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Contents

Abstract

The objective of this study is to present the changes in the general government's role in the distribution and generation of income and in the functions of the state. The period under study is 1991-1997, with an emphasis on the fiscal adjustment which occurred during the years 1995-1996. In relation to this, a separate chapter addresses international experiences in fiscal consolidation and its theoretical aspects.

In the period under study, the general government had a certain *stabilizing impact*. Up to 1993, overspending by the government retarded economic decline and following the commencement of economic growth the adjustment program which became necessary owing to the unsustainability of the external and internal equilibrium put the brakes on growth in the short term.

Based on international experience, the most important factor for success is to be sought in the *structure of the adjustment.* This study concentrates on the presentation of structural changes, and particularly the structure of primary expenditures and revenues, even though its point of departure was the changes in the level of total expenditures and revenues of the general government. Between 1990 and 1997, the volume of the primary levels declined by nearly one quarter and the rearrangements which were effected within this were even more significant. It can be established that the decline was most vigorous on the expenditures side, in the case of expenditures on wages and transfers (particularly with respect to households). According to international experience, the savings achieved precisely in this area can be a guarantee for the lasting success of fiscal adjustment. However, the fiscal retrenchment of 1995-1996 in Hungary does not present us with a clear picture. Personal income tax was increased, there were tax increases of a one-off nature and cuts in public investment, too. This kind of measures were identified as less successful ones by international studies.

According to statistics using the prime cost approach, the role of the public sector in income generation declined, as wage costs declined. Were it possible to take quality criteria into account when specifying performance, the picture would be different. According to international experience, some public sectors do not contribute to income generation even at prime cost, and in these areas it is possible to reduce spending without suffering any deterioration in performance. A counterexample can be provided by the tax administration, where a very close correlation can be demonstrated between wages and efficiency. The impact of the Hungarian measures, particularly with respect to changes in the number of persons employed, cannot be evaluated negatively in this respect.

In addition to an institutional approach to general government, it is also important to take *functional aspects* into account - that is to say, it is necessary to the fiscal transparency to demonstrate quasi-fiscal activities performed outside the general government. (This study does not undertake to do so.)

Introduction

The Hungarian statistics and budgetary system only introduced international standards (Government Finance Statistics) a few years ago and the category of primary balance has only recently become an object of attention. Initial comparative studies on the structure of the general government were published (*Muraközy, 1992*), which were then followed by others which attempted to consolidate transfers within the general government (*László, 1993, Hetényi 1994, Gyulavári and Neményi, 1996*). The objective of my study is to present *a more accurate view of the size of the general government*, by reducing revenues by the repayments on Russian debt (in the form of military equipment), and at the same time by expenditures on the use of such equipment. Further consolidation of different intragovernmental transfers also results in a more accurate approximation of the size of the government sector, but deficits *have changed* because of the errors in budgetary accounting. In addition to this, an *accrual basis was preferred* to a cash basis in this study. This was necessary to comply with the national accounts and to eliminate the (cash-flow) effects of such changes, such as shifts from annual interest payments to shorter interest periods. (See the Annex)

In the 90's significant changes took place in the Hungarian economy and general government. In 1997 the level of planned expenditures was only 86 percent of the level of spending in 1990 in real terms. The *changes in structure* are even more striking. *Primary spending declined by one quarter* during this period, while *interest expenditures grew by two-third in real terms*. In the course of reorganizing public activities, several budgetary institutions were spun off from the general government, and the system of subsidies was reformed, for example the subsidies to the state railway and housing subsidies. In 1997 the level of planned revenues was 78 percent of the level of revenues in 1990 in real terms, and the underlying structure had also changed significantly. There was an even more considerable reduction in profit taxes and duties, while indirect taxes remain more or less unchanged in real terms. These changes are all related to a certain extent to the specific characteristics of the Hungarian tax system: on one hand, there is a (relatively) large number of taxpayers (contributing to a high level of tax evasion), while on the other hand, the base of VAT tax is broad, even in international comparison, with few exceptions and high rates, but the effective rate remains low because of tax evasion. The progressivity of the total tax burden (direct and indirect taxes) of the different deciles of the households has declined, and become similar to a linear tax.

My analysis of the changes in the structure of the general government includes a quantitative description, as well as more a detailed discussion of the measures and the background factors. Some fiscal measures can be classified as reform measures, others as short-term policy measures (e.g. enhancing economic growth) or fiscal adjustments. The success (long-lasting result) of the adjustments is determined not only by the reduction in the deficit, but also by the composition of the measures. This finding is supported by empirical evidence and theoretical arguments as well. Two types of adjustments were identified. The more successful form of adjustment concentrates on cuts in transfer programs and the government wage bill, while the less successful one relies on tax increases or cuts in public investment. The Hungarian adjustment in 1995-96 falls somewhere in between, however there were significant reductions in public employment. The composition of the staff reduction was also important factor in the success. Staff (or wages) could reduced without affecting government output in many cases. At the same time, the tax administration's staff and wage bills were increased, as otherwise efficiency may have suffered.

The changing role of the general government in income generation and redistribution can only be described together with an examination of changes in public functions. Increases in the non-profit sector (because of outsourcing) and quasi-fiscal activities should have been taken into consideration, but due to the limitations of this study this was not possible. Expenditures and revenues are not directly linked to changes in the debt; expenditures exclude bank bailouts, issues of compensation vouchers and so on. (The problems related to these items are detailed in the Annex.)

The international comparison should extend to the other Central-Eastern European countries, but the problems of fiscal transparency make such a comparison extremely difficult. In spite of the problems, some studies have made an effort to present a comprehensive picture. (*Kosterna, 1996, Dabrowski and Kosterna, 1996, World Economic Outlook, 1996*)

I. Theoretical and empirical aspects of fiscal adjustments

Expansionary or contractionary fiscal policies have effects on both the demand and supply side. Aggregate demand is influenced by fiscal policy through different channels: (1) wealth effects on consumption and (2) credibility effects on interest rates. The supply side effects are (3) effects on individual labor supply and (4) effects on the labor market structure via the reactions of the unions. The effects of fiscal policies depend on whether the revenue side or the expenditures side is affected. This can also be empirically proven. (*Alesina and Perotti, 1996, McDermott and Wescott, 1996*)

1. Fiscal adjustments can have different impacts on consumption according to theoretical models:

- In a simple Keynesian model with sticky prices and wages, a fiscal contraction has a temporary contractionary effect.
- In fuller Keynesian models, negative multiplier effects are partly offset by the crowding in effects of lower interest rates and currency depreciation.
- Neo-classical models calculate with other transmission mechanisms by which fiscal impulses affect an economy such as wealth effects and expectational effects. The negative Keynesian multiplier effect can even be outweighed by these factors.

At a low level of public debt, the effects of a Keynesian model are stronger, because adjustment is expected in the distant future. As the level of debt increases a neo-classical approach become more relevant. Fiscal expansions become contractionary, because current consumers expect a stabilization in the near future.

2. A fiscal adjustment can reduce interest rates significantly by reducing the perceived risk that the government would depreciate the public debt through higher inflation (inflation risk premia) or become insolvent (default or consolidation risk premia). As the level of debt approaches a “critical” threshold, the risk premium increases and the portion of private demand which is sensitive to interest rates falls. As an adjustment reduces the level of the debt, the risk premium decreases and private demand grows (crowding in).

3. The wealth effect from permanent spending cuts may reduce the labor supply, as wealthier individuals may consume more leisure, and therefore work less. If a permanent reduction in government spending is financed by a reduction in taxes, it has an opposite effects on the labor supply, because it reduces work effort (substitution effect). Empirically these effects are relatively minor.

4. Aggregate supply side effects can be much higher, if unions are strong enough, but decentralized. In such cases, the unions do not realize the connection between the taxes and the spending side. For example, such unions insist on wage increases, when tax burdens on wages are raised, as they wish to prevent a “decline” in net wages (without internalizing the overall fiscal measures). This may increase the unit labor cost and negatively affect the competitiveness.

In summary, the composition[1] of fiscal adjustments plays an important role in their success. An increase in purchases of goods and services can be offset by an increase in taxes, but the impact on demand will not be the same. Fiscal spending affects demand directly[2], while taxes only have an indirect impact on consumption, and so they do not lower demand by the same amount. Similarly, the impact on demand is different for a wage increase compared to a purchase from abroad. The composition of spending cuts is important because of the following reasons:

- Reductions in public wage bills do not have the same impact as cuts in the purchase of goods and services. Cuts in public employment affect the aggregate demand for labor, and this can result in a fall in the unit labor cost and a depreciation of exchange rate in a flexible exchange system. This will improve profitability, while the cuts in the purchase of goods do not have the same effects, provided that private and public sector have the same propensity to spend on those goods.
- The impact depends on how long-lasting the effects are. The impact of postponed maintenance of public infrastructure is not the same as a reduction in public employment. Expectations make a distinction between transitory and more permanent measures.
- Governments can demonstrate their strong intention to adjust the fiscal policy by austerity measures which concentrate on sensitive areas, for example welfare systems and public employment. These measures have a political credibility effect. Many (typically coalition) governments do not have enough strength to implement austerity measures (*Alesina and Perotti, 1995*).

The success of adjustments is determined by the size and composition. Alesina and Perotti placed the stress on the impact of the composition, while McDermott and Wescott stressed the size. The role of composition has been proven by empirical evidence as well. Both Alesina and Perotti, and McDermott and Wescott found similar results in spite of their different fiscal indicators and definitions of success. The more successful adjustments concentrate on reduction of *transfers* to households and the public *wage bill*.

Other studies suggest that even the composition of cuts in the wage bill are significant. A clear link was established between low civil service salaries and higher levels of tax evasion. (*Haque and Sahay, 1996*) An optimum combination of wage and tax rates can be found which maximizes the government's net revenues. On the other hand, wasteful spending can be reduced without affecting government output. Empirical studies have found that overstaffed public sectors are a major factor in excessive public spending. (*IMF Survey, 1997*)

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[1] Different taxes and expenditures have different effects on demand. This was recognized by Haavelmo (1945), Bator (1960) and Hansen (1969). However, it is very difficult to find objective weights for the different items. Recent studies (*Aziz and Leruth, 1997*) have found that changes in the composition of spending between consumption and investment goods affect productivity in the long run as well as the short-run cyclical variability of the economy.

[2] The short run and the long run impact of public consumption should be separated. The model of Amano and Wirjanto found an elasticity of 0.9 for the intertemporal substitution of private and public consumption. In other words, a stabilization which reduces public consumption by 1 % of GDP will result in an increase of private consumption by 0.9 % of GDP.

The question of transfers is also quite complex. Income redistribution has two channels: transfers and taxes financing the transfers. The "cost" of taxation has been determined by an empirical study (*Engen and Skinner*, *1996*): a change of 5 percent in the average total tax burden and 2.5 percent in the marginal total tax burden affects long-term economic growth rate by 0.2-0.3 percent in the opposite direction. On the other hand, some transfers can have a positive impact on economic performance because they reduce social unrest and prevent crime and abuse. (*Sala-I-Martin, 1996*) This positive effect should be compared to the negative effect of taxation, because these "productive" transfers must be financed by taxes. (Untargeted "unproductive" transfers can be reduced without affecting economic performance.)

A good example of a more successful adjustment is the Irish adjustment (1987-89), while an example of less successful adjustment is presented by the Italian adjustments (through 1993 and 1994-95). The Danish adjustment (1983-86) and the Hungarian adjustment (1995-96) had mixed features, because, on the one hand, there were cuts in transfer programs and public wage bills (successful type), but on the other hand, there were also cuts in public investment and increases in taxes (unsuccessful type of adjustments). (*Alesina and Perotti, 1996*)

Both the Irish and Danish spending cuts proved to be "long lasting" (in the sense that two years after the adjustments the levels of expenditures were more or less the same as during the adjustments). One of the most important differences between the Irish and Danish adjustments was that income taxes were reduced in Ireland while they were increased in Denmark. Irish wage increase remained moderated because of the cut in taxes, whereas in 1987 the Danish unions demanded compensation for the increase in income taxes of the previous four years. This has significant macroeconomic consequences because of changes in relative unit labor costs and competitiveness.

The first impression may be that the Hungarian adjustment shares many similarities with the Danish and Italian adjustments. Personal income tax was increased as in Denmark. There were tax increases of a one-off nature (introduction of an import surcharge) as in Italy. There were cuts in public investment as in Italy (and, to a lesser extent, as in Denmark). These measures were identified as less successful ones by Alesina and Perotti. On the other hand, all the measures which can contribute to the success (more permanent nature) of an adjustment can be recognized in the case of Hungary as well. There were broad ranging cuts in transfer programs (e. g. pensions, sick pay) as was the case in Denmark. Wages are indexed to planned inflation such as in Italy, so the higher-than-planned inflation led to a reduction in real wages. The most important measure was a reduction in public employment - this was even more radical, much as was seen in Ireland. This results in a structural improvement and can contribute to long-term effectiveness of the adjustment.

II. Changes in the levels of expenditures and revenues and balance of general government

The volume of GDP declined by 19 percent between 1990 and 1993 in Hungary (because of the collapse of Eastern trade and costs of transition to a market economy), while the volume of final consumption declined to a significantly lower extent. This gap between GDP and consumption was eliminated in 1994-95, when GDP increased by 5 percent, while final consumption decreased by 5.5-6 percent. In 1994 the economy was still far from equilibrium because economic growth was only higher than the growth of consumption, but was much lower than the growth of investments. In 1995 a radical reduction in consumption became necessary, even at the price of retarding economic growth. In this successful adjustment the general government played an important role, the size and the redistributional role of government became remarkably lower in 1995-96.

The general government had a certain stabilizing impact throughout the whole period. Up until 1993 the recession was moderated by the expanding government. In 1991-92 it was possible to finance the fiscal deficit through the increasing domestic (household) savings, but from 1993 deficit financing was possible only via deterioration of the external balance. In 1991-92 the crowding out effect was not significant because private sector financing needs were moderate because of the recession. From 1993 the financing needs of private sector began to grow, and crowding out became a more relevant problem. When economic growth resumed in 1994, the internal and external imbalances became clearly unsustainable. The adjustment improved balances at the price of moderating economic growth, but it was necessary to ensure sustainable growth over the longer term. The fiscal adjustment was not expansionary like the adjustments seen in Denmark and Ireland (it did not result in a growth in consumption), but improved competitiveness in a similar manner. First round positive impacts on growth can be observed only in this channel, but from 1996 the credibility effect, via the reduction of interest risk premia, and the "crowding in" effect of decreasing deficit and size of government also affect economic growth.

I wish to note that in my analysis the 1995 adjustment is not the same as the package of measures introduced in the course of that year. A practical reason for this is the annual base of the analysis, while another reason is the difficulty in separating the various effects. Beyond this, the original budgetary endeavors can also not be absolutely contrasted with the Bokros-package, as they *ab ovo* contained a degree of progress. The budget aimed at reducing income centralization by the state, which by itself would have been an achievement. The tightening in the course of the year, which had become necessary to improve external and internal equilibrium contained mainly measures aimed at increasing revenue. In *nominal terms*, revenues were higher, while the largely fixed expenditures hardly changed. The real difference, relative to the estimate, arose in the real value of expenditures and revenues. The rise in the price level above and beyond that which was planned resulted in an *unexpected loss of value* in expenditures, while the planned *reduction in the volume of revenue* was more or less met. That is how we can briefly summarize the characteristics of the 1995 fiscal adjustment.

In terms of figures, the processes could be characterized by the following *approximate figures*. The fiscal impact of the 1995 and 1996 measures can be estimated at about 6 percent of GDP[3]. The Irish adjustment resulted in an 8 percent

[3] The indicator used for cyclic adjustment in the study of Alesina and Perotti, the *Blanchard indicator*, cannot be calculated in the case of Hungary. Instead, we applied an other indicator, where cyclical fluctuations are detemined by calculating a reference output growth (following the Cobb-Douglas

improvement expressed in terms of GDP over three years, the Danish adjustment 11 percent over four years (net of the impacts of the cycle). For the sake of completeness, however, it should also be noted that in the course of 1995-1996, the quasi-fiscal expenditures of property managers expanded by 0.2 percent of GDP. Thus the corrected impact of the adjustment was 5.8. %, which, favorably, arose largely from reducing current (primary) expenditures. Of this, structural savings (sickness benefit, family allowance, export subsidy, price subsidies for transportation and pharmaceuticals, reduction in the labor force, etc.) could be estimated at 1.5 percent of GDP. Of the remaining approximately 4.3 percent[4] adjustment in proportion to GDP, a share amounting to 4 percent of GDP could be the loss of value due to the unexpected surplus inflation. This transitory saving may lose its effect over the coming years, as the demand for compensation of the losses suffered will increase. (The study does not extend to an analysis of the fiscal situation in 1998, which is briefly addressed in the Annex.).

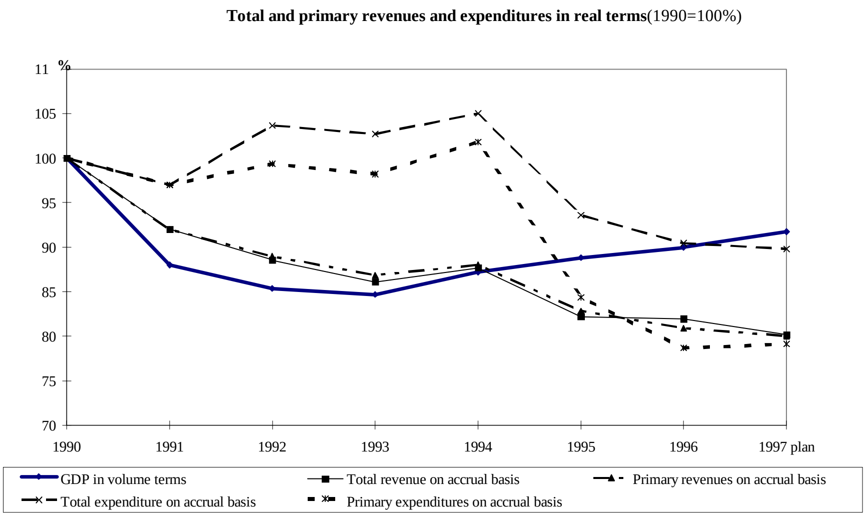
If we wish to determine the success of the adjustment based on the Alesina and Perotti criteria, then foreseeably, the Hungarian retrenchment will qualify as successful in spite of the fact that the *level* of the primary balance will not improve any further, as we are able to satisfy[5] the other criterion which can be linked to the *balance* (debt reduction achieved through guaranteeing an adequate surplus). By itself this rating is not of any major significance, as the criteria were arbitrarily defined; at the same time, it provides an opportunity for international comparison. According to this, empirically, the Hungarian adjustment would fall under that quarter of the programs under study, which could be rated as more successful.

Figure 1

production function approach) and substracting this output estimate from the actual figure. The effects of this gap on the primary deficit are then calculated and deducted from the actual primary deficit to obtain the cyclically adjusted primary deficit. In Hungary the revenue elasticity with respect to GDP is close to 1.0. In the expenditure side unemployment benefits are the only category which is assumed to react automatically to cyclical fluctuations. In Hungary the expenditure elasticity is assumed to be 0.09 (average of the elasticities in EU). To get the structural deficit we made another adjustment by deducting the fluctuations of extraordinary revenues and expenditures.

[4] Of the 4.3 percent adjustment, 1.5 percent appeared in the case of pensions, 3 percent under wages and expenditures on goods an services.

[5] The 5 percent reduction in government debt (in proportion to GDP) which is included in the criterion (naturally, over and above the impact of prepayments out of the proceeds of privatization) was largely satisfied as early as in 1997.



The volume of the total revenues and expenditures of general government in the period between 1991-1993 moved together with primary revenue and expenditures (net of interests and profits payment by/loss reimbursement to the central bank). This period was still characterized by the determinative role of primary expenditures and revenues. Beginning in 1994, however, with the expansion of government debt at market rates, an increasing difference was seen in between the two categories (the total and the primary). By the end of the period under study, the volume of total expenditures sank below 86 percent of the 1990 level. Yet even greater structural shifts underlie this. The ratio of primary and interest expenditures to each other changed radically. Not only were there savings of a reform nature in primary expenditures, there were also substantial changes in what was categorized as belonging to the general government.[6] Interest expenditures were greatly increased by financing general government on a market basis since 1992, as a result of which, the true burden of indebtedness was reflected in the budget, though with some delay. Additionally, due to the implementation of the Act on Bankruptcy, the mounting losses generated by state-owned companies, which had till then remained hidden, were also manifested and realized. The impact of this was reflected in the deterioration of the loan portfolio and financial position of the banking sector. Without government action, this could not be managed, but the government settled this part of the enormous additional burden of the transition to a market economy not directly by increasing the deficit, but rather by increasing government debt only. The government did not cover the losses by issuing new government papers, but by government bonds transferred directly to the banks affected in the consolidation process (which were long-term bonds but bearing market rates). However, the interest burden on these bonds substantially worsened the balance of the general government during subsequent years and in 1994, it amounted to nearly 2.2 % of GDP (nearly one-third of total interest expenditures). In addition to the direct interest burden, the increase of the state's debt may also have had an impact on changes in the risk premium on the entire debt bearing a market rate.

[6] The impact of sourcing institutions out of the public sector appeared continuously in parallel with the increase in the weight of the nonprofit sector. Numerous institutions not in the classical category of general government engaged in entrepreneurial activities were transformed whose own revenues and expenditures reduced the totals of general government. This will be discussed in more detailed in the last chapter.

The substantial structural changes observed during the period under study were in part related to the implementation of public finance reforms. A non-exhaustive list of the main elements reads as follows:

1. Beginning in 1992, financing was placed on a market basis, that is to say, preferential lending ceased, financing by the central bank was restricted, later its operations on the secondary market were constrained and an organization specialized in debt management and the system of primary dealers was established. The 1997 debt swap between the central budget and the central bank also settled the issue of the foreign exchange debt taken out by the central bank (and of the devaluation losses continuously generated on net foreign exchange debt).

2. Some clarification of the state's public functions also commenced. A number of organisations and organizational units were gradually transferred out of the general government; some of them were transformed into one of the new organizational forms (public foundation, company for public benefit, public body) introduced since 1993. The government funding of the Hungarian State Railways was placed on a new footing. From 1991 the housing finance system was also changed: preferential loans (granted at 3 percent) were transformed into 15 percent loans or, under the condition of assuming half the debt, the other half was transformed into loans bearing a market interest rate. The debt assumed by the state, similarly to the consolidation of the banks, was arranged through the transfer of government bonds thus increasing interest expenditures but the transfer by itself did not appear in the current deficit.

3. There was a major change in state ownership as well. Privatization, which is nothing more than a swap between the financial assets of the state (company shares and money) also resulted in changes in the development of the primary balance and the interest balance. The decline in state revenues from dividends led to a deterioration in the primary balance, while the interest balance improved owing to the rise in interest revenue and the reduction in interest expenditures due to debt repayment and the increase in the payment of central bank profits.[7] Once the assets belonging to the local governments were clarified and specified, primary capital revenue was also generated through the sale of real assets. For some of the local governments financing based on the proceeds of privatization enabled the maintenance of a deficit in spite of the tightened financial constraints, that is, a delay in the necessary adjustment was possible.

4. The regulations applicable to local governments[8] changed fundamentally in 1991. The basic principles introduced at that point were the liability-oriented regulation and the interest in generating revenue (local autonomy in taxation), as stipulated in the Act on Local Governments. Local governments obtained a substantial degree

[7] Since the prepayment out of the proceeds of privatization mainly affected the non-market rate debt outstanding vis-à-vis the central bank, this resulted primarily in higher payments by the central bank owing to the growth in its profits, because of the reduction in the indirect interest preference and not so much in any savings on interest payments.

[8] In the period 1991-1994, the consolidated expenditures of municipalities rose from 13 percent of GDP to 14.5 percent. This share gradually approached the 10 percent share seen in West European countries in 1995-1996 and is expected to reach this value in 1997 according to the estimates.

of financial independence which was also reflected in the fact that they managed to generate considerable interest revenues, while they were also able to incur significant debt. Finally, borrowing by local governments was constrained by the Act on Public Finance; debts to the state were made impossible through net financing by the Treasury and the Act on Bankruptcy curbed other debt. Only health care institutions constituted an exception from this latter rule, but owing to their rapid indebtedness, a decision was made in 1997 placing these institutions under the effect of the Act on Bankruptcy as well.

5. The social security system became somewhat more transparent in the sense that a gradual concentration on its primary functions has taken place since 1991: first between the central budget and social security (welfare type expenditures were placed under the budget and social security was made responsible for the financing of health care) and then between the various branches of social insurance. *Through its system of self-government, the independence of social insurance increased, yet the situation in which the growing deficit was financed by the budget was contradictory.* Short of a reform of health care and the pension system, only a transfer of assets[9] could improve this situation and even that only for a transitory period and any financing[10] against the payment of interest could only produce partial results. The solution lies partly in a change in the system of preparing and submitting the social security budget proposal, introduced in the second half of 1997, on the basis of which the role of the budget, which guarantees financing, will increase in this field. On the other hand, the long-term solution is ensured through the commencement of pension reform in 1998, the transformation of financing (financing by performance) and the impact of structural modernization may also gradually unfold in the health care system.

6. The treasury system began operation in 1996, through which subsequent financing was implemented in the case of the central budgetary institutions. In addition to controlling expenditures, the Treasury also monitors debts not paid by the institutions from 1997.[11] After a certain period of time or if a certain amount limit is exceeded, a trustee in bankruptcy is assigned to the central institution. With the implementation of the treasury system, net settlement of accounts with the municipalities was also introduced, which means that allocations from the central budget are transferred net of payment obligations (e.g. taxes on wages). This solution improved the liquidity of the central budget, while causing a deterioration in the liquidity of the local governments. The expansion of the treasury system was effected gradually, initially the extra-budgetary funds were included, then social security from 1997. The standing of the extra-budgetary funds was also changed, as many of them were integrated[12] into the chapters of the central budget from early 1996.

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[9] Equipping social security with assets was continuously on the agenda; finally, this was effected in 1996-1997 but to an extent substantially less than originally envisaged. The problem is that there is no law to regulate asset management by social security, thus this issue is unsettled.

[10] From 1996, the Social Security Funds may take out interest-free liquidity loans from the budget only up to a certain limit, above that, they have to pay an interest.

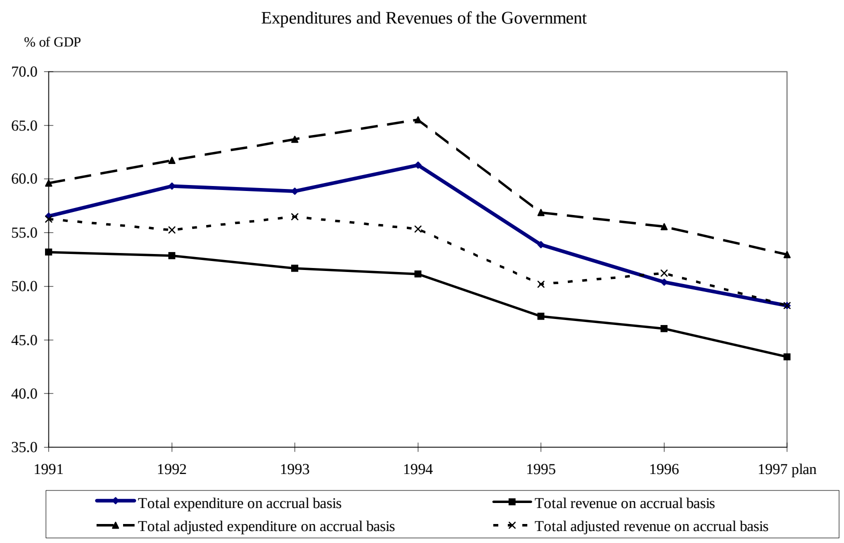
[11] Under the public procurement system, this can be quite simply registered above a certain procurement value.

[12] Until 1996, approximately 30 extra-budgetary funds were in operation. The change affected almost everyone of them; one fund was terminated without legal successor, 19 funds continue to operate but

7. The public procurement system may produce real savings in general government expenditures. This system began operation in 1996. Public procurements can be optimized and the order of magnitude of the demand of the public sector can be asserted in the prices.

If the changes in the magnitude of general government are examined by also taking into account the impact of the outsourcing which was previously referred to (that is, we put them back under expenditures and revenues) and list tax preferences as subsidies, we are presented with a more realistic picture of the processes (Figure 2). Under expenditures, more steady growth is seen with the corrections up to 1994 and the period thereafter shows a less even reduction in the case of both expenditures and revenues. This trend was broken in 1996, particularly in the case of revenue. This was partly due to the acceleration of outsourcing and partly to the level of tax preferences, which was higher than in the preceding year.

Figure 2



III. Changes in the primary revenue of general government

Tax revenue composes the largest share of primary revenue. Accordingly, with the taxation system held constant, primary revenue would evolve in accordance with changes in GDP.[13] Any movement which differs from that of GDP indicates the direction of modifications in the taxation system[14], their extent and the reaction of

within the budgetary chapters, four funds remained unchanged and one continues its operation by integrating five former funds.

[13] Assuming unit flexibility, taxes would move fully in line with GDP and their share would not change overall. The progressive personal income taxation, however, causes greater than unit flexibility. The system of deferring losses under the corporate taxation system has an opposite effect, as in this way, tax revenue follows changes in income generation with a delay.

[14] The most important factor to be mentioned among the general features of the Hungarian system of taxation is that at the very beginning of the reform of public finances in 1988-1989, new types of taxes were introduced (corporate income tax, personal income tax, VAT), which lent it a modern structure.

taxpayers (manifested in changes in tax avoidance). As Figure 1 reveals, tax revenue (primary revenue) evolved in accordance with GDP in 1991-1994 and again in 1996 (neutral with respect to the cycle) but opposed to it in 1995.

The economic shock caused by the loss of the Eastern markets and the deterioration in the terms of trade reduced the tax base by an extraordinary extent in 1991. Another factor contributing to the loss of revenue was that the structure of tax bases (profit, personal income) changed more than was assumed and, as the private economy and small businesses gained ground, so did the gray economy. Tax rates were held high and on occasion even raised which encouraged tax evasion, while the tax authority was overburdened due to the sharp jump in the number of taxpayers and was unable to prevent this.[15]

The transition to a market economy also resulted in a loss of revenue through changes in the system of regulators (accelerated depreciation, raising the provisioning obligations of the banks, etc.) and consequently the tax system, which was intended to cover the expenditures side (Table 8) which was left essentially untouched up until 1993, had a little room for maneuver. Another determining factor was that the country's international commitments essentially defined the amount of elbow room available in customs policy; thus, customs tariffs had to be continuously reduced from 1993. The taxation system which, in addition to covering expenditures, also took on an incentive providing support role, had continuously to review the range of tax preferences in order to reduce the legal possibilities for tax avoidance. The tax rules changed year after year and frequently, supplementary budgets attempted to rectify the development of the deficit, which was less favorable than planned, by increasing tax revenue in the course of the year.

Once it became manifest that the deterioration of the balance had to be offset at the level of the primary balance and an increase in revenue was not feasible, it was no longer possible to postpone a reduction in primary expenditures after 1994. This would have enabled some reduction in the tax burden as well. These ideas were only partially implemented both in 1994 and in 1995. The measures taken in the course of

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The taxation system has been developing continuously ever since, presently the unification of tax bases and the development of consumption tax in accordance with international standards are on the agenda.

[15] Another important feature is the relatively large number of taxpayers (small businesses) which makes the controlling activity of the tax authority more difficult and which also contributed to a mixing feature of the various types of tax. Such a mixed form was the minimal tax specified in percentage of sales revenue within corporate tax (turnover type) and the flat rate taxes were also similar (e.g. sales revenue minus 10 percent assumed costs), while the classical turnover tax (VAT) taxes, in addition to consumption, also investments, thus it is similar to an income based tax. A determinative feature of the system of taxation is that it is almost exclusively built on self-assessment. In such a case, the taxpayer is the active party and the tax authority has to face the task of controlling over four million taxpayers. This can be performed efficiently only if tax rules are simple and the information system and forms of procedure are uniform. The possibility of this latter factor was rendered more difficult by the decision of the Constitutional Court which, referring to the protection of personal rights, prohibited the use of the personal identity code for the purpose of taxation as well as the establishment of a permanent information channel in between the Tax and Financial Audit Office and social security. At the same time, the close cooperation between the tax authority and the Customs and Finance Guard and the maintenance of certain contacts evolving with social security contributes to the efficient operation of the tax authority. All in all, the efforts of the customs authority can be qualified as successful: for instance, with the implementation of the system of customs security, their claims sank from 1.4 percent of GDP early in 1992 to 0.3 percent in 1993 and to 0.1 percent by 1997.

the year to improve the equilibrium had an impact contrary to the planned reduction in the tax burden. (In the course of 1994 there was an increase in turnover taxes, in 1995 the import surcharge was introduced together with a single major devaluation.) In 1996 again, a reduction in centralization proportionate to GDP was envisaged. Owing to the underestimated 1995 base, which turned out to be actually higher than expected, a revenue surplus arose thus, in spite of the reduction in centralization, it was not possible to achieve the planned level of centralization by the state.

Table 2

Consolidated revenues of the General government (% of GDP)

	1991	1992	1993	1994	1995	1996	1997Plan
Total revenue	**52.3**	**51.2**	**53.2**	**50.3**	**46.4**	**45.7**	**44.5**
Total revenue on accrual basis	**53.2**	**52.8**	**54.5**	**51.4**	**47.2**	**46.2**	**44.0**
Errors	0.1	0.6	0.1	0.3	-0.1	-0.2	0.2
Interest revenues	1.6	1.2	0.6	0.6	0.8	1.8	2.2
Interest revenues on accrual basis	1.7	1.4	1.0	1.1	1.0	1.9	1.5
NBH profits	0.4	0.1	0.3	0.5	0.0	0.1	0.0
NBH profits on accrual basis	0.0	0.0	0.3	0.5	0.1	0.0	0.0
Primary revenues	**50.5**	**50.5**	**52.4**	**49.5**	**45.5**	**43.7**	**42.5**
Primary revenues on accrual basis	**51.5**	**51.4**	**53.3**	**49.9**	**46.0**	**44.2**	**42.5**
Current taxes on the profits of corporations	4.5	2.5	1.5	1.9	1.9	1.9	2.0
Current taxes on the profits of corporations on accrual basis	4.5	2.5	1.7	2.0	1.9	1.9	2.0
Taxes on production and imports	16.7	17.2	18.0	16.7	17.6	16.5	15.4
Taxes on production and imports on accrual basis	16.7	16.8	17.8	16.9	17.8	16.6	15.4
Current taxes on the incomes of households	7.4	7.5	7.9	7.4	7.1	7.2	6.7
Current taxes on the incomes of households on accrual basis	7.3	7.7	7.7	6.9	7.0	7.1	6.7
Social and other contributions	12.7	13.4	13.4	12.6	11.3	10.3	11.0
Social and other contributions on accrual basis	13.7	14.5	14.6	13.3	11.7	10.8	11.0
Taxes on production and imports of households	0.1	0.3	0.1	0.1	0.1	0.1	0.0
Fees, co-payments and profits	4.2	4.4	4.6	4.6	3.7	3.4	3.9
Capital taxes, and current taxes on capital	0.4	0.8	0.7	0.6	0.7	0.9	0.8
Dividends	0.8	0.3	0.1	0.2	0.1	0.2	0.1
Fines and other penalties	1.2	1.2	1.1	0.9	0.7	0.7	0.7
Other revenues	0.3	0.5	0.6	0.9	0.5	1.0	0.1
Capital revenues	**2.1**	**2.5**	**4.4**	**3.4**	**1.9**	**1.6**	**1.7**
Repayments	0.7	0.3	2.3	0.4	0.1	0.3	0.5
Other repayments mixed with returns	0.9	0.7	0.6	0.7	0.6	0.5	0.4
Disposal of fixed assets	0.5	1.3	1.2	1.9	0.9	0.7	0.6
Other capital revenues	0.1	0.1	0.3	0.3	0.3	0.2	0.1

A slightly more detailed review of the changes in the revenues of a few important types of tax and institutions is presented below.

Studies (*Newbery and Révész, 1996*) have demonstrated that the evolution of the Hungarian tax system (1988-1996) resulted in significant changes both in the redistributive impact (average taw burden) and tax incidence (marginal rates). The study focused on households and not individuals, the “total” tax burden was generated by adding up indirect and direct taxes, including all components of gross labor costs paid to the general government, less taxes on cars and motor fuel (treated as a road charge) and consumption subsidies. They found that between 1988 and 1996 for a median family the average tax rates rose 40 percent to 60 percent (of gross labor cost), while marginal tax rates increased from 60 percent to 70 percent. The marginal rates for families with various levels of income converged and the tax burden on the 20 percent with the lowest income increased sharply. The tax system became similar to a so-called “optimal” model which is a simple linear system with constant marginal rate.

While the tax burden (direct and indirect) on households increased, profit taxes and import duties decreased (except for the transitory introduction of import surcharge). Empirical studies (*Engen and Skinner, 1996*) found that a major tax reform which changes all marginal rates by 5 percentage points and average rates by 2.5 percentage points affects long-term growth rate by 0.2-0.3 percent in the opposite direction. They found that the composition of the tax system is probably as important for growth as the level of taxation. The design of the tax system is likely to exert a modest, but cumulative impact on growth, broad based tax structures with efficient administration increase long-term growth rates. In this sense, the evolution of Hungarian tax system became favorable to growth from 1997, because marginal tax rates on personal income were cut by 6 percent and tax burden was cut by 1.5 percent; customs duties also declined in addition to the abolition of the import surcharge. Efforts were made to improve the efficiency of tax administration and the tax base was broadened (the base of Social Security contributions).

Table 3

Consolidated revenues of the General government in real terms

	1991	1992	1993	1994	1995	1996	1997 plan
Total revenue on accrual basis	**1328.8**	**1278.9**	**1311.9**	**1272.9**	**1186.9**	**1188.2**	**1173.0**
Errors	3.4	14.2	2.7	8.1	-1.5	-4.2	6.3
Interest revenues on accrual basis	43.3	35.0	23.1	26.8	26.0	50.0	41.1
NBH profits on accrual basis	9.0	3.2	7.0	11.5	2.4	0.1	0.0
Primary revenues on accrual basis	**1286.0**	**1243.3**	**1282.6**	**1236.9**	**1157.8**	**1135.8**	**1133.4**
Current taxes on the profits of corporations on accrual basis	112.9	59.7	40.5	49.7	47.0	49.0	52.4
Taxes on production and imports on accrual basis	417.7	407.3	429.1	417.8	448.3	425.7	409.8
Current taxes on the incomes of households on accrual basis	182.7	185.3	184.3	171.8	175.9	182.9	177.6
Social and other contributions on accrual basis	342.6	349.8	350.3	330.3	294.1	276.6	294.1
Taxes on production and imports of households	3.3	6.7	2.9	2.0	1.4	1.5	1.3
Fees, co-payments and profits	104.8	106.9	109.8	114.7	93.8	87.2	104.0
Capital taxes, and current taxes on capital	10.1	18.6	15.7	15.8	16.5	22.0	21.8
Dividends	21.1	6.7	1.7	4.9	2.5	4.2	3.5
Fines and other penalties	30.9	28.7	26.6	22.8	17.8	18.4	18.9
Other revenues	8.5	12.8	14.8	22.8	12.6	26.0	3.7
Capital revenues	**51.4**	**60.7**	**107.0**	**84.4**	**48.0**	**42.2**	**46.4**
Repayments	16.4	8.0	54.6	10.6	3.6	7.0	13.7
Other repayments mixed with returns	21.4	17.6	15.6	18.0	14.5	11.6	11.7
Disposal of fixed assets	11.4	31.6	29.8	47.5	23.2	17.2	17.1
Other capital revenues	2.2	3.5	7.0	8.2	6.7	6.4	3.9

1. The weight of the **corporate and financial corporate** (banking sector) **profits tax** introduced in 1989 declined in total revenue year after year until 1993, after which it largely remained at the same level.[16] Its role is, however, more important than its share in total revenue as, through guaranteeing preferences, it also plays an incentive role.

Table 4

Corporate income tax (including Banking sector) in % of GDP

	1991	1992	1993	1994	1995	1996	1997 Plan
Tax revenues	4.5	2.5	1.7	2.0	1.9	1.9	1.7
Tax allowances	1.3	1.1	1.2	0.8	0.3	0.4	0.4
Total	5.8	3.6	2.9	2.8	2.2	2.3	2.1
Free of Tax reservation of the Banking sector	1.7	1.1	5.7	2.0	1.0	n.a.	n.a.

Sources: data from annual Budget Execution Laws

Within the structure of *tax preferences*, a decisive change took place in 1992. In 1991 several types of preferences had fairly significant weight. From 1992, however, the share of the preference extended to foreign investors became decisive. From 1994 these preferences were reduced and with the general reduction in the rate in 1995, they were partly abolished.[17]

[16] According to preliminary figures, the tax revenue reached 2 percent of GDP in 1997.

[17] The 100 and 60 percent tax preference of companies functioning with foreign participation, the interest reimbursement and the preference granted to offshore companies were retained but, inter alia, the 40 percent preference to companies with foreign participation was abolished.

After the unification of corporate *tax rates* in 1991 (abolition of the preferential rate), these rates remained at 40 percent until 1994, when they were reduced to 36 percent. In 1995 the 36 percent was divided into two components: the general rate, which was 18 percent, and the supplementary tax part payable on profits taken out of the company (23 percent on after-tax profits). As a result of the reduction in the range of preferences and the incentive effect of reducing the rate, tax payments in 1995 did not decline in proportion to GDP.

Other *regulatory changes affecting the tax base* had a fundamental impact on the magnitude of tax revenues. With the change in the settlement of depreciation in 1992 companies paid less in tax, as they were able to write off their fixed assets more quickly. From 1991 the implementation of the Bankruptcy Act increased risk provisioning by the banks by leaps and bounds. As this took on unmanageable proportions, a loan, bank and debtor bail-out scheme was effected in the period 1992-1994 in several steps.

2. **Taxes and contributions related to wages and income** play a significant role within the revenues of general government. Within this, the rate of the social security contribution payable by employers is particularly high in an international comparison. By far the greater part of the vigorously progressive personal income tax is also paid by those living off wages and salaries. Individual entrepreneurs (the self-employed), whether they are subject to corporate taxation or to personal income taxation, have a wide range of legal possibilities for charging costs to income.[18] On the other hand, the practice of hiding income took on substantial proportions among entrepreneurs.

[18] In a peculiar manner, some of the small businesses pay tax under personal income taxation, while others according to corporate taxation. They may regroup between the profits and the wages paid to themselves; the regulation of charging cost to income is not stringent and the individual and corporate property are not legally separated from one another. In 1996, there was an attempt to bring the burden on profits and wages nearer to one another, as the burden on withdrawing income was not so significantly less than the marginal rate (48 percent) of PIT (18 percent + 23 percent on the remaining + 10 percent dividend tax). Withdrawing income in the form of dividends still remained more favorable, because on that amount, social security contribution did not need to be paid. From 1997, the supplementary tax was abolished, and the dividend tax rate was raised to 20 percent. The total burden, therefore, declined from 40 percent in 1996 to 34.4 percent in 1997. According to the original regulation, if the dividend payment exceeds the part of the primary deposit calculated by multiplying it with twice the base rate of the central bank, then a dividend tax of 27 percent instead of the 20 percent should have been paid on the part above this amount. This would have meant that this part would all in all have been taxed at a rate similar to the marginal PIT rate had it not been for the decision of the Constitutional Court, which qualified it as unconstitutional. What would have been a change of even greater significance was that from early 1998, social security contribution would also have been payable on the part above this, that is, it would have carried a burden similar to wages (this too proved to be unconstitutional). Another change was that from 1997, small businesses became subject to the PIT Law. Their peculiar standing was retained as they pay a so-called entrepreneurial personal income tax on their business tax base and they could also carry over their former corporate tax preferences. Their different groups enjoy different preferences. In addition, there is an intention to continuously restrict and restrain the preferences enjoyed by self-employed professionals and small-scale agricultural producers. From 1997, in addition to the flat rate type taxes existing till then, a new, specific flat rate tax was introduced as an experiment. This was extended to taxi drivers, hairdressers and beauticians. Beyond the fact that this solution is able to guarantee at least a certain level of tax revenue may give rise to a problem in the sense that it also applies to VAT. Payment of a flat rate VAT breaks the VAT chain; the question is naturally to what extent this chain has hitherto functioned in this field. The problem is that the VAT chain is also broken in the case of the preferred small-scale

Table 5

Personal Income Tax and Social Contributions on accrual basis in % of GDP

	1991	1992	1993	1994	1995	1996	1997 Plan
Personal Income Tax	7.3	7.7	7.7	6.9	7.0	7.1	6.7
Social Contributions	13.7	14.5	14.6	13.3	11.7	10.8	11.5
Total	21.0	21.5	22.3	20.2	18.7	17.9	18.2
PIT allowances	0.7	0.1	0.6	0.4	1.5	2.8	2.3
PIT basic abatement	1.2	2.1	1.4	4.4	0.0	0.1	0.1
Total PIT expenditure*	*1.1*	*0.8*	*1.2*	*2.2*	1.5	*2.9*	*2.4*

/* Own estimate

Sources: data from annual Budget Execution Laws

In addition to changes in gross household income, revenues from PIT were considerably influenced by the system of tax base[19] and tax preferences[20] granted, which affected a relatively constant range of headings. With the preferences enforced in the course of centralizing incomes, the state, in actual fact, performs a redistribution similar to subsidies. The fluctuations of the tax revenue lost in that way reveals that its extent has changed substantially over time. In respect of how well targeted it was, it can be established that, to a decisive extent, the redistribution was not implemented in favor of the genuinely disadvantaged[21]. In 1994 there was an outstanding tax base preference in making social security contributions deductible from the tax base (the impact of this amounted to 2.4 percent of GDP), thereafter, however, by 1995 all deductibility was abolished and transformed into tax preferences. Apart from 1992 and 1994 the government supplemented the tax table by a tax preference for employees of a fixed amount each year which was intended as compensation to some extent for the unfavorable position of employees with respect to charging costs to income. In the meantime, the range of tax-free fringe benefits (purchase of clothing, use of cars) was gradually decreased but the benefit on meals provided in kind was retained, in spite of several attempts at abolishing it. It can be regarded as a positive development that, apart from minimal differences, the bases of PIT and social security contribution correspond to one another since 1997.

A specific feature of progressive taxation is that the tax burden would increase year after year even with an unchanged tax table as a result of incomes increasing to reach the next tax band (bracket creeping). Under the condition of a given system of preferences (revenue loss), the tax table can be so designed that the required tax revenue be well grounded. With the help of the tax table, not only the necessary

agricultural producers, because the companies in contact with them do not pay VAT either. The introduction of the subsistence farmer's certificate may help in solving this.

[19] The most constant but relatively insignificant item from among the items deductible from the tax base (which has been retained also in 1996 and 1997) is the membership fee in representative bodies. In the period 1991-1994, such a preference was available on payments to foundations, for the disabled and on investments. The amount of the latter reached 1.1 percent of GDP in 1994. In 1992-1994, intellectual activities also enjoyed this preference.

[20] From 1995, former tax base preferences were transformed into tax preferences supplementing the preference granted on pensions and replacing the preference available on children.

[21] In order to make use of any tax preference, it is necessary to have a certain amount of declared income.

revenue can be guaranteed but, through a combination of changes in rates and tax brackets, the degree of progression and the spreading of the tax burden can also be addressed. Progressivity was also increased by the fact that tax credits could be written off from below. During the period under study, the tax table changed continuously through the combinations of the two instruments (rate and bracket adjustment). The high marginal rate in 1991 (50 percent) was reduced to 40 percent in 1992 but, in parallel with this, the brackets were adjusted upwards. The marginal rate was not changed in 1993 and the brackets also remained constant. (This meant that incomes increased to reach the higher tax bands and there was a relative increase in the tax burden of the low and middle-income groups. The employee preference was applied in order to offset this.) In 1994, while adjusting brackets, the marginal rate rose to 44 percent, in 1995 the unchanged tax table again resulted in bracket creeping, which was again offset by tax credits calculated from below. The marginal rate was increased to 48 percent in 1996 and together with the impact of modifying band limits, the average tax burden rose by 1.5 percentage points (with the new tax base, the effective PIT burden rose from approximately 22 percent to 23.5 percent). The marginal rate was decreased to 42 percent in 1997 and, by drawing the brackets further apart, the progression was decreased and the effective tax burden returned to the 1995 level of 22 percent.

During the period under study, the social security contribution rates were more constant: the rates of 44 percent paid by the employers plus 10 percent paid by the employees meant a 37.5 percent burden on the wages grossed up by the contribution. The 44 percent rate was reduced by 1.5 percent in 1996 thus, with the 1.5 percent increase in effective PIT, the tax burden on wages would have remained at the same level according to the plans. Seemingly preferential rates were also enforced: subsistence farmers pay only 11.5 percent, instead of the 15 percent health care contribution and they do not pay a pension contribution at all. On the other hand, however, they receive proportionately less in terms of benefits, they are not eligible for sickness benefits and pensions. The social security contribution base did not change much until 1997, although in 1995, the employers' contribution was also extended to severance pay. There was a major change in 1997, when the base for PIT and social security contribution was determined in an identical manner. (The only difference is that a certain type of royalty is free of social security contribution.) Individual social security contribution payments, however, are constrained by the contribution ceiling introduced in 1992, above which there is no contribution payment. The ceiling was reviewed and valorized in 1997, till then, however, the ceiling set at Ft 75,000 a month was not adjusted to the increase in average wages, thus more and more individuals reached this value. The increase in the number of individual entrepreneurs (as self-employment replaced employment on which wages are paid) resulted in a continuous loss of revenue as well, as individual entrepreneurs only pay the minimum amount of contribution prescribed for them[22]. From 1997 this increases by 50 percent on activities performed in any further business. Until 1996 entrepreneurs engaged in supplementary activities had to pay the 10 percent so-called "accident" contribution on the base of the minimum wage. In 1996, however, actual income was the base of the "accident" contribution. In 1997, in order to reduce payment avoidance, a fixed health care contribution of Ft 1,800 per month was introduced, applicable to all. This contribution does not constitute an insurance

[22] In practice, they pay on a contribution base corresponding to the current minimum wage.

relationship but is not fully of a tax nature either. As a result of this ambiguous situation, the health care contribution was attacked before the Constitutional Court. The Constitutional Court found it unconstitutional that every citizen with a personal identity card should pay the contribution, thus it was retained only in the case of those in employment. The decision by the Constitutional Court according to which contribution on business activities performed in addition to employment or being a student of an institution of higher education is to be paid not on the base of 50 percent of the minimum wage but on actual income is only an apparent tightening, as many declare an income even more modest than this. (There is a table in the Annex on the contributions rates.)

Other contributions linked to wages are less significant; their rates, however, have changed more vigorously over time. In 1992 employers and employees paid altogether 6 percent of wages to cover tasks related to the labor market (unemployment benefits, employment policy). This rate reached its maximum in 1993 (9 percent), since then it has gradually declined, reaching 5.7 percent in 1997.

3. In addition to taxes on incomes and wages, the most significant tax revenues are generated by taxes on consumption, custom duties, local taxes and taxes on specific services making extra profits. In 1997, the total of such revenues will correspond to the level of 1991 expressed in terms of GDP, while its internal structure has undergone substantial changes. The share of VAT and local taxes has increased continuously, offsetting the decline of other taxes over the entire period.

Table 6

Taxes on production and imports and capital on accrual basis (in % of GDP)

	1991	1992	1993	1994	1995	1996	1997 Plan*
Taxes on production and imports	**16.7**	**17.2**	**17.2**	**16.6**	**17.6**	**16.5**	**15.6**
Value Added Tax	5.6	5.7	7.3	7.8	7.9	7.6	7.9
Excises	5.8	5.6	4.2	3.8	3.6	3.3	3.4
Import duties	2.5	3.2	2.9	2.8	3.6	3.1	2.1
Customs deposit	0.0	0.0	0.4	0.5	0.9	0.5	0.3
Other taxes on production**	2.8	2.7	2.4	1.7	1.6	2.1	2.0
Taxes on production and imports paid by households	**0.1**	**0.3**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
Capital taxes and current taxes on capital	**0.4**	**0.8**	**0.7**	**0.6**	**0.7**	**0.9**	**0.7**

/* On the basis of preliminary cash-flow data taxes on production and imports was 15.2 % of GDP in 1997. Revenues from VAT and taxes on pruducts (fuels) were higher, but import duties were much lower than planned.
/** Gambling tax, tax on mining and other taxes on products.
Source: data from annual Budget Execution Laws

The Hungarian **VAT system** rests on a wide tax base (containing few exceptions and exemptions) in comparison to the other Central East European countries *(Jack, 1996).* Since, however, it also taxes a substantial portion of investments[23], it cannot be

[23] Investments by households and general government are subject to VAT but the taxation of corporate investments was gradually abolished. From 1988, companies could benefit from a tax reclaim

regarded as a purely consumption tax in an economic sense, as with respect to its content, it is more like an income-based tax. The average statutory VAT rate is high in Hungary, similar to the Czech Republic and Slovakia. The same value is lower in Poland and Romania. In contrast, the effective VAT burden is lower only in Romania. This, on the one hand, shows that the high rate constitutes a greater incentive for tax evasion and also that the work of the tax authority is substantially less efficient in Hungary than in the Czech Republic, Slovakia or Poland. This is attributable partly to the fact that the exemption threshold (above which the payment of VAT is mandatory) is much lower in Hungary[24]. Through this, the number of taxpayers has become substantially higher than in the other countries, where the tax is collected at the level of the larger taxpayers. The possibility of tax fraud is particularly great in the case of tax reclaims. Moreover, VAT can be reclaimed even if the debt of the taxpayer in the given period is lower than his claim. Abuse could be avoided if only such VAT could be deducted which had previously been actually paid.[25]

The weight and significance of VAT has increased since 1993. While the 25 percent general rate has remained constant, major changes have taken place in the range on which VAT is paid at 0 and 15 percent. They were replaced by rates of 0 and 6 percent, while the categories were radically changed. The wide category taxed at 0 percent was almost abolished (the only exceptions were medications) and they were regrouped largely under the 6 percent rate with a smaller part (fuel) under the 25 percent rate. In 1993, in the course of the year, the supplementary budget raised the preferential rate to 10 percent, which was again increased from 1994 to 12 percent. Since then, the greatest change has been that the VAT base has expanded and, since 1996, consumer price subsidies are also included. (The revenue surplus does not improve the balance because this price subsidy was grossed up with VAT.)

In Hungary, **consumption tax and taxes ("fees") on specific goods** were levied[26] on a group of products wider than the classical range of excise products.[27] In the case of consumption taxes, the reason for this was to increase the state's share to increase revenue but, in the case of the Road Fund, the Cultural and the Environment Protection Funds, it was to guarantee the targeted revenue assigned to concrete tasks. The taxes ("fees") of the latter two funds are enforced on a relatively wide range of products but at lower rates. Hence, they are not particularly efficient when measured against the costs of tax administration.

The amount of the tax is characteristically determined per unit and the significance of the ad valorem tax is lower. This also means that tax items need to be valorized year after year, in accordance with planned inflation. From 1993, when it became obvious that full valorization greatly reduces legal turnover, tax items were increased only in

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increased by 20 percentage points each year, thus they have not been taxed since 1992. From 1993, the tax reclaim on investments in housing and housing renewal was abolished.

[24] In 1994, it was one-sixth or one-ninth of the thresholds of the countries referred to. In the meantime, this difference has declined because since then the threshold value was doubled.

[25] Naturally, default with respect to VAT payment may take place not only in the case of fictitious transactions but also in the case of companies that go bankrupt. Then the buyer would suffer because he would not be able to reclaim the VAT that the seller gone bankrupt never paid.

[26] In addition to the typical excise products, it is payable on cars, coffee, precious metals, chocolates, packaging materials, tires, cooling equipment, batteries, cultural products and services.

[27] Alcohol, tobacco products, fuel.

part, at a rate short of that of inflation. (In the future, it is planned that annual valorization will be 80 percent.) Measures taken to curb tax avoidance were continuously on the agenda. As early as in 1992, it became clear that household heating oil sold at preferential prices was greatly abused. Dye used for marking and inspections only brought about partial results: thus, from 1995, the price of the household heating oil was raised to the price level of other fuels. This put an end to the abuses and increased consumption tax revenue. From 1998 consumption tax will be transformed into an excise duty. Taxation of products which are not classical excise products will be gradually terminated within a few years. It will become general practice that taxes will be determined per unit basis, an ad valorem tax part will be retained only in the case of tobacco products. At the same time, taxes ("fees") for the environment protection and cultural products will remain in place.

There are a number of factors influencing changes in **customs revenue.** In addition to changes in the volume and composition of imports,[28] customs tariffs (and preferences) determine the customs duty payable, based on changes in devaluation, cross exchange rates and international prices. Actual customs revenue, however, is also influenced by changes in discipline concerning the payment of customs duty and changes in the customs authority's collection, control and assessment activities. Of these numerous factors, we shall now address the effects of customs policy and the measures taken by the authorities.

Commitments undertaken in international agreements fundamentally determine the amount of leeway available in customs policy. The general ban on raising customs tariffs undertaken in the Europe Agreement concluded with the European Communities came into force in 1992, while at the time it was not yet possible to apply the so-called protection clause guaranteeing the option of transitory customs protection. Thus in 1992 customs policy was characterized by the preferences available from customs tariffs. In 1993 customs tariffs were reduced somewhat both vis-à-vis the European Community and Poland, the Czech Republic and Slovakia. In 1993 the average customs burden calculated by also taking into account the customs clearance fee and the statistical levy was 10.8 percent, which declined to 9.4 percent in 1993. This was attributable to the fact that the dismantling of customs duties under the free trade agreement affected some 70 percent of the products in that year and with respect to certain products, the process was accelerated, that is, the customs tariff became zero. In the autumn of 1994 agricultural customs duties were raised. In 1995 the reduction of customs duties in accordance with Hungary's commitments undertaken in the free trade agreements was continued with respect to a wide range of products also including products sensitive from the viewpoint of the protection of domestic production. In a range affecting about 60 percent of trade, the average customs burden declined and, in addition, the statistical levy was also reduced by 1 percentage point and the import license levy, which was in any case enforced in a range narrowed year after year, was abolished. In March 1995, as part of the stabilization package, measures aimed at increasing customs duties for a transitory

[28] Composition is interesting from the viewpoint of country of origin, product group or exemption from customs duty. Changes in the share of imports exempt from customs duty, for instance, caused a revenue loss of 2 percent by itself in 1995 when the share of customs-free imports rose from 13.5 percent in the preceding year to 15.5 percent.

period[29] were taken with the introduction of the 8 percent import surcharge, thus the average customs burden rose to 10.3 percent. Customs duties and levies were reduced further in 1996-1997 and gradually the import surcharge was also abolished.[30] Major changes took place in 1997, as far as exemptions from customs duty were concerned: five kinds of exemption were terminated through accession to the Pan-European System of Accumulation[31] which accepts only certain types of exemptions and drawbacks. It is not possible to effect any other drawback but customs tariff preferences continue to be permitted. In the case of the remaining drawbacks, rules have been tightened by making such drawbacks retainable in case of tax or social security contribution arrears. The new customs law abolished the exemption of contributions in kind from customs duty which was made possible by the Act on the Investment of Foreigners in Hungary.

Discipline in the payment of customs duty was improved considerably by continuously tightening up the legal regulations, introducing prompt payment and the system of customs deposit. Customs payment obligations increased quite substantially in 1991, relative to the preceding year, with the unfolding of trade liberalization and the shift in settlement from ruble to convertible currencies. As a result of the economic recession and the deterioration in payment discipline, outstanding claims of the customs authority reached 50 percent of customs revenue by the end of the year, which meant that only about two thirds of the obligations were actually paid up. As a result of the measures taken, the arrears, which amounted to 1.5 percent of GDP outstanding at the beginning of 1992, sank to 0.3 percent by the end of 1993. The system of customs deposit affected those who provided no other guarantee for meeting their import-related obligations on time. Customs deposit had to be deposited not only on the customs duty, but also for VAT and consumption tax. Characteristically, nearly two-thirds of the total customs deposit concerns VAT, 10 percent consumption tax and only a quarter customs duty. The stock of customs deposits depends on turnover and the processing time taken by the customs authority, while the surplus of customs deposit appears as a revenue to the central budget. Licenses for deferred payment[32] were tightened from 1997 and, in addition to the security offered by the general guarantee used till then, “reliability”[33] became another criterion for licensing. The customs authority planned to do away with the remaining outstanding claims (amounting to 0.1 percent of GDP) through reinforcement of its collection operations by 1997. From that year, the new Customs Law incorporated the

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[29] The import surcharge was levied on about 60 percent of imports excluding imports for investment purposes, energy and a few other import items.

[30] This was reduced by 1 percentage point in the autumn of 1996, then in three steps, each of 1 percentage point, in the spring of 1997, then the remaining 3 percent was abolished at the end of the half year.

[31] Twenty-nine countries belong to the free trade circle: the EU, EFTA and CEFTA countries, Romania, Slovenia, Bulgaria and the Baltic states. With respect to these countries, identical rules of origin are enforced on the basis of which four types of exemption and one type of drawback can be permitted.

[32] Payable within 15 days, that is, customs deposit need not be put up.

[33] This means that whoever has no tax or social security debt may be regarded as reliable (the tax authority and social security provide information on this). A new company which from this point is still unknown to the authorities has to put up twice the usual deposit.

possibility of a valuing system even more stringent than the GATT valuing system,[34] which is stringent in any case.

The categories of **local taxes** are composed partly of *property-type* taxes and partly of taxes on *production* (the table shows them in this breakdown). These were introduced in 1991 as well, but owing to the time required for the process, the former Act on Household Taxes, Fees and Contributions was in force until the end of that year (December 31, 1991). By the end of that year, only a third of the town municipalities[35] levied local taxes. About 43 percent of these municipalities introduced a local industry tax, an additional 30 percent levied communal taxes on individuals or on businesses, 21-22 percent of the municipalities introduced a property tax on buildings and a tourist tax proportionate to the time spent. The share of local taxes increased continuously in terms of GDP until 1993[36], then remained at a constant level until 1995. There was another major growth in the level of taxation in 1996, when increasing numbers of the some 50% of the municipalities which had not levied a tax in the past made use of the centrally-regulated and delineated possibility of levying local taxes. This, however, did not alter the characteristic of local taxes: they vary exceedingly among the municipalities as, for instance, in the meantime, Budapest shifted from the former 0.8 percent rate of industry tax to the maximum rate of 1.2 percent. The differentiation is also characterized by the fact that 53 percent of the total local taxes were generated in Budapest and the surrounding Pest County, while the village and large village municipalities, constituting 93 percent of the total, generate no more than 9 percent of the total local tax revenue.[37]

Of the **other tax revenues,** we have already mentioned taxes on products making up the major part and the local production related taxes (e.g. local industry tax). The remaining taxes on specific goods and services lift off extra profits, such as the DTTP (Differential Turnover Tax on Production), the mining royalty or the gambling tax. In 1991, substantial changes took place partly with the introduction of the gambling tax and partly through the transformation of DTTP. Under this heading, this was the last year when payment of extra revenues arising from trade settled in ruble terms appeared. Its magnitude reached 0.5 percent of GDP but it was even higher in the preceding years.

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[34] This means that the National Headquarters of the Customs and Finance Guard may assess the customs value higher than the value arrived at through GATT rules; the difference must be deposited as customs security and the authority has 60 days to furnish proof of its estimate by requesting additional information. The system has been in operation since August 1 in the areas which have been characterized by undervaluing, thus second-hand cars, electronics, fresh fruit, vegetables and flowers. Since the customs clearance of second-hand cars was centralized to a specialized location in Budapest, turnover plummeted to a fraction of its former value.

[35] As far as its weight is concerned, this ratio is higher, because Budapest, the capital city, also introduced local taxation.

[36] By 1992, 47 percent of all the municipalities levied local taxes and this ratio has slowly increased further. By 1995, more than half of the municipalities exercised their right of levying taxes. In the period 1992-1993, not only tax revenue increased but the internal distribution of revenues was also transformed. The weight of the local industry tax rose from 74 percent to 80 percent, that of the property tax on buildings declined from 10 percent to 8.5 percent, as did the communal tax from 9 percent to 6.5 percent together with other local taxes (tourist tax, land tax) from 7 percent to 5 percent.

[37] This also demonstrates the fragmentation of municipalities, as the average number of their inhabitants is at around 3,000 in contrast to the West European average which is several times higher than this figure.

4. As far as their contents are concerned, the **revenues from co-payments and fees collected** by the central and municipal institutions and the **revenues from households to obtain certain licenses or certificates** can be deducted to some extent from the general government expenditures on final consumption and social transfers to households in kind. Apart from levies (the rate of which is determined centrally), all other revenues depend on the management of the institutions, although there were limits to their powers of price setting. The revenues of the central budgetary institutions proved to be underestimated year after year, as for them, a higher revenue estimate would have meant a lower allocation from the central budget. In spite of the reductions in allocations, the central agencies were able to maintain the level of their expenditures on wages and goods and services out of their own revenues which were regularly higher than projected, that is to say, central control could not be efficiently implemented. The budget punished underestimation by withdrawing the surplus to some extent but, as an incentive, it always left a part with the institutions. From 1996, the treasury system resulted in changes in this field as well: institutions must first use their own revenues to cover their expenditures, their central appropriations can only be used thereafter. The usual surplus in their own revenues enabled a saving in a part of the central appropriations at the end of 1996.

Table 7

Revenues of the institutions of the general government

(in % of GDP)

	1991	1992	1993	1994	1995	1996	1997 Plan*
Co-payments from other sectors	3.0	3.2	3.6	3.8	3.4	3.4	2.9
Revenues from economic activity	1.0	1.0	0.7	0.6	0.2	0.0	0.0
Fees for licences and certificates	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Total	4.2	4.4	4.6	4.6	3.7	3.4	3.0
Cumulated impact of outsourcing	0.0	0.1	0.1	0.4	0.5	1.0	1.5

/* Actual figures will be higher, co-payments can reach 4 % of GDP.
Source: data from annual Budget Execution Laws

The share of the total own revenues and levies in GDP increased gradually until 1994, then it began to decline. If we take into account the impact of outsourcing by taking the institutions covering their expenditures out of their own revenues from outside the general government, the decline was of a much lower extent. The picture would be even more accurate if we were able to take into account those effects which related to the outsourcing not of entire organisations but only of their units which provide business service.

IV. Changes in the primary expenditures of general government

Essentially, the expenditures of general government can be divided into four major groups: direct expenditures (it is to this extent that the state participates in GDP generation), current transfers, capital expenditures and interest expenditures. First we shall examine changes in the first three categories, the so-called primary expenditures, in greater detail. In the next chapter we shall return to direct expenditures and we shall present their contribution to GDP in a functional breakdown.

Table 8

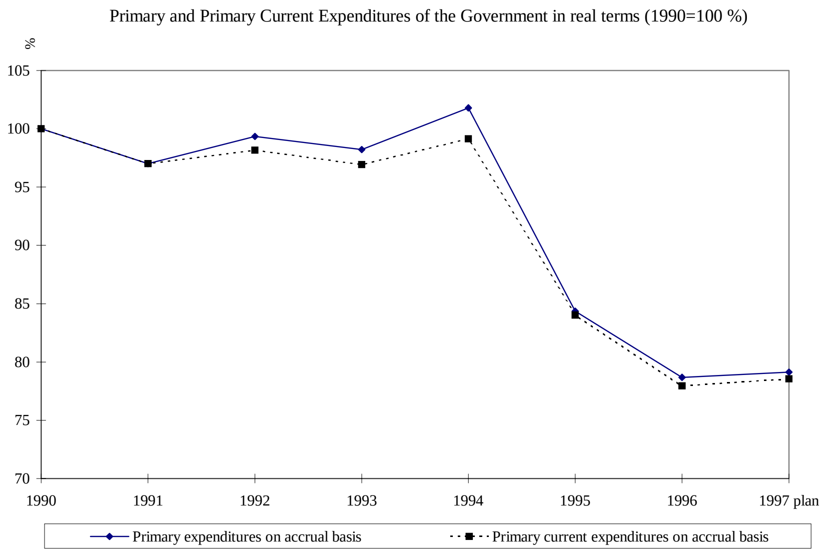
Consolidated expenditures of the General government (% of GDP)

	1991	1992	1993	1994	1995	1996	1997plan
Total expenditure	**55.4**	**58.5**	**59.2**	**59.1**	**52.6**	**48.7**	**49.3**
Total expenditure on accrual basis	**56.5**	**59.3**	**61.7**	**61.6**	**53.9**	**50.6**	**48.8**
Errors	-0.2	-0.2	-0.2	0.4	0.0	0.1	-0.1
Interest expenditures	6.0	5.6	4.6	6.8	9.6	8.4	10.0
Interest expenditures on accrual basis	6.0	5.6	5.7	7.9	10.3	9.9	9.4
Transfers to cover NBH losses	0.0	0.3	0.0	0.0	0.0	0.8	0.3
Primary expenditures	**49.2**	**52.5**	**54.4**	**52.7**	**43.0**	**39.5**	**38.9**
Primary expenditures on accrual basis	**50.5**	**53.4**	**56.0**	**53.7**	**43.6**	**40.0**	**39.1**
Wages	9.3	9.5	9.6	9.6	8.3	7.5	7.5
Goods and Services	7.9	9.8	9.8	9.9	8.0	7.3	8.0
Extraordinary purchases *	0.0	0.0	2.9	0.3	0.0	0.2	0.6
Other expenditures (fees, compensations, etc.)	1.1	1.4	0.6	0.9	0.5	0.4	0.4
Current transfers	24.7	24.1	24.2	24.1	20.5	18.7	17.4
o/w Households	17.7	18.3	18.6	17.9	15.5	13.6	13.0
Consumers price subsidy	3.3	2.1	2.1	2.2	2.0	2.1	2.1
Consumers price subsidy on accrual basis	3.3	2.1	2.2	2.2	2.0	2.1	2.1
Enterprises	3.1	3.0	2.6	3.2	2.3	2.1	1.8
Nonprofit sector	0.6	0.6	0.8	0.7	0.7	1.0	0.6
Capital expenditures	6.2	7.7	7.3	8.0	5.6	5.3	5.1
o/w Investments	4.8	5.9	5.5	6.3	3.8	3.9	3.5
Investments on accrual basis	4.8	5.6	5.6	6.2	3.8	3.9	3.5
Capital transfers to Households	1.0	1.2	1.2	0.9	1.2	0.9	0.7
Capital transfer sto Households on accrual basis	1.1	1.1	1.0	0.9	1.2	0.9	0.7
Capital transfers to Enterprises	0.3	0.4	0.6	0.7	0.6	0.4	0.5
Capital transfers to Nonprofit sector	0.1	0.1	0.1	0.2	0.0	0.1	0.3

The weight of general government increased in the period between 1991-1994. The growth in expenditures expressed in terms of GDP observed in 1992 was attributable to the fact that, in parallel with the volume decrease in GDP, the volume of expenditures increased rather than decreased. This took place in spite of the fact that steps paramount to a reform were taken in relation to consumer price subsidies (the range subsidized shrank considerably). In real terms, expenditures increased primarily in the case of the purchase of goods and services and capital expenditures, while remaining essentially at the same level in the case of transfers to households and expenditures on wages (see Table 9).

GDP reached its nadir in 1993. As primary expenditures declined at a similar rate in real terms, they did not change as a share of GDP. The decline in expenditures was related to the reduction in the volume of accumulation expenditure. Then, in 1994, when economic growth commenced, the growth in the volume of primary expenditures exceeded GDP growth rate, hence their share increased again. Apart from current and capital transfers to households, the real value of every expenditure increased and the volume of public investment expenditures reached a level higher than ever before. As can be seen, the fluctuation in capital expenditures considerably influenced the development in the volume of primary expenditure. Taking current expenditures into consideration only, we get a more balanced picture in the period 1991-1994. Taken together with capital-type expenditures, current expenditures evolved similarly to expenditures in 1995-1997, which indicates that similar adjustments took place in both areas.

Figure 3



A turnabout-like change took place with respect to the size of general government in 1995. It was in that year that the share of primary expenditures decreased significantly (by 10 percentage points on an accrual basis). Within this, the weight of transfers to households declined further but, in that year, the share of expenditures which had been more stable until then, such as on wages, public investment or subsidies to the corporate sector, also declined. The **1995-1996 adjustment** shows an ambiguous picture in the light of international experience as was presented in the first chapter, insofar as the expected sustainability of success is concerned, because the first phase (1995) was still characterized by measures taken to reduce investment expenditures[38] as well as measures taken on the revenue side (import surcharge, devaluation). The result of the price level increasing effect generated by these measures finally resulted in revenue declined in real terms, while the real value of expenditures decreased more intensively as a result of stronger inflation. Equilibrium had to be adjusted using such transitory instrument in the first step because the impact of more lasting measures appeared more slowly, unfolding continuously. In the following, we shall examine how the structure of expenditures evolved over the period under study and to what extent they were affected by the various measures.

Table 9

[38] The impact of substantially curbing investment expenditures was reduced by the significant decline in the sale of real assets (negative investments).(Negative investments turned out to be nearly 1 percent of GDP lower in 1995 than in 1996).

Consolidated revenues of the General government in real terms

	1991	1992	1993	1994	1995	1996	1997 plan
Total revenue on accrual basis	**1328.8**	**1278.9**	**1311.9**	**1272.9**	**1186.9**	**1188.2**	**1173.0**
Errors	3.4	14.2	2.7	8.1	-1.5	-4.2	6.3
Interest revenues on accrual basis	43.3	35.0	23.1	26.8	26.0	50.0	41.1
NBH profits on accrual basis	9.0	3.2	7.0	11.5	2.4	0.1	0.0
Primary revenues on accrual basis	**1286.0**	**1243.3**	**1282.6**	**1236.9**	**1157.8**	**1135.8**	**1133.4**
Current taxes on the profits of corporations on accrual basis	112.9	59.7	40.5	49.7	47.0	49.0	52.4
Taxes on production and imports on accrual basis	417.7	407.3	429.1	417.8	448.3	425.7	409.8
Current taxes on the incomes of households on accrual basis	182.7	185.3	184.3	171.8	175.9	182.9	177.6
Social and other contributions on accrual basis	342.6	349.8	350.3	330.3	294.1	276.6	294.1
Taxes on production and imports of households	3.3	6.7	2.9	2.0	1.4	1.5	1.3
Fees, co-payments and profits	104.8	106.9	109.8	114.7	93.8	87.2	104.0
Capital taxes, and current taxes on capital	10.1	18.6	15.7	15.8	16.5	22.0	21.8
Dividends	21.1	6.7	1.7	4.9	2.5	4.2	3.5
Fines and other penalties	30.9	28.7	26.6	22.8	17.8	18.4	18.9
Other revenues	8.5	12.8	14.8	22.8	12.6	26.0	3.7
Capital revenues	**51.4**	**60.7**	**107.0**	**84.4**	**48.0**	**42.2**	**46.4**
Repayments	16.4	8.0	54.6	10.6	3.6	7.0	13.7
Other repayments mixed with returns	21.4	17.6	15.6	18.0	14.5	11.6	11.7
Disposal of fixed assets	11.4	31.6	29.8	47.5	23.2	17.2	17.1
Other capital revenues	2.2	3.5	7.0	8.2	6.7	6.4	3.9

- Between 1991-1994, the real value of **purchases of goods and services** increased continuously, while expenditures on **wages** remained constant. In 1995-1996 the real value of expenditures on both wages and goods and services declined substantially. Wages declined by nearly 1.3 percentage points of GDP in 1995due partially to the inflationary impact of the measures implemented to increase state revenue. Essentially, therefore, what we have is a loss of value in these items, that is, the structural reform measures could not result in any considerable savings in this field[39] in 1995. Of the 1996 decline, 0.4 percentage points are attributable to outsourcing institutions able to cover their expenditures mainly out of their own revenues from outside the general government, which means a quarter of the additional 0.8 and 0.7 percentage points decline appearing in the case of expenditures on wages and on assets, respectively. The part of the decrease above this was attributable, in the case of wages, to the loss of value of the wage level to a substantial extent even in 1996,[40] but the impact of the staff reductions of the preceding year was perceptible to a greater extent. The structure of employment in the public sector changed in a favorable way in 1996: redundancies were effected partly in inefficient areas, while the numbers employed in tax administration increased.

- In addition to the net expenditures on wages and goods and services,[41] the state's final consumption and transfers to households in kind also contains **consumer price subsidies** of certain products. The range of consumer price subsidies was transformed in 1992, when the price subsidies for dairy products, household energy, water and sewer fees were abolished, thus subsidies declined substantially

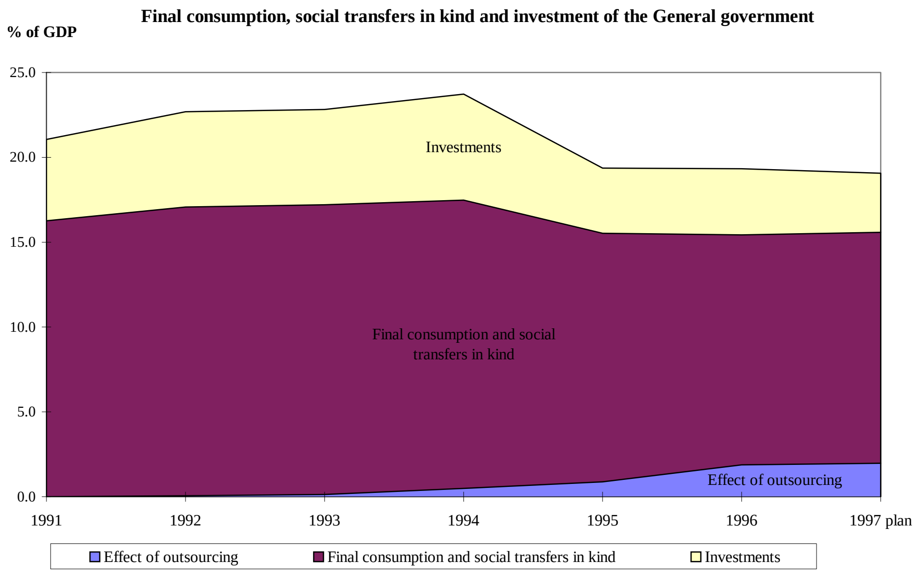
[39] In respect of wages, the redundancies did not produce savings in 1995 owing to their time requirement and the system of severance pay.

[40] One of the reasons for the loss of value in 1996 was that the maintenance of the real value of wages could not be implemented even at the level of planning and, in comparison to that, actual inflation turned out to be several percentage points higher. The savings realized from the redundancies effected in 1995 (and to a slight extent also in 1996) were retained by the institutions. They should have financed a substantial portion of the wage increases undertaken in the wage agreement from these savings. That is to say, the originally undertaken 19.5 percent average wage increase would have meant an *ab ovo* lower increment in terms of the total wage bill. Owing to the insufficiency of the funds of the institutions, however, the planned wage increase could not be satisfied in reality.

[41] Reduced by the co-payments of households and fee revenues of institutions and by the revenues from households to obtain certain licenses and certificates.

in terms of GDP. The price subsidy extended for transportation supports wide household strata (public employees, pensioners, conscripts, students), hence this subsidy is insufficiently targeted. The percentage rate of the subsidies is frequently very high and enables users to make use of transportation facilities at this subsidized price without limitation. Since 1995, rates have been continuously lowered and in the case of certain groups, limits were set on the number of usage. The subsidization rates on medications were also continuously reduced. If price subsidy was determined in a fixed forint amount rather than in percentage terms, it would result in additional savings and would shift consumption towards cheaper medications. Another problem is that the municipalities issuing health cards (authorizing the holder to obtain medication free of charge) bear only a fraction of the costs, hence the necessary stringency is lacking on their part in terms of both issuing and control. All in all, the weight of consumer price subsidies was constant in the period between 1992-1996 in spite of the fact that in 1995, the range and extent of subsidizing medications were reviewed. The share of consumer price subsidies in GDP still failed to decrease in 1996, even though the range subsidized shrank further and the rate of the subsidy decreased in the case of medications and the subsidization rates extended for transportation declined as well. The reason for this was that price subsidies were increased by the change introduced in 1996, according to which the transportation price subsidy is to be part of the VAT base. (The subsidy is disbursed in an amount increased by the amount of VAT but, at the same time, VAT increases revenue, hence it has no impact on the deficit.)

Figure 4



- With the reduction in **public investment expenditures** effected in 1995 (constituting 2.4 percentage points in terms of GDP), the share of these expenditures came nearer to the internationally normal level. The peculiar features of economies in transition (underdeveloped infrastructure and a low rate of return owing to the constraints of solvent demand for such services) will, however, necessitate stronger state participation in the longer term. In 1996 the share of the state's expenditures on investment was not further reduced in spite of the fact that the “own funds” of the local governments proved to be insufficient (hence they were unable to make use of the targeted subsidies) and they were also unable to make use of the regional equalization funds aimed to make up for the lack of their own funds owing to the belated adoption of the Act on Regional Development and the delays in the decision-making process based on the Act. There could also be technical reasons giving rise to delays in investments as the application of the Act on Public Procurement slowed down investment projects.

- Within **current household transfers**, expenditures expressed in terms of GDP declined continuously under several headings since 1991, thus in the case of expenditures on pensions, sickness benefits and maternity benefits. The impact of unemployment benefits contributed to the fluctuation in the total benefits which, following the recession, grew until 1992 then remained at that level of 1993 and resulted in expenditures declining since 1994. The greater part of the 2.7 percentage point decline in total household transfers taking place in 1995 was, however, attributable to loss of value due to inflation. In 1996, loss of value (which was partly planned and partly resulted from higher than expected inflation) and the impact of the measures reduced the share of transfers to households by another 1.1 percentage points (that is, by 7-8 percent).

Table 10

Current transfers to households in % of GDP

	1991	1992	1993	1994	1995	1996	1997Plan
	17.7	18.3	18.6	17.9	15.5	13.6	13.0
1. Pensions	10.5	10.4	10.3	10.1	9.2	8.5	8.4
2. Sick-pay	1.2	1.0	1.0	0.9	0.7	0.5	0.4
3. Maternity provision	1.1	1.0	0.9	0.7	0.6	0.6	0.5
4. Child care benefits	3.3	3.1	3.0	2.5	1.8	1.4	1.2
5. Unemployment benefits*	0.5	1.2	1.3	0.7	0.5	0.5	0.5
6. Other social transfers	1.2	1.6	2.1	2.9	2.7	2.0	2.0

/*Including those from the Unemployment fund, but excluding transfers from the municipalities

Pensions moved along with wages in 1995, thus a real decline also took place in this field. At the same time, the increase in numbers raised expenditures on pensions by nearly 2 percentage points. In 1996 the change according to which from that year on pension increases were not linked to the wage increases of the given year but to that of the preceding year had a restraining impact on the growth of expenditures on pensions. Transfers to households were also reduced by the **unemployment benefit** system, which can be regarded as stringent and restrictive by international standards as well, as more and more people lost their eligibility for unemployment benefits. In respect of **sickness benefits**, measures were taken in both 1995 and 1996 to reduce the range of the benefit, as well as its rate. The weight of sickness benefits declined by a total of 0.2 percentage points (20 percent) in 1995. In 1996, raising the sick leave paid by employers made for additional savings at the state level, as this resulted in some additional burden for the public institutions, but it reduced expenditures on sickness benefits by an additional 0.2 percentage points (30 percent) at the social security system (about half of the decrease was the effect of the measures and half resulted from the unexpected decline in the time period spent on the average sick leave). Changes in the number of persons eligible for **family allowance** and the determination of the magnitude of that allowance together regularly resulted in a decrease in expenditures over the period under study. The attempt at introducing reform-type changes in the system of family benefits made in the course of 1995 was unsuccessful as the decision by the Constitutional Court postponed its implementation. The impact of tightening the eligibility criteria became apparent in 1996.

In general it can be established that the *reduction of wasteful, ill-targeted (unproductive) social benefits not only makes fiscal adjustment successful in the longer term, but also facilitates economic growth*. In contrast to this, the reduction in the so-called productive[42] social benefits is accompanied by a decline in economic growth according to experience. (It should, however, be noted that the strong relationship generally empirically demonstrated between transfers and growth may arise from the fact that growth enables the reinforcement of the social safety net and it is not the latter which has a stimulating impact.)

- **In the case of current transfers to the corporate sector,**[43] the most substantial change took place in 1991.[44] Relative to the preceding year, subsidies decreased by nearly 1.5 percent of GDP, although two-thirds of this was due to the fact that export subsidies to socialist countries were abolished. Between 1991-1995, current subsidies to the corporate sector were further gradually reduced, in parallel with this, however, capital subsidies increased to a similar extent. Corporate subsidies reached an exceptionally high level in 1994. Expressed in terms of GDP, the subsidization of agriculture did not change much but the ratios within it were substantially rearranged in favor of export subsidies and to the detriment of agricultural market subsidies. The growth in the share of corporate subsidies could

[42] Sala-i-Martin uses the term "productive transfer" in the sense that it decreases crime and abuse, social unrest and thereby contributes to economic growth. In our view, a fundamental element of such "productivity" is that it be targeted, that is, that it focus on the genuinely needy strata.

[43] By far the greater part of corporate subsidies is focused on transportation and agriculture. The subsidization of transportation appears here only in part, as not only the general prices of the services are subsidized but, in addition to this, a number of strata are eligible for additional preferences from this "full" price based on a number of other criteria. (This latter subsidy is carried under the price subsidies already presented.) The subsidy extended to producers affects the railways and other companies in public transportation. The railways receive a subsidy on the basic service only, which can be qualified as a public function (maintenance of the tracks); in principle, it should manage operation out of its own funds. The subsidization of agriculture is low by OECD standards: of the member countries it is only lower in New Zealand *(Mackenzie, Klingen and Brosio, 1997)*. In this respect, the reduction of export subsidies achieved since 1991 is the greatest decline ever achieved by an OECD country. Yet there is a danger of returning to old practices as in Hungary, the law permits a wide range of subsidies, even though the greater part of these are not currently applied. It will be necessary to introduce guaranteed prices and market intervention arrangements in conformity with EU practices. At present, the reduction in export subsidies in accordance with WTO commitments (by an additional 30 percent until the year 2000) and a focus on investment subsidies can be observed. There was an important change in 1996 in that the subsidies disbursed earlier on the basis of value specified in percentage terms were determined in forint terms by physical units. (A fixed subsidy had to be specified for 300 products.) The normative nature of export subsidization constitutes a problem, as the global annual budget estimate may be exceeded depending on export performance. Production subsidies are partially normative and are partially distributed through tenders. This latter system gaining ground would be generally more favorable for the budget as normative subsidies regularly result in additional expenditures.

[44] For instance, the price subsidization system for large agricultural business working under unfavorable conditions, the subsidies for mining, beef production and fertilizers and the producer price subsidy for branches of transportation other than the railways were abolished.

be attributed to the higher losses incurred by rail transportation. Relative to the Ft 4 billion subsidy (0.1 percent of GDP) in 1993, the Hungarian State Railways received Ft 32 billion (0.75 percent of GDP) in 1994.[45] Accordingly, the 0.8 percentage point decrease in corporate subsidies expressed in terms of GDP which was effected in 1995 appears to a substantial extent only in relation to the outstandingly high 1994 base. The railway subsidization sank to 0.25 percent of GDP, this, however, did not prove to be sufficient and the railways had to take out an additional loan corresponding to 0.3 percent of GDP under state guarantee. What constituted genuine savings was that the effective export subsidy was reduced from the 16.3 percent level in 1994 to 12.2 percent in that year. Additional subsidies were extended in relation to the reconstruction of the steel industry; its share, however, remained below 0.1 percent of GDP. In 1996 corporate subsidies were reduced further, partly as a result of certain measures (e.g. further reduction in effective export subsidies and partly in relation to individual transactions (e.g. recovery of certain guarantees). (At the same time, a shift in the structure of exports towards products subsidized at a higher rate increased expenditure.)

As mentioned above, the share of **capital transfers to the corporate sector** in GDP increased from 1991 in parallel with the reduction in current subsidization. These subsidies are largely extended by the local governments and, to a small extent, by the extra-budgetary funds based on various standards. In 1996 some restraint was observed here as well owing to the more constrained funding of the local governments. The share of **capital transfers to households** in GDP**,** by far the greater part of which is related to housing construction, declined gradually until 1994. Relative to the high level of housing subsidies in 1990, expenditures decreased considerably in 1991, as the system of housing subsidies was modified and the interest rate on the preferential loans was significantly increased.[46] A major change in the subsidization system was brought about by the decision made at the end of 1994, according to which the amount of the benefit available depending on the number of children for the purchase or construction of new housing units was significantly increased. Accordingly, in 1995, the number of building permits issued increased by 44 percent and the restraining measures brought in the course of the year was not able to bring about the desired result, moreover, they produced additional expenditures due to increased use for a temporary period. In 1996, however, as a result of the measures introduced in the preceding year, the capital subsidization of the households declined. The former level was re-established in the case of housing subsidies and following their peak in 1995, their share in GDP declined by 0.3 percentage points.

Beyond primary expenditure, the changes in **interest expenditures** also point to the success of the adjustment program and an increase in the enhanced credibility of the

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[45] Of this, an amount corresponding to 0.15 percent of GDP became necessary under a redeemed guarantee, as the Hungarian State Railways took out loans under state guarantee; and a subsidy corresponding to 0.4 percent of GDP was the result of the non-recurrent debt settlement related to the railways' debts to social security.

[46] The interest rate rose from 3 percent to 15 percent or, in some of the cases, was transformed to market rate (32 percent) with respect to that part of the half of which was taken over by the state. As they had become uncovered, the housing loans of Ft 82 billion assumed by the state were transformed into housing fund bonds which constituted the liability of the state outstanding against the bank. In this way, the savings under the heading capital transfer partly appeared as a surplus under interest expenditures.

government. The decline in the risk premium did not yet appear in the yield of the discounted treasury bills (and the related interests on bonds) in 1995. Their level hovered around 11 percentage points in the course of the year. From early 1996, however, a major decline in the premium took place: the interest premium has since remained at around 3 percentage points

V. The role of the government in the production of GDP

The allocation function of the government can be observed as production of public goods. The extent of this function changed much in the period, as is illustrated by the following table[47].

Table 11.

The contribution of General Government to Value Added*

(in percent of GDP)

	1991	1992	1993	1994	1995 prelimi
1. Agriculture and Industry	0.2	0.2	0.2	0.2	0.1
2. Public Accommodation + Catering	0.4	0.5	0.4	0.4	0.3
3. Transportation	2.2	2.2	2.0	2.0	1.9
4. Administration**	5.9	6.4	6.6	6.7	5.9
5. Education	4.2	4.6	4.7	4.7	4.1
6. Health	3.6	3.8	3.7	3.7	3.3
7. Other	1.0	1.0	1.0	1.0	0.9
8. Total output	17.5	18.7	18.6	18.7	16.5

* Source: 1991-1994: Central Statistical Office, 1995: Ministry of Finance

** Public Administration and Defense

The role of the government was unchanged until 1994. In 1995 there was a sharp decrease in Education, Health and Public Administration. The reduction in the volume of GDP was lesser (1.8 percentage point) because 0.4 percentage points of decline was related to outsourcing, so resulted in a parallel increase in other sectors (non-profit, corporate). In 1996 fiscal adjustment had impact of another 0.5-1.0 percentage points on GDP production. As was mentioned, the adjustment affects both the wage bill and the purchase of goods and services. While wage levels are determined centrally (Acts on Civil Servants and Public Employees) the different branches have influence rather on the number of staff. This can be in line with the determination of duties, for example reduction of capacities of hospitals, or increase of the working hours in Education. Previously physicians were public employees, but in 1995 2,800 physicians out of 6,500 became private, and till 1996 the share of private physicians reached 60 percent.

[47] The changes reflected in this table are in line with the changes in the public wage bill and purchases of goods and services presented earlier. (Production of GDP is determined on the basis of costs.) The only difference is the statistics calculate with Social Security contributions paid by employers as a factor of GDP production while our consolidated tables excludes this. (See methodological annex.)

Reductions in public employment were concentrated in a few areas in 1995 (Higher Education, Defense and Civil Servants). The average number of public employees declined by 4.3 percent (13,500), half of which was caused by a reduction in part time and pensioner employment and elimination of vacancies. In 1996 reduction in public employment slowed, on one hand there was a cut of 10,000 workers, but the other hand the staff of tax administration increased by 5,000. Tax administration remained a preferred area both in employment and real wages in 1997, so there was no decrease in efficiency in that area (*Haque and Sahay, 1996*).

Another problem is that statistics measure public production (in the lack of market prices) on the basis of costs[48], so efficiency or quality aspects are neglected. Two kind of distortions can be observed. On one hand the general government - in an institutional approach - can include such entities, which do not have public functions and with market pricing would make profits. (Thus their real contribution to GDP is higher than the level of costs.) On the other hand, many public expenditures are unproductive in the sense that they do not contribute to GDP even at their costs. This is a quite common phenomenon identified by the International Monetary Fund (*IMF Survey, 1997*).

The IMF examined 17 countries worldwide. Their findings were that the major source of excessive spending was the overstaffed public sector (in two-thirds of the countries). In many countries (one-third) there were problems with the allocation of primary health and education. Excessive military spending and inefficient investment projects (also in state-owned companies) was at least as serious a problem as the latter. Aside from direct expenditures, inefficient transfers cause also wasteful spending because of their untargeted features.

Since the early 1990’s, the government has implemented many changes in the health sector, including changes to the financing, delivery and institutional system. The Act on Capacity Reduction (1996) intended to reduce excess capacity in hospitals (and excessive length of stay). It defined in-patient and out-patient capacity for each medical specialty on a county basis (based on the number of inhabitants). The Act on Health Insurance (1997) classified medical treatments into the following categories according to the ratio of patients’ participation in the costs: treatment not financed by insurance [49], treatment partly financed by insurance (with co-payments of the patients) and treatment provided free of charge. The Act also includes regulations to the access to services, physicians are obliged to refer patients to a lower possible level of care. Finally, the Act modified the contracting procedures between the Health Insurance Fund, the institutions and the physicians. The Act on Social Insurance Eligibility and Financing (1997) regulated the revenues of the Social Security Funds. Except the effects of these Acts, there will be only minor changes in the Health System. (e.g. introduction of the medical aid lending system) Further steps in Health Reform will be discussed, and approved in 1998, and will be implemented in next year. (*Kornai, 1998*)

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[48] Public goods and services are valued by their cost of production.

[49] From 1998 some of these treatments are financed by the central budget instead of the Health Fund. This will improve the balance of the Health Fund by 8.8 billions of forints (0.1 % of GDP).

VI. The role and the functions of government

From a statistical point of view (SNA), the principal functions of government are to assume responsibility for provision of goods and services to the community or to individual households and to finance their provision out of taxation or other incomes, to redistribute income and wealth by means of transfers, and to engage in non-market production. The definition is not exactly the same as the classic division of the functions of government into three branches (*Musgrave, 1959*), it includes the first two (allocation, distribution) but excludes the third one (stabilization). Stabilization policy has come to be viewed more as one aspect of government intervention to alleviate market failure (*Auerbach, 1994*).

The coverage of the government can be defined in two ways. The first approach is based on institutional classification, the second one on functional classification. Government institutions actually often carry out market activities, while on the other hand public activities are also conducted outside the government (defined as an institutional unit). These are the quasi-fiscal activities. The two different approaches can result in different measures of the size of the government. In Hungary it would be important to calculate the size of the government consistently, excluding all non-fiscal activities performed government institutions and including all quasi-fiscal activities.

Classic public goods are provision of law and order, external security, the executive, legislative and judicial branches of government, the administration of market regulations, provision of primary education, public health, immunization and environmental regulations. In other areas (education, health, social assistance) public functions should be defined in a more specific way by the public sector reform. Another important task of the reform is to focus more on the process by which a public good is produced, the terms under which transfers are provided (benefit levels, eligibility criteria) and the way in which the government purchases goods and services in product and factor markets (*Heller, 1997*). Such public reform efforts can be seen in the United Kingdom, Australia and New Zealand, but there is no such consensus as in the case of “core” public activities. These reforms are necessary because of the high level of wasteful, unproductive spending. Recently there has been a tendency (*Tanzi, 1997*) to gradually reduce government intervention and rely more strongly on the allocative role of the market. The role of government is changing from one which competes with the market to one which augments the market, for example price and interest rate controls, restrictions on the allocation of credit, quantitative restrictions on trade and import duties are being reduced or removed, public enterprises are being privatized. This process also can be seen in Hungary, but these aspects are beyond the scope of this study.

Initially, some general clarification in relation to the public functions was necessary in Hungary, because these public activities can be conducted not only by the government, but by public foundations, companies for the public benefit, public bodies as well. In addition to this, the government supports other public activities performed by non-profit organisations. Certain public enterprises, which provide public transport, such as the Hungarian State Railways are also supported. A distinction was made between the basic public activities and market-type activities in the contract between the government and the Hungarian State Railways. This was the basis of the division of the capital stock as well.

Only those costs related to public activities which are incurred by the State Railways are covered by government subsidy - losses generated by market-type activities are not covered. Public expenditures were reduced in this manner. Support of outsourced institutions remained more or less the same, however both the level of revenues and expenditures of the government sector decreased by the fees and co-payments collected and spent by those institutions.

Separation of public and non-public functions were started by the permission for budgetary institutions to participate in companies. For example in 1992, 14 budgetary institutions received permission to participate in and found companies. On the basis of the revision of the budgetary institutions, an outsourcing plan was introduced with the draft Budget of 1992. Only a fraction of the proposals was realized; in terms of outsourcing there were some mergers and transformations (for example in the case of the Central Institute of Research on Physics). The impact of these measures was a savings of 1.6 billion forints in 1993. The process continued in 1993, and yielded a further 7.5 billion forints in savings. In 1993 a Program for the Revision of Institutions was prepared. The objectives of the program were:

- to define the coverage of the budgetary institutions,
- to make a parallel revision of functions,
- to look for additional financial sources,
- to examine the possibilities, limitations of the introduction of co-payments.

1. The first kind of outsourcing did not involve the transformation of the entire institution; only sections conducting market activities were outsourced. The costs of the institutions will be higher, because the price of the outsourced activities is increased by VAT. On the level of the government this is not an additional expenditure, because the higher VAT revenue compensates for this (provided it is paid). On the other hand, competition can reduce expenditures.
2. The second kind of outsourcing affects the whole institution. New organizational forms (public foundation, company for public benefit, public body) were introduced in the autumn of 1993.

From 1994 the revision of institutions slowed down, the Act on Media was delayed (the Act was the condition of transformation the Radio and the Television) and still in 1995 there were only preparations made for outsourcing. The following table shows the major plans in 1996, which were not completely fulfilled.

Table 12.

Impact of outsourcing in the central budget

(reduction in expenditures and revenues at the same time)
(in the % of GDP)

	1996 plan
1. Water, Postal service, Transport.	0.29
2. Services (supporting production)	0.01
3. Research	0.01
4. Education	0.00
5. Culture	0.24
6. Total	0.54

Source: Ministry of Finance

A significant portion of the outsourced activities have been assumed by the non-profit sector. The share of the non-profit sector in the production of the GDP was 0.4 percent in 1991-92. This share was 0.9-1 percent in 1993-95, and increased even more in 1996. From the beginning of 1995 the Directorate of Reservation was transformed into a non-profit company, at the end of 1995 another non-profit company was separated from the State Energy Supervision. This reduced the size of the government and increased the share of non-profit sector. The annualized[50] effect of outsourcing is shown in the following table.

Table 13.

Impact of outsourcing 1992-1997

	1992	1993	1994	1995	1996	1997 plan
Cumulated reduction in revenues (GDP %)	0.06	0.13	0.48	0.88	1.88	1.91
Cumulated reduction in expenditures (GDP %)	0.07	0.14	0.49	0.89	1.89	1.91
Cumulated reduction in staff	2313	2701	7890	8437	21522	22648

Source: Ministry of Finance

Public expenditures are only one channel of fiscal policy. Other channels include regulations, tax allowances, guarantees, loans, providing fixed (real) assets[51]. These are beyond the scope of our study, but these channels can be employed as alternatives. For example, the role of the government in protecting individuals from risk can be implemented in three forms: spending, regulations and guarantees. (*Tanzi, 1997*) In some areas regulation may be an alternative to spending, for example in the case of fully funded pension reforms. This would not work very well in the health sector, because the amount of money that individuals spend for health care cannot be related to their income. This kind of insurance would generate highly differentiated health care. Government guarantees have replaced spending in different areas, mainly in

[50] Outsourcing conducted during the course of the year had an effect which was only fully realized during the next year.

[51] The government supports conduct of public activities not only transfers, but also by providing fixed (real) assets (buildings). This kind of implicit current transfers cannot be calculated as a loss of revenue (of real assets) because the lack of accounting or statistics. Both Public Foundations and Companies of Public Benefit can be provided with real assets. The latter form is more common, because the founder has more direct rights of disposal over the assets, and the profits made by supplementary activities cannot be distributed.

infrastructure and in parallel with privatization. This means a current spending cut (or additional privatization revenue) at the cost of potential costs in the future.

In Hungary the capital stock of the government was partly distributed to the non-profit sector and partly to holding companies. Management of property performed by holding companies is not a quasi-fiscal activity, but there are quasi-fiscal transfers (e. g. subsidies for reorganization) funded by privatization revenue of the government. While the first holding company (the State Holding Agency) was a budgetary institution transfers and expenditures from guarantees (0.2-0.3 percent in GDP) were included in the budget deficit till 1993. Quasi-fiscal activities can be carried out not only by non-financial institutions, but by financial ones (e. g. central banks) as well. (*Mackenzie and Stella, 1996*) The impact of these activities sometimes is very difficult to calculate, and this question is not the subject of this study.

Annex on the projections for 1998

The analysis of the 1998 projections could not be integrated into the scope of the present study. It was an initial problem that only estimates are presented, rather than facts and actual figures for 1997, and this would have been aggravated by indicating the 1998 estimates. The 1998 estimates would be consistent only with the 1997 planning base, which is not identical with the estimates presented in the study.

According to projections, the real value of primary expenditures would not be further reduced in 1998, i.e. general government spending would rise at the rate of economic growth (or rather slightly exceeding it) according to the plans. At the same time, the centralization of revenues would decline because, in real terms, such revenues would increase at a rate lower than the expected growth rate.

What plays a major role in this respect is that the *development in the real value of total revenue* is not in line with the planned growth (falling 1.5-2 percent short of it).

1. The loss of revenue owing to the pension reform plays a role in this, but its impact can be estimated at no more than 0.2 percent of GDP.
2. A substantial portion of the shortfall is related to the reduction in revenue from customs duties, as the effect of terminating the import surcharge in the course of the year have a full year impact in 1998. In this year, additional reduction in customs tariffs will be due.
3. The Yamburg revenue will cease and the revenue estimate from the Russian debt repayment is also lower.
4. The decrease in income centralization has only a minor impact on households, as the average PIT burden declines by no more than 0.2 percentage points.
5. Apart from this, the only other measure aimed at reducing the tax burden is effected in the case of consumption taxes where tax items are valorized to a rate lower than that of inflation.
6. At the same, the effective tax burden may increase in the case of a number of taxes, as further improvement in the efficiency of tax collection is expected.

Total primary expenditures will expand by 3.5-4 percent in real terms, within this, current and accumulation expenditures will grow at the same rate.

1. As a result of the 17 percent increase in remuneration per capita and the reduction of approximately 1.5-2 percent in public employment, the total wage bill will rise by 15 percent (by 1.5 percent in real terms). The planned reduction in the public employment is concentrated on local governments, while a 1 percent increase in the number of staff is envisaged for the central public administration which represents a lower weight. As seen before, *it is important from the viewpoint of the success of the adjustment that the savings achieved in reducing the total wage bill of general government prove to be lasting.* The 1998 budget does not endanger this as far as wages are concerned at the level of plans, as no subsequent compensation or making up for incomes lost will be effected.

2. The situation in other areas which are important from the viewpoint of the *sustainable success* of the adjustment cannot be characterized quite so favorably. In the case of *transfers to households*, in a wider sense we see a turnabout in the earlier trends and a compensation of the former loss of value to some extent. In *real terms*, transfers *will increase faster than the rate of economic growth.*

3. There are plans to reduce the real value of purchases of goods and services further (by 6-8 percent). According to international experience, savings achieved in this field belong to those which are less sustainable. Its implementation is also not fully guaranteed, as central budgetary institutions may be able to finance their expenditures on goods and services be exceeding their own revenue estimates.

4. In contrast to the 1995-1997 period, expenditures on investments (the reduction of which had played a role in the transitory results of the adjustments) will no longer decrease in real terms in 1998, but will rise at a rate corresponding to that of total primary expenditures.

Annex on methodology

In the course of this study, I have attempted to follow the SNA methodology thus, inter alia, in using the accrual approach, in the appropriate categorization of expenditures and revenues and, for instance in taking privatization into account as financing (as a swap in financial assets). I have deviated from the SNA methodology in a few cases, for instance, in the case of the classification of the contributions on wages paid by the employer[52] and the lending operations of general government. Here, in line with the GFS methodology, lending was calculated as expenditures and the recovery of the loans as revenue. The reason for this is that if the state takes out a loan for its companies, which is regarded as mere financing by SNA, while GFS settles the on-lending of the loan as a deficit increasing expenditure. The former solution may be justified by the fact that the borrowing and the further lending take place not strictly in the interest of the budget, at the same time, as a counter-argument it could be said *(Tanzi, 1993)* that it implicitly assumes that the public companies

[52] According to the SNA guidelines, the employer's payments related to wages or the labor force should be taken into account under the primary income distribution account under taxes related to production. Accordingly, it was here that I presented the communal tax on businesses proportionate to their labor force, but I presented contributions on wages combined with the contributions paid by employees (belonging under secondary income distribution).

concerned would produce the same output at similar cost and would borrow at similar conditions if they were private companies. In contrast to this, in reality a number of companies are able to survive only with state assistance and their support by credits actually contributes to the deficit in general government.

The functional balance sheet structure of the central budget and of the other subsystems in general government has not been prepared to date in spite of the fact that its development has recurrently been on the agenda since 1989. Consequently and methodologically consistently, we do not have fully consolidated general government balance sheets for the period under study. Without this, as the Hungarian general government consists of four subsystems (or five if the central budgetary institutions are regarded as a separate unit) and among these, substantial money flows take place causing multiple accumulation, the true extent of the general government cannot be accurately established *(Cs. László, 1993)*. In the case of the most important items, the Ministry of Finance also performed consolidation officially with retroactive effect to 1994. The problem therein is caused by the fact that the data base of general government is not of an adequate standard and there are significant arithmetical differences in the statements of the various subsystems.[53] Consequently, *the funds transferred and received do not coincide, therefore, the consolidation does not maintain the balance.* The magnitude of the transfers can be more accurately established from the more detailed general government data, thus the difference could be reduced. The data, which are presented in different structures or breakdowns in individual years, could be determined in some places only using estimates based on the previous and the subsequent years. In order that consolidation maintain the balance, the work can be continued but any further refinement in the figures will presumably have only a minor impact on the tendencies described.

With a view to a better analysis of the consolidated expenditure and revenue levels and processes, two corrections were made, some modifications, however, were left out.

On the one hand, wherever it was possible, I have used figures *based on the accrual approach.* The use of the accrual recording affected interest expenditures to the largest extent. It can be seen that whenever interest expenditures swell up suddenly, the accrual recording will present the continuous increase in expenditures even before the actual payment. This held true every year until 1996. A decrease in interest expenditures gives rise to exactly the opposite. Beyond the changes in interest expenditures overall, the cash-flow and the accrual recording also differ if the frequency of interest payment (interest payment period) changes. The Statistics Division of the National Bank of Hungary calculated the figures on an accrual basis and the interests accrued. Concerning *primary expenditures and revenues,* official

[53] The annual laws on budget execution do not present the balance sheet of the central budgetary agencies for 1991 and for 1997; with respect to 1991, however, the figures are partially included in the narrative analysis. It is a general problem that the balance sheets of the local governments breakdown the transfers from the other subsystems only to current and capital items, and that there is no breakdown by subsystems. On that basis, from the other side, using the data of the transfers to local governments reported by the subsystems, one can make deductions with respect to the breakdown. The problem is that the statements of the other subsystems (e.g. institutions, funds) are not full, thus we have attempted to eliminate the deficiencies using the principle of residue (deducting the figures known from the reports of the subsystems from the unbroken data of local governments).

data can be found in the annual volumes of the laws on budget execution for the accrual recording in the case of the major taxes of the central budget and also under some of the subsidies. In the case of the extra-budgetary funds, an adjusted cash-flow figure replaces the accrual recording, which takes into account the amounts which have already arrived in the collection account but not yet settled as actual revenue under revenue. In the case of social security, the quasi accrual recording is in fact related to the settlement of arrears of contribution. I have added the balance of the contributions not paid in the given year and the amounts collected from earlier debts to the revenue of the given year under the accrual recording, as if these had actually been paid. At the same time, I have indicated that as expenditures as if that amount would have been immediately returned by social security as a loan. (I took this into account net, as I only had data on stock changes, as the balance of "lending" and "repayment".) I qualified penalty for delay as interest and presented it in the appropriate line. The differences in the levels on an accrual and on a cash-flow basis are seen in Table 4, where I present changes in the real value of expenditures. (Wherever the accrual basis is not indicated, it means data on a cash-flow basis except for the last line, which category only appears in the accrual based version.)

On the other hand, I did not calculate with the *repayment of the Russian state debt* (delivery of military equipment) and its use under the revenue and expenditures levels, as that appears in a concentrated manner in certain years, hence results in substantial distortions. An alternative solution would be if that expenditures on military equipment could be presented also spread out over time. These were genuine expenditures which would have had to be incurred sooner or later irrespective of the source of financing (repayment of the Russian state debt).

The *impact of the bank, loan and debtor consolidation schemes* (and of the housing loan transfer which took place in a similar manner) was left out of the calculations. This has only a practical reason as, according to the most recent IMF recommendations, the category of the so-called "augmented balance" should also contain these items *(Daniel, Davis and Wolfe, 1997).* Technically, however, it is rather difficult to quantify the loss incurred by general government and also to determine when such losses were incurred. The losses accumulated over the years and their realization is very difficult to track. The government received claims against its consolidation bonds, in actual fact, only the difference between the two constitutes a loss. Had we included consolidation in the study as a primary expenditure, we would have obtained a more accurate picture in the sense that we would have been able to present the full impact of the loss incurred in the economy on general government in full. Such a loss partially appears in the loss of tax revenue, it would have, therefore, been justified to take into account also the impact which appears in the form of surplus expenditure. General government suffered that loss both as owner and as the redistributor of incomes. As the quantification of the loss corresponding to the latter would have added hue to the picture outlined, the former type would have a distorting factor, as this study regards the state primarily not as an owner. (Its revenues from ownership and dividends do not represent a weight such as to substantially influence the tendency, in contrast to the loss of capital recognized in the course of consolidation.)

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