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Mika Widgrén

Budget Allocation in an Expanding EU

– A Power Politics View

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FOREWORD

While it is often emphasised that the EU budget is small in comparison with Member States' budgets and the US federal budget, it is the interplay between different actors – and the institutions, rules and procedures that govern this interplay – that attracts attention. This, in turn, is foremost caused by the fact that the EU budget is mainly about redistributing money between Member States.

The present report, by Professor Mika Widgrén of Turku School of Economics in Finland, investigates the relationship between the Council voting rules and EU budget transfers by using a power politics model. According to this view, budget allocation is determined by the desire of Member States to maximize their receipts. The main claim of the power politics view is that the distribution of voting power in the Council alone is sufficient to explain budget allocation.

SIEPS conducts and promotes research and analysis of European policy issues within the disciplines of political science, law and economics. SIEPS strives to act as a link between the academic world and policy-makers at various levels. By issuing this report, SIEPS hopes to make a contribution to the debate on the future of the EU budget, particularly in view of the up-coming EU budget overview.

Stockholm, November 2006
Jörgen Hettne
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LIST OF ABBREVIATIONS

CAP	Common agricultural policy
EU	European Union
EU15	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom
EU25	EU15 + NMS10
EU27	EU25 + Bulgaria and Romania
EU29	EU27 + Croatia and Turkey
GDP	Gross domestic product
GNI	Gross national income
GNP	Gross national product
IGC	Intergovernmental conference
NMS10	Cyprus, Czech Republic, Estonia, Hungary Latvia, Lithuania, Malta, Poland, Slovak Republic and Slovenia
SSI	Shapley-Shubik index
TOR	Traditional own resources
VAT	Value added tax

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1 INTRODUCTION

1.1 Question

Prior to the 2004 enlargement of the European Union, a common fear among incumbent Member States was that the costs resulting from EU budget transfers would increase dramatically. In this paper we investigate the determination of these transfers and argue that the Council voting rules matter. We then evaluate different stages of EU enlargements from EU15 to EU25 and onwards and assess the costs of these enlargements under various Council voting rules and show that different voting regimes will result in very different budget allocations among EU Member States. We also discuss the role of the Financial Framework and assess the net payments using different assumptions on their determination.

1.2 Outline

This report will start with a summary of the main text followed by conclusions (chapter 2). Thereafter follows the main text of the report (chapters 3–6), which will start with a brief background to the EU budget and a survey of the earlier literature. Chapter 4 will introduce the theoretical tools that are applied in this study. In the subsections of chapter 5, the report evaluates, first, the estimated gross receipts of the Member State from the EU budget in EU15, EU25, EU27 and EU29 and, second the estimated net receipts using different assumptions concerning the collection of revenues. In EU27 it is assumed that Bulgaria and Romania will have entered and in EU29 that Croatia and Turkey have entered. Finally, chapter 6 makes a comparison between predicted and actual budget receipts after enlargement.

2 SUMMARY AND CONCLUSIONS

2.1 Summary

The European Union budget is, despite its small size, difficult to negotiate. The key reason for the difficulties is the nature of the budget: EU spending is largely a matter of redistribution. Only some 20 percent of EU spending is devoted to EU-wide public goods, i.e. activities that are not country-specific like administration, external relations or research. The bulk of the budget is devoted to the common agricultural policy (CAP) and cohesion policy. Money is collected from the Member States and given to Brussels, where it is re-allocated back to the Member States. This makes some countries net beneficiaries and others net payers, which is likely to cause conflicts as to how the money should be spent. Recent and future enlargements, with large disparities between the income levels of both incumbent countries and new entrants, are likely to make the negotiations on EU budget allocation even more cumbersome.

Although there is a widespread view that EU spending is inefficient and that there would be good grounds to re-allocate spending from redistribution to Union-wide public goods in the areas of defence, foreign policy, and internal security,[1] there is strong scepticism about the success of substantial budget reforms. The budget stalemate is likely to remain, on the one hand, since any reallocation would reduce the receipts of net beneficiaries and, on the other hand, because net payers are unwilling to expand the size of the budget. Moreover, the stalemate seems even more likely to persist as there is a balance of power in the Council of Ministers between net payers and the recipients, where both sides have a sufficient number of votes to block any reform that would not be beneficial to either group. The EU budget allocation is like a zero-sum game.

The scepticism about future budget reforms is closely connected with the view that the national distribution of power in the Council determines EU policy. According to this power politics view, the CAP, or structural spending, or budget allocation in general, are neither due to high-minded principles about supporting rural and poor regions, nor to the Union's desire to pursue benevolent policies, but rather to the desire of Member States to maximize their receipts. The main claim of the power politics view is that the distribution of voting power in the Council alone is sufficient to explain budget allocation and there is indeed some fairly convinc-

[1] For a recent discussion on the structure and size of the EU budget, see e.g. Tabellini (2002), Sapir (2003), Blankart and Kirchner (2004), Baldwin (2005a, 2005b) and Gros and Micossi (2005).

ing evidence that the power politics view is successful in explaining the (net) receipts of the Member States from the EU budget. Given this observation, the importance of Council voting rules can easily be understood especially when the EU is expanding.

Most of the new Member States of the EU are small and medium-sized countries. An often-expressed view is that the voting rules in the Council at least in the past used to favour small countries. Power politics would then imply that the new Member States would form an influential group that would dramatically change the budget allocation. Since there is no room for substantial increases in the budget this would decrease the benefits of net-recipients and increase the budget burden of net-payers. Moreover, since the national contributions to the EU budget are very closely related to income levels, the contributions of the new Member States are much smaller than their receipts.

During the preparations of the incumbent countries for the 2004 enlargement, institutional reform was set as a pre-condition. The most important element of the reform was the re-weighting of the votes in the Council, which was motivated by the EU's ability to act after the enlargement. The power politics view would suggest, however, that re-weighting that favours the biggest countries would make the enlargement cheaper since the four biggest countries are the most important net contributors. Having failed to reform the voting rules in Amsterdam, agreement was reached in Nice in December 2000. Interestingly, the Nice rules did not improve the Council's ability to act (see Baldwin *et al*. 2001).

In this paper, we use a power politics model to assess the impact of three enlargements in terms of their budget costs. First, we evaluate the enlargement that took place in May 2004, second, we investigate the consequences of Bulgaria and Romania's entry on EU budget allocation and, third, we assess the implications of Croatia and Turkey's accession on the EU budget. After the power politics analysis, we discuss how well the model is able to capture the impact of the Eastern enlargement using actual 2005 budget data.

2.2 Conclusions

In this paper, we analyse the impact of EU enlargements on the EU budget. We base our investigation on the power politics view on EU budget allocation. In earlier literature, there exists some fairly convincing evidence that the voting power in the Council of Ministers is the leading determinant of EU budget allocation (see Kauppi and Widgrén 2004, 2006

Box 1 Voting rules matter

Voting rule reform in the Council was one pre-condition for the EU enlargement. It was motivated by the EU's ability to act after membership expanded from 15 to 25 and beyond. Another obvious motive behind the reform was to make the enlargement less costly.

Voting rule reform was agreed in 2000 and it came into force in 2004. The Treaty of Nice voting rules are not able to guarantee the Council's ability to act but rather reduces the efficiency of the Council. However, it did reduce the expected budget costs of enlargement. This holds for all stages of the enlargement, which among other things might make it difficult to deviate from the Nice rules.

and Baldwin *et al*. 2001). Despite the abstractness of the underlying voting model the approach also has a sound theoretical base as, basically, we predict the budget shares of Member States by using tools that are widely used to model dividing-up-a-cake situations. Clearly, the measure of voting power that we are using provides a shallow illustration of real world voting or decision-making regarding the EU budget. For instance, we disregard the role of agenda-setting, unanimous decisions, issues that are not voted on and the question of how intensively a country holds its position. In a sense, the abstract voting model is also a way of dealing with this shallowness. Council votes are important during bargaining regardless of whether the actual vote takes place or not, i.e. in the shadow of a vote. The idea is that everything that is left out from the model is evened out in a large enough number of issues or decisions. This, of course, makes our predictions essentially very long-term concepts. We have left the European Parliament out of the analysis. The reason for the latter is twofold. First, we are interested in the impact of the national distribution of power on budget allocation. Adding the European Parliament here would not contribute anything to the model. Second, recent literature (see Napel and Widgrén 2006) demonstrates that the Council is significantly more powerful than the Parliament.

Applying the power politics model for the budget allocation in EU25 and comparing it to the allocation in EU15 leads to the following predictions and allows us to draw the following conclusions concerning the exact costs.

Box 2 The budget costs of Eastern enlargement

Using the power politics model (and the Nice voting rules) the estimated budget cost of the 2004 enlargement is 20.1 billion euros at 2004 price levels. It is approximately 0.2 per cent of EU GNP. Compared to the old voting rules the Nice reform reduced the budget costs by 2.6 billion euros.

Under the Nice voting rules the entry of Bulgaria and Romania would increase the budget costs by 7.1 billion and that of Turkey and Croatia in 2015 by 20.0 billion euros.

Before the Nice summit the EU states had several alternatives for reform. After the agreement there was a lively debate on the Nice voting rules and there were several arguments suggesting that the Nice reform was a failure because it could not restore the Council's ability to act. The European Convention in 2002–03 took the voting rule issue back to the table and it was one of the key issues in the negotiations on the Constitutional Treaty. By comparing different relevant alternative voting rules our analysis suggests that the old rules would have been the most costly. The temporary weighting scheme also serves as a benchmark as it would have been the weighting without the Nice reform.

Box 3 Expected budget costs of the Eastern enlargement under different rules

An analysis of five different voting rules reveals that the budget costs of the enlargement tend to be the lowest under the rules that allocate more power to the biggest countries. Our estimates for the following five rules are (at 2005 price levels):

Constitutional Treaty	17.7 bill. euro
Treaty of Nice	20.1 bill. euro
Square-root rule	19.8 bill. euro
Simple dual majority	22.1 bill. euro
Old weighting scheme	22.8 bill. euro

The Constitutional Treaty is less costly than the Nice rules also after Bulgaria and Romania's entry. It is, however, more costly to the EU27 (and also EU15 as a part of EU27) after Turkey and Croatia's entry.

It is worth noting that the budget costs may vary depending on the size of the new entrants. Turkey's entry is a good example. As long as the entrants are small or medium-sized countries the Constitutional Treaty is less costly than the Nice voting rules. That is mainly because Germany gains power under the Constitutional Treaty, which offsets the losses of other incumbent countries. If Turkey were to enter it would be much better off under the Constitutional Treaty rules than under the Nice rules. Turkey's large re-

Box 4 Power politics predictions and reality

Using the 2005 budget data, the power politics model fails to predict the actual allocation. There is an over 15 billion euros discrepancy between the estimated and true budget costs. This does not mean that the power politics model is useless and without predictive power and that for several reasons. The power politics model deals with long-term predictions. It is quite natural that the new Member States have not been able to use their influence in all aspects of budget allocation. Second, the budget allocation in 2004-06 is based on the Financial Perspective for 2000-06 (Agenda 2000) that was adjusted for enlargement by the Copenhagen package. Since Agenda 2000 was determined by the incumbent countries they all had the power to agree on additional constraints for the allocation. Actually the same holds for the Financial Perspectives for 2007-13 too since, if there had been no agreement, the fall-back solution would have been at least temporarily something reminiscent to Agenda 2000, which would have diminished the bargaining power of the new Member states. Third, the appropriations for commitments and payments for new Member States in the Copenhagen package have a clear upward trend and they are approaching the power politics predictions. In the long run the predictive power of the power politics model is clearly improving. Finally, since the power politics model has worked well for decades and for different compositions of the EC/EU there is no reason to think that this has changed. Already now, the power politics model is an appropriate tool for the comparison of the impact of different voting rules and, in the long run for the evaluation of the budget costs and allocation when the Union expands.

ceipt under the Constitutional Treaty would be a substantial cost for the incumbents. That might make it more difficult to accept the Constitutional Treaty in the major incumbent countries just as the referendum result in France demonstrated. On the other hand, the voting rules of the Treaty of Nice would make decision-making very cumbersome in the Union of 29 members or more, which makes the link between Turkish membership and the acceptance of the Constitution ever more complicated.

The incumbent countries could have reduced the budget costs by cutting the budget. This is because most EU15 countries and especially the major countries are net contributors. In 2004, the EU budget was, however, expanded by more than the GNP of the new entrants implied. This benefited the traditional net recipient countries of the EU15.

An investigation of 2005 budget data reveals that the power politics estimates do not fit in well with reality. However, this does not mean that the power politics exercise is useless. There is no reason to presume that the connection between power and budget allocation has broken down.

3 THE EU BUDGET

3.1 Revenue

After the first phase of Eastern enlargement in May 2004, the European Union went through tough negotiations on the Financial Perspectives for 2007-2013. The Perspectives were accepted by the Member States in December 2005, then rejected by the European Parliament in January 2006 and finally accepted through the inter-institutional agreement in April 2006. The Perspectives define a general framework and principles for the collection of revenue for the next seven years and the allocation of expenditure in different budget items.

Box 5 Own resources

The four own resources for financing the EU budget are

1. Customs duties collected on imports from the rest of the world
2. Agricultural levies
3. Payment based on the VAT base of the Member States (0.3% from January 1, 2007)
4. Payment based on a percentage of the GNI of the Member States (formerly GNP)

The EU budget is financed using four so-called own resources.[2] The traditional own resources (TOR) are the tariff revenues, agricultural duties and sugar levy, collected at the Union's external borders or as a fee that punishes the excess production of sugar. They are transferred directly to the common resources bar a share that pays for the local administrative collection costs. While the traditional resources initially played a major role, nowadays their proportion is only 2 per cent of the total revenues. The third resource is based on the value added tax (VAT) base of the Member States and is similar to an EU-wide consumption tax,[3] currently a maximum 0.5 percent rate. The relative importance of this resource is rapidly declining. The fourth resource is collected from the Member States based on their GNIs. In other words, each Member State pays a certain percentage (common to all countries) of its GNI to the common resources. The fourth resource has gained in importance ever since it was introduced. Currently, it constitutes about 70 percent of the EU budget and the share continues to increase since the VAT-payment will be subject to even further decline in 2007. Figure 1 shows the development of the share of own resources as regards revenue between 1971 and 2005.

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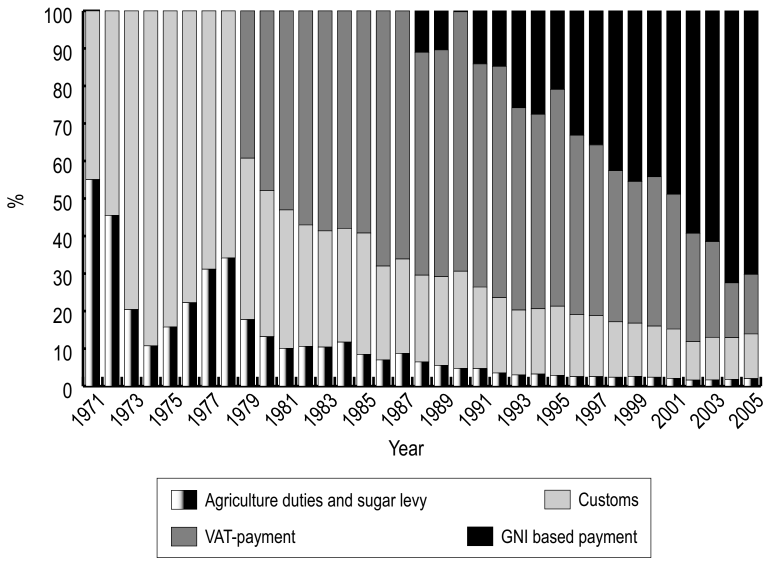
[2] The own resource system was established in 1970.

[3] This is not exactly true since the VAT-based payment is computed using the statistical VAT basis of member states that harmonises national differences. Moreover, the UK correction has an impact on the payments of Member States.

Figure 1 Own resources' shares of the EU budget revenue in 1971-2005



Since the introduction of the own resource system in 1970 it has experienced some revisions. These are listed in Table 1. It illustrates that the VAT-based resource and the budget ceiling have been subject to occasional revisions. Also the introduction of the UK rebate in 1985 and the fourth resource in 1988 constituted major changes. More recently there is a clear trend: the revenues are going from VAT-based payments to gross national income (GNI) based payments.[4] VAT-payments decreased from 1 percent to 0.7 percent of the VAT base in 2002 and further to 0.5 percent in 2004. These events can be clearly seen in Figure 1.

Despite the revisions of the own resource system, as a starting point, we will treat the payments of the Member States to the EU budget as taxes. For the third and fourth resource this assumption is natural, because the former transfers a part of the domestic VAT revenue of the Member States to a common pool and the latter does the same for a part of their income. Thus, the third resource works like a common consumption tax and the fourth resource like an income tax. For the traditional resources the tax in-

[4] This was a gross national product (GNP) based resource until 2001.

Table 1 Major changes in financing the EU Budget by the own resource system

Source of change	Date	Change
VAT resource	1970	Established as 1% to the VAT base, collection started in 1979
VAT resource	1985	Increase to 1.4% to the VAT base
UK rebate	1985	Reduce the UK payments
Budget ceiling	1988	Increased from 1.1% to 1.2% of total Community GNP in 1992
Budget ceiling	1994	Increase to 1.21% of total Community GNP in 1995 and gradually to 1.27% in 1999
VAT resource	1994	Gradual decrease from 1.4% to the tax base to 1.0% in 1999, VAT base to be taken into account was capped to 50% of GNP instead of previous 55%.
VAT resource	2000	Decrease to 0.75% in 2002 and 0.50% in 2004
UK rebate	2000	Changes in financing the rebate, reductions to Austria, Germany, the Netherlands and Sweden
Budget ceiling	2000	Decreased to 1.24% of total Community GNI
VAT resource	2007	Decrease to 0.3% to the VAT base

Source: http://europa.eu.int/

terpretation is slightly different, since these payments go directly to the budget. This is due to the common external trade policy and therefore the traditional resources can be interpreted as an EU-wide import tax.

The tax interpretation of the contributions of the Member States means that the payments can be taken for granted, at least in the short run, and there are no strategic elements in their design. Rules that determine the payments of the Member States are fixed well in advance of the Council's decisions on the allocation of budget spending. Thus, strategic aspects are less important as regards financing the budget, while they tend to play an important role when the receipts of the Member States are decided. The UK rebate, however, demonstrates that strategic aspects can, indeed, play a role when the decisions concerning the own resource system are made.

As a first approximation we assume that the modifications in the own resource system can be characterized as shifts in the "tax structure" and "the size of the cake", respectively. One notable development has been the slight raise of the ceiling during the 1990s and a shift from VAT to GNI-based contributions in financing the budget. While both of these trends have to a certain extent favoured the poorest EU countries, they have generally resulted in only minor changes in the distribution of the budgetary costs.

The UK rebate also shown in Table 1 constitutes a significant exception on the revenue side. Interestingly, the own resource system was decided before the UK's entry and it came into force in 1979, which set off the conflicts regarding the financing of EU expenditure between the UK and other Member States. This special budgetary compensation for the UK was launched in 1985. One justification for the acceptance of the other Member States was that the UK was in a position to threaten the rest of the Community that it would leave (Blankart and Kirchner 2004).

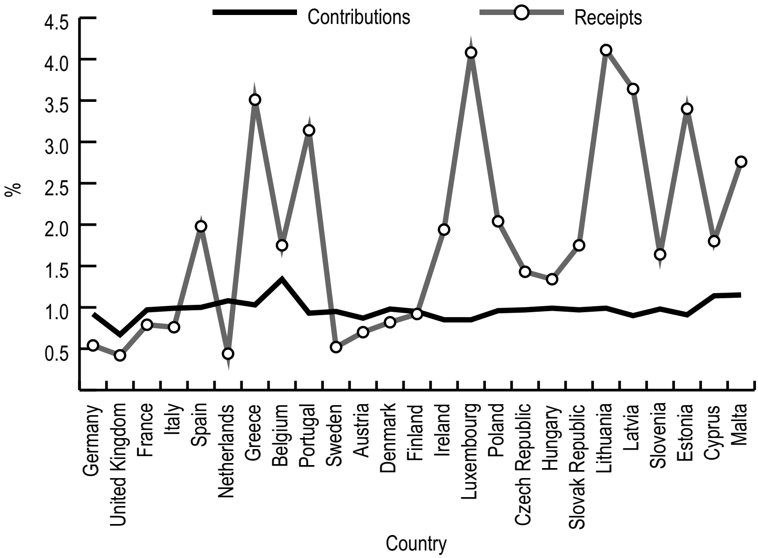
Another reason was the fact that CAP expenditure in particular increased rapidly in the period leading up to the Fontainebleau summit in 1984, which threatened to exhaust the Community's own resources. Moreover, this was compounded by the imminent Iberian accession, which was to add two poor Member States to the Community. This provided the UK with a credible veto threat, because the remaining Member States became dependent on the UK's willingness to raise the VAT ceiling (Lindner 2005). The rebate effectively reallocates some of the original UK payments so that they are paid by the other Member States.

In 2000, Austria, Germany, the Netherlands and Sweden were granted a reduction in their VAT-based payments, which can be seen as a reduction in their contribution to financing the UK rebate. This reduction is financed by increasing the contributions of the other Member States. The policy is a great improvement to the budgetary position of the UK with the net gain being around 0.3 per cent of the country's GDP. EU publications present two justifications for the UK rebate: 1) the agricultural sector of the UK has been smaller and structurally different from those of the other Member States resulting in lower CAP spending in the UK, and 2) the harmonized VAT base of the UK is comparatively higher than those of the other Member States resulting in proportionally greater VAT-based payments for the UK. It is not clear how these arguments should be interpreted. The first reason in particular seems odd, because the CAP is supposed to distribute EU funds to the agricultural regions that need them the most. Why is the policy rule not able to bring enough support to the agricultural regions of the UK? The following well-known statement of Mrs. Margaret Thatcher probably reveals the answer to this question:[5]

> We are not asking the Community or anyone else for money. We are simply asking to have our money back.

[5] See http://news.bbc.co.uk/1/hi/world/europe/4721307.stm.

Figure 2 Member States' contributions to and receipts from the EU budget as a percentage of GDP in 2004



Note: The contributions and receipts of the new Member States have been multiplied by 1.5 since they became members on 1 May 2004.

Figure 2 indicates that, despite some country-specific differences, the tax interpretation gets some support. The figure shows the payments of EU25 countries to the EU budget as a percentage of their GDP. You can see that for most countries the share is about one percent. The most notable exceptions are Belgium and the Netherlands, their share is greater due to their high customs income and the UK's share is significantly smaller due to the UK rebate.

Figure 2 also illustrates the budget receipts of the Member States as a percentage of GDP. There you can see greater discrepancies. Among the old Member States Spain, Portugal and Greece receive the most proportionate to their GDP but also the receipts of Belgium and Luxemburg are relatively high due to high administration costs. The discrepancy between the new Member States is surprisingly high. The highest figures in relation to GDP are to be found in the Baltic States and Malta.

3.2 Expenditure

The usual way to evaluate EU spending is to rely on institutional facts like we did for the revenues above. Indeed, as Figure 3 demonstrates, the share of common agricultural policy and structural spending together have constantly accounted for 80 percent of spending. The rest of the expenditure is devoted to external relations, R&D spending and administration. Figure 3 also shows an important shift in the structure of spending from agriculture to structural spending. Interestingly, this development clearly started when the then poorest Member States Greece, Spain and Portugal entered the EU in the 1980s. The development of EU expenditure is illustrated in Figure 3.

At first sight, the overall structure of the EU budget suggests that the importance of agriculture and the income levels of the Member States determine the major part of the receipts of the Member States from the EU budget. Also, the declared objects of the EU budget allocation state that the:[6]

> CAP aims at achieving an adequate level of production, at a reasonable cost to consumers, while ensuring a fair standard of living for the agricultural community and safeguarding the future of rural areas.

This declaration indicates that one of the main aims of the EU budget is to direct support to those Member States in which agriculture and rural areas play a relatively important role.

As mentioned above, structural spending is the other and increasingly important part of the EU budget. Again citing the EU budget policy declarations:

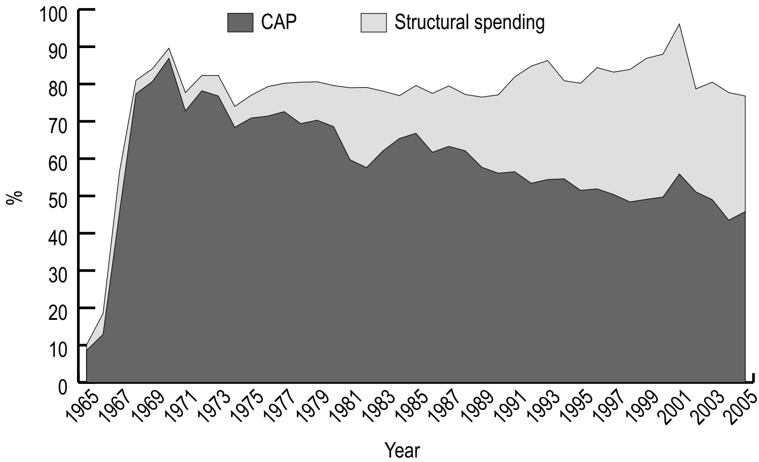
> An objective of the EU is the achievement of economic and social progress across the Member States. By their nature, structural actions should result in differences in expenditure between Member States.

Like with the CAP, the aim of structural spending is to redistribute the EU's common resources to those regions that need them the most to reduce income differences between the regions of the EU.

This EU budget structure dates back to the Treaty of Rome. Art. 40 of the Treaty speaks of the establishment of an Agricultural Guidance and Guarantee Fund forming the basis for later common agricultural policy (CAP). Art. 123 speaks of the establishment of the European Social Fund, forming

[6] Detailed material concerning the EU budget, financial perspectives and budget figures is provided at http://europa.eu.int/comm/budget. Citations here are all from that source.

Figure 3 The distribution of EU budget expenditure in 1965-2005



the basis for later structural spending. The contractual basis of these funds can be regarded as incomplete contracts. Blankart and Kirchner (2004) argue that the expansion of the CAP in the early years was mainly due to the fact that agricultural spending was not limited. France as a strong player contributed heavily to the expansion of the CAP arguing that farmers did not benefit from the Common Market as much as industry and perhaps even lost out. France was a necessary member of the EEC and threatened to leave the EEC in 1966. Unanimous decision-making became as a result the norm[7] rather than qualified majority voting which the Member States previously had agreed on. Germany, on the other hand, was more interested in the development of the Common Market and an expansive CAP was the price of that.

Social Fund spending was limited as it was based on fixed contributions. According to Blankart and Kirchner (2004) this constraint prevented structural spending from growing until the mid-1980s when the new southern European democracies joined. The formation of the Single Market and deepening integration made the new Member States claim support from

[7] That is the so-called Luxembourg compromise that solved the problem of France's empty chair policy.

the EU budget to ease the potentially negative implications of the Single Market. For the new Member States the increase of structural spending was more beneficial than the increase of the CAP. The fear of communism and populism made the increase acceptable to old Member States.[8]

If you take a closer look at EU spending, however, dark clouds gather with regard to the high-minded principles and the so-called 'Needs' view. In his two most recent papers, Baldwin (2005a, 2005b) demonstrates that the bulk of CAP spending is devoted to rich farmers, the biggest recipient countries per farmer being Denmark, Belgium, the UK and Sweden. The scheduled receipts per farmer are lowest in the Czech Republic, Estonia, Cyprus and Latvia. Moreover, he provides evidence that the richest farmers are the biggest beneficiaries: 1.5 percent of the biggest farms receive 27 per cent of the money and 52 percent of the smallest farms receive only 4 percent. The same argument holds for the structural funds. Were the new Member States to be treated in the same way as the EU15 Member States in terms of per capita incomes, it would increase their receipts enormously (see Baldwin 2005a for details).

Box 6 EU spending

EU spending was 119 419 million euros in 2005 at current price levels. The distribution of expenditure was as follows

Agricultural policy	43.1 %
Structural spending	35.6 %
Internal policies	7.5 %
External action	4.3 %
Administration	5.1 %
Other	4.4 %

Another drawback in the 'Needs' view is that agriculture and income levels together are not able to predict the net or gross transfers from the EU budget to Member States. Moreover, the predictive power of income levels turns out to be highly dominated by the cohesion countries.[9] The Cohesion Fund was established in the *Delors II package* in 1993. Cohesion spending has typically accounted for 2-3 per cent of the budget.

[8] The so-called Delors I package.

[9] For the former see Baldwin *et al*. (2001) and for the latter Kauppi and Widgrén (2004).

3.3 Important differences between expenditure and revenue

Here it is important to see the difference. Since the Financial Perspectives lay down the principles for collecting revenues, each Member State more or less knows how much it has to pay. Moreover, this decision is made unanimously. The expenditure is decided on an annual basis mainly by the Council of Ministers where national interests are represented. This decision is made by a qualified majority, which is a fact that one must bear in mind. Although the Council takes a formal vote relatively rarely, the voting rules and rights matter when Member States bargain on expenditure. That is the key reason why the power or influence of the Member States in the Council is likely to have a close connection with actual budget receipts. This connection is strengthened by the fact that roughly 80 percent of the expenditure is spent on redistribution. Tabellini (2002) describes this bluntly:

> Now the whole discussion on the EU budget only concerns who gains and who loses, and in particular which countries are beneficiaries or net payers and how much.

This citation gives us reason to turn to the evaluation of the EU budget transfers using the power politics apparatus.

4 THE POWER POLITICS VIEW ON THE EU BUDGET

4.1 Preliminaries

Rather than following benevolent objectives of equality between EU countries, we can alternatively take the public choice perspective and imagine that Member States care about nothing else but their own interests. With this approach, which we call the power politics view, representatives of the Member States use their influence in the Council of Ministers to allocate as much money as possible to their home country. Hence, the budget share of Member States should reflect their voting power in the Council rather than their needs for CAP or structural spending.

In a formal analysis, the budget allocation problem is treated like a dividing-up-the-cake problem. The dividing-up-the-cake problem is one of the most investigated questions in game and especially bargaining theory. The literature is very wide-ranging from cooperative to non-cooperative game theory with several applications. In recent years, these methods have been applied to study different aspects of EU decision-making as well (see e.g. Thompson *et al*. 2006).

The allocation of the EU budget is a good example of a dividing-up-the-cake problem, since it is based on a principle where estimated revenue for a financial year must be equal to the appropriations for payment of that particular year. No funds may be borrowed to run a budget deficit. In the case of a surplus, it is entered as revenue in the following year's budget. Moreover, any unforeseen additional expenditure incurred during the course of the year must be financed by amending the budget, which will redeploy appropriations within the budget adopted or call for additional resources. Second, the EU budget has a pre-defined ceiling as a percentage of total EU-wide GNI. Combined with the principle of a balanced budget, the ceiling makes the link between the determination of the receipts of the Member States from the EU budget and the dividing-up-the cake problem even clearer.

4.2 Game-theoretic tools

When the number of bargainers increases, detailed (non-cooperative or procedural) game-theoretic modelling of the negotiation process becomes extremely complicated.[10] In contrast to a non-cooperative approach to EU budget allocation, cooperative game theory does not attempt to model a

[10] For a recent study on different models of EU decision-making, see Thompson *et al*., eds. (2006).

dividing-up-the-cake problem in a detailed way but rather approaches it with a set of plausible conditions in order to restrict the set of feasible divisions. At best these restrictions lead to a unique prediction for the bargaining problem (see Nash 1950 or Shapley 1953 for classical solutions). Cooperative game theory allows for an unlimited coalition formation and pre-play binding agreements that are not explicitly modelled. It does not deal with preferences either. The disadvantage of the cooperative approach is, naturally, that it does not say a great deal about what leads to a specific compromise. This calls for empirical testing.

An often-used measure for the power of voting of actors is the Shapley-Shubik index (SSI) (Shapley and Shubik 1954), which is also the method that we are applying here. What is notable about the Shapley value in voting games is that there are either winning majority coalitions or losing minority coalitions. Thus a coalition can only obtain a worth of one or zero, the former representing winning (majority) coalition and the latter losing (minority) coalition. Power or the expected marginal contribution is then reduced to an actor's ability to swing a losing coalition into a winning one (or vice-versa).[11]

In voting games, another illustration to the SSI can also be given. The index is based on the broad idea that an actor, who can break a winning coalition into a losing one, or vice versa, exerts power. These actors are critical in the sense that they may help a coalition to achieve its goals. Suppose that this help is rewarded by a prize which ends up as money in the data. This may sound like an abstract construction and it makes practical men and women ignore this approach completely but, in fact, there is some fairly convincing evidence that abstract power measures are able to capture power in a meaningful way (see e.g. Baldwin *et al*. 2000, 2001, Kauppi and Widgrén 2004, 2006, Pajala and Widgrén 2004, Thompson *et al*., eds. 2006).

Another often-used illustration of the SSI goes as follows. The SSI assumes that voters have different intensities when it comes to accepting or rejecting a proposal. Suppose that these intensities can be expressed on a line with the extremes of more spending and less spending. For instance, when the issue is about support for hillside farmers it may be that A is the most reluctant to increase spending, followed by B leaving C as the most willing to increase support for this purpose. On another day, the issue might be the inclusion of reindeer meat in the CAP's price support mechanism. This time we might get a different order of preferences.

[11] A comprehensive presentation of the Shapley value from several angles is Roth, ed., (1988).

In general, you may presume that after considering a great enough number of issues all preference orders of A, B and C are equally likely. In our numerical example we arrive at six orders as follows:

$$\mathrm{A\underline{B}C\ \ A\underline{C}B\ \ B\underline{A}C\ \ BC\underline{A}\ \ C\underline{A}B\ \ CB\underline{A}}$$

where the critical voter is underlined. A critical voter exerts power since (s)he is able to break a winning coalition. In the first order ABC, B can do that by breaking the winning coalition AB. Voter A favours more spending on this issue than B. Therefore A is not critical. Should voter A try to break the winning coalition AB by voting against spending, voter B would have already broken that since (s)he is less eager to increase spending. In this example, voter A has four pivotal positions, voters B and C one each. In relative terms we get 2/3 for A and 1/6 for both B and C. If the SSI is a meaningful estimate of power and if power politics can explain the EU budget these should be the budget share of A, B and C respectively.

More generally, the Shapley value is one of the best-known solution concepts in cooperative game theory. In cooperative or coalitional form games, each coalition is assigned a worth. Power is defined as an actor's expected marginal contribution to the coalition (s)he can join. Originally, Shapley (1953) defined the concept based on three axioms. More specifically he showed that, in a coalitional form game, the division is a) efficient, i.e. nothing is left out from the division, b) symmetric, i.e. the division is solely based on actors' votes or other resources that they have in the game and not on actors' names and c) linear, i.e. in two divisions an actor gets the sum of his/her receipts in two respective divisions. The Shapley value is designed to answer the question: "How will a cake be divided?" under the three conditions listed above. In the context of EU budget decisions the first property holds by definition, since there are neither surpluses nor deficits. The second one is crucial and constitutes a sharp difference to the needs view. Here, symmetry means that only the voting rules in the EU matter as determinants of budget shares and that all countries can utilize the rules to the same extent. Symmetry assumption is the core of the power politics view. Finally, the last property, linearity, is merely a technical assumption that is natural in the context of EU budget decisions.[12]

[12] More formally the SSI can be expressed as $\phi = \sum_{S\subseteq N} \frac{(n-1)!(s-1)!}{n!}[\Delta v_i(S)]$ where the first term gives the probability of being in a swing position n being the number of players and s the number of players in coalition S. The second term gives player i's marginal contribution to coalition S. In voting games, it is either one (player i has a swing) or zero, where the player is not able to swing a coalition from a winning to a losing one or vice-versa.

Clearly, the SSI does not provide a detailed description of real-world voting procedures. For instance, it lacks all strategic aspects, like who draws up the proposal to be voted on or the sequence of moves. It contains, however, some information on the preferences of the voters understood as intensities of holding a favourable position. On the other hand, the SSI can be seen as a highly long-term concept. For a general evaluation of voting rules this is a desirable property. It gives information of what actors are able to do with their resources in a hypothetical voting situation. The SSI predictions do not require that an actual vote takes place – they merely assess the bargaining power of voters in the shadow of a vote.

4.3 Power politics at work: a statistical analysis

On the basis of the game-theoretic tools outlined above the actual budget shares of the Member States should be equal to their corresponding voting power shares measured using SSI. However, as demonstrated by Kauppi and Widgrén (2004) the past annual EU budget shares do not match one-to-one with power. Consequently, you may wonder if this ruins the power politics explanation. This is not, however, necessarily true. Even if the decisions (obtained through actual voting) of the Council of Ministers were perfectly in line with the voting power distribution of the Member States, their practical implementation is subject to numerous details that are likely to result in deviations from the intended budget allocation, at least in the short run. The SSI is essentially a long-term solution and hence it is reasonable to assume that the theoretical power politics predictions are accurate only in the long run or on average. In order to assess whether such a long-run notion of the cooperative game theory works, Kauppi and Widgrén (2006) carried out a statistical analysis using the following simple regression:

$$S_{it} = \alpha + \beta\, SSI_{it} + u_{it}$$

where S_{it} denotes country i's budget share in period t and SSI_{it} denotes the Shapley Shubik index for country i at time t.[13] If the voting power distribution alone explained the budget shares, we would have the restrictions $\alpha = 0$ and $\beta = 1$ and the error term would have a conditional mean zero.

[13] The term u_{it} is a stochastic error that should capture all the short-term variation of the budget shares that cannot be explained by the power measure.

Table 2 Estimation results of the power politics model

Variable	Model 1	Model 2
SSI	1.119	1.003
	(16.87)	(13.48)
Franco-German dummy		0.029
		(2.79)
Intercept	-0.010	-0.005
	(-1.53)	(-0.80)

Source: Kauppi and Widgrén (2006)

Note: *t*-values in parenthesis. The sample consists of 46 observations corresponding to countries in EU9, EU10, EU12 and EU15.

Table 2 illustrates the estimation results. The first model explains budget shares using the SSI only and in the second a Franco-German dummy is added. The dummy gets value 1 for France and Germany and zero otherwise. The justification of adding this dummy is based on well-known Franco-German cooperation in EU matters, which is also formally established. Moreover, Kauppi and Widgrén (2004) found convincing evidence that the predictive power of the power politics model can be improved by assuming that France and Germany's voting behaviour is in tandem.[14]

The estimation period is 1976–2001 and the budget shares on the left hand side are averages of 1976–1980 for EU9, 1981–1985 for EU10, 1986–1994 for EU12 and 1995–2001 for EU15 respectively. Thus, there are 46 observations altogether. In the first model the coefficient of the SSI is 1.119. It is not exactly one but it does not differ from one in a statistically significant sense. Adding a Franco-German dummy changes the picture as the coefficient of the SSI is then almost exactly one as predicted by the theory. The coefficient of the dummy itself is statistically significant (*t*-value 2.79). In both models, the coefficient of the intercept is zero, which is also in line with the theory.

[14] More formally Kauppi and Widgrén (2004) investigate all bi-partitions of Member States and assume that members of one group have probability t of accepting a randomly chosen proposal while in the other group the probability is $1-t$. In the EU15, there are 32768 bi-partitions. Kauppi and Widgrén (2004) computed 32768 modified SSIs using the probabilistic voting model and ran regressions for each case. It turned out that among the 100 best fits France and Germany had the same acceptance probability in 95 cases.

5 EXPLAINING EU BUDGET ALLOCATION USING POWER POLITICS

5.1 Estimated costs of the 2004 enlargement

The Union expanded with ten new Member States on 1 May 2004. Eastern enlargement was one of the major reasons for the EU's institutional reform and, in particular, for the re-weighting of votes in the Council, which is the main decision-making body in the EU. The reform was motivated by the need to restore the EU's ability to act but clearly the future budget transfers also played an important role. Imagine that power politics were able to predict the future budget shares. In that scenario, since almost all the new Member States are small, re-weighting of Council votes in favour of major countries would be likely to reduce the budget costs of enlargement. We will return to this issue in the next subsection.

Table 3 illustrates some basic facts of different weighted voting rules. The first column gives populations and the other three columns the weighting votes of Member States using the temporary rules (between 1 May and 31 October 2005), the Nice rules and using the square-root rule. The latter assigns to Member States voting weights that are directly proportional to their square-rooted populations.[15]

Table 4 gives the immediate budget costs of eastern enlargement. The contributions are the true contributions made in 2003 for EU15 and in 2004 for EU25 bar the new Member States. Since their accession on 1 May, their contributions from 2004 have been multiplied by 1.5. The receipts in EU15 are based on a voting game using the old voting weights. In EU25, the Nice rules are applied.[16]

The results in Table 4 suggest that the overall budget cost of the enlargement is 20.1 billion euros at 2004 price levels. The total impact can be broken down into parts that are, on the one hand, caused by the losses of the old Member States in their receipts and, on the other hand, by increased payments. The figures reveal that the former amount to 11.9 billion and the latter to 8.2 billion euros. If we follow the tax interpretation

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[15] This was proposed by the Swedish delegation in 2000. It also gained some support from academics and it popped up again during the negotiations on the Constitutional Treaty. In the EU context the square-root rule has been studied e.g. in Laruelle and Widgrén (1998).

[16] Note that in 2004 the Council used the so-called temporary rules between 1 May and 31 October. These are analysed in section 5.2. They serve only has a benchmark, no-reform-in Nice scenario. For 2004, however, we chose the Nice rules here as the main purpose of the assessment is to capture the budget implications in a more general sense than only one year.

Table 3 Member States' populations and voting weights in three alternative weighting schemes

	Population in 2005	Nice votes	Old votes	Square-root rule
Germany	82501	29	10	287
France	62371	29	10	250
United Kingdom	60035	29	10	245
Italy	58462	29	10	242
Spain	43038	27	8	207
Poland	38174	27	8	195
Netherlands	16306	13	5	128
Greece	11076	12	5	105
Portugal	10529	12	5	103
Belgium	10446	12	5	102
Czech Republic	10221	12	5	101
Hungary	10098	12	5	100
Sweden	9011	10	4	95
Austria	8207	10	4	91
Denmark	5411	7	3	74
Slovak Republic	5385	7	3	73
Finland	5237	7	3	72
Ireland	4109	7	3	64
Lithuania	3425	7	3	59
Latvia	2306	4	3	48
Slovenia	1998	4	3	45
Estonia	1347	4	3	37
Cyprus	749	4	2	27
Luxembourg	455	4	2	21
Malta	403	3	2	20
EU25	**461298**	**321**	**124**	**2792**
Romania	21659	14	n.a.	147
Bulgaria	7761	10	n.a.	88
EU27	**490717**	**345**	**n.a.**	**3027**
Turkey	71608	29	n.a.	268
Croatia	4444	7	n.a.	67
EU29	**566769**	**381**		**3361**

Table 4 Budget costs of the 2004 enlargement in million euro at 2004 prices (comparison of power politics estimates before and after enlargement using true total figures)

	Receipt EU15	Receipt EU25	Contrib. EU15	Contrib. EU25	Net Receipt EU15	Net Receipt EU25
Germany	9769	8978	19203	20229	-9434	-11251
United Kingdom	9769	8978	9971	11682	-202	-2704
France	9769	8978	15154	16013	-5385	-7035
Italy	9769	8978	11759	13786	-1990	-4808
Spain	7994	8322	7429	8383	565	-61
Netherlands	4621	3848	4919	5268	-298	-1420
Greece	4621	3525	1534	1742	3087	1783
Belgium	4621	3525	3486	3848	1135	-323
Portugal	4621	3525	1293	1332	3328	2193
Sweden	3767	2922	2501	2680	1266	242
Austria	3767	2922	1936	2046	1831	876
Denmark	2930	2028	1776	1940	1154	88
Finland	2930	2028	1338	1443	1592	585
Ireland	2930	2028	1128	1250	1802	778
Luxembourg	1758	1150	204	231	1554	919
EU15	**83631**	**71736**	**83631**	**91873**	**0**	**-20137**
Poland		8322		1965		6357
Czech Republic		3525		848		2677
Hungary		3525		806		2719
Slovak Republic		2028		329		1700
Lithuania		2028		179		1850
Latvia		1150		101		1049
Slovenia		1150		255		895
Estonia		1150		83		1067
Cyprus		1150		143		1007
Malta		865		50		815
NMS10		**24892**		**4755**		**20137**
Total	**83631**	**96628**	**83631**	**96628**		**0**
Cost for EU15		**11895**		**8242**		**20137**

of the revenues we can express the breakdown by saying that the “EU tax rate” has increased by 0.08 percentage points and the additional cost of the enlargement amounts to 0.12 per cent of EU15 GDP. The total effect is 21 per cent of the EU budget. The increase of the EU budget from 2003 till 2004 amounted to 13.0 billion euros, 4.8 billion of which was financed by the new Member States. An interesting related question is this: What if we limit the budget expansion to the part that has come from the new entrants?

Table 5 assumes that the EU budget as a percentage of EU-wide GDP has been kept constant at 2003 levels. The increase in the total budget would then only be 4.2 billion euros, which would reflect the share of the new Member States of EU25 GDP. The contributions of the Member States are computed using the actual contributions that have been adjusted to the assumed total budget. In this scenario, the old Member States would lose the gross receipts that were based on additional budget expansion. In receipts, the loss would now amount to 18.4 billion euros instead of 11.9 billion euros. The loss due to increasing payments would be practically zero and the net position of the old Member States would deteriorate by 18.3 billion euros. Even if the total budget would be 8.8 billion euros smaller it would only be 1.8 billion euros cheaper for the old Member States as compared to the actual budget. This is because the old Member States would “lose” the receipts that are based on additional budget expansion.

In absolute terms, major countries would naturally lose more gross receipts than the smaller ones. In relative terms the opposite holds true due to the distribution of power. Changes in the contributions of the Member States do not follow any systematic pattern and hence the net receipts do not either. There is, however, one interesting feature in net receipts when we compare the columns on the right hand side in tables 4 and 5. For the net-payers a smaller budget makes them better off since they pay less and for net recipients the smaller budget makes them worse off since they receive less.

5.2 Hypothetical costs of the 2004 enlargement under selected alternative voting rules

Before the agreement on the Treaty of Nice in December 2000 an intergovernmental conference (IGC-2000) investigated different voting rule reforms in the Council. This section compares the budget implications of the enlargement under a selected group of proposed voting rules and our basic scenarios, i.e. the rules set out in the Treaty of Nice and the Constitutional Treaty.

Table 5 Budget costs of the 2004 enlargement in million euro at 2004 prices (comparison of power politics estimates before and after enlargement keeping the total budget proportional to GDP constant)

	Receipt EU15	Receipt EU25	Contrib. EU15	Contrib. EU25	Net Receipt EU15	Net Receipt EU25
Germany	9769	8159	19203	18384	-9434	-10224
United Kingdom	9769	8159	9971	10616	-202	-2457
France	9769	8159	15154	14552	-5385	-6393
Italy	9769	8159	11759	12528	-1990	-4369
Spain	7994	7563	7429	7618	565	-55
Netherlands	4621	3497	4919	4787	-298	-1290
Greece	4621	3203	1534	1583	3087	1620
Belgium	4621	3203	3486	3497	1135	-294
Portugal	4621	3203	1293	1210	3328	1993
Sweden	3767	2656	2501	2436	1266	220
Austria	3767	2656	1936	1859	1831	796
Denmark	2930	1843	1776	1763	1154	80
Finland	2930	1843	1338	1311	1592	532
Ireland	2930	1843	1128	1136	1802	707
Luxembourg	1758	1045	204	210	1554	835
EU15	**83631**	**65192**	**83631**	**83492**	**0**	**-18300**
Poland		7563		1786		5777
Czech Republic		3203		770		2433
Hungary		3203		732		2471
Slovak Republic		1843		299		1545
Lithuania		1843		162		1681
Latvia		1045		91		954
Slovenia		1045		232		813
Estonia		1045		75		970
Cyprus		1045		130		916
Malta		786		45		741
NMS10		**22621**		**4321**		**18300**
Total	**83631**	**87813**	**83631**	**87813**		**0**
Cost for EU15		**18439**		**-139**		**18300**

The reforms that were proposed were mainly different weighted voting schemes that re-weighted the old allocation of voting weights in favour of major countries. The final agreement was also a weighted voting system but not the only one on the table during the IGC-2000.[17] There were also two additional interesting proposals that were not weighted voting schemes.[18] One of them was often referred to as the *simple dual majority rule* or simply as the Commission proposal. It was based on the idea that any majority in the Council should obtain support from an absolute majority of Member States with more than 50 per cent of the EU population. The Commission proposal was on the table already during the IGC-1996 and was the first attempt at reforming Council voting. The grounds for this proposal were that this rule ensures a certain kind of fairness. Both IGCs emphasized that the EU should be defined as a union of states and a union of citizens. The simple dual majority rule fulfilled the former part by requiring that the passage of a legislative proposal needed support from a majority of states and the latter by the fact that it also needed support from a majority of EU citizens.

Box 7 Comparing five different Council voting rules

- basic scenarios: the Nice rules and the Constitutional Treaty rules
- simple dual majority rule: majority of states and citizens
- square-root rule: a majority of states and square-rooted population shares
- temporary rules in May-October 2004: an extrapolation of the pre-Nice weighting scheme

Another interesting proposal from the IGC-2000 came from the Swedish delegation. In this proposal, voting weights would be proportionate to the square-rooted populations of the Member States and the passage of a proposal would then need a simple or qualified majority of the weights and a majority of Member States. It was also widely referred to as *the square-root rule* and was originally based on Penrose (1946). The rule was similar to weighted voting but it could be interpreted as a dual majority: however, here you simply added the square-rooted populations. The latter fits better since populations change automatically over time and hence the weights can be automatically and accurately updated from statistical data. Reallocating voting weights typically requires tough renegotiation as the EU ex-

[17] For a thorough investigation of the alternatives at the Nice summit see Baldwin *et al*. (2000).

[18] It is worth noting, however, that these schemes can also be expressed as weighted voting schemes but that confuses the simple ideas behind the alternative rules.

ample demonstrates. Moreover, although using a square-rooted population as the basis for a voting scheme might sound mysterious, it can also be justified from the point of view of fairness. It can be shown that in a two-tier decision-making system (e.g. the Member States at the lower level and the EU at the upper) the square-root rule guarantees under certain circumstances that each citizen is equally represented in the Council regardless of his/her home country.[19]

In the following section, we consider, in addition to our basic scenarios, the two alternative proposals described above. We also consider the so-called temporary rules. They were in force between 1 May and 31 October 2004.Temporary weighting in the Council was simply an intrapolation of the pre-Nice weighting scheme described above. It serves as a benchmark for an enlarged EU like the old system for the EU15 since it would have formed the basis for Council voting without the Nice reform.

Tables 6-8 give the power politics estimates for gross and net receipts and the changes in net receipts from the old rules to the considered alternatives in the EU15. Member State contributions are assumed to be as they were in 2004.[20]

Table 6 shows the gross receipts under five Council voting rules in the EU25 and under the old rules in the EU15. The results clearly demonstrate that there are considerable differences between the rules. From the view-point of the old Member States, the budget cost is lowest under the voting rules in the Constitutional Treaty and the second lowest under the square-root rule. It is worth noting that the enlargement would have been most costly without any reform, i.e. under the temporary rules. The difference between the most and least costly voting rules is roughly five billion euros at 2004 price levels. This would suggest that the old Member States were successful to some extent in reducing the costs of enlargement through a Council voting reform. The Nice reform was carried out without the new entrants and the only new entrant that is better-off under the Nice rules than under the temporary rules is Poland.[21] In conclusion, the Nice rules benefit only the six biggest Member States.

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[19] This proposal obtained considerable support from academics. For an analysis of the square-root rule in EU15 see Laruelle and Widgrén (1998).

[20] The contributions of the new Member States have been multiplied by 1.5.

[21] One reason why Poland gains under the Nice rules is the so-called “Aznar bonus” (see Baldwin and Widgrén 2004). The Aznar bonus refers to the final minutes of the Nice summit when the Spanish delegation was successful in increasing its number of votes from the 26 that was included in the final proposal by the French presidency to 27. Note that Germany and the other big four have 29 votes each. In pre-Nice rules the big four countries had 10 votes each and Spain 8, i.e. 80 per cent of 10. For a comparison 27 is 93 per cent of 29.

Table 6 Estimated power politics budget receipts under different voting rules in the EU25 and under the old rules in the EU15 in million euro at 2004 prices

	EU15	Temporary rules	Nice Treaty rules	Constitutional Treaty rules	Simple dual majority	Square root rule
Germany	9769	8213	8978	15282	11629	9984
UK	9769	8213	8978	9984	8414	8631
France	9769	8213	8978	9931	8373	8488
Italy	9769	8213	8978	9702	8205	8361
Spain	7994	6290	8322	6568	5954	7151
Netherlands	4621	3838	3848	3324	3542	4431
Greece	4621	3838	3525	2630	2994	3482
Belgium	4621	3838	3525	2590	2962	3603
Portugal	4621	3838	3525	2562	2941	3543
Sweden	3767	3142	2922	2405	2817	3292
Austria	3767	3142	2922	2322	2743	3130
Denmark	2930	2265	2028	1932	2461	2553
Finland	2930	2265	2028	1909	2440	2511
Ireland	2930	2265	2028	1725	2298	2205
Luxemburg	1758	1517	1150	1297	1972	738
EU15	**83631**	**69091**	**71736**	**74163**	**69746**	**72104**
Poland		6290	8322	6468	5851	6791
Czech Republic		3838	3525	2602	2973	3512
Hungary		3838	3525	2576	2952	3495
Slovak Republic		2265	2028	1932	2461	2549
Lithuania		2265	2028	1725	2298	2040
Latvia		2265	1150	1576	2169	1674
Slovenia		2265	1150	1515	2132	1553
Estonia		1517	1150	1437	2071	1277
Cyprus		1517	1150	1337	2004	939
Malta		1517	865	1297	1972	695
NMS10		**27576**	**24892**	**22465**	**26882**	**24524**
Change in receipts for EU15		**-14540**	**-11895**	**-9468**	**-13885**	**-11527**
Cost for EU15		**22782**	**20137**	**17710**	**22127**	**19769**

Table 7 Estimated power politics net receipts under different voting rules in the EU25 and under the old rules in the EU15 in million euro at 2004 prices

	EU15	Temporary rules	Nice Treaty rules	Constitutional Treaty rules	Simple dual majority	Square root rule
Germany	-9434	-12016	-11251	-4947	-8600	-10245
UK	-202	-3469	-2704	-1698	-3268	-3051
France	-5385	-7800	-7035	-6082	-7640	-7525
Italy	-1990	-5573	-4808	-4084	-5581	-5425
Spain	565	-2093	-61	-1815	-2429	-1232
Netherlands	-298	-1430	-1420	-1944	-1726	-837
Greece	3087	2096	1783	888	1252	1740
Belgium	1135	-10	-323	-1258	-886	-245
Portugal	3328	2506	2193	1230	1609	2211
Sweden	1266	462	242	-275	137	612
Austria	1831	1096	876	276	697	1084
Denmark	1154	325	88	-8	521	613
Finland	1592	822	585	466	997	1068
Ireland	1802	1015	778	475	1048	955
Luxemburg	1554	1286	919	1066	1741	507
EU15	**0**	**-22782**	**-20137**	**-17710**	**-22127**	**-19769**
Poland		4325	6357	4503	3886	4826
Czech Republic		2990	2677	1754	2126	2664
Hungary		3032	2719	1770	2146	2690
Slovak Republic		1937	1700	1604	2132	2220
Lithuania		2087	1850	1547	2119	1862
Latvia		2165	1049	1476	2068	1573
Slovenia		2010	895	1260	1877	1298
Estonia		1434	1067	1354	1988	1194
Cyprus		1374	1007	1194	1861	796
Malta		1467	815	1248	1923	646
NMS10		**22782**	**20137**	**17710**	**22127**	**19769**

Table 8 Estimated changes in power politics net receipts under different voting rules for the EU15 in million euro at 2004 prices

	Temporary rules	Nice Treaty rules	Constitutional Treaty rules	Simple dual majority	Square root rule
Germany	-2581	-1816	4488	835	-811
UK	-3266	-2501	-1496	-3065	-2848
France	-2414	-1649	-696	-2254	-2140
Italy	-3582	-2817	-2093	-3591	-3434
Spain	-2658	-626	-2380	-2994	-1797
Netherlands	-1132	-1121	-1646	-1428	-538
Greece	-991	-1304	-2199	-1834	-1346
Belgium	-1145	-1458	-2393	-2020	-1380
Portugal	-822	-1135	-2098	-1718	-1116
Sweden	-804	-1024	-1541	-1129	-654
Austria	-735	-955	-1555	-1134	-746
Denmark	-828	-1066	-1162	-633	-541
Finland	-769	-1007	-1126	-594	-524
Ireland	-786	-1024	-1327	-754	-846
Luxemburg	-268	-635	-488	187	-1047
EU15	**-22782**	**-20137**	**-17710**	**-22127**	**-19769**

The voting rules of both the Nice and the Constitutional Treaties benefit the biggest countries. They are also the biggest net contributors to the budget. By obtaining more influence they are able to reduce their net contributions by increasing their gross receipts. The main reason why the Constitutional Treaty rules are cheaper than the Nice rules is the huge impact of the former on Germany's net contribution. This is because the Constitutional Treaty rules take population directly into account just like the simple dual majority does. An interesting difference is, however, that the former requires 65 percent of the EU population to form majority coalitions whereas the latter requires only 50 percent. This means that the population requirement has a stronger impact in the Constitutional Treaty than in the simple dual majority rule and benefits the biggest countries more.

Box 8 Why does a higher population requirement benefit populous countries?

Consider a simple dual majority rule, i.e. the rule that requires 50 percent of membership and population for a majority, and compare it to an alternative dual majority scheme that requires 55 percent of membership and 65 per cent of population for a majority like in the Constitutional Treaty. In a simple majority rule, there are many more coalitions that fulfil the population requirement than in the Constitutional Treaty. Moreover, the Constitutional Treaty introduced an asymmetric dual majority scheme – required quotas of population and membership differ, the population quota being higher.

Since both the population and membership requirements are binding, an asymmetric dual majority in the Constitutional Treaty corresponds with a two-player unanimity game, players being population requirement (POP) and membership requirement (MEM). Since POP applies a 65-percent quota and MEM 55-percent quota POP can be characterised as a more reluctant player. In unanimity games the more reluctant player always has an advantage as his/her consent is needed anyway. Imagine a wife and her husband, where the wife is more eager to go to the movies than her husband. She is more prepared to accept a wide range of movies to see than her husband, which gives him an advantage when it comes to choosing the movie (for an application of this argument to EU decision-making, see Napel and Widgrén 2006a, 2006b).

Table 8 illustrates the shifts in the net contributions of the Member States of EU15 after the enlargement. As shown in Table 7 the total increase in the old Member States was between 17.8 and 22.8 billion euros depending on the voting rule. Table 8 evaluates how these extra net contributions were allocated between the old Member States. With an exception of three shifts the figures are negative indicating that the net contributions of the old Member States have increased or that the net receipts have decreased. That is exactly what one would expect. The enlargement yields a budget cost that is shared by EU15 Member States. In terms of power, the 10 new Member States obtain a part of the influence in dividing the cake, which is paid by the loss of influence of the old Member States in dividing the cake. There are, however, three ways certain old Member States might even benefit from the enlargement and the aggregate budget cost. It is worth noting that there are always losers, not all countries can avoid the increasing budget burden.

First, as demonstrated above, net contributors have the incentive to reduce the size of the budget as that would diminish their budget burden whereas net recipients have the incentive to expand the budget as this would increase their net benefits. The gross contribution to the budget of the EU15 countries increased by 10 per cent from 2003 till 2004, which is a relatively sizable expansion of the budget. By comparing the right hand columns of tables 4 and 5 above, you can see that the implications of the budget increase are just as expected. Given that the receipts are determined by power politics, net contributors pay the expansion with larger net contributions whereas the net recipients collect the benefits in the shape of larger net receipts. The groups of net contributors and net recipients remain unchanged.

Second, assuming that gross receipts are determined by power politics, the incumbent countries might change the rules for collecting revenue or introduce additional restrictions to receipts like they did in Berlin as a part of Agenda 2000. In this respect, the Financial Framework for 2007–13 and already Agenda 2000 for 2000–06 have reduced the VAT payments, i.e. the third resource, considerably. It seems that gradually the revenues are in practice determined by the income levels of the Member States. However, since the contributions of the Member States are already determined as a fixed share of national income, the most recent changes have not affected their net positions.

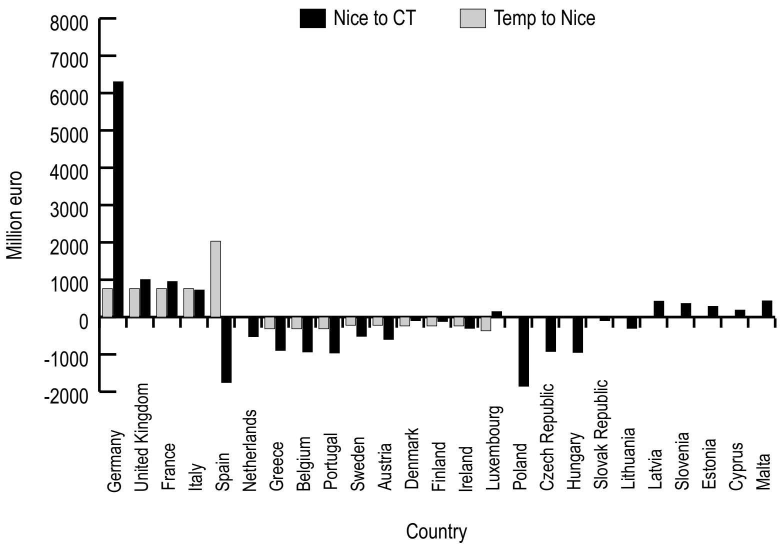
Third, and most importantly, voting rule reforms might have substantial effects on gross and consequently net receipts. Table 8 illustrates this very clearly. The voting rules in the Constitutional Treaty and simple dual majority rule take population directly into account while the weighted voting schemes divide countries into clusters that are related as regards population, but the cluster borders are arbitrary. Why should for instance Germany and France be in the same cluster? Their population difference is more than 20 million. The Nice rules kept the clustering. Compared to the temporary voting rules the biggest countries gain and consequently they gain as regards gross contributions while their net contributions diminish. In the Nice rules, however, all incumbent countries lose compared to the budget allocation for EU15.

Box 9 How can an incumbent country avoid enlargement induced budget costs?

- By increasing or decreasing the size of the budget: it is possible that a net contributor gains if the budget is cut enough while a net recipient might benefit from budget expansion
- By modifying the rules for collecting revenues
- By changing the voting rules
- By adding restrictions to receipts in proportion to GNI, population, etc.

The most interesting changes take place in voting rules that take population directly into account without any clustering. The voting rules in the Constitutional Treaty and the simple dual majority reveal the magnitude of

Figure 4 Budget gains from shifting from temporary to Nice rules and from Nice rules to Constitutional Treaty, in million euro



Source: author's calculations.

the bias caused by clustering. In both, the results suggest that Germany would be able to reduce its net contribution compared to the situation in EU15. The gain under the Constitutional Treaty would be 4.5 billion euros, which would make France the biggest net payer. Under a simple dual majority, Germany would gain 0.8 billion euros but would still be the main net contributor.

The EU15 Member States differ considerably if you investigate which voting rule minimizes the enlargement cost. Starting from the smallest, the simple dual majority rule would be the most desirable for Luxemburg and Ireland. The square-root rule would minimize the cost of the Netherlands, Finland, Denmark and Sweden. Note that the Swedish delegation proposed that rule. For Finland the differences compared with the simple dual majority rule, the second best system for the country, are very small. It is worth noting that Finland together with the Commission was the last proponent of the simple dual majority rule before the Nice summit. The status quo, i.e. the temporary rules, would have been cost-minimizing for Greece,

Box 10 The drawbacks of the Nice voting rules

The major goal of the institutional reform was to maintain the EU's, and mainly the Council's, ability to act. Obvious goals that were more seldom mentioned were the re-weighting of votes in the Council to increase the influence of the major countries and consequently make eastern enlargement cheaper.

As our results suggest, the Nice rules reduced the enlargement induced budget costs by 2.6 billion euros. They also re-weighted votes in the Council in favour of the major countries. The reduction of the expected budget cost was, however, much smaller than that of the Constitutional Treaty, which is also, in terms of voting power, more favourable for the major countries except Spain and Poland.

Perhaps the major drawback of the Nice voting scheme was that it completely failed to maintain the Council's ability to act. Baldwin et al. (2001) use a theoretical concept of passage probability which measures how likely the passage of a random proposal is. In practice, Commission proposals are not random and the measure can only be used to compare different voting rules. Absolute probability values are meaningless. In the evaluation it turned out that the Nice rules were not at all successful in restoring the Council's ability to act (see Baldwin et al. 2001 for details).

Portugal, Belgium and Austria and benefit-maximizing for the new entrants with the exception of Poland, Estonia, Cyprus and Malta. Poland would favour the Nice rules and Estonia, Malta and Cyprus the simple dual majority rule.

According to our basic scenarios, i.e. with the Nice and Constitutional Treaty rules minimizing the budget costs of the biggest countries, Spain is the only EU15 country which minimizes its budget costs under the Nice rules. For the big four, especially Germany, the Constitutional Treaty would be the best solution. After seeing these results one might wonder about the rationale behind choosing the Nice rules. Although the Nice rules entail the second lowest enlargement cost at the aggregate level, the savings compared to the alternative rules are unevenly distributed. The fact that the Nice rules are the top alternative for Spain alone might together with the other drawbacks of the Nice rules explain why very soon after the signature of the Treaty of Nice and even before it came into force the European Convention included voting rule reform on its agenda. On the other hand, a move from the Nice rules to the Constitutional Treaty would further concentrate power to the hands of the biggest countries and reduce the costs of enlargement that they would face (see Figure 4).

5.3 The impact of further enlargements

5.3.1 Bulgaria and Romania's entry

Bulgaria and Romania will be the next new entrants of the EU. The Union is also negotiating accession with Croatia and Turkey. Moreover, Macedonia has applied for membership and it is highly likely that new applications will follow. The purpose of this section is to assess the expected budget costs of, first, Bulgaria and Romania's entry in 2007 and, second, Croatia and Turkey's entry that is supposed to take place in 2015. In both scenarios, we assume that the total budget relative to EU GNP is kept constant. The evaluation is carried out based on the 2006 budget at 2004 price levels. Table 9 illustrates the effects of the 2007 enlargement and Table 10 the impact of Croatia and Turkey's accession.[22]

Table 9 illustrates that the overall expected gross budget cost of Bulgaria and Romania's entry is 8 billion euros at 2004 price levels for EU25. Again the Constitutional Treaty would lower the cost to 7.1 billion euros at 2004 prices. The respective net costs would be somewhat lower since the total budget would increase by roughly 0.8 per cent, which would be covered by the contributions of Bulgaria and Romania since the budget relative to GNP is constant. The net cost under the Nice rules would be 7.1 billion and under the Constitutional Treaty rules 6.2 billion euros. For the EU15 countries the aggregate net cost would increase to 29.9 billion euros under the Nice rules and to 22.4 billion under the Constitutional Treaty. This means that for EU15 the expected budget costs of the 2007 enlargement would be much greater under the Nice rules than under the Constitutional Treaty.

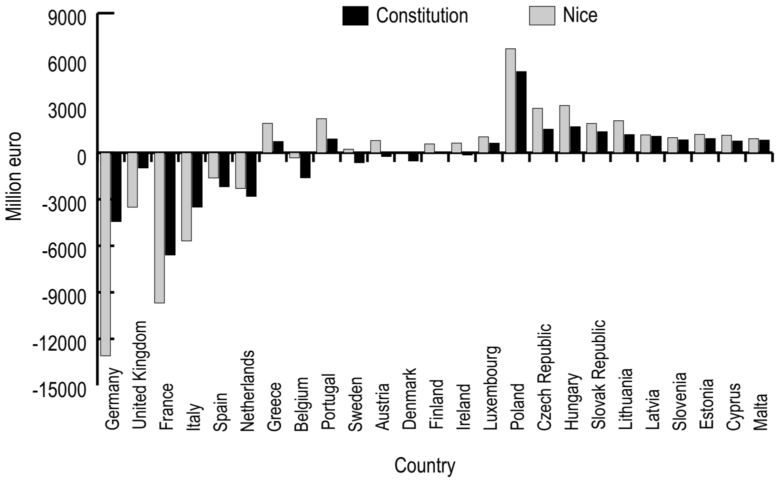
It is worth noting, however, that the results in table 9 disregard the UK rebate. It is simply assumed that the budget is fixed at 1 percent of EU-wide GNP and each country contributes 1 percent of its GNP. This would make the UK the biggest net contributor in EU27 under the Constitutional Treaty and the second largest net contributor under the Nice rules. The results with regard to EU15 and EU25 above take the UK rebate into account as the calculations use actual gross contributions. One way to take the UK rebate into account is to assume that the contributions of the EU25 are kept constant and that the new entrants contribute a fixed share of their GNP. That would give exactly the same net receipts for Bulgaria and Romania as in Table 9. From the incumbents' point of view the situation would be somewhat different as can be seen in Figure 6. The total net contribution

[22] The impact of this enlargement on EU voting has been evaluated by Baldwin and Widgrén (2005).

Table 9 Estimated effects of Romanian and Bulgarian entry and the Constitutional Treaty on allocation of EU budget receipts in million euro at 2004 prices

	Receipts in EU25 in 2006	Receipts in EU27 in 2007 in Nice rules	Receipts in EU27 in CT	Estimated contributions	Net contribution Nice	Net contribution Constitution
Germany	10871	10309	18966	24740	-14431	-5774
France	10871	10286	13378	18596	-8310	-5218
UK	10871	10265	12793	19432	-9167	-6639
Italy	10871	10259	12440	15568	-5309	-3128
Spain	10077	9460	8895	9417	43	-521
Poland	10077	9427	7955	2283	7143	5671
Netherlands	4660	4335	3823	5491	-1156	-1667
Greece	4268	4010	2838	1888	2122	950
Portugal	4268	4010	2724	1603	2407	1121
Belgium	4268	4010	2704	3229	781	-525
Czech Republic	4268	4010	2666	977	3032	1688
Hungary	4268	4010	2646	910	3100	1736
Sweden	3538	3317	2445	3161	156	-716
Austria	3538	3317	2294	2643	673	-350
Denmark	2456	2303	1772	2211	93	-438
Slovak Republic	2456	2303	1772	380	1924	1393
Finland	2456	2303	1737	1703	600	34
Ireland	2456	2303	1534	1654	649	-120
Lithuania	2456	2303	1410	203	2101	1207
Latvia	1392	1297	1211	125	1172	1086
Slovenia	1392	1297	1155	293	1004	862
Estonia	1392	1297	1031	101	1195	930
Cyprus	1392	1295	924	140	1155	785
Luxemburg	1392	1295	889	303	991	586
Malta	1047	963	871	48	914	823
EU25 TOTAL	**117000**	**109980**	**110874**	**117099**	**-7118**	**-6224**
Romania		4702	4906	682	4021	4225
Bulgaria		3317	2219	220	3097	2000
NMS2		**8019**	**7126**	**901**	**7118**	**6224**

Figure 5 Incumbent countries' net receipts from the EU budget under the Nice and Constitutional Treaty in EU27, million euro at 2004 prices



Source: author's calculations.

Note: It has been assumed that the distribution of EU25 Member States' contributions remain as in 2005. This is to cature the impact of the UK rebate.

of the EU25 does not change but there is a slight internal shift from EU15 to the NMS10. The change of the net contributions of the EU15 countries would be 28.9 billion euros under the Nice rules and 21.5 billion euros under the Constitutional Treaty.

Figure 5 also quantifies the net impact of the UK rebate. If we assume that the distribution of gross contributions is as in 2005, the net contribution of the UK would be 3.5 billion euros under the Nice rules, which is much smaller than the 9.2 billion estimate in Table 9. The respective figures under the Constitutional Treaty are 1.0 billion and 6.6 billion euros. Thus the net contribution of the UK would increase by 5.5 billion euros should the EU budget revenue be collected at 1 percent of GNP "EU tax".

5.3.2 Croatia and Turkey's entry in 2015

Turkey and Croatia have started accession negotiations and these will be more cumbersome than the negotiations that preceded the Eastern enlargement. In the following section we again assume that the EU budget in

2015 is 1 percent of the GNP of 29 Member States. We have not assumed any particular catching-up scenarios for the new Member States but we assume that the EU-wide GNP growth is 2.5 percent per annum. Catching-up would have a slight impact on the results as it would change the distribution of the contributions of Member States to the budget. However, as the EU budget is only one percent of GNP the absolute effect is relatively small over a ten-year period and that is why it has been disregarded.

The assumed annual growth rate increases EU GNP by roughly 28 percent at 2004 price levels by 2015. We also make a hypothetical computation where we assume that Turkey and Croatia join the EU together with Bulgaria and Romania. This is to capture the impact of an expanding budget. As noted above, budget expansion tends to work in favour of net recipients.

Table 10 gives the results. Compared to earlier enlargements the main difference is the ranking between the Nice and Constitutional Treaty costs. For the 2004 enlargement and Bulgaria and Romania's accession, the Constitutional Treaty is cheaper from the incumbents' point of view. Here, especially the entry of Turkey makes the Constitutional Treaty more expensive since the voting rules take the population directly into account. If we assume a 2.5% annual growth in GNP the budget cost is 14.8 billion euros at 2004 price levels and 13.1 billion euros under the Constitutional Treaty, should the enlargement take place simultaneously with Bulgaria and Romania's accession. Under the Nice rules the respective costs are 9.9 billion and 7.7 billion euros. The cost of a hypothetical 2015 enlargement is, thus, much greater under the Constitutional Treaty than under the Nice rules. All incumbent EU27 countries would lose more under the Constitutional Treaty than under the Treaty of Nice, Turkey being the main beneficiary. Moreover, any voting rule where populations or their square-roots are determinants of voting weights is likely to have the same effect and be more costly than the Nice rules. This, of course, makes the acceptance and ratification of the Constitutional Treaty in its current form more cumbersome than any relevant mix of dual majorities. In conclusion, there is a trade-off between the predicted budget costs and improving the efficiency and transparency of the EU voting rules.

In our analysis we have assumed that the population of Turkey is the same as in 2005 just like we have assumed for the other countries as well. It is, however, highly likely that Turkey's population will exceed the current 71 million at the time of Turkey's entry. Should the population of Turkey increase to 80 million by 2015 the budget cost will be slightly higher, 0.5 billion euros more under the Constitutional Treaty. Under the Nice rules there would be no impact.

Table 10 Estimated effects of immediate Turkish and Croatian entry under the Nice and the Constitutional Treaty on allocations of EU budget receipts in million euro at 2004 prices

	Receipts in EU27 in 2015 under Nice	Receipts in EU29 in 2015 under Nice	The impact of enlargement on budget receipts	Receipts in EU27 in 2015 under CT	Receipts in EU29 in 2015 under CT	The impact of enlargement on budget receipts
Germany	10309	9533	-776	18966	16306	-2659
France	10286	9533	-753	13378	11926	-1452
UK	10265	9533	-732	12793	11433	-1360
Italy	10259	9533	-726	12440	11127	-1313
Spain	9460	8829	-631	8895	8702	-194
Poland	9427	8829	-598	7955	7459	-496
Netherlands	4335	4075	-260	3823	3307	-516
Greece	4010	3760	-250	2838	2461	-377
Portugal	4010	3760	-250	2724	2365	-359
Belgium	4010	3760	-250	2704	2349	-356
Czech Republic	4010	3760	-250	2666	2316	-350
Hungary	4010	3760	-250	2646	2300	-346
Sweden	3317	3124	-193	2445	2125	-319
Austria	3317	3124	-193	2294	1997	-296
Denmark	2303	2168	-135	1772	1555	-217
Slovak Republic	2303	2168	-135	1772	1555	-217

Finland	2303	2168	-135	1737	1524	-214
Ireland	2303	2168	-135	1534	1352	-182
Lithuania	2303	2168	-135	1410	1240	-170
Latvia	1297	1218	-78	1211	1068	-144
Slovenia	1297	1218	-78	1155	1021	-135
Estonia	1297	1218	-78	1031	911	-120
Cyprus	1295	1218	-76	924	813	-111
Luxemburg	1295	1218	-76	889	783	-107
Malta	963	921	-41	871	767	-104
Romania	4702	4411	-292	4906	4198	-708
Bulgaria	3317	3124	-193	2219	1934	-285
EU27 TOTAL	**118000**	**110299**	**-7701**	**118000**	**104892**	**-13108**
Turkey		9533	9533	0	15709	15709
Croatia		2168	2168	0	1398	1398
NMS2		**11701**	**11701**	**0**	**17107**	**17107**

6 POWER POLITICS INDUCED BUDGET ALLOCATION AND REALITY

In the analysis above, we have evaluated the long-term budget costs in three different enlargements. As the analysis of Kauppi and Widgrén (2004, 2006) demonstrates, power politics have explained the receipts of Member States from the EU budget very well in the past. As we now at this stage have the first observations on actual budget contributions and receipts after the enlargement, it is interesting to assess whether the allocation mechanism indicates certain changes. We have used 2005 data for the assessment.

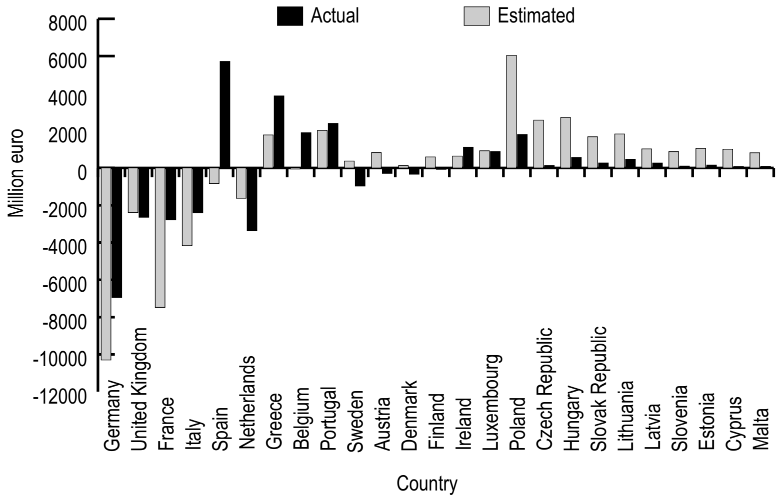
According to 2005 budget data the total budget cost of the enlargement amounts to 4.0 billion euros. It is considerably lower than our estimate of 20.1 billion euros and it is also much lower than the Financial Framework for enlargement 2004–06 suggests. In the Copenhagen package the total appropriations for commitments was 11.2 billion and for payments 5.0 billion euros.

Figure 6 shows the actual and estimated net budget receipts using 2005 data. The contributions are based on actual 2005 data, estimated gross receipts according to the power politics model and actual gross receipts according to actual data. Figure 6 clearly illustrates that there is a significant discrepancy between the model predictions and reality. In most cases the model is able to predict whether a country will be a net recipient or net contributor but, clearly, the power politics model tends to overestimate the receipts of the new Member State. The most notable errors concern Spain and Sweden, the former being a net recipient although the power politics model predicts that it would be a net contributor and the latter being a net contributor although the model prediction is a net recipient.

An important element that restricts the budget receipts of the new Member States is the four-percent-receipt cap proportional to GNI that was agreed in Berlin as part of Agenda 2000. The predicted receipts based on GNI ratios are presented in Figure 7. It clearly illustrates that should the power politics model work unrestrained the budget cost would be much higher than with the four-percent ceiling. The average receipts based on the GNI ratio in EU27 amount to 6.3 percent at 36.2 billion euros, the difference with the four-percent cap being 13.5 billion euros. The small countries and Bulgaria in particular significantly exceed the cap.

Does the comparison suggest that the power politics model is useless for the prediction of the budget costs? We believe that that is not necessarily the case. First, the year 2005 was the first full year of membership for the

Figure 6 Estimated and actual budget receipts in 2005, million euro



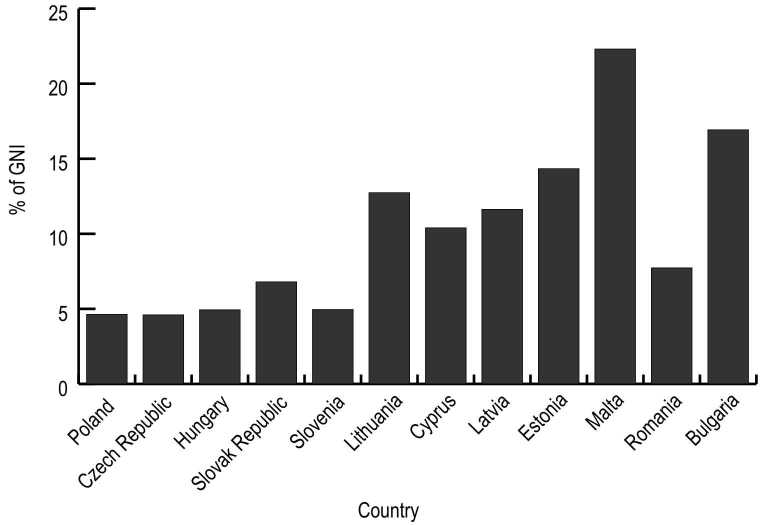
Source: http://ec.europa.eu/budget/library/documents/revenu_expenditure/agenda_2000/ /allocrep_2005_en.pdf and author's calculations.

new Member States. The power politics model deals with long-term predictions. It is quite natural that the new Member States have not been able to use their influence in all aspects of budget allocation.

Second, the budget allocation in 2004-06 is based on the Financial Perspective for 2000-06 (Agenda 2000) that was adjusted for enlargement through the Copenhagen package. Since Agenda 2000 was adopted by the incumbent countries they all had the power to agree to additional constraints for the allocation. Actually the same applies to the Financial Perspectives 2007-13 too since, if there had been no agreement, the fall-back solution would have been at least temporarily something reminiscent to Agenda 2000, which would have diminished the bargaining power of the new Member States.

Third, the appropriations for commitments and payments for new Member States as set out in the Copenhagen package are experiencing a clear upward trend and they are approaching the power politics predictions. In the long run the predictive power of the power politics model is clearly improving.

Figure 7 New Member States' predicted budget receipts proportional to GNI in EU27



Fourth, before the entry of NMS10, the incumbent countries (especially the net contributors) were willing to exert more control over expenditure. As demonstrated above, the net contributors can reduce their budget costs by restricting the expenditure or by increasing their influence. In the analysis above, we have argued that the pre-enlargement institutional reforms and the Financial Perspectives confirm this. The former favoured the biggest Member States that are also the major net-payers and the four percent of GNI support cap that was set in Berlin as part of Agenda 2000 limits the receipts of the new Member States significantly.

Finally, as the power politics model has worked well for decades and for the various compositions of the EC/EU there is no reason to think that this has changed. It is likely to take some time before the new Member States are able to change their status from newcomers to true full members in EU policies or budget negotiations. Already now, the power politics model is an appropriate tool for comparing the impact of different voting rules and in the long run to evaluate the budget costs and allocations when the Union expands.

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