individual far-

mers, about €11 billion is to be spent in the Rural Development programme in 2013. Increases in the budget have been “financed” by the so-called modulation where national envelopes for direct aid are being partially converted to rural aid programmes, most recently with €2 billion in the context of the Health Check.

For the period 2007-2013, Rural Development finances four types of activities with required national co-financing in the region of 25 per cent for countries receiving cohesion funds and 50 per cent for other countries.

- Axis 1: “Improving the competitiveness of the agricultural and forestry sector” (investment, R&D, education and training).
- Axis 2: “Land management”, support to less favoured regions, agri-environmental schemes, animal welfare, afforestation etc.
- Axis 3: “Diversification of the rural economy and quality of life in rural areas”, support for non-agricultural activity such as tourism, renovation of villages etc.
- Axis 4: “Leader plus”, a financial framework for environment, with the purpose of strengthening implementation and development of Community environmental policy and legislation.

The third change has been the “greening” of agricultural spending and land management more generally, i.e. more focus on achieving environmental goals through three EU Budget channels.

The first channel is axis 2 of the Rural Development fund, described above.

The second channel is the requirement of cross-compliance. The receipt of market support and direct payments, currently through the Single Payment programme, and partly Rural Development aid, requires conformity with a number of specific provisions pertaining either directly to the individual farmer or implemented through national legislation. The areas are summarised in Table 4.4 below and affect such areas as conservation of natural habitats, regulation of the use of fertilisers, minimum standards for calves/pigs welfare, protection of water quality i.e. the whole gamut of environmental issues.

Table 4.4 Cross-compliance related to receipts of single payment

Field	Area of regulation
EU regulation applying directly at the farm level	
Environment	Conservation of natural habitats, wild flora and birds Protection of groundwater against certain dangerous substances including sewage and nitrates used as fertilisers
Public and animal health	Identification and registration of pigs, cows etc as well as labelling
Use of fertilizers and pesticides	Placing of plant protection products on the market Prohibition on the use in stock farming of certain substances having a hormonal or thyrostatic action and of beta-agonists General principles and requirements of food law and food safety Prevention, control and eradication of certain transmissible spongiform encephalopathies (certain diseases affecting the brain and nervous system of animals)
Notification of diseases	Control of certain animal diseases such as foot-and-mouth disease, bluetongue, swine vesicular diseases (SVD)
Animal welfare	Minimum standards for the treatment of calves, pigs etc.
National level of regulation	
To keep agricultural land in a good agricultural and environmental condition (GAEC)	Member States are provided with compulsory as well as optional requirements to implement standards in the areas of environmental maintenance and soil- and water management, if national legislation for these area exist.

Source: EU Commission (2009a) Annex II

The third channel is more “stand alone” programmes, first of all the LIFE+ programme³⁵. The general objective of LIFE+ is to contribute to the implementation, updating and development of Community environmental policy and legislation, including the integration of the environment into other policies. LIFE+ has three components: (1) Nature & Biodiversity (2) Environment policy & Governance (3) Information & Communication. In particular, LIFE+ shall support the implementation of the Sixth Community Environment Action Programme. The total budget of €2.1 billion for the period 2007-2013 aimed at co-financing projects in line with the purpose of the fund. At least 78 per cent of LIFE+ will be for the co-financing of project action grants, of which at least 50 per cent will be for nature and biodiversity projects.

4.3. MATCHING OBJECTIVES WITH PROPOSED EU SPENDING PRINCIPLES

The stated objectives of the present natural resource management policies are relatively straightforward:

- Supplying consumers with food at reasonable prices
- Providing farming communities with a fair standard of living
- Consolidating rural development policy in order to support sustainable growth and employment, meet the economic, social and environmental challenges and needs of rural Europe
- Strengthening environmental objectives

³⁵ EU Commission (2007a) and Eur lex (2008)

The task addressed below is to assess how these objectives, and in particular the instruments used to support them, fit with the principles for a common budget in a (semi-) federal system. In other words, are the existing instruments *a priori* the most effective ones in delivering benefits relative to action either at the national level (in view of the subsidiarity principle) or through other action taken at the EU level?

The first objective – ensuring that consumers can afford to buy food – is likely to be dealt with more effectively by nationally defined *income distribution policies*. Indeed, affordable food prices are related to social policy objectives. Expenditures on food constitute a higher share of the budget for low income families than high income families, therefore low food prices are proportionally more beneficial for low income families. Member States might instead consider instruments such as (1) reduced VAT rates on food used extensively in the EU or even better (2) provide social assistance to low income families – based upon Member States own evaluation of the merits of these objectives and instruments.³⁶

The second objective – ensuring “a fair standard of living” – seems somewhat at odds with general principles of competition, by providing subsidies to a particular industry within the EU. Furthermore, income distribution policies are better linked to the income status of recipients in general, rather than to their occupation. If some countries had a particular preference for allowing farmers with low market incomes to reap comparable standards of living relative to workers with higher market incomes that can be achieved by more effective means such as (1) general tax and social policies (2) grants to rural communities which would allow public authorities to provide standards of living comparable with those in higher income, urban areas.

Considering the third objective – support for rural communities – we also see little *a priori* arguments for significant EU Budget programmes targeted in this direction. As discussed above, Member States can favour poor or non poor rural areas by generous grants from central budgets while specific industrial support can be ingrained in regional development programmes within the remit of standard state aid rules to prevent negative spillovers on competition from other countries.

By contrast, there are compelling environmental reasons for the EU to intervene in the fourth objective – environmental issues. Activities of farming communities, other industries as well as private consumers in individual Member States may have significant positive as well as negative spill-over effects in other EU countries. Key examples³⁷:

³⁶ These issues are discussed in detail in Copenhagen Economics (2007) with estimates of the effects of income distribution in the EU countries on the prevailing use of reduced VAT rates on food

³⁷ LUPG (2009a), summary

- Water pollution: 30 per cent of river basic districts identified under the Water District Framework directive are international districts, 16 of which are shared between EU and candidate countries.
- Water management: while transport of water for consumption purposes is limited, the importance of river management at EU level is important to reduce future risks of flooding given EU's many trans-boundary waterways.
- Migrant species including fish: many species are depending upon access to habitats in diverse parts of the EU; implying that the preservation of the diversity and stocks of wildlife, depend on actions in other areas of the EU.

Hence, there is a potential for EU co-ordination related to trans-boundary environmental issues, the question here is which role that budgetary instruments should play. We discuss this below in the context of the evaluation of present policies.

4.4. EFFECTIVENESS IN MEETING OBJECTIVES

Despite substantial reforms reducing distortions in product markets, the present set up of budget resources committed to agriculture and fisheries can still benefit from reforms, as confirmed by a number of studies discussed below under three headings:

- Direct aid and market support
- Rural development policies
- Environmental impact

Direct aid and market support fail to deliver on objectives

First, in addition to national policies being more efficient, we find that direct aid as well as market support programmes fails to deliver on providing “fair standards for farming communities”. Essentially, the aid constitutes income support to a specific part of the EU population who happens to own a farm or other assets that in the past produced a certain amount of agricultural produce. Historically, the aid was constructed as the counterpart to reduced market support which was expected to lead to reduced prices for agricultural prices. With the recent surge in global and European food prices as discussed below, this compensation argument has lost some of its credibility.³⁸

Indeed, the real benefits of either market support or direct payments tend to accrue to the original owners/users of the assets qualifying for the direct aid when support systems were put in place not the present owners/users. The argument is that buyers of agricultural assets will pay more for them if they can expect to receive government support as new owners or operators. So new farming generations and tenants, the latter may be holding up to 50 per cent of arable land in the EU,³⁹ receives no or limited benefits: to a large extent they just face

³⁸ The lack of credibility point is underlined in Notre Europe (2008)

³⁹ OECD (2008a), chapter one of this publications provides theoretical argumentation for this proposition while chapter 3 offer some empirical support. Rough estimates suggest that roughly 50 per cent of EU farm land is held

higher land prices or higher costs of renting land. The entry of the EU12 into the CAP has led to substantial increases in farm land prices in this area triggered essentially by exactly such capitalisation factors⁴⁰ as well as access to EU agricultural markets in areas formerly protected by tariffs and other import barriers.

The conclusion is that permanent increases/decreases in direct payments have limited long term impacts on net incomes in the agricultural sector. They mainly provide windfall gains or losses to owners/users of land when changes are made. OECD research suggest that only one quarter of market support or equivalent measures provide a net impact on farming incomes, the rest going to original owners of land etc.⁴¹

The boosting of land prices will also make it more expensive and risky to enter into the agricultural sector. In fact, a number of EU countries run programmes – supported by EU funding – to reduce the investment costs for young farmers when buying land. Hence, EU countries and the EU Budget are committing funds that in effect provide compensation for the land price boosting effects of EU's own agricultural policies.

Furthermore, if the aim is to preserve (small-scale) traditional farming in remote areas – then direct payments are badly designed with the brunt going to areas with high yields, in Europe often flat lands close to urban areas, for example the wheat basin around Paris, while direct payments “barely” reach disadvantaged areas in Austria⁴².

Even worse, by leading to higher land prices direct payments discourages alternative use of land, thus somewhat counteracting EU and national efforts to encourage broad-based rural development.⁴³

There is also considerable doubt about the CAP's ability to reduce the *volatility* of net incomes due to its effect on asset prices. The potential benefits that fixed levels of direct payments can provide to the stabilisation of farmers' incomes can be undermined by more volatility in expenditures. Thus, on the one hand, fixed direct aid provides a floor to gross incomes compensating for fluctuations in revenues. However, higher asset prices make it more expensive and risky to enter into the agricultural sector. Adverse effects from changes in financial markets, such as higher interest rates and/or tighter credit standards, will be amplified by direct payments systems, in particular for new entrants or young farmers given higher debt levels for any given level of market income. In short, the CAP increases financial leverage.

by tenants with tenant holding 30 per cent or below in countries such as Ireland, Denmark and Portugal and above 65 per cent in countries such as Germany, France and Belgium.

⁴⁰ Notre Europe (2008) refers to studies that provide this conclusion.

⁴¹ OECD(2006)

⁴² OECD(2006)

⁴³ OECD (2006)

Moreover, providing floors or ceilings to a particular agricultural product does not necessarily reduce volatility at farm level even if we disregarded the effect from financing costs discussed above. Seen over a long term perspective, quantities and prices tend to move in opposite directions: a bad harvest leads to high prices, a good harvest to low prices. In other words there is a certain natural self-balancing effect on total revenues. A recent study even suggests that price support schemes can lead to larger, not smaller, fluctuations in incomes as they tend to disrupt such natural balancing.⁴⁴ Another example from the same study: higher costs of inputs – for example of energy – are often a co-driver of higher prices for final agricultural products. If price intervention only affects one of the prices, then again it can be destabilising. As a whole, stabilisation of incomes via price support is arguable inferior to more targeted solutions such as active use of insurance markets for crop failure, forward selling in future markets etc.⁴⁵ Governments' effort to stabilise incomes could hence focus on the promotion of less distorting stabilisation instruments including overall safety nets within the welfare system.

Therefore, our conclusion is that in terms of providing “fair standards of living” and reducing the volatility of net incomes, the present EU policies are likely to be inferior to more targeted national policies in principle, and rather ineffectual in practice.

At the same time, they are costly to operate. First, the cost in terms of tax revenues at the national level are non-trivial. Higher tax rates distort decisions made in labour and product markets for example in the form of a reduced supply of labour. Based upon conservative estimates of the costs of raising public funds, the price tag could be in the range of about €10 billion, per year⁴⁶. Second, the support system also implies substantial administrative burdens on enterprises as well as administrations. A recent EU study showed that compliance costs related to CAP per farmer in five reviewed countries ranged from 3 to 8 per cent of received payments⁴⁷. Public administrative costs come on top of that. A not too heroic guesstimate then is that total compliance costs may reach 10 per cent of payments. Third, in particular market support measures distort product markets and trade and make it more difficult for the EU to make progress in WTO areas in the interest of consumers as well as EU industries that would gain from more market access outside EU.

Clarifying the objectives of rural development

Rural development policies are also due for reform. First, there is a partial overlap with structural fund objectives which can better target poor regions, rural or not, within a general development approach. The “overlap” argument should be seen in the context of rural development being *de facto* partly distributed according to per capita income levels in Member States – less affluent getting more – while being almost unrelated to direct aid payments cf.

⁴⁴ OECD(2009a) page 51-52

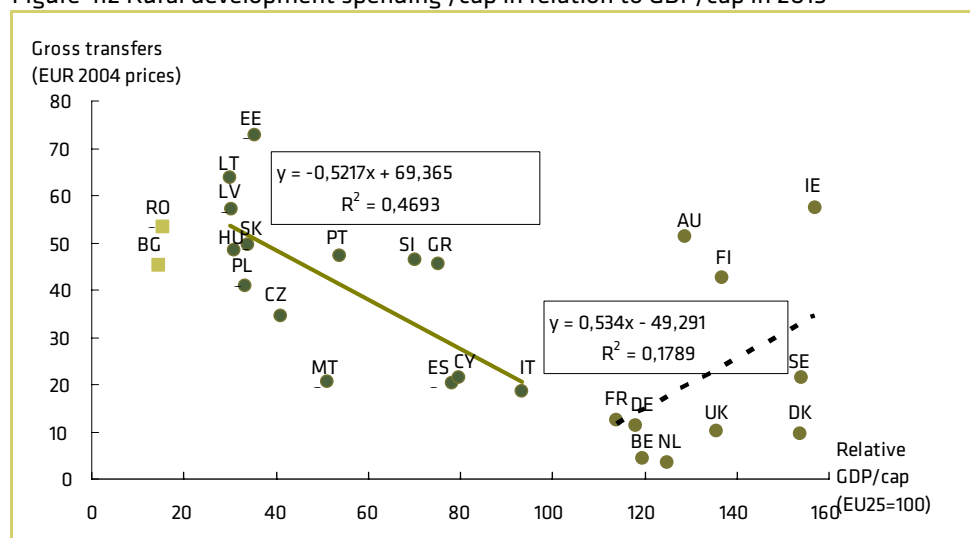
⁴⁵ OECD(2009a and b) contains an extensive discussion of the instruments farmers themselves as well as governments can use to achieve stabilisation of market incomes with price support getting a low grade.

⁴⁶ 20-30 per cent costs low end in marginal costs of public funds literature.

⁴⁷ DG Agri (2007).

Figure 4.2. The countries with a GDP per capita above average, together receive approximately € 3.6 billion in 2013, whilst countries with a lower GDP per capita receive approximately € 7.6 billion. The relatively low rural development receipts of Romania and Bulgaria can be explained by their receipts not being fully phased in 2013.

Figure 4.2 Rural development spending /cap in relation to GDP/cap in 2013



Source: Official Journal of the European Union (5.6.2007), Annex and Eurostat > National Accounts and Population and Copenhagen Economics

The effectiveness of regional policy efforts can be adversely affected by “earmarking” linked to agricultural sector (mainly the axis one dimension of the rural development funds). Programmes designated for agriculture, even if directed at investment, R&D etc., also have a weak tendency to recouple aid to actual production; they are essentially input aid, thus undermining the original reform efforts starting back in the early 1990s.

The need to lessen the focus on agriculture within rural development was underlined in a recent study on policy coherence between agricultural and rural developments⁴⁸. Indeed it notes that increasingly the agricultural sector has only a “small” role in rural areas, including the remote areas. Within the EU, agricultural income in rural areas accounts for only 6 per cent of total income. Tying any aid to that small amount of economic activity makes little sense particularly in most EU15 countries where the primary sector, including agriculture, typically accounts for below 10 per cent of employment, even in predominantly rural areas.⁴⁹

⁴⁸OECD (2006)

⁴⁹ A note from DG Agriculture (2007) provides an overview of the primary sectors’ share of employment in rural areas across EU which shows that it is below 10 per cent in almost all EU15 Member States but but 20 to 40 per cent in EU12.

Environmental spending

As described in the section on trends, environmental aspects of agricultural policies in a wider sense are now build into three different dimensions: (1) cross-compliance for direct payments (2) environmental aspects of rural development funds (3) a new more stand-alone LIFE+ programme.

The question is whether this set-up is effective. From a pure implementation level, several studies have indicated that the effective control at Member State level is not very effective and that the weapon of discontinuing direct payments is seldom used, and if so, with only modest reductions⁵⁰. The costs of compliance can well exceed the reduced payments thus undermining the sanctioning element.

However, a more fundamental weakness is that neither the original direct payment nor the specific environmental requirements forming the backbone of the cross-compliance system are rooted in any fundamental EU logic. We argue that point for direct payments above but the same criticism has been levelled at the environmental requirements themselves. To a substantial degree the potential benefit from complying with the requirements will most often accrue solely or largely at the local level. This suggests that the optimal level of regulation in some cases is neither the EU nor national level but the regional/very local level.⁵¹

Schemes within the rural development to support environmental aid have also received some criticism. First, often the benefits produced can be very local with no positive spillovers to other countries, providing limited argument for EU support. Second, rather than using taxes to reduce pollution in conformity with the “polluter pays principle”, polluters are sometimes paid to reduce emissions.⁵²

4.5. OPTIONS FOR REFORM

Our proposed options for reform are based on three main conclusions drawn from the previous two sections on the principles as well as the effectiveness of EU spending on the three main objectives related to agricultural policies and broader natural resource management.

- The task of ensuring fair living standards in rural areas, including that of farmers, must in general be moved to Member States.
- For countries receiving structural funds from the EU budget, rural development aid should be integrated fully into those policies with no particular role of the agricultural sector per se.
- EU Budget support for improving environmental performance in broadest sense streamlined mainly towards transboundary issues, e.g. true spill-over effects

We discuss seven concrete options:

⁵⁰ The EU Court of Auditors (2009) and Notre Europe (2008)

⁵¹ Notre Europe (2008), LUPG (2007)

⁵² Notre Europe (2008)

- Reduce/remove the remaining market support in agriculture
- Bring about further cuts in direct payments
- Renationalise the CAP
- Cap direct support levels for farmers with large receipts
- Reform rural development schemes
- Rationalise and expand funds for environmental objectives

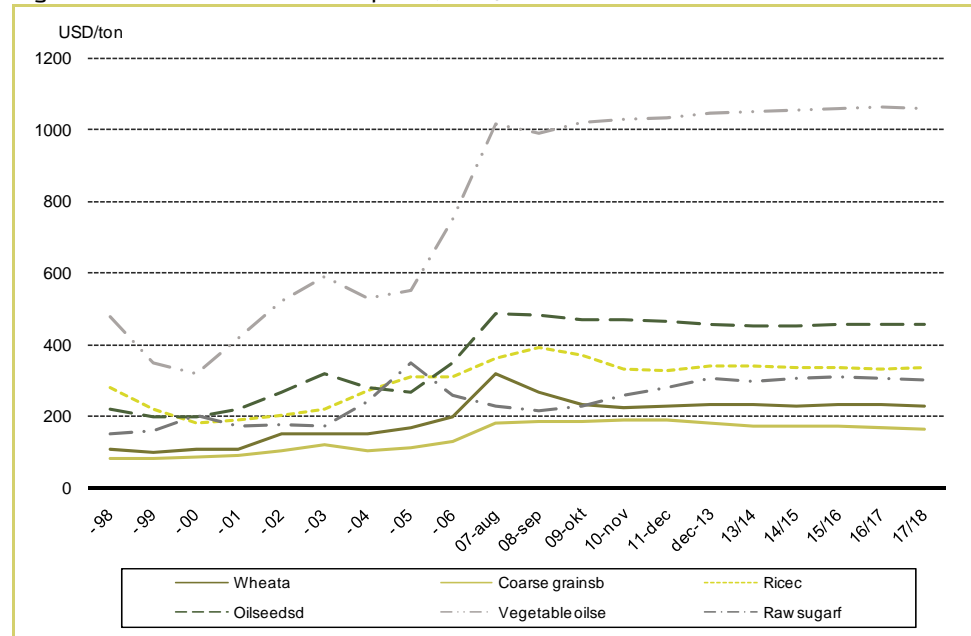
Reducing/removing remaining production and investment support

With the Health Check fully phased in, remaining market support mechanisms are predicted to about €1-2 billion given current projects of world market prices in the main supported markets. We propose such support to be stopped in line with many years of reforms. It can be affected with or without temporary compensation. If with compensation, we suggest that this should be largely phased out in 2020.

The present surge in global food prices would seem a particular good moment to institute the removal of price floor and support mechanisms as well as cuts in direct payments as discussed below. Current prices of key commodities such as cereal, corn or rice have gone up with over 50 per cent from mid 2006 to end 2008, and are, despite a projected fall, likely to remain high in the coming decade cf. Figure 4.3⁵³. Indeed, high cereal prices reduce the actual spent market support from the EU Budget ceilings for market support.

⁵³ For a more in depth discussion see OECD-FAO (2008) and a clear policy oriented discussion is contained in Delgado and Santos (2008)

Figure 4.3 Estimated world food prices, USD/t



Note: a) No. 2 hard red winter wheat, ordinary protein, USA f.o.b. Gulf Ports (June/May), less EEP payments where applicable.

b) No. 2 yellow corn, US f.o.b. Gulf Ports (September/August).

c) Milled, 100%, grade b, Nominal Price Quote, NPQ, f.o.b. Bangkok (August/July).

d) Weighted average oilseed price, European port.

e) Weighted average price of oilseed oils and palm oil, European port.

f) Raw sugar world price, ICE Inc. No. 11, f.o.b. stowed Caribbean port (including Brazil), bulk spot price.

Source: OECD-FAO (2008) annex A and web page

We have hence outlined two main variants for cutting direct payments relative to a no-policy change baseline scenario. In the baseline scenario, real values moving forward from 2013 are declining by 2 per cent a year according to the ceilings fixed by the Commission, cf. Table 4.5.⁵⁴ In our first reform scenario we suggest that all direct payments will have been scrapped by 2020 with no compensation, representing a saving of €32 billion or an estimated 0.2 per cent of GDP by 2020. In a less radical version, spending is reduced to half of the baseline, representing a saving of half this level.

⁵⁴ All new Member States bar Rumania and Bulgaria are fully phased in by 2013, implying that overall real spending on direct aid falls by 1(2) per cent per year as agreed by European Council conclusions (precise references).

Table 4.5 Baseline spending and reform options for direct payments, € billion, 2004 prices

Scenario	2013	2020
Baseline	36	32
Abolishment from 2020	36	0
Halving from 2020	36	16

Note: Receipts after modulation

Source: EU Commission (2006a), EU Commission (2009a) Annex VIII, EU Commission (2008a), EU Commission (2009b) and Copenhagen Economics

In a third variant we mix an complete abolishment with a personal compensation scheme where recipients of single payments in year 2014 receives a personal bond that provides him/her the next 10 to 15 years with an amount for example equal to the difference between the funding he/she would have got if direct payments had been cut only to 50 per cent of the baseline rather than abolished.

Such bonds can be either mandatory or obligatory for Member States that should be made responsible for the administration of them. The underlying cost can either be born by Member States in which case direct payments become co-financed in a transition period (the duration of the bond) or kept within the *EU Budget* in which case the savings on the *EU Budget* becomes smaller.

“Renationalisation” of CAP

Renationalisation of CAP – transferring part of the financing burden to the Member States whose farmers get the aid – has been mentioned in a number of studies. We outline three variants and discuss the implications of the reforms. In all variants we assume that EU retains 50 per cent of the financing representing a possible budget saving of € 16 billion, cf. Table 4.6.

Table 4.6 “Renationalisation” of direct payments scenario with 20% cut of direct aids, € billion, 2004 prices

Scenario	2013	2020
Baseline	36	32
Renationalisation of CAP with 50% cut of direct payments	36	16

Note: Receipts after modulation

Source: EU Commission (2006a), EU Commission (2009a) Annex VIII, EU Commission (2008a), EU Commission (2009b) and Copenhagen Economics

In a first version Member States are being allowed to top up by national means. This version has two benefits: (1) allows Member States who do not consider direct payments good use of tax funds to save what corresponds to their share of the resulting 50 per cent savings on direct payments (2) Member States that want to continue with the system can do so.

We find that the resulting differences in direct payments between Member States do not create internal market distortions. First, apart from an obligation to keep land in conditions compatible with agricultural use, direct payments are largely agreed to imply relatively few production incentives. This is also the stance that the EU takes in international negotiation in WTO. If this “faith” is taken at face value, then differences between Member States should not lead to internal market distortions. Second, payment levels are already different between Member States as they are based upon historical levels of differences in yields per acre etc. which may or may not still be relevant. Again this should not affect competition between farmers in different countries but only the prices they pay for agricultural assets and total CAP receipts in their countries. For countries exerting the right *not* to top up, the result will primarily be a fall in land prices benefiting the entry of new generation of farmers.

In a second version, overall payments are kept unchanged but requiring Member States to finance 50 per cent of their national envelopes by national means if farmers are to receive direct payments. This effectively makes direct payments a co-funded programme as most other EU programmes that require private firms or governments to provide funds on top of the EU financing as a precondition for getting the EU support.

It is somewhat difficult to see the welfare rationale for such a policy. Seen from a purely national perspective, Member States have a huge incentive to provide the co-funding. Essentially, direct payments are an income transfer to a country’s domestic farmers from the EU Budget. For every 50 cents they pay to its farmers, the Member State will receive 50 cents from the EU. Part of these 50 per cent will come back to the state in the form of higher revenues from estate and income taxes etc.

It illustrates somewhat the perils of using co-funding without a clear welfare policy perspective within a (semi)federal system. Co-funding should be used where the EU as a whole gains from supporting a specific activity in a Member State such as well chosen research projects with *spill-over* effects to other countries. In this case, the questions must be asked: what positive effects does the EU get as a whole from Member States being required to co-funding direct payments to get the EU transfer? The real effect of co-funding in this particular case is that part of the EU Budget moves off budget.

In the third option, Member States are obliged to provide the remaining part. Arguably, this option has little to do with an expenditure reform as obligatory spending is unchanged, but more to do with finance “reform” as it improves net budget balances for countries with a low level of CAP receipts. At the same time, it moves part of the EU Budget off budget.

Capping direct support levels for “rich” farmers?

The EU Commission – and others – have at times argued that large farmers should take a larger than proportional burden in the face of budget cuts. The argument is linked to the fact that roughly 15 per cent of total direct payments in EU15 are given to farms receiving

more than €100.000 per year, cf. Table 4.7. So capping payments at a level of €100.000 may save roughly €4 billion.

Table 4.7 Payments submitted to modulation share of total per threshold, per cent

	< €5.000	€5.000 - €99.999	€100.000 - €199.999	€200.000 - €299.999	> €300.000	Total (€ million)
Belgium	7	90	2	0	0	467
Denmark	6	82	9	2	1	924
Germany	7	65	7	5	17	5,050
Greece	51	48	0	0	0	1617
Spain	18	70	6	2	3	4,463
France	3	90	5	0	1	7,616
Ireland	11	86	3	0	0	1,203
Italy	32	56	6	2	4	3456
Luxemburg	3	95	2	0	0	32
Netherlands	11	86	2	1	1	649
Austria	25	73	1	0	1	665
Portugal	29	55	11	3	2	538
Finland	15	84	1	0	0	501
Sweden	12	80	5	1	1	669
United Kingdom	3	70	17	5	5	3,524
EU-15	13	73	7	2	4	31.372

Source: Henke and Sarcone (2008)

There are at least three serious problems with the proposal. First, present land owners may in fact not be the beneficiaries of the CAP, as past support was already capitalised in the form of the higher land prices they faced when they bought their present lot as discussed above. Second, larger land owners may not be “richer” but simply working full time, while small land holders may own and operate the land in addition to another main occupation giving them potentially larger total revenues than owners with more land. Third, on a more administrative level: capping payments may not so much save money as encouraging either actual or just formal splitting up into smaller lots to retain payments.⁵⁵ Such moves may well trigger higher (compliance) costs as Member States will have to spend resources checking that splitting up is not just circumventing the new rules and, if the splitting up is real, potentially less efficient agricultural farms.

We keep this option *on* the table, mainly because it is mentioned in many studies even though we do not find much to commend it, even if it was already a part of the Health Check adjustment with capping above €300.000.

⁵⁵ A threat also underlined in Notre Europe (2008)

Slimming down rural development funds?

For rural development policies we outline the following options. First, the distribution of funds is *de facto* partly based on per capita income levels, spending should be seen in light of what is decided in these areas. As a first option, all economic development based spending, where retained, should under all circumstances be placed under the heading of structural funds. Second, the logical extension of the proposal to focus spending of structural funds on low income countries would be to discontinue aid for all countries with above average incomes.

Table 4.8 Baseline spending and reform options for rural development policies € billion, 2004 prices

Scenario	2013 CAP and natural resource manage- ment	2020 CAP and natural resource manage- ment	Structural funds
Baseline	11	10	0
Complete transfer to Structural funds	11	0	10
Abolishment for median to higher income countries, remaining funds transferred to Structural funds	11	0	7

Note: Receipts after modulation

Source: EU Commission (2006a), EU Commission (2009a) Annex VIII, EU Commission (2008a), EU Commission (2009b) and Copenhagen Economics

We discuss axis two in the context of environmental aspects of land management below.

Environmental reorientation

Our ultimate option for the heading of what is now resource management is to reduce it over time essentially to two areas.

First, areas with strong EU externalities, such as preserving habitats for migrating birds or management of waterways linked to other EU countries as discussed above. It integrates the policy now funded by axis 2 of the rural development fund as well as the current LIFE+ programme. The programme essentially offers co-funding for contracts between Member State authorities and individual farms or land owners that promise to deliver public services, e.g. land management that has costs to the owner but provides positive external benefits.⁵⁶ In principle, EU co-funding should be restricted to projects with positive spillover effects to other EU-countries. State aid rules should be modified, if necessary, to allow Member States to subsidy recipients in cases where only national benefits accrue.

Second, programmes that compensate for extreme natural events. The present Solidarity programme is an example. It is a contingency fund allowing EU to disperse up to €1 billion per year primarily in case of natural disasters. It has provided compensation e.g. for floods in

⁵⁶ Such schemes are proposed in LUPG (2007) and Notre Europe (2008) that both present options for future CAP with the former focusing on environmental issues.

2002. The line of reasoning is linked to the reinsurance argument. The problem in practice is that the triggering event may well be beyond the control of the individual Member States while the costs may result from weakly designed policies: building houses close to vulnerable areas, deforestation which in periods of heavy rains let water run too quickly down to rivers etc.

4.6. SUMMARY OF THE OPTIONS

Based upon the arguments and analysis above, we have proposed a certainly non-exhaustive list of options for reform for Natural Resource Management (NRM) which briefly is discussed below, and summarised in Table 4.9.

Direct payments

We propose a number of options all leading to reduction in direct payments (“Single Payment System”).

Option NRM I: direct payment cuts

- Ia and Ib The most simple and straightforward option is to move towards abolishing direct payment entirely, with zero direct payments in 2020, or in a less radical version, reducing payments to 50 per cent of its declining baseline.
- This can be combined with completely decoupled bonds of limited duration given directly to the current legal recipients of direct payments as compensation for losses leading to lower prices of milk quotas, farming land, etc.

Option NRM II: renationalisation

- IIa: voluntary top-up allowing Member States to scale down what they consider non productive spending.
- IIb: Standard co-funding rules: Member States must match with national funding. If not, no transfer from EU takes place. Little savings expected as most member states are likely to co-fund direct payments
- IIc: mandatory top-up, this is just a revenue financing reform which creates saving on the *EU Budget* but which provides no real EU-wide savings
- Options a-c: Could be “instrumentalised” with bonds, so that national co-funding is transitory, that may substantially increase the uptake of (b) and (c), see also above

Option NRM III: capping receipts

- If receipts were capped at a real low level such as €100.000 direct payments savings of €4 billion could be reached. However the savings are likely to be partly illusory as farmers will take steps to split up legally the entities that receive payments.

Market support

Remaining market support over the EU Budget with current rules in 2020 may run to no more than €1-2 billion. In NRM IV we propose simply to phase this out. Any need for compensation should be linked to the discussion of direct payments above.

Rural development

Option NRM V:

- Va: All spending linked to environmental performance should be reformed and removed from the heading of rural development
- Vb: the remaining economic development moved back under structural fund policies with no set-asides for the agricultural sector.
- Vc: all funding for countries with above average incomes should be removed

Environmental objectives

The overriding objective is to focus EU Budget support in this area on true spillover effects – negative or positive – arising from natural resource management

Option NRM VI:

- VIa: Focus spending on supporting key EU objectives where positive externalities arise from national action.
- VIb: Contingency fund to deal with major natural disasters like the present Solidarity Fund

Table 4.9 Summary of options (billion of 2004 Euro)

Status quo Objectives	Money spent in 2013 (% of EU GDP)	Money spent in (Continuation)* (% of EU GDP)	Options	Argument	Qualitative options	Money spent 2020 (Proposal) (% of EU GDP)
					Ia: Abolishing. Zero direct payments in 2020	0.0 (0,00)
			NRM I: Direct cuts	Limited welfare benefits. Direct payments distortionary in labour and product markets, imply administrative burdens.	Ib: Reduce to 50 per cent of its declining baseline	15,8 (0,11)
					Both can be combined with completely decoupled bonds with a limited duration.	
Direct payments	36.0 (0.26)	31.7 (0.22)			Ila: Voluntary top-up allowing Member States to scale down what they consider non productive spending	15,8 (0,11)
			NRM II: Renationalisation	Could be "instrumentalised" with bonds, so that national co-funding is transitory, that may substantially increase the uptake of b and c see also above.	Ilb: Standard co-funding rules: Member States must match with national funding if not, no transfer from EU takes place.	15,8 (0,11)
					Ilc: Mandatory top-up, this is just a revenue financing reform which creates saving on the EU-budget but which provides no real EU wide savings.	15,8 (0,11)
			NRM III: Capping receipts	If receipts were capped at a real low level savings could be reached. However, the savings are likely to be illusory.		
Market support	2.8 (0.02)	1-2 (0.01)	NRM IV: Abolishment from 2020	Remaining market support over the EU budget with current rules in 2020 may run to no more than 1-2 billion.	Iva: Phase this out. Any need for compensation should be linked to the discussion of direct payments above.	0 (0,00)
					Va: All spending should be reformed and removed from the heading of rural development	
Rural development	11.3 (0.08)	10.2 (0.07)	NRMV: Slimming Rural Development Fund	Regional beneficiaries of rural development are largely also recipients of structural funds.	Vb: The remaining economic development moved back under structural fund policies with no set-aside for the agricultural sector	0 (0,00) (10.2 (0,07) under Structural funds heading)
				Regional beneficiaries of rural development are largely also recipients of structural funds	Vc: All funding for countries with above average incomes should be removed	0(0.00) (6.9 (0.04) under Strucutral funds heading)
Environmental objectives	0.3 (0.00)	0.4 (0.00)	NRM VI: Focus EU budget support in this area on true spillover effects - negative or positive - arising from natural resource management		Vla: Focus spending on supporting key EU objectives where positive externalities arise from natural action.	
					Vlb: Contingency fund to deal with major natural disasters like the present Solidarity Fund.	
					Vlc: A possible fund to compensate farmers when EU imposes standards on its domestic producers that may undermined in its aim by imports from regions with less stringent standards.	
Fisheries	0.9 (0.01)					

Source: 2020 estimates by Copenhagen Economics and 2013 figures from EC (2006a), EU Commission (2009a) Annex III, EU Commission (2009b), EU Commission (2008a)

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Chapter 5 GROWTH ORIENTED POLICIES

5.1. SETTING THE SCENE

Supporting structural growth is a very important part of the official EU policy agenda, with the Lisbon agenda as a driving political motor and with regular reviews of progress and agreements on future priorities as part of the Spring European Council House. The delivery mechanisms in this field predominantly rely on other areas than the EU Budget – such as improved competition and better regulation in product markets to increase productivity as well as labour market and pension reforms to enhance employment and long term economic sustainability.

Nonetheless, the EU Budget has also an important role to play. In this challenge paper we focus on two areas where public spending at the EU level makes sense, on top of private and public spending at the national level.

There is a wide ranging consensus based upon both theoretical arguments and empirical estimates that national research and development spending may provide net welfare gains for the EU as a whole. When Germany expands its public research budget, some of the benefits accrue to firms and employees in France and *vice versa*. These implications constitute the so called *spillover* effects from a social welfare point of view. Therefore, if each country made decisions just based upon what uncertain benefits it could gain from its own investments, too little research might be undertaken. The EU Budget could provide the bridge spanning this gap: the co-finance rate should correspond to the *spillovers*.

There is also a potential role to play for the EU Budget for a co-financing of physical infrastructure, such as bridges, rail networks and water management systems, that are used by or produce benefits to citizens in many EU countries.

In section 5.1 we describe *key trends of policies* in the area of EU Budget support for research and infrastructure investment. In section 5.2 we review the economics of these areas at the EU level, and summarise the options in section 5.3.

5.2. KEY FACTS

Since the late 1980s, support for research, development and infrastructure has been a rising part of the EU Budget as well as the EU GNI. It is projected to grow from around 3 per cent of the total EU Budget in 1988 to around 12 per cent in 2013; with a considerable expansion during the present budget period, lasting from 2007 to 2013.

In the official EU parlour, spending on Research, Development and Innovation (RDI) plus infrastructure is termed “Competitiveness for growth and employment”. In 2013, a total of €13 billion is to be spent in this area of which €10.4 billion will be on RDI-related items, €9 billion of this within the 7th Research Framework programme. The latter programme also experiences the strongest increase in spending.

Table 5.1 Breakdown of spending: competitiveness for growth and employment, 2007 and 2013, € billion in 2004 prices

	2007	2013	Percentage change
R&D orientated spending	6.4	10.4	62%
7th Research framework programme	5.2	8.9	71%
Competitiveness and innovation (CIP)	0.4	0.5	33%
Life Long Learning + Erasmus Mundus	0.9	1.0	21%
Infrastructure spending	1.0	1.4	44%
Transport	0.9	1.3	44%
Energy	0.0	0.0	63%
Other	1.0	1.2	14%
Total	8.4	13.0	54%
Total as percentage of EU27 GNI	0.07%	0.09%	-

Note: Other includes Nuclear decommissioning social policy agenda, internal market, statistics, fight against fraud etc.

Source: EC (2006) and EC (2007)

Compared to the US, total EU “federal” spending on RDI and infrastructure accounts for a much smaller part of the underlying GDP. For RDI, the share in the EU is 0.06 per cent (2007) against 0.64 per cent in the US (2006), cf. Table 5.2. Despite the higher federal share, the US overall public support for RDI spending in the US is lower. The EU’s overall RDI deficit then stems from a low share of private sector spending. This suggests that general framework conditions rather than insufficient public support for research is the main factor behind lower overall spending.

Table 5.2 Expenditure on R&D and Infrastructure split between private, (member) state and EU/US federal level 2007, in percentage of GDP

	EU27	US
Research and development		
Private sector	1.17%	1.83%
Public	0.71%	0.66%
State	0.65%	0.02%
Federal	0.06%	0.64%
Total	1.88%	2.49%
Infrastructure		
Public	1.20%	1.54%
State	1.13%	1.01%
Federal	0.07%	0.53%

Note: Public spending on R&D consists of government sector and higher education sector. The federal spending of EU is the appropriations for 2013 in percentage of GNI for 2013. The US data is from 2006. State spending on infrastructure in the US includes local funding. The state spending on infrastructure in the EU suffers from missing values and the true number could be twice the size. The federal funding in the EU consists of the funds used to TEN, Marco Polo II and Galileo and the funds used on infrastructure under the cohesion policy. The exchange rate Dollar/Euro was assumed to be 0.73, based on annual average exchange rates in 2007 (www.aeanda.com).

Source: National Science Foundation, Eurostat (2008), "US Government spending", EC (2006), Applica, Ismeri and Wiiw (2008), Inforegio and own calculations

5.3. SIZE OF SPILL-OVERS, ECONOMICS OF SCOPE AND SCALE

Research, development and innovation

The spatial economics of RDI – which regions benefit from research activities in a specific location – has been a key area of research of recent decades. A number of studies have confirmed that there is a clear geographical dimension to the ‘who benefits’ issue. This again has ramifications for decisions on how to fund research: on the firm, the regional, the (member) state or a combined level by an institution such as the EU.

First, a number of studies have confirmed that the benefits of both private and public research are to a large extent capitalised in a relative small region around the institution carrying out the research. This is very much linked to the so called tacit element of research: not all research is codifiable and capable of being transmitted globally, even when it is in the interest of the firm or institution that undertook the research. The strongest effects have been found in areas of 100 to 150 kilometers from the centre: this unsurprisingly fits with the maximum commuting distance in most areas for the involved workers. Therefore, it is the potential for research workers to exchange the experiences of their work in informal settings that drives these results.

Second, there is some evidence that a wider region around the centre of research harvest a large share of the total benefits. A number of studies have calculated the rate at which the benefits of research decline with distance beyond the most narrow region. One of the best known and frequently quoted studies suggests that the benefits are halved once the distance exceeds 1200 kilometers. Box 5.1 summarises some of the leading studies in the field. This should be seen in the context of the fact that in all Member States, the distance between its large research centres and equivalent centres in neighbouring countries is typically below 400-500 kilometres, cf. Box 5.2.

Box 5.1 Leading studies on the connection between benefits and distance from RD

Study on	Geographic range of effects from research
Global <i>spillover</i> effects from other countries' R and D spending (Keller, 2002)	Knowledge <i>spillovers</i> reduced to half in interval of 162-1200 kilometres; global <i>spillovers</i> rising over time.
Geographical distribution of use of external R and D output in (Adams, 2002)	Nearby R and D output (less than 200 miles distance) accounts for 1/3 of external laboratory input
The ability to win research contracts (Wallsten, 2000)	The probability of winning increases with closeness to clusters of strongly performing firms within 1/10 mile, fades after 5 miles
<i>Spillover</i> from parent level firm R and D to plant level productivity (Adams and Jaffe, 1996)	Beyond 100 miles, productivity effects reduced to 10-30 per cent
<i>Spillovers</i> from university research to local innovation in US (Anselin, 1996)	Univ. research effects positively local innovation up to 50 miles from MSA
<i>Spillovers</i> from university research to commercial R and D (Adams and Jaffe, 1996)	Strongest effect at state level, localisation effects strongest for pharmaceutical, ICT and nuclear technology firms.
Relation between Patents, R and D and local R and D efforts in France (Autant-Bernard, 2003)	Effects of local research between adjoining areas are only half as twice within the same area defined as French Department of which there are 91

Source: Copenhagen Economics

There are strong reasons to believe that the regionalisation of benefits is less dominant for public than for private research. First, public research is produced to be disseminated widely and often at no charge to all interested parties, while private firms will try to keep benefits to themselves or making its use by others more costly by the way of patent protection.

Second, public research tends to be focused precisely on the areas where the potential benefits are long term and only become clearer over time as private and public institutions realise its potential in practical applications. Such projects are typically called basic research where the underlying aim is to reap fundamental not marginal gains in human knowledge. For these

reasons, there are grounds to believe that the results from basic research are spread over a larger geographical area.

An upshot is that there is a strong argument for focusing EU funding on basic research. First, general public economics suggest that public funding should be directed at areas at where there large spill-over effects in order not simple to duplicate or crowd-out private research investments. Second, precisely because the benefits of basic research to a larger extent than applied research accrue to beneficiaries outside the region or country undertaking the research, it makes sense for the EU rather than regions or countries to co-finance such projects.

Box 5.2 Innovation *spillovers* between EU technological hubs

Buck Consultants have developed a ranking of Europe's 30 most technologically advanced cities. This is not representative of all the R&D and innovation which takes place in the EU, but it provides a useful indication that even though *spillovers* take place within relatively short distances, inter-country *spillovers* can still be important in the EU.

Assuming that the *spillovers* from these hubs extend in a radius of 200 kilometres from them, we can get an impression of the importance of innovation *spillovers*.

In particular in the Benelux area and in the Aachen-Cologne area are there likely to be important innovation *spillovers* between EU countries. This also exists to a lesser extent in the Copenhagen-Malmö area.



Note: Radius of the circles around the cities is 200 kilometres.
Source: Google Earth.

Economies of scope and scale are other arguments for undertaking research projects with the participation of international partners, though not necessarily through the *EU Budget*. The issue here is not *spillover* effects, but the fact that the quality in research and tertiary education may require a certain critical mass. Certain regions within the EU may specialise in, for example, biotech such as Lund in southern Sweden and Copenhagen Universities. However, reaping such benefits is very much about governance reforms of higher education that allow specialisation and co-operation across borders with the aim of achieving top results. The EU

Budget can provide incentives to such co-operation, e.g. a top-down approach such as creating new technology institutions. But ultimately the pairing of interests should be driven by bottom-up processes: the latter point was one of the key feed-back elements the EU-commission got in its consultation paper on the European Research Area.⁵⁷ The EU can essentially help co-ordination by promoting “transnational peer review” to help excellence, “autonomy to universities” to strength governance and to create “a true European market for applied research”⁵⁸ which does not necessarily require much EU funding but rather more competition for *national* R&D budgets including from institutions in other EU countries.

The conclusion, then is, that within the area of support for research and development, the focus should be on basic research. The argument is that long term and risky research efforts – the essence of basic research – have larger problems in attracting private finance while also providing larger cross-border spill-over effects.⁵⁹

When and if applied research is to be supported, for example in the field of climate technology, it is important to choose instruments that encourage competition between projects and the competing technologies to encourage real breakthroughs in technology rather than incremental improvements which should be funded by firms themselves. Very recent research suggests that the level of carbon taxes needed to deal with climate change effectively could trigger a fourfold increase in private RDI linked to energy technologies such as renewable energy and energy savings simply because it becomes more profitable to undertake such research. This underlines the need to find ways to supplement, rather than duplicate, efforts in the private sector. A potential advantage with such “technology-blind” support programmes is that unlike project or technology specific subsidies and grants, they do not suffer from governments’ lack of precise knowledge about the relative merits of competing solutions, for example the development of renewable energy⁶⁰. The EU could take its lead from the US where such an approach to applied research has been promoted by the national research council.

Infrastructure development

The vast majority of infrastructure projects carried out in EU will primarily benefit the residents in the country where the investment is made. Furthermore, while infrastructure investments in many cases have been beneficial for local growth by providing a return in excess of financial costs, there is no systematic evidence that a general increase in funds for infrastructure would prove beneficial for economic growth. There are both cases of over- and under provision. There is some evidence that the return on investment may decline with the level of investment, e.g. decreasing returns. A general recommendation is to have a case-by-case evaluation of projects to identify viable projects where future benefits exceed the costs of

⁵⁷ EU Commission (2008a)

⁵⁸ Main conclusion in report by ERA Expert group(2008)

⁵⁹ Recent studies on climate studies accentuate this point such as OECD (2008) “The economics of climate change mitigation”, WP and Aldy and Pizer (2008)

⁶⁰ OECD (2008b) box 4 and Aldy Pizer (2008).

building and maintaining roads, bridges, railways, etc. Furthermore, the blocking stones to good investment projects that link up EU countries, for example in the area of energy networks (electricity and gas grids) may have more to do with inappropriate regulation that reduces incentives to exploit and invest in user-financed investments than with a lack of public funds. Badly designed incentive structures in infrastructure investment can reduce interconnectivity between countries or regions within the EU.⁶¹

Both of the above points suggest that EU Budgetary support for infrastructure investments should be looked at carefully. The argument for support should be linked to true spill-over effects from infrastructure, where improved regulation is not a sufficient answer.

For transport this may apply when infrastructure is used by residents from other countries. The argument rests primarily on two premises. Standard theory suggests that full cost recovery in the utilisation of highly expensive infrastructure investment is typically not optimal: once a bridge is built, the marginal costs of using it – i.e. wear and tear – are way below average costs which also include financial costs related to the original construction costs. This part will typically fall on domestic tax payers. However, some of the users will reside in other countries, thus benefiting from its construction but only contributing to its costs through eventual user charges. Hence, there is a risk of under financing projects where the rationale for building infrastructure partly lies in non-resident tax payers' use of the network. Research from the US has indicated that states benefiting from highways in neighbouring states cut back on their own spending.⁶²

The EU Budget provides specific funds for such projects under the headline trans-European Networks (TEN) focusing on transport (TEN-T) and energy (TEN-E). By far the biggest recipient of funds is transport, while energy receives only a fraction of 1.9 per cent⁶³. Within transport, railways consume 74 per cent, cf. Table 5.3. In most cases, projects must include an improvement in the interconnection between Member States.

Table 5.3 Expenditure on trans-European Network for transport, 1996-2013, total funding and percentage breakdown.

	1996-1999	2000-2006	2007-2013
Total costs of TEN-T Basic network (Billions of Euros)	106	302	390
- of which Rail (%)	48-61%	48-61%	74%
- of which priority projects (%)			85%
Financing by TEN-T programme (Billions of Euros)	2.23	4.43	8.01
Financing by TEN-T programme (%)	2.1%	1.5%	2.1%
Financing by Cohesion Policy (%)	14.8%	8.3%	12.1%
Total Community contribution, grants (%)	17.0%	9.8%	14.1%
Total Community contribution, grants and loans (%)	41.0%	22.5%	27.7%

Source: EU Commission (2009) and EC(2008b)

⁶¹ These points are being made in OECD(2009)

⁶² Bruce (2007)

⁶³ EC (2007)

The share of overall EU co-funding of projects lies in the range of 10 to 30 per cent, cf. Table 5.4. This share is higher for projects with a substantial potential to improve connections between countries.

Table 5.4, Priority projects and maximum co-financing rates

Number of priority projects	30
- Railway projects	21
- Cross border projects	25
Maximum co-financing rates (2007-2013)	
- Studies	50%
- Priority transport projects	20%
- Cross border priority transport projects with guarantee	30%
- Energy projects and non priority transport projects	10%

Note: At least three of the priority projects are already completed.

Source: EC (2007) Article 6 and EC (2008b)

In our view, deciding on the optimum of how much to allocate to such projects over the coming decades is difficult. First, there is little evidence on the number of infrastructural projects that provide substantial benefits that accrue to non-residents.⁶⁴ Second, the big projects that account for the bulk of the budget are not only based on a project appraisal of external benefits, but also on the need for a “balanced” placement of the projects across the EU, a consideration which it is probably difficult to overcome⁶⁵. In other words, in practice it will not be easy to allocate more funding to projects that comply with well defined funding criteria. Thirdly, the increasing use of smarter financing instruments for financing road transport such as GPS based user charges will improve the ability of the financing Member State to let non-resident users pay for the network: Germany, Austria and Switzerland already have such system for lorries passing through their territory; other countries have decided to follow⁶⁶.

As railways consume the bulk of resources as noted above, the role that EU public funding can potentially achieve in this sector has particular importance. Improved functioning in particular of long haul commercial freight may have direct positive economic effects for economic operators while a shift from road to rail freight can reduced environmental costs of long distance transport of goods within EU.

⁶⁴ One example is the economics of the bridge over Fehmern Belt between Germany and Denmark which will be built with financing from the TEN budget. The EU wide net benefits is approx. 2.1 billion Euro, while the net benefit to Denmark is approx. € 0.6 billion and the net benefit to Germany is approx. 0.9 billion Euro. That leaves a balance of € 0.6 billion accruing to residents of other countries. The bridge will receive revenues also from user fees as well as implicit revenues from the Danish Government guaranteeing investors their return on the fixed income securities financing the investments see Cowi (2004)

⁶⁵ Short and Kopp (2005) suggest that TEN projects fail to make sufficient use of prior economic analysis of the merits of the projects and tends to be biased towards large scale projects.

⁶⁶ Copenhagen Economics (2009)

Studies suggest that the main obstacles to such a shift result both from the characteristics of the rail industry as well as inadequate EU regulation⁶⁷. In practice it has been difficult to introduce the same kind of liberalisation of railways systems as has been introduced in other network industries such as electricity, telecommunication etc. with separation of the management of the network (the rail systems) from the management of the ownership of the “production” service (the carriages transporting persons and goods). Partly that reflects that such separation may in practice be more difficult to implement in this sector than in the other network services.

In any case, a recent EU Commission study observed that international freight operations within the EU have problems with “...lack of cooperation (across borders) both in terms of investment as well as the operational management of infrastructure which can lead to discontinuation between borders”⁶⁸. The study makes the case for increased investments particular linked to the operation of long haul rail freight corridors within the EU. However, it is less clear whether such needed funding should primarily be the result of improved regulation as proposed by the EU Commission in 2008 or whether increased EU funding is required to supplement such investments.

5.4. PRESENTING OPTIONS

Based upon the arguments and analysis above we have proposed a certainly non-exhaustive list of options for a reform of growth oriented policies. This is briefly discussed below and summarised in option Table 5.6.

RDI

Defending the conclusion that the EU Budget should support research with a concrete amount of money requires some heroic assumptions. Estimates of the optimal size of publicly supported RDI funding, as well as the distribution between layers of government are fraught with difficulties⁶⁹.

To come up with some ballpark-based estimate, we have instead taken a very simplified approach involving two mechanical steps plus a more qualitative evaluation. The first step is to define an overall target for public research that is broadly in line with existing commitments. The EU has already committed itself to reaching public research budgets of 1 per cent of GDP broadly, at the US level. This decision was taken before the enlargement which included new Member States with lower per capita income levels and hence arguably lower levels of optimal research per capita. This has been an additional argument for a lower target

⁶⁷ Pierantonio and Pelkman(2004)

⁶⁸ EU Commission(2008c)

⁶⁹ One of the leading scholars in this field (Salters (2000), page 529) notes after an extensive discussion of the pros and cons of various evaluation methods that while there is relatively substantial research to strong externalities from private research, “*we do not have the robust and methodological tools to state with any certainty what the benefits of additional research might be*”. A relative non-technical description of some of the evaluation problems are also contained in Danish Ministry of Finance (2006), chapter 5.

e.g. 0.7 per cent. A large body of studies suggests that regions or countries with substantial catch-up potential may spend their scarce resources better on technological adaptation than funding for basis research.

The second step is to decide on the EU part in financing RDI. Our estimates suggest that on average perhaps 20 to 40 cent – see appendix – of the benefits of publicly oriented research accrues to residents outside the national level. We suggest that this *spill-over* effect would be a good indicator for the EU financing part⁷⁰. Translated into RDI targets for the EU, these amount to between 0.14 and 0.40 per cent of GDP, cf. table 5.5.

Table 5.5 Scenarios for RDI spending for EU in per cent of GDP, 2020

EU Public research target, per cent of GDP	0,7 per cent target	1.0 per cent target
<i>Spillover</i> effect of 20%	0.14	0.20
<i>Spillover</i> effect of 40%	0.28	0.40
Current spending	0.08	

Source: Copenhagen Economics, Eurostat and EC (2006)

The qualitative part essentially relates to the nature of such research as well some reservations concerning the current functioning of the programmes. Hence, we would suggest that EU should for the time being adopt the lower estimate which would still represent a continued strong increase.

First, a very large part of national research budgets is devoted to areas of research where EU-wide *spill-overs* are probably either relatively small or at least not very much linked to business innovation, such as social sciences and the humanities. By contrast, EU research funds tend to favour natural science-based research. For that reason, the share of total funding in this area is higher than for publicly funded research as a whole in EU. That suggests that a value in the lower range is more appropriate.

Second, the present functioning of the 7th Framework programme has been criticised and its failings should be addressed. Some concern has been expressed that EU research tenders put a strong premium on bids from consortia from different countries relative to bid from a single country eventually just one institution. While such an approach can be defended as an attempt to encourage increased co-operation between research partners in EU – public and private – it also leads to substantial costs for bidders, potentially holding back offers.

Moreover, the research programmes are often organised around specific technology funding programmes rather than more open ended funding for research institutions. Alternatively, a one could suggest a more grant oriented financing to research *institutions* where allocations over time would depend on international peer reviews of their overall work while at the same

⁷⁰ The total demand for public goods should equal the horizontal adding up of demand from different agents in this case national and EU beneficiaries.

time scaling down the provisions of grants for *individual research projects*. This would be more in line with the direction that Member States are talking vis-a-vis their own funding of basic research and it would without doubt reduce compliance costs. The peer review would need to take into consideration both the quality of the work as well as the likelihood of the institution providing research results with wider benefits for the EU, not only the region or country in which it is based.

Third, the Court of Auditors have specifically referred to the 7th research programme as being a programme lacking in clarity about its objectives and where the eligibility criteria for funding are so difficult to meet that this affects its effectiveness⁷¹.

Our overall evaluation of the effectiveness of the EU's research programmes is that there is a need for a more selective approach to funding principles geared to the specifics of the different research domains that needs to be supported. In the absence of such reforms, there are serious reservations as to how much more funding the EU budget can absorb and still produce the needed quality of research of a sufficient quality at acceptable compliance costs for the partners involved.

Option GI: allocation of funds

- Ia: lower end option (RDI expenditure on EU Budget 0,1 per cent of EU GNI)
- Ib: higher end option (RDI expenditure 0,3 per cent of the EU GNI)

Option GII: allocation and management issues

- IIa: focus on basic research where spillover effects are largest
- IIb: focus on excellence in selection, bottom up co-operation between universities rather than top-down creation of new research entities etc.

Infrastructure

Our options G III for infrastructure spending are simple:

- G III a: no compelling argument for increasing the share of infrastructure investments in EU Budget
- G III b: stronger tests of spillover effects and role of other policies than joint financing in the selection of infrastructure project

⁷¹ Court of Auditors(2007 and 2008)

Table 5.6 Summing up the options

Status quo objectives	Money spent in 2013 (% of GDP)	Money spent 2020 (Continuation)* (% of GDP)	Options	Argument	Qualitative options	Money spent 2020 (Proposal) (% of GDP)
Research and Development	€11 billion (0,08)	€13 billion (0,08)	Option GI: allocation of funds	If low spillovers and low target	I.a: lower end option (RDI expenditure on EU budget 0,1 per cent of EU GNI)	€16 billion (0,1)
				If high spillovers and high target	I.b: higher end option (RDI expenditure 0,3 per cent of the EU GNI)	€48 billion (0,3)
			Option GII: allocation and management issues	II.a: focus on basis research where spillover effects are largest		
				II.b: focus on excellence in selection, bottom up co-operation between universities rather than top-down creation of new research entities etc.		
Infrastructure	€1.4 billion (0,01)	€1.6 billion (0,01)	GIII: Infra-structural spending		GIII a: no compelling argument for increasing the share of infrastructure investments in EU budget.	€1.6 billion (0,01)
					G III B: stronger tests of spillover effects and role of other policies than joint financing in the selection of infrastructure project	

Source: 2020 estimates by Copenhagen Economics and 2013 figures from EC (2006)

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APPENDIX

Research *spillovers* between EU Member States.

In this appendix we try to indicate the importance of R&D *spillovers* within the European Union (EU27). The starting point of the analysis are the results by Keller (2002) which show that R&D *spillovers* are not global, but instead are concentrated in a more narrow area surrounding the original location of research activities. There is much uncertainty about precisely how large the area is, but Keller (2002) concludes that the effect of knowledge transfer declines with distance and the effect is halved between approx. 160 kilometres and approx. 1.200 kilometres from the place of performance.

The places in Europe most likely to produce successful R&D have been identified using work by Buck Consultants who have identified 30 so-called “Tech-cities” in Europe, which they consider to be the best places for firms to locate their R&D efforts. These cities are shown in the second column of the table below.

We have tried to indicate how strong R&D *spillovers* are between these “tech cities” and the various EU countries. In doing so, we have used two kinds of indicators:

- The first indicator is the number of tech-cities within a given distance of the country’s tech-cities. For example, in Belgium there is one “tech-city”, Leuven, which has four foreign “tech-cities” within 160 kilometres distance: Aachen, Amsterdam, Delft and Eindhoven. In Sweden there are two “tech-cities”: Malmoe and Stockholm. Only Malmoe has another “tech-city” within 160 kilometres radius: Copenhagen. We have added up the connections for all cities within a country, so that if e.g. both Amsterdam and Delft have Leuven within 160 kilometres, then it counts as two foreign connections.
- The second indicator is the share of EU researchers within a given distance of the country’s tech-cities. We have calculated this by using the share of researchers in the Nuts 1 region surrounding each “tech-city” as an indication of the share of researchers in the “tech-city”. For example, the Copenhagen region (Denmark as a whole) hosts approx. 2.1 per cent of EU’s researchers and has access to another approx. 1.7 per cent in the Malmö region (south Sweden), totalling 3.8 per cent.

If one believes that a major share of knowledge generated in EU reaches out to 1.200 kilometres from the site where the knowledge is generated, then almost irrespective of where in the EU it is placed, it will reach about a half of all EU researchers.

Country	Tech cities/ hubs	Number of cross bor- der connec- tions to hubs within 160 km	Number of cross bor- der connec- tions to hubs within 600 km	Number of cross bor- der connec- tions to hubs within 1200 km	Share of R&D per- sonnel within 160 kilometers	Share of R&D per- sonnel within 600 kilo- meters	Share of R&D per- sonnel within 1200 ki- lometers
Austria	Vienna	0	5	17	1.0%	13.5%	47.3%
Belgium	Leuven	4	14	25	5.2%	28.1%	45.3%
Czech Re- public	Prague	0	7	22	1.9%	14.2%	41.5%
Denmark	Copenhagen	1	3	22	3.8%	7.2%	43.1%
Finland	Helsinki	0	1	4	3.1%	5.2%	10.2%
France	Lyon/Grenoble, Nice and Paris	0	25	64	6.5%	34.0%	47.3%
Germany	Aachen, Berlin, Co- logne, Karlsruhe, Münich and Stutt- gart	4	55	118	14.8%	37.6%	50.5%
Ireland	Dublin	0	5	15	0.9%	9.5%	25.6%
Italy	Milan and Rome	0	6	36	3.8%	15.5%	43.9%
Spain	Barcelona and Ma- drid	0	2	19	4.6%	6.8%	34.8%
Sweden	Malmoe and Stock- holm	1	4	29	6.0%	10.2%	43.1%
The Nether- lands	Amsterdam, Delft and Eindhoven	4	33	69	5.6%	28.0%	47.4%
United Kingdom	Cambridge, Edin- burgh/Glasgow, London, Manches- ter and Oxford	0	30	84	8.6%	19.4%	42.5%

Note: R&D personnel are full time equivalent researchers. The total number of researchers in these hubs with belonging Nuts 1 regions as a percentage of EU27 researchers is around 53%. The data for AT1, CH, DK0, FR1, FR7, and FR8 is from 2004. The data for NL3 and NL4 is from 2003. The data for the English regions is found by multiplying the region's share of GDP in UK in 2005 with the total number of FTE researchers in UK in 2005.

Source: Euro stat

Chapter 6 INTERNAL AND EXTERNAL SECURITY INCLUDING DEVELOPMENT ASSISTANCE

EU's external policy efforts have historically been concentrated on providing development assistance to poor(er) countries as well as pre-accession aid to candidate countries. However with the adoption of the European Security Strategy in 2003, the EU formally strengthened its ambitions within the areas of foreign policy, co-operation on defence issues as well as legal co-operation with the area of justice.

The strategy identified both a number of global security challenges as well as specific key threats⁷². On the latter, the strategy is very clear on the linkage between internal and external security issues. Lack of political stability and poverty in neighbouring regions as well as globally can lead to pressures/threats felt within the borders of the EU. Regional conflicts in neighbouring regions can lead to state failure, military escalation and create centres for organised crime that may pervade EU's relatively open borders etc. Poverty and grave diseases such as AIDS compounded with military conflicts have created havoc on the African continent feeding illegal immigration pressures into the EU.

There is thus a strong argument from removing sharp distinctions between development aid and security policy efforts⁷³. Effective poverty reduction and other programmes in developing countries is an objective in itself for EU spending – global equity concerns – but can also help stem immigration pressures to a more prosperous EU as well as reduce threats from organised crime and terrorism originating at least partly from state failure etc.

With the financial framework for 2007-2013 funding for external efforts and internal security received a relative modest increase. The bulk of spending within this broad category is still concentrated on development oriented aid to developing countries as well as EU's neighbours, including pre-accession aid. However, financing for EU's Common Foreign and Security Policy (CFSP) and Management of Migration experienced the largest increases cf. table 6.1. We will review the cases for future spending below leaving out a discussion of the many smaller programmes under different headings in the financial framework that is grouped together under the term "other, including margin".

6.1 External efforts and internal security aspects, € million 2004 prices

	2007	2013
Pre-accession aid (IPA)	1.193	1.700
Other mainly economic external assistance (ENPI, DCEC, stability)	4.668	5.822
Common foreign and security policy	150	340
Management of migration	275	852
Other, including margin	1.113	1.303
Total	7.400	10.017
Total (per cent of GNI)	0.06%	0.07%

Source: European Commission (2006) and EC (2008c), Table 6.1

⁷² The strategy is discussed intensively in Deighton et al (2006)

⁷³ See Deighton et al (2006) page 23.

6.1. FROM PRE-ACCESSION ASSISTANCE TO INTERNAL SUPPORT?

Through its pre-accession assistance grants, the EU supports its candidate and potential candidate countries in their path towards full membership. In 2007, a single Instrument for Pre Accession (IPA) replaced the former system of individual assistance programs in operation since 1989 for the 10 candidate countries from Eastern Europe: PHARE, SAPARD and IS-PA. Three candidate countries and 5 potential candidate countries have at their disposal about € 8.4 billion allocated for the 6 years 2007-2012. Turkey, the largest candidate country, every year accounts for about 45 to 50 percent of the IPA funds. The budget assumes an initial rate of spending of over € 1.1 billion in 2007, increasing in a fairly constant annual fashion by about 9 percent, on average, reaching € 1.7 billion in 2012, cf. Table 6.2.

Table 6.2 Allocation of IPA funds by candidate countries, 2007-2012, million €, current prices

	2007	2009	2012
Candidate countries	696	800	1166
<i>of which:</i>			
Croatia	141	151	160
Macedonia	58	83	106
Turkey	497	566	900
Potential candidate countries*	413	505	519
Total	1,109	1,305	1,685.

Note: * The potential candidate countries include Albania, Bosnia & Herzegovina, Montenegro, Serbia and Kosovo.

Source: EU Commission (2008)

Our review of pre-accession assistance boils down to one issue: what will be the consequence for the budget if these countries become full members over the next programme period? The likelihood of these countries becoming members of EU depends on the evaluation of the progress demonstrated over the next decade in meeting the economic and political entry criteria as well as the existing members' evaluation on that score.

We will not engage in predicting the outcomes of either of these two evaluations. Instead, we choose to examine the mechanical consequences of applying the existing EU rules governing disbursements of structural and agricultural funds to Member States. The exercise is somewhat academic, as the entry particularly of Turkey is likely to trigger a review of these policies. An example: bringing in Turkey with the current GDP per capita projections would lower the average GDP per capita in the EU by 11.3 per cent⁷⁴ triggering both structural funds losses for existing recipients⁷⁵ as well as expanding the share that structural funds will consume of the total EU budget as a share of EU GNI with 0.1 to 0,2 per cent. Also for agriculture the effects are considerable, as shown in Table 6.3. Comparing to literature on the budgetary costs of a Turkey entry, our estimates are at the higher range, cf. Annex.

⁷⁴ Including all candidate countries would lower the average GDP per capita by 14.0 percent. Turkey is assumed to have nearly 90 million inhabitants in 2020 and a GDP per capita level that in purchasing power parities is projected to remain at 38 per cent of the EU average at the time.

⁷⁵ Most notably, e.g. Italy stands to lose transfers to its poor regions in the South.

Table 6.3 Net affects on EU-budget with “full” accession of all candidate countries, € billion, 2004 prices

	2020
Gross increase in expenditure	38-40
Structural funds to all candidate countries	26-39
Phased in agricultural support to all candidate countries	10-13
Savings	10-14
Pre-accession aid*	2
Statistical effect of reduced average GNI per capita on structural funds	8-12
Net increase	24-30
Net increase as percentage of EU GNI	0.3%

Note: The methodology of the calculations can be found in the Appendix. All candidate and potential candidate countries access in 2015. The level of pre-accession aid in 2020 is found by linear extrapolation of the expenditures on the IPA in 2007 and 2013.

Source: <http://www.oanda.com>, World Bank Indicators and CIA World Factbook

6.2. MERITS OF SHIFTING SOME DEVELOPMENT AID TO EU BUDGET

The EU Member States are collectively the biggest donors in the world, providing for 56 per cent of all official development assistance worldwide⁷⁶, amounting to more than € 46 billion.⁷⁷ Expressed as a percentage of the EU’s GNI, ODA has for the most part followed a growing trend, from about 0.35 to the most recent 0.42 percent of GNI cf. Table 6.4.

Table 6.4 Official development aid (ODA) from 15 Member States and the EC

Member State	2003	2004	2005	2006	2007	2008
EU 15 (net of EC aid)	26.6	27.6	37.1	39.0	36.4	N/A
Percentage of GNI EU15	0.35%	0.35%	0.43%	0.44%	0.39%	0.42%
EDF						3.2
European Community (EC aid)*	6.4	7.0	7.5	8.2	8.5	N/A
Total (EC+EU15)	33.0	34.7	44.6	47.2	44.9	47.7

Note: All figures in € billion, current prices. Annual €/£ exchange rates from www.oanda.com. * EC aid amounts to nearly all expenditures under Heading 4, including the IPA, the ENPI and the DCEC as the main instruments. Differences from official Heading 4 are due to exchange rate calculation methodology.

Source: QWIDS (2009) and own calculations.

European ODA originates from two main sources⁷⁸:

- EC aid funded by Community budget
- The European Development Fund (EDF) funded off the budget

⁷⁶ DG Development (2009)

⁷⁷ <http://www.eudevdays.eu/Files/media/PressKit/Fiche13/EU.Dev.Facts.Figures.pdf>

⁷⁸ EU Summaries of legislation

In addition, Member States run their own bilateral aid programmes and initiatives but these are not financed by Community funds or the EDF.

European aid funded from the budget corresponds to expenditures under Heading 4 of the Community budget. Expenditures on the IPA, the ENPI and the DCEC, humanitarian aid and several smaller instruments are treated as ODA.⁷⁹ The IPA is directed at EU candidate and potential candidate countries, as discussed above. The ENPI funds programmes in Mediterranean, Eastern Europe, Caucasus, Russia and the Middle East. The DCEC funds programmes principally in Asia and Latin America, as well as the Middle East and South Africa. In the period 2007-2013, EC aid funded by the Community budget amounts to 68 percent will amount to 68 percent of total the European aid, excluding bilateral programmes.

The EDF provides support to developing countries of the African, Caribbean and Pacific (ACP) regions and the Overseas Countries and Territories (OCT). It is made up of voluntary contributions from Member States outside the Community Budget. In the period 2007-2013, the EDF will amount for 32 percent of the total European aid.

The key question addressed in this section is whether there are economics of scale and scope to be reached by letting the EU budget carry a larger share of the ODA from the EU as a whole. The cost of managing aid for donors is high and in the absence of efficiency improvements the cost is likely to increase with the increasing volume of aid in the future.⁸⁰ The potential scope of efficiency gains should be seen in the light of the EU and Member States often running programmes with similar ultimate objectives in a number of recipient countries such as Tanzania cf. Table 6.5.

Table 6.5 European ODA donors to Tanzania in 2007: top 5 Member States and the EU

Donor	2007	Pct.	Overall objectives of ODA*
United Kingdom	231.8	24.9	Poverty reduction
EC	187.1	20.1	Sustainable development, integration into the world economy, poverty reduction, democracy and the rule of law
Netherlands	128.2	13.8	Poverty reduction
Sweden	107.8	11.6	Poverty reduction
Denmark	90.0	9.7	Poverty reduction
Germany	65.0	7.0	Poverty reduction, safeguarding peace, making globalisation equitable
<i>Subtotal top 5 + EC</i>	<i>810.0</i>	<i>87.0</i>	
Total: EU DAC members + EC	930.5	100.0	

Note: USD million, current prices

Source: QWIDS (2009), * EU Donor Atlas (2006)

However, Member States may be somewhat reluctant to assign a higher share of overall development aid to the EU given the EU Commission record in efficiency which has historically not been that impressive. The reform of EC foreign aid is at the centre of the current

⁷⁹ OECD (2007a), p. 24.

⁸⁰ OECD (2008), p. 15.

overhaul of EU governance initiated after the resignation of the Commission en masse in 1999 amid allegations of mismanagement. In 1998, the European Court of Justice criticised the Commission for the lack clarity of purpose and coherence as well as the insufficient legal basis of the aid it provides. Two subsequent reports of the European Court of Auditors in 2000 sharply criticised the management practices of the Commission, forcing it to suspend and review its programmes to promote democracy and good governance abroad.⁸¹

External evaluations provide a mixed record of efficiency for both EU and the Member States. In the 2005 Paris Declaration, the OECD developed a set of 12 indicators⁸² to measure the effectiveness of European aid. The 2006 review already included EC performance on a select group of indicators using data its projects in 33 countries. The EC scored high on indicators measuring alignment of aid with national priorities, but it scored low on indicators measuring coordination of aid flows. Therefore, one area where the efficiency of EU aid can be improved is in the context of aid co-ordination across the recipient countries and harmonisation of efforts with Member State donors.

The Commission is only in the early stages of addressing joint assessments and joint programming frameworks to enable joint efforts.⁸³ In 2007 a Code of Conduct on division of labour between donors has been proposed in 2007⁸⁴ to ascertain that the efforts of the EU and Member States become more complementary.

Even if attempts are co-ordinated approaches to enhance delivery, it is not easy in practice. The EU efforts to improve efficiency have been criticised for their slow pace, and sometimes their “cosmetic character”. The administrative set-up within the EU commission may also hamper the effectiveness of delivery cf. Box 6.1. The available evidence does not provide strong support for efficiency gains being reached by increasing the share of EU budget in total development aid.

Box 6.1 Outstanding challenges with EU organisation of aid

(...) European development aid remains strongly compartmentalised across geographic lines, along four main regions - Africa, the Caribbean and the Pacific (ACP), Asian and Latin America (ALA), the Mediterranean countries (MED), and East and Central Europe and the Commonwealth of Independent States (CIS). The co-operation with each one of these regions is governed by its own set of agreements. The aid apparatus of the Commission is divided between three directorate generals and one implementing agency within the purview of the Commission. This structure has created insurmountable inertia that makes it particularly difficult to reform it and define sectoral strategies across regions.

EC aid to developing countries remains largely concentrated on middle-income countries, despite the renewed calls from EU Member States to focus efforts on poor countries. During the decade of the 1990s, an increasing share of EC aid has been redirected towards Central and Eastern Europe and the Mediterranean basin.

Source: Euractiv (2002)

⁸¹ Euractiv (2002)

⁸² OECD (2008), p. 22.

⁸³ OECD (2007a), p. 44.

⁸⁴ OECD (2007a), p.46.

In any event it is clear that such a decision in practice cannot be applied only, or perhaps even mainly, based on economic efficiency considerations. On the one hand, Member States may want to pursue different kind of development strategies, including choice of recipient countries, which make them reluctant to finance a “mix” of recipient countries fundamentally different from their own mix. As well they may appreciate the political leverage national programmes can provide. On the other hand, EU may want to increase its political leverage as a collective body by a larger budget even in the absence of expected gains in economic efficiency.

Given the legitimate policy concerns Member States may have in transferring responsibility for both delivery efficiency reasons and choice of recipient countries, it is difficult to say with certainty that such a shift will increase quality of overall policy delivery.

Nonetheless, we outline two polar scenarios that should cover the spectre of possible options in terms of the size of the EU’s budget development aid budget. Many EU15 countries are still far from meeting the UN target of 0.7 percent of GNI by 2015 and virtually all of the EU12 countries have problems meeting their reduced targets of 0.33 percent of GNI by 2015, cf. Table 6.6.

Table 6.6 EU and UN targets for development assistance

Member State	2008	Interim 2010 target	2015 target
High spending EU15*	0.86%	Retain high spending	Retain high spending
Remaining EU 15	0.37%	0.51%	0.70%
EU 10/ 12	<< 0.10%	0.17 %	0.33%
Total *	0.37%	0.50%	0.66%

Note: Shares of GNI. The high spending EU countries are Sweden, Luxembourg, Denmark and the Netherlands. Average weighted by GDP.*

Source: EU Commission (2009), EP (2007).

In the first scenario, we suggest that all countries in 2020 meet this target and that one-third of total spending of development aid from the EU area is delivered through the EU Budget: that would equal roughly 0.21 per cent of GDP. In a second scenario, the EU as a whole stays at the 2010 intermediate target, with an unchanged share of EU Budget in that contribution of 25 per cent, implying a level of expenditures at 0.13 per cent of GDP, cf. Table 6.7.

Table 6.7 Alternative allocations of EU budget contributions for development aid, share of GNI, 2020

	2020
Total aid as percentage of EU 27 2020 GNI assuming target are met	0.66%
Option 1 – 33 per cent of the overall target 2015 for EU as a whole	0.22%
Option 2 – 25 per cent of the 2010 intermediate target or the EU as a whole	0.13%

Source: Copenhagen Economics

The difference between the two scenarios boils down to prospects for meeting the UN target and Member States overall judgement on the merit in transferring responsibility to EU.

Option ELA II: development aid under the EU budget

- IIa: 25 per cent of the 2010 intermediate target or the EU as a whole
- IIb: 33 per cent of the overall target 2015 for EU as a whole

6.3. MIGRATION POLICIES

Spending on migration policies focuses on the management of migration flows, which includes the European Refugee Fund, the Return Fund, external borders, and integration. In addition a new agency – European Border Agency (Frontex) – was established in 2004 with the task of implementing “... a coherent, communitarian approach in border management”.

⁸⁵ A substantial part of the work on migration as well as legal co-operation on police issues and judicial co-operation are focused on regulatory issues and conditions for exchange of information between agencies in different countries with a relatively limited pull on budgetary resources.

The present budgetary costs under this heading, as well as future increases, are hence linked to external border control and management of refugees where there are a priori reasons for EU spending. There is clearly a public good element involved for the EU in having efficient control of its external frontiers which should not necessarily be financed exclusively by the countries with the most exposed borders. On the same account, solidarity considerations would also imply that countries facing a disproportionate share of the costs of immigration should be compensated. If so, fairness as well as effectiveness could suggest that these countries are provided with the means to implement the necessary measures for the common good.

While there is a good case for letting EU spending on migration management increase further post 2013, the speed in that direction is likely to depend on the degree to which underlying policy priorities and practices among Member States converge on the issue. A recent study suggests that Member States continue to operate with uneven border practices and with lack of consistency in the treatment of asylum applications despite EU regulation that was supposed to reduce such disparities.⁸⁶ Another recent paper suggests that moving forward on this agenda with improved external border management as well internal co-operation takes time and hard work for national administrations as well as EU institutions involved. Additional resources are likely to be required to build up central capacity to develop and implement improved procedures and policies.⁸⁷ Improved co-operation with crucial neighbour countries to improve policing of joint borders and general upgrade of judicial co-operation are also included in EU’s programmes directed at neighbouring countries (ENP see above),

⁸⁵ Hobbing(2005)

⁸⁶ Guild et al (2008)

⁸⁷ Bertozzi(2008)

showing the increasing interconnection between external assistance on security issues and EU “domestic” spending within the policy area⁸⁸.

All in all we suggest that higher spending within this area can deliver potential EU wide benefits, but that further development is strongly conditional on Member States continued willingness to relinquish more of their control in this sensitive area to the EU as a whole. In the absence of EU funding a police force to monitor the external borders – a proposal that has been raised⁸⁹ – we do however see little need or prospect for massive increases in spending within this area.

6.4. COMMON FOREIGN AND SECURITY POLICIES (CFSP)

Total spending on the CFSP is by any account a very small part of EU’s budget: € 340 million or less than 0.3 per cent of EU’s total budget. Spending is expected to cover: crisis management operations (only civilian, military operations outside Treaty scope), conflict prevention, resolution and stabilisation, monitoring and implementation of peace and security processes, non-proliferation and disarmament, emergency measures as well as covering the costs of EU special representatives.⁹⁰

The only reason to spend a subsection of this chapter on such a small programme is that this is an area with likely further increases post 2013. This reflects that foreign and security policies are by nature natural potential functions for a semi-federal organisation such as EU *if* the Member States want to invest it with such capacity. In addition to adding more resources to the activities mentioned above it could include co-operation on defence issues for example joint financing of operations with a military, not only civilian, element as well as co-operation on military procurement. We will just note, almost on an anecdotic level, one less controversial area where different studies have pointed towards the potential benefits for more EU co-operation with possible budgetary consequences. The new Constitutional Treaty, if finally adopted, allows for a European diplomatic service. At present, the Member States spends collectively more than twice as much as the US on their diplomatic services; some movement of resources towards the EU level could help save overall resources while improving effectiveness at the same time.⁹¹

⁸⁸ Balzacq(2008)

⁸⁹ See Deighton et al (2008) page 105.

⁹⁰ Deighton et al(2006) page 53.

⁹¹ Deighton et al (2006) page 117

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APPENDIX

To approximate the cost of Turkey's membership, we value of transfers under structural and agricultural policies.

Our estimations of structural funds transfers are based on the same methodology as that used in Chapter 3 for extrapolating expenditures for current recipients of structural funds beyond the year 2013.

Our estimations of rural development aid are calculated based on per capita receipts of rural development aid divided by per capita GDP in Bulgaria and Romania. The average value of these two countries is assumed to apply for the future Member States, as well. Correspondingly the relation between total CAP Pillar 1 receipts and gross value added within agriculture⁹² is assumed to be the same in the future Member States as the average for Bulgaria and Romania.

When considering an overview over studies estimating the receipts for Turkey, we can conclude that our estimations are in the higher end of the range (about €16 billion for Turkey) cf. Table 0.1 Financial impact of Turkish EU membership.

Table 0.1 Financial impact of Turkish EU membership

Author	Status quo	Reform Scenario	Method employed	Estimated net transfers p.a. (€ bn., rounded)
Copenhagen Economics estimate	X		Status quo projection	16
ZfT (2002/03)	X		Status quo projection	8
Flam (2004)	X		Regression analysis	12
Togan (2004)	X		Regression analysis	14
Derviş et al. (2004)	X		Status quo projection	9->20
Quaisser/Wood (2004)	X	(X)	Projection (basis: Commission estimate)	9->21
Grethe (2005)	X	X	Model simulation	7-31

Source: *Schultz (2005) and Copenhagen Economics*

⁹² Due to lack of consistent data, gross value added for agriculture had to be estimated using share of gross value added*GDP.

Chapter 7 A SMALL NOTE ON ADMINISTRATIVE EXPENDITURE

EU spending on administrative expenditure broadly follows the rise in GNI. The drivers of this expansion are mainly linked to expansion of Growth policies (RDI and infrastructure), External policy, and legal co-operation. By contrast, the two areas that consume the bulk of EU budgetary resources, namely Structural Funds and Natural Resource management only account for just over one tenth of the budget. More than half of the total budget is not linked to any particular policy but relates to the functioning of inter alia the European Parliament.

Table 7.1 Estimates for administrative expenditure, 2007-2013, € billion, 2004 prices

	2007	2013
Costs directly linked to specific policy areas within the EU commission	3.2	3.9
- Structural Funds	0.3	0.3
- Natural resource management	0.5	0.6
- Growth policies	1.2	1.5
- External efforts and legal cooperation	1.2	1.5
Other costs, including pensions, European Parliament, Court of Auditors etc.	3.4	3.7
Total administrative expenditures	6.6	7.6
As percentage of GNI	0.06%	0.06%

Note: We have used the estimated breakdown from EC (2004) and the total numbers from EC (2006). Administration includes other institutions, pensions and European schools.

Source: EC (2004) and EC (2006)

At certain intervals, the EU spending on administrative expenditure receives considerable attention, for example focusing on pay and pension conditions of EU staff.

Our approach in this small note is to focus the debate on three key issues that have a structural effect on EU administrative costs and which could be reviewed more closely in the coming years.

First, as already noted in the context of the discussion of CAP and structural funds, the quality of the regulation and policies at the EU level has derived effects on the compliance costs both for the EU institutions themselves as well as Member States. The Court of Auditors has specifically in their contribution to the EU Budget underlined the “...complexity of the eligibility of many expenditure programmes”.⁹³

Second, the pressure on resources is linked to the spending choices made in the context of a new financial framework, but not in any simplistic way. An example: if the EU would build up a new European Diplomatic Service as discussed in chapter 6 this would require clearly greater administrative resources. By contrast, more spending on research and development financed over the budget, does not necessarily require corresponding increases in personnel as much of the implementation of such policies is likely to be delegated to various existing ad-

⁹³ European Court of Auditors(2008)

visory institutions that can exploit economies and scale in their administration of such policies.

Thirdly, there is a need to review the administrative set-up within the European institutions to see whether internal reforms over the last decade match the efforts Member States have put in place to improve efficiency. Such a review must include *inter alia* structural pay and employment conditions, as well as the ability to recruit external staff with ease while protecting the quality of the service. It should also take a closer look at the internal controls put in place to reduce risks of a misuse of funds which have arguably been implemented at excessive costs. Benchmarks should be best performing Member States and/or other international institutions, with proper regards for differences in circumstances under which they operate.