## Gábor P. Kiss

# Simulation of fiscal institutions: passport or pass partout

The delay in accession to the euro zone makes the Hungarian economy vulnerable, thus the present state of public finance may be the source of serious problems. The prerequisite of accession is for the deficit measured with the European methodology to stay below 3 per cent of GDP, whereas the deficit in 2002 and in 2006 exceeded 9 per cent and fluctuated between 6-8 per cent in the interim period. Fluctuation is meant here literally since the Hungarian figures were modified systematically and rather substantially after the first publication of data. Beyond the high level of deficit, another at least as serious a problem lies in the significant role played by creative accounting and the (quasi-fiscal) circumventing of official accounting. This is partly in contradiction with the European statistical methodology and leads to a supplementary revision of data. But partly even this methodology makes "deferred payment" possible, for example, in the form of expost debt assumption or PPP repayment instalments. The alternative calculations of the central bank are also corrected with that, thus revealing that the actual deficit-to-GDP in 2002-2004 was permanently in the 8-9 per cent range, and thereafter it went beyond 9 per cent in 2005 and 10 per cent in 2006.

Masking the reality by gimmicks is only a symptom of what is usually referred to as

deficit bias or the lack of social consensus. Real fiscal adjustment could also be implemented without a consensus by referring to the European fiscal framework which can be taken as mandatory, but in our case it appears to be a less credible argument in the light of the considerable deficit target overruns. In this situation fiscal institutions introduced at national level by which fiscal policy binds its own hands can be a solution.

Several proposals have been formulated in connection with the introduction of new fiscal institutions, and in 2006 the requirement of a fiscal balance rule and a balance reserve was incorporated in the Public Finance Act. The problem diagnosis and most proposals for solutions are similar, underlining, in general, the importance of transparency that restricts gimmicks (Bathó, 2006) or expressly mentioning it as a priority (Kopits, Romhányi, 2007). Concrete proposals have also been drafted to handle the gimmicks (P. Kiss et al., 2005)

Taking into account the specific Hungarian features, I shall make a proposal for fiscal institutions that are supported on three pillars and are complemented with three constraints.

• The first pillar is the expenditure rule the circumvention of which is prevented by the first constraint through a broader coverage and definition of the category of expenditures.

- The second pillar is the golden rule of local governments according to which indebtedness can grow only as a result of an imbalance between capital revenue and expenditure. This is where the second constraint comes in preventing central spending cuts from having a disproprotionate impact on local government finances.
- The third pillar is an independent organisation which enhances transparency with its forecasts and by adjusting with gimmicks and one-off items. The third constraint impedes deviation from the expenditure rule by generating a contingency reserve.

In the next pages, I shall demonstrate by numerical data that, if the deficit target is considered given, what level of tax increase would required or what level of tax reduction could be possible by selecting the growth rate of the expenditure rule. Finally, by overviewing the composition of expenditure, I shall examine to what extent the rate of the expenditure rule can be achieved without extraordinary efforts.

#### **HUNGARIAN FEATURES**

In many countries in the world there are fiscal institutions aimed at improving budgetary discipline and planning. This can be numerically defined fiscal rules or a fiscal organisations that contribute to the budget planning with independent forecasts. The experience of these countries can guide us in finding a rule and an organisation that could represent an effective solution in Hungary by eliminating the existing bottlenecks (or if you like, loopholes). The experience should however be treated with caution as the empirical evidence is ambiguous and concrete solutions play a dominant part in it.1 For instance, in the case of a balance rule no further improvement can be demonstrated after compliance with the rule. If the rules limiting the growth rate of expenditures were

examined separately, then continuous improvement could be observed. Contrary to other rules, the expenditure rule makes it also possible for the fiscal policy to dampen the swings in the economic cycle since it imposes no constraint on the automatic stabilisators operating mainly on the revenue side.

The success of the fiscal institutions is largely dependent on how far the applied concrete solutions meet the requirements of the given country and provide answers to specific problems. A number of studies higlighted the deficiencies in transparency and the weaknesses in the planning, adoption and implementation of the budget in Hungary. The ultimate cause behind fiscal problems is to be found in the deficit bias rather than technical explanations similar to the one mentioned above. To this effect, not only technical changes are required but a constraint on fiscal policy should be introduced whose enforcement is assured by automatic corrective mechanisms and which rule cannot be changed by a simple legislative amendment. Owing to the usual circumvention of the rules, there is a need for stringent constraints to eliminate the existing loopholes since with the emergence of the deficit bias any rule will become ineffective at the weakest link.

The question is: which would be the most favourable out of the various fiscal institutions. With Hungary's EU accession the compliance with the EU-level deficit and debt rules has now become mandatory. Two kinds of weaknesses became apparent in connection with these rules. On the one hand, loopholes can be found around these rules for shorter or longer periods through quasi-fiscal and creative accounting operations. Let us refer, for example, to public investments carried out in the PPP-schemes. The upfront costs of these investments disappear from deficit and debt at the time of outsourcing from the traditional accounts, and thereafter repayment instalments appear with delay. The other problem is that

the developments falling outside the scope of fiscal policy (economic cycle, inflation, exchange rate) may to a large extent affect deficit and debt indicators. Since the impacts of fiscal policy and these exogenous factors cannot be separated in practice, the responsibility of fiscal policy is less evident. Furthermore, the Government can control only the central level of public finance, while having only an indirect effect on local governments. If – for example – a fiscal consolidation that would have decreased the expenditures of local governments fails, then it is not obvious who is responsible.

The three pillars of the fiscal institutions I am proposing introduce constraints in order to prevent from the circumvention of the expenditure rule, deviation from the expenditure rule and making the responsibility clear in case of other types of deviation (revenue, local governments). At the same time, this solution allows for the fiscal policy to reallocate within the growth limited by the expenditure rule as well as to modify the tax rates in a manner corresponding to the required deficit reduction. Besides, the local government sector would remain independent since they could carry on even in the future with the four-year investment cycles observed in the past.

The most urgent task would be to establish an independent organisation watching over transparency. Its function would be to make an assessment of the impact of exogenous factors, including the impact of fiscal policy measures on these factors. If this assessment resulted in the modification of budgetary projections in every case, then the systematic planning error could be avoided. The analysis to be done by this organisation would provide the basis for transparency by identifying the impacts of creative accounting, one-off measures and the economic cycles. An expenditure rule limiting the growth of all centrally controlled, expenditure-type items and items partly substituting

them (tax expenditure, guarantees) would constitute a key pillar. A pillar of lesser significance is the imposition of the constraint of the golden rule-type on the local governments according to which the current balance must be balanced and only the imbalance between capital revenue and capital expenditure can increase the stock of liabilities. Its potential importance lies in the fact that it can limit the local governments' incentives to finance investments via the PPP-scheme reflecting preferences for deferred payments.

#### THE FIRST PILLAR: EXPENDITURE RULE

As shown by international experience, the limitation of nominal expenditure growth can contribute simultaneously to reducing the deficit and to the operation of automatic stabilisors which moderates the effect of the cyclical swing (not allowing the utilisation of temporary revenue surpluses). The expenditure rule has another advantage, because it is less affected by exogenous factors than the deficit and debt rules. Accountability requires that expenditures uncontrolled by the Government should remain outside the scope of the rule, and thus it should not extend to local government expenditures, to the interest expenditures of the central government or to the compensation of loss by the central bank. The part that remains under the scope of the rule is the primary expenditure of the central government (hereinafter referred to as 'primary budgetary expenditure').

One of the disadvantages of the expenditure rule is that even if the deficit remains unchanged the transfers in cash can be substituted by granting tax expenditure. This can be eliminated by extending the scope of the rule to the tax expenditure. It is a smaller although not negligible problem in terms of evading the rule that the tax content of various expendi-

tures is different and, as a result, the composition of the cuts in the expenditure side is also important in respect of the net impact on the deficit. Due to the shortfall in tax and contribution revenues, cutting public sector wages by a certain amount improves the deficit only half as much.

The main weakness of the expenditure, deficit and debt rules is that the quasi-fiscal expenditure and creative accounting make it possible to circumvent these rules. The cashflow based accounting of the budget act is modified in compliance with the ESA statistical rules, thus quasi-fiscal expenditure and creative accounting is partly corrected. This would support the argument that the rule should rely on expenditures under the accrual recording of ESA-definition. This raises several problems. On the one hand, the statistical revisions are often done with delays; activities are "detected" only at the time of ex-post financing, for instance, in case of a guarantee is called or debt is assumed. On the other part, the financing of some activities emerges spread over a number of years, for instance, the instalment payment owing to implementing public investments under a PPP-scheme. Finally, there are a number of ways to convert cash-flow to accrual recording and this method may also change from year to year. It can be well illustrated by the story of the value added tax (VAT) where the recording of the postponed refund could not be corrected with the simple time adjusted cash method of accrual recording so the method had to be changed retrospectively.

If the expenditure rule is defined at the level of cash-flow expenditures specified in the Public Finance Act, it can make the rule simpler, more controllable and more suitable for timely intervention. Preventing the circumvention of the rule, however, makes another constraint necessary: a similar rule should apply for the five items that depend on the decisions of the Government and whose impacts are similar

to budget expenditures. Accordingly, a growth limit corresponding to expenditures would apply separately to the aggregate expenditure of the Hungarian Privatisation and State Holding Company (ÁPV Rt), to the aggregate expenditure of the deposit account, to aggregate tax expenditure, to PPP investments and separately to the stocks of the different types of guarantees.2 Some guarantees supporting quasi-fiscal expenditures - e.g. the Hungarian State Railways (MÁV) - is very likely to be called. In the case of other quasi-fiscal subsidies - for example the preferential loans granted by the Hungarian Development Bank (MFB) - this is less likely to happen. It is can hardly be expected that the guarantees of Eximbank and the Hungarian Export Credit Insurance Pte Ltd. (MEHIB) will be called. This rule can also be evaded if companies involved in quasi-fiscal activity receive loans without state guarantee; therefore this possibility needs to be also limited.

Similarly to the expenditure rule applied in Sweden, it is advisable to limit the nominal growth of expenditures in Hungary. Its advantage is that it is simple and less easy to manipulate, and it dampens the fluctuation. It would be a difference from the Swedish system that it is not recommended to set the expenditure growth limit at the level of the individual budgetary chapters, ministries, consequently, the flexibility required for reallocations would be ensured by the stringent aggregate-level rule. The ceiling of the aggregate expenditure growth rate must be laid down in the Public Finance Act instead of the annual budget acts. Instead of the rolling three-year ceilings, it may be necessary to fix a lower growth rate until the year of euro-accession, and a higher but moderate rate in the following period.

According to the Swedish experience, a substantial reserve needs to be generated in order to ensure compliance with the growth ceiling. The stipulation of a contingency reserve is ne-

cessary to avoid overspending. Considering the repeated overspending in the past years, there is a need for a binding rule at the level of aggregate expenditure. This means that the flexible allocation of aggregate expenditure between years should be prohibited. One of the means to achieve that could be the partial or total deletion of the contingency reserve. Based on past experience, a contingency (balance) reserve of at least 1.5 per cent of GDP would be required. This means that the accumulation of reserve would correspond to 5 per cent of the total central budget expenditure. The contingency reserve thus established would replace the current general reserve and could include an earmarked reserve to cover the increase in public sector wages.3 The contingency (balance) reserve would be higher than the existing, but only 10 per cent could be utilised until 30 November to address real contingencies. The remainder of the contingency reserve would be automatically deleted, in part or in full, in December if in months 1-11 the open-ended expenditure items resting on normative regulation produce higher spending than time-proportionately expected.4 If the remaining part of the primary budgetary expenditure under stronger government control produces timeproportionately higher spending, then a public evaluation would be carried out of the developments. The State Audit Office (ÁSZ) would express an opinion on this evaluation, and then the Government would take a decision on the deletion or release of the contingency reserve. During the review in December the Government would also have the opportunity to delete a part of the contingency reserve in case of unfavourable revenue developments (I shall come back to the role of the independent forecast later).

While by introducing the first constraint I have made a proposal for broadening the category of primary expenditures, with the help of a second constraint I consider it necessary to

make a further breakdown of the expenditures. This latter constraint would differentiate between expenditures based on whether they are transfers granted to local governments rather than whether they are of the mandatory or discretionary type. Mandatory expenditures are based on laws or international agreements. It is however not advisable to remove this expenditure of considerable magnitude from the scope of the rule since the enforcement of a stricter expenditure rule may trigger some legislative changes.<sup>5</sup> At the same time, in order to avoid a disproportionate share of local governments in the adjustment, it is justified to separate the transfers to local government from the other primary budgetary expenditures and to supplement them with the transferred PITrevenues. With the introduction of the second constraint the aggregate growth of the transfer together with the PIT should correspond to the growth ceiling prescribed at the level of the other primary budgetary expenditures, and thus local governments would contribute to the cut in general government expenditures in proportion to their transfers calculated together with PIT.

# THE SECOND PILLAR: THE GOLDEN RULE OF LOCAL GOVERNMENTS

In Hungary, local government deficit was rarely sizeable. If the central government reduced their transfers in real terms, it was usually followed by an immediate drop in local government expenditures and only a smaller part (one-fifth) of it resulted in a higher local government deficit. (P. Kiss, 2007) To this effect, the second pillar ensuring the proportionate decrease of budgetary transfer would be sufficient without a need for another pillar, provided the possibility of a future greater indebtedness of local governments can be excluded.

Different methods are applied in the international practice to limit the local government deficit. A relatively relaxed regulation, which is stricter than the current one could be chosen to assure the independence of local governments. In the golden rule-type approach proposed by us the constraint to indebtedness represents that the current balance of local governments is to be well-balanced, whereas the imbalance between capital revenue and capital expenditure may increase the stock of liabilities. Beyond being theoretically well-founded, this solution has two practical advantages. First, it would ensure that the decrease in budgetary transfers moderated by the expenditure rule will not result in higher current deficit. Second, it would not stop even in the future local governments from continuing their four-year investment cycles or from providing their cofinancing for EU-programmes.

Compared to the present constraint, it would imply that from now on the capital balance rather than adjusted own revenues will represent the ceiling of the debt-creating commitments of local governments (borrowing and related charges, as well as bond issues, guarantees issued, and leasing arrangements). This solution could stop the tendency that an increasing number of local government investments are financed through the PPP-scheme in the interest of short-term savings.

As regards the capital balance there is a need for its specific legal definition that is consistent with the methodology of the annual budget acts. The breakdown into cash-flow expenditures and revenues presented in the tables annexed to the annual budget acts is suitable for separating capital and current items. One should consider, however, that it is justified to exclude from the capital expenditures the VAT paid on investments. If this rule had been enforced between 1994 and 2005, then the annual local government deficit would have been lower by 0.1 per cent of GDP on average,

and the local government share in the general government debt according to the Maastricht criterion would be zero today.

# THE THIRD PILLAR: THE INDEPENDENT ORGANISATION

In Hungary, the general government deficit being significantly in excess of the planned level every year represented a critical fiscal problem. This was attributable to both planning mistakes and deliberate decisions. The scope of deliberate decisions can be regulated by a fiscal rule, whereas mistakes owing to biased planning can be eliminated under a new institution framework. In 2005, an IMF evaluation recommended to Italy that a similar organisation, under the name of fiscal council, should be set up to eliminate similar planning mistakes. IMF experts recommended to a broader range of EU-countries that independent fiscal councils should be established to ward off creative accounting by enhancing transparency and also to prepare an official forecast underlying the planning (Anett et al.). In the case of Hungary, the improvement of both dimensions would be a task of high importance. Optimistic planning practice and statistical revisions necessitated by the creative accounting are at the bottom of the substantial slippages from the programmes.

Three types of planning mistakes have occurred in Hungary in the recent period. Firstly, the estimation of the base year developments has always been optimistic. Secondly, the estimation made for the macroeconomic developments of the current year of planning has also proved to be optimistic. Finally, the estimation of the effects expected from the planned measures has been overly optimistic too.

In order to minimalise planning mistakes it would be necessary that the estimation of these three factors be made by an independent organisation. This would make it possible for the fiscal decision-making (Parliament, Government) to exercise its primary powers, i.e. taking discretionary decisions. This means that Parliament takes decision on tax rates, but it is not practical that it should also vote on the predicted evolution of tax bases, which is eventually determined by the economic cycles and taxpayers' decisions.

Apart from this, there are problems with transparency in Hungary. The impact of fiscal policy cannot be adequately separated from the impact of the exogenous factors. The "true" activity of fiscal policy cannot be seen either, since the official accounting contains illusory items (creative accounting), while the size of the real (quasi-fiscal) activity cannot be observed (e.g. appears only some years later).

It would therefore be necessary to reinforce transparency with the analyses of an independent organisation. This organisation would in the first place separate the impact of the economic cycle, in the course of which it would treat separately the impact of the private sector's cycle and the revenue effects deriving from the change in public expenditures. (For instance, in case of public sector wage cuts, tax and contribution payment automatically decrease.) In the second place, in order to analyse the actual macroeconomic impacts of fiscal policy it would apply its own analytical methodology to remove creative accounting from the official accounting, while augmenting it with the estimated size of quasi-fiscal activities. In the third place, it would present the development of expenditures and revenues both according to its own analytical methodology and based on the budgetary cash-flow data. In addition, it would make a detailed description of the methodology bridge between the official (legal) budgetary data and statistical recording of the ESA-methodology but without expressing an opinion on statistical methodology questions. Finally, the independent organisation would publish the structural deficit as a permanent component of the deficit. It would be computed with its own analytical methodology with the estimated effects of the cycles and of one-off items. Its own published methods would be followed in the calculations, and the time series would be continuously published. It is necessary to review the analytical methodology regularly since there may always be new creative accounting solutions emerging with the aim of circumventing the official (legal) and statistical accounting.

The annual activity and publications of the independent analyst-forecasting institution must be consistent with the timetable indicated in the budget act.

- The Spring Report would have three functions. First, the analysis of previous year's fiscal and macroeconomic developments and its own forecast error would be presented. Second, a forecast would be given of the similar factors of the given year as the baseline period of planning. Finally, the fiscal and macroeconomic hypothetical baseline paths of the forthcoming years would be described which demonstrates what would happen if no new fiscal measure were taken and the one-off impacts would be removed from the developments.
- The Autumn Report being published early September would also have three functions. On the one hand, it would update the fiscal and macroeconomic projections for the base year. On the other, it would review the estimate for the hypothetical baseline path (without corrective measures) of the next few years. Finally, it would present, in relation to the baseline path, the fiscal and macroeconomic effect of the submitted draft budget as the most likely paths. It would publish a fan chart showing the inflation, GDP and deficit projections for demonstrating the uncertainties surrounded the central projections.
- In December, the Winter Report would review the forecasts of the Spring Report,

including in particular the forecast for the base year, the hypothetical baseline path of the following years, the fiscal and macroeconomic path based on fiscal measures adopted for next year, including the fan charts demonstrating the degree of uncertainty. The Government could rely on the forecast for the base year in its decision on the utilisation of the contingency reserve.

The results of the activity of the independent organisation could be best utilised if the forecasts for macroeconomic developments, inflation and yield curve were automatically taken over by the budget act. It is especially important that the Winter Report should give a last feedback in the final stage of the passing of the law. It is possible that the measures will considerably change after the bill is submitted. An IMF-study prepared in 1996 cites the example of Italy where - similarly to Hungary - modifications were made in the process of adopting the budget whereby the cover for actual expenditure surpluses was provided by uncertain revenue surpluses (increased tax base estimate).

Institutional solutions may also be of importance in terms of success. There is likely to be no need to set up a new institution. While the establishment of a new organisation would raise a number of problems, there would be nothing to guarantee that its operation is reliable, stable and effective over the long run. (Should it become cumbersome for fiscal policy, then it would be relatively easy to terminate or gradually phase out the new organisation.) Following from the function of the proposed institution, it is a practical solution to set up the organisation within the State Audit Office (ÁSZ) and its leader should be a vice-president elected by Parliament in accordance with the current regulation. It would contribute to its marked appearance if the organisation were given an independent image within ÁSZ which should also be reflected in its name. When finding an appropriate denomination, the name Fiscal Council should be avoided because it can easily be misunderstood. It is more desirable to choose a name that indicates that the organisation is part of a larger institution, for instance, Fiscal Institute or Budget Office.

# ILLUSTRATING THE OPERATION OF THE THREE PILLARS OF THE FISCAL INSTITUTE

As I have mentioned earlier, the expenditure rule (first pillar) may have an essential role in respect of adjustment since an expenditure growth that is lower than nominal GDP can improve the deficit. The difference between the selection of the expenditure growth rate and the deficit reduction path determines what measure is required on the revenue side to attain a given deficit. The following numerical data demonstrate what additional steps must or can be taken on the revenue side under given deficit and expenditure rates.

- To make it simple, I have started out from the figures of the Convergence Programme (CP) published in December 2006. The estimated expenditure-revenue values shown for 2007 are consistent with a 2 percentage-point expenditure rate.
- Thereafter, I have prepared four scenarios based on the different primary expenditure rates of the state budget. I have extended the path with the different expenditures until 2015.
- In all scenarios I have assumed as given the savings on interest expenditures, the magnitude of revenues received from the EU and the net local government expenditures (i.e. expenditures minus budgetary transfers), which latter is determined by the usual investment cycle in accordance with the golden rule (second pillar). I have taken into account that there are one-off expenditures in the initial stage (see the Convergence Programme), which in the future will only be allowed by the

rule if it is counterbalanced by the reduction of permanent expenditures.

One of the tasks of the independent fiscal office or institute (third pillar) would be to assess the automatic shortfall in tax and contribution revenues as a result of expenditure cuts. Its other task would be to prepare an estimate of the macroeconomic impacts of expenditure cuts and the additional revenue measure required to meet the deficit target. Somewhat departing from the Convergence Programme, in the forthcoming paragraphs I assume that a 30 per cent of the total expenditure reduction will be realised in wages, 20 per cent of the total in the purchase of goods and services and investment expenditures and the remaining 50 per cent in transfers. Beyond their different tax content, their macroeconomic impacts will also vary. I have calculated the impact of the expenditure decrease and the required revenue measures with the iteration process using the coefficients published in a study by the National Bank of Hungary (MNB). (Horváth et al., 2006) On the other hand, I wish to underline that wages and consumption being dominant tax bases are more important in terms of macroeconomic impacts than GDP and inflation. I have not made an estimate to that effect, but according to the Convergence Programme these tax bases are likely to fall behind GDP growth, i.e. the revenue to GDP ratio will decline. If I took this shortfall into consideration it would lead to a lower potential tax reduction or a higher requirement for tax hikes than what is indicated in the table. Compared to the nominal GDP path of the Convergence Programme, the values I have shown were higher with respect to 2007-2008, but they were significantly lower in the next few years, because based on the findings of the MNB occasional paper, macroeconomical impacts emerge prolonged in time, moreover, the impact of continuous expenditure cuts cumulates. According to the results of the simulations, the changes taking place on the expenditure side have over this time horizon a more marked effect on nominal GDP than tax changes (except indirect taxes), therefore a stricter expenditure rule results temporarily in a somewhat larger extent of GDP deceleration.

In the following tables I shall outline the four scenarios (see Tables 1, 2, 3 and 4). In these scenarios the same projected deficit reduction is divided between the effects of a specific expenditure rule (see the net impact after the tax shortfall) and the residual tax changes (see tax measure to be adopted additionally). In the first case, in line with the rule, expenditures will be increased by 2 per cent until 2010, and by 4 per cent following that. In the second case, the expenditure growth rate will be 3 per cent from 2008 onwards. In the first case, the drop in GDP is greater, but faster expenditure-savings can turn around the initial tax rise (in 2007) already at the beginning of the period. Expenditure-savings are more balanced in the second case, and the rate of GDP deceleration will be slower, but tax reduction can only be launched starting with 2010.

In case 3, expenditure savings are smaller because the rate indicated in the expenditure rule permits a 4 per cent increase. Case 4 assumes an even higher - 5 per cent - rate. In the above cases, although GDP deceleration is of a smaller extent than in the former two scenarios, but due to the required tax measures the economic growth is not much more favourable. In case 3, a minimal tax increase would be required in 2008–2009, and the subsequent small level of tax reduction will turn around the effect of the initial increase only gradually by 2015. In case 4, the achievement of the deficit path will be noticeable in 2008-2009, followed by the requirement of a small tax increase in 2010-2011, and only then could a small tax decrease follow.

On the other hand, the different versions of the expenditure rule laying down various parameters (rates) vary in their degree of reali-

CASE 1: 2 AND 4 PER CENT EXPENDITURE RULES

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary expenditure without one-off items	47.4	44.8	43.2	42.1	41.6	41.2	40.6	40.1	39.5	38.6
Of whitch local goverment without subsidy	5.4	5.3	5.3	5.4	5.5	5.3	5.3	5.4	5.5	5.3
Expenditure faling under the rule	42.0	39.5	37.9	36.7	36.1	35.9	35.4	34.7	34.0	33.3
Rate specified in the expenditure rule		2.0	2.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0
Nominal GDP growth		8.6	6.1	5.4	3.8	4.5	5.6	6.0	6.1	6.1
Reduction of primary expenditure		-2.6	-1.5	-1.1	-0.6	-0.4	-0.5	-0.6	-0.6	-0.9
Tax shortfall		-0.4	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Net impact following loss in tax		-2.2	-1.3	-0.9	-0.5	-0.3	-0.5	-0.5	-0.5	-0.7
Interest expenditure	3.9	4.2	4.1	4.1	3.9	3.8	3.6	3.5	3.3	3.2
One-off expenditures	0.7	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	52.0	50.0	47.4	46.2	45.5	44.9	44.2	43.5	42.8	41.8
Unchanged revenue only with tax shorfall	42.0	41.6	41.3	41.1	41.0	40.9	40.9	40.8	40.7	40.5
Deficit based on the expenditure rule	-10.0	-8.4	-6.1	-5.1	-4.4	-4.0	-3.4	-2.8	-2.1	-1.3
Deficit target		-6.8	-4.3	-3.2	-2.7	-2.2	-1.7	-1.2	-0.7	-0.2
Revenue required	42.0	43.2	43.1	43.0	42.8	42.7	42.5	42.3	42.1	41.6
EU-transfers	1.3	1.8	2.4	2.8	3.3	3.3	3.3	3.3	3.3	3.3
Revenue without EU-transfers	40.7	41.4	40.7	40.2	39.5	39.4	39.2	39.0	38.8	38.3
Auxiliary measure		1.1	-0.4	-0.3	-0.6	0.0	-0.1	-0.1	-0.1	-0.4

Table 2

## CASE 2: 3 PER CENT EXPENDITURE RULE

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary expenditure without one-off items	47.4	44.8	43.6	42.8	42.4	41.6	40.5	39.5	38.5	37.4
Of whitch local goverment without subsidy	5.4	5.3	5.3	5.4	5.5	5.3	5.3	5.4	5.5	5.3
Expenditure faling under the rule	42.0	39.5	38.3	37.4	36.9	36.3	35.2	34.1	33.0	32.1
Rate specified in the expenditure rule		2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Nominal GDP growth		8.6	6.2	5.5	4.2	4.9	6.0	6.5	6.3	6.0
Reduction of primary expenditure		-2.6	-1.2	-0.8	-0.3	-0.9	-1.0	-1.0	-0.9	-1.1
Tax shortfall		-0.5	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
Net impact following loss in tax		-2.2	-1.0	-0.7	-0.3	-0.7	-0.9	-0.9	-0.8	-0.9
Interest expenditure	3.9	4.2	4.1	4.1	3.9	3.8	3.6	3.5	3.3	3.2
One-off expenditures	0.7	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	52.0	49.9	47.8	46.9	46.3	45.3	44.1	42.9	41.8	40.5
Unchanged revenue only with tax shorfall	42.0	41.5	41.3	41.2	41.2	41.0	40.8	40.7	40.5	40.3
Deficit based on the expenditure rule	-10.0	-8.4	-6.4	-5.6	-5.2	-4.3	-3.3	-2.3	-1.3	-0.2
Deficit target	cél	-6.8	-4.3	-3.2	-2.7	-2.2	-1.7	-1.2	-0.7	-0.2
Revenue required	42.0	43.1	43.5	43.7	43.6	43.1	42.4	41.7	41.1	40.3
EU-transfers	1.3	1.8	2.4	2.8	3.2	3.3	3.3	3.2	3.2	3.2
Revenue without EU-transfers	40.7	41.4	41.1	40.9	40.4	39.8	39.2	38.5	37.9	37.1
Auxiliary measure		1.1	-0.1	-0.1	-0.4	-0.4	-0.5	-0.5	-0.4	-0.6

Table 3

## **CASE 3: 4 PER CENT EXPENDITURE RULE**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary expenditure without one-off items	47.4	44.8	43.9	43.5	43.5	42.9	42.1	41.3	40.6	39.7
Of whitch local goverment without subsidy	5.4	5.3	5.3	5.4	5.5	5.3	5.3	5.4	5.5	5.3
Expenditure faling under the rule	42.0	39.5	38.6	38.1	38.0	37.6	36.8	35.9	35.1	34.4
Rate specified in the expenditure rule		2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Nominal GDP growth		8.6	6.2	5.5	4.2	5.1	6.2	6.6	6.4	6.1
Reduction of primary expenditure		-2.6	-0.8	-0.4	0.0	-0.6	-0.8	-0.8	-0.7	-0.9
Tax shortfall		-0.5	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.2
Net impact following loss in tax		-2.2	-0.7	-0.4	0.0	-0.5	-0.7	-0.7	-0.6	-0.7
Interest expenditure	3.9	4.2	4.1	4.1	3.9	3.8	3.6	3.5	3.3	3.2
One-off expenditures	0.7	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	52.0	49.9	48.1	47.6	47.4	46.7	45.7	44.8	43.9	42.9
Unchanged revenue only with tax shorfall	42.0	41.5	41.4	41.3	41.3	41.2	41.1	41.0	40.8	40.7
Deficit based on the expenditure rule	-10.0	-8.4	-6.7	-6.3	-6.1	-5.4	-4.6	-3.8	-3.1	-2.2
Deficit target		-6.8	-4.3	-3.2	-2.7	-2.2	-1.7	-1.2	-0.7	-0.2
Revenue required	42.0	43.1	43.8	44.4	44.7	44.5	44.0	43.6	43.2	42.7
EU-transfers	1.3	1.8	2.4	2.8	3.2	3.3	3.2	3.2	3.2	3.2
Revenue without EU-transfers	40.7	41.4	41.5	41.6	41.5	41.2	40.8	40.3	40.0	39.4
Auxiliary measure		1.1	0.2	0.2	-0.1	-0.2	-0.3	-0.3	-0.2	-0.4

Table 4

## **CASE 4: 5 PER CENT EXPENDITURE RULE**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary expenditure without one-off items	47.4	44.8	44.3	44.2	44.6	44.3	43.8	43.2	42.8	42.1
Of whitch local goverment without subsidy	5.4	5.3	5.3	5.4	5.5	5.3	5.3	5.4	5.5	5.3
Expenditure faling under the rule	42.0	39.5	39.0	38.8	39.1	39.0	38.5	37.8	37.3	36.8
Rate specified in the expenditure rule		2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Nominal GDP growth		8.6	6.2	5.5	4.3	5.3	6.5	6.8	6.5	6.2
Reduction of primary expenditure		-2.6	-0.4	-0.1	0.4	-0.3	-0.5	-0.5	-0.4	-0.6
Tax shortfall		-0.5	-0.1	0.0	0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Net impact following loss in tax		-2.2	-0.4	-0.1	0.3	-0.3	-0.4	-0.5	-0.4	-0.5
Interest expenditure	3.9	4.2	4.1	4.1	3.9	3.8	3.6	3.5	3.3	3.2
One-off expenditures	0.7	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure	52.0	49.9	48.5	48.3	48.5	48.0	47.4	46.7	46.1	45.3
Unchanged revenue only with tax shorfall	42.0	41.5	41.5	41.5	41.5	41.5	41.4	41.3	41.2	41.1
Deficit based on the expenditure rule	-10.0	-8.4	-7.0	-6.9	-7.0	-6.6	-6.0	-5.4	-4.9	-4.2
Deficit target	-6.8	-4.3	-3.2	-2.7	-2.2	-1.7	-1.2	-0.7	-0.2	
Revenue required	42.0	43.1	44.2	45.1	45.8	45.8	45.7	45.5	45.4	45.1
EU-transfers	1.3	1.8	2.4	2.8	3.2	3.2	3.2	3.2	3.2	3.2
Revenue without EU-transfers	40.7	41.4	41.8	42.3	42.6	42.6	42.4	42.2	42.2	41.9
Auxiliary measure		1.1	0.5	0.5	0.2	0.1	-0.1	-0.1	0.0	-0.2

ty, or rather, they assume that the extent of improvement in the efficiency of expenditures will be different, but it cannot be expected without special measures. As we have seen, the GDP ratio of mandatory expenditures, i.e. those that cannot be altered without legislative changes, reaches 11 per cent (pension, sick pay, EU-payment). In legal sense, in the budgetary procedure there is a scope for action in respect of the remaining - currently 31 per cent expenditure. Whereas, in economic sense, both mandatory and annually altered expenditure items can be reduced, and the level of savings achievable in the various expenditure items depends on other - such as practical and feasibility - considerations. As a starting point, by following a possible division, expenditure items are broken down into open-ended and closedended items, including centralised and decentralised ones within the latter (P. Kiss, 2007). With a more detailed expenditure breakdown, we can overview the practicability of the changes and the potential impact of measures that can be considered of average extent.

Open-ended expenditures are expenditures whose achievement depends on some exogenous factors and, as a consequence, their midyear developments is subject to modifying the appropriation.

- The interest expenditure depends on the development of yields and exchange rates. It is justified to remove these items from the scope of the expenditure rule.
- Out of normative transfers, also falling within open-ended expenditures, mandatory expenditures (pension, sick pay, EU-payment) are driven by macroeconomic and demographic developments, such as wages, inflation, economic growth and the number of retiring persons. There are two reasons for including these items within the scope of the expenditure rule. On the one hand, altering the parameters of the pension system is not justified merely owing to the expenditure constraint, but rather, for the

sake of long-term sustainability. On the other hand, even in respect of these items it is worth curbing discretionary measures increasing expenditure, for example the "rounding up" of the annual increase of pensions calculated according to the Swiss index. Mandatory expenditures would show savings based on macroeconomic developments – Swiss indexation –, but the demographic trends produce an adverse effect, thus in one-fourth of the expenditures falling under the scope of the expenditure rule, no savings can be expected without corrective measures.

Out of normative transfers, the proportion of non-mandatory expenditures (with annually changing parameters) is around 6.5 per cent of GDP. The third of it consists in family allowances, the reduction of which would be unfavourable for demographic aspects. Pharmaceutical subsidies represent more than one-fourth of the expenditures and, based on the trends, an expenditure rate exceeding GDP growth can be assumed.6 However, if substantial measures are taken this can be moderated back to the rate of GDP growth. Unemployment benefits only amount to 0.4 per cent of GDP, but owing also to the impacts of adjustment, additional expenditure is more likely to be expected. The public transport subsidy and the normative subsidy granted to enterprises come to 0.8 per cent of GDP; in this case a 4.5 per cent nominal expenditure growth would be required to achieve an annual 1.5 per cent improvement in efficiency. The remaining 1.2 per cent expenditure includes other household subsidies. In the latter cases, a 5.5 per cent nominal rate per annum could be attained realistically, since it would represent a 0.5 per cent shortfall compared to the nominal growth of GDP. On the whole, the annually changed normative transfers would be widened in a 5.7 per cent rate a year.

Closed-ended expenditures are defined every year, based partly on the budget act, partly on

the budgets of local governments and partly on the decisions of the various institutions.

Of closed-ended expenditures, operational expenditures amounting to 19.2 per cent of GDP are determined, within a specific framework, by local governments and budgetary institutions. Since the local government expenditure is influenced by the expenditure rule only through the budgetary transfer, therefore merely 16.6 per cent of GDP is affected (the other expenditures are covered by own revenues). In case of operational expenditures, an annual 1.5 per cent efficiency improvement can be accomplished through average scale of measures (this corresponds to the trend of the productivity of the former period assumed by the Central Statistical Office (KSH)). As the nominal GDP growth of the period under review is around 6 per cent, consequently, attaining a similar growth rate in the government sector under 1.5 per cent efficiency improvement would call for a 4.5 per cent increase in nominal expenditures.

Of closed-ended expenditures, local government investments and enterprise subsidies amount to 2.7 per cent of GDP. I assume that

these investments are covered by local governments using their own revenue (EU-funds) and credit, rather than from central subsidy, as a result they are not affected by the expenditure rule.

of closed-ended expenditures, a part corresponding to 5.3 per cent of GDP is utilised by the central government. No savings can be expected from that in case of central investments: the utilisation of EU-funds is more likely to result in expenditure overruns. If we assume that EU-funds will replace other investments, then a 10–12 per cent nominal growth will be achievable annually. On the other hand, in respect of enterprise subsidies, a degree of efficiency improvement comparable to operational expenditures can be assumed. This efficiency improvement can for instance be assured in the case of subsidised public utilities.

In summary, if we assume that average measures are taken in case of expenditures falling under the scope of the rule a 5.5 per cent growth per annum can be considered realistic. (See Table 5) This means that if a 5 per cent expenditure rate were set by the expenditure rule, then other further expenditure measures

Table 5

# EXPENDITURE STRUCTURE IN 2004 AND ASSUMED GROWTH RATE, 2008–2015

	Expenditure (GDP per cent)	Of vhich, rule	Annual rate (per cent)
Open-ended expenditure	22.5	17.5	
Inerest and interest subsidy (housing construction)	5.0	-	-
Mandatory normative transfer (pension. sick pay. EU-payment)	11.0	11.0	6
Annually changed normative transfer	6.5	6.5	5.7
Closed-ended decentralised expenditure	21.8	16.6	
Wages and purchase of goods and services of local			
government and budgetary units	19.2	16.6	4.5
Local government investment	1.9	-	-
Local government subsidy to enterprises	8.0	_	_
Closed-ended centralised expenditure	5.3	5.3	-
Central investment	2.0	2.0	11.0
Central subsidy to enterprises and other expenditure	3.3	3.3	4.5
Total expenditure	49.7	39.4	5.5

would be required. To illustrate its magnitude it would be necessary – for example – to replace the Swiss indexation of pensions with inflation indexation or to cut the number of public-sector employees by a further 1.5 per cent every year on top of the small degree of reduction achievable with average measures. This would imply that employment within the government sector would drop by a further 11.5 per cent during eight years.

#### **SUMMARY**

I have proposed a three-pillar institutional proposal in order to reinforce fiscal transparency and responsibility. Its first pillar is the expenditure rule which can be a means of adjustment by curbing the growth of all expenditure-type items under central control. The second pillar is the golden rule of local governments according to which indebtedness can grow only as a result of a shortage in the capital balance. The third pillar is an organisation watching over transparency and preparing estimates for the impacts of exogenous factors and fiscal policy measures, as well as supporting transparency by separating the impacts of creative accounting, one-off measures and the economic cycles.

I have proposed the introduction of con-

straints to promote the efficient operation of the three pillars. The first constraint prevents the circumvention of the expenditure rule through broadening the category of expenditures (tax expenditure, guarantees). The other constraint prevents spending cuts from having a disproportionate impact on local government expenditures. The third constraint prevents deviation from the expenditure rule by generating a contingency reserve.

The proposed solutions make it possible for the fiscal policy to make reallocations within the growth limited by the expenditure rule as well as to modify the tax rates to the extent which is consistent with the deficit cut. Apart from this, the local government sector would remain independent, since they could even in the future carry on running the four-year investment cycles applied in the past. The three pillars and the three constraints can contribute to meeting the deficit targets and if the targets are missed - in the revenue-side or by the local governments - this setup makes it clear where the responsibility falls. It will however be up to us whether we take the institutional solutions seriously and whether they represent a passport into the domain of fiscal discipline or, as a pass partout, would offer only temporary help in masking our deficit bias.

#### Notes

- <sup>1</sup> The EC constructed a synthetic indicator that relies on the scope ("intensity") of the rule and, based on its characteristics, on its potential efficiency. (Ayuso-i-Casals et al.). IMF experts also constructed a composite index for independent organisations. (Debrun Kumar) Both analyses came to the conclusion that the independent organisation is beneficial for developing the fiscal rule, but different results were achieved as regards the relationship between institutional solutions and the fiscal outcome.
- <sup>2</sup> This approach is similar to the current regulation applicable for local governments which regulation
- imposes a constraint on such a broadly defined category of annual debt-creating commitments that includes the change in the guarantees issued as well as in the stock of leasing.
- <sup>3</sup> The ad-hoc year-end spending of the reserve corresponding to 1.5 per cent of GDP is not desirable, therefore a part of it can be earmarked reserve. In this case, this reserve can act as an incentive for meeting the deficit target.
- <sup>4</sup> These include pharmaceuticals, pension, sick pay, housing construction, social benefit and the norma-

tive subsidies of local governments and other organisations.

<sup>5</sup> A substantial item is the pensions increasing pursuant to the Swiss index (10 per cent of GDP), the sick pay due after earlier wages (0.4 per cent), the EU-payment (0.7 per cent) and the interest subsidy of housing loans (0.6 per cent). It may be justified to omit the latter item from the scope of the rule similarly to interest expenditure. On the contrary, in the case of family allowances (2.1 per cent) and unem-

ployment benefits (0.4 per cent) the nominal ceiling, effective for most recepients, depends on discretionary decision every year.

<sup>6</sup> A higher-than-GDP growth of the expenditures spent on pharmaceuticals is noticeable in the developed countries. In Hungary, the government subsidy within this expenditures grew at an even higher rate between 2001–2006 representing a 8–16 per cent increase in real terms despite the corrective measures.

#### **LITERATURE**

Annett, A. – Decressin, J. – Deppler, M. (2005): Reforming the Stability and Growth Pact, *IMF Policy Discussion Paper* 

AYUSO-I-CASALS, J. D. G. – HERNANDEZ, L. – MOULIN – TURRINI, A.: Beyond the SGP. Features and effects of EU national-level fiscal rules, *mimeo* 

BATHÓ, F. (2006): Principles of a regulated public finance system, *Public Finance Quarterly, Number 4* 

DEBRUN, X. – KUMAR, M. S.: The Discipline-Enhancing Role of Fiscal Institutions: The Theory and Empirical Evidence, *mimeo* 

HORVÁTH, Á. – JAKAB, M. Z. – KISS, G. P. – PÁRKÁNYI, B. (2006): Myths and Maths: Macroeconomic Effects of Fiscal Adjustment in Hungary, MNB occasional paper

International Monetary Fund: Italy-2005, Article IV Consultation Concluding Statement of the Mission

KOPITS, G. (2007): Fiscal Responsibility Framework: International Experience and Implications for Hungary, *Public Finance Quarterly*, *Number 2* 

MILESI-FERRETTI, G. M. (1996): Fiscal Rules and the Budget Process, *IMF working paper* 

P.Kiss, G. (2007): Pain or gain? Short-term budgetary effects of surprise inflation – the case of Hungary, *MNB occasional paper* 

P. KISS, G. – KARÁDI P. – KREKÓ J. (2005): Structural challenges towards the euro: fiscal policy, *MNB background study* 

ROMHÁNYI, B. (2007): Reforming fiscal rules and institutions in Hungary – aspects and proposals, *Public Finance Quarterly, Number 2*