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Hungary: Selected Issues and Statistical Appendix

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HUNGARY

Selected Issues and Statistical Appendix

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MANAGING MEDIUM-TERM FISCAL CHALLENGES IN HUNGARY

I. INTRODUCTION

1. ***Hungary has largely completed the transition process and has shifted focus to the challenges of EU accession.*** Structural reforms of the real and financial sectors have laid the foundation for rising investment, high FDI inflows, and strong growth, with real GDP growth averaging 4½ percent in 1997–99. Privatization revenues were used to substantially reduce foreign debt from high levels in the early 1990s. Fiscal consolidation in 1995–96 drove a turnaround from the excessive external current account deficits of 1993–94, and also facilitated a reduction in CPI inflation from rates persistently above 20 percent through 1992–94, to 10 percent on average in 1999.[1] The implicit debt arising from demographic pressures has been addressed by pension reform, though the health system remains exposed to these pressures. Altogether, the quasifiscal issues facing transition economies have been effectively tackled, in a manner that has contained contingent liabilities (Brixi *et al*, 1999).

2. ***EU accession and other factors will exert pressures on public expenditures in the medium-term, creating a tension in fiscal policy given constraints on revenues and the fiscal stance.*** Accession to the EU is associated with spending for legal approximation and institution building, development of the transport infrastructure, and compliance with environmental standards. Rising healthcare costs are expected in the medium and longer terms. However, revenues cannot be increased to accommodate expenditure pressures because the Hungarian authorities aim to reduce tax and social security contribution rates from high levels to promote employment, which is low by OECD standards.[2] [3] The authorities also seek to maintain a sustainable external current account deficit, implying no room to relax the fiscal stance considering the anticipated robust growth in private investment.

3. ***This paper seeks to illustrate the nature and magnitude of these tensions in fiscal policy, and to explore policy goals and frameworks that might help resolve these while supporting growth***. Given the various expenditure pressures and losses in customs revenues, there is a tension between achieving a modest fiscal consolidation while also easing the high labor tax burden. This tension could be addressed through reforms to improve the efficiency of public services—often provided by local government—and also the effectiveness of

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[1] Cottarelli *et al* (1998) provides a detailed review of these developments.

[2] Ferenczi (1999) finds that in 1997, Hungarian labor force participation is 8–10 percentage points lower than the average in developed countries. Part of this shortfall is accounted for by very low participation of persons over 55 who have retired early, but the participation rate of prime age workers is still 4–5 percentage points lower than average.

[3] Ligthart (1998) discusses the Hungarian tax system and its employment effects.

household transfers, with the broad goal of freezing these expenditures in real terms. The resulting savings would facilitate tax reform, healthcare reform, and higher public investment, together supporting higher growth. To help promote such fiscal reforms and consolidation, a number of other OECD countries have used medium-term budget frameworks, and lessons from this experience may help guide the further development of this type of framework in Hungary.

4. ***The paper is organized as follows.*** Section II outlines the medium-term expenditure demands facing the Hungarian government, also noting areas where reforms may improve services or reduce costs. Key issues in designing a medium-term fiscal framework are discussed in Section III, including private savings and investment prospects and the role of fiscal policy in growth. A quantitative illustration of fiscal strategies in the context of EU accession is then presented in Section IV. The baseline scenario illustrates the tensions in fiscal policy, while the reform scenario aims to realize the authorities' fiscal objectives in a growth supporting manner. Implementation of a medium-term fiscal strategy is complex in practice, and Section V considers lessons from OECD country experiences in this area, as well as possible applications in Hungary.

II. Public Expenditure Issues and Outlook

5. ***The Hungarian government implemented significant restraint and reforms in the mid–1990s, but substantial challenges remain in the medium-term.*** Primary expenditures of general government were cut from some 50 percent of GDP in 1993 to 39 percent of GDP in 1998, as discussed in Ruggiero (1998).[4] While much reduced, government expenditure remains somewhat high for Hungary's level of development (Figure 1) and this can only be partly accounted for by demographic and other factors.[5] The following seeks to identify the main medium-term expenditure challenges, and also some of those areas recognized to be likely to benefit from reform. The discussion is based on recently developed official data classifying expenditures by function (Table 1). The impacts of EU accession on the budget are discussed throughout, and are summarized in Box 1 and Table 2.

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[4] The primary expenditure ratio for 1993 is a staff estimate that attempts to avoid double-counting of intragovernment transfers—the official data yield a ratio 58 percent of GDP.

[5] Begg and Wyploz (1999) use a model of OECD government expenditures to project expenditures in the transition economies, finding that government transfers to households and enterprises are significantly larger than projected for Hungary, though this gap has fallen dramatically since 1991.

Box 1. Direct Fiscal Impact of EU Accession

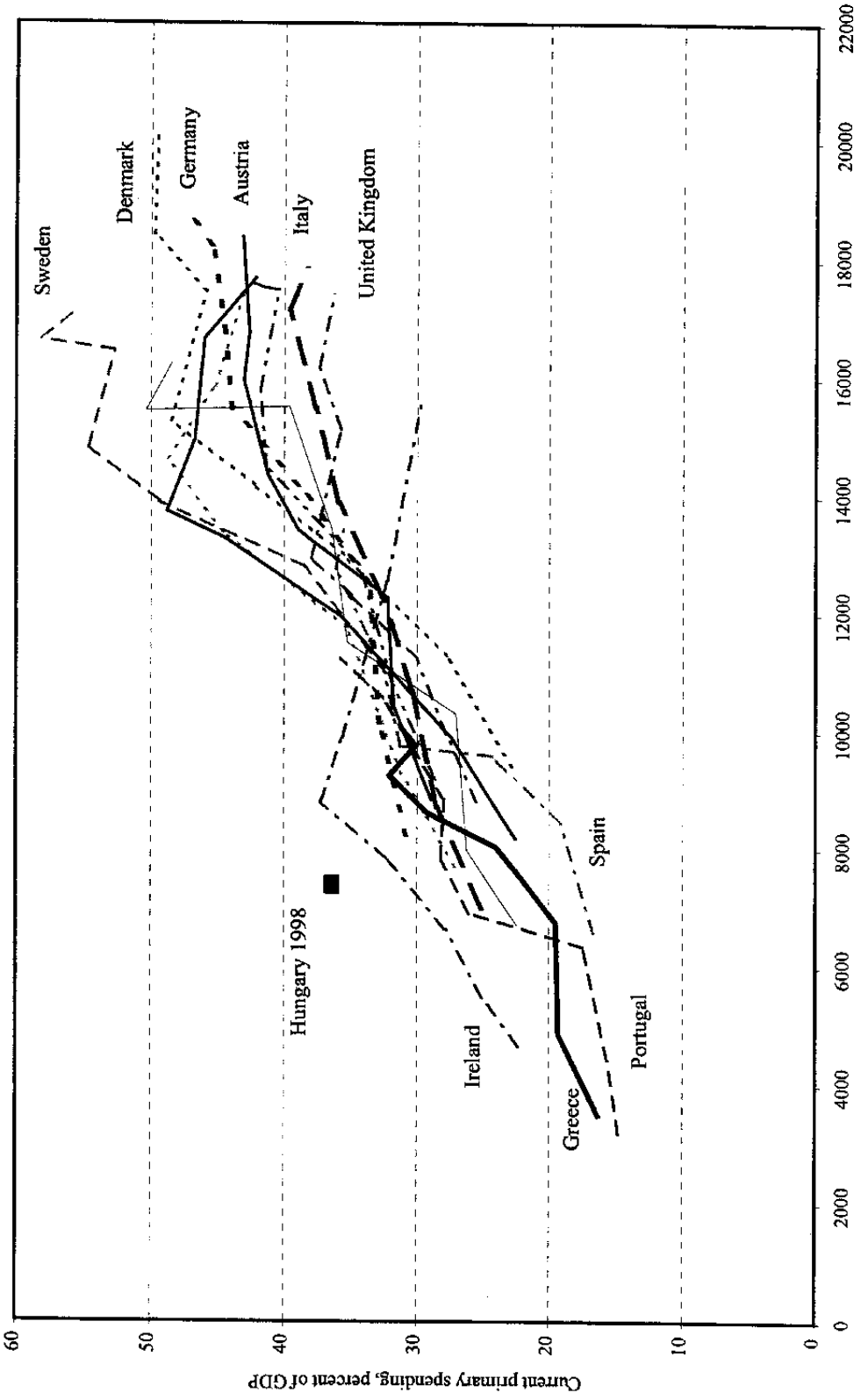
Direct fiscal impacts of EU accession include the EU related transfers, changes in revenue due to tax and customs policy compliance with EU standards, and expenditures required to meet EU standards. There is a range of potential outcomes for each depending on the negotiated accession agreement and internal EU reforms.

Expenditures: Hungary's *National Program for the Adoption of the Acquis* (NPAA) envisages that by end 2001, Ft 824 billion will be spent on legal and institutional development and economic development, **(Table 2)**, a cumulative 6½ percent of GDP. Of this, some 3 percent of GDP is financed by central budget, but up to 4½ percent of GDP is financed by general government. Employment of some 10,000 central administration staff to execute these tasks is also envisaged. Over the longer run, complying with EU environmental standards, and road and railway development costs, will require significant investments, that may be spread over 10-20 years. Expenditure on agriculture will also increase after accession, because a part of EU transfers will be dedicated to agricultural support under the revised Common Agricultural Policy.

Transfers: The NPAA envisages transfers from the EU rising from 0.2 percent of GDP in 1999 to some ¾ percent of GDP in 2000-01, making a significant contribution to covering accession costs. Indeed, the contribution of the central budget would only rise by ½ percentage point of GDP from 0.7 percent of GDP in 1999 to 1.2 percent in 2001. It is unclear how much of the funding from sources other than the central budget and the EU would be required from local governments as opposed to NGOs and the private sector, but it seems likely that the majority will be from local governments. In this case, the rise in spending required by EU accession at the level of general government would be in the order of 1 to 1½ percent of GDP. After accession, it has been estimated that Hungary would pay about 400-500 million euro, but receive about 2.5-3.1 billion euro per annum—from the Common Agricultural Policy, Structural Fund, and Cohesion Fund—giving a net potential inflow of 2-2.7 billion, or 4½ to 6¼ percent of current GDP. These estimates appear to be consistent with the limits agreed at the Berlin European Council in March 1999.

Revenue effects: As tariffs are cut on accession to the common EU trade policy, customs revenues are expected to shrink from 1¼ percent of GDP at present to an estimated ¼ percent, though there will be some prior decline to about ½ percent of GDP as Hungary meets its WTO commitments. Other countries, e.g. Poland, must lift excise taxes on alcohol, cigarettes, and fuels to meet EU standards, but this does not appear to be the case in Hungary.

Figure 1. Hungary: Government Size and Income Level in EU Countries, 1960-97 1/
(Five Year Averages)



Source: OECD, Economic Outlook.
1/ Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and UK.

Table 1. Hungary: General Government by Function, 1997-99

	1997 Actual	1998 Actual	1999 Budget	1997 Actual	1998 Actual	1999 Budget
	(In billions of forint)			(In percent of GDP)		
Primary expenditure	3370	4081	4496	39.5	40.5	38.9
State operating functions	532	632	663	6.2	6.3	5.7
General public services	285	361	351	3.3	3.6	3.0
Defense	106	103	127	1.2	1.0	1.1
Law and order, public safety	141	169	185	1.7	1.7	1.6
Welfare functions	2347	2835	3139	27.5	28.1	27.1
Education activities and services	409	481	509	4.8	4.8	4.4
Schooling prep. and elementary	131	152	168	1.5	1.5	1.5
Secondary education	38	44	47	0.4	0.4	0.4
Higher education	126	152	158	1.5	1.5	1.4
Other education	114	134	137	1.3	1.3	1.2
Health	382	461.4	503	4.5	4.6	4.3
Hospital operations and services	164	193	204	1.9	1.9	1.8
Family doctor and paediatric services	23	36	46	0.3	0.4	0.4
Clinic, medical, dental services	58	54	71	0.7	0.5	0.6
Public health activities and services	13	16	19	0.2	0.2	0.2
Other health (inc. Pharmaceuticals)	124	163	163	1.5	1.6	1.4
Social security and welfare services	1238	1516	1717	14.5	15.0	14.8
Sickness, maternity, disability benefits	142	167	204	1.7	1.7	1.8
Pensions (inc. disability)	671	835	943	7.9	8.3	8.2
Other social security provision	34	50	50	0.4	0.5	0.4
Unemployment benefits	45	75	69	0.5	0.7	0.6
Family and child care allowances	157	175	223	1.8	1.7	1.9
Other social supports	110	123	140	1.3	1.2	1.2
Social & welfare institutional services	79	91	88	0.9	0.9	0.8
Housing, municipal&community services	149	157	150	1.7	1.6	1.3
Entertainment, cultural&religious activities	95	121	140	1.1	1.2	1.2
Environment protection	74	99	121	0.9	1.0	1.0
Economic functions	434	538	594	5.1	5.3	5.1
Heating, motor fuel, energy supply	3	3	3	0.0	0.0	0.0
Agriculture, forestry, fisheries, and game	125	165	193	1.5	1.6	1.7
Mining and industry	18	20	15	0.2	0.2	0.1
Transport and telecommunications	179	225	242	2.1	2.2	2.1
Public road transport activities	104	130	120	1.2	1.3	1.0
Rail road transport and services	46	54	73	0.5	0.5	0.6
Telecommunication	7	12	18	0.1	0.1	0.2
Other transport and shipping	21	29	31	0.2	0.3	0.3
Other economic activities and services	109	125	142	1.3	1.2	1.2
Other items	56	75	100	0.7	0.7	0.9
Primary revenues	3638	4230	4742	42.6	42.0	41.0
Primary balance	268	149	246	3.1	1.5	2.1
Net interest	674	631	704	7.9	6.3	6.1
Overall balance	-406	-482	-458	-4.8	-4.8	-4.0
Gross domestic product	8541	10075	11565	...	...	...

Source: Ministry of Finance.

Table 2. Hungary: EU Related Spending and Financing

		1999	2000	2001	Total
			(In billions of Forint)		
Legal approximation		**42.5**	**105.5**	**121.1**	**269.1**
financed by:	Central budget	19.9	58.3	80.0	158.2
	EU assistance 1/	16.0	34.2	29.8	79.9
	Other 2/	6.7	13.1	11.3	31.0
Economic development		**97.2**	**226.3**	**231.4**	**554.9**
key sectors:	Agriculture	1.0	31.6	36.5	69.1
	Transport	2.5	24.0	24.0	50.5
	Environment	82.0	137.0	145.0	364.0
	Regional development	11.6	33.0	25.7	70.2
financed by:	Central budget	57.6	82.8	88.8	229.2
	EU assistance 1/	10.1	72.9	64.7	147.7
	Other 2/	29.4	70.6	77.9	177.9
Total		**139.7**	**331.8**	**352.5**	**824.0**
financed by:	Central budget	77.5	141.1	168.8	387.4
	EU assistance 1/	26.1	107.1	94.5	227.6
	Other 2/	36.1	83.7	89.2	209.0
			(In percent of GDP)		
Total		**1.2**	**2.6**	**2.6**	**6.4**
financed by:	Central budget	0.7	1.1	1.2	3.0
	EU assistance 1/	0.2	0.9	0.7	1.8
	Other 2/	0.3	0.7	0.7	1.6
			(Number of employees)		
Central administration staff		**710**	**4219**	**5108**	**10037**
Agriculture		149	709	549	1407
Employment and social affairs		0	740	1574	2314
Environment		174	786	705	1665
Justice and home affairs		127	1254	1624	3005
Other		260	730	656	1646

Sources: Hungarian Authorities--National Programme for the Adoption of the Acquis.

1/ EU assistance under Phare, ISPA, SAPARD.

2/ Local governments, NGOs, private sector.

A. Public Services

6. ***Earlier reforms have reduced the resources used by the government, but efficiency can still be improved in the core public services.*** Employment in general government has fallen from 870 thousand in 1995 to 809 thousand in 1997, but has since rebuilt to 816 thousand in 1999 (Table 3). Coupled with real wage restraint, the public sector wage bill has fallen from 8.1 to 7.2 percent of GDP from 1995 to 1999. Public sector consumption has fallen from 11.0 percent of GDP to an estimated 10.6 percent in the same period, so the total resource savings have been some 1¼ percent of GDP. Nevertheless, the share of public employment remains at the high end of the OECD (Figure 2) partly reflecting the large number of local governments which each provide core public services (Box 2). The following outlines the situation in healthcare, education, and defense.

7. ***Healthcare expenditure is not high for Hungary's level of economic development, but efficiency in health care delivery is low, contributing to poor health status.*** Health care expenditure by the budget was 4.6 percent of GDP in 1998, typical for Hungary's per capita income level, but the health status of the population appears to be the worst in the OECD, see OECD (1999). Underlying problems are reflected in the high ratio of doctors to nurses and substantial overcapacity in hospitals. Local government management of hospitals faces limited incentives to contain costs because 90 percent of expenditures are financed by transfers from the Health Insurance Fund, which does not act as a selective purchaser. Reform of the healthcare system has been identified as a priority by the EU in the 1999 Regular Report.

8. ***There are pressures for healthcare costs to rise sharply in coming years, but reforms could moderate this increase significantly.*** Rising healthcare costs—by at least 1½ percent of GDP in the next decade—are expected in the absence of reforms, with additional pressures from population aging after 2010 (World Bank, 1999). The World Bank urges a gradual reform of the health system, to strengthen financial discipline and orient spending towards services with greatest health benefits. Reforms would initially require a ½ percent of GDP rise in expenditures, mainly for repairs and modernization. Public spending would then stabilize in the remainder of the decade, though private expenditure would increase, because services outside a defined benefit package would be financed through private insurance. While health system reform is not expected to generate fiscal savings in the medium-term, there is potential for savings on pharmaceutical subsidies (1¼ percent of GDP in 1999) where public funds are lost on medicines resold on the black market.

9. ***Education reform could simultaneously address overstaffing and low wages.*** With 4¾ percent of GDP in total education spending, per student spending relative to per capita GDP is a little above the international average (Aradi et al., 1998). However, Herczog *et al* (1998) find substantial overstaffing, and student-teacher ratios are very low, with 1996 ratios of 12.2, 10.4, and 9.9 in primary, secondary, and university level education respectively, compared with OECD averages of 17.9, 14.5, and 17.1 (Clements, 1999). Staffing has not matched the decline in pupil numbers, with a further decline projected for coming years.

Box 2. Structure of the General Government

From a unitary government prior to 1990, the Hungarian public sector, and therefore control over public spending, has become quite decentralized.[1] Central government has 34 budget chapters, under which there are 1,294 central budgetary institutions (CBI). The pension fund (PIF) and health fund (HIF), provide pensions (old-age, survivors, and disability) and healthcare and related benefits respectively. The two extrabudgetary funds (EBF) are the Labor Market Fund providing unemployment insurance and related services, and the Central Nuclear Fund—where the number of such funds has been cut from 29 in 1995. Local government (LG) is responsible for delivery of utilities, education, health and other services, and it employs some 65 percent of the 816 thousand public sector workers. The municipal sector is very fragmented, with 3170 municipal bodies as of 1997—serving on average 3250 citizens—with 13422 local budgetary institutions (LBI), including schools, hospitals, universities, and other service providers.

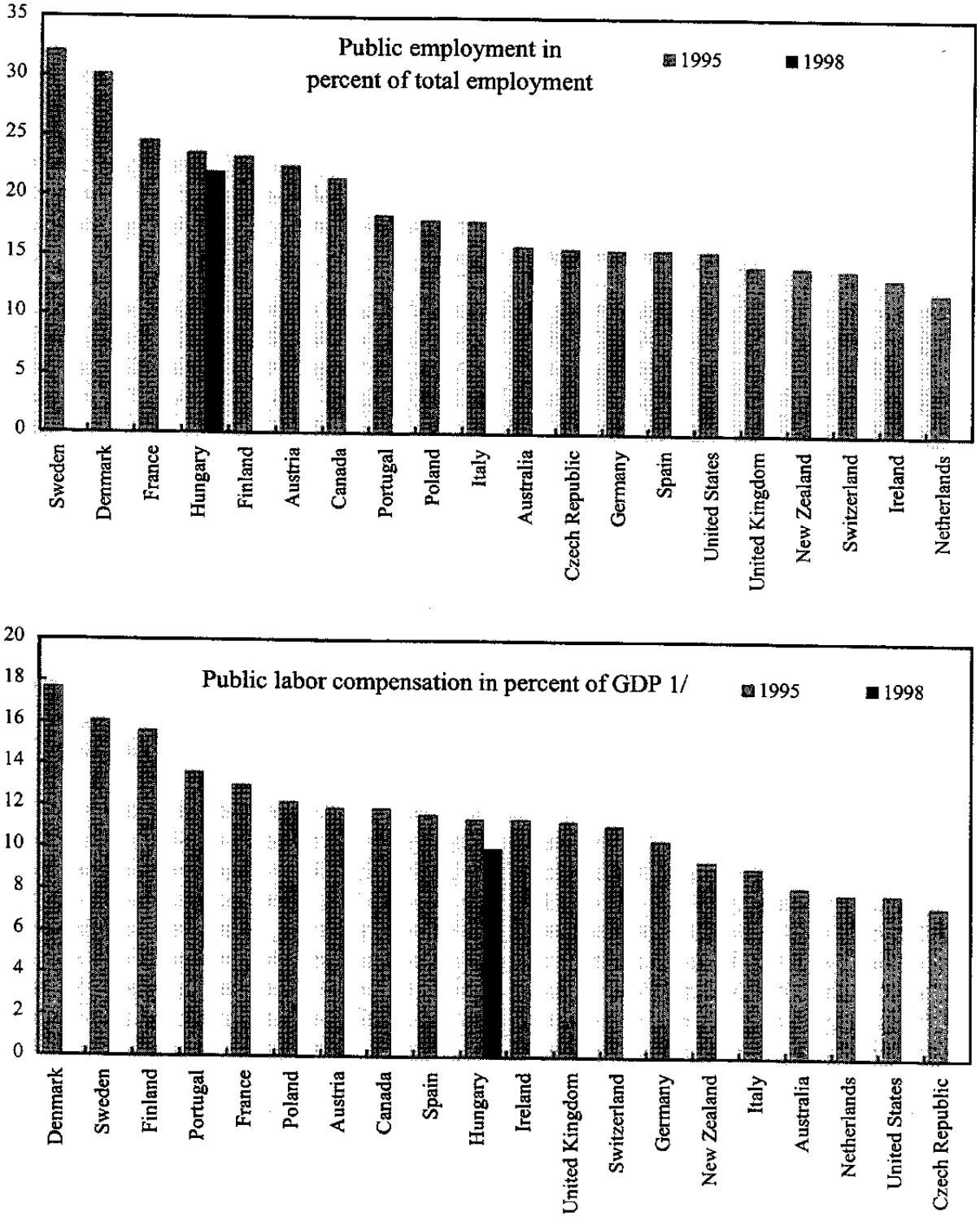
Though many levels of government have their own revenue sources, the central government has significant leverage via transfers. Institutions with budgetary autonomy—about half of CBIs and some 60 percent of LBIs—can use higher-than-expected revenues to fund higher than budgeted expenditures. In 1998, CBIs spent 10.8 percent of GDP, of which their own revenues covered 31 percent, with the majority of funding being central transfers. Local governments received current revenues of 12 percent of GDP in 1998, of which 15 percent were tax shares, and 52 percent were transfers from other levels of government, with just 33 percent of own revenues.

A variety of mechanisms exist to ensure budgetary discipline despite the number of autonomous budgetary institutions. A centralized Treasury was established in 1996, bringing central government funds (including SSFs and the own revenues of CBIs) through a single account, Thuma et al (1998). Cash disbursement controls are in place, for example, Treasury disbursements to LGs are made net of the LG contributions due to SSFs and EBFs. Local government debt (borrowing, bond issues, and guarantees) is limited to 70 percent of own revenues, and the Municipal Bankruptcy Law limits moral hazard in LG finances.

Reforms to local government arrangements are needed to the enhance the quality and efficiency of public services.[2] Numerous regulations lay out the tasks of LGs, and also rigidly prescribe how they should be delivered. Central transfer arrangements are focused on inputs rather than outputs through detailed norms for funding. Weak administrative capacity partly accounts for shortfalls in local taxation relative to potential, along with very limited borrowing, such that investments have often fallen behind depreciation—most LGs are too small to undertake investments on a scale sufficient to reduce their operating costs. Steps including regulatory reforms to assure quality without micro-management, a reevaluation of appropriate level of government for the delivery of public services, and a simplification of the system of central transfers would likely contribute to efficiency, but the central government may also need to strengthen the current set of incentives for LG cooperation in service provision and administration, including perhaps by setting suitable conditions for access to EU grants.

[1] The development of the structure of government is discussed in Lutz *et al* (1997).
[2] This discussion reflects technical work by the World Bank in cooperation with the authorities.

Figure 2. Hungary: General Government Employment and Compensation



Source: OECD

1/ Compensation costs include social security contributions, except for Australia, Canada and the United states.

Table 3. Hungary: Public Employment and Wages

	1995	1996	1997	1998	1999 Estimate	2000 Planned
Number of staff			(Thousands of persons)			
Total	869.5	831.0	809.0	814.3	816.4	800.3
Central Budgetary Inst.	301.0	284.1	275.5	276.9	293.4	292.0
o/w: Civil servants	155.5	144.7	130.0	126.5	128.4	134.4
Public servants	45.3	43.4	48.8	51.2	57.1	60.3
Others	100.2	96.0	96.7	99.2	107.9	97.3
Local governments	568.5	546.9	533.5	537.4	523.0	508.3
Education	256.8	247.1	234.1	233.1	229.8	222.8
Healthcare	122.6	117.9	111.7	111.2	109.5	106.3
Social services	55.5	53.4	51.6	52.9	58.0	57.1
Administration	63.4	61.0	57.8	57.6	55.4	53.9
Other (inc. public works)	70.1	67.4	78.2	82.7	70.3	68.2
Compensation			(In billions of forint)			
Total	638.4	719.0	870.6	1036.0	1144.8	1252.3
Central Budgetary Inst.	285.5	317.1	387.3	470.8	527.1	595.7
Local governments	352.9	401.8	483.3	565.2	617.7	656.6
Wages and salaries	454.5	506.2	609.8	725.3	819.6	899.1
Central Budgetary Inst.	205.8	226.7	276.8	335.6	382.0	434.2
Local governments	248.7	279.5	333.0	389.7	437.6	464.9
Education	114.9	127.8	152.5	174.5	190.5	200.0
Healthcare	55.4	62.2	71.2	83.4	92.8	97.5
Social services	20.0	22.1	25.1	29.6	35.6	38.0
Administration	37.5	42.4	52.6	51.3	58.0	62.8
Other (inc. public works)	20.8	25.0	31.5	50.9	60.7	66.6
Social security contributions	183.9	212.7	260.8	310.7	325.2	353.2
Central Budgetary Inst.	79.7	90.4	110.5	135.2	145.1	161.5
Local governments	104.2	122.3	150.3	175.5	180.1	191.7
Memorandum items						
Compensation to GDP, percent	11.4	10.4	10.2	10.3	10.0	10.0
Wage bill to GDP, percent	8.1	7.3	7.1	7.2	7.2	7.1
Public employment share	23.6	22.8	22.2	22.0	21.4	20.7
GDP, billions of forint	5614.0	6893.9	8541.4	10075.0	11420.0	12530.0
Employment, thousands	3678.9	3648.0	3646.3	3697.7	3808.7	3865.8

Source: Ministry of Finance, and staff estimates.

However, wages are relatively low in parts of the education sector, suggesting scope for reforms which address both issues, while potentially realizing some fiscal savings.

10. ***The path for defense spending is bound by agreement with NATO, though defense expenditures are being reformed.*** Hungary joined NATO on March 12, 1999 with an agreement to expand defense expenditure by 0.1 percent of GDP each year, to reach 1.8 percent of GDP by 2001, from 1.5 percent of GDP in 1998.[6] The composition of spending is shifting from personnel towards capital expenditures.

B. Transfers to Households

11. ***Hungary's social benefits are comprehensive, and they have been subject to various reforms, but targeting and tighter eligibility could improve their effectiveness.*** Total transfers to households amounted to 16.1 percent of GDP in 1998, including consumer subsidies (0.7 percent of GDP), and housing subsidies (0.4 percent of GDP). Pensions represented 7.8 percent of GDP, and the pension system is undergoing reforms to address the effects of population aging (Box 3). The remaining 7.2 percent of GDP are distributed under a range of programs, including: disability pensions for persons unable to work (1.0 percent of GDP); family and child care allowances (1.7 percent of GDP); sickness benefits, compensating for lost earnings (0.4 percent of GDP); and unemployment insurance and assistance (0.9 percent of GDP). To a varying degree, the effectiveness of these programs may benefit from targeting or tightened eligibility, as highlighted in the following.[7]

12. ***Family, maternity, and child-care benefits have been made universal and are being supplemented through the tax system.*** An attempt to introduce targeting of family allowances in 1995 was rejected by the constitutional court, but in April 1996 an income test was applied, though this only applied to 10 percent of families. This means test was eliminated in 1999, expanding coverage by 100–150 thousand children. Households with sufficient taxable earnings also benefit from child tax credits introduced in 1999. These changes have increased the share of overall benefits received by households that are not poor.

13. ***Disability pensions have widely recognized incentive problems, but reform plans have made limited progress.*** Through the 1990s the number of disability pensioners (under the retirement age) has risen from 204 to 425 thousand persons, some 10.4 percent of the labor force (Table 4) acting as a long-term unemployment benefit for some recipients. A

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[6] The figures for Defense in Table 1 are somewhat lower because they are consolidated.

[7] Enterprise and agricultural subsidies (1¾ percent of GDP) are much reduced from earlier levels, but still significant for railways and long-distance bus services. Agricultural subsidies offer little scope for expenditure savings in view of EU accession.

Box 3: Pension Reform in Hungary

Pension reforms began in 1996, with adjustments to the pay-as-you-go (PAYG) system, including a gradual increase in the retirement age, and a shift in indexation formula. The PAYG system was then partly-privatized in 1998, with PAYG members given the option to join a fully-funded, private pension fund—the "second pillar". August 31, 1999 was the cut-off date for the second pillar, with 2 million persons joining, just over half the workforce—close to expectations. It is mandatory for future labor market entrants to join the second pillar. Voluntary pension funds were established in 1993, completing the multi-pillar system. Rocha and Palacios (1997) discuss the reforms in more detail.

Projections by Rocha and Palacios find that before reforms, pension expenditure would rise by some 5 percent of GDP from 2000 to 2050, with 1 percentage point in the next 10 years. The reforms would avoid this entire long-term increase, and even in the next 10 years would reduce spending by almost 3 percent of GDP relative to the baseline. The net fiscal saving is about 1¼ percent of GDP smaller in the long-run, because part of pension contributions are diverted to the 2nd pillar. Though a long-run deficit in the pension system remains, at some 1½ percent of GDP by 2050, Benczúr (1999) estimates that the reforms have cut the implicit debt burden from roughly 100 percent of GDP to 40 percent, equivalent to a permanent fiscal saving of approximately 1½ percent of GDP per annum.

Hungary—Impact of Public Pension System Reform
(In percent of GDP)

	1998	2000	2005	2010	2020	2030	2040	2050
Expenditure saving	0.0	0.1	1.4	2.9	3.6	4.3	4.9	5.4
Pre-reform expenditure	8.4	8.5	8.8	9.5	10.3	11.1	12.8	13.5
Post-reform expenditure	8.4	8.3	7.4	6.6	6.7	6.8	7.9	8.2
Revenue loss	-0.2	-0.9	-1.0	-1.1	-1.3	-1.2	-1.1	-1.2
Pre-reform revenue	8.2	8.2	8.1	8.0	8.0	8.0	8.0	7.9
Post-reform revenue	8.0	7.3	7.1	7.0	6.7	6.8	6.8	6.8
Net saving	-0.2	-0.8	0.4	1.8	2.3	3.1	3.8	4.2

Source: Rocha and Palacios (1997).

For employees entering the second pillar, a part of the regular pension contribution (30 percent of gross wages in 1999) is redirected to their private pension fund. This portion was initially set to 6 percent of gross wages, and was scheduled to rise to 7 percent in 1999, and to 8 percent in 2000. However, due to the revenue loss to the budget—some 0.1 percent of GDP for each percentage point—the authorities will leave the rate of contribution to the private funds at 6 percent in 2000, with no new schedule to reach 8 percent yet announced. As discussed in Annex II, this revenue loss does not imply a weaker fiscal stance, due to the offsetting increase in private savings.The longer the increase is delayed, the larger the number of people who may eventually need to draw on the guarantee fund—which supplements the 2nd pillar pensions of those who would receive less than ¾ of the PAYG pension. Projections attached to the 2000 budget suggest that a delay until 2003 would significantly deplete the guarantee fund in 2013–16, but it would be manageable. However, there is also a risk that considering the uncertainty in the funds to be contributed to their accounts in the private funds, some 2nd pillar entrants will switch back to the PAYG system in 2000. This would weaken the outlook for the PAYG system, and undermine the benefits of the reform.

Table 4. Old age and Disability Pensioners

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total pensioners										
Thousands	2004	2091	2173	2223	2279	2318	2367	2413	2430	2423
Percent of population	19.3	20.2	21.0	21.6	22.2	22.6	23.2	23.7	24.0	24.0
Old-age pensioners										
Thousands	1462	1516	1542	1564	1589	1600	1621	1647	1652	1665
Percent of population	14.1	14.6	14.9	15.2	15.5	15.6	15.9	16.2	16.3	16.5
Disability pensioners, over retirement age										
Thousands	310	323	342	364	377	386	393	402	397	334
Percent of population	3.0	3.1	3.3	3.5	3.7	3.8	3.9	3.9	3.9	3.3
Disability pensioners, under retirement age										
Thousands	233	252	289	295	313	332	352	365	380	424
Percent of population	2.2	2.4	2.8	2.9	3.0	3.2	3.4	3.6	3.8	4.2
Population, thousands	10375	10355	10337	10310	10277	10246	10212	10174	10135	10092

Source: Ministry of Finance and Central Statistical Office.

parliamentary resolution in 1997 outlined the principles of disability pension reform—including a focus on a workers' remaining ability to work rather than on the loss of ability in a particular occupation—but this reform has not been implemented. Entry conditions were tightened to include a hospital test rather than a doctors report, but existing recipients are not reassessed. Implementation of further reforms would generate savings over time, but active labor market policies should be strengthened to assist people back into the labor force.

14. ***Sickness payments may exacerbate the high rate of sick leave.*** These payments compensate employees for lost earnings due to sickness. A reform in 1992 required employers to pay for the first 10 days of absence, which was extended to 15 days in 1996, with the payment reduced to 75 percent of gross wages from 85 percent previously. Compensated sick days per employee fell from 25–30 days to 16.5 days more recently, but this remains high compared with the U.S. and the Netherlands at 5–6 days. Estimates of lost productivity of some 1.7 percent of GDP (World Bank, 1999), indicate that further reform steps may be desirable.

C. Public Investment

15. ***Public investment (3.6 percent of GDP in 2000) may need to rise over time due to infrastructural investments.***[8] Analysis of regional issues in Hungary indicates a strong connection between investment, FDI, and the quality of infrastructure (Annex I). A more effective transport infrastructure has been identified as key to assisting the East of Hungary participate in the rapid economic development that is currently benefiting primarily the Northwest and Budapest regions. The government has a 10–year motorway construction plan, involving total expenditures of 7 percent of the 1998 level of GDP (Table 5). To execute this program, the Hungarian Development Bank has established the National Motorway Shareholding Company, which is to be funded by a mixture of transfers from the central budget, EU assistance, and state guaranteed loans. Toll revenues are designed to cover operations and maintenance expenses, so other costs like debt service would eventually need to be covered by the budget, implying that the total budgetary obligation in annual terms may rise by some 0.3 percent of GDP more than the transfer for construction expenses.

16. ***Investments required to meet EU environmental standards are large, but estimates vary widely.*** The most important issues to be addressed are water quality improvement, waste treatment, and air pollution from the energy sector and vehicles.[9] The ultimate costs of complying with EU standards are rather uncertain, with estimates ranging from 1.7 percent to

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[8] This is the sum of items identified as investment and capital transfers in the central and local government, but it may not represent a full coverage of general government investment.

[9] In 1998 only 44 percent of houses and apartments were connected to a sewage system.

Table 5. Hungary: 10-Year Motorway Plan--Construction and Other Costs

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(In constant 1998 prices)					
Total construction cost	39.8	51.5	54.2	70.1	75.2	76.2	68.9	56.9	56.0	51.5
External credits	30.8	35.7	34.9	33.3	30.5	29.5	26.5	25.1	26.9	26.8
EU assistance	-	-	-	9.2	17.0	20.5	21.5	12.9	9.7	9.2
Budget transfer	9.0	15.8	19.3	27.6	27.7	26.2	20.9	18.9	19.4	15.5
Other costs, total	6.6	11.0	13.7	16.5	20.5	31.3	32.4	31.3	38.7	37.5
o/w Debt service	2.0	6.4	9.1	9.0	13.2	24.0	25.3	24.3	31.8	30.7
Budget transfer & other costs	15.6	26.8	33.0	44.1	48.2	57.5	53.3	50.2	58.1	53.0
					(In current prices)					
Total construction cost	45.1	64.5	74.4	105.1	122.6	134.6	130.8	115.0	118.8	114.7
External credits	34.9	44.7	47.9	49.9	49.7	52.1	50.3	50.7	57.4	59.7
EU assistance	-	-	-	13.8	27.7	36.2	40.8	26.1	20.7	20.5
Budget transfer	10.2	19.8	26.5	41.4	45.2	46.3	39.7	38.2	40.7	34.5
Other costs, total	7.5	13.7	18.8	24.7	33.4	55.3	61.4	63.3	82.5	83.6
o/w Debt service	2.3	8.0	12.5	13.5	21.5	42.4	48.0	49.1	67.8	68.4
Budget transfer & other costs	17.7	33.5	45.3	66.1	78.6	101.6	101.1	101.5	123.2	118.1
					(In percent of GDP)					
Total construction cost	0.4	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.4	0.4
External credits	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
EU assistance	-	-	-	0.1	0.2	0.2	0.2	0.1	0.1	0.1
Budget transfer	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1
Other costs, total	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
o/w Debt service	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2
Budget transfer & other costs	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.4	0.5	0.4

Sources: Ministry of Transport and staff estimates.

4.5 percent of 1997 GDP per annum.[10] Waste water treatment is the area of greatest cost, which will fall primarily on local governments. To ensure effective environmental regulation, the National Environmental Program was adopted in 1997, with a planned rise in expenditures from 1 percent of GDP in 1996 to 1.4 percent of GDP by 2000–02.

III. Issues in Designing a Medium-term Fiscal Framework

17. ***A medium-term fiscal framework may assist in evaluating the preferred approach to managing this range of expenditure pressures and structural reform issues.*** As discussed in Section II, Hungary faces a multi-faceted medium-term fiscal challenge from EU accession among other factors. A medium-term fiscal framework can be used to analyze the economic implications of various approaches to managing such shocks, and this is the focus of Section IV. The focus of a medium-term framework is typically on the fiscal balances consistent with a sustainable macroeconomic path. However, the level and structure of revenues and expenditures also have medium to long-run consequences for economic growth, where strong growth is a high priority for the Hungarian authorities. The following first outlines the factors guiding decisions on the medium-term fiscal stance in Hungary, and then discusses the state of research on growth effects from the structure of fiscal policy, with a view to incorporating these into a medium-term fiscal framework.

A. Determining the Medium-term Fiscal Position

18. ***In addition to the sustainability of public debt, Hungary needs to evaluate the sustainability of the external current account in determining the medium-term fiscal position as the main guiding rule for fiscal policy.*** Analysis of the sustainable fiscal stance typically focuses on whether it can be financed at an acceptable inflation rate without a trend rise in public debt ratios. However, experience in Hungary and other countries suggests that the external current account balance, and in particular the requirement for debt-creating financing, will also be a factor constraining the macroeconomic stance because investors are averse to unsustainable trends in external debt. As discussed below, external current account sustainability is likely the binding constraint on the fiscal stance in the medium-term, and the importance of this issue implies that a fiscal deficit path will be the key rule for policy over the medium-term. This is also consistent with Hungary's strong orientation toward EU convergence.

19. ***The current fiscal stance is adequate to stabilize the public debt ratio without ongoing inflows of nondebt budget financing.*** With a substantial contribution from privatization, the public debt in Hungary has been cut from nearly 90 percent of GDP in

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[10] World Bank (1999) presents the estimates made in various studies, and assumes that the required investments are spread over 20 years. Differences in estimates reflects both differences in capital costs and the costs of operations and maintenance.

1993 to some 61 percent of GDP at end 1999. To avoid a reversal of this downtrend in the public debt ratio, the primary balance (p) must be at least the value from the usual formula:

$$p = (r-g)D/(1+g) - a \qquad (1)$$

Where r=real interest rate, g=real GDP growth rate, D=public debt in percent of GDP, and a=nondebt financing in percent of GDP. The real interest rate (on the basis of the GDP deflator) is assumed to be 5 percent—similar to the average level in 1996–99—while the potential real GDP growth rate is assumed to be 4½ percent (Box 4). Assuming no privatization revenues, the required primary surplus is therefore 0.3 percent of GDP. While the primary surplus is 1.6 percent of GDP in 1998 on an official basis, the NBH estimates the primary surplus at 0.6 percent of GDP on a national accounts basis and accrual approach, as further discussed in (Annex II). [11] Preliminary data for 1999 show a primary surplus of some ¾ percent of GDP, so the current fiscal stance should generate a trend decline in the public debt burden. Such a debt decline is not driven by the need to make room for a future rise in expenditures arising from demographic pressures, because these are being addressed directly by pension reform and reforms are also feasible in the case of healthcare. Rather, debt reduction will further reduce risk premia and support growth (van der Ploeg, 1996).

20. ***The Hungarian authorities aim to maintain the external current account deficit at around 4 percent of GDP, which can be considered sustainable.*** [12] The current account deficit that stabilizes the net foreign debt to GDP (NFD) is given by the following formula:

$$ca = nd + g^*/(1 + g^*)\, NFD \qquad (2)$$

Where ca = external current account deficit, g* is growth of GDP in foreign currency terms, and nd = net nondebt-creating BOP financing, which includes foreign direct investment. With 4½ percent potential real GDP growth, foreign inflation on a GDP deflator basis of 1 percent, and assuming a stable real exchange rate on a GDP deflator basis, the external current account deficit may exceed FDI and other nondebt inflows by 1¼ percent of GDP per annum, given net foreign debt to GDP estimated at 24 percent at end 1999. [13] As discussed in (Annex I), FDI inflows are subject to some uncertainty, but a prudent assumption for the medium-term would be in the order of 3 percent of GDP per annum. A current account deficit of 4 percent of GDP deficit would therefore result in a gradual reduction in net foreign

[11] This measure of the primary surplus already excludes the profit transfer of the National Bank of Hungary which includes seigniorage revenues.

[12] See Ministry of Foreign Affairs (1999) and Government of Hungary (1999).

[13] This assumption regarding the real exchange rate may be considered conservative when allowing for Balassa-Samuelson effects, but in Hungary the real exchange rate on a CPI basis has been quite flat since 1994, and the GDP deflator is likely less affected by this factor.

Box 4: Potential Growth in Hungary

Hungary would appear well placed to sustain high growth rates in the medium-term. van Elkan (1997) estimated that with inflation falling, strong FDI inflows, the progressive liberalization of external trade, and the labor force increasingly well educated, that growth could accelerate to 5–6 percent. In the event, growth was close to 5 percent in 1997–98, and the slowdown to 4 percent in 1999 reflects weak external demand in the EU and flooding effects on agriculture. Recovery in the EU is expected to lift growth to some 4½ percent in 2000, and the authorities estimate that growth with accelerate to some 5 percent in 2001 and 5–6 percent in 2002 (Hungarian Budget Directives, 1999).

Productivity rises could permit high growth in the medium-term, but there is significant uncertainty about how rapidly productivity will rise. An initial application of the growth accounting approach by Hviding (1998) explores the conditions that would allow growth of 5–5¼ percent in the medium-term. The following conditions are sufficient: fixed investment growth of 8 percent; a rise in labor force participation to offset declines in the working age population; and total factor productivity (TFP) growth of 2½ percent. This latter growth rate is similar to that seen in many emerging market economies, but below the post-war experience 3–3½ percent in Germany, France, Italy and Japan. The required rise in the participation rate, from 61 percent in 1997 to 70 percent by 2002, is quite rapid, suggesting some downside risk to the potential growth estimate.

Research underway at the National Bank of Hungary suggests a broadly similar potential growth rate in the medium-term. The NBH also uses a growth accounting framework, but is able to produce more sophisticated estimates of the capital stock. In particular, the NBH finds a smaller reduction in the effective capital stock in 1990–91 due to the collapse of CMEA trade. Analysis of the labor force cohorts supports the expectation for slow employment growth despite a falling population, with a rising level of skills on average. The main engine of growth is found to be the rising net capital stock, which is expected to permit average growth of 4 to 5 percent in the medium-term. Recent research using statistical decomposition techniques also estimates potential growth rates in this range in recent years.

As in more advanced economies, estimates of potential growth will need to be updated regularly, and the greater uncertainty of these estimates must be reflected in the design of economic policies. Medium-term fiscal projections are often based on somewhat conservative estimates of potential growth. For Hungary, a potential growth rate of some 4½ percent appears to be supported by a variety of analysis. While actual growth rates could be higher, a fiscal policy based on this assumption reduces the risk that lower than assumed growth rates will undermine the fiscal balances, putting pressure on inflation and the external current account deficit.

debt to GDP, which is appropriate considering that Hungary's debt is somewhat higher than typical of middle-income countries with an investment grade rating (Beaumont, 1999).

21. ***The expected rise in private investment relative to private savings requires a further consolidation of the fiscal position.*** The external current account deficit in 1998 was 4¾ percent of GDP, and the preliminary out-turn in 1999 is 4¼ percent of GDP. While these are relatively close to the authorities' medium-term goal, a strong rise in private investment is anticipated in coming years, most likely exceeding the total rise in corporate and household savings. Private saving and investment prospects are examined in Annex III, which suggests that a fiscal tightening on the order of 1 percentage point of GDP may be needed in the medium-term to keep the average current account deficit broadly on target. However, there is substantial uncertainty in the outlook for private investment, corporate profits, and household savings, and thus the appropriate path for the fiscal balance—the implications for fiscal management are considered below.

B. Macroeconomic Effects from the Structure of Fiscal Policy

22. ***The structure of fiscal policy, as reflected in the level and composition of revenues and expenditures, could significantly shape the pace at which Hungarian incomes converge toward EU levels.*** Endogenous growth models suggest that there is an optimal size for government in terms of economic growth, where the costs from tax distortions begin to outweigh the benefits from public expenditures (Barro, 1990). The large empirical literature that stems from these models is surveyed by Gerson (1998). The range of estimates for the growth effects of fiscal policy is wide, but the following points can be made regarding the impact of fiscal variables on growth:

- Health and education status are important for growth, but the link to spending is found to be weaker, presumably reflecting gestation lags and varying degrees of efficiency in the provision of services.

- Social transfers may have quite different effects depending on their level and design, with positive effects stemming from enhanced political stability, but negative effects from disincentives to employment.

- A higher tax burden reduces labor force participation, especially among secondary workers, with a 1 percent of GDP increase in the tax share reducing the employment rate by 0.3 to 0.5 percent in the long-run, Habermeier and Lenseigne (1998).

- The elasticity of GDP with respect to public capital is commonly estimated at between 0.2 to 0.3, Ligthart (1999). Sturm (1998) finds that transport infrastructure raises GDP with a lag, and other infrastructure stimulates machinery investment.

23. ***Recent research may offer somewhat more robust statistical evidence on the magnitude of fiscal policy effects on economic growth.*** Kneller *et al* (1999) follow the structure of the endogenous growth models, by disaggregating expenditures into two types:

"productive"—those that enter the private sector production function—which include public services, health and education, transport and communication; and, "nonproductive", primarily social security and welfare expenditures. Similarly, taxes are disaggregated into those which distort production and investment decisions (taxes on income and profits, social security contributions and payroll taxes) and "nondistortionary" taxes (taxes on domestic goods and services). Their empirical analysis of OECD countries pays careful attention to the implications of the government budget constraint. Distortionary taxes are found to reduce growth, by an average of -0.3 percent per annum for a 1 percent of GDP increase in taxes, while nondistortionary taxes have no significant effect. Productive expenditures are found to increase growth, by an average of 0.2 percent per annum, while nonproductive expenditures have a limited impact. Therefore, a 1 percent of GDP cut in distortionary taxation financed by cutting nonproductive expenditures can raise growth by some 0.3 percent per annum, but only 0.1 percent per annum if financed by cutting productive expenditures. These estimates are found to be reasonably robust to a variety of empirical specifications, though the authors urge caution in predicting the precise growth effects of fiscal changes.

24. ***Private savings and investment are responsive to the structure of fiscal policy, but the impact on the private sector savings-investment balance is unclear.*** Research outlined in Box 5 suggests quite strong effects from the level and composition of revenues and expenditures on private saving and investment. A number of papers suggest that a reduction in current spending by 1 percent of GDP, with a matching reduction in revenues—such that the fiscal deficit is unchanged—may increase private savings by 0.4 to 0.6 percent of GDP.[14] Alesina *et al* (1999) finds that private investment may rise by as much as 1 percent of GDP after five years, primarily because a simultaneous reduction in spending and revenues is found to increase corporate profits. The investment response is sensitive to the composition of the expenditure and revenue changes, being much larger if the public wage bill is reduced so that labor taxes can be eased. However, the literature on investment responses is less developed than that for saving, making it difficult to reach a conclusion on the impact of fiscal reforms on the balance of private savings and investment.

25. ***This research suggests that the structure of fiscal policy does affect growth, savings, and investment, though there is significant uncertainty about the magnitude of these effects.*** This brief survey suggests that the rate of economic growth is significantly responsive to the structure of fiscal policy, and savings effects are found in a number of studies, but the empirical literature on investment responses appears to be at an early stage. These results are therefore applied in a cautious manner in the following section.

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[14] These effects operate in addition to the better known Ricardian effects from variations in the fiscal balance on private savings.

Box 5. Fiscal Policy and Private Savings and Investment

The effect of the fiscal balance on private sector savings has been subject to much research testing for Ricardian equivalence. Ricardian effects are sometimes found to be large in advanced economies, with changes in private saving offsetting as much as 90 percent of changes in public saving in Ul Haque *et al* (1999). These effects appear less strong for low- or middle-income countries (with a 40 to 50 percent private savings offset) likely reflecting less developed financial markets among other factors, see Masson *et al* (1995). In addition to the fiscal balance, the level and composition of expenditure and taxation may affect private savings and investment, as discussed below.

Ul Haque *et al* find that the level of current government expenditures is a key determinant of **private savings**. An increase in current spending ratio to GDP by 1 percentage point is found to reduce the private savings ratio by 0.4 to 0.6 percentage points, similar to Masson *et al* (1995). This effect—for a given fiscal balance—may reflect higher taxation reducing disposable income and incentives to save, a stronger redistribution of incomes from higher to lower saving households, and weaker precautionary motives to save due a more generous social safety net. Callen and Thimann (1997) emphasize the importance of effects from income taxation and the generosity of the social security and welfare system on household saving. Public investment, to the extent that it is viewed as generating future revenues for the government, might not be expected to require further taxes, and hence would not generate a private savings response. The empirical results are less clear-cut for public investment, but Ul Haque *et al* find a similar though statistically less significant effect to current expenditures, while Masson *et al* are often able to accept the restriction that the effects are the same. Overall, these results would suggest that the expansion of savings due to an expenditure-led fiscal consolidation may broadly offset the contraction due to Ricardian effects, at least in middle income countries.

Alesina *et al* (1999) find large negative effects from public spending on **private investment** in the OECD countries. These effects are felt over a number of years, and differ significantly across different types of public expenditure, as shown in the following estimates:

	Change in Private Investment to GDP Ratio	
Increase by 1 Percent of GDP	Initial Impact	Cumulative Effect in 5 years
Primary Spending	-0.16	-0.80
Transfers	-0.22	-1.13
Wages	-0.51	-2.77
Investment	-0.39	-1.64
Total Revenue	-0.07	-0.18
Labor taxes	-0.17	-0.69

A permanent cut in both expenditures and revenues by 1 percent of GDP is therefore estimated to increase the private investment ratio by close to 1 percentage point after 5 years. The impact is larger still if public wage expenditures are reduced, at the same time reducing labor taxes. The effects on investment are found to work primarily by increasing labor supply, thereby strengthening corporate profits. Alesina *et al* suggest these results help explain why some fiscal consolidations had expansionary effects, because they were cases of cuts in wage and transfer expenditures, rather than increases in taxes. Caution regarding the magnitude of these investment effects is warranted, because the literature is less developed than for savings. It is therefore difficult to know whether a matching reduction in expenditures and revenues will raise or lower the private savings-investment balance.

IV. FISCAL STRATEGIES ON THE ROAD TO EU ACCESSION

26. ***This section presents scenarios illustrating the tensions in fiscal policy, and the potential role for medium-term expenditure restraint to achieve fiscal objectives while facilitating growth.*** Starting from the 2000 budget, the scenarios cover 2001–03, though they would also have implications for economic performance in later years. Both scenarios assume that commitments made in key policy areas, including pensions, defense, and EU accession are met, and also that the fiscal stance is adjusted to ensure sustainable economic performance—indeed the fiscal deficit paths are the same in each case. The focus of the analysis is the different way in which these goals are achieved. In the baseline scenario, the growth in expenditures in categories outside these commitments assumes no new policy reforms. These results are contrasted with a reform scenario, which includes higher expenditures on infrastructure and healthcare, but where restraint in other expenditures facilitates tax reforms.

27. ***The scenarios presented are not projections, rather they are intended to illustrate the potential gains from continued structural reform efforts in the general government.*** The baseline scenario may be considered moderately conservative, which as discussed below, is likely the best starting point in the face of significant uncertainty. The next section discusses the treatment of public spending and pension reform in the scenarios, along with the factors affecting revenues. The second section presents and contrasts the two scenarios, followed by a discussion of how to handle uncertainty with respect to macroeconomic and fiscal developments.

A. The Treatment of Public Expenditure, Pensions, and Revenues

28. ***Some expenditure components are strongly precommited in Hungary, suggesting that they be treated separately.*** In addition to interest payments, the key components of public spending bound by precommitments include old-age pensions under the pension reform, and defense spending under arrangements with NATO. Capital expenditure is best treated separately because there are needs for infrastructure to support growth and to comply with EU environmental standards. Healthcare expenditures—excluding pharmaceutical subsidies—must also be analyzed separately, considering that addressing the long-term implicit liability in this sector may require additional expenditure in the medium-term, as discussed in Section II. Finally, given the high priority attached to timely EU accession, expenditures for legal approximation and institution building required to adopt the *Acquis Communautaire* are also separately identified.[15]

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[15] Only that subset of expenditures on accession financed by the central budget are identified in the scenarios. Part of the total costs are covered by expected preaccession transfers from the EU, (Table 2), and these transfers are netted from expenditures—they are not included in primary revenues. The other costs to the general government are primarily infrastructure investment by local government, which are included under total capital expenditures.

29. ***The analysis therefore focuses on projecting these pre-committed items, and on exploring the implications of alternative paths for the more flexible or "discretionary" expenditure components.*** Current primary spending excluding the above pre-committed items is denoted for convenience as "discretionary" expenditure. Discretionary expenditure was some 24 percent of GDP in 1998, of which public sector wages (outside healthcare) were some 6.4 percent of GDP (27 percent), social security and welfare services (excluding old-age pensions) were some 7.5 percent of GDP (31 percent), while the remainder is dominated by goods and services. Some 60 percent of this expenditure is therefore linked to wage developments, because most social benefits are linked to the minimum pension, which is indexed to wages.

30. ***In anything but the very short-term, expenditure restraint within the discretionary component of spending can only be sustained through structural reforms that either reduce the obligations of the public sector, or improve the efficiency of public services.*** Social benefits form a substantial part of discretionary current spending: though these expenditures are not closely controlled by policymakers within any budget year, they can be managed over the medium-term by altering eligibility rules among other reforms. Even in areas more amenable to short-term restraint, it should be recognized that expenditure goals supported by structural reforms will prove to be more sustainable than spending caps. This is true in an area such as the public sector wage bill, where average wages in some areas have been squeezed to low levels, and where future efforts need to focus on reducing staff numbers in areas with low productivity, e.g., education, while retaining the flexibility to employ persons with the requisite skills, e.g., demand for foreign language skills will increase due to EU accession.

31. ***Each scenario presents the fiscal balances both with and without completion of the pension reform in the medium-term.*** While most elements of the pension reform are complete, the proportion of social security contributions to be transferred to the private pension funds has not yet reached the final level. This transfer was to have increased from 6 percent of the base for social contributions in 1998, to 7 percent in 1999, and 8 percent in 2000. However, this increase has been delayed, with the rate of transfer remaining at 6 percent in 2000.[16] Each scenario is presented with the transfer rate remaining at 6 percent, and also with an increase to 7 percent in 2001, and 8 percent in 2002. The underlying stance of fiscal policy is the same with or without completion of the pension reform, but in the former case the fiscal balances are lowered by the additional transfers to the private funds.[17]

32. ***Revenues are under pressure from implementation of WTO agreements among other sources.*** Customs revenues are projected by the Ministry of Finance to fall from 1.3 percent of GDP in 1999 to 0.6 percent of GDP by 2002 as tariff rates are cut to the levels

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[16] The implications of this delay are noted in Box 3.

[17] Annex II discusses why this reduction in fiscal balances does not affect the fiscal stance.

agreed under the Uruguay round. Receipts from asset sales included within official primary revenues are expected to fall sharply in 2000, from 1.2 to 0.5 percent of GDP, and it is assumed that these receipts remain at this lower level in later years.[18] On top of these factors, the volume of social security contributions that are transferred to the private pension funds is rising, from a projected 0.5 percent of GDP in 1999 to 0.7 percent of GDP by 2003 with no increase from the 6 percent rate, or to 0.9 percent of GDP with the increase to an 8 percent rate. Therefore, level of primary revenues is adjusted to exclude customs revenues and asset related receipts, and also for pension reform losses, to indicate the scope for changing the tax burden.

B. Scenario Comparison

33. ***The 2000 budget is the starting point for the medium-term analysis.*** The budget for 2000 targets an overall fiscal deficit of 3½ percent of GDP. The tightening in the fiscal stance from the projected 1999 out-turn is estimated at a modest ¼ percent of GDP, Table 6, such that there may be a small rise in the external current account deficit due to the expected acceleration in private investment.[19] A significant cut in the primary revenue ratio is also planned, by some 1.1 percentage points of GDP, reflecting an expected fall in receipts from asset sales and customs revenues, while other revenues are stable as a share of GDP. Therefore, to achieve the targeted fiscal tightening, the 2000 budget relies on firm expenditure restraint in order to reduce the ratio of current primary expenditure to GDP by some 1.2 percentage points from the level expected in 1999. With a sharp rise in EU accession costs, discretionary expenditures are to be cut by 1.4 percentage points of GDP, or by 2.2 percent in real terms.

34. The medium-term path for the fiscal balance in both scenarios is broadly consistent with the tighter end of the authorities' medium-term target range for the official general government deficit. The scenarios incorporate the fiscal stance discussed in Annex III, with a cumulative fiscal withdrawal of 1 percent of GDP spread over 2001–2003. Allowing for the pension reform to be completed in 2001–02, this tightening would reduce the official fiscal deficit to some 2 percent of GDP by 2002, consistent with the tighter end of the target range in the Medium-term Budget Directives, MOF (1999).[20]

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[18] In the event that asset related receipts are higher (lower) than assumed, the official fiscal balances would need to be stronger (weaker) than those reported in the tables to achieve the same fiscal stance, but the SNA balances would be unaffected.

[19] The magnitude of fiscal tightening is measured according to the approach in Annex II.

[20] This projection for the official balance assumes the future deviation between the official and the SNA basis measures remains at the level expected in 2000. If this deviation were to fall—perhaps reflecting fewer asset sales included under revenues—a larger official overall deficit and smaller official primary surplus would achieve the same underlying fiscal stance.

Table 6. Hungary: Baseline Fiscal Scenario

	Prel. 1998	Prel. 1999	Budget 2000	2001	2002	2003
Real sector	(In percent of GDP, except where indicated otherwise)					
Real GDP, percent change	4.9	4.1	4.5	4.5	4.5	4.5
Fixed investment	23.6	23.1	24.6	25.1	25.5	25.9
Gross domestic saving	25.3	25.4	26.8	27.5	28.1	28.6
Of which: Private	25.0	25.0	25.2	25.1	24.8	24.7
Operational, pension adjusted	22.2	21.9	23.0	23.2	23.2	23.2
Balance of payments						
Current account balance	-4.9	-4.3	-4.5	-4.3	-4.1	-4.0
Nondebt-creating capital, net	3.2	4.7	3.6	3.1	3.1	3.0
FDI equity capital , ex. Privatization	3.0	3.1	3.0	3.0	3.0	3.0
Net external debt	26.3	23.4	23.0	22.7	22.0	21.3
General government						
Revenue, primary 1/	42.0	42.4	41.3	41.3	41.1	40.6
Customs	1.3	1.3	0.9	0.7	0.6	0.5
Asset-related receipts	0.6	1.3	0.5	0.5	0.5	0.5
Other revenues	40.0	39.8	39.9	40.1	40.0	39.7
Change, pension reform adjusted	0.4	0.1	0.0	0.2	0.0	-0.3
Expenditure, primary	40.4	39.7	39.2	38.9	38.3	37.7
Real growth, percent	7.0	2.3	3.2	3.6	3.0	2.9
Capital spending	3.6	2.9	3.6	3.6	3.6	3.6
Current spending	36.8	36.8	35.6	35.3	34.7	34.1
Old-age pension 2/	7.8	7.8	7.7	7.5	7.4	7.2
Defense	1.5	1.6	1.7	1.8	1.8	1.8
EU related 3/	0.4	0.7	1.1	1.2	1.2	1.2
Healthcare 4/	3.2	3.2	3.1	3.1	3.1	3.1
Discretionary	23.9	23.5	22.0	21.6	21.2	20.8
Real growth, percent	6.6	2.4	-2.2	2.5	2.5	2.5
Primary balance, official	1.6	2.7	2.1	2.4	2.7	2.9
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.7	-1.8	-1.2
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.7	-2.8	-2.2
Public debt	61.2	60.6	58.9	56.8	54.4	51.7
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.4	1.7	1.9
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform revenue loss 6/	-0.2	-0.5	-0.5	-0.6	-0.7	-0.7
Scenario with completion of pension reform in 2001-02						
Primary balance, official	1.6	2.7	2.1	2.3	2.5	2.7
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.8	-2.1	-1.5
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.8	-3.0	-2.5
Public debt	61.2	60.6	58.9	57.0	54.7	52.3
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.3	1.5	1.7
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform revenue loss	-0.2	-0.5	-0.5	-0.7	-0.9	-0.9

Sources: Ministry of Finance and staff estimates until 1998; staff projections after 1998.

1/ Revenues are exclusive of EU transfers--expected preaccession transfers are netted against spending for accession purposes.
2/ Includes survivor benefits. Projections from Fifty-year Pension Forecast attached to 2000 budget.
3/ Estimates for central government from National Program forAdoption of the Acquis for 1999-2001, staff estimates for other years.
4/ Expenditures on public health services. Does not include pharmaceutical subsidies, or payments for maternity or sick leave.
5/ Preliminary staff estimates, as discussed in Annex 2.
6/ Projections assume no increase in the rate of transfer to the private funds from the present 6 percent level.

The estimated overall fiscal deficit on a National Accounts (SNA) basis would be cut to less than 3 percent of GDP by 2003.[21]

35. ***Two scenarios for public spending growth are considered.*** The baseline scenario represents no structural change in fiscal policy, but firm implementation of current policies for discretionary spending, while the reform scenario envisages a range of reforms to underpin restraint in discretionary spending, which is coupled with tax and healthcare reforms, and a rise in public investment. Box 6 notes the technical assumptions common to both scenarios.

36. ***Without expenditure reforms, there is little or no room to raise public investment, implement healthcare reform, or cut the tax burden in the medium-term.*** The baseline scenario assumes that real discretionary expenditure growth is some 2½ percent per annum over 2001-03 (Tables 6 and 7). This estimate reflects the fact that the majority of these expenditures are wage-related, along with the expectation that labor productivity will grow at some 3 percent, and the assumption that public sector wage rates will not be further reduced relative to the private sector in the medium-term.[22] Significant fiscal discipline will be required to achieve this baseline expenditure path. It is also assumed that public capital spending remains constant as a share of GDP. Under this scenario, discretionary spending would be cut by 1.2 percentage points of GDP in 2000–03, and total primary expenditure falls by 1.5 percentage points—because the projected decline in pension expenditures outweighs rising costs from EU accession and defense. However, these savings are needed to compensate for lost customs revenues and to make the targeted tightening in the fiscal stance, leaving no room for tax cuts—adjusted primary revenues are stable at 40.4 percent of GDP.

37. ***The baseline scenario fails to make progress towards the fiscal goals of the Hungarian authorities.*** The *Three-Year Prognosis* of the Ministry of Finance (attached to the Budget for 2000) targets a reduction in primary revenues from a budgeted 41.3 percent of GDP in 2000 to 38.5 percent of GDP in 2002, some 2.8 percentage points of GDP. However, in the baseline scenario primary revenues fall only 1 percentage point of GDP, and this is due to lower customs and asset-related receipts, rather than a lower tax burden. The baseline scenario also does not allow for higher infrastructural investment, and together with the unchanged tax burden, this scenario is not supportive of economic growth.

38. ***To reduce taxes and raise public investment, a wide range of reforms would be required.*** The key reforms would be in the areas of: (1) healthcare, involving the definition

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[21] Annex II discusses the adjustments made to the official fiscal data to approximate the fiscal balance on a national accounts methodology.

[22] Indeed, World Bank (1999) analyzes scenarios where a significant relative wage increase in some parts of the public services is needed to attract the skills needed to meet the administrative requirements of EU accession.

Box 6. Technical Assumptions for the Scenarios

A number of working assumptions are made that are common to both scenarios:

1. Large inflows of **EU transfers** that would follow accession are not assumed to occur during the 2000–2003 period. There are more modest pre-accession inflows which cover some EU preparation costs. The scenarios assume that this EU assistance remains at some ¾ percent of GDP, based on the *National Program for the Adoption of the Acquis*, and these inflows are netted from EU accession related expenditures.

2. Expenditures for **EU Accession** financed by central government are estimated in the *National Program for the Adoption of the Acquis* at some Ft 77.5 billion in 1999, Ft 141.1 billion in 2000, and Ft 168.8 billion in 2001. It is assumed that there are also ongoing costs in 2002 and 2003 in the same order of magnitude as a share of GDP as in 2001.

3. **Pension** expenditure is assumed to follow the path in the 50-year projection attached to the 2000 budget.

4. **Healthcare** expenditures are assumed to remain stable as a share of GDP in the baseline, though they decline by 0.4 percentage points of GDP in the *Three-Year Prognosis*.

5. NATO commitments imply that **defense expenditures** increase by 0.1 percentage points of GDP in 2000 and 2001, to reach 1.81 percent of GDP on an ongoing basis.

6. **Net interest payments** start from the 2000 budget projection, and then decline similarly to the *Three-Year Prognosis* for 2001–2002.

7. **Inventory investment** is assumed to remain at the estimated 1998 level as a share of GDP, because the ultimate nature of this national accounts item is unclear.

8. **Inflation** on a CPI basis is expected to settle at around 4 percent by 2002–2003, and in the GDP deflator at about 3 percent, in each case allowing for contributions from an initial unit labor cost differential and the Balassa-Samuelson effect.

9. The overall deficit is financed completely by new debt issues, by assuming that future privatization receipts cover various **contingent liabilities**—including contractual guarantees on past privatization, local government claims on privatization proceeds, losses by the Hungarian Development Bank, and expenditures preparing state enterprises for privatization.

10. **FDI inflows** on a gross basis in 1999–2003 are assumed to be 3 percent of GDP, the level observed in 1995–98 when excluding privatization receipts—see Annex I. Net inflows of portfolio equity are assumed to broadly balance outflows of direct investment, so net nondebt-creating inflows are also 3 percent of GDP.

Table 7. Hungary: Fiscal Scenario Comparison

	2000 Proj.	Levels in 2003			Change from 2000 to 2003			Real Growth (2001-2003)		
		Baseline	Reform	Reform with FDI response	Baseline	Reform	Reform with FDI response	Baseline	Reform	Reform with FDI response
Real sector		(In percent of GDP)			(In percent of GDP)			(In percent per annum)		
Real GDP	...	...	...	...	...	...	...	4.5	4.8	4.8
Fixed investment	24.6	25.9	26.9	27.2	1.3	2.3	2.6	7.3	9.0	9.8
Private	20.9	22.2	22.8	23.1	1.3	1.9	2.2	7.7	8.9	9.8
Private saving	25.2	24.7	25.3	25.3	-0.5	0.1	0.1	3.8	4.9	5.0
Operational 1/	23.0	23.2	23.8	23.8	0.2	0.8	0.8	4.7	5.9	6.0
General government										
Revenue, primary	41.3	40.6	39.6	39.6	-0.7	-1.7	-1.7	3.9	3.4	3.4
Adjusted 2/	40.4	40.4	39.3	39.3	-0.1	-1.1	-1.1	4.4	3.9	3.9
Expenditure, primary	39.2	37.7	36.7	36.7	-1.5	-2.5	-2.5	3.2	2.5	2.5
Capital spending	3.6	3.6	4.0	4.0	0.0	0.4	0.4	4.5	8.6	8.6
Current spending	35.6	34.1	32.7	32.7	-1.5	-2.9	-2.9	3.0	1.9	1.9
o/w Discretionary 3/	22.0	20.8	19.1	19.1	-1.2	-2.9	-2.9	2.5	0.0	0.0
Primary balance	2.1	2.9	2.9	2.9	0.8	0.8	0.8	...	...	...
Overall balance	-3.5	-1.2	-1.2	-1.2	2.3	2.3	2.3	...	...	...
Overall balance, SNA basis 4/	-4.5	-2.2	-2.2	-2.2	2.3	2.3	2.3	...	...	...
Public debt	58.9	51.7	51.5	51.4	-7.1	-7.4	-7.4	...	...	...
Scenario with completion of pension reform in 2001-02										
Primary balance	2.1	2.7	2.7	2.7	0.6	0.6	0.6	...	...	...
Overall balance	-3.5	-1.5	-1.5	-1.5	2.0	2.0	2.0	...	...	...
Overall balance, SNA basis 4/	-4.5	-2.5	-2.5	-2.5	2.0	2.0	2.0	...	...	...
Public debt	58.9	52.3	52.1	52.0	-6.5	-6.8	-6.8	...	...	...
Fiscal stance indicator 5/										
Primary balance, SNA basis 4/										
Excl. pension reform loss	1.6	2.6	2.6	2.6	1.0	1.0	1.0	...	...	...

Sources: Ministry of Finance, National Bank of Hungary, and staff projections.

1/ Adjusted for the transfer of savings from the public to private sectors due to the pension reform.

2/ Indicator of change in tax burden, given by primary revenues excluding customs revenues and asset related receipts, adjusted for losses due to pension reform.

3/ Current primary expenditure excluding projected spending on old-age pensions, defense, healthcare, and EU accession.

4/ Based on preliminary staff estimates of the deviation between official fiscal balances and balances on an SNA methodology.

5/ The fiscal stance is the same with or without completion of the pension reform in 2001-02.

of a core benefit package for healthcare services, reforms to pharmaceutical subsidies, and an active purchaser approach by the Health Insurance Fund; (2) targeting of various social benefits, including support for families, and reforms to disability pensions and sickness payments; and, (3) improved arrangements for local government financing and responsibilities—a prerequisite for greater efficiency in education and in healthcare over the longer term (Box 20).

39. ***The reform scenario assumes that comprehensive implementation of such reforms would allow discretionary spending to be held constant in real terms***. The resulting expenditure savings rise to 1.7 percent of GDP per annum relative to the baseline scenario by 2003 (Table 8). These savings are used as follows:

- Healthcare expenditure rises by 0.3 percent of GDP by 2003, principally on overdue investments and repairs, as part of a comprehensive reform which aims to contain larger longer-term expenditure pressures (see Section II).

- Public investments rise by 0.4 percent of GDP, including to fund the 10–year motorway construction program, which will have additional budgetary costs besides the transfers for construction expenditures (see Section II).

- The tax burden is reduced by 1.1 percent of GDP. This would facilitate the introduction of a reform package that would introduce new taxes, e.g., a municipal tax on property values—which could yield some 2 percent of GDP—and taxation of interest and insurance, while cutting the high labor tax rates significantly.[23]

40. ***Achieving this set of fiscal reforms would promote growth through a variety of channels.*** The largest contribution would come from tax reforms focused on reducing the high burden of labor taxes, which would be only partly offset by the effect of increases in less distortionary taxes. Thus labor force participation and human capital investments would be increased, while bringing more of the large gray market economy back into the fiscal net. The estimated impact of the reform scenario on private savings and investment is presented in Annex III (Table 17). As noted above, the magnitude and timing of the private investment response is rather uncertain, and it has been constrained to be in line with the savings response, at 0.6 percent of GDP by 2003—this assumption allows the targeted fiscal stance to be the same in the two scenarios. Higher public infrastructure investment should improve the productivity of existing private capital, and altogether these effects are estimated

[23] Contributions for pensions, health insurance, and unemployment insurance total 48.5 percent of gross wages in 1999, plus a fixed health contribution of Ft 3,600 per employee. A reduction in labor taxes could potentially involve a shift in the funding of healthcare, away from social contributions toward a broader tax base, to better reflect the universal eligibility for state health services.

Table 8. Hungary: Fiscal Reform Scenario

	Prel. 1998	Prel. 1999	Budget 2000	2001	2002	2003
Real sector	(In percent of GDP, except where indicated otherwise)					
Real GDP, percent change	4.9	4.1	4.5	4.6	4.8	5.0
Fixed investment	23.6	23.1	24.6	25.4	26.1	26.9
Gross domestic saving	25.3	25.4	26.8	27.8	28.7	29.6
Of which: Private	25.0	25.0	25.2	25.3	25.2	25.3
Operational, pension adjusted	22.2	21.9	23.0	23.4	23.6	23.8
Balance of payments						
Current account balance	-4.9	-4.3	-4.5	-4.3	-4.1	-4.0
Nondebt-creating capital, net	3.2	4.7	3.6	3.1	3.1	3.0
FDI equity capital , ex. Privatization	3.0	3.1	3.0	3.0	3.0	3.0
Net external debt	26.3	23.4	23.0	22.7	22.0	21.3
General government						
Revenue, primary 1/	42.0	42.4	41.3	40.9	40.3	39.6
Customs	1.3	1.3	0.9	0.7	0.6	0.5
Asset-related receipts	0.6	1.3	0.5	0.5	0.5	0.5
Other revenues	40.0	39.8	39.9	39.7	39.3	38.6
Change, pension reform adjusted	0.4	0.1	0.0	-0.1	-0.4	-0.6
Expenditure, primary	40.4	39.7	39.2	38.5	37.6	36.7
Real growth, percent	7.0	2.3	3.2	2.7	2.2	2.6
Capital spending	3.6	2.9	3.6	3.7	3.8	4.0
Current spending	36.8	36.8	35.6	34.8	33.8	32.7
Old-age pension 2/	7.8	7.8	7.7	7.5	7.4	7.2
Defense	1.5	1.6	1.7	1.8	1.8	1.8
EU related 3/	0.4	0.7	1.1	1.2	1.2	1.2
Healthcare 4/	3.2	3.2	3.1	3.2	3.3	3.4
Discretionary	23.9	23.5	22.0	21.1	20.1	19.1
Real growth, percent	6.6	2.4	-2.2	0.0	0.0	0.0
Primary balance, official	1.6	2.7	2.1	2.4	2.7	2.9
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.7	-1.8	-1.2
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.7	-2.8	-2.2
Public debt	61.2	60.6	58.9	57.0	54.4	51.5
Primary balance, SNA basis 6/	0.6	0.8	1.1	1.4	1.7	1.9
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss 6/	-0.2	-0.5	-0.5	-0.6	-0.7	-0.7
Scenario with completion of pension reform in 2001-02						
Primary balance, official	1.6	2.7	2.1	2.3	2.5	2.7
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.8	-2.1	-1.5
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.8	-3.1	-2.5
Public debt	61.2	60.6	58.9	57.1	54.7	52.1
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.3	1.5	1.7
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss	-0.2	-0.5	-0.5	-0.7	-0.9	-0.9

Sources: Ministry of Finance and staff estimates until 1998; staff projections after 1998.

1/ Revenues are exclusive of EU transfers--expected preaccession transfers are netted against spending for accession purposes.

2/ Includes survivor benefits. Projections from Fifty-year Pension Forecast attached to 2000 budget.

3/ Estimates for central government from National Program forAdoption of the Acquis for 1999-2001, staff estimates for other years.

4/ Expenditures on public health services. Does not include pharmaceutical subsidies, or payments for maternity or sick leave.

5/ Preliminary staff estimates, as discussed in Annex 2.

6/ Projections assume no increase in the rate of transfer to the private funds from the present 6 percent level.

to add some ½ percentage point to the annual growth rate over the medium-term.[24] A stronger growth effect would be generated if improved infrastructure also led to higher FDI inflows. A sustained rise in investment financed by FDI does not call for a tighter fiscal stance to contain the associated rise in the external current account deficit, because net foreign debt is unaffected(Table 9).

41. ***The optimal allocation of savings in current expenditures will require closer analysis.*** In the reform scenario presented, savings are allocated to a mixture of tax cuts, public investment, and to the initiation of healthcare reform. Nevertheless, the primary revenue ratio remains some 1 percentage point of GDP above the target in the *Three-Year Prognosis*. A more detailed analysis of the major components of these scenarios is needed to assess whether this allocation is the best use of fiscal resources considering social priorities, regional growth bottlenecks, and the tradeoffs in implementing tax reforms. The feasibility of the savings from discretionary expenditure restraint also requires more detailed analysis, though it is notable that the 2000 budget targets a higher degree of restraint in discretionary spending—a fall of some 2 percent in real terms—than is assumed in the reform scenario. Nonetheless, it is clear that moving in the direction of the expenditure reform scenario has a significant capacity to enhance economic growth.

C. Managing Uncertainty in the Medium-term

42. ***Fiscal policy faces a variety of uncertainties which need to be managed, including through appropriate design of the medium-term fiscal framework.*** The areas of greatest uncertainty are:

- ***The outlook for the savings-investment balance of the private sector is the key risk in determining the appropriate general government balance.*** Prospects are uncertain due to rapid structural changes reflecting the large past and expected inflows of FDI, potentially altering equilibrium corporate profits. Financial deepening and disinflation may allow households to sharply lift their borrowing from the current low levels, but the magnitude and timing of such effects is unclear.

- ***Potential growth is another area of significant uncertainty.*** In a rather pessimistic case, real GDP growth could settle at 3½ percent over 2001–2003 (Table 10). Maintaining the same path for real expenditure growth as in the reform scenario would imply that current expenditure savings would be some 0.8 percent of GDP smaller than in the reform scenario by 2003 (19.9-19.1), again leaving little scope for reducing the tax burden.

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[24] Any growth benefits from improved healthcare would only be realized in the longer-run, but the reforms should improve investor confidence by addressing a potentially large implicit fiscal liability.

Table 9. Hungary: Fiscal Reform Scenario with FDI Response

	Prel. 1998	Prel. 1999	Budget 2000	2001	2002	2003
Real sector	(In percent of GDP, except where indicated otherwise)					
Real GDP, percent change	4.9	4.1	4.5	4.6	4.8	5.1
Fixed investment	23.6	23.1	24.6	25.5	26.3	27.2
Gross domestic saving	25.3	25.4	26.8	27.8	28.7	29.6
Of which: Private	25.0	25.0	25.2	25.3	25.2	25.3
Operational, pension adjusted	22.2	21.9	23.0	23.4	23.6	23.8
Balance of payments						
Current account balance	-4.9	-4.3	-4.5	-4.4	-4.3	-4.3
Nondebt-creating capital, net	3.2	4.7	3.6	3.2	3.3	3.3
FDI equity capital , ex. Privatization	3.0	3.1	3.0	3.1	3.2	3.3
Net external debt	26.3	23.4	23.0	22.7	22.0	21.3
General government						
Revenue, primary 1/	42.0	42.4	41.3	40.9	40.3	39.6
Customs	1.3	1.3	0.9	0.7	0.6	0.5
Asset-related receipts	0.6	1.3	0.5	0.5	0.5	0.5
Other revenues	40.0	39.8	39.9	39.7	39.3	38.6
Change, pension reform adjusted	0.4	0.1	0.0	-0.1	-0.4	-0.6
Expenditure, primary	40.4	39.7	39.2	38.5	37.6	36.7
Capital spending	3.6	2.9	3.6	3.7	3.8	4.0
Current spending	36.8	36.8	35.6	34.8	33.8	32.7
Old-age pension 2/	7.8	7.8	7.7	7.5	7.4	7.2
Defense	1.5	1.6	1.7	1.8	1.8	1.8
EU related 3/	0.4	0.7	1.1	1.2	1.2	1.2
Healthcare 4/	3.2	3.2	3.1	3.2	3.3	3.4
Discretionary	23.9	23.5	22.0	21.1	20.1	19.1
Real growth, percent	6.6	2.4	-2.2	0.0	0.0	0.0
Primary balance, official	1.6	2.7	2.1	2.4	2.7	2.9
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.7	-1.8	-1.2
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.7	-2.8	-2.2
Public debt	61.2	60.6	58.9	57.0	54.4	51.4
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.4	1.7	1.9
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss 6/	-0.2	-0.5	-0.5	-0.6	-0.7	-0.7
Scenario with completion of pension reform in 2001-02						
Primary balance, official	1.6	2.7	2.1	2.3	2.5	2.7
Net interest	6.4	6.5	5.6	5.1	4.6	4.1
Overall balance	-4.8	-3.9	-3.5	-2.8	-2.1	-1.5
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.8	-3.1	-2.5
Public debt	61.2	60.6	58.9	57.1	54.7	52.0
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.3	1.5	1.7
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss	-0.2	-0.5	-0.5	-0.7	-0.9	-0.9

Sources: Ministry of Finance and staff estimates until 1998; staff projections after 1998.

1/ Revenues are exclusive of EU transfers--expected preaccession transfers are netted against spending for accession purposes.

2/ Includes survivor benefits. Projections from Fifty-year Pension Forecast attached to 2000 budget.

3/ Estimates for central government from National Program forAdoption of the Acquis for 1999-2001, staff estimates for other years.

4/ Expenditures on public health services. Does not include pharmaceutical subsidies, or payments for maternity or sick leave.

5/ Preliminary staff estimates, as discussed in Annex 2.

6/ Projections assume no increase in the rate of transfer to the private funds from the present 6 percent level.

Table 10. Hungary: Sensitivity Analysis to Lower Potential Real GDP Growth

	Prel. 1998	Prel. 1999	Budget 2000	2001	2002	2003
Real sector	(In percent of GDP, except where indicated otherwise)					
Real GDP, percent change	4.9	4.1	4.5	3.5	3.5	3.5
Fixed investment	23.6	23.1	24.6	25.3	25.9	26.5
Gross domestic saving	25.3	25.4	26.8	27.8	28.7	29.6
Of which: Private	25.0	25.0	25.2	25.3	25.2	25.3
Operational, pension adjusted	22.2	21.9	23.0	23.4	23.6	23.8
Balance of payments						
Current account balance	-4.9	-4.3	-4.5	-4.3	-4.1	-4.0
Nondebt-creating capital, net	3.2	4.7	3.6	3.1	3.1	3.0
FDI, ex. privatization	3.0	3.1	3.0	3.0	3.0	3.0
Net external debt	26.3	23.4	23.0	22.7	22.0	21.3
General government						
Revenue, primary 1/	42.0	42.4	41.3	41.2	41.0	40.6
Customs	1.3	1.3	0.9	0.7	0.6	0.5
Asset-related receipts	0.6	1.3	0.5	0.5	0.5	0.5
Other revenues	40.0	39.8	39.9	40.0	39.9	39.6
Change, pension reform adjusted	0.4	0.1	0.0	0.2	0.0	-0.2
Expenditure, primary	40.4	39.7	39.2	38.8	38.2	37.7
Capital spending	3.6	2.9	3.6	3.7	3.8	4.0
Current spending	36.8	36.8	35.6	35.1	34.4	33.7
Old-age pension 2/	7.8	7.8	7.7	7.6	7.5	7.4
Defense	1.5	1.6	1.7	1.8	1.8	1.8
EU related 3/	0.4	0.7	1.1	1.2	1.2	1.2
Healthcare 4/	3.2	3.2	3.1	3.2	3.3	3.4
Discretionary	23.9	23.5	22.0	21.3	20.6	19.9
Real growth, percent	6.6	2.4	-2.2	0.0	0.0	0.0
Primary balance, official	1.6	2.7	2.1	2.4	2.7	2.9
Net interest	6.4	6.5	5.6	5.1	4.6	4.2
Overall balance	-4.8	-3.9	-3.5	-2.7	-1.9	-1.3
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.7	-2.9	-2.3
Public debt	61.2	60.6	58.9	57.4	55.4	53.3
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.4	1.7	1.9
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss, est. 6/	-0.2	-0.5	-0.5	-0.6	-0.7	-0.7
Scenario with completion of pension reform in 2001-02						
Primary balance, official	1.6	2.7	2.1	2.3	2.5	2.7
Net interest	6.4	6.5	5.6	5.1	4.6	4.2
Overall balance	-4.8	-3.9	-3.5	-2.8	-2.1	-1.6
Overall balance, SNA basis 5/	-6.0	-5.7	-4.5	-3.8	-3.1	-2.5
Public debt	61.2	60.6	58.9	57.5	55.8	53.9
Primary balance, SNA basis 5/	0.6	0.8	1.1	1.3	1.5	1.7
Change, ex. pension reform loss	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss	-0.2	-0.5	-0.5	-0.7	-0.9	-0.9

Sources: Ministry of Finance and staff estimates until 1998; staff projections after 1998.

1/ Revenues are exclusive of EU transfers--expected preaccession transfers are netted against spending for accession purposes.
2/ Includes survivor benefits. Projections from Fifty-year Pension Forecast attached to 2000 budget.
3/ Estimates for central government from National Program forAdoption of the Acquis for 1999-2001, staff estimates for other years.
4/ Expenditures on public health services. Does not include pharmaceutical subsidies, or payments for maternity or sick leave.
5/ Preliminary staff estimates, as discussed in Annex 2.
6/ Projections assume no increase in the rate of transfer to the private funds from the present 6 percent level.

- ***The costs of EU accession remain uncertain.*** The outcomes for negotiations on derogations, e.g., the timing of compliance with environmental standards, and the timing of accession itself, are uncertain, and could require more or less accession related expenditures in the medium-term than is currently estimated.

- ***There are significant budgetary risks in implementing structural reforms.*** It is often difficult to estimate the magnitude and timing of the costs and savings from structural fiscal reforms. These risks should not delay well-designed and sequenced reforms, rather they should be managed as discussed below.

43. ***In the face of such uncertainties, a prudent approach is to lean on the side of caution in setting fiscal deficit goals, to set budgeted tax revenue cuts based on expenditure targets that are reasonably achievable, and to retain flexibility on the timing of tax cuts.*** If for example, domestic demand is very strong due to higher investment or consumption than expected, or if EU accession costs rise or structural reform savings are delayed, the appropriate response would be to delay tax cuts while maintaining expenditure restraint. This would keep the external balance broadly on track and avoid undue reliance on tight monetary conditions, which would dampen private investment and growth. On the other hand, should external balance and inflation developments permit, additional tax cuts can be introduced in the out-years of the scenario. Due to the relative ease of making additional tax reductions, in contrast with the limited fiscal withdrawal that can be achieved through delayed tax reductions, and also considering the potential political difficulty of making a discretionary fiscal policy tightening, the targets in the medium-term framework should be based on a conservative outlook for growth and private sector behavior. While this approach to managing uncertainty would initially involve some deviations from the medium-term fiscal framework, they would be of a stabilizing nature, and thus should not undermine fiscal credibility. However, a persistent shock may call for revisions to the framework itself, raising issues related to the effectiveness of such "rolling" medium-term frameworks, as discussed in the next section.

V. Medium-Term Fiscal Management in Practice

44. ***The Hungarian authorities, aware of the fiscal tensions lying ahead, have begun to integrate a medium-term framework into their budget process.*** Early experience suggests challenges related to the fiscal policy assumptions to be reflected in the framework, e.g., regarding structural reforms. The framework covers the general government, but the local governments are autonomous, raising questions as to whether the expenditure restraint that is targeted will be achievable. Many OECD countries have found medium-term budget frameworks (MTBF) a useful tool to coordinate and sustain their reform efforts, OECD (1995). Given the structural changes it is still undergoing, Hungary faces greater uncertainties than the more advanced OECD economies, so a mechanical transfer of their procedures is not advisable. However, their experiences may provide useful lessons on how to manage these and other issues. This section first outlines the types of MTBF that have been used and draws some conclusions on the desirable design features based on OECD

experiences. It then describes the recent development of a medium-term fiscal framework in Hungary, and considers areas where further development may be desirable.

A. Medium-term Budget Frameworks in OECD Countries

45. ***OECD countries have increasingly adopted some type of medium-term budget framework to guide fiscal policy.*** In 1995 about half of OECD countries were applying some version of an MTBF, including Australia, Austria, Canada, Denmark, Finland, Germany, the Netherlands, Sweden, and the United Kingdom. The primary motivation for adopting an MTBF is to more reliably achieve medium-term fiscal objectives. In many cases, the underlying goal is a fiscal consolidation too large to be achieved in a single budget, but the government wishes to credibly signal its intentions, to strengthen confidence and investment.

46. ***A variety of frameworks have been used to guide fiscal policy in the medium-term, with differing degrees of discretion versus precommitment.*** Many countries announce broad goals for fiscal policy, to cut or stabilize public debt, to reduce fiscal deficits, or to lower the tax burden over a number of years. In some cases, specific numerical targets are given—for example, in the case of the countries seeking to join EMU, these were consistent with satisfying the Maastricht criteria, while these countries now maintain Stability Programs as part of the requirements of the Stability and Growth Pact. Many countries also publish medium-term fiscal projections, but some are more a formal way to articulate their fiscal goals. By contrast, projections based on a well defined set of policies can illustrate their medium-term implications—where new policies often have higher costs in the medium-term than in the first year they are included in the annual budget—and therefore provide information on the magnitude of measures required to achieve medium-term fiscal goals.[25]

47. ***Stronger precommitments are made in some countries, although there are reasons to doubt that this will be appropriate for Hungary*** (Table 11). Finland has set ceilings on total central government expenditures for four years ahead since 1991, designed to avoid any increase in real terms, thereby underpinning a strong fiscal consolidation through the 1990s (Daseking, 1999).[26] At the outset of each government in the Netherlands, the coalition agreement has set expenditure targets at the level of central government, which have been used to reduce the tax burden as well as the fiscal deficit (Watson et al, 1999).

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[25] Prior to adoption of a Stability Program, Austria published its medium-term budget estimates, not as a plan, but as a means to indicate the consequences of existing policy commitments, OECD (1995). Also, each spring, multi-year estimates of expenditures were published, showing an institutional, functional, and economic breakdown.

[26] Though these are rolling on an annual basis, in practice revisions to the ceilings have been very small.

Table 11. Hungary: Medium-Term Budgetary Frameworks in Finland, the Netherlands, and the United Kingdom

	Finland	Netherlands	United Kingdom	Pros and Cons
Horizon	Four years, on annually rolling basis	Four years, set at outset of coalition period	Three years on a two-year rolling basis (i.e., with successive frameworks overlapping by one year) for non-cyclical expenditures (see coverage); cyclical or volatile spending is managed on an annual basis	Longer horizon and fixed ceilings provide more certainty and discipline to managers, but reduce flexibility in case of changing circumstances
Objective	In past, mainly geared to deficit reduction; in future also to provide room for tax cuts	To achieve a parallel reduction in the deficit and tax burden	Over the cycle, to balance the current budget and maintain investment (and hence borrowing) at a sustainable level, while meeting the Government's priorities	Prominence of deficit goal should reflect considerations of public debt sustainability (factoring in demographics), plus room for stabilizers; goal for taxes should reflect, inter alia, extent tax wedge distorts labor market and thus long-run fiscal outlook
Coverage of medium-term spending targets	Total central government expenditures and subceilings for individual ministries, including transfers to local governments and social security funds; excludes local governments' self-financed expenditure	Expenditures of central government (excluding infrastructure fund) and social security funds; subceilings on central government, health, and social security	Departmental Expenditure Limits (DELs), covering most non-cyclical primary expenditures (some half of total expenditures); includes central government support for local government but not local authoritity's self-financed expenditure	Comprehensive coverage is more transparent and effective but may constrain automatic stabilizers unduly; inclusion of local governments requires their autonomy to be limited, with risks of adverse incentive/accountability effects
Statutory nature of medium-term spending targets	Budget year binding; outer years agreed by cabinet as nonbinding norm to ministries; published but not submitted to parliament	Budget year binding; outer years politically but not legally binding; submitted to parliament for information; contingency reserve to deal with changing circumstances	Budget year binding; outer years not legally binding but overall DELs announced in parliament; contingency reserve to deal with changing circumstances	Politically binding targets favor discipline and credibility; legally binding limits might constrain flexibility unduly

Table 11 (concluded). Hungary: Medium-Term Budgetary Frameworks in Finland, the Netherlands, and the United Kingdom

	Finland	Netherlands	United Kingdom	Pros and Cons
Nominal or real targets	Medium-term at constant prices of budget year; for new budget translated to current prices based on specific price and cost deflators	Medium-term at constant prices; for one-year budget, translated to current prices based on projected GDP deflator	All targets set in current prices	Medium-term based on constant prices facilitates real resource planning; one-year budget must be nominal as inflation anchor; use of category-specific deflators may risk discouraging desired adjustment to relative price changes
Macroeconomic assumptions	Underlying assumptions reflect central forecast	Growth forecast cautious; rule splits "growth dividend" between additional deficit and tax cuts	Growth forecast at conservative end of potential output range	Reasonably prudent assumptions on growth, inflation, and interest rates essential; but, if unduly so, may over time create credibility problems and "second-guessing"
Adjustments in target levels for outer years	Ceilings for outer years can be adjusted; automatic adjustment for wage and salary increases	No adjustment in real expenditure; only "automatic" translation of targets into current prices based on aggregate inflation forecast	Medium-term DELs in current prices are adjusted only if new inflation forecasts differ significantly from original projections	Adjustments provide flexibility in case of unanticipated exogenous developments or desired policy changes but reduce imposed discipline, transparency, and credibility of the system
Autonomy and incentives at lower levels	Ministries and agencies bound by annual budget; some appropriations transferable, avoiding "forced" consumption at end of fiscal year	Ministries and agencies bound by annual budget; part of funds can be carried over to next year; no penalties have been imposed for repeated healthcare overruns	Individual departments bound by DELs; within these limits departments can recycle any efficiency savings they make; unspent DEL funds can be carried over to next year; overruns are avoided by strict DELs	Carry-over discourages excessive spending at end of fiscal year; tolerance of overruns lowers credibility but is difficult to avoid, if coverage includes cyclical items or other expenditures, that are difficult to control
Output objectives and quality control	Agencies establish result and efficiency targets, with ex-post evaluation by ministries	No formalized output objectives	Publication of Public Service Agreements alongside spending plans, stating departments' goals and setting specific quantified policy and efficiency targets	Experience with performance objectives positive; but tensions between output objectives and spending restraint possible, if output objectives introduced before budgetary discipline is inculcated

The U.K. has recently introduced a medium-term expenditure control system with Parliamentary submission of three-year plans covering a substantial set of general government expenditures.[27] This multiyear expenditure framework is set in cash and will only be revised if inflation varies substantially from forecast, U.K. Treasury (1998). However, considering the types of uncertainty facing Hungary—regarding private economic behavior, the costs of EU accession, and complexities in structural reform including implementation risks at the local government level—these approaches with a high degree of precommitment may not be feasible, and failure to observe them could reduce fiscal credibility. Therefore, approaches using a "rolling" medium-term framework—one which is updated each year—are likely most relevant to Hungary. To this extent, an expenditure rule may only play a subordinate and indicative role in formulating policy over the medium term.

48. ***Within a "rolling" medium-term framework, a clear linkage between the medium-term fiscal targets and the annual budget process might be considered the defining feature of a formal but rolling MTBF.*** At its heart, an MTBF consists of: (1) a top-down evaluation of resources available for public expenditure in the medium-term; (2) a bottom-up costing of expenditure policies over the medium-term; (3) a mechanism for reconciling these costs with the available resources, including making decisions on needed reforms. There are a variety of ways this can be achieved in practice, but the key components of a formal rolling MTBF may be defined as follows:

- A medium-term macroeconomic projection suitable for fiscal policy analysis.
- A statement of fiscal policy goals, including: the path for the fiscal deficit; a description of tax policy such that a revenue projection can be made; and, a medium term path for expenditures consistent with these revenue and deficit paths.
- A requirement that spending ministries and agencies maintain "forward" estimates of their expenditure covering several years ahead.
- A budget preparation and negotiation process that gives a formal status to the forward estimates, as well as the estimates for the budget year, such that they must be reconciled with the aggregate expenditure path. Thus, in each budget round, a notional budget is effectively agreed for each of the years ahead.
- The first out-year estimate of expenditures by the spending ministries is the basis for the preparation of the following year's budget, to ensure the annual budget is linked to the medium-term framework.
- The budget figures for spending institutions are hard budget constraints.

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[27] The main excluded items are social security benefits, local government expenditures financed by its own revenues, and interest payments.

49. ***Under this approach, the forward estimates, though well short of a legal authorization, provide a precise statement of the government's spending intentions.*** By starting from the forward estimates, the bulk of the annual budget negotiation can focus on the costs of changes to policy relative to those assumed when the previous forward estimates were made. Because the forward estimates are reconciled with the medium-term expenditure path, the spending agencies attain greater certainty while also being made aware of the need for savings in time to design and implement structural reforms. An MTBF can have additional benefits by potentially reducing the ad hoc nature of resource allocation that can affect annual budgets, by enabling the government to schedule resource reallocations over time. Finally, at least in the U.K. and Australia, the establishment of a strong forward estimates process has been associated with greater flexibility of resource use within the ceilings, to permit the more effective achievement of policy goals.[28]

50. ***For successful implementation of an MTBF, its design must be well suited to the economic and institutional environment.*** The detailed design of MTBFs varies quite significantly across countries, as illustrated in Table 11 concerning the approaches of Finland, the Netherlands, and the U.K. Some critical design features include: the policy statement; the macroeconomic framework; the horizon of the framework; the coverage of expenditure targets; the allowance for cyclical factors and inflation; and the inclusion of reserves. These design parameters translate relatively straightforwardly from a rigid medium-term budget to a more flexible rolling framework. Experiences in OECD countries suggest that there is a preferred approach regarding some features, while others must be adapted to the country circumstances:[29]

- The **policy statement** covering the fiscal deficit goals and other fiscal variables should be stable and transparent. The design of a MTBF involves making assumptions that will be open to debate. It is therefore important to state clearly all underlying assumptions, so that their appropriateness can be reviewed.

- The **macroeconomic framework** should be realistic if the MTBF is to be a useful and credible policy tool. Having experienced a sequence of "optimistic" forecasts in the early 1990s, the Canadian fiscal projections are now determined as the average of private sector forecasts, systematically revised by subtracting the estimated macroeconomic impact of interest rates being 50-100 basis points higher than in the private forecasts, OECD (1999).

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[28] This greater discretion has also been coupled with a stronger focus on the "output" performance of spending agencies, and mechanisms for improving their accountability.

[29] This is based on OECD (1996), and an unpublished memo from the Fiscal Affairs Department, "Medium-term Budget Frameworks: Some Lessons from the Experience of Selected OECD Countries".

- A **time horizon** of three years in addition to the budget year is the most common approach. While longer horizons were used in the U.K. in the past, it was found that figures for the fourth and fifth years were of little utility. However, for some policies, e.g., pensions or healthcare, a supplemental longer-term analysis is appropriate.

- Ideally for macroeconomic purposes the **expenditure coverage** of the MTBF would be for general government, but in practice, only central government expenditures may be wholly under the government's control. While Finland and the U.K. exclude self-financed expenditures of local government, some decentralized governments still aim to control general government expenditures: Australia finances much of spending by the states with transfers from the federal government so it can apply relatively direct controls; in contrast, Germany uses the MTBF as a tool to reach agreement on fiscal goals among the levels of government, given the wider taxation powers of the länder. Clearly, expenditure coverage is a design issue that needs to be adapted to institutional circumstances.

- Some countries make explicit allowance for **cyclical factors**, e.g., the U.K. excludes the unemployment benefit from the coverage of the medium-term limits. This allows the automatic fiscal stabilizers to operate in both directions, with expenditure able to rise in recession because no offsetting savings are required to respect the ceilings, but also prevents a temporary fall in unemployment benefits during a boom being used to run a more expansionary fiscal policy. There is, however, a greater risk that these excluded expenditures undermine the medium-term goals—the U.K. has established separate reviews contain this risk. Finland has chosen to not exclude unemployment benefits, partly reflecting the larger contribution from structural changes in unemployment rather than cyclical shocks that Finland faced in the 1990s. Thus, the treatment of cyclically sensitive expenditures also involves tradeoffs to be judged on country specific factors.

- The MTBFs in OECD countries use a range of approaches to **inflation**, with the Netherlands and Finland programming in real terms, while the U.K. and Australia set budget targets in cash terms. A framework designed in real terms provides greater resource certainty to spending agencies, but the resulting indexation risks undermining inflation performance by automatically validating inflation shocks or relative price increases, as experienced in early versions of the MTBF in the U.K., when specific deflators were allowed for different areas of expenditure. The latter approach should be avoided, but the scope for programming in cash terms will clearly depend on a good degree of inflation stability.

- **Reserves** are often included in many MTBFs, e.g., the U.K. has a contingency reserve of 2 percent of spending in the budget year, while reserves for new policy priorities—planning reserve—rise from 4 percent of spending in the first out-year to some 6 percent of spending in the third year. However, such reserves should be limited to avoid undermining expenditure control, as was experienced in Canada prior

to the adoption of the Expenditure Management System in 1994–5, under which reserves are no longer available to fund new initiatives, OECD (1999).

51. ***Fiscal decentralization is perhaps the most difficult design issue for an MTBF, but experience suggests a range of approaches to managing this challenge.*** Canada and Belgium are cases where the formulation of coherent consolidation policies were significantly complicated by different levels of government making independent fiscal decisions, including running debt-financed deficits, OECD (1995). Ter-Minassian (1997) finds that countries address the issue of aggregate expenditure control though a mixture of: hard budget constraints, e.g., rules governing local government borrowing; central control over funding, whether this be transfers or tax shares; and, pacts among the levels of government. The Finnish case is interesting, where local governments are autonomous and responsible for major public services. Transfers to local government were included under the expenditure ceilings, but self-financed expenditures were not covered. Nevertheless, the ceilings also contributed to restraint and reform at the local government level, due to local tax competition in conjunction with aversion to deficits, (Daseking, 1999). It would appear that with appropriate reinforcing factors, a MTBF can be made effective even within a quite decentralized government.

52. ***Even with a sound design, political commitment to the ultimate fiscal goals is needed to preserve the credibility of an MTBF in the face of shocks.*** While a MTBF can prompt a government to design and adopt reforms towards achieving its fiscal goals, it is only a tool to assist decision making. OECD (1996) concludes that once a fiscal strategy has been selected, enduring political commitment is crucial to secure and enhance the strategy's credibility. This commitment would require that in the face of potential deviations, whether they are due to unpredictabilities in structural reform or variations in GDP growth, the government is prepared to take measures such that the deviation will be temporary, and the original medium-term goals are preserved. Nevertheless, the announcement of an MTBF, coupled with a high degree of transparency to support external monitoring of fiscal performance, can itself reinforce the political will needed to address such deviations, therefore helping to lock-in the benefits of the fiscal strategy.

B. Medium-term Budgeting in Hungary

53. ***A medium-term fiscal framework has been under development in Hungary through 1999.*** Hungary has adopted a two-step MTBF approach (Box 7). In the first step, the *Medium-term Budget Guidelines* were submitted to the cabinet in April and were adopted by the government through a Parliamentary Resolution in June.[30] The *Guidelines* define the major targets of the budgetary policy, where the resolution approves both the overall deficit and the expenditures of the general government, as a ratio to GDP. Thus the broad outlines of the medium-term framework—including targets for 2000—were announced in advance of

[30] The budget year in Hungary coincides with the calendar year.

Box 7. Budget Timetable in Hungary

Budget Guidelines

by April 15 [June 30][1]	Minister of Finance prepares the guidelines and submits them to cabinet.
by May 15 [July 31]	Cabinet agrees on the guidelines and submits them to the Parliament.
by June 15 [Aug 31]	Parliament, on the basis of the guidelines, decides on the overall balance and the total expenditure of the general government,

Budget Negotiations

June to August	On the basis of the guidelines, Ministries and state organs prepare their budget request and submit them to the Ministry of Finance,
August	Ministry of Finance evaluates the budget requests, negotiates them bilaterally, and submits a draft budget to the Cabinet by August 31.
September	Cabinet considers the draft budget, approves a draft budget, and submits it to the Parliament by September 30 [October 31]

Parliamentary Approval

Oct. 15 [Nov. 15]	The central budget chapters are to be submitted to the Parliament. The *Three Year Prognosis* and other materials are attached for the information of Parliament.
November	Parliament discusses the revenues and expenditures of the central budget by chapter and globally.
by November 30	Parliament makes a resolution defining the revenues and expenditure aggregate amounts of the chapters, and the overall balance. Following this, any amendments submitted in the debate of the budget bill may not alter the fiscal balances or the revenue and expenditure totals.
After this resolution	Debate of the draft budget law. If it has not been approved by the Parliament before the beginning of the fiscal year, the Minister of Finance establishes interim limits on expenditures on the basis of the previous budget law.

Closing of Accounts

The Government submits to Parliament the draft law reporting on budget execution within eight months of the end of the fiscal year. The draft law on the closing accounts is submitted to the State Audit Office two months prior to its submission to the Parliament.

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[1] The dates in [] are the deadlines in an election year.

the 2000 budget, which was sent to Parliament in October 1999, and approved in December.[31] The second step in the MTBF is the *Three-Year Prognosis* that accompanied the 2000 budget, the time at which most OECD countries publish their MTBF.

54. ***The Medium-term Budget Guidelines cover the next three years, setting aggregate fiscal targets in the context of a macroeconomic framework***. The 1999 Guidelines provide target ranges for key fiscal variables at the level of general government, and projections for major macroeconomic indicators, as follows:

	2000	2001	2002
Overall balance, percent of GDP	-2.5 to -3.5	-2.3 to -3.3	-2.0 to -3.0
Expenditure to GDP, percent	43.5 to 44.5	42.0 to 43.0	40.5 to 41.5
Revenue to GDP, percent	40.5 to 41.5	39.0 to 40.0	38.0 to 39.0
Real GDP growth, percent	4 to 5	4.5 to 5.5	5.5 to 6.0
CPI inflation, average, percent	6 to 7	4 to 5	3.5 to 4.5
Public sector wage, avg., percent	8 to 9	6 to 7	5.5 to 6.5

These aggregate targets are accompanied by a description of the economic environment and an outline of economic policy goals, including for the structure of tax policy, expenditure priorities, and envisaged reforms, e.g., in health financing. The quantitative fiscal outlook is also elaborated by a presentation in terms of the means of the above ranges, with the primary revenues and expenditures indicating the targets for tax reform and expenditure restraint. The primary balance adjusted for the pension reform and expenditures by the privatization agency (APV Rt), is used to better illustrate the fiscal stance intended by the government:

In percent of GDP	1999 proj.	2000	2001	2002
Overall balance	-4.0	-3.0	-2.8	-2.5
Primary revenues	41.0	40.0	39.3	38.5
Primary expenditures	38.7	37.7	37.3	36.8
Primary balance	2.2	2.3	2.0	1.7
Adjusted primary balance	2.6	3.0	2.8	2.7

55. ***The Three-year Prognosis accompanying the 2000 Budget provides a more detailed presentation of the projected development of the budget***. The macroeconomic framework is updated modestly from that in the *Guidelines*. The fiscal targets are presented both in terms of the level of government, and by a detailed functional and institutional classifications, with a discussion of the policy goals and other factors underlying particular trends. The projected development in the aggregate fiscal indicators, is also updated from those in the *Guidelines*:

[31] This is similar to the practice in Italy, where the medium-term program is formally approved by parliament in May, well ahead of the detailed budget.

In percent of GDP	2000	2001	2002
Overall balance	-3.5	-3.0	-2.8
Expenditure	45.6	Approx. 43.6	Approx. 42
Revenue	42.1	Approx. 40.5	Approx. 39.3
Primary balance	2.1	1.8	1.5
Primary revenues	41.3	39.9	38.7
Primary expenditures	39.2	38.1	37.2

56. ***The targets in the Prognosis were somewhat revised from the Guidelines.*** The *Prognosis* revises upwards the central expectation for the overall deficit in 2001–02 by 0.2 to 0.3 percent of GDP, with a similar change in the primary balance. The primary expenditure path is revised up substantially in the near-term—by 1½ percent of GDP in 2000—but this revision is reduced to 0.4 percent of GDP by 2002. Consequently, the revenue path is also significantly higher than in the *Guidelines*. Nevertheless, the broad goal to reduce the overall deficit to less than 3 percent of GDP by 2002 was retained.

57. ***This revision largely reflected an updated perspective on the potential for fiscal reforms.*** The 1999 *Guidelines* incorporated the expectation of a range of reforms that were subsequently not approved by the Cabinet. When it became clear that these reforms would not be implemented, resulting in the postponement of tax reform plans that were under discussion in the first half on 1999, the medium-term outlook in the *Prognosis* needed to be revised to retain credibility. This experience underlines the importance of basing an MTBF on a well-articulated and agreed policy statement.

58. ***As discussed, the Guidelines and the Prognosis are characterized by significant transparency, but as yet their role with respect to the annual budget is still developing***. The *Guidelines* have a clear role in shaping the budget for the following year, because the Parliamentary Resolution is made prior to the budget submissions and negotiations, though in practice the overall deficit in the 2000 budget of 3.5 percent of GDP was at the upper limit of the *Guidelines*, and the budgeted ratios to GDP of primary expenditure and revenues were respectively 1½ and 1¼ percentages points higher than in the *Guidelines*. In contrast, the *Three Year Prognosis* is provided for the information of Parliament, and the figures for the future years are indicative data that play no formal role in the budget process. Nevertheless, the data in the *Prognosis* is based on the rolling plans of the Ministries for the next two years—each year the plans can be changed on the basis of developments in the budget year as well as changes in the macroeconomic projection. Thus the "forward estimates" process needed to implement a more formal MTBF is already partly in place. Moreover, the MOF plans to review the 2001 budget submissions having regard to the figures provided in the *Prognosis*. The further development of these practices could therefore serve to give the *Prognosis* an important role in the annual budget process.

59. ***The developing Hungarian medium-term fiscal framework has many of the features that are recommended by OECD experience.*** It articulates the aggregate fiscal objectives of government clearly, though the emphasis is on the overall balance target in

percent of GDP, with the expenditure paths representing goals rather than ceilings. The adoption of the *Guidelines* ahead of the budget has both advantages and disadvantages—it helps settle the basic structure of the forthcoming budget in advance of detailed expenditure discussions, but it also provides an opportunity for the Government to revise the framework provided in the *Prognosis*. Credibility may be reduced if this opportunity for substantive revisions is used too freely. It has a horizon of the budget year, plus 2 years, and though this is slightly shorter that the common approach of 3 years after the budget year, this can be justified by the greater uncertainty relative to advanced economies. The framework focuses on targets as a share of GDP, where the nominal framework is updated each year, but where conservative inflation projections contain the risk of accommodating inflationary pressures. As presently implemented, the Hungarian MTBF would encourage the offset of automatic cyclical stabilizers. Though the impact of these stabilizers is likely fairly modest[32] it would be possible to make adaptations to allow their free operation—which with growing fiscal credibility appears warranted.

60. ***A fundamental issue for the credibility of medium-term fiscal goals is to achieve structural reforms in the areas of responsibility of the local governments.*** The Hungarian MTBF covers the whole government, while also providing information on the main levels of government. However, major areas of public services, such as healthcare and education, are defined by law as the responsibility of local government, where local government independence is constitutionally protected. Accordingly, reforms in these areas require coordination between central and local governments, where one of the main goals is to encourage effective cooperation among the local governments in public service provision. For example, water services are an area with significant economies of scale, but there are a large number of small water services utilities (more than 300). The World Bank (1999, C.10) recommends that the Government use public and EU funds to encourage joint water services projects, to permit EU standards to be met with a smaller rise in utility tariffs. This broad approach will also be relevant in the case of other services, though a deeper modernization of local government arrangements may be necessary to facilitate cooperation considering the constraints on local governments imposed by the current arrangements (Box 2).

61. ***Careful design of local government modernization is needed to retain sufficient leverage over general government operations.*** Under the current arrangements, the largest share of local government funding in Hungary is from central government transfers, and local governments are also subject to constraints on their borrowing, while ultimately facing the discipline of innovative bankruptcy procedures. Therefore, an MTBF expenditure aggregate which includes these transfers, even though it does not cover locally financed expenditures, should still assure substantial leverage over general government expenditure. However, two elements of local government modernization would be a greater reliance on local revenue bases, and enhanced local government access to financial markets to fund investment, and

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[32] This reflects among other factors the relatively low 18 percent tax rate on profits—which are more cyclically sensitive than labor income—and the very high openness of the economy.

together these would tend to weaken the effectiveness of an MTBF at the level of general government. Mechanisms that compensate for such changes, like the multi-layer negotiations in Germany, will therefore need to evolve in accordance with progress in local government modernization, to avoid risks that overall fiscal control is undermined.

62. ***Sustained political commitment will be essential to ensure the full effectiveness of the MTBF in Hungary.*** The Ministry of Finance is planning to use the *Prognosis* as the starting point for the 2001 budget, but this will be the first test of the linkage between the MTBF and the budget. Forming an effective linkage will in practice require a strong political commitment to the strategy in the *Prognosis.* Once this commitment is established, ministries and other spending agencies will have clear incentives to make sound forward estimates, and to develop and implement reforms that achieve policy goals within the constraints of the *Prognosis*. Under these conditions, the medium-term goals for expenditure will be increasingly underpinned by a range of structural reforms rather then expenditure caps. Such an evolution in the budget process typically takes some years to unfold in most OECD countries, but Hungary has a strong incentive to accelerate this process considering that entry to the EU will bring the need to adopt a Stability Program, and then a Convergence Program when it joins ERM 2. This paper suggests that Hungary can benefit from OECD experiences to ensure its MTBF is well adapted to assist in managing the challenges of EU accession, while also improving the quality of fiscal policy to underpin a continued strong economic performance.

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FOREIGN DIRECT INVESTMENT IN HUNGARY[1]

1. Hungary ranks among the most successful countries in the world in attracting foreign direct investment (FDI) since 1991. The first part of this annex provides an overview of Hungary's performance in comparison with other developing countries, and regional differences in FDI inflows within the country. The second part contains a discussion of the factors underpinning the strong inflows. Finally, future prospects for foreign direct investment are discussed in the light of accession expectations and surveys of major foreign investors.

Background

2. Inflows into emerging Europe in the 1990s, relative to the size of the economies, have been much higher than the average for the rest of the world, due to a catch-up effect and large scale privatization. Still, Hungary's performance is exceptional: one third of total fixed investment has been financed by foreign capital between 1995–97, compared to 6 percent for the world, 9 percent for Central and Eastern European countries (CEEC), and about 18 percent for Poland and Estonia (the next best performers in CEEC). This ratio is one of the highest in the world, even after accounting for the fact that about half of the inflows were privatization receipts. Excluding privatization revenues, FDI equity inflows have been about 3 percent of GDP since 1991 (see Figure 3). Total ex-privatization inward FDI—including intercompany loans—has increased to about 4 percent of GDP since 1997[2].

3. Among the CEEC, Poland and Hungary have the highest total stock of inward investment and are recipients of more than half of all FDI flows to that region. According to both of the relative indicators we show (FDI in percent of GDP, and FDI in percent of gross investment, (Tables 12–14), Hungary is comparable to some of the best performing countries—Malaysia, Chile, and Ireland. It should also be noted that FDI statistics for Hungary still do not include reinvested earnings. If reinvested earnings are included, FDI as a percentage of GDP would have been higher by about two percentage points in the most recent years[3]. FDI stock per capita in Hungary in 1998 was US$1,806, which is by far the highest among all transition economies. Nevertheless, this is about half of the average per capita stock for developed countries, so in absolute terms there is potential for further absorption of FDI capital.

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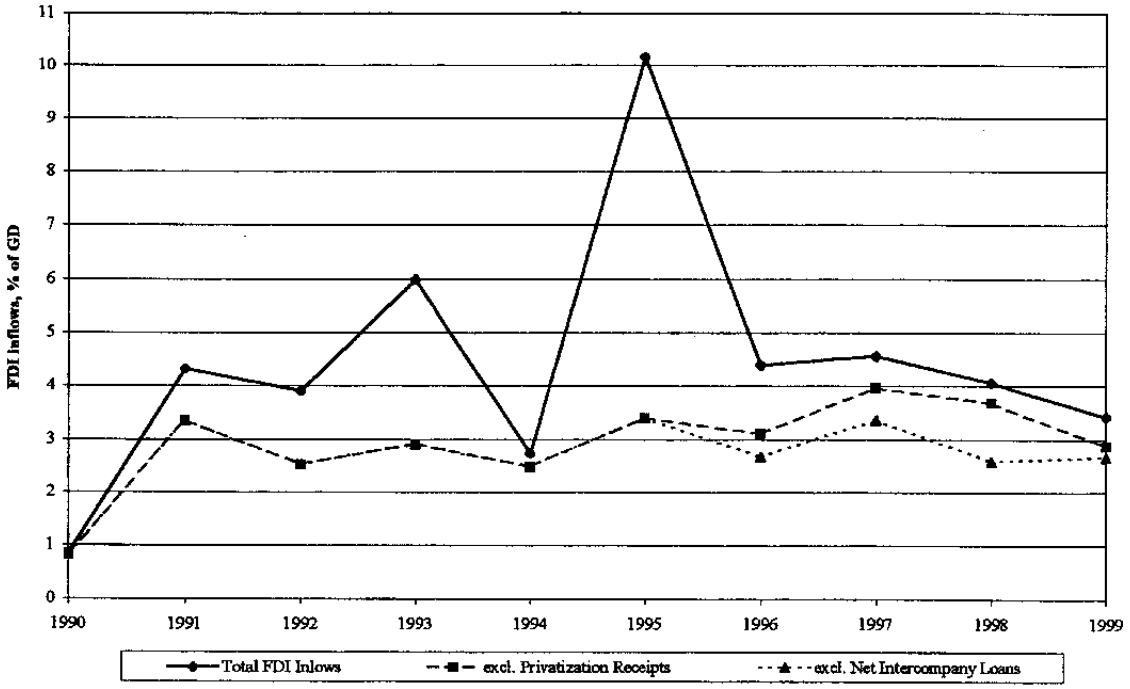
[1] Prepared by Dora Iakova.

[2] Intercompany loans were not distinguished from equity capital FDI before 1996.

[3] Beaumont (1999) estimates retained earnings at 1.3 percent of GDP in 1997. The National Bank of Hungary is considering including retained earnings in the balance of payments starting in 2000.

Figure 3. Hungary, FDI Inflows
(in percent of GDP)



4. There are significant differences among regions in Hungary with respect to economic development, infrastructure, and domestic and foreign direct investment. The central and northwest regions, including Budapest, have the highest concentration of investment, lowest unemployment, and higher than the national average GDP per capita. Between 1992 and 1997, a disproportionately high share of all investments (43 percent) went to the central region (for a detailed discussion, see GKI Economic Research report, 1998). Investments in expanding the transport and communication network, as well as imports of modern equipment, lay the foundations for growth of advanced manufacturing industry in the area. Foreign direct investment has followed the same pattern as domestic investment, and is heavily concentrated in the regions with well developed infrastructure. The expansion of the national motorway network, together with special incentives for investment in less developed regions, creates potential for future growth of FDI to those regions.

Factors behind the strong foreign direct investment inflows

5. What has made Hungary such an attractive place for foreign investment and how would those factors affect future flows? One important factor has been the relative stability of domestic macroeconomic conditions and the existence of an investment friendly legal

environment[4]—good property protection laws, and liberalized capital account with respect to FDI. These macroeconomic and institutional factors are improving further over time and that would influence positively future investments. A second factor has been the favorable tax environment and additional investment incentives given to large investors. Third, the labor market in Hungary is relatively flexible in terms of wages, working hours, and labor laws. This, combined with the availability of a highly educated labor force and real wages still well below the EU average, has made Hungary particularly attractive for industries that use highly skilled workers.

6. Hungary's leading position among transition economies in attracting FDI is rooted in the early start and strong outward orientation of its transition process. Prior to the transition, Hungary had already begun a gradual reform process, and had developed partnerships with Western firms. Early reforms resulted in stable and transparent legal framework for FDI. Hungary adopted a general policy of encouraging greater foreign participation in the domestic economy—perhaps partly a consequence of the need to service high external debt in the early 1990s. The country rapidly liberalized prices, foreign trade, and long-term capital flows. Today, companies with major foreign ownership play an important role in the economy, accounting for more than one third of employment, and more than 70 percent of total exports (Oszlay, 1999). A well functioning financial system and service sector also play a positive role in attracting FDI.

7. With its well-educated labor force (10.8 years of schooling on average), and relatively flexible wages and working hours, Hungary has been well positioned to meet the increasing demands for skilled labor. At the beginning of the 1990s, the structure of FDI investment in Hungary was similar to that of the other Eastern European countries—nonresidents invested mostly in food, textiles, metallurgy—sectors which require less investment in technology and employ low-skilled labor. In recent years, the proportion of high-tech industries has gained a much larger share. Investments in financial services, machinery and equipment, autos, and the chemical industry has grown significantly. Similar positive shifts in FDI concentration have been observed in Slovenia, and to some extent in Poland and the Czech Republic, while in the rest of the former Eastern block FDI inflows are still more concentrated in low-skilled sectors. The structure of FDI in Hungary has been closer to that of EU countries. Increasingly, FDI has been going into services—banking, telecommunications, real estate. In recent years several major multinational firms have set up research and development centers in Hungary, and the software industry has been rapidly growing. In the future, availability of skilled labor may become a bottleneck with some regions already starting to experience shortages of skilled labor.

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[4] The 1999 EBRD Transition Report assigns Hungary the highest ranking among all transition economies for its good investment climate, and the extensiveness and effectiveness of commercial law and financial regulations.

8. The increasing mobility of international capital has resulted in high sensitivity of location decisions to different tax treatments and to increased competition among countries to create incentives that attract capital. For example, a very low corporate tax rate of 10 percent was key to the strong performance of Ireland as a favored FDI recipient. Hungary compares very favorably to other European countries—it has a corporate tax rate of 18 percent, compared with 34 percent for Poland, and 30–40 percent for most countries in the EU. The effective tax rate has been even lower than that, since deductions and tax credits are given for certain investments. Until 1995, there has been preferential tax treatment for most foreign direct investments, the effect of which is being phased out at present. Nevertheless, credits or tax holidays are still given, among others, for investments in underdeveloped regions, new investment projects of at least Ft 10 billion, and manufacturing investments of Ft 1 billion or more (Economist Intelligence Unit, 1999).

9. With privatization largely over, future FDI will go to new establishments and capacity increases. The share of cash inflows in FDI is likely to decline and the share of reinvested earnings to rise, as earnings of existing firms and reinvestment of profits increase. The choice of new financing between equity, intercompany loans, or reinvested earnings will depend on the effective cost of each of those—any change in the composition of FDI will only affect the composition of the financial account, and not the overall balance of payments.

Medium term prospects for foreign direct investment

10. Looking forward, several positive factors are still present and likely to lead to further strong inflows: stable macro and legal environment, progress with disinflation, favorable tax treatment and additional investment incentives, and educated labor force. On the downside, skilled labor constraints may emerge, and convergence towards EU real wages may erase some of the competitive advantage that Hungary presently enjoys. A more long-term concern is the rising competition from other transition countries—most prominently Poland and the Baltic republics. Most investment decision are made on a global competitive basis, and a country's relative competitive advantage may change.

11. According to a survey of large enterprises with foreign participation in Hungary done by McKinsey & Co., reinvestment/local expansion and greenfield investment will each represent about 43 percent of future FDI inflows, with privatization about 15 percent. The survey covered 38 companies which together account for 47 percent of FDI in Hungary. Seventy percent of them plan new investments over the next 3–5 years, most of which is fresh equity investment. One third of all present investors consider Hungary to still be one of the best alternatives for future investments, one third consider the rest of Eastern Europe to be an increasingly good alternative, and the rest compare Hungary to the world at large when making investment decisions. Based on the results of the survey, McKinsey analysts estimated that average annual FDI inflows (reinvestments plus equity and privatization) are expected to be of the order of 3 percent of GDP in the next few years, about of third of it being reinvested earnings. This can be considered a lower bound since the survey focuses only on the largest existing investors and does not account for entry of new foreign investors.

12. A more optimistic view is presented by Andras Oszlay at the National Bank of Hungary—he argues that the level of FDI can increase to as much as seven percent of GDP in the medium term (this figure includes retained earnings of about two percent of GDP). This estimate represents a rise of 2 percentage points of GDP from current levels. The factors behind this view are the potential for growing investment in Central and Eastern Europe, and increased interest in Hungary during the accession process. Current initiatives to improve transport infrastructure and extend economic growth to all regions within the country can also stimulate fresh FDI inflows (Financial Times, Feb. 2000).

13. The literature on determinants of FDI has found a strong link between cross-border trade and investment[5]. More than 80 percent of FDI inflows in Hungary come from the European Union due to its strong trade linkages, geographical proximity, and accession prospects. The evidence from Spain and Portugal shows that for the first five years after accession, FDI inflows increased by 1–2 percent of GDP, after which they declined by about 1 percent of GDP (Table 15). Hungary has already experienced much higher inflows relative to GDP, and it is catching up with Portugal in total FDI stock. This is partly a result of a worldwide increase in capital flows, and partly due to the fact that Hungary is very open, and three fourths of its trade is with the European Union, a large share of it being intra-industry trade. Given the high current level of FDI, the actual accession may have a more modest positive effect than was seen in Portugal and Spain.

14. In the process of convergence of Hungarian income to that of developed countries, FDI outflows are likely to pick up somewhat. Outward foreign direct investment has been negligible until 1996 but has increased to 0.5–1 percent of GDP in recent years and has been oriented to both CEEC and developed countries. In the medium term, FDI outflows will probably remain modest relative to inward foreign direct investment. Given a rather stable track record and overall positive prospects for the future, total net FDI of 5 percent of GDP in the medium term may be considered a conservative forecast. Cash FDI inflows (net of retained earnings) would then remain at about 3 percent of GDP.

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[5] See the studies by Blomstrom and Kokko, and Martin and Velazques on regional integration and FDI.

Table 12. Inward FDI Flows as percent of Gross Fixed Capital Formation

	1987-1992 (annual avg.)	1993	1994	1995	1996	1997	1995-1997 (annual avg.)
CEE countries	3.5	7.7	3.3	9.8	7.0	10.5	9.1
Hungary	10.2	32.1	13.7	52.8	20.6	20.5	31.3
Czech Republic		6.8	7.4	15.4	7.7	8.1	10.4
Poland	1.3	12.6	12.5	18.2	17.6	17.1	17.6
Estonia		40.6	34.8	21.8	12.9	21.5	18.7
Portugal	9.7	7.9	6.1	2.8	5.3	9.9	6.0
Spain	9.9	10.1	9.8	5.9	5.7	5.9	5.8
Ireland	8.9	14.9	9.6	13.4	20.6	19.0	17.7
Chile	14.4	9.3	21.8	19.1	27.5	27.9	24.8
Malaysia	18.1	20.3	14.9	11.1	12.1	12.2	11.8
World	4.1	4.3	4.6	5.4	5.8	7.7	6.3

Table 13. FDI Inflows as percent of GDP

	1987-1992 (annual avg.)	1993	1994	1995	1996	1997	1995-1997 (annual avg.)
Hungary	1.4	6.0	2.7	10.1	4.4	4.5	6.4
Czech Republic	0.8	1.9	2.1	4.9	2.5	2.4	3.3
Poland	0.1	0.7	0.6	0.9	1.9	2.1	1.7
Estonia	1.4	9.7	8.7	5.6	3.4	5.7	4.9
Portugal	2.5	1.8	1.4	0.7	1.3	2.5	1.5
Spain	2.1	1.6	1.9	1.1	1.1	1.0	1.0
Ireland	1.3	2.3	1.5	2.2	3.6	3.5	3.1
Chile*	2.1	1.9	3.7	2.9	6.0	5.7	4.9
Malaysia*	6.8	7.8	6.0	4.8	5.8	7.0	5.8

* The average in the first column is for 1989-1992

Table 14. FDI Inflows Stock, 1998

	Total Stock (In millions of US$)	FDI Stock per Capita (US dollars)
Hungary	18,255	1,806
Czeck Republi	13,457	1,308
Poland	21,722	562
Estonia	1,822	1,248
Portugal	21,130	2,156
Spain	118,926	3,025
Sweden	53,790	6,078
Ireland	23,871	6,452
Chile	30,481	2,057
Malaysia	41,005	1,917

Table 15. FDI Inflows Before and After Accession
(percent of GDP, annual average)

	1981-85	1987-92	1993-97
Spain	1.0	2.1	1.3
Portugal	0.8	2.5	1.5

Source: World Investment Report, 1999 for FDI Stocks and Inflows; IFS; WEO.

ASSESSING THE FISCAL STANCE IN HUNGARY

1. This annex outlines an approach to assessing the fiscal stance in Hungary. The strategy is to work from the official fiscal balances, which follow the Government Finance Statistics (GFS) methodology. These are adjusted towards balances on a national accounts basis (SNA)—with some modifications—a classification more suited to macroeconomic analysis. The modified SNA basis primary balance, adjusted for the effects of pension reform and for cyclical factors, is the indicator used to assess the fiscal stance. The following outlines the approach in more detail, building up from the official fiscal data.

The Official Fiscal Data

2. The Hungarian fiscal accounts follow a GFS'86 methodology, which is intended to integrate with the planning and implementation of the budget, by reporting spending and receipts in a certain period on a cash basis.[1] In the official Hungarian data, specific transfers from the privatization agency (APV Rt) are classified as privatization, and these are excluded from the fiscal balances set as budget targets. However, these transfers are typically only a fraction of total privatization revenues, and the APV Rt makes significant expenditures. While its accounts are reported in the budget, they are not consolidated in the official general government data. All lending by the government and repayments on these loans, are treated as expenditures and revenues respectively, while payments on guarantees are included in expenditures when they are made. Given this consistent cash basis methodology, the overall fiscal deficit can be approximately characterized as the net borrowing requirement from financial markets and institutions of the central and local governments.

Differences between GFS and SNA

3. In contrast, the classification of the SNA is based on economic concepts, and the SNA fiscal balance can be characterized as the balance of savings and investment by general government. Key differences between the GFS and SNA classification systems include:

- GFS'86 permits the inclusion of privatization receipts in revenues, raising the fiscal balance, while in the SNA, this is a financing item that does not affect the balance.
- Lending by government and the repayments of these loans are treated differently. The SNA treats all these operations as being financial, putting them below the line with no effect on the balance, while in the GFS'86 there is a distinction between net lending

[1] The current GFS methodology from *A Manual on Government Finance Statistics* 1986 is being revised in line with SNA concepts, with a draft revised manual available on the IMF website, www.imf.org.

for policy purposes which is placed above the line, and for liquidity management purposes which is kept below the line.

- The SNA is on accrual basis, rather than being based on cash payments like the GFS.

4. In developing internationally comparable fiscal data, most IMF member countries have first produced data on a GFS basis. However, when data are available on an SNA basis this data is typically the focus of macroeconomic analysis.[2] The treatment of privatization proceeds as financing rather than revenues makes SNA data more suited to analysis of the fiscal stance than GFS'86 data, because asset transfers at market prices between government and the private sector should little affect aggregate demand. If payment timing factors largely affect firms—which are less likely to be liquidity constrained—rather than households, the SNA accrual approach is also preferable to a cash basis. Nevertheless, in the case of net lending operations, the GFS distinction may preferable, where policy-based lending is kept above the line due to the potential aggregate demand effect. While an SNA classification is generally well suited for assessing the impact of the budget developments on aggregate demand, in practice some modifications may be needed, most especially with respect to the treatment of those asset sales, e.g. real estate, which may not be classified as financing in the SNA.

Background on Fiscal Stance Analysis

5. The fiscal stance is the stimulus to aggregate demand due to fiscal policy, and an evaluation of the fiscal stance assists in judging whether fiscal policy is well attuned to macroeconomic conditions. The standard approach to estimating the stance of fiscal policy excludes variations in the fiscal balances due to changes in inflation and cyclical swings in activity, and also the effects of any structural factors that do not impact on real aggregate demand[3]:

- Variations in the component of interest payments that compensate for inflation do not affect aggregate demand. An operational fiscal balance which excludes the inflation related part of interest payments can be estimated, but the primary balance—which excludes all interest payments and receipts—is often preferred due to the sometimes wide variance in calculations of the inflation component of interest payments, and also the more direct relationship between the primary balance and fiscal policy.

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[2] For example, EU countries use the European System of Accounts 1995 (ESA95), a version of the System of National Accounts, for the purposes of the Stability and Growth Pact. The Hungarian Ministry of Finance and the Central Statistical Office are currently developing general government accounts to the ESA95 standard.

[3] A more detailed discussion is provided in Blejer and Cheasty eds. (1993) *How to Measure the Fiscal Deficit, Analytical and Methodological Issues*, IMF.

- Cyclical influences on the fiscal balance are excluded because these reflect automatic revenue and expenditure responses, rather than the effect of fiscal policy. More sophisticated techniques for estimating the "structural" fiscal balance take a disaggregate approach, but the cyclical sensitivity of the various components of revenues and expenditures is yet to be assessed in Hungary. A simple technique is used in the interim, calculating the cyclical effect as the difference between actual and potential GDP growth multiplied by the primary revenue ratio.

- A structural reform like the privatization of the old-age pension system may reduce revenues and expand the deficit, but the reform implies a change in private behavior which needs to be recognized when assessing the fiscal stance. The pension reform in Hungary is described in (Box 3). Persons switching their contributions from the PAYG system to the private pension funds are making additional savings for their retirement, so the revenue loss to the social security funds does not raise aggregate demand. Therefore a correction for this structural factor is needed to estimate the fiscal stance.

Estimates of the Fiscal Stance in Hungary

6. The estimated fiscal stance is reported in Table 17, shown as the fourth line under fiscal stance indicator. There was a significant (1.0 percent of GDP) easing in the fiscal stance in 1998, contributing to the sharp rise in the external current account deficit from 1997. A fiscal tightening of 0.7 percent of GDP was targeted in 1999, and the preliminary estimate of the fiscal stance is similar. The fiscal tightening implied by the 2000 budget is estimated at ¼ percent of GDP. The following discusses the steps in estimating the fiscal stance steps in more detail.

1. ***The modified SNA fiscal balances***

As shown in the top section of Table 1, the main adjustments between the official fiscal balance and the modified SNA balance are:

- Privatization items—privatization receipts remaining in official revenues are excluded.

- Net lending—lending and repayments for non-policy purposes that are included in official expenditures and revenues are removed.

- Off-budget spending—spending outside the official budget, but which would be included in the SNA concept of government, is included.

- Accrual basis corrections—the official data are adjusted for factors shifting the timing of payments abnormally.

7. Considering **privatization items**, these include asset sales of the social security funds, other misclassified privatization, and two items from APV Rt that are included in

official revenues but which are funded by privatization or a draw-down of the APV Rt reserve fund. The main issue is the treatment of revenues from sale of the 1800 MHz concession. Under national accounts principles, this transaction represents the sale of a nonproduced nonfinancial asset, or a capital revenue. However, its aggregate demand impact is expected to be the same as a privatization, so for the purposes of analyzing the fiscal stance, it has been included. The resulting measure is therefore a modified SNA basis.

8. **Off-budget spending** of a fiscal nature includes APV Rt expenditures on business reorganization, agricultural subsidies, various guarantees and other legal obligations, current costs, and investment. This spending is reported to Parliament, but is not included in the official budget data, though the macroeconomic character of this expenditure is clear. The **net lending item** is dominated by receipts from the repayment of Russian debt (valued at market prices), but there are also some other debt repayments. The **accrual basis corrections** include interest and VAT, but these corrections are not significant in 1999–2000.

9. The modified overall SNA balance is some 5¾ percent of GDP in 1999 (some 5.4 percent of GDP excluding the concession receipts), compared with the official overal balance of 3.9 percent of GDP. However, this estimate does not capture all differences between a GFS and SNA basis, and it will be revised when official data on the ESA 1995 basis are published.

2. *The fiscal stance indicator*

10. The modified SNA primary balance is calculated by subtracting net interest on an accrual basis from the modified SNA overall balance. The change in this balance as a share of GDP is the starting point for evaluating the fiscal stance (second line under Fiscal stance indicator), where an increase indicates a withdrawal of stimulus to aggregate demand. However, as noted above, a correction for the revenue loss due to the pension reform must be made (see the third line under Fiscal stance indicator), which shows a firmer fiscal stance in recent years than would appear from the uncorrected balances.

11. To estimate the change in the cyclically-adjusted primary balance (pc), the following formula is used, where the actual primary balance (p) rises according to the output gap between GDP (y) and potential GDP (y*):

$$p = pc + \alpha\,(y-y^*) \qquad (1)$$

$$\Delta pc = \Delta p - \alpha\,(\Delta y-\Delta y^*) \qquad (2)$$

The cyclical contribution to the change in primary balance is estimated according to the deviation of GDP growth from potential growth ($\Delta y-\Delta y^*$), which is assumed to be 4.5 percent in 1997–2000, as discussed in (Box 4). It is also assumed that the fiscal balance improves by 0.4 percent of GDP for each 1 percentage point of real GDP (α=0.4), in line with the primary revenue ratio of 41–42 percent of GDP. The cyclically adjusted fiscal stance (see the fourth line under Fiscal stance indicator) shows a withdrawal of 0.2 percent of GDP

greater than the unadjusted figure in 1999, while in 2000, real GDP growth is projected in line with potential so there is no correction for cyclical factors.

Qualifications to the fiscal stance measure

12. While the fiscal stance measure includes an approximate consolidation of the APV Rt into general government, there are other enterprises that may be engaged in off-budget spending. For example, losses by the railways (MAV Rt) exceed state subsidies as reflected in past and prospective debt assumptions (which are not classified as expenditures), but data on these losses are not incorporated in this estimate of the fiscal stance. The National Motorway company has been recently established to begin operations in 2000. Its activities should also be consolidated, given that it is owned and financed by the government, and also that its revenues from tolls will cover only operation and maintenance costs, not debt service or construction costs. The Ministry of Transport projects construction expenditures in excess of the transfers from the budget and expected EU grants at some Ft 40 billion (0.3 percent of GDP), which offsets the targeted fiscal tightening in 2000.

Table 16. Estimate of Fiscal Stance, 1997-2000

	1997	1998	1999 Budget	1999 Prel.	2000 Budget
Estimation of fiscal balances on a modified SNA basis			(In billions of forint)		
Overall balance, official	-407.7	-482.4	-458.0	-440.4	-443.3
Modified SNA basis adjustors	-157.5	-118.6	-143.3	-209.4	-125.7
Privatization items	-23.6	-16.6	-63.2	-123.2	-38.0
SSF privatization 1/	-9.4	-9.9	-53.7	-74.0	-12.4
Misclassified privatization items 2/	0.0	-5.8	10.0	10.0	0.0
Extraordinary dividends of APV Rt 3/	-4.2	-0.7	0.0	-15.6	0.0
Revenues from debt consolidation 3/	-10.0	-0.2	-14.5	-8.3	0.0
1800 Mhz concession receipts 4/	0.0	0.0	-5.0	-35.3	-25.6
Net lending 5/	-39.3	-46.1	-33.6	-23.7	-23.1
Lending	11.3	2.6	2.5	2.5	0.0
Repayments	-50.6	-48.7	-36.1	-26.2	-23.1
o/w Russian debt, at market price	-27.7	-28.2	-14.8	-8.9	-13.6
Off-budget spending	-66.0	-69.3	-53.5	-67.5	-71.6
Expenditures of APV Rt 6/	-66.0	-69.3	-53.5	-67.5	-71.6
Accrual basis corrections	-28.6	13.4	7.0	5.0	7.0
Interest 7/	-23.2	-16.7	0.0	0.0	0.0
VAT 8/	-5.4	30.1	7.0	5.0	7.0
Overall balance, modified SNA basis	-565.2	-601.0	-601.3	-649.8	-569.0
Net interest	667.2	640.9	696.5	745.9	703.3
Net interest, accural basis	690.4	657.6	696.5	745.9	703.3
Primary balance, official	259.5	158.5	238.4	305.5	260.0
Primary balance, modified SNA basis	125.2	56.6	95.1	96.1	134.3
Pension reform revenue loss	0.0	-20.1	-69.9	-62.5	-69.1
			(In percent of GDP)		
Overall balance, official	-4.8	-4.7	-4.0	-3.9	-3.5
Modified SNA basis adjustors	-1.8	-1.2	-1.2	-1.8	-1.0
Overall balance, modified SNA basis	-6.6	-5.9	-5.2	-5.7	-4.5
Primary balance, official	3.0	1.6	2.1	2.7	2.1
Fiscal stance indicator					
Primary balance, modified SNA basis	1.5	0.6	0.8	0.8	1.1
Change from previous year	...	-0.9	0.3	0.3	0.2
Adjusted for pension reform loss	...	-0.7	0.7	0.6	0.2
Adjusted for cyclical factors	...	-1.0	0.7	0.8	0.2
Pension reform revenue loss	0.0	-0.2	-0.6	-0.5	-0.6
Memoranda items					
Cyclical contribution, est.	0.0	0.2	0.0	-0.2	0.0
Real GDP growth	4.6	5.1	4.5	4.1	4.5
Potential GDP growth, est.	4.5	4.5	4.5	4.5	4.5
Nominal GDP (billions of forint)	8,541	10,086	11,565	11,420	12,530

Sources: Ministry of Finance, National Bank of Hungary, and staff estimates.

1/ Proceeds from sales of shares and other financial assets by the Social Security Funds.
2/ Reciepts from indirect privatization (1998) and predictable payment of guarantee on privatization (1999).
3/ Classified as revenues of the central government, though these are generated by privatization proceeds.
4/ Proceeds from sale of concession for 1800 MHz spectrum.
5/ Net lending for nonpolicy purposes, principally related to Russian debt and other debt repayments in revenues.
6/ APV Rt spending on reorganization, subsidies, guarantees and othe legal obligations, operating costs, and investment.
7/ Accrued interest less cash interest payments as calculated by the NBH Statistics Department.
8/ Difference between accrued VAT liability and actual cash payments, estimated by MOF.

SAVINGS, INVESTMENT, AND THE FISCAL STANCE

1. This Annex considers the outlook for private savings and investment, and the implications for the stance of fiscal policy given that the authorities are targeting an external current account deficit of about 4 percent of GDP in the medium-term. Fiscal policy is the main instrument for achieving this goal, considering that the flexibility of interest rates is limited by the exchange rate peg. The fiscal position likely has an stronger effect on the external current account deficit in Hungary than in advanced economies, because Ricardian effects are limited by stronger liquidity constraints on Hungarian consumers. The outlook reflects recent trends, and allows for expected structural developments, but is subject to a wide range of uncertainty considering the lack of historical relationships, and the unpredictable timing and implications of EU accession, suggesting that significant flexibility in the fiscal stance should retained in the medium-term.

Private savings

2. Savings data in Table 13 are presented on an operational basis, according to National Bank of Hungary estimates of the component of measured savings which is compensating for inflation. Operational savings are also adjusted for the effects of pension reform—which switch savings from the public to the private sector. On this measure, private savings have risen strongly in 1995–98, primarily due to higher corporate savings, but have slipped slightly in 1999, with preliminary data suggesting a sharp decline in household savings.

3. In the baseline scenario, a rise in private savings on the order of 1 percent of GDP is anticipated by 2001 compared with 1998, primarily reflecting rising corporate profits. Private savings are then assumed to level out, as though corporate profitability may continue to strengthen as FDI projects mature, and as joint ventures attain a rising share of value added, the rate of profit growth may be constrained by a tightening market for skilled labor. Household saving may be eroded by improved credit access as lower inflation reduces debt service relative to household incomes, and also due to a new mortgage foreclosure law which is expected to be enacted in 2000, which should reduce the currently wide interest spreads on mortgage loans. Growing confidence of rising future incomes, and in prospects for macroeconomic stability, may also lower household savings, which may be a factor in the fall in the household savings rate in 1999 despite higher than usual real interest rates.[1]

[1] Ricardian effects may also contribute to a reduction in private savings if there is a further fiscal consolidation, but their magnitude is unclear in Hungary, though the strong simultaneous movements in the fiscal and external deficits in the mid–1990s would suggest that they were relatively weak at that time.

Private investment

4. Private fixed investment has risen by an estimated 3 percentage points of GDP in 1995 to 1999, with all growth in the corporate sector, while household investment in residential property has been stable. While investment growth in 1999 was modest, a rebound in private investment, including in residential property, is anticipated in 2000, before returning to more normal but still strong growth in later years, on the order of 7 to 8 percent in the baseline scenario. Inventory investment is assumed to remain stable as a share of GDP at its 1998 level—this item also includes the statistical discrepancy.

Fiscal stance

5. The estimation of the appropriate fiscal stance starts from the budget for 2000, which implies a modest fiscal tightening such that such that there may be a small rise in the external current account deficit—to some 4½ percent of GDP—due to the expected acceleration in private investment. Combining the external current account goals, with the outlook for the private saving-investment balance, gives the required path for the public sector saving-investment balance after 2000. These are converted into targets for the fiscal balances by assuming the statistical discrepancy is unchanged in future, in the lower panel of (Table 13). Fiscal data are provided on both an official basis, and according to preliminary staff estimates of the fiscal balances on and SNA basis, as described in Annex II.[2]

6. As a consequence of the anticipated decline in the private savings-investment balance, and the aim to modestly reduce the external current account deficit towards its target level, the public savings-investment balance must rise by some 2.4 percent of GDP in 2000-2003, as also reflected in the target for the overall balance. Given interest savings of 1.5 percent of GDP, the targeted rise in the primary balance is some 0.9 percent of GDP. The interest savings of the public sector closely match the projected reduction in the inflation component of private savings, so the change in the primary balance is driven by the rise in private investment relative to savings on an operational basis.

7. The fiscal stance is assessed using the change in the primary balance on an SNA basis, adjusted for the pension reform.[3] As shown, this rises by a cumulative 1 percent of GDP after 2000, with the tightening concentrated in 2001–2002, when the external current account balance is being reduced toward its medium-term target.

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[2] Asset related receipts included in official primary revenues are assumed to remain at their 2000 level in subsequent years, as are other items accounting for the estimated difference between the fiscal deficits on an SNA basis and an official basis. If this assumption is incorrect, the official balances required to achieve the same fiscal stance would be different, but the SNA basis deficit would be unchanged.

[3] With real GDP growth assumed to remain at its potential rate in 2000-2003, there is no need to calculate a cyclically-corrected primary balance.

Table 17. Hungary: Savings, Investment and the Fiscal Stance

	1995	1996	1997	Prel. 1998	Est. 1999	Proj. 2000	Proj. 2001	Proj. 2002	Proj. 2003
Baseline Scenario 1/				(In percent of GDP)					
Investment	23.9	26.8	27.4	29.2	28.8	30.3	30.8	31.2	31.6
Fixed	20.0	21.4	22.2	23.6	23.1	24.6	25.1	25.5	25.9
Public 2/	2.9	3.2	3.9	3.8	3.1	3.8	3.8	3.8	3.8
Private	17.1	18.2	18.3	19.8	20.1	20.9	21.4	21.8	22.2
Inventory	3.9	5.4	5.2	5.7	5.7	5.7	5.7	5.7	5.7
Domestic Savings	21.0	24.6	26.5	25.3	25.4	26.8	27.5	28.1	28.6
Public	-2.8	0.1	0.3	0.3	0.5	1.5	2.4	3.2	3.8
Private	23.8	24.5	26.2	25.0	25.0	25.2	25.1	24.8	24.7
Inflation component 3/	5.2	5.1	4.7	2.6	2.5	1.7	1.3	1.0	0.9
Operational	18.6	19.4	21.5	22.4	22.5	23.6	23.8	23.8	23.9
Pension reform adj.	18.6	19.4	21.5	22.2	21.9	23.0	23.2	23.2	23.2
Reform Scenario 1/									
Investment	23.9	26.8	27.4	29.2	28.8	30.3	31.1	31.8	32.6
Fixed	20.0	21.4	22.2	23.6	23.1	24.6	25.4	26.1	26.9
Public 2/	2.9	3.2	3.9	3.8	3.1	3.8	3.9	4.0	4.2
Private	17.1	18.2	18.3	19.8	20.1	20.9	21.6	22.2	22.8
Inventory	3.9	5.4	5.2	5.7	5.7	5.7	5.7	5.7	5.7
Domestic Savings	21.0	24.6	26.5	25.3	25.4	26.8	27.8	28.7	29.6
Public	-2.8	0.1	0.3	0.3	0.5	1.5	2.5	3.4	4.2
Private	23.8	24.5	26.2	25.0	25.0	25.2	25.3	25.2	25.3
Inflation component	5.2	5.1	4.7	2.6	2.5	1.7	1.3	1.0	0.9
Operational	18.6	19.4	21.5	22.4	22.5	23.6	24.0	24.2	24.5
Pension reform adj.	18.6	19.4	21.5	22.2	21.9	23.0	23.4	23.6	23.8
External and fiscal balances									
External current account 4/	-5.6	-3.7	-2.1	-4.9	-4.3	-4.5	-4.3	-4.1	-4.0
BOP-NA residual 5/	-2.6	-1.4	-1.3	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Savings-investment	-2.9	-2.3	-0.9	-3.9	-3.3	-3.5	-3.3	-3.1	-3.0
Private	2.8	0.8	2.7	-0.4	-0.8	-1.3	-1.9	-2.6	-3.1
Public	-5.7	-3.1	-3.6	-3.5	-2.6	-2.2	-1.4	-0.5	0.1
Overall balance, official	-6.2	-3.1	-4.8	-4.8	-3.9	-3.5	-2.7	-1.8	-1.2
Net interest	8.2	7.3	7.8	6.4	6.5	5.6	5.1	4.6	4.1
Primary balance	2.1	4.3	3.0	1.6	2.7	2.1	2.4	2.7	2.9
Overall balance, SNA 6/	...	...	-6.6	-6.0	-5.7	-4.5	-3.7	-2.8	-2.2
Net interest, accruals	...	...	8.1	6.5	6.5	5.6	5.1	4.6	4.1
Primary balance, SNA 6/	...	...	1.5	0.6	0.8	1.1	1.4	1.7	1.9
Change, adjusted for pension reform		...	...	-0.7	0.6	0.2	0.4	0.4	0.2
Pension reform loss 1/	0.0	0.0	0.0	-0.2	-0.5	-0.5	-0.6	-0.7	-0.7

Sources: National Bank of Hungary and staff estimates.

1/ Assuming the pension contribution to the private funds remains at 6 percent. With the completion of reforms, the fiscal balances and public saving would be lower, but private saving would be correspondingly higher.

2/ National accounts data on public investment, which differ slightly from those based on the official fiscal data.

3/ Estimates of the National Bank of Hungary for 1995-99, and staff projections thereafter.

4/ Official Balance of Payments data.

5/ This residual is assumed to remain at the level estimated for 1998 in future years.

6/ Preliminary staff estimates of the balance of the general government sector consistent with SNA concepts.

Table 1. Hungary: Selected Indicators, 1991-98

	1991	1992	1993	1994	1995	1996	1997	1998 Est.	1999 Staff Proj.
Real economy (change in percent)									
Real GDP	-11.9	-3.1	-0.6	2.9	1.5	1.3	4.6	4.9	4.2
Real domestic demand	-8.4	-2.6	8.3	1.7	-4.1	0.8	3.8	7.9	3.3
Of which: Private consumption	-5.6	0.0	1.9	-0.2	-7.1	-2.7	1.7	4.1	4.8
Gross fixed investment	-10.4	-2.6	2.0	12.5	-4.3	6.7	9.2	12.3	3.1
Exports (real) 1/	-13.9	2.1	-10.1	13.7	12.4	8.4	26.4	16.4	10.5
Imports (real) 1/	-6.1	0.2	20.2	8.8	-1.6	6.6	24.1	22.8	8.6
CPI (end year)	32.2	21.6	21.1	21.2	28.3	19.8	18.4	10.3	11.2
CPI (average)	34.8	22.8	22.4	18.8	28.3	23.5	18.3	14.3	10.0
Unemployment rate, percent		10.2	11.5	10.3	9.9	9.2	7.7	7.0	6.6
General government (percent of GDP) 2/									
Balance (excl. privatization receipts)	-3.8	-7.8	-9.2	-8.6	-6.2	-3.1	-4.8	-4.8	-3.9
Primary balance 3/	2.0	-3.1	-5.0	-2.7	2.1	4.3	3.0	1.6	2.7
Debt	73.4	77.6	87.9	85.2	84.3	71.5	62.9	61.2	60.6
Money (end of year, percent change)									
M3	35.9	27.6	15.3	13.0	20.2	22.1	19.7	15.3	16.5
Credit to non-government	0.2	0.8	2.5	14.2	9.7	19.9	35.2	17.5	...
Interest rate (90-day T-bill, average)	34.5	22.7	17.2	26.9	32.0	24.0	20.1	17.8	14.6
Balance of payments									
Current account (percent of GDP)	0.8	0.9	-8.9	-9.3	-5.6	-3.7	-2.1	-4.9	-4.3
Billions of U.S. dollars	0.3	0.3	-3.5	-3.9	-2.5	-1.7	-1.0	-2.3	-2.1
Reserves in convertible currencies									
Billions of U.S. dollars	4.0	4.4	6.7	6.8	12.0	9.8	8.4	9.3	11.0
In months of merchandise imports	5.2	5.2	6.7	7.1	9.4	7.0	4.7	4.5	4.9
Gross external debt in convertible currencies									
In percent of GDP	67.1	57.0	63.0	68.1	70.9	61.0	51.9	56.9	58.4
In billions of U.S. dollars	22.7	21.4	24.6	28.5	31.7	27.6	23.7	26.7	28.1
Net external debt 4/									
In percent of GDP	43.1	35.3	38.3	45.2	37.6	31.4	24.4	26.3	23.3
In billions of U.S. dollars	14.6	13.3	14.9	18.9	16.8	14.2	11.2	12.3	11.2
Exchange rate									
Exchange regime	Crawling peg against euro, at 0.4 percent per month, with band +/-2.25 percent.								
Nominal effective rate (1990=100)	88.8	84.9	81.3	72.0	56.1	48.1	44.7	39.9	37.7
Real effective rate, CPI basis (1990=100)	112.3	121.2	132.1	129.7	124.1	128.1	133.0	133.4	135.4

Sources: Data provided by the authorities; IFS; and staff estimates.

1/ National accounts basis.

2/ Consists of the central budget, social security funds, extra-budgetary funds, and local governments.

3/ This excludes net interest payments and central bank transfers from the government balance.

4/ In convertible currencies. Including inter-company loans, and non-resident holdings of forint denominated assets.

Table 2. Hungary Gross Domestic Product and Aggregate Demand, 1991-98

	1991	1992	1993	1994	1995	1996	1997	1998
				(In billions of forint)				
Domestic Demand	2,555.9	3,009.9	3,869.2	4,679.3	5,685.4	6,968.8	8,537.9	10,287.3
Consumption	2,009.9	2,476.0	3,128.0	3,676.0	4,341.7	5,119.5	6,198.3	7,342.1
Individual	1,750.5	2,146.2	2,646.2	3,159.3	3,724.0	4,415.9	5,297.5	6,257.0
Collective	259.4	329.8	481.7	516.7	617.7	703.6	900.8	1,085.1
Investment	546.0	533.8	741.2	1,003.3	1,343.7	1,849.4	2,339.6	2,945.2
Gross fixed capital	555.4	621.0	711.5	932.9	1,125.4	1,475.5	1,899.1	2,373.0
Stockbuilding	-9.3	-87.2	29.7	70.4	218.3	373.8	440.5	572.2
Net exports	-0.9	19.6	-280.8	-261.9	-71.3	-74.9	3.0	-212.3
Exports	894.1	1,010.9	1,023.7	1,379.2	2,073.0	2,678.7	3,885.6	5,105.9
Imports	895.0	991.2	1,304.4	1,641.1	2,144.4	2,753.6	3,882.6	5,318.2
GDP	2,521.7	2,970.3	3,581.5	4,405.7	5,614.0	6,893.9	8,540.9	10,075.0
				(In percent of GDP)				
Domestic Demand	101.4	101.3	108.0	106.2	101.3	101.1	100.0	102.1
Consumption	79.7	83.4	87.3	83.4	77.3	74.3	72.6	72.9
Individual	69.4	72.3	73.9	71.7	66.3	64.1	62.0	62.1
Collective	10.3	11.1	13.5	11.7	11.0	10.2	10.5	10.8
Investment	21.7	18.0	20.7	22.8	23.9	26.8	27.4	29.2
Gross fixed capital	22.0	20.9	19.9	21.2	20.0	21.4	22.2	23.6
Stockbuilding	-0.4	-2.9	0.8	1.6	3.9	5.4	5.2	5.7
Net exports	0.0	0.7	-7.8	-5.9	-1.3	-1.1	0.0	-2.1
Exports	35.5	34.0	28.6	31.3	36.9	38.9	45.5	50.7
Imports	35.5	33.4	36.4	37.2	38.2	39.9	45.5	52.8
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CSO.
1/ Based on New System of National Accounts (SNA).

Table 3. Hungary: Sectoral Savings and Investment Balances, 1992-99 1/

	1992	1993	1994	1995	1996	1997	1998	1999
	(In percent of GDP)							
Gross domestic savings	15.3	10.6	14.4	21.2	24.6	26.5	25.3	25.6
Government 2/	0.5	0.2	-1.9	-2.6	0.1	0.2	0.9	-0.1
Nongovernment	14.7	10.4	16.3	23.8	24.4	26.3	24.4	25.7
Households	12.9	8.2	9.9	10.7	12.4	11.9	11.8	10.8
Enterprises	1.8	2.3	6.4	13.1	12.0	14.4	12.6	14.9
Gross Investment	16.1	20.0	22.2	23.9	26.8	27.4	29.2	29.4
Government 3/	5.9	5.5	6.3	2.9	3.2	3.9	3.7	3.4
Nongovernment	10.1	14.5	15.9	21.0	23.6	23.5	25.5	26.0
Households	4.9	5.1	4.6	4.9	5.0	4.8	4.1	5.7
Enterprises	5.2	9.4	11.4	16.1	18.5	18.7	21.4	20.3
Nonfinancial balance	-0.8	-9.4	-7.8	-2.7	-2.2	-0.9	-3.9	-3.8
Government	-5.4	-5.3	-8.2	-5.5	-3.1	-3.7	-2.8	-3.5
Nongovernment	4.6	-4.1	0.4	2.8	0.8	2.8	-1.1	-0.3
Households	8.0	3.1	5.3	5.8	7.4	7.1	7.7	5.1
Enterprises	-3.4	-7.1	-5.0	-3.0	-6.5	-4.3	-8.8	-5.4
Memorandum items:								
Current account balance	0.9	-8.9	-9.3	-5.6	-3.7	-2.1	-4.9	-4.3
Capital transfers								
Government	-1.5	-1.4	-1.4	-1.7	-1.5	-1.4	-1.8	-1.3
Nongovernment	1.5	1.4	1.4	1.7	1.5	1.4	1.8	1.0
Households	0.9	0.9	1.0	0.7	0.8	0.5	0.2	0.2
Enterprises	0.6	0.5	0.4	1.0	0.7	0.9	1.6	1.1

Sources: CSO, Ministry of Finance.
Note: Differences in totals are due to rounding; Estimation of NBH.
1/ The indicators were calculated on accrual approach. Savings do not include revaluation of stocks of households' deposits and loans due to exchange rate changes. In the general government's balance (deficit according to GFS methodology less privitization receipts)
2/ Includes in 1993 and 1994 imports (and public final consumjption) of military equipment from Russia in lieu of outstanding claims by Hungary (net of VAT and customs duties).
3/ The net position of foreigners does not entirely correspond to the accrual approach, as interest and divident payments are on a a cash-flow basis as in the balance of payments.

Table 4. Hungary: Household Disposable Income, 1991-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999
								NBH Estimate	
				(In billions of forint)					
Wages and salaries	1030.9	1166.0	1353.9	1576.3	1905.1	2324.0	2824.4	3363.9	3946.5
Employers' social security contributions	354.9	440.1	552.3	639.8	729.9	823.4	1017.7	1117.7	1193.8
Compensation of employees	1385.8	1606.1	1906.2	2216.1	2635.0	3147.4	3842.1	4481.6	5140.3
Mixed income	361.7	498.1	583.0	736.2	999.7	1291.2	1471.4	1751.3	1957.0
Property income	68.1	95.7	131.1	177.4	196.7	305.8	422.4	512.0	551.9
Social benefits in cash	475.6	581.1	708.1	821.7	910.5	992.6	1158.4	1400.5	1598.6
Other current transfers, net	-553.6	-730.2	-977.5	-1062.8	-1182.5	-1354.1	-1674.7	-2004.5	-2279.9
Disposable income	1727.6	2050.8	2350.9	2888.6	3559.4	4383.0	5219.6	6140.9	6967.9
Social transfers in kind	392.8	470.3	578.4	693.5	763.2	890.7	1063.9	1248.1	1448.6
Adjusted disposable income	2130.4	2521.1	2929.3	3582.1	4322.6	5273.7	6283.5	7389.0	8415.5
Memorandum items:									
Final consumption	1746.9	2141.1	2639.9	3151.7	3723.9	4415.8	5297.5	7271.8	7271.8
Saving 1/	383.5	380.0	289.4	430.4	598.6	857.9	1019.3	1251.6	1251.6
In percent of GDP	15.2	12.8	8.1	9.8	10.7	12.4	11.9	12.4	10.9
Saving rate (in percent) 2/	18.0	15.1	9.9	12.0	13.8	16.3	16.2	16.9	14.9

Source: CSO

1/ The financial saving contains the savings payed into the pension funds.

2/ Ratio of savings and adjusted disposable income.

Table 5. Hungary: Unemployment Indicators, 1991-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999
				(In thousands, end-of-period)					
Registered Unemployed	406.1	663	632.1	519.6	495.9	477.5	464.0	404.1	404.5
Skilled	135.7	232.2	226.7	184.3	174.2	168.5	165.8	144.8	145.8
Semi-skilled	97.1	154.9	143.5	123.9	119.2	119.4	115.9	102.7	102.3
Unskilled	105.8	167.1	154.3	120.4	109	106.5	99.9	88.0	86.5
Nonmanual	67.5	108.8	107.6	91	93.5	83.106	82.3	68.6	69.9
Job seekers by duration of unemployment	...	435.6	473.9	408.3	397.3	365.8	295.4	266.4	...
Less than 26 weeks	...	197.6	176.7	148.7	121.4	127.9	84.4	89.2	...
Less than one year and over 26 weeks	...	138.2	120.5	86.4	78.8	61.2	63.6	56.2	...
Over one year	...	99.8	176.7	173.2	197.1	157	147.4	121.0	...
				(In percent of respective total)					
Registered Unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Skilled	33.4	35.0	35.9	35.5	35.1	35.3	35.7	35.8	36.0
Semi-skilled	23.9	23.4	22.7	23.8	24.0	25.0	25.0	25.4	25.3
Unskilled	26.1	25.2	24.4	23.2	22.0	22.3	21.5	21.8	21.4
Nonmanual	16.6	16.4	17.0	17.5	18.9	17.4	17.7	17.0	17.3
Job seekers by duration of unemployment	...	65.7	75.0	78.6	80.1	76.6	63.7	65.9	...
Less than 26 weeks	...	29.8	28.0	28.6	24.5	26.8	28.6	33.5	...
Less than one year and over 26 weeks	...	20.8	19.1	16.6	15.9	12.8	21.5	21.1	...
Over one year	...	15.1	28.0	33.3	39.7	32.9	49.9	45.4	...
Memorandum items:									
Unemployment rate, in percent 1/	7.5	12.3	12.1	10.4	10.4	10.5	10.4	9.1	9.6
Persons obtaining unemployment benefits	312.1	477.0	326.6	191.6	198.9	139.4	136.7	141.6	...
Average benefit per month, in forint	7,310	8,828	9,949	11,237	11,730	13,514	16141.0	18895.0	...
Nominal growth rate, in percent	25.7	20.8	12.7	12.9	4.4	15.2	19.9	17.1	...
Real growth rate, in percent 2/	-6.9	-1.8	-8.0	-5.0	-18.8	-8.4	1.2	6.2	...

Sources: CSO, Statistical Yearbook and Monthly Bulletin of Statistics (various issues); data provided by the authorities.
1/ Ratio of unemployed at end of year to the labor force in January of previous year.
2/ Deflated by the consumer price index.

Table 6. Hungary: Consumer Prices and Wages, 1991-99

	Consumption share 1999	1991	1992	1993	1994	1995	1996	1997	1998	1999
					(Average annual percent change)					
Consumer prices		35.0	23.0	22.5	18.8	28.2	23.6	18.3	14.3	10.0
Foodstuffs 1/	27.2	21.9	19.4	29.2	23.4	31.1	17.3	17.5	14.4	2.9
Beverages and tobacco	8.9	25.1	19.6	18.6	16.4	20.1	26.6	18.9	15.3	11.5
Fuel and electricity	8.9	81.1	43.2	20.3	11.7	50.0	32.5	29.9	17.9	9.4
Consumer durables	5.5	31.7	14.3	11.1	11.8	24.0	19.2	8.5	8.1	6.6
Other industrial articles	17.0	43.4	27.2	21.6	19.0	27.3	25.7	16.1	10.7	14.7
Clothing	6.1	32.1	23.0	16.7	16.1	20.2	25.6	18.7	14.1	10.6
Services	26.4	41.9	26.0	24.1	20.3	26.0	26.4	19.2	16.2	14.8
Wages										
Gross wages		33.4	24.3	21.9	22.8	16.8	20.4	22.3	18.3	16.1
Net wages		28.1	20.7	17.5	25.4	12.6	17.4	24.9	18.4	12.7

Sources: CSO, *Monthly Bulletin of Statistics*; and data provided by Hungarian authorities.
1/ Since 1992 including coffee, tea and soft drinks.

Table 7. Hungary: Producer Prices, 1992-99 1/

(Average annual percent change)

	1992	1993	1994	1995	1996	1997	1998	1999
Industry	12.3	10.8	11.3	28.9	21.8	20.4	11.3	5.2
Mining	4.2	6.4	9.0	21.5	18.8	20.5	15.5	9.5
Manufacturing	10.4	11.0	12.8	26.1	22.3	17.8	8.6	4.8
Food, beverages tobacco	12.0	16.7	18.2	22.2	24.3	22.4	8.7	2.3
Textiles, clothes, leather, fur	10.2	8.8	8.3	25.2	23.0	15.6	12.9	11.2
Wood, paper, publishing, printing	13.0	13.5	11.5	38.5	16.3	9.4	10.1	6.4
Chemicals, petroleum, plastic	5.2	6.5	9.1	29.7	28.5	16.6	4.0	15.3
Nonmetallic mineral products	12.1	12.0	14.8	23.7	21.9	19.4	10.1	9.7
Basic and fabricated metals	5.0	2.7	10.6	32.0	126.9	13.3	14.1	0.6
Engineering	17.8	9.3	8.9	9.8	14.5	17.6	9.3	-0.2
Other manufacturing	12.1	11.9	11.2	22.3	22.5	14.4	10.7	10.1
Electricity and water supply	6.1	9.2	2.1	32.9	24.8	34.1	17.8	7.7
Construction	17.2	12.0	14.5	26.6	24.8	19.9	10.7	10.2 2/

Sources: CSO, Monthly Bulletin of Statistics; and data provided by the Hungarian authorities.
1/ By the new Standard Industrial Classification of the Economic Activities introduced in 1992.
2/ Data for Jan-Nov 1999.

Table 8. Hungary: Consolidated General Government, 1997-1999 1/

	1997	1998	1999 Budget 2/	1999 Prel.
		(In billions of forint)		
Total revenues (ex. official privatization)	3,837	4,386	4,844	4,955
Interest and NBH receipts	199	156	102	114
Primary revenues	3,638	4,230	4,742	4,842
Central government taxes	3,077	3,590	4,060	4,046
VAT	675	797	985	942
Excises	335	418	461	464
Profit tax	164	217	295	262
Customs	161	131	134	140
Personal income tax	560	657	731	770
Social security contributions 3/	1,181	1,371	1,453	1,468
Employer contributions	958	1,130	1,217	1,207
Employee contributions	195	219	243	261
Local government and other 4/	561	640	683	796
Expenditure and net-lending	4,245	4,868	5,302	5,396
Interest and NBH expenditure	867	797	798	859
Primary expenditures	3,378	4,071	4,504	4,536
Current	3,039	3,706	4,113	4,208
Pensions and social transfers	750	932	1,068	1,065
Enterprise and household subsidies	351	468	497	517
Other current expenditure	1,938	2,306	2,549	2,626
Capital 5/	340	365	391	328
Investment	255	289	296	255
Capital transfers 6/	85	76	94	73
Net interest	-667	-641	-696	-746
Primary balance	260	159	238	306
Overall balance	-408	-482	-458	-440
		(In percent of GDP)		
Total revenues	44.9	43.0	42.3	43.4
Primary revenues	42.6	42.0	41.0	42.4
Central government taxes	36.0	35.6	35.1	35.4
Local government and other	6.6	6.4	5.9	7.0
Expenditure and net lending	49.7	47.7	46.4	47.2
Primary expenditure	39.6	40.4	38.9	39.7
Current	35.6	36.8	35.6	36.8
Capital 5/	4.0	3.6	3.4	2.9
Primary balance	3.0	1.6	2.1	2.7
Net interest	-7.8	-6.4	-6.0	-6.5
Overall balance	-4.8	-4.8	-4.0	-3.9
Gross debt	62.9	61.1	59.6	60.6
Memoranda items				
Primary balance, staff adjusted 7/	1.5	0.6	0.8	0.8
Change, pension and cyclically adjusted 7/	...	-1.0	0.7	0.8
Primary current spending				
Real growth, in percent (GDP deflator)	2.2	8.7	1.5	4.4
Nominal GDP (billions of forint)	8,541	10,086	11,565	11,420

Sources: Ministry of Finance, National Bank of Hungary, and staff estimates.

1/ Official consolidated data for central budget, social security funds, extra-budgetary funds, and local governments.

2/ Incorporates the decision to freeze Ft 40 billion of expenditure reserves in February 1999.

3/ Contributions to the Pension Insurance Fund, the National Health Fund, and the Labor Market Fund.

4/ Includes privatization revenues of the social security funds and proceeds from the sale of concessions.

5/ Central budget investment projects and local government capital expenditures.

6/ Housing grants and other capital transfers by central and local government.

7/ Adjusted to a modified SNA basis, as described in Annex 2 of the background paper.

Table 9. Hungary: General Government by Function, 1997-99

	1997 Actual	1998 Actual	1999 Budget	1997 Actual	1998 Actual	1999 Budget
	(In billions of forint)			(In percent of GDP)		
Total expenditure	4243	4868	5302	49.7	48.3	45.8
Primary expenditure	3370	4081	4496	39.5	40.5	38.9
State operating functions	532	632	663	6.2	6.3	5.7
General public services	285	361	351	3.3	3.6	3.0
Defense	106	103	127	1.2	1.0	1.1
Law and order, public safety	141	169	185	1.7	1.7	1.6
Welfare functions	2347	2835	3139	27.5	28.1	27.1
Education activities and services	409	481	509	4.8	4.8	4.4
Schooling prep. and elementary	131	152	168	1.5	1.5	1.5
Secondary education	38	44	47	0.4	0.4	0.4
Higher education	126	152	158	1.5	1.5	1.4
Other education	114	134	137	1.3	1.3	1.2
Health	382	461.4	503	4.5	4.6	4.3
Hospital operations and services	164	193	204	1.9	1.9	1.8
Family doctor and paediatric services	23	36	46	0.3	0.4	0.4
Clinic, medical, dental services	58	54	71	0.7	0.5	0.6
Public health activities and services	13	16	19	0.2	0.2	0.2
Other health (inc. Pharmaceuticals)	124	163	163	1.5	1.6	1.4
Social security and welfare services	1238	1516	1717	14.5	15.0	14.8
Sickness, maternity, disability benefits	142	167	204	1.7	1.7	1.8
Pensions (inc. disability)	671	835	943	7.9	8.3	8.2
Other social security provision	34	50	50	0.4	0.5	0.4
Unemployment benefits	45	75	69	0.5	0.7	0.6
Family and child care allowances	157	175	223	1.8	1.7	1.9
Other social supports	110	123	140	1.3	1.2	1.2
Social & welfare institutional services	79	91	88	0.9	0.9	0.8
Housing, municipal&community services	149	157	150	1.7	1.6	1.3
Entertainment, cultural&religious activities	95	121	140	1.1	1.2	1.2
Environment protection	74	99	121	0.9	1.0	1.0
Economic functions	434	538	594	5.1	5.3	5.1
Heating, motor fuel, energy supply	3	3	3	0.0	0.0	0.0
Agriculture, forestry, fisheries, and game	125	165	193	1.5	1.6	1.7
Mining and industry	18	20	15	0.2	0.2	0.1
Transport and telecommunications	179	225	242	2.1	2.2	2.1
Public road transport activities	104	130	120	1.2	1.3	1.0
Rail road transport and services	46	54	73	0.5	0.5	0.6
Telecommunication	7	12	18	0.1	0.1	0.2
Other transport and shipping	21	29	31	0.2	0.3	0.3
Other economic activities and services	109	125	142	1.3	1.2	1.2
Other items	56	75	100	0.7	0.7	0.9
Primary revenues	3638	4230	4742	42.6	42.0	41.0
Primary balance	268	149	246	3.1	1.5	2.1
Net interest	674	631	704	7.9	6.3	6.1
Overall balance	-406	-482	-458	-4.8	-4.8	-4.0
Gross domestic product	8541	10075	11565	...	...	...

Source: Ministry of Finance.

Table 10: Hungary: Banking Survey, 1997-1999
(In billions of forint, at current exchange rates, end-of-period)

	1997				1998				1999			
	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Dec-98	Mar-99	Jun-99	Sep-99	Dec-99
Net Domestic Assets	...	4935.8	5033.4	5133.7	4939.8	5013.4	5346.2	5633.6	5489.0	5342.8	5349.0	5349.0
Domestic credit	5164.2	5244.0	5441.5	5569.8	5592.4	5681.7	6128.1	6374.9	6281.8	5918.5	5892.6	5977.6
Total General government, net	3496.3	3436.0	3519.8	3463.5	3441.2	3364.5	3665.4	3895.7	3716.8	3247.8	3094.1	2962.7
Local Governments	29.8	28.3	26.9	30.3	29.5	39.0	35.6	44.4	41.7	49.9	48.3	50.0
Nonprofit Institutions	22.4	26.8	27.9	33.5	33.6	36.6	39.0	43.4	48.4	38.4	40.7	43.2
Enterprises	1329	1455.4	1561.3	1709.3	1757.8	1881.5	1993.2	1983.7	2044.8	2109.5	2196.6	2368.4
Working Capital	769.5	866.0	911.7	996.4	1018.7	1066.3	1129.1	1094.0	1110.2	1190.4	1237.0	1282.2
Investment Needs	145.2	159.9	164.9	187.9	201.0	211.9	233.9	253.4	256.6	222.2	235.7	270.3
Foreign exchange credits	414.3	429.5	484.7	514.9	538.1	603.3	630.2	636.3	677.9	697.0	723.9	816.0
Households	218.1	216.3	219.5	238.0	225.4	241.1	252.9	264.6	272.8	299.8	328.7	357.4
Small enterprises	61.4	63.1	64.3	63.8	76.3	83.7	88.2	92.1	94.5	103.4	105.6	111.9
Oth Fin Inst Credit	7.2	18.1	21.8	31.4	28.6	35.3	53.8	51.1	62.8	69.7	78.5	84.0
Other Assets, net	-268.8	-308.2	-408.1	-436.1	-652.7	-668.5	-781.9	-741.3	-792.8	-575.7	-588.0	-537.3
Net Foreign Liabilities	1594.4	1501.2	1400.1	1127.2	1006.9	932.9	1074.2	1007.5	845.4	573.5	332.5	84.9
Broad money (M2)	2819.0	2962.9	3166.7	3522.5	3897.4	4047.6	4240.2	4597.2	4612.1	4731.4	4930.6	5302.8
Currency outside banks	499.8	512.0	541.0	562.6	551.7	587.7	640.5	666.6	667.1	708.4	737.5	845.2
Households	427.1	443.0	463.4	496.9	489.4	521.4	569.2	589.5	589.9	628.7	658.2	750.7
Other	72.7	69.0	77.6	65.7	62.3	66.3	71.3	77.1	77.2	79.7	79.3	94.5
Enterprise deposits	686.5	747.0	805.4	954.2	881.8	943.1	945.9	1032.1	971.6	997.7	1086.7	1210.4
Forint	484.5	543.8	579.0	719.6	654.8	709.2	713.9	802.8	743.5	779.4	837.4	976.2
Foreign currency	202	203.2	226.4	234.6	227.0	233.9	232.0	229.3	228.1	218.3	249.3	234.2
Household deposits	1361.6	1423.6	1507.7	1663.2	2135.3	2183.7	2305.1	2514.5	2601.8	2654.8	2712.8	2811.9
Forint	887	939.1	1003.0	1140.4	1598.4	1623.6	1704.5	1898.9	1971.4	2030.0	2071.6	2163.8
Foreign Currency	474.6	484.5	504.7	522.8	536.9	560.1	600.6	615.6	630.4	624.8	641.2	648.1
Small enter. deposits	50.1	53.8	63.4	66.8	70.4	77.4	83.3	83.4	102.9	111.8	118.3	123.1
Other deposits	221	226.5	249.2	275.7	258.2	255.7	265.4	300.5	268.8	258.7	275.3	312.1
Local Authorities	107.1	97.0	113.7	115.8	112.4	93.1	113.3	123.5	115.0	91.8	119.2	126.3
Bonds & savings notes	...	471.7	466.6	484.0	35.5	32.9	31.8	28.9	31.5	37.9	41.6	52.5
M3 (Broad money+bank bonds & notes)	...	3434.6	3633.3	4006.5	3932.9	4080.5	4272.0	4655.0	4675.1	4807.1	5013.7	5355.3

Source: Data provided by the Hungarian authorities.

Table 11. Hungary: Interest Rates for the Enterprise and Financial Sectors, 1995-99
(In percent per annum)

	Dec.	Mar	Jun	Sep	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1997		1998								1999						
Credit Interest Rates																	
Maturity																	
1 yr or less maturity	20.8	20.3	18.8	18.3	18.8	17.8	17.1	17.0	16.8	16.6	16.2	16.0	15.6	15.6	16.0	15.9	15.4
More than 1 yr maturity	21.7	21.3	19.4	20.3	18.8	18.8	18.3	18.0	17.9	17.2	17.2	16.3	16.6	16.2	16.5	16.9	15.8
Bills of exchange	21.0	21.1	20.6	19.9	19.4	18.9	16.7	16.7	17.5	16.7	16.5	16.5	16.0	15.5	15.7	17.2	16.3
Deposit Interest Rates																	
Maturity																	
1 month or less	16.8	16.1	15.2	14.3	14.3	14.1	13.3	13.3	13.0	12.7	12.4	12.1	12.0	11.9	12.0	11.9	11.7
1 to 12 months	17.6	17.1	16.0	15.3	15.4	14.7	13.5	14.0	13.9	13.7	13.1	13.0	12.9	12.5	12.5	12.7	12.8
More than 1 year	18.2	16.6	16.0	15.1	15.0	14.5	12.7	13.9	14.0	13.0	13.1	12.8	13.3	13.1	11.7	12.3	13.0
Current account deposits																	
Minimum	2.5	2.5	1.0	1.0	1.0	1.0	1.0	2.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maximum	18.0	17.0	17.0	18.0	18.0	17.0	17.0	18.0	18.0	18.0	18.0	18.0	18.0	15.0	15.0	15.0	15.0
Interbank overnight interest rate	20.4	18.6	17.5	17.5	15.8	17.9	14.8	15.6	15.3	14.6	14.7	14.5	14.1	14.1	14.6	13.8	...
Treasury bill auctions																	
3-month	19.2	19.0	17.4	17.4	16.9	15.5	15.2	15.3	15.2	14.9	14.8	14.6	14.3	14.0	14.0	13.8	12.5
6-month	19.2	19.0	17.5	17.0	17.0	15.5	15.0	15.2	15.5	14.8	14.9	14.6	14.3	14.1	14.0	14.0	12.5
12-month	19.1	19.1	17.6	17.1	16.6	14.1	15.0	15.3	15.1	14.8	14.9	14.5	14.3	14.1	14.1	13.9	13.4

Source: NBH Monthly Report.
Note: The T-Bill figures are end-of-period given a straight depreciation or appreciation between auctions.

Table 12. Hungary: Balance of Payments, 1991-99
(In millions of US Dollars)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Current account balance	267	325	-3457	-3915	-2480	-1678	-981	-2528	-2007
Goods, net	189	-48	-3246	-3635	-2442	-2645	-1734	-2352	-2178
Exports 1/	9258	10028	8094	7613	12810	14183	19637	20752	21841
Imports 1/	9069	10076	11340	11248	15252	16828	21371	23104	24019
Services (net)	601	765	250	257	680	1499	1177	678	837
credit	2363	3304	2792	3057	4218	5006	4871	4908	4772
debit	1762	2539	2542	2800	3538	3507	3694	4230	3935
Of which: Travel (net)	560	590	422	503	659	1288	1428	1298	1655
Income, net	-1383	-1251	-1192	-1446	-1845	-1454	-1421	-1872	-1559
of which:									
Other investment income, (net)	-1331	-1251	-1130	-1286	-1599	-559	-401	-277	-164
Credit	297	420	456	661	758	547	600	329	330
Debit	-1628	-1635	-1586	-1947	-2367	-1106	1001	606	494
Transfers, (net) 2/	861	859	732	908	1127	922	996	1018	893
Capital and financial account balance	1652	444	5331	3229	6580	-1644	515	2862	4571
Capital account	...	...	...	...	...	156	117	188	32
Direct investment (net) 3/	1459	1471	2329	1097	4410	1986	1653	1453	1689
Abroad, net	0	0	-11	-49	-43	3	-431	-481	-249
Of which: Equity capital, net	...	...	-11	-49	-43	3	-286	-462	-245
In Hungary, net	1459	1471	2339	1146	4453	1983	2085	1935	1938
Of which: Equity capital, net	1459	1471	2339	1146	4453	1788	1811	1410	1674
Portfolio and other investments									
Assets, net	84	-298	75	239	127	-1287	-692	-417	-379
Short-term, net	141	-152	-162	202	9	-1583	-530	-278	299
Long-term, net	-57	-146	237	37	118	296	-162	-139	-679
Liabilities, net	109	-729	2927	1894	2041	-2499	-2396	1637	3229
Short-term, net 4/	-758	157	-109	581	196	509	30	713	770
Long-term, net 5/	867	-886	3036	1313	1845	-3008	-2426	924	2458
Net errors and ommissions	...	...	733	189	1225	1864	296	232	-170
Overall balance	1919	769	2607	-497	5325	-1457	-170	797	2395
Reserves change (increase -)	-2720	-761	-2635	661	-4532	1650	170	-797	-2395
Fund purchases (net)	801	-8	29	-164	-793	-193	0	175	0
Memorandum items:									
Current account balance (In percent of GDP)	1	1	-9	-9	-6	-4	-2	-5	-4
Gross official reserves	4017	4381	6736	6769	12011	9751	8429	9341	10960
(In months of imports)	5	5	7	7	9	7	5	4	5
Gross external debt 6/	22658	21438	24560	28521	31655	27552	23747	26746	28144
(In percent of GDP)	67	57	63	68	71	61	52	57	58
Net external debt 6/	14555	13276	14927	18935	16816	14164	11157	12343	11245
(In percent of GDP)	43	35	38	45	38	31	24	26	23

Sources: Data provided by the Hungarian authorities; and staff estimates.
1/ Settlement basis.
2/ Through 1995 includes current and capital transfers, from 1996 includes current transfers only.
2/ Excludes reinvested profits.
4/ Through 1992 includes net errors and ommissions.
5/ Excludes IMF loans.
6/ Includes intercompany loans.

Table 13. Hungary: Directon of Trade, 1994-99
(In percent)

Exports	100.0	100.0	100.0	100.0	100.0	100.0
EU countries	51.0	62.8	62.7	71.2	72.9	76.1
of which: Germany	23.4	23.4	29.0	37.2	36.6	38.3
Austria	12.0	10.7	10.1	11.5	10.6	9.9
Italy	7.0	7.9	8.0	6.2	5.8	6.0
France	3.4	3.9	3.7	3.8	3.8	4.4
United Kingdom	4.0	3.1	2.9	3.3	3.6	4.4
The Netherlands	3.0	3.1	2.7	2.8	4.7	5.2
Belgium	2.1	2.5	2.1	2.4	2.6	2.9
Spain	1.0	1.5	1.1	1.5	1.7	1.5
Sweden	2.1	2.0	1.0	0.8	0.9	0.9
EFTA countries	14.5	1.6	1.5	1.4	1.3	1.4
of which: Switzerland	2.6	2.5	1.3	1.2	1.2	1.2
CEFTA countries	...	...	...	8.9	8.9	8.0
Of which: Poland	1.3	1.6	3.0	2.7	2.3	2.1
Czech Republic	2.4	2.4	2.2	1.7	1.6	1.6
Slovakia	2.4	2.4	1.9	1.4	1.4	1.2
Slovenia	0.6	0.6	1.7	1.5	2.5	1.1
Romania	0.8	0.8	2.1	1.7	1.0	1.9
CIS countries	...	...	...	7.2	4.5	2.4
Of which: Russia	12.0	11.8	5.9	5.1	2.9	1.4
The Ukraine	2.1	2.3	1.7	1.3	1.0	0.5
Other major foreign trade partners						
USA	3.1	3.1	0.2	3.2	4.5	5.2
Japan	2.7	2.2	0.8	0.5	0.4	0.3
China	0.7	0.8	0.1	0.1	0.1	0.3
Imports	100.0	100.0	100.0	100.0	100.0	100.0
EU countries	61.7	61.5	59.8	62.8	64.1	65.1
of which: Germany	28.2	28.6	23.6	26.9	28.2	29.8
Austria	10.9	10.1	9.5	10.6	9.6	9.2
Italy	8.5	8.5	8.1	7.4	7.6	7.7
France	3.5	4.0	4.2	4.4	4.9	4.7
United Kingdom	4.3	3.0	3.3	3.4	3.4	3.1
The Netherlands	2.5	2.9	3.2	2.6	2.5	2.5
Belgium	1.9	2.0	2.4	2.4	2.5	2.7
Spain	0.9	0.9	1.0	1.3	1.6	1.7
Sweden	1.2	1.0	1.7	1.2	1.2	1.1
EFTA countries	25.2	2.6	2.3	1.8	1.8	1.8
of which: Switzerland	1.5	1.4	2.1	1.7	1.7	1.6
CEFTA countries	...	...	...	7.2	6.9	7.3
Of which: Poland	2.1	2.6	1.8	1.7	1.8	2.1
Czech Republic	1.8	1.6	3.0	2.4	2.2	1.9
Slovakia	1.3	1.7	2.4	1.9	1.7	1.7
Slovenia	1.8	2.0	0.5	0.5	0.7	0.6
Romania	1.9	2.8	0.9	0.7	0.5	0.8
CIS countries	...	...	...	10.9	7.7	6.4
Of which: Russia	7.5	6.4	12.5	9.2	6.5	5.3
The Ukraine	2.1	2.5	1.8	1.3	0.9	0.8
Other major foreign trade partners						
USA	4.0	3.2	3.5	3.8	3.9	3.5
Japan	0.9	0.6	2.2	3.3	3.8	3.9
China	0.1	0.2	1.2	1.4	1.7	2.1

Source: National Bank of Hungary Annual Reports.
1/ Data for January-October 1999.