Dirk-Jaan Kraan

The political economy of budgeting in Hungary

Similarly as in most Central and Eastern European EU accession countries, Hungary has experienced rapid economic growth in recent years. Over the period 1997–2002 GDP growth averaged 4% per year, around 2 percentage points above the EU average. If maintained such a difference would lead to a closing of the gap between Hungarian per capita GDP and average EU per capita GDP of 37% in 2005 in some 25 years.

THE NEED FOR INSTITUTIONAL REFORM

Whereas the private sector in Hungary is prospering and general economic conditions are healthy, the general government sector is not under control. The general government deficit on ESA basis increased from –2.8% to –9.4% GDP from 2000 to 2002.[1] In the first years after the elections of 2002, the government has succeeded in partly redressing the situation, reducing the deficit to 5.4% GDP, but in the advent of the elections of 2006, the deficit surged again to a level of 6.1% in 2005[2]. Since the beginning of the century the government has announced plans to reduce the deficit to acceptable levels. The EU pre-accession programme 2002–2006 aimed at a deficit of less than 3% in 2005, the EU convergence programme 2005–2008 established in May 2004 after EU entry aimed at reaching the 3% band in 2008. The December 2004 update of the EU convergence programme even aspired to reach the 3% band in 2007. A year later the December 2005 update postponed the attainment of this level again to 2008. According to the estimates of the European Commission in reality the deficit is increasing since 2004 and will reach a level of more than 7% in 2007 on the basis of pre-elections policies.

Hungarian budget policy over the last decade has been characterized by strong electoral spending and insufficient efforts to redress the situation after elections. For instance in the run up to the elections of 2002 under a centre-right cabinet, a series of large wage hikes was decided, culminating in a 55% salary increase for army officers in January 2002 and a 50% wage increase for all public servants in September 2002. In the run up to the elections of 2006, under a centre-left cabinet a comprehensive five-year tax cut package was adopted in 2005 amounting to a revenue loss of 1% of GDP in 2006. In addition social expenditures in the sphere of pensions and family benefits were extended amounting to an expenditure increase of 1.6% of GDP in 2006. This general pattern of budgetary development has not been much different between cabinets of

different political orientation although the spending and tax relief priorities have been slightly different.

Against this background it is remarkable that budgetary policy has become highly politicized in Hungary. After the recent elections in which the centre-left coalition has maintained its majority, the opposition has severely criticised the cabinet for its failure to put the deficit under control. The political turmoil has even increased after an admission by the prime minister that his cabinet had done little to steer the budget in the right direction. The public outcry that this admission caused, not only among the supporters of the opposition but among the public at large, is the more remarkable because the facts about the Hungarian budget, as well as the criticism of budgetary policy by the European Commission, the IMF and the OECD were since many years in the public domain and could have been known and highlighted by the opposition and the media at any time in the last few years. It is as if politicians have suddenly decided to use the shortcomings in budgetary policy to blame each other whereas it is well known that both camps, when in power, have hesitated to take the necessary measures.

It is important to note however, that there is nothing particularly Hungarian about this course of affairs. Political economists have argued since long that politicians in representative democracies are subject to incentives that may lead to less than optimal economic results.

In the public sector there is no invisible hand that steers decision-making in the direction of the general interest. Two of the most important causes of government failure that have been identified in the area of budgeting are known as the common pool problem and universalism. What is somewhat different in Hungary as compared to many other OECD countries, is that until now Hungary has not

yet established sufficient institutional barriers to block certain avoidable forms of government failure. These institutional barriers should be distinguished from budgetary policies. This paper will argue that the present budgetary problems in Hungary are not in the first place due to wrong or irresponsible budgetary policies but rather to shortcomings in the institutional set-up of the Hungarian budget process. This argument assumes that it makes little sense to blame politicians for actions that prevailing institutions allow and from which they can not refrain without being punished in the political arena.

The importance attached to the distinction between budgetary policy and budgetary institutions is characteristic for the analytical approach of political economy[3]. In this approach the motivation of actors such as politicians and bureaucrats is assumed as given. Reform proposals focus on the change of institutions and are assessed in the light of probable behavioural consequences in the light of given motivational assumptions. In practice institutional reform mainly proceeds on the basis of trial and error. Lessons are learned by bad experiences and practical considerations guide the proposals for innovations. Furthermore countries are looking at each other's experiences and organisations such as the OECD and the IMF disseminate information on "best practices". The perspective of political economy may add to the understanding of the problems and the effectiveness of the proposed solutions and thus contribute to the reform effort.

BUDGET POLICY AND INSTITUTIONS

In the area of budgeting the distinction between institutions and policies is not always evident. Sometimes it is thought that institutions refer to rules and policies to unique decisions, but this criterion is not always applica-

ble. Indeed there are various types of institutions and various types of policies. For the purpose of this paper it suffices to pay attention to institutions that can be labelled as competence rules. These rules describe the competences and obligations of the public authorities who are responsible for the enactment, execution and control of the budget. This paper will focus in this connection on the budget of the central government as opposed to the budgets of subnational governments. Roughly speaking these competence rules can be found in the organic budget law, that most central governments have established, but some of them may not be included in that law. The latter often applies to two sets of competence rules that are particularly important from the perspective of this paper, namely the budget time table and rules of budgetary discipline.

Whereas institutions are always rules, applicable to all cases that satisfy the conditions stated in the rules, budgetary policies may apply to unique cases but may also be rules themselves. Budgetary policies in the strict sense are usually conceived as decisions concerning the budget, in particular authorizations to make expenditures, to collect revenues and to borrow in a particular year. However, many of such authorizations are materially provided in substantive laws preceding the enactment and execution of the budget. For instance, at the revenue side of the budget, the tax laws materially authorize the collection of tax revenues. Similarly, at the expenditure side, many social benefits are materially authorized in so called 'entitlement laws' which establish claims to receive public services on the part of citizens, regardless of subsequent budgetary authorization. In many countries, including Hungary, important expenditures for entitlement benefits, are not formally part of the budget, namely social security benefits and health benefits. In all these cases the substantive laws that materially authorize revenue col-

lection, expenditures and borrowing, will be considered as budgetary policies in a broad sense, even though they apply to rules rather than decisions for unique cases.

Summarizing, the distinction between budget institutions and budget policies is based on content rather than on the generality of the decision. Budget policies are decisions that authorize revenue collection, expenditures and borrowing, regardless of whether these authorizations are comprised in a budget law in formal sense. Budget institutions are rules that define the competences and obligations of the authorities that are responsible for the enactment, execution and control of the budget, regardless of whether these rules are comprised in the organic budget law.

For budget institutions to be effective, it is important that they are broadly accepted by the political community of the country concerned. For this reason some countries have special rules for the enactment of the organic budget law that require approval by a qualified majority in Parliament[4]. If the organic budget law can easily be changed by each new government, politicians may be inclined to consider the law as just another tool to facilitate their budgetary policies. The budget procedure thus becomes politicised and cannot effectively fulfil its role as a constraint on the behaviour of the incumbent government. Therefore it is important that the organic budget law and other budget institutions command broad political approval, even if there is no formal qualified majority requirement. Since in the long run this is in the interest of all major political parties (every incumbent party may be ousted in a few years), the government may also informally adopt procedures that guarantee such broad support[5]. For instance, the government can encourage such a sphere of consensus by committing the preparation of institutional change to working parties in which financial experts of the opposition are represented.

GOVERNMENT FAILURE

The common pool problem and universalism have been identified by political economists as major causes of government failure in representative democracies[6]. In order to illustrate these problems it is necessary to make a specific assumption about the motivation of politicians. In this paper it will be assumed that politicians maximize the utility flowing from the provision of public services to themselves and groups in the electorate with similar preferences. Politicians are seen in other words as representatives of certain subgroups of the electorate with similar preferences for public services and they are trying to serve the interests of these subgroups as well as they can.

This assumption seems rather different from the more conventional notion in political economy that politicians maximise votes in elections (Downs 1957). Indeed in the latter view, as *Downs* put it, "Parties formulate policy in order to win elections, rather than win elections in order to formulate policies."[7]. It has been noted that the difference might be less important than it seems at first sight because in an electoral system of first past the post or in a system of proportional representation with no more than two parties, and assuming complete information on the part of the electorate about the policy positions of the candidates and no abstentions from alienation, politicians are compelled to choose vote maximizing policies on penalty of certain electoral defeat (Wittman 1983). However, in reality the electorate is not completely informed about policy positions and many citizens do abstain from alienation. In these cases politicians may be able to seek preferred policies without too much electoral consequences. Furthermore, there are many systems of proportional representations with more than two parties, including Hungary. In this case they can trade off policy preferences against voter support. Finally, the total conver-

gence of candidate policy positions implied by the assumption of vote maximization, seems for most political systems rather implausible. So it does for Hungary. In this light the present exposition will be based on the assumption that politicians seek the implementation of preferred policies.

The common pool problem refers to the phenomenon that services financed from common resources tend be provided in too large quantities, due to the fact that the benefits from the services are more concentrated than the costs of the common resources. In the case of the government budget the common pool problem implies that a parliamentary majority may decide to fund a publicly provided service in larger than optimal quantity if that service benefits that majority. In that situation the minority pays a part of the tax price but does not benefit from the service. The problem is caused by the fact that in general the benefits from publicly provided services are distributed more unevenly than the costs of the taxes that are used to finance the services. Benefits are more concentrated than costs.

The common pool problem is exacerbated in the absence of a binding fiscal rule. In that case the common pool not only exists of current revenue but also of the proceeds of loans which have to be redeemed by future revenues. The common pool problem thus gives rise to a problem of time inconsistency: debt funding of additional expenditures does not originate in time preference of current benefits over future benefits, but in the fact that current benefits are more concentrated than future revenues (Drazen 2000). Therefore future revenues may be used for current expenditures ('added to the common pool') via the increase of public debt, in spite of the fact that no politician favours such action on the basis of time preference alone[8].

The common pool problem does not explain how it is possible that services may be provid-

ed in higher than optimal quantities if they benefit only a minority of the politicians. However this phenomenon occurs as well and it can be explained by universalism.

Universalism is the phenomenon that minorities support each other's proposals for output expansion of services that benefit them (Tullock 1981). In the US, where this process is mainly taking place in the Congressional budget process and well observable in view of the public character of the proceedings, universalism is mainly studied as a negotiation process. This process is known as 'logrollling' and consists in the exchange of votes in support of funding proposals for separate services. In this process politicians attempt to bid down the outputs of services that do not benefit them and to bid up the outputs of services that benefit them. Under certain conditions, an equilibrium can be reached in which all services are provided in too large quantities, even if each of them benefits only a minority.

It has been noted that the phenomenon of logrolling is essentially equivalent to the practice that occurs in European cabinet meetings when ministers acquiesce in each other's funding proposals, in which they have no political interest (Kraan 1996). This phenomenon is known as the "non-intervention principle". Since it implies that ministers do not oppose each other's proposals for increased funding of services that benefit minorities, it results in the approval of all such proposals.

Universalism usually coincides with the common pool problem. Minority services are not only provided (due to universalism), but also provided in too large quantities (due to the common pool problem). It is in particular this combination of government failures which causes the gravest kinds of distortionary allocation. This is the case because services benefiting minorities generally have more distortionary tax prices (in the sense of higher deviation from unit costs) than services benefiting majorities,

because they are more heavily subsidized by the non-benefiting part of the citizenry.

The appendix provides an illustration of both kinds of government failure on the basis of some very simple models of political decision-making.

TOP DOWN BUDGETING

Political economists have generally found that institutions in the public sector may lead to deviations from optimal allocation in the same way as institutions in the private sector. In both cases improvements are usually possible by institutional reform, without assuming that individual consumers or producers will put aside their individual interests. What makes the public sector fundamentally different from the private sector, is that in the former there is no equivalent to the free market under conditions of full competition and complete information. In the public sector there is no such "ideal" set of institutions. Indeed there is a substantial amount of literature in political economy showing that such institutions can-not exist[9] in the realm of collective decision-making, regardless the motivation of agents such as politicians and bureaucrats. This means that government failure is a more fundamental and less tractable problem than market failure. The latter can often be addressed by moving closer to the ideal, for instance by removing obstacles to competition or improving information. Similar remedies are not available in public sector reform. Government failure cannot be fundamentally eradicated. However, this does not mean that there is no scope for institutional reform. Especially in the area of budgetary decision-making, OECD countries have made considerable progress in the last decades with reforms that have lead to generally beneficial results[10]. On the basis of practical experiences, but also stimulated by theoretical insights, more atten-

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tion has particularly been given to reforms aimed at mitigating government failure caused by the common pool problem and universalism. In particular it turns out that reforms aimed at so-called top-down-budgeting can eliminate certain excesses that are caused by the combination of both kinds of failure.

Top-down budgeting can be defined as budgeting according to a time table which guarantees that definitive decisions about the totals of both revenues and expenditures are taken before decisions are taken at the line item level.

Important aspects of top-down budgeting are:

❶ all major proposals for changes in revenue legislation have to be considered simultaneously with all major proposals for expenditure increases or cuts. This implies that all trade offs can be made: between different revenue sources, between different expenditures and between revenue sources and expenditures.

❷ top-down budgeting is compatible with all kinds of fiscal rules: those that set constraints on the total deficit, those that set constraints on the current or operational[11] balance (golden rules) and those that set constraints on expenditures.

❸ once the decisions about the totals are made, they should be maintained rigorously, not only during the rest of the budget preparation process, but also during budget execution.

The consequence of top-down budgeting is that excessive (Pareto-inferior) expenditures will be cut in broad packages or across the board in order to finance tax relief. This will be supported by all major political groups in parliament, if in previous periods the common pool problem and universalism have led to gravely distortionary allocation in favour of minority groups. Top-down budgeting will generally not cure the overspending on services that benefit a governing majority (as opposed to overlapping coalition of minorities). However, any kind of fiscal rule (overall, current or operational balance rules or mid-term expenditure ceilings) may at least alleviate the common pool problem, by excluding excessive deficit financing. This will eliminate the time inconsistency that otherwise aggravates the common pool problem.

Effective top-down budgeting requires two types of institutional rules. The first concerns the budget time table. Top-down budgeting implies that in an early stage of the budget process, say at least half a year before the start of the budget year, a definitive decision is taken on the totals of revenues and expenditures and the resulting deficit. This requires that at that time a first reliable set of estimates is available on the tax revenues and expenditures on the basis of current policy. The macro-economic and demographic assumptions underlying these estimates should be published and be made by an independent public forecasting institute. Top-down budgeting does not imply, as is sometimes thought, that decisions on the totals are made before agencies and line ministries have had an opportunity to submit proposals for new initiatives. Indeed it is important that before the decisions on the totals are taken, such proposals are solicited, because otherwise the decisions on the totals will lack credibility by the agencies and line ministries.

The second type of institutional rules is rules of budgetary discipline. These have to assure that the decisions on the totals are rigorously enforced after they have been made. This applies to the rest of the budget preparation process as well as to the execution of the budget. In order to make this possible the decisions on the totals have to distribute the totals among the ministerial portfolios, both at the expenditure and the revenue side. Rules of budgetary discipline at the expenditure side have to guarantee that ministers submit their final budgets at the line item level in accordance with the totals distributed to them. New developments can be taken into account but only through reallocation among portfolios. It

is important that at the expenditure side the general rule should be that after the decision on the totals all changes should be compensated regardless whether they originate in policy change or in estimate updates on existing policies. However, a government may decide that estimate updates on certain entitlement laws in the sphere of social security may remain outside the compensation requirement to stimulate the automatic stabilization effects of the budget[12]. Budget discipline at the revenue side requires that all legislated policy changes are compensated. Estimate updates at the revenue side have to be left out of the compensation requirement for reasons of both macro-economic stabilization and tranquillity in the budget process (these estimates tend to change per month).

Rules of budgetary discipline can only function if the budget is transparent. In particular it is necessary that a clear and objective distinction is made between estimates of the budgetary consequences of current policies and those of proposed policies. Transparency in this sense requires permanent updating of information about the estimated outcomes of the current budget year and on the estimates for future years on the basis of both current policy and proposed policy change. Moreover the macro-economic assumptions of revenue and expenditure estimates should be updated at least twice a year[13] and be published in a way that allows public scrutiny. Only on the basis of these forms of transparency can budgetary discipline be effectively enforced.

Rules of budgetary discipline can only function smoothly if the estimates cover not only the budget year but also two or three out-years after the budget year. These multi-annual estimates should have the same binding force as the estimates for the budget year and be subject to the same compensation requirements. In general government policies have become so complicated that changes can only effectively

be implemented over a multi-year period. Ministries can only be made responsible for compensation if there is enough time to change policies and organisational structures, including the required legislation. Rules of budgetary discipline have to apply to the budget execution phase as well. Some countries, including Hungary, have quite rigid rules on deviations from the budget, once it has been improved by Parliament. However, the deviations that are possible, sometimes after quite cumbersome procedures or even the enactment of supplementary appropriations laws, do not always require compensation. This is not effective from the point of view of top-down budgeting. The budget should be flexible and allow rapid and easy adjustment to new circumstances. However, compensation should always be required and line ministers should be thoroughly indoctrinated from their first day in office that compensation is the iron law of budgeting that can only be broken under penalty of dismissal.

PRIORITIES FOR INSTITUTIONAL REFORM IN HUNGARY

In recent years several international institutions have made suggestions to the Hungarian government for adjustment of budget institutions[14]. Since the elections of 2006, the government has unmistakingly addressed some of the most urgent problems in budget control, but until now it is not entirely clear whether the institutional side of the problem is getting sufficient attention. This paper has argued that it is important to distinguish between budget policy and institutional reform. Cutting expenditures and controlling the deficit is certainly important, but even more important is institutional reform which will ensure that expenditures and the deficit are kept under control in the longer term.

For institutional reform to get hold, it is important that rules are implemented on the basis of broad political agreement and that they are supported by the opposition of the day. For this to happen it is necessary that institutional reforms are prepared by experts who command authority and are trusted across a broad political spectrum. In the Hungarian context with a strong and independent Central Bank and a similarly strong and independent State Audit Office, it may for instance be important to have representatives of these offices in a committee that makes proposals for institutional reform, possibly next to representatives of the Ministry of Finance, the Prime Minister's Office and academics of various political orientations.

Hungary has in recent years been struggling to get the budget of its central government under control. However, there is nothing special Hungarian about the causes of overspending and revenue shortage that have plagued the Hungarian budget process. Indeed, many OECD countries have gone in the recent past through similar periods of slipping control. It has been argued in this paper that from the perspective of political economy some of the problems can be identified as the common pool problem and universalism that are omnipresent in budgeting processes in western countries. What is necessary for Hungary is to strengthen its budget institutions so that some avoidable consequences of these kinds of government failure will be mitigated. The experiences of other OECD governments may be helpful in this respect.

An institutional reform that is most urgent from this perspective is the establishment of a firm procedure of top-down budgeting. Such a procedure is compatible with different kinds of fiscal rules, for instance total deficit rules, golden rules or expenditures ceilings. For the implementation of this reform it is necessary to strengthen the budgetary time table and to make sure that final decisions on the totals of expenditures and revenues, as well as on the deficit, are taken in an early phase of budget preparation. At the same early occasion the totals have to be distributed over the ministerial portfolios, both at the expenditure and at the revenue side. In Hungary, funds for new initiatives have typically still been allocated in a very late stage of the budget preparation process[15]. The consequence is that current policies are left untouched because ministers have no incentive the reallocate in order to make room for new initiatives as long as they have hope to have their new initiatives funded from new money.

To establish an effective practice of top-down budgeting it is also necessary to promulgate a set of clear and simple rules of budgetary discipline. These rules should require compensation for every instance of overspending, regardless of whether originating in updated estimates of current policy or in policy change. Only overspending caused by estimate updating in the sphere of social security legislation may be exempted from the compensation requirement. Similarly, revenue shortfalls originating in legislative change (not in estimate updating) should be subject to compensation.

A requisite for the effective implementation of rules of budgetary discipline is budget transparency. In particular it is necessary that a clear and objective distinction is made between estimates of the budgetary consequences of current policies and those of proposed policies. In addition it is necessary that the macro-economic assumptions of revenue and expenditure estimates be updated at least twice a year[16] and be published in a way that allows public scrutiny. These conditions have not yet been fully satisfied in the Hungarian budget process.

Finally, for rules of budgetary discipline to function smoothly it is necessary that the budget contains multi-annual estimates with exactly the same binding force as the estimates for the budget year. In particular the multi-annual estimates should be subject to perma-

nent updating on the same footing as the estimates for the budget year. Similarly, they should be subject to the same compensation requirements in case of overspending or legislated revenue reliefs.

Rules of budgetary discipline should be widely dispersed and made available throughout the government. Of course at the end of the day, the effectiveness of these rules is dependent on the willingness of ministers to comply. A special responsibility in this respect lies with the Minister of Finance and the Prime Minister. However, their tasks will become easier if the rules command wide support and are seen by the whole of the political community as an impartial instrument to improve allocation in the public sector and to make the use of public resources more efficient.

APPENDIX

The common pool problem can be demonstrated by use of a simple model which describes the preferences of a single politician for a single publicly provided good *(model 1)*. The model assumes a strict zero balance fiscal rule and does not treat the time inconsistency problem that arises if debt financing is allowed.

Model 1

(1) $u_\theta = u/_\theta (x_1, m_\theta)$
(2) $g_\theta = p_{\theta 1} x_1 + m_\theta$
(3) $p_{\theta 1} = (h/k) \ \tau_\theta c_1$

The first expression is the utility function of the politician, who is called θ *(Theta)*. It is determined by the output of a publicly provided good: x_1, and net income of the politician: m_θ. Output is measured as the number of units available to each beneficiary of the good. The utility function is of the usual shape, inducing convex indifference curves[17]. The second expression is the budget constraint, with gross income of the politician: g_θ, tax price of the publicly provided good to the politician: $p_{\theta 1}$, and net income of the politician (after tax): m_θ. The third expression is the definition of the tax price of the politician. The tax price is the tax share of the politician[18]: τ_θ, times the unit cost of the publicly provided good 1: c_1, times the number of beneficiaries of the publicly provided good: h, divided by the capacity of good 1:

k. Recall that the politician is supposed to be representative for a group in the electorate with similar preference and similar incomes.

In the case of a pure public good *(k = h)* the tax-price of the service to the politician amounts to: $\tau_\theta c_1$. In this case only on unit of the good has to be funded per beneficiary unit. In the case of a pure private good *(k=1)*, the tax price to the politician amounts to: $h \ \tau_\theta c_1$. In his case h units of the good have to be funded per beneficiary unit. This tax-price equals the unit price c1 if the number of beneficiaries is equal to the reciprocal of the tax share: $h = 1/\tau_\theta$. This is for instance the case if the good is provided to all citizens and if the politician pays the average tax price. If, on the other hand, the private good is only provided to the politician *(h=1=k)*, the tax price is $\tau_\theta c_1$, which in the case of a private good is almost zero and the good is effectively free. In practice many publicly provided services are somewhere in between purely public and purely private *(1<k<h)*. Moreover, in a single budget year not all citizens are beneficiaries, for instance: education, social security. This implies that the number of units that the government has to fund per beneficiary unit is typically smaller than the reciprocal of the individual tax-share so that the tax-price to the politician is smaller than the unit price: $h/k < 1/\tau$ so that $(h/k) \ \tau_\theta c_1 < c_1$. This implies that for a politician and the citizens that he/she represents it is more beneficial to have

Figure 1

OVERSPENDING FROM COMMON RESOURCES
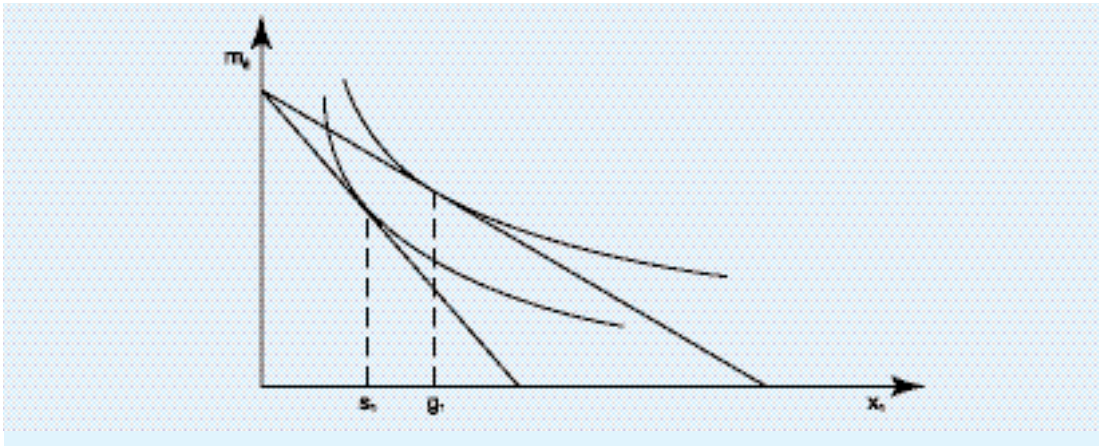
the service provided by the government than to buy it in the market. In the former situation non-beneficiaries contribute to the funding via their tax-shares, whereas in the latter case the beneficiaries have to pay the full unit costs. This, in turn implies that the politician will be in favour of an output of the service that is higher than optimal.

The situation can be illustrated graphically by a conventional indifference diagram *(see Figure 1)*. The horizontal axis measures the output of the publicly provided good available to the politician, the vertical axis measures net private income after tax. The figure shows both the budget constraint based on unit price c_1 and the budget constraint based on the lower tax price $p_{\theta 1}$. The former leads the politician to favour output s_1, the latter to favour output q_1.

Universalism can be described by a small extension of model 1 that adds some additional goods and politicians to the decision-making process *(model 2)*.

Model 2

(1) $u_\xi = u_\xi (x_1, x_2, x_3, m_\theta)$
$$\xi = 1,2,3,\ldots\ldots, v$$

(2) $g_\xi = p_{\xi 1} x_1 + p_{\xi 2} x_2 + p_{\xi 3} x_3 + m_\xi$
$$\xi = 1,2,3, \ldots\ldots, v$$

Expression (1) describes again the utility function of the politicians. In this case there are three goods and v politicians. Expression (2) describes the budget constraint of each of them. For convenience the tax-prices for each politician are in this model taken as given. Suppose now that goods 1, 2 and 3 are services that benefit only a minority of the citizens, for instance education, social security and farm subsidies. Politicians who are in favour of a certain new educational service can now conclude a coalition with politicians who are in favour of an increment in social security service provision, so that both services are provided. In itself this does not need to constitute a major government failure because it is in the interest of both politicians to make concessions on the level of additional funding. This is illustrated in F*igure 2* which shows the attribute space for services 1 and 2.

The ideal points of politicians 1 and 2 are indicated by *(q_1,0)* and *(0,q_2)*. Remember that q1 is probably not the optimal output for education (good 1) because the tax-price of education for politician 1 is too low. The optimal output for education may for instance be s_1. Similarly, q_2 is probably not the optimal output for social security (good 2) because the tax-price of social security for politician 2 is proba-

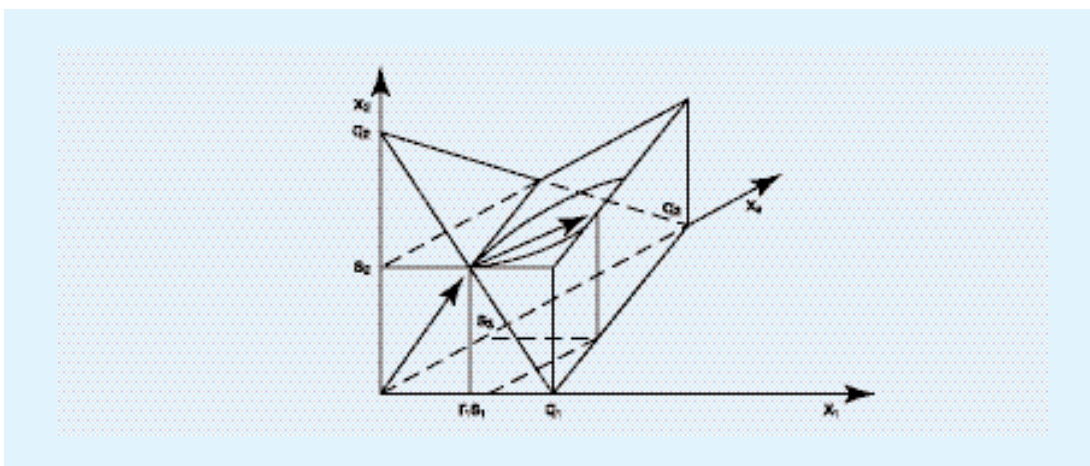*Figure 2*

VOTE TRADING ON TWO PUBLICLY PROVIDED GOODS
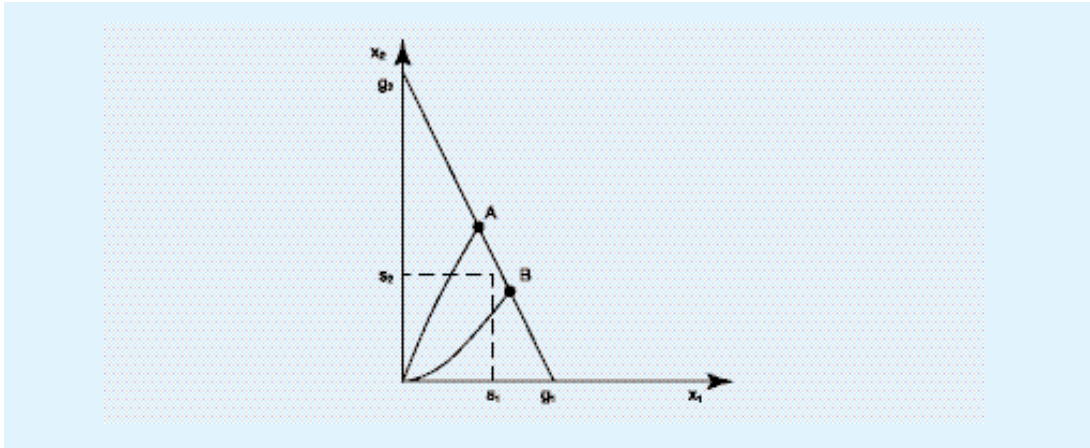
bly too low. However, starting from the initial situation $O = (0,0)$, the coalition of politicians 1 and 2 will probably agree at some compromise at the interval AB of the contract curve between $(q_1,0)$ and $(0,q_2)$. This interval constitutes an improvement for both politicians vis-a-vis the status quo O. However, each point of this interval represents a combination of lower outputs than q_1 and q_2, because both politicians have to make concessions. Indeed the set of output combinations represented by the contract curve does not need to be too far away from the optimal output combination (s_1, s_2).

However, vote trading in a majority coalition is not yet universalism. The latter phenomenon occurs only if more than a single majority coalition engages in vote trading. In model 2 this would occur if, for instance, politician 1 would enter into a coalition with politician 2 as well as with politician 3. Unfortunately the resulting situation cannot readily be illustrated graphically because this would require a graph in three dimensions, but some visual support may be provided by a providing a two-dimensional graph in perspective *(Figure 3)*.

Figure 3

VOTE TRADING ON THRE PUBLICLY PROVIDED GOODS (UNIVERSALISM)

In this figure $(q_1,0,0)$, $(0,q_2,0)$ and $(0,0,q_3)$ represent the ideal point of the politicians.

If politicians 1 and 2 again enter into a vote trading deal an output combination such as $(s_1,r_2,0)$ on the contract curve between $(q_1,0,0)$ and $(0,q_2,0)$ can be reached. A subsequent deal between politicians 1 and 3 may then lead to an output combination such as (s_1,s_2,s_3). It is characteristic for this result that it is not anymore in the Pareto-optimal triangle between the three ideal points. This is indeed the defining characteristic of universalism: it leads to non-Pareto-optimal outcomes and can even lead to the adoption of proposal (q_1, q_2, q_3), in which all goods are provided in too large, non-optimal quantities. Outcomes which deviate from the Pareto-optimal surface can be avoided if all trade-offs between different expenditures, different revenues and expenditures and revenues are considered at the same time.

NOTES

[1] IMF (2005)

[2] European Commission (2006). This number excludes the consequences of pension reform, the purchase of military Gripen aircraft and quasi-fiscal activities of public enterprises.

[3] In this paper I use the term political economy for the area of scientific analysis that is also known as public choice theory. It comprises an empirical branch which is concerned with political and bureaucratic behaviour and a normative branch which is concerned with institutional design.

[4] The Act on Public Finance, which is the organic budget law of Hungary, can be changed by simple majority. Strengthening of the majority requirement would necessitate a constitutional change.

[5] For instance by de facto requiring broad consensus in the parliamentary committee reporting on changes of the organic budget law and other budget institutions. Such practices exist in many OECD countries.

[6] See for instance Poterba – von Hagen (1999)

[7] Downs (1957), p. 28

[8] Apart from the common pool problem, time inconsistency in public budgeting may also arise from the political business cycle. According to the Nordhaus model pre-electoral spending may lead to favourable election results for in incumbent government if voting is retrospective, electors are motivated by unemployment and inflation and experiences are discounted with time past (Nordhaus 1975). The empirical evidence for the Nordhaus model is mixed. However the evidence for a related model for an business cycle in fiscal policy is strong (Alesina – Cohen – Rubini 1992). Moreover the latter model suffers less from the conceptual problem that it assumes irrational voters (Drazen 2000).

[9] Much of this literature builds forth on the so called impossibility theorem, proved by Arrow (1952).

[10] See for instance: Alesina – Perotti (1999)

[11] The operational deficit takes account of depreciation of public capital goods, the current deficit does not.

[12] For instance in the UK the AMA sector (annually managed appriations) mainly consisting of social security and health entitilements remains outside the compensation requirments. However, in Sweden and the Netherlands all changes in estimates on entitlement laws have to be compensated, if necessary by change of the laws.

[13] Once to inform the decision about the totals and once to update the budget before submission to Parliament.

[14] For instance: OECD (2004), OECD (2006), IMF (2004)

[15] For instance in the "programme planning" procedure initiated during budget preparation 2005 and in the "cental basket" procedure used during budget preparation 2006.

[16] Once to inform the decision about the totals and once to update the budget before submission to Parliament.

[17] Indifference curves are convex if the utility function is monotonically increasing in x_1 and m_θ and quasi-concave.

[18] The tax share of the politician is the share of total tax revenues contributed by the politician. For instance, if there are 10 million citizens, and the politician has an average tax share, $\tau_\theta = 1/10,000,000$.

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