

**OECD  
Economic Surveys**

**Hungary**

**ECONOMICS**

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**Volume 2002/10 – June**

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

## **ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT**

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## BASIC STATISTICS OF THE REPUBLIC OF HUNGARY

2001

### THE LAND

Area (km <sup>2</sup> )	93 036
Arable land (km <sup>2</sup> )	44 998

### THE PEOPLE

		Population of major cities (thousands):	
Population (thousands, end year)	10 005	Budapest	1 812
Urban population (per cent of total)	64	Debrecen	204
Rural population (per cent of total)	36	Miskolc	172
Projected population in 2005 (1995 = 100)	96		
Employment (thousands)	3 803	Employment by sector (per cent of total):	
Unemployment rate	5.8	Agriculture	6
(per cent of civilian labour force)		Industry	35
Participation rate of 15-64 year olds	60.2	Services	59

### THE PARLIAMENT

Number of seats	386
Number of political parties (elections of April 2002)	4
Share of seats held by governing coalition (per cent)	51
Next election	2006

### PRODUCTION

GDP (HUF billion, current prices)	14 876
GDP per head (current PPP in USD)	13 232
Consumption (private, per cent of GDP)	52
Gross fixed capital formation (per cent of GDP)	22

### PUBLIC FINANCE

Central government budget balance (per cent of GDP)	-2.8
General government revenue (per cent of GDP)	44.1
General government balance (per cent of GDP)	-5.2

### FOREIGN TRADE

Exports of goods and services (per cent of GDP)	60
Imports of goods and services (per cent of GDP)	63
Official reserves (average, incl. gold, SDR billion)	9
Total gross external debt (euros billion)	38
Total gross external debt (per cent of GDP)	65

### THE CURRENCY

Monetary unit: Forint

Forints per euro:		Forints per USD:	
Average, 2001	256.68	Average, 2001	286.54
End March 2002	243.50	End March 2002	279.18



*This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of Member countries.*

•

*The economic situation and policies of Hungary were reviewed by the Committee on 28 March 2002. The draft report was then revised in the light of the discussions and given final approval as the agreed report by the whole Committee on 24 April 2002.*

•

*The Secretariat's draft report was prepared for the Committee by Rauf Gönenç and Jaromir Cekota under the supervision of Andreas Wörgötter.*

•

*The previous Survey of Hungary was issued in November 2000.*

## Assessment and recommendations

*Economic growth has slowed less than in other small OECD countries...*

Growth in Hungary has averaged 4½ per cent since 1997, and was well maintained in 2001 at close to 4 per cent. The economy was hit by the international slowdown, with exports and private investment decelerating sharply. But this was largely offset by an aggressive fiscal loosening of nearly 2½ per cent of GDP and strong real wage growth of 8 per cent, which together stimulated public infrastructure building, housing and private consumption. Unemployment fell below 6 per cent, and the labour force remains fully employed in western Hungary and the Budapest area. Upward pressure on domestic prices has been strong, as reflected in inflation in non-tradables slightly above 10 per cent. But an appreciating currency has kept downward pressure on import prices and, helped by favourable food and energy price developments, led to a decline in headline inflation to below 7 per cent by the end of the year. The current account continued to improve, reflecting a significant increase in tourism revenues. The current account deficit – 2.1 per cent of GDP on a cash basis and 5.9 per cent on a transactions basis according to OECD estimations – was to a large extent financed by FDI inflows and reinvested earnings of foreign firms. The ratio of total gross external debt to GDP nonetheless remains at the relatively high level of 65 per cent.

*... but labour market bottlenecks could increasingly constrain future growth possibilities*

Beyond the decrease in the registered unemployment rate, there are signs of additional tensions in labour markets. In the past a skilled labour force available at internationally-competitive wages has been a major factor attracting foreign investment to Hungary, and an important incentive for domestic investment as well. Now the skills and profiles most demanded by businesses have fallen in short supply with the risk that potential growth will be constrained in the coming

years. Meanwhile, very low activity rates persist among the low-skilled segments of the working-age population. Within this group, older individuals in particular appear increasingly unable to re-enter the labour market at prevailing labour costs (which include regressive labour taxes). They are thereby withdrawing from the labour force, leaving Hungary with the lowest activity rate among OECD countries for low-skilled individuals. These developments create a divide between those who are actually employed and whose productivity increases rapidly, and the inactive. In the face of the resulting dual labour-market problem, upskilling efforts need to be intensified and policies should aim more resolutely at increasing demand for low-skilled workers, in particular by reducing the high burden of social security contributions.

***Economic results should improve through 2002 and beyond***

Looking forward, economic developments will reflect a re-balancing between the stimulus of international recovery and less dynamic domestic demand, leading to a broader-based growth. According to Secretariat projections, private investment and exports will remain weak in the first half of 2002 but will then respond to a recovery in foreign demand in the second half. At the same time, public infrastructure and government-sponsored housing investments may grow faster, as some funding earmarked for 2001 has been carried forward. However, with an increase in precautionary savings and less exuberant household borrowing following more cautious consumer sentiment, consumption should grow at a lower pace than in 2001. Overall, growth in 2002 may slow slightly to 3.5 per cent. Thereafter, scheduled general government deficit reductions indicate a welcome fading of the fiscal impulse. The emerging slack in the economy may be partly re-absorbed in 2003 in the course of an export driven recovery, with growth rising above 4 per cent somewhat higher than its estimated potential.

***The main risk is that excessive wage growth in combination with a strong forint may endanger competitiveness***

The main risk for future growth is likely to come from a possible overshooting in wage growth and an ensuing deterioration in competitiveness. Real wage growth in the competitive sector had reached 6½ per cent in 2001, following a 57 per cent increase in minimum wages, strong wage growth in the public sector, and high inflationary expectations in the first half of the year which led to high wage settlements.

Rapid wage growth may persist in 2002 because of a further increase in the minimum wage, and an expected 19 per cent increase in public sector wages. The latter is driven by the government's aim to achieve earnings parity between public and private-sector workers with comparable educational backgrounds within the short time span remaining in the current electoral cycle. Private-sector wage increases may be less rapid than in 2001 but overall wage growth, combined with exchange rate appreciation, may well raise previously unknown competitiveness challenges. In 2001, the net outcome of large wage increases, nominal exchange-rate appreciation and the somewhat-offsetting reduction of social-security contribution rates was an appreciation of the real exchange rate based on unit labour costs of close to 9 per cent. Even if this should be seen in relation to the earlier much larger real depreciation (of more than 50 per cent between 1994 and 2000), Hungarian producers might face rising competitive pressures on both their domestic and export markets. The resulting risks to both exports and business investment may affect GDP growth negatively.

***Monetary policy  
is on track  
towards a credible  
inflation targeting  
regime...***

A new monetary regime has been in place since mid-2001. The crawling peg was abandoned and the forint now fluctuates in a wider band, permitting monetary policy to tighten according to ambitious disinflation objectives. The regime change is part of a declared policy of participating in the European Monetary Union as early as possible after EU accession. The early disinflation record of the new regime has been encouraging, as the target for headline inflation of  $7 \pm 1$  per cent by the end of the year 2001 was reached with ease. The currency promptly appreciated and fluctuated between 7 and 11 per cent above its central parity in the second half of 2001, reinforcing the passthrough of international price deceleration. However, domestic price pressures remained strong, and inflation in non-tradables stayed at a yearly average of 11 per cent. The Central Bank has been successful in developing its communication strategy and began to make progress in altering markets' inflationary expectations in line with its objectives. Future inflation targets are ambitious – a band of  $\pm 1$  per cent around 4.5 per cent at end-2002 and 3.5 per cent at end-2003. Latent wage pressures, price effects related to the productivity catch-up

(the Balassa-Samuelsong effect, calculated at 1-2 per cent over EU trade partners' inflation) and expected inflationary effects of the international recovery may require monetary tightening in 2002 and beyond.

*... requiring  
a strict  
implementation  
of budgetary  
consolidation  
targets*

For such tightening to remain as moderate as possible and avoid a too strong exchange rate appreciation, which would hamper growth, a prudent fiscal policy will be required. In the circumstances of the international slowdown and of the electoral cycle (with general elections in April and country-wide municipal elections in autumn 2002), budget stimulus reached 2½ per cent of GDP in 2001, raising the SNA-compatible budget deficit estimated by the OECD to above 5 per cent of GDP; an additional loosening equivalent to 0.7 per cent of GDP is expected in 2002. It will be important not to allow any further loosening during the execution of this budget. The fiscal stance should then tighten in 2003 along the lines indicated in the medium-term economic programme submitted to the European Commission. Sticking strictly to the announced budgetary objectives of the pre-accession programme would avoid a costly tension between fiscal and monetary policies. Achieving fiscal consolidation should be helped by the broad stabilisation of public debt (at below 60 per cent of GDP) and the associated implications for debt servicing, but it will also require a reduction of primary expenditures, projected to decrease from 44.2 per cent of GDP in 2001 to 41.5 per cent in 2004. It is important that these consolidation plans are met.

*Public  
expenditure  
and taxes need  
to be trimmed  
back*

The fulfilment of the scheduled short and medium-term fiscal objectives, as well as longer-term tax and expenditure reduction policies, requires a thorough reform of public spending. Longer-term spending reduction is important, as the high tax pressure at 39 per cent of GDP (2001) may hamper potential growth while similarly high labour taxes need to be reduced further to increase labour market participation and employment. However, such a reduction will present a real challenge: substantial new spending on infrastructure, public health, education and environment protection is implied by national priorities and EU accession rules, so that the room for such items has to be provided by curtail-ing spending more forcefully in other parts of the budget.

The required public expenditure reform will necessitate more explicit medium-term spending priorities, better and internationally-comparable indicators of the fiscal stance, the containment of off-budget spending by quasi-fiscal institutions, and improved efficiency in the supply of public services.

***Effective multi-year expenditure ceilings should be imposed***

The competing and growing claims on public resources, notably from the emerging spending areas reflecting the new priorities outlined above, complicate the implementation of fiscal restraint. Following the experience of other OECD countries, firm multi-year expenditure ceilings based on cautious growth and inflation projections should provide useful hard-budget constraints to deal with this risky budget situation. Medium-term fiscal priorities declared at the beginning of each legislature and delineating multi-year spending frameworks should be set and followed through so as to give the necessary credibility to such expenditure ceilings. Their sustainability will depend crucially on effective reforms of individual spending programmes to improve efficiency.

***The fiscal stance should be monitored according to international standards***

Important progress has been achieved in the modernisation of fiscal management but the accounting basis for the monitoring of general government accounts should be improved. Ongoing efforts to develop accruals based accounting in line with ESA95 norms should be accelerated and completed, and these standards should be used not only in co-operating with EU and international partners, but also in the domestic – notably parliamentary – monitoring of the fiscal stance. Furthermore, spending by off-budget institutions should be more accurately reflected in government accounts, reflecting common understandings with and guidance by international bodies (EUROSTAT re-emphasised recently the need to include road building expenditures in the general government budget). Debts and loan guarantees of off-budget institutions should be monitored closely, and the ongoing efforts for a better measurement of public debt should be completed by including off-budget liabilities in the government accounts.

***Off-budget spending should be contained***

Quasi-fiscal institutions, whose borrowing and spending are very imperfectly reflected in the general government accounts, play a growing role in public finances. The Hungarian

Development Bank (MFB) has been in charge of road construction financing and some other schemes of the national economic plan ("Szechenyi Plan"), while the National Privatisation and State Holding Corporation (APV) owns and exerts shareholder rights in 162 government-controlled companies. There are also smaller but numerous municipal holding companies, which play quasi-fiscal roles at the local level. The remaining state-owned corporations with policy-driven rather than profit-making objectives should also be considered as quasi-fiscal institutions. Taken together, these bodies represent a large share of public resources, total yearly expenditures of MFB, APV and MAV (the Hungarian State Railway Company) amounting currently to more than one-third of central government expenditures. The policy-driven activities of these institutions need to be delineated clearly and consolidated with general government accounts. Institutions carrying out off-budget activities, including their subsidiaries, should be subjected to rigorous financial control and their procurement programmes should be opened to competitive bidding. At the same time, in recognition of the long-term character of their investments, they should enjoy the necessary long-term planning and funding horizons in the context of explicit national priorities and related multi-yearly budgetary frameworks.

***The efficiency of service supply should be enhanced by intergovernmental reform***

The structure of public service supply, which is a major consumer of budgetary resources, should also be improved. At present public services, including technically demanding health and education services, are provided in highly fragmented ways by a large number of local governments. The separation of central funding and local execution of services reflects efforts to promote local democracy. Funding mechanisms are based on objective criteria and are transparent, but the service supply system is hampered by organisational inertia. Over-staffing and low technical efficiency in the supply of these services are the main problems and it is desirable to reassess the suitability of the existing degree of fragmentation in their provision. The responsibility for some of these services can be consolidated at an intermediate level between central and local governments, with comparative benchmarks gauging the efficiency of services, and – when

possible – competition introduced between supply units. Central government funding should be provided on the basis of more demanding reviews of the efficiency of services and the State Audit Office should be better equipped to cater to this need.

***Speeding up convergence makes continued structural reforms necessary***

Hungary has narrowed the living standards gap separating it from more advanced economies, moving from 47 to 52 per cent of the OECD average per capita GDP from 1996 to 2001. To sustain and indeed speed up this convergence process, it will be necessary to pursue structural reforms in a number of areas. To consolidate progress in establishing a competitive market-based economy, the authorities ought to divest the remaining state holdings of productive assets more resolutely than in recent years. In this context there is no justification for listing 93 entities as strategic. The government should legislate measures to reduce this list and should in any case act to sell off the portfolio of strategic stakes in diverse firms to the minimum levels stipulated by the law as soon as possible.

***Having established a strong FDI sector, the focus should now be on improving the employment potential of SMEs***

Hungary attracted considerable inflows of foreign direct investment over the last decade, resulting in the creation of a competitive and dynamic economy. To broaden the growth-enhancing effects of foreign investment, the authorities started to implement a programme providing considerable assistance to the medium-sized and small enterprises (SMEs) in the framework of the Szechenyi Plan. While this policy improved the access of domestically-controlled businesses to credit and know-how, the same businesses were hit hard by the doubling of the minimum wage mentioned above. The authorities responded by cutting social-security contribution rates and developing a special scheme to allocate wage subsidies to businesses whose wage costs were increased most by the higher statutory wage minima. At the same time, however, the flat-rate health charge was increased, inflating the cost of unskilled labour. Specific initiatives for SMEs are unlikely to yield good results if the framework conditions for this development are adverse. The authorities ought to set the employers' costs of minimum wages such that they do not have significant adverse effects on the demand for low-skilled



labour. Abolishing the flat-rate health charge would be a timely first step – this measure could be financed by cutting other subsidy programmes.

***Increasing labour force participation is the main task for further labour market reforms***

Ten years ago, Hungary's labour force participation was comparable to that of the United States, exceeding the OECD average. Subsequently, the authorities responded to rising unemployment associated with market-based restructuring by creating a comprehensive system of early retirement, light-disability and welfare benefits that reduced the labour force participation rate to well below the OECD average by the mid-1990s. Despite a considerable tightening of access to welfare benefits in recent years, the marginal improvement in the participation rate observed in the late 1990s appears to have stopped in 2001. Given the still considerable number of early retirees and disability benefit recipients, the authorities ought to review these benefits and rationalise access, removing actuarial distortions which favour early retirement and emphasising rehabilitation rather than passive treatment of disabilities. The abolition of the tax clawback reducing the take-home pay of working retirees is a welcome development that has increased the incentives to remain in the labour force. A more general strategy of reducing taxes on labour would improve employment-increasing incentives.

***Challenges related to the Roma minority are rooted in low employability and activity rates***

A specific and rather difficult policy challenge is posed by the objective to improve living conditions of the country's historically disadvantaged Roma population. Despite ongoing government efforts, this group continues to be characterised by substandard educational, health and labour-market achievements. Policies promoting the advance of this ethnic minority may need to be better co-ordinated and target the employability and activity rate of working-age individuals. Measures stressing human capital formation and facilitating workers' access to growing local labour markets (including via measures improving housing and transportation opportunities and costs) may be useful. In this difficult area, all policies should be regularly re-evaluated and public resources should be concentrated on the most effective programmes.

***Recent moves may endanger the long-term sustainability of the pension system***

Hungary reformed its pension system in 1998, introducing a system combining a PAYG pillar and a fully-funded mandatory second pillar consisting of privately-operated pension funds. Last year the government modified key parameters of this reform, abolishing the mandatory nature of the second pillar, withdrawing the state guarantee of a minimum annuity generated on individual retirement accounts and refusing to increase the contribution rates to such accounts according to the original reform plan. At the same time, the government has announced that it intends to modernise the existing PAYG system, making it more attractive to all workers. These measures trade off a short-run cash flow gain against long-term liabilities. Given the importance attached to the long-run sustainability of the public pension system, these moves ought to be reconsidered by the authorities.

***Network industries have been liberalised and should be further opened to effective competition,...***

The government pushed forward liberalisation of network industries, adopting new legislation governing the telecom, gas and electricity sectors. The progress in the telecom sector is impressive and international best-practice standards are already being implemented – although impacts on tariffs are not yet fully visible. However, the opening of the energy sectors will be more gradual. The electricity and gas sectors will experience partial liberalisation following EU Directives, starting in 2003. The situation in the gas sector is worrisome with the government proposing to purchase the gas production and transportation network from the dominant privately-owned energy group and let the current artificially low household prices approach the market level over a number of years. This contradicts the previous achievements of the privatisation process and regulatory reform. The authorities are encouraged to reconsider such regressive moves and resume the liberalisation agenda.

***... which has to be supervised by competent regulators***

For liberalisation of network industries to be effective, there is an urgent need for regulators who are both competent and independent. In the telecommunication sector, the authorities established a regulatory framework and equipped the supervisors with the tools needed to do the job adequately in the context of relatively rapid liberalisation.

In the not yet liberalised energy sector, the situation is more complicated. Although recent legislation improves the status of the Hungarian Energy Office, the final price-setting authority remains with the government. The authorities are encouraged to transfer politically-sensitive pricing decisions to the independent regulators.

### *To sum up*

Hungarian structural reforms have permitted an impressive catching up with living standards in more advanced OECD member countries. Sustaining the convergence process will require both further structural reforms, including in particular addressing the low labour force participation rate, and appropriate macroeconomic policies. The economy outperformed most of the other countries during the recent slowdown largely due to a strong fiscal impulse and rapidly growing private consumption expenditure. Looking forward, it will be crucial for fiscal policy to return to the announced consolidation path. This aims at reducing primary expenditures by almost 3 percentage points of GDP by 2004. Achieving this target is necessary to avoid a costly confrontation with monetary policy, which aims for a relatively rapid disinflation over the same period in order to ensure an early entry into EMU. The intended fiscal consolidation is unlikely to be realised without a deepening public expenditure reform entailing a medium term budgeting framework with credible expenditure ceilings. It should also promote increased use of performance budgeting, benchmarking and other quality control mechanisms. Reforming public service provision, especially in the case of education and health care, can be expected to improve human capital with positive consequences for long-term growth. The reform agenda should notably aim to reverse the recent expansion of off-budget activities. The decision to widen the PAYG pillar of the pension system has changed key parameters of the pension reform and should be reconsidered in order to maintain the long-term sustainability of the public pension system. The high growth rates necessary for a rapid catch-up to average EU income levels will require both high trend productivity growth and increased labour force participation. This will only be possible if structural reform and liberalisation pick up again. Privatisation of the remaining state enterprises should be completed and the liberalisation of

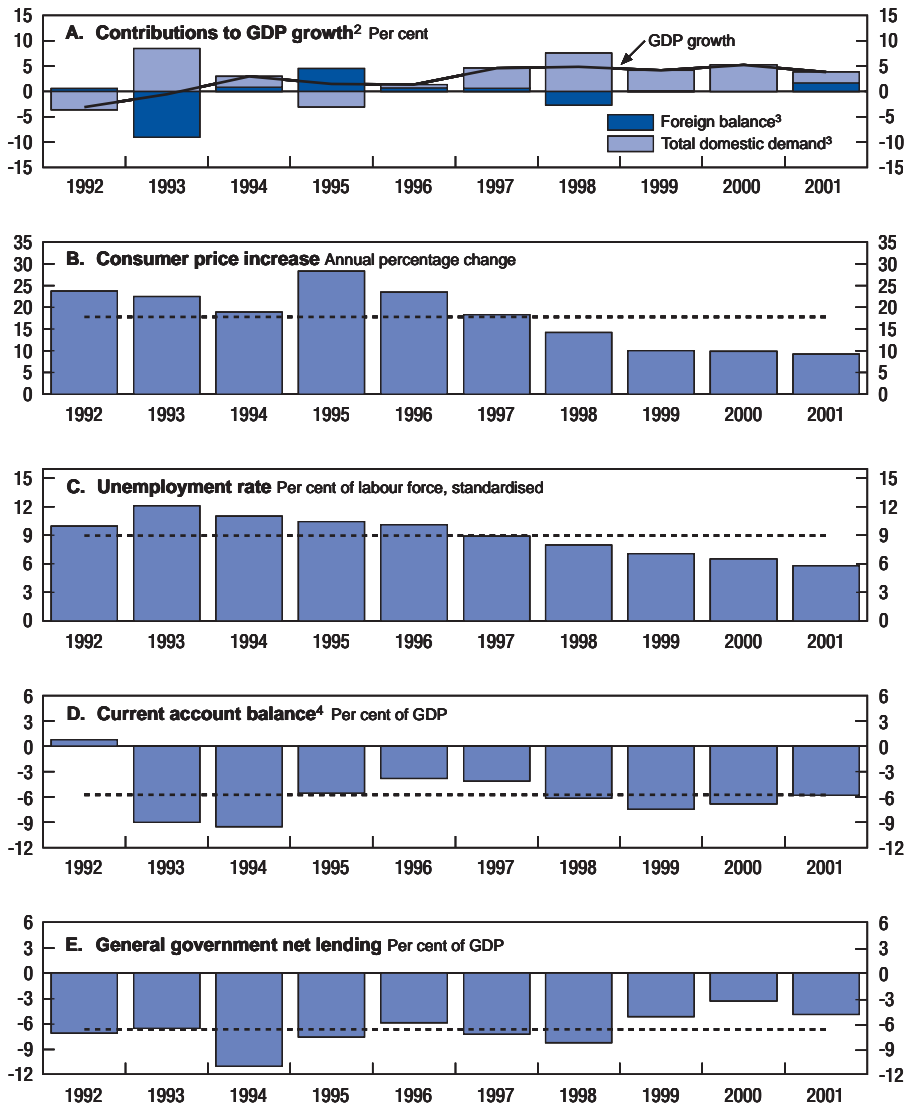
the energy sector should be accelerated. Labour market policies need to focus on increasing the low participation rate which threatens to impose a speed limit on growth and aggravate economic and social inequality. Progress along these lines will significantly contribute to achieving the ambitious goals set by the authorities for the Hungarian economy.

# I. Recent trends and prospects

## Overview

Hungary is one of the fastest growing OECD economies, with GDP having expanded at an annual average rate of 4½ per cent in the last four years and the unemployment rate falling from 8.9 per cent in 1997 to 5.8 per cent in 2001. Despite rapid output growth, the pace of consumer price inflation decelerated over the same time period from 18 to 9 per cent and the current account deficit was reduced, from almost 7 per cent on an accrual basis (2.9 per cent on a cash basis) to below 6 per cent (2.1 per cent) of GDP (Figure 1).<sup>1</sup> To a large extent, this macroeconomic performance reflects radical liberalisation and microeconomic reforms achieved through the transition, substantial fiscal stabilisation, and the supportive exchange rate regime which helped preserve the international competitiveness of the economy while contributing to gradual disinflation. From the second half of 2001 on, the economy faced its first endogenous slowdown of the post-transition period, while a new exchange rate regime tightened monetary conditions in order to attain a more ambitious disinflation objective. Meanwhile the fiscal policy loosened in the context of an electoral cycle. Despite slowing, GDP growth proved more resilient in 2001 than in many other OECD countries. Public infrastructure investment and private consumption, stimulated by government road construction and housing subsidies and overall wage growth, offset the strong decline in private business investment. Against the background of strongly decelerating international trade, Hungarian exports gained share in most markets and contributed to GDP growth. In 2002, aggregate output growth may well be weaker; private sector investment will remain subdued, additional fiscal stimulus is likely to be smaller than in 2001 and private consumption will decelerate with wage growth likely to be less strong. The international recovery projected for the second half of 2002 should push the economy closer to potential in the course of 2003.

The significant income gap between Hungary and other OECD and EU economies keeps narrowing (Figure 2). The level of labour productivity is still well below the OECD average as would be expected in a catching-up economy, but the gap is narrowing rapidly with the help of FDI inflows which are injecting technological and managerial know-how at a high pace. In 2001, average worker productivity

Figure 1. Macroeconomic performance<sup>1</sup>

1. The broken line is the average for 1992-2001. Data for 2000, 2001 in panel E are OECD estimates.

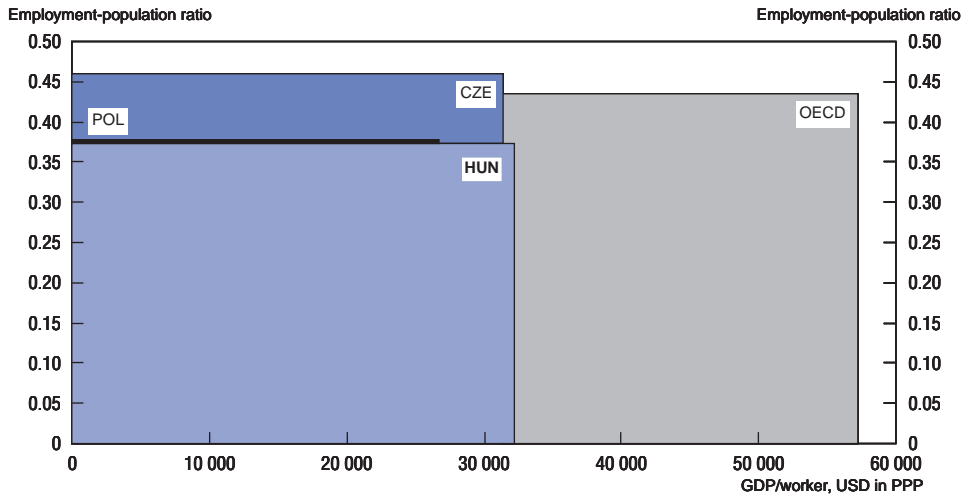
2. Based on seasonally adjusted GDP and components at 1998 prices (series created using splicing).

3. Change in variable as a percentage of the previous year's GDP.

4. Includes OECD estimate of net reinvested earnings.

Source: OECD, Analytical Database and *Main Economic Indicators*; Central Statistical Office; National Bank of Hungary.

Figure 2. **The wealth gap and its components**<sup>1</sup>  
2000



1. Area of rectangle is GDP/capita, USD in PPP.  
Source: OECD Analytical Database.

reached 59 per cent of the OECD average, up from 52 per cent in 1993. In contrast, GDP per capita<sup>2</sup> is catching up more slowly; in 2001 it reached 52 per cent of the OECD average against 45 per cent in 1993. This larger gap results from Hungary's below average employment rate.<sup>3</sup>

### GDP growth slows down

After strong growth until the end of 2000, GDP growth decelerated in 2001, falling below 4 per cent for the first time since 1997, but remaining nonetheless considerably above the OECD average (Table 1). The immediate cause of the slowdown was the deceleration of external demand, especially in the European Union (EU) that absorbs about three-quarters of Hungarian exports. The deteriorating external environment impacted on investment in the private sector, which declined more in export-oriented manufacturing than domestic market-oriented services. Due to an upsurge in public infrastructure and private housing, total investment growth remained nevertheless positive. While the business sentiment kept deteriorating through 2001 (Figure 3), consumer confidence moved in the opposite direction, reflecting large real wage gains

Table 1. Quarterly gross domestic product<sup>1</sup>

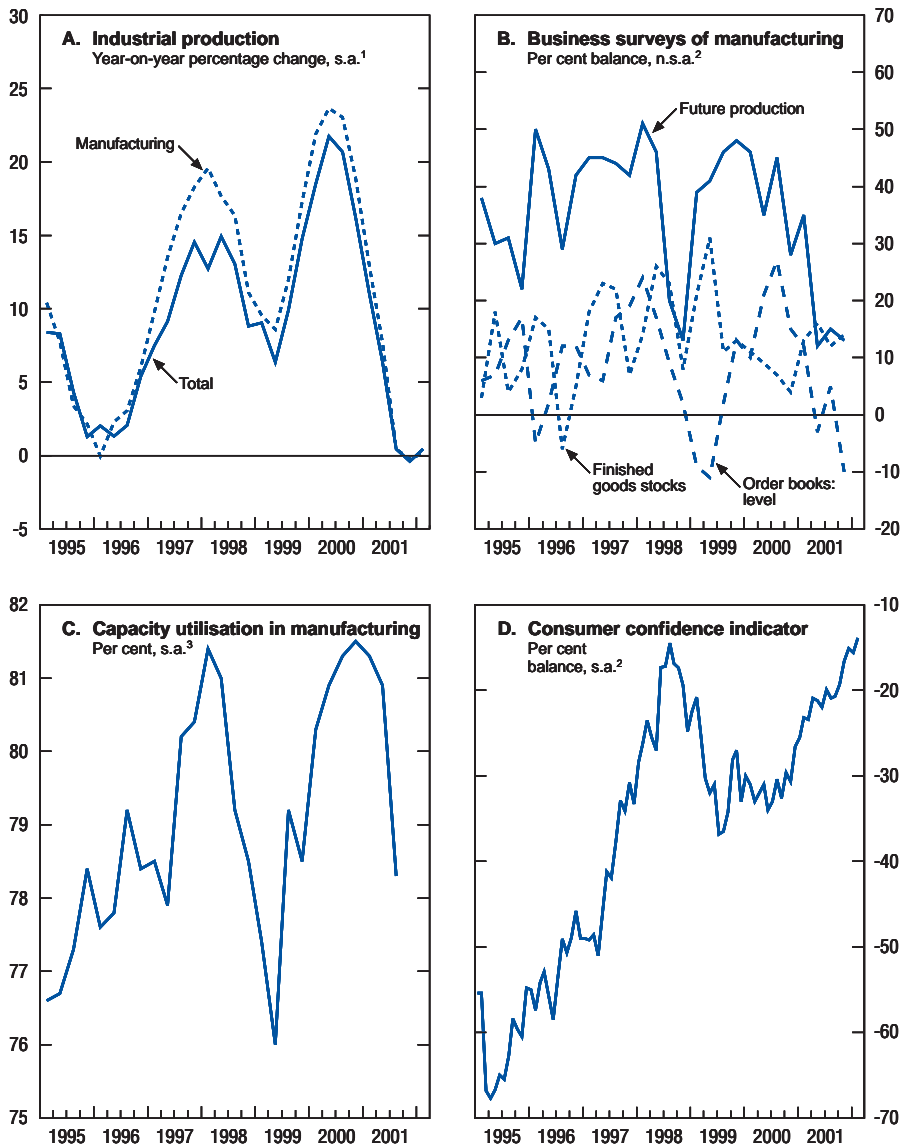
	1999					2000					2001				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Gross domestic product	3.2	3.3	4.2	5.9	4.2	6.6	5.7	4.6	4.2	5.2	4.4	4.0	3.7	3.3	3.8
Household consumption	5.0	5.5	5.4	5.9	5.4	4.0	4.3	4.6	4.6	4.4	5.2	4.7	4.7	5.8	5.1
Gross fixed capital formation	6.2	7.2	3.2	6.9	5.9	8.7	7.2	3.9	10.2	7.7	4.1	2.4	2.9	3.1	3.1
Exports of goods and services	9.5	9.8	13.4	18.7	13.1	20.9	21.0	19.9	25.0	21.8	19.3	15.0	7.8	-2.1	9.1
Imports of goods and services	13.0	10.2	9.1	16.8	12.3	18.5	16.4	20.8	27.3	21.1	18.1	13.9	1.2	-4.1	6.3

1. GDP data are in 1998 prices, not seasonally adjusted.

Source: OECD, *Main Economic Indicators and Quarterly National Accounts*.



Figure 3. The subdued climate in the private sector



1. Gross value of output, 1995 = 100, based on a chain linked index.

2. Balance of positive and negative replies.

3. Current level of capacity utilisation as a per cent of normal level.

Source: Kopint-Datorg (KD) Hungary; OECD, *Main Economic Indicators*.

triggered by policy decisions and stable employment levels.<sup>4</sup> Fuelled by rapidly growing consumer credits, household consumption accelerated (Table 2). Still, import growth fell faster than that of exports, as the slowdown in investment and intermediate goods more than offset the growing imports of consumption goods. Exceptionally strong tourism sector performance contributed to the improvement of the current account.

Table 2. **The household account**  
Per cent of GDP

	1996	1997	1998	1999	2000	2001
Disposable income <sup>1</sup>	78.0	74.0	74.4	73.5	72.6	73.1
Consumption	63.7	61.7	62.3	63.8	63.5	64.0
Saving	14.3	12.3	12.1	9.6	9.1	9.1
Investment	5.0	4.6	4.0	3.8	4.0	4.4
Financing capacity	9.3	7.7	8.1	5.8	5.1	4.7

1. Including capital transfers.

Source: National Bank of Hungary.

Industrial production, which is very sensitive to international demand, slowed down more than GDP. For the first time since the post-transition recession, it declined in real terms over the previous year in the second half of 2001. Manufacturing activity, and more particularly IT-related branches which account for more than 20 per cent of Hungarian exports, suffered most. In contrast, construction activity boomed, pulled by public infrastructure spending and private housing demand. Retail trade also grew dynamically, pulled by private consumption growth (Table 3).

Due to the impossibility to offset an external shock completely by domestic sources, the economy is falling below potential (Figure 4).<sup>5</sup> A majority of cyclical indicators is compatible with a negative gap, in particular the growth of produced inventories, of “expected mass layoffs”, and lower capacity utilisation in industry.<sup>6</sup> A composite cyclical indicator computed by the Ministry of Finance<sup>7</sup> shifted from 0.5 in December 2000 to -0.2 in August 2001 and -0.1 in December 2001.

### Labour market conditions stop improving

In contrast, the lagging labour-market data still indicate some tension in labour markets. The unemployment rate according to the ILO-methodology bottomed at 5.6 per cent in the fourth quarter of 2001 – a low rate by OECD standards.

Table 3. **Quarterly gross domestic product by sector**  
Year-on-year percentage change<sup>1</sup>

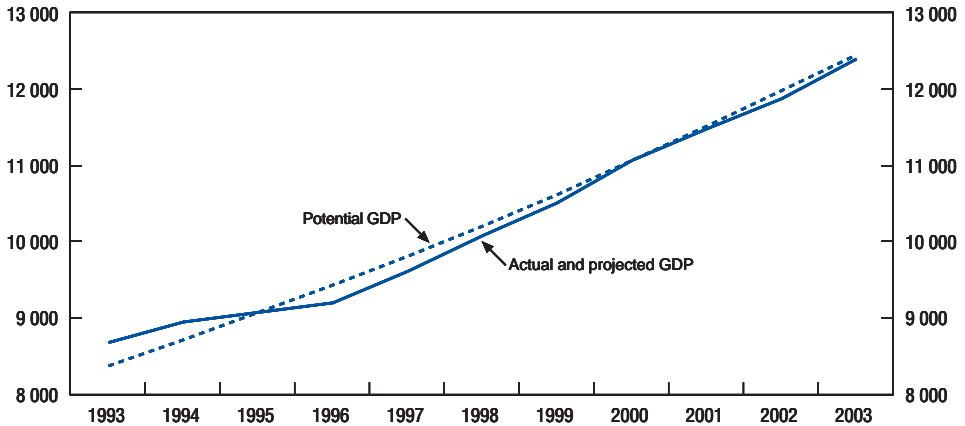
	1999					2000					2001				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Gross domestic product	3.2	3.3	4.2	5.9	4.2	6.6	5.7	4.6	4.2	5.2	4.4	4.0	3.7	3.3	3.8
Agriculture, forestry and fishing	1.9	-10.9	3.1	6.8	0.9	0.4	1.0	-10.2	-13.5	-7.9	-0.1	4.2	6.6	15.2	8.6
Industry <sup>2</sup>	3.8	4.8	7.3	12.2	7.2	12.7	9.6	10.0	6.7	9.6	6.4	2.4	0.9	-3.9	1.2
Manufacturing	4.2	5.3	8.5	14.7	8.3	15.1	10.8	11.1	7.8	11.0	8.0	2.8	1.3	-5.6	1.3
Construction	4.3	4.3	4.3	4.3	4.3	6.6	6.7	7.2	7.0	6.9	6.0	8.9	8.9	7.1	7.9
Services total	2.9	4.0	3.4	2.6	3.2	4.0	4.0	3.5	4.6	4.0	3.5	4.1	3.9	4.0	3.9
Trade, repair	0.5	2.6	-0.3	-1.8	0.2	2.4	2.6	2.4	2.5	2.5	4.9	4.6	3.5	3.5	4.1
Hotels and restaurants	3.1	0.5	1.1	9.0	3.0	-1.4	0.0	-1.6	-1.0	-1.0	5.3	5.2	4.1	-4.0	2.7
Transport, storage and communication	5.0	6.9	6.6	3.6	5.5	5.1	3.1	0.5	0.8	2.3	5.2	5.9	3.8	2.1	4.2
Financial intermediation, real estate and business	2.3	3.4	4.1	5.3	3.8	6.8	7.5	7.7	9.2	7.8	2.9	3.8	4.6	5.8	4.3
Public administration, education, health and social work	4.0	3.8	2.5	0.8	2.8	2.8	3.2	3.7	5.1	3.7	2.5	3.1	3.4	4.0	3.3
Other community, social and personal service activities	2.4	7.7	8.6	7.0	6.4	-2.0	-3.0	-5.3	-2.7	-3.3	-2.1	3.1	3.7	4.4	3.3

1. Gross value added in 1998 prices, not seasonally adjusted.

2. Industry comprises mining and quarrying; manufacturing; electricity, gas and water supply.

Source: Central Statistical Office.

Figure 4. **Estimate of potential growth and output gap<sup>1</sup>**  
HUF billion, 1998 prices



1. The output gap is the deviation of the actual from the potential GDP. Potential growth is trend real GDP estimated using a Hodrick-Prescott filter with lambda 100.

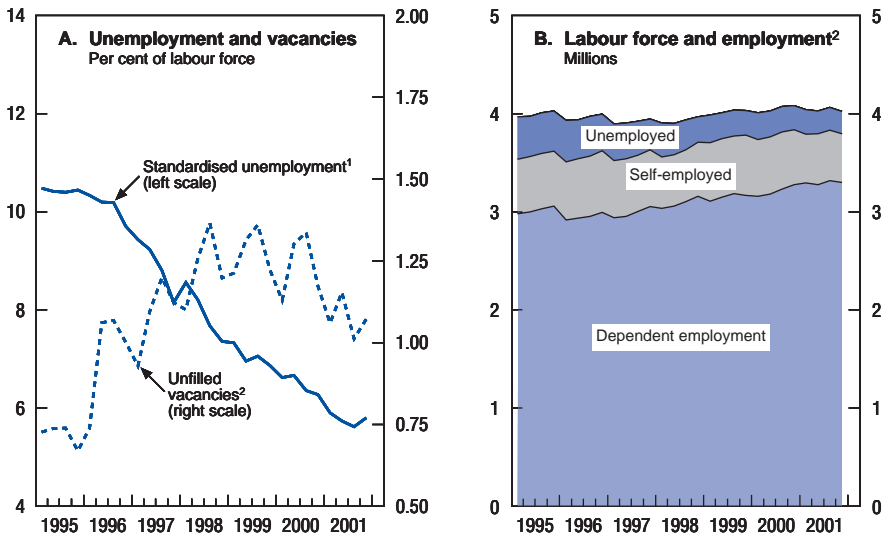
Source: OECD.

However, the intensity of labour use measured by “average hours worked by manual workers in manufacturing” declined in the course of 2001, hinting at some labour reserves within enterprises. On a regional basis, activity may remain close or beyond potential in certain areas, notably in Budapest and its immediate surroundings, where the registered unemployment rate hit a historical low at 2.3 per cent in the last quarter 2001.

### **Employment stagnates...**

After increasing at a slow pace over the corresponding months of the previous year in the first half of 2001, total employment declined year-on-year in the second half. In December 2001, dependent employment was down 0.4 per cent on the level observed a year ago; while private sector employment had fallen by almost 1 per cent, government employment increased slightly. With unemployment falling through 2001 this was accompanied by a decline in the participation rate. Indeed, despite policymakers’ persisting efforts to increase participation, the economically active population shrank by

Figure 5. Employment, unemployment and the labour force



1. Seasonally adjusted.

2. Not seasonally adjusted.

Source: OECD, *Main Economic Indicators and Quarterly Labour Force Statistics*.

70 000 persons between the final quarters of 2000 and 2001, which is a disappointing development, given the already low labour force participation rate in Hungary.

### **... but government policies triggered strong wage growth**

In spite of slow employment growth, a particularly strong pace of wage growth has characterised the economy since the last *Survey*. Already in 2000, actual gross wage rises in the competitive sector had averaged 14 per cent (4 per cent in real terms). In 2001, average gross wages in the competitive sector increased by 16.3 per cent (6.5 per cent in real terms). This dynamic real wage growth – the largest in recent Hungarian history – resulted from a 57 per cent increase in minimum wages in January,<sup>8</sup> and high inflationary expectations in the first half of the year which led to high nominal wage settlements. Furthermore wage growth was also strong in the course of 2001 in the government sector, exceeding 22 per cent per annum. Wage developments represent a significant

Table 4. Recommended and effective wage increases<sup>1</sup>

	Centrally recommended wage increase for enterprises <sup>2</sup>			Actual wage increase in the enterprise sector	Excess of actual wage increase over the central bargain		
	Minimum	Average	Maximum		Minimum	Average	Maximum
1992	13	23	28	26.6		3.3	
1993	10-13	18	25	25.1		7.1	
1994	13-15	17-19	21-23	23.4		5.4	
1995	n.a. <sup>3</sup>			19.7		n.a.	
1996	13	19.5	24	23.2		3.7	
1997	14	17.5	22	21.8		4.3	
1998	13.5	–	16	18.5	5.0	–	2.5
1999	12	–	15	14.8	2.8	–	–0.2
2000	8.5	–	11	14.2	5.7	–	3.2
2001	9.75	–	12.5	16.3	6.6	–	3.8

1. From 1998 agreements concluded only on the recommended minimum and maximum rate of the average wage increase. In 1999 and 2000 the agreement was bipartite between the employers and the employees side of the Council.

2. Guideline of the Interest Reconciliation Council (IRC) before 2000 and the National Labour Council afterwards.

3. No agreement was reached by the IRC in 1995.

Source: Hungarian authorities.

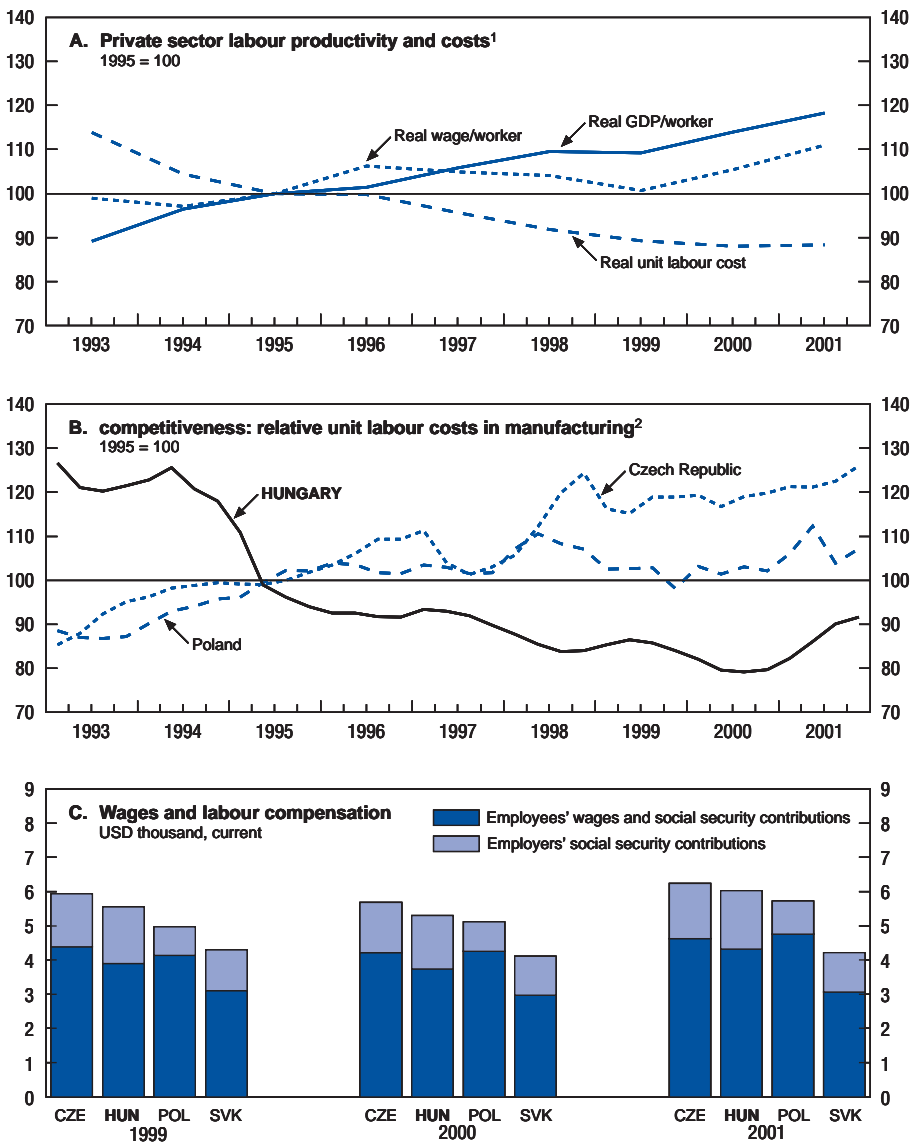
departure from the rates negotiated and recommended by the National Labour Council (Table 4). It must be noted that the Central Bank's wage inflation index, incorporating certain adjustments,<sup>9</sup> indicates a lower wage growth in the competitive sector – of 13 per cent in 2001 (3½ per cent in real terms).

### **Competitiveness indicators declined for the first time in many years**

Government impulses to wage growth have been justified by the long time period during which wages lagged productivity year after year. Indeed, Hungary had experienced real wage growth below productivity gains for some time and consequently firms have benefited from high profitability (Figure 6).

International competitiveness was further influenced recently by changes in exchange rates and social contribution rates, which acted in opposite directions. Under the new exchange-rate regime introduced in May 2001, the crawling depreciation ended<sup>10</sup> and the forint has appreciated strongly in the second half of 2001. On the other hand, social-security contribution rates have been reduced from 33 per cent in 2000 to 29 per cent in 2002. As an outcome of these opposing forces, *the real exchange rate based on unit labour costs* has appreciated by close to 9 per cent in 2001. This appreciation follows a much larger depreciation between 1994

Figure 6. Productivity, wage and competitiveness indicators

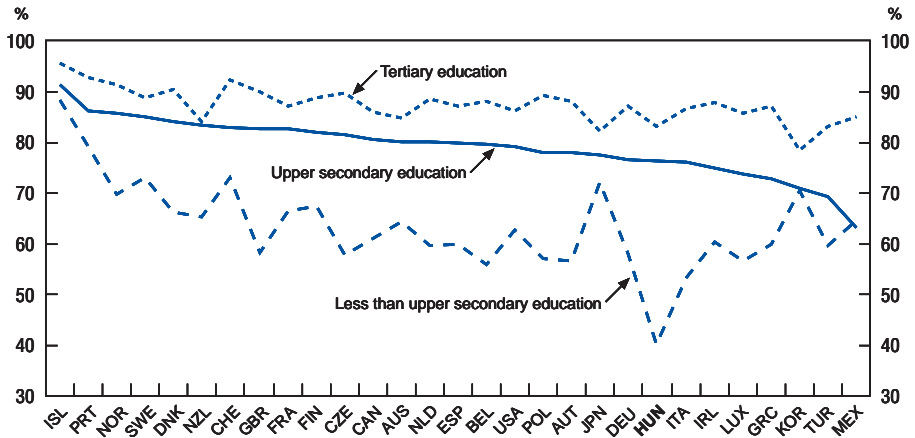


1. Deflated using the private sector GDP deflator. On forint basis hence exchange rate effects are not included. OECD estimates for 2001.

2. Unit labour costs in manufacturing of country X relative to an export weighted combination of those of its trading partners; on effective exchange rate basis.

Source: OECD Analytical Database; Economic Intelligence Unit Database.

Figure 7. **Labour force participation in different countries<sup>1</sup>**  
1999<sup>2</sup>



1. Participation rates by educational attainment for persons aged 25-64. Countries are ranked in descending order of the rates for upper secondary education.

2. 1998 for Austria, Ireland, Norway and Poland.

Source: OECD, *Education at a Glance – OECD Indicators 2001*.

and 2000 (of 52 per cent) but Hungary has lost some of its labour cost advantage relative to regional competitors (Figure 7). Nevertheless, Hungarian exporters kept increasing market shares.<sup>11</sup>

### *... and the business sector demand for low-skilled labour weakened*

The impact of wage developments on labour demand cannot be observed in isolation, because of the cyclical slowdown. Yet, according to recent estimations, the sensitivity of employment to labour costs is growing, especially at the lower end of the labour market, probably as a result of further exposure of the business sector to domestic and international competition:<sup>12</sup> as the 2001 wage increases are concentrated in that end of the market, there are strong reasons to believe that the demand for this type of labour will have weakened more than would be implied by just the cyclical slowdown. Actual employment of manual workers decreased through 2001 and small and medium-sized enterprises, which are the principal employers of low-skilled workers, substituted part-time for full-time labour in large proportions.<sup>13</sup>



*...while labour supply remained weak in spite of strong incentives to work*

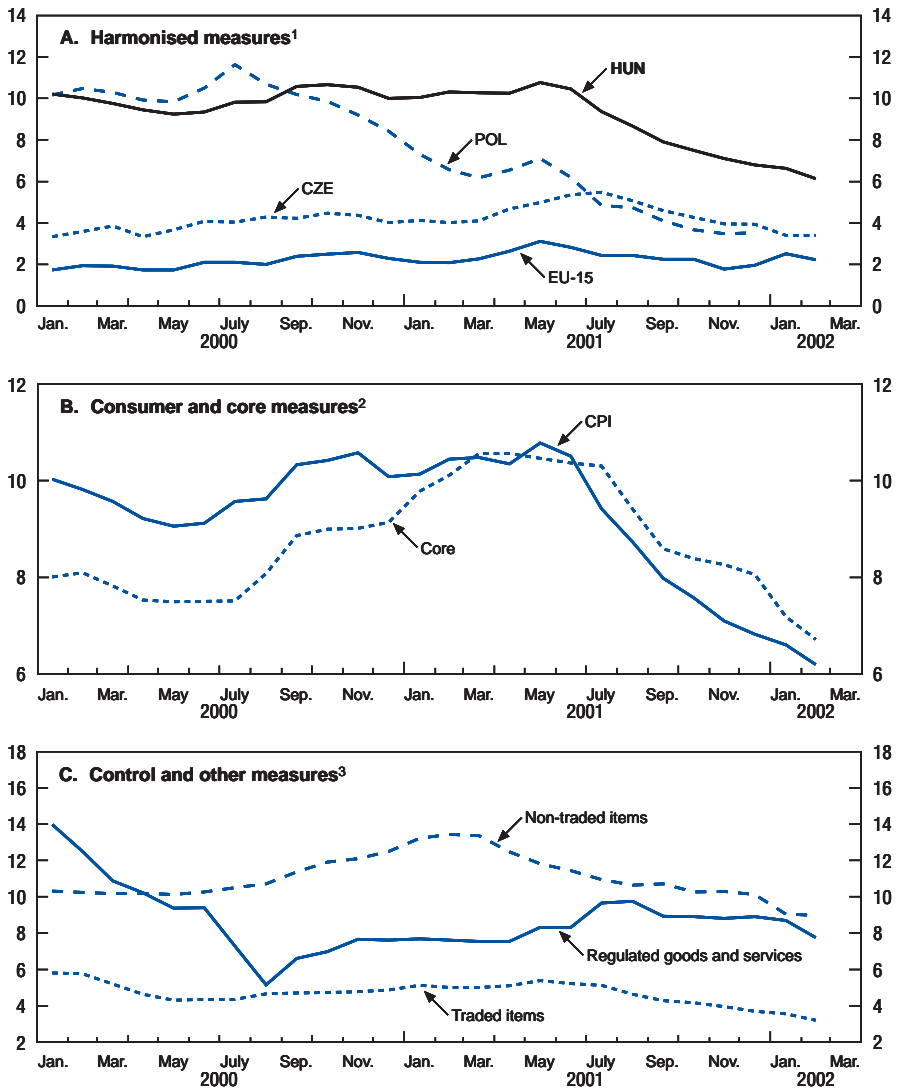
Labour market participation rates remain low, here again in particular in low-skill segments (see Figure 7). Hungary has the lowest participation rate among its unskilled working-age population (see Chapter IV). The lack of increase in labour supply is puzzling as income replacement rates diminished drastically after minimum-wage increases at the beginning of the year. Mandatory registration with unemployment agencies, a condition introduced in 1999 for benefiting from social transfers, did not have a visible effect on labour force participation either – contrary to expectations.<sup>14</sup>

**The forint stabilised and disinflation resumed**

Following a two-year pause in the disinflation process, consumer inflation decreased significantly during the second half of 2001, when headline inflation declined from 10.8 per cent (May) to 6.8 per cent (December). In 2002 the disinflation process continued; in March the year-to-year CPI inflation decreased to 5.9 per cent. The earlier pause in disinflation in 2000 had resulted from one-off factors (oil and food price increases) and the inability of the Central Bank to tighten monetary conditions due to the narrow-band crawling-peg regime. The widening of the exchange-rate corridor in May 2001 to  $\pm 15$  per cent and the subsequent adoption of the inflation targeting framework by the increasingly independent monetary authority resulted in a more active anti-inflationary policy. In line with expectations, the nominal exchange rate appreciated substantially after the widening. Consequently, imported inflation decelerated and allowed disinflation to resume again. This process was furthered by the reversal of the one-off factors mentioned above.

After accelerating in the first half of 2001, industrial prices moderated in the second half and the prices of durable goods declined in the last few months. Inflation of market services, probably thanks to increased competition, has declined to a greater degree than that of industrial products, so that the non-traded/traded gap has decreased by 1 per cent; nevertheless it remains high, at almost 6 per cent. The impact of fuel and food price deceleration on inflation is reflected in core inflation diminishing at a slower pace than headline inflation: In December 2001, year-on-year CPI inflation was at 6.8 per cent – within the Central Bank's year-end inflation target of  $7 \pm 1$  per cent – while core inflation was at 8.1 per cent (Figure 8).

Figure 8. **Inflation**  
Year-on-year percentage change



1. Harmonised indices of consumer prices according to Eurostat methodology.

2. Core index, computed by the Central Statistical Office, excludes fresh food and other seasonal products; energy prices and centrally regulated goods; services and mortgage payments.

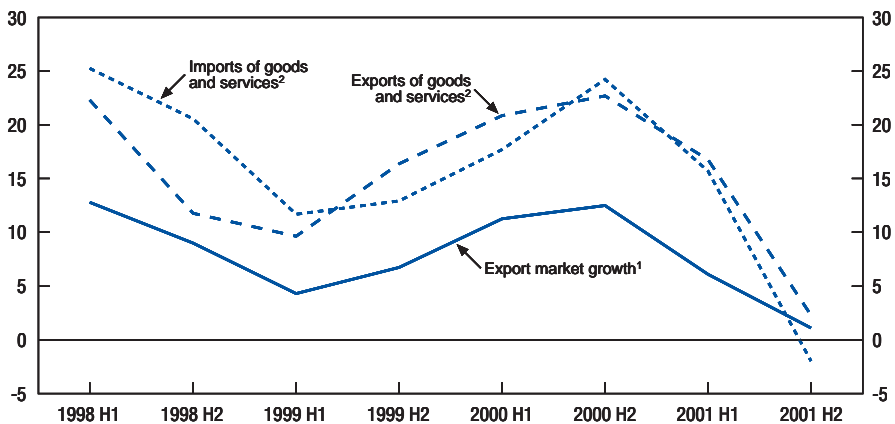
3. Traded items are industrial products; non-traded items are market services.

Source: Central Statistical Office; National Bank of Hungary; Eurostat.

## The external balance improved

Export growth decelerated considerably in 2001, parallel to the global and European slowdown. Hungarian exporters have lost some market share in their regional markets but have gained some share in the markets they are now targeting (the large EU countries and the United States). However, import growth decelerated more rapidly (Figure 9) and the merchandise trade deficit in 2001 was lower than in 2000. The decline in the cost of energy imports due to the fall in world market prices, weak investment spending, destocking of inputs and slowing exports are responsible for the reduced growth of imported goods. The customs trade data indicate that the merchandise trade deficit amounted to € 3.6 billion (about 6.1 per cent of GDP) in 2001, falling from the previous year's level of € 4.3 billion. Meanwhile the merchandise trade deficit registered in the balance of payments (BOP) indicates a figure of € 2.3 billion (3.9 per cent of GDP) in 2001, increasing from the previous year's level of € 1.9 billion (Figure 10). The customs and BOP trade data are compiled from different sources while using different methodologies; hence, they exhibit divergent trends.<sup>15</sup> In all instances, the services balance improved substantially and the growing surplus of tourism, by reaching some € 2.9 billion in 2001, has more than compensated the deficit in goods trade.

Figure 9. Trade performance  
Year-on-year percentage change

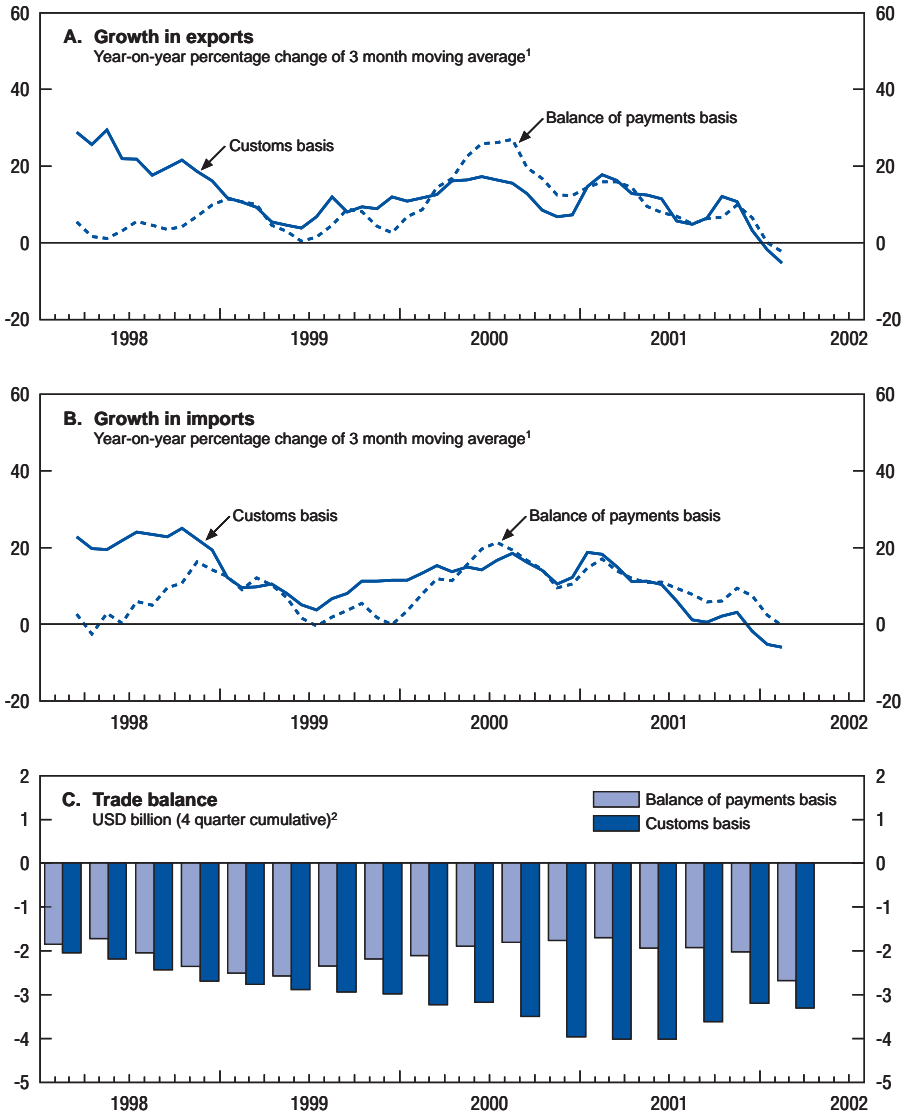


1. Weighted average of import volumes in the export markets of Hungary. OECD estimate for 2001H2.

2. 1998 prices created using splicing, seasonally adjusted.

Source: OECD Analytical Database.

Figure 10. **Customs versus balance of payments trade data**  
Goods



1. Basic data in USD, not seasonally adjusted.

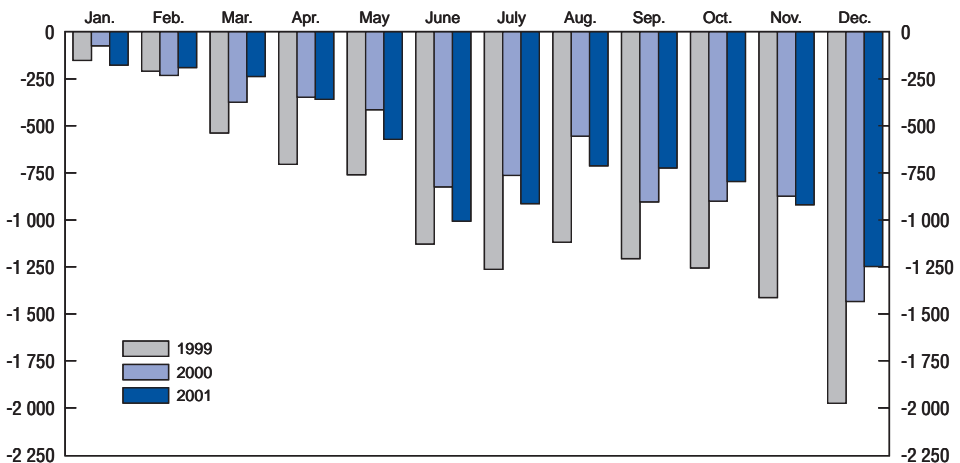
2. Data for each quarter is sum of that quarter and the three preceding quarters. Data for 2002Q1 is based on January and February data.

Source: OECD, *Main Economic Indicators*; National Bank of Hungary.

The developments in exports, imports and the balance of services were reflected in the improving official current account balance, which fell from a deficit of € 1.4 billion in 2000 to one of € 1.2 billion in 2001. The current account balance is still measured in Hungary on a net-cash basis, which diminishes the level of the deficit by the magnitude of the retained earnings by FDI firms, which are estimated at 3½ per cent of GDP in 2001.<sup>16</sup> If this adjustment is effected on the current account, the deficit shifts from € 1.2 billion to € 3.3 billion. However, this *level* adjustment does not alter the improvement observed in the current account. Even so, a move to accruals based current accounting standards would improve the international comparability of Hungarian statistics.

Capital inflows picked up in 2001. A comparison of net direct investment incomes with the direct investment flows (Tables 5 and 6) indicates that inflows of foreign direct investment exceed profit repatriation by a large margin, the latter amounting to € 0.9 billion per annum over the last two years. The true size of this margin may be lower than indicated by this comparison, because some profit repatriation may take place through payments for business and technical services.<sup>17</sup> In all instances, the margin remains positive, despite rising outflows of investment by Hungarian firms abroad. Portfolio investment rose also strongly

Figure 11. **Cumulative current account deficit**  
EUR million<sup>1</sup>



1. Not seasonally adjusted.

Source: National Bank of Hungary.

Table 5. **Current account of the balance of payments**  
EUR million<sup>1</sup>

	1998	1999	2000	2001
<b>I. Trade balance</b>	-2 080	-2 054	-1 916	-2 265
Exports	18 447	20 521	27 988	31 346
Imports	20 527	22 574	29 904	33 611
<b>II. Services, net</b>	1 591	1 315	1 938	2 425
Receipts	5 274	5 313	6 814	8 622
Expenditures	3 683	3 998	4 876	6 197
Construction services, net	-14	-106	8	-7
Merchanting and other trade-related services, net	100	82	80	122
Transportation services, net	176	114	144	94
Travel, net	2 141	2 078	2 533	2 930
Business services, net	-146	-145	-150	-163
Technical and cultural services, net	-648	-676	-675	-549
Government services, net	-17	-32	-1	-1
<b>III. Income, net</b>	-2 208	-2 923	-3 701	-3 776
Receipts	988	723	1 021	1 239
Expenditures	2 650	2 280	2 727	2 920
Compensation of employees, net	21	4	3	6
Direct investment income, net	-1 367	-2 176	-2 865	-2 980
Reinvested earnings, net <sup>2</sup>	-546	-1 367	-1 995	-2 095
Portfolio investment income, net	-616	-530	-523	-450
Other investment income, net	-246	-220	-315	-351
<b>IV. Current transfers</b>	130	320	249	273
<b>Current account balance</b>	-2 566	-3 342	-3 429	-3 343
<i>Items not adjusted for reinvested earnings</i>				
<b>III. Income, net</b>	-1 662	-1 556	-1 706	-1 681
Direct investment income, net	-821	-809	-870	-885
Current account balance	-2 020	-1 975	-1 434	-1 248

1. Not seasonally adjusted.

2. OECD estimate.

Source: OECD and National Bank of Hungary.

in 2001, contributing further to an increase in non-debt financing inflows (Table 7). FDI inflows are firm and do not seem to pose a danger to the balance of payments in the short term – but their future trends may be affected by the outcome of ongoing efforts to improve the attractiveness and competitiveness of business conditions (see Chapter IV) and the relationship between wages and productivity.

Table 6. **Financial account of the balance of payments**  
EUR million

	1998	1999	2000	2001
Financial account	3 128	5 809	4 402	2 838
Direct investment, net	1933	3 001	3 174	4 443
Reinvested earnings, net <sup>1</sup>	546	1 367	1 995	2 095
Portfolio investment, net	1 786	1 851	-429	1 735
Other investment, net	-590	956	1 656	-3 341
Short-term capital	-141	-22	782	-2 498
Change in reserves (minus means increase)	-760	-2 241	-1 158	60
<i>Items not adjusted for reinvested earnings</i>				
Financial account	2 582	4 442	2 407	743
Direct investment, net	1 387	1 634	1 179	2 348
<i>Memorandum item</i>				
Net errors and omissions	28	-256	-115	88

1. OECD estimate.

Source: OECD and National Bank of Hungary.

Table 7. **Capital flows in the balance of payments**  
EUR million<sup>1</sup>

	2000				2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Investment income, net	-236	-719	-418	-333	-197	-841	-361	-282
Non-debt financing, (1 + 2)	149	-326	323	288	519	2077	-92	53
1. Foreign direct investment, net (a + b)	251	469	336	-194	203	270	204	39
a. Abroad, net	28	-46	-188	-397	-320	-44	-25	21
b. In Hungary, equity only	223	515	524	202	523	314	228	18
2. Portfolio investment, net	-102	-795	-14	482	316	1 807	-295	-92
<i>Memorandum items</i>								
Short-term liabilities, stock	13 869	15 715	15 738	16 991	15 388	17 470	17 592	17 277
Reserves, stock	34 585	33 929	34 784	36 570	35 882	39 122	39 784	37 912
Reserves/short-term liabilities (ratio)	2	2	2	2	2	2	2	2
Reserves/goods imports (ratio)	5	5	5	4	5	5	5	4

1. Not seasonally adjusted.

Source: National Bank of Hungary.

## The short-term outlook

Macroeconomic developments seem likely to continue to reflect the respective influences of subdued international and dynamic domestic demand, although these are likely to converge somewhat through 2002. According to OECD

projections, exports and business sector investment will remain weak in the first half of 2002 but, pulled by the international recovery, should begin to pick up toward the end of the year assuming that Hungarian exporters maintain their good trade performance. Industrial production is expected to show the same trend. Wage growth will continue to be strong as a result of further minimum and public-sector wage increases and tight labour markets. However, less exuberant household borrowing and more precautionary savings are expected due to uncertainties in the international and domestic environment. Consumption growth is thus likely to run at a slower pace than in 2001. Public infrastructure and government-sponsored housing investments are expected to grow faster, as some of the spending earmarked for 2001 will probably be effected only in 2002. The widened fluctuation band of the currency should allow the Central Bank to control monetary conditions appropriately, in order to attain its ambitious inflation objective of  $4.5 \pm 1$  per cent by year-end. However, this objective will be difficult to reach, should wage growth be too strong and should international prices pick-up together with the recovery. As in 2001, the current account deficit should pose no problem in 2002 and beyond. Overall, because of the carry-over effects from a particularly weak second half of 2001, GDP growth should remain at a relatively "slow" pace of around 3.5 per cent in 2002. Thereafter, growth might accelerate in 2003 as exports and investment pick up, with government spending playing a more limited role and fiscal policy coming under better control following the election. The more ambitious inflation objective (of  $3\frac{1}{2} \pm 1$  per cent at the year end 2003) is likely to necessitate monetary tightening in 2003. Table 8 summarises Secretariat projections for 2002 and 2003.

There are risks arising from a greater-than-expected electoral push to fiscal spending in 2002 and less consolidation thereafter, higher international prices and stronger wage growth. These factors may create additional pressures on inflation and may force the Central Bank to tighten monetary conditions further. If this occurs, the policy mix would become more unbalanced and the competitiveness of the economy and its attractiveness for international investments may suffer.

In a medium-term perspective, the Hungarian economic performance will depend on the evolution of the two fundamental determinants of per capita GDP – productivity growth and activity rates. *Continuing productivity gains* are expected to derive from high and persisting rates of investment by domestic and international corporations, which would be accelerated by the microeconomic reforms outlined in Chapter IV. However, higher productivity is not sufficient, as it needs to be complemented by an increase of the *labour participation and activity rates*. Here, the recent trend of increasing withdrawal from the labour force needs to be reversed. Reducing total employment costs and strengthening the working-age population's human capital, particularly in the lower end of the labour market, will be key. The



Table 8. Short-term projections

	1998		1999	2000	2001	2002	2003
	Current prices, HUF billion	Per cent of GDP	Annual percentage change, 1995 prices				
Private consumption expenditure	5 120.4	50.8	5.1	4.5	5.1	4.6	4.9
Government consumption expenditure	2 186.9	21.7	2.5	2.8	0.0	2.1	2.2
Gross fixed investment	2 384.6	23.6	5.9	7.7	3.1	4.0	4.8
Final domestic demand	9 692.0	96.1	4.9	4.9	3.5	4.0	4.3
Stockbuilding <sup>1</sup>	607.8	6.0	-0.2	0.5	-1.2	0.0	0.2
Total domestic demand	10 299.7	102.1	4.3	5.1	2.1	3.8	4.4
Exports of goods and services	5 105.9	50.6	13.2	21.8	9.1	5.5	9.4
Imports of goods and services	5 318.2	52.7	12.3	21.1	6.3	5.9	9.5
Foreign balance <sup>1</sup>	-212.3	-2.1	0.1	0.0	1.7	-0.3	-0.1
GDP at constant prices	-	-	4.4	5.2	3.8	3.5	4.3
GDP at current prices	10 087.4	100.0	13.3	14.8	13.1	9.0	9.7
GDP price deflator	-	-	8.6	9.1	9.0	5.3	5.2
<i>Memorandum items:</i>							
Consumer price index	-	-	1.0	9.8	9.2	5.5	5.1
Unemployment rate <sup>2</sup>	-	-	7.1	6.5	5.7	5.8	5.7
Household saving ratio <sup>3</sup>	-	-	12.4	9.0	10.8	12.6	11.7
General government balance <sup>4</sup>	-	-	-5.2	-3.0	-5.2	-5.5	-4.4
Current account balance <sup>5</sup>	-	-	-	-2.9	-2.1	-3.5	-3.1

1. Annual percentage changes are contributions to changes in real GDP.

2. As a per cent of labour force.

3. As a percentage of disposable income.

4. OECD estimate which adjusts official data so as to increase international intertemporal comparability.

5. As a percentage of GDP, on a cash basis.

Source: OECD.

Secretariat presents two prospective scenarios of medium-term growth in Box 1, one constrained by the present pattern of low participation and activity rates, and one where these converge to OECD averages over the next few decades. The latter assumes appropriate reductions in labour costs which would increase non-inflationary demand for labour and counter the present discouragement and hysteresis problems in the labour market. Medium-term productivity growth lags in the second scenario compared to the first one, because less skilled workers are brought into employment. But overall GDP growth, private income and public revenue attain significantly higher levels in the long term. Social, economic and regional discrepancies should also decrease faster. These scenarios give some indications of the structural reform programme, examined further in Chapter IV.

### Box 1. Potential output and alternative catch-up scenarios

After an impressive growth performance in the late 1990s, based on both rapid productivity advance and increased labour force participation, growth slowed down in 2001 while the participation rate declined. This box addresses two questions. First, what is potential output growth? Second, what are the prospects for the future growth path of the Hungarian economy? The first issue is approached while using the Hodrick-Prescott filter to remove the cyclical fluctuation from the time series of output observations. The second is investigated with the aid of a simple catch-up model with two alternative scenarios characterised by diverse productivity and employment levels.

The conclusions arrived at are as follows. The potential growth rate might be somewhat less robust than estimated in the previous *Economic Survey*, amounting to 4 per cent per annum. The actual evolution of the Hungarian economy within the next five to six years depends considerably on the ability of policymakers to mobilise hidden labour reserves.

#### Underlying growth trends

The baseline potential output is the trend real GDP, the trend being estimated with the aid of the Hodrick-Prescott filter with lambda of 100. The estimated growth trend of 4 per cent for the time period 1994-2007 and the OECD projections for real GDP imply that actual output catches up the potential level during 2001-04.

#### Alternative medium-term projections

According to OECD (2002), Hungary's productivity measured by per worker GDP in purchasing power parities reached 45 per cent of the US level in the late 1990s. Two future productivity catch-up paths were estimated with the aid of the following model that measures labour productivity by GDP per worker:  $H(t) = (1 + \alpha) H(t - 1) + \beta [A(t - 1) - H(t - 1)]$ , where  $H$  and  $A$  denote productivity in Hungary and the United States respectively,  $\alpha$  is the trend growth rate of 1.75 per cent per annum,  $t$  indexes time and  $\beta$  refers to a specific catch-up parameter. In one scenario, Hungary's participation rate converges to that of Ireland in 2008 while  $\beta$  is set at 2 per cent per annum. In the alternative scenario, Hungary's participation rate remains frozen at the current level and the catch-up parameter is increased to 2½ per cent. The lower  $\beta$ -value in the first scenario reflects the assumption that more low-skilled, *i.e.* less productive, workers enter the labour force and employment. In the first scenario, Hungary reaches 53 per cent of the US productivity level by 2008. In the second scenario, Hungary reaches 55 per cent of the US level at the same time. However, the overall level of GDP depends on both productivity and employment. The first scenario is superior in terms of per capita GDP that increases from 2002 to 2008 by 43 per cent, in contrast to an increase of 29 per cent that is implied by the lower employment, higher productivity alternative (see Table 9).

Box 1. **Potential output and alternative catch-up scenarios** (*cont.*)Table 9. **Alternative medium-term projections**<sup>1</sup>

Scenario	Employment		Productivity		Per capita GDP	
	I	II	I	II	I	II
2002	100.0	100.0	100.0	100.0	100.0	100.0
2003	102.5	100.3	104.0	104.5	106.7	105.0
2004	104.8	100.3	108.0	109.0	113.4	109.7
2005	107.1	100.4	112.2	113.7	120.4	114.5
2006	109.4	100.4	116.4	118.3	127.6	119.4
2007	111.9	100.4	120.6	123.1	135.3	124.3
2008	114.2	100.2	124.9	127.9	143.1	129.2

1. Scenario I assumes that the aggregate labour force participation rate increase to 67.4 per cent by 2008.

Scenario II assumes that the participation rate remains at the estimated 2002 level of 59.2 per cent.

Source: OECD calculations.

Although the increase in the aggregate participation rate in the first scenario may appear to be too optimistic, it is well below the increase implied by the government's long-term projections. The underlying demographic developments are consistent with the updated baseline provided to the OECD by the Demographic Institute of the Hungarian Statistical Office. Because the working-age population, consisting of the 15-64 years old persons, expands over the time period projected, the increasing participation translates into rapid growth of the labour force and employment.

This *Survey* argues that it is important to increase incentives to employment of labour by cutting social-security charges, especially the flat-rate health charge that prices out unskilled workers from the labour market. But would such cuts be fiscally sustainable? OECD calculations indicate that the revenue foregone would amount to 2.1 per cent of total tax intake or 0.9 per cent of GDP in 2003. However, the expected expansion of employment and output would generate significant tax revenues to offset the budget cost of abolishing the flat-rate health tax. By 2008, the annual tax revenues associated with the higher-employment scenario would exceed those of the higher-productivity scenario by 8 per cent.

## II. Macroeconomic management

The Hungarian economy is weathering the international slowdown relatively well, partly thanks to its strong fundamentals, and more importantly because of a powerful fiscal stimulus given in the context of an electoral cycle. A fiscal shock of similar amount is not foreseen for 2002 and would not be sustainable in the framework of medium-term fiscal objectives, including those implied by the EU and EMU accession rules (Box 2). Meanwhile, a new monetary regime has widened the fluctuation band of the currency, broadened the scope for policy options and achieved its first disinflation target. The remaining challenge for macroeconomic policy is to establish a coherent framework which facilitates the achievement of the economy's strong growth potential through a sound fiscal stance and a credible monetary policy.

### Monetary policy

#### *Monetary policy tightened in a new regime to moderate inflation*

In the aftermath of fiscal stabilisation of the mid-1990s (see Chapter III), Hungary had adopted a crawling-peg regime with a narrow exchange-rate corridor. This proved successful in reducing average inflation from 28 per cent in 1995 to 10 per cent in 1999, while promoting export-led growth. In the middle of 2000 however, the disinflation process faltered as a consequence of international energy and food price increases. Inflation got stuck at about 10 per cent and further disinflation proved impossible to achieve as monetary conditions could not be tightened in the face of the limited room of manoeuvre for monetary policy.<sup>18</sup> The framework of monetary policy changed in 2001 when the crawling-peg system was effectively abandoned and replaced by a substantially wider band in May, a comprehensive inflation-targeting regime adopted in June, and the monthly crawl of the reference rate discontinued in October. In July, Parliament adopted a new Central Bank Act, increasing the independence of the NBH and defining price stability as its primary objective (for details, see Box 3).

**Box 2. Implications of EU and EMU accession for monetary and fiscal policy**

EU membership requires applicants to meet a broad set of political, economic and institutional requirements, as summarised in the EU's Copenhagen criteria in 1993. In particular, membership requires that the candidate country has achieved: *i*) the stability of the institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities; *ii*) the existence of a functioning market economy, and the capacity to cope with competitive forces within the EU; and *iii*) the ability to take on the obligations of membership, including adherence to the aims of political, Economic and Monetary Union (EMU).<sup>1</sup>

According to the latest regular assessment, Hungary has made considerable progress in the harmonisation of law and macroeconomic and policy reforms. It has fulfilled the political criterion and is said to be a functioning market economy (EC, 2001). With respect to negotiations of its entry conditions, Hungary concluded 24 out of 31 chapters. However, further efforts and reforms are needed in several areas, with significant consequences for fiscal policy. The health care reform should be undertaken swiftly, further costly efforts are needed in the area of environmental policy, and restructuring of the rail sector remains to be carried out. Further negotiations are needed to establish the rules governing Hungary's participation in the Common Agricultural Policy.

The EU accession process – in contrast to the Maastricht criteria for EMU accession – does not set specific and quantified requirements for fiscal and monetary policy. Still, the sustainability of macroeconomic policies is a key element in determining the candidate countries' readiness for accession. The main task of macroeconomic policy is identified as creating a framework for achieving real and nominal convergence between Hungary and the current EU members. This requirement includes the development of infrastructure, the strengthening of competitiveness, and the implementation of the *acquis communautaire*. The main challenge for fiscal policy is to ensure the related financing, while reducing the overall expenditure and deficit levels.

Monetary policy should take into account adjustments in regulated prices and the tax system that comply with EU rules and have impacts on inflation. The most important changes concern the increase in the taxes on tobacco products (the total effect on inflation is estimated by the Central Bank to be 1.6 per cent), elimination of zero VAT rates (0.1 per cent impact on inflation) and the cost-based adjustment of household gas prices.

Entry into the European Monetary System (ERM II) cannot begin prior to the EU accession but could take place immediately thereafter. Under the convergence criteria of the 1991 Maastricht Treaty on European Economic and Monetary Union, new member countries have to meet the following requirements:

1. After joining the ERM II, they are required to keep their exchange rate within a normal fluctuation band ( $\pm 15$  per cent) for at least two years. After the

**Box 2. Implications of EU and EMU accession for monetary and fiscal policy (cont.)**

widening of the intervention band, abandoning the crawling-peg devaluation of the currency, and abolishing the remaining foreign-exchange restrictions, the Central Bank believes that the Hungarian monetary system has become conform to the requirements of ERM II with the exception of the Bank's prerogative to change the central parity at its own discretion. While the ERM II can be described as a quasi-fixed exchange-rate regime, the central parity can be changed in a common procedure.

2. The fiscal deficit – measured by ESA95 standards – must be below 3 per cent of GDP for some time. The Hungarian deficit according to this standard was above 5 per cent in 2001.
3. Government debt must be below 60 per cent of GDP or declining at a satisfactory pace. Hungary may have already fulfilled this objective with the official government debt/GDP ratio of 55 per cent. This figure excludes, however, the debt of off-budget public institutions and it is therefore unclear whether it complies with ESA95 standards.
4. Inflation must be no more than 1.5 percentage points higher than the average of the three lowest inflation rates in EU member countries for some time. This average rate of inflation was 1.9 per cent while the Hungarian year-on-year inflation rate was 6.6 per cent in January 2002.
5. The long-term (ten-year) yield differential with the average of the three countries with lowest inflation rates must be less than 2 percentage points for some time. The Hungarian difference to the reference rates is at present close to 2 percentage points.

The most controversial criterion among the above is the requirement for low inflation. Due to the relative price adjustment resulting from the catch-up process, there is an equilibrium inflation differential between Hungary and the Euro zone, estimated by the Central Bank at 0.8-2.2 per cent (Kovacs, 2001). This substantial Balassa-Samuelson effect implies that to achieve the Maastricht inflation criterion, Hungary would have to bring down the traded component of its own CPI to a lower level than the current EMU member countries. This objective may well force economic policy to confine the growth rate of the economy below its potential, unless indirect taxes can be lowered systematically.

1. Accession candidates must also bring their legislation in line with the EU's *acquis communautaire* (common body of law). In 2001, Hungary elaborated its first official pre-accession economic programme that was evaluated in EC (2002), pp.57-65.

### Box 3. Inflation targeting

Following the significant widening of the intervention band of the forint in early May 2001, the central parity lost its earlier function of a nominal anchor with a limited fluctuation band. Consequently, the NBH announced in June 2001 that it was adopting a new inflation-targeting regime. Within the new policy framework, the Bank intends to guide the market participants with a new nominal anchor via a disinflation path announced several years ahead.

The publicly-available inflation forecast serves as an intermediate target for monetary policy. The inflation scenarios of the Central Bank are made public, and the assumptions and risks affecting the different components of the CPI basket are made explicit. The Bank's Monetary Policy Council assesses and quantifies these risks and associates to them a probability distribution around the central projection established by the Bank's staff. The uncertainty factors related to the behaviour of domestic actors, including fiscal policy, wage negotiation outcomes and policies concerning regulated prices are identified, and their expected impacts on inflation estimated. The Central Bank makes clear, through a range of communication tools,<sup>1</sup> that if these factors deviate from the assumptions of the central scenario and threaten the inflation objective, then monetary policy will respond. The Bank sets the inflation target in agreement with the government which strengthens the credibility of the objective.<sup>2</sup>

The medium-term disinflation path reflects the Central Bank's assumption that Hungary joins the European Monetary Union (EMU) during the period 2006-07, implying that the country has to satisfy the Maastricht criteria by 2004 or 2005 and thus reduce inflation to around 2-2½ per cent. This strong commitment to the euro zone integration is believed to play an important role in establishing a climate of price stability. Beside this medium-term nominal path, the NBH and the government set in June 2001 the end-2001 and end-2002 targets at 7 and 4½ per cent respectively, with a 1 per cent tolerance band that allows for policy flexibility in case of unexpected shocks. The target of 3½ per cent for end 2003 was subsequently announced. Although the Bank targets a medium-term disinflation path, the operational time horizon of monetary policy extends to 18 months – the estimated time period during which the full impact of a policy step is expected to feed through. To avoid excessive volatility in monetary policy and output, the NBH intends to respond to inflationary shocks only if they are of a permanent character and jeopardise the medium-term target.

The main policy instrument of the Bank is the two-week *deposit rate*, remunerating the deposits of banking institutions. In contrast with standard liquidity conditions in other OECD countries, the structural liquidity position of the Hungarian banking sector has long been one of excess liquidity, due to strong intervention in response to heavy capital inflows. The Central Bank has been reabsorbing liquidity through its two-week deposit facility. In the new exchange-rate regime which permits the market clearance of foreign-exchange transactions and currency appreciation, reflecting the autonomy of monetary policy under flexible exchange rates, the need for instantaneous sterilisation diminishes and the Central Bank is expected to become a direct provider of liquidity within a few years.

**Box 3. Inflation targeting (cont.)**

In a small open economy like Hungary and in the circumstances of a weak credit channel, the exchange rate is the most powerful and rapid transmission channel of monetary policy. The passthrough effect of exchange-rate appreciation (depreciation) into disinflation (inflation) in tradable goods is estimated by the Central Bank, on the basis of other countries' experiences, to be about 37½ per cent within twelve months and 60 per cent within 24 months. The NBH therefore attaches a prime importance to exchange-rate outcomes and implements its policies by taking into account their impacts on exchange rates. These remain nevertheless fundamentally determined by domestic and international markets. In the short period of operation of the new regime since May 2001 no exchange-rate intervention has taken place, even if public statements of the Bank helped to stabilise exchange-rate expectations in a few instances.

1. The Bank utilises its *Quarterly Report on Inflation* as its main communication tool. *Ad hoc* statements are also issued on specific subjects of interest (such as an assessment by the Bank of the competitiveness impacts of exchange rate developments in November 2001). The *NBH Monthly Report* presents more frequent information on prices, monetary, fiscal and other economic developments and underlying monthly statistics. The *Annual Report* of the Bank, which is the published version of its report to the Parliament, provides a retrospective analysis of the past year's economic and monetary policy developments.
2. Before the new regime, the government determined, independently from the NBH, its own inflation target in the budget. The government's inflation projection in the budget did not coincide with the (unpublished) forecast of the Central Bank and tended to undershoot it systematically. In 2000-01, budget assumptions on inflation were 6.5 and 6.3 per cent respectively, while the actual inflation rate reached 9.8 and 9.2 per cent.

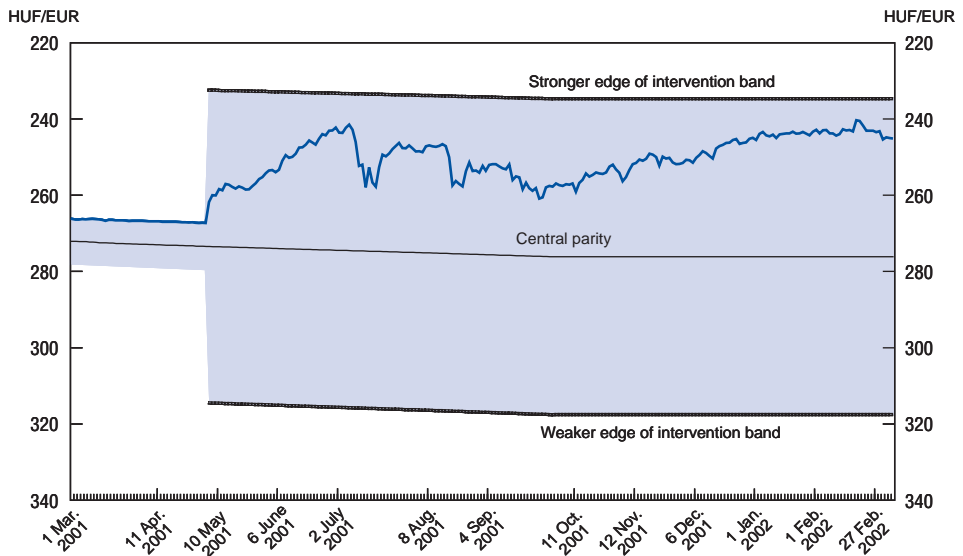
***The exchange rate appreciated and proved resilient to international shocks***

The exchange rate appreciated strongly in nominal and real terms immediately after the widening of its fluctuation band. It then oscillated, largely in line with changing global market sentiments on emerging economies. Each episode of depreciation was followed by a correction of smaller size, eroding in part the effect of the initial appreciation but maintaining the currency permanently in the upper half of the fluctuation band. From November 2001, additional capital inflows raised the currency to some 11-12 per cent above its reference rate (Figure 12).

These movements nevertheless remain moderate in the light of other countries' experiences with band widening. The forint never reached the band's new official edge and did not call for a corrective central bank intervention.



Figure 12. The forint in its fluctuation band



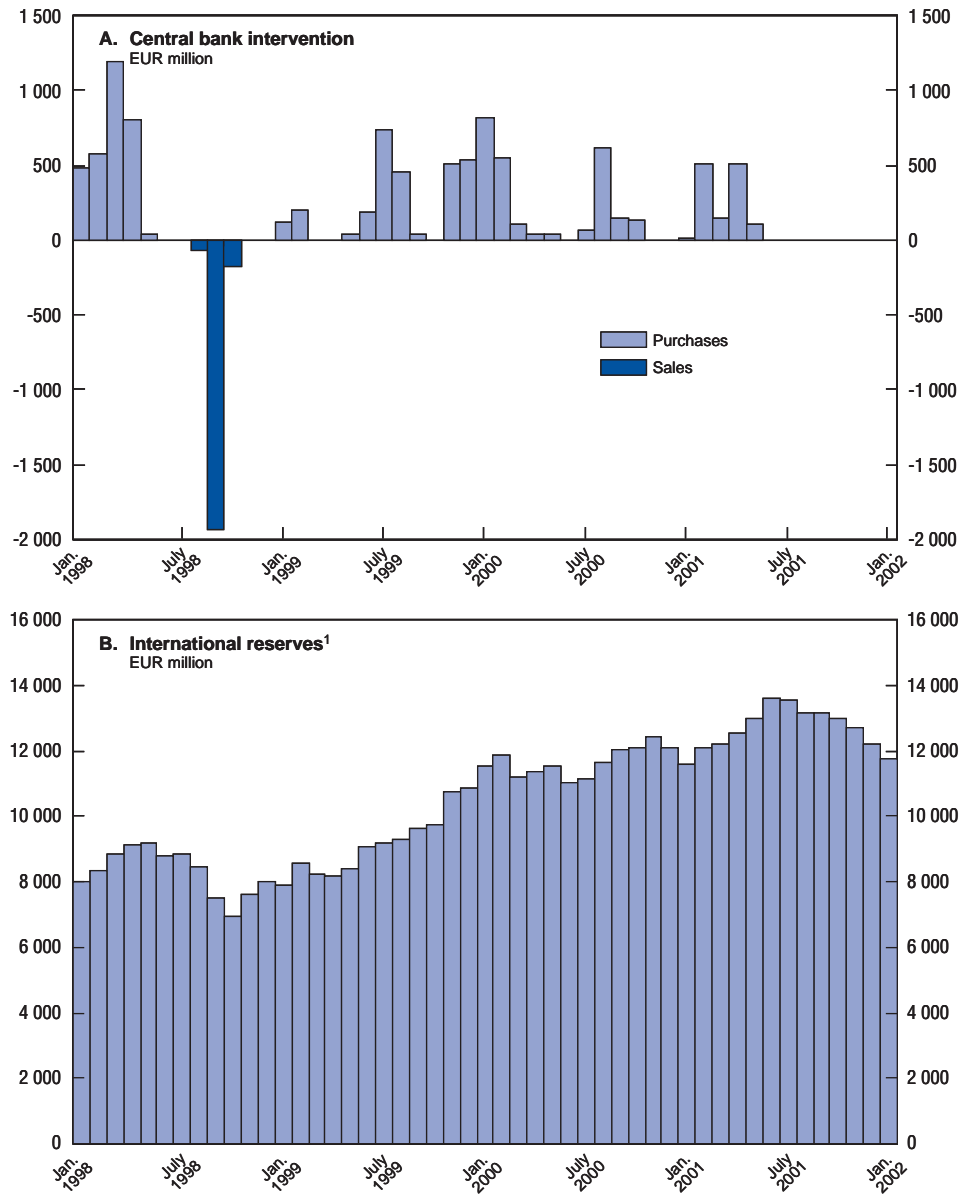
Source: National Bank of Hungary.

Foreign direct investment inflows and the high rate of retention of FDI firms' earnings have provided a consistent support to the currency. The weight of non-interest sensitive items in capital inflows, which to date have dominated the interest-rate sensitive items,<sup>19</sup> may diminish the responsiveness of exchange rates to monetary policies. Full liberalisation of foreign-exchange transactions, which took place in June 2001, will probably increase the role of interest-rate responsive capital flows and the sensitivity of exchange rates to monetary policy. To ensure that the exchange rate is determined by market forces alone, the NBH decided to channel the net amount of all government forex transactions to the market on a daily basis, until the end of 2001.<sup>20</sup>

### ***Disinflation resumed and relies on falling imported inflation***

The achievement of the first inflation target of  $7 \pm 1$  per cent year-on-year in December 2001 has been a success. Developments in international prices helped, as they increased by only 2.1 per cent in the euro zone in 2001 against 2.5 per cent in 2000. In addition, the passthrough effects of exchange rate appreciation have played an important role.<sup>21</sup> Among the main components of headline

Figure 13. Exchange rate interventions



1. At historic cost for 1998-1999, at market price net of accrued interest from 2000. Data for January 2002 in Panel B is preliminary.

Source: National Bank of Hungary.

inflation, energy prices peaked in the first half of the year then declined, food prices first grew at a higher pace than historical trend then slowed down in the second half, regulated prices increased slightly but remained subdued (in certain instances at levels below cost – see Chapter IV) and tradable merchandise and non-tradable service prices decelerated in the second half of the year. The difference between inflation in tradables and non-tradables is significant and could be partly explained by productivity differences between the two sectors in the context of strong wage growth (see Chapter I and Panel C of Figure 8).

The disinflation target for 2002 is ambitious, aiming at a headline CPI inflation of  $4.5 \pm 1$  per cent in December in line with negative output gaps at home and abroad. There are recognised risks to the present inflation projection, which are monitored by the Central Bank. In the November 2001 *Inflation Report* of the Bank those risks included exchange rate depreciation, international energy and tradable price rises, additional fiscal loosening and income claims in an election year. Their expected effects were quantified and appeared non-trivial (Table 10). The February 2002 *Report* focused on the uncertainty concerning the intensity of the exchange rate passthrough, the oil prices, the domestic regulated prices and the labour cost developments as the most significant risks pending on inflation. The Monetary Policy Council, on the basis of an analysis of these and other factors estimated that the upward and downward risks on 2002 inflation are evenly

Table 10. **Uncertainty factors in CPI inflation**  
Changes of CPI in percentage points

Uncertainty factors	CPI effect in Q4 2002	CPI effect in Q4 2003
Persistent change in the forint/euro exchange rate (10 per cent persistent depreciation of the forint)	1.9	1.7
Changes in the intensity of exchange rate pass-through (33 per cent a year)	0.4	0.4
(67 per cent a year)	-0.5	-0.35
Changes in the credibility of disinflation policy (3 per cent higher nominal wages)	0.1-0.4	0.1-0.4
Changes in fiscal effect (HUF 100 billion higher spending on wages and transfers)	0-0.2	0-0.2
Changes in external demand (1 per cent higher demand for imports)	0.4	0.1
Changes in oil prices (10 per cent higher price for oil)	0.4	0.1
Changes in euro/dollar exchange rates (10 per cent weaker euro)	0.4	0.1
Changes in regulated prices (such as prices for pipeline-supplied gas (Additional price rise in July 2002)	0.2	0.2

Source: National Bank of Hungary.

distributed, while it sees an upward bias in the probability distribution of the inflation forecast for December 2003.

Market players seem to endorse this perspective, by taking their CPI inflation expectations for 2002 increasingly closer to the official target of the Central Bank. Average inflation expectations of market analysts for the end of the year decreased significantly, from 7 per cent in April 2001 to 5¼ per cent in February 2002, coming down towards the NBH's inflation target. With a view to the strong international recovery expected in 2003 and its impact on international prices and domestic product and labour markets, monetary tightening will probably be necessary in 2003 in order to achieve the inflation target.

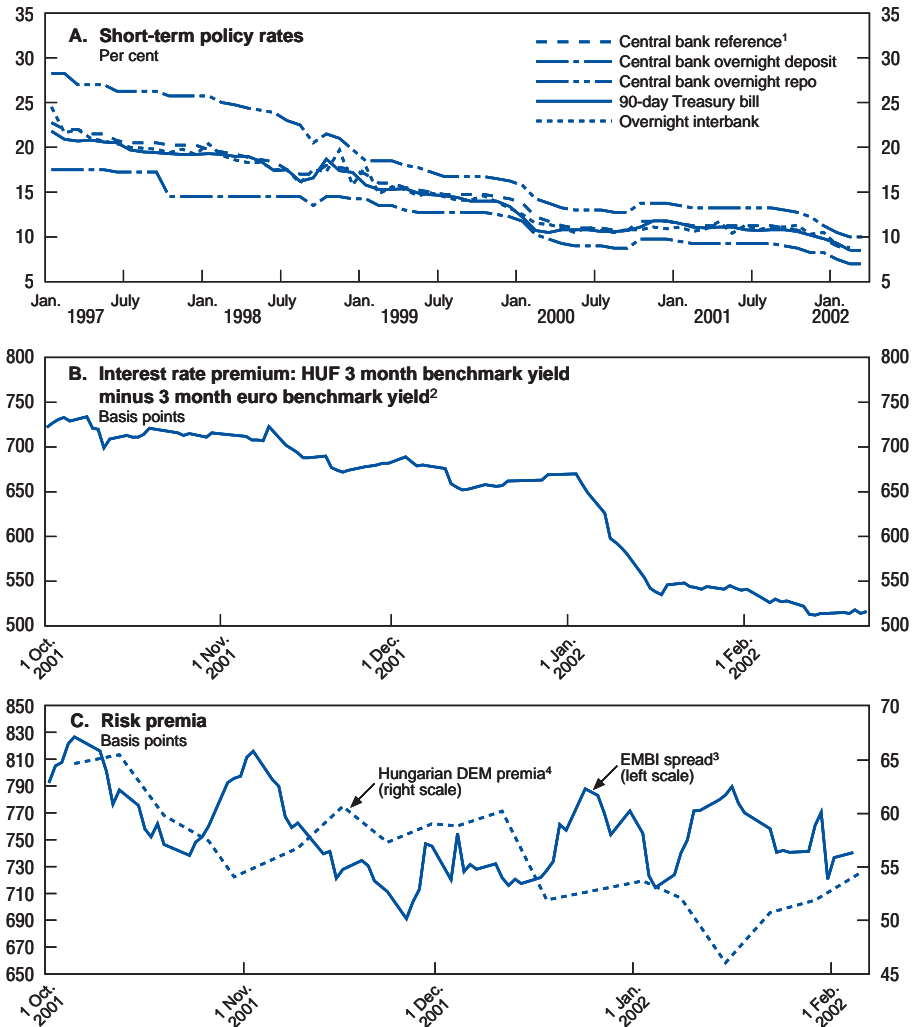
In the medium term (four to five years), the yearly forward rate differentials on forint and euro interest rates<sup>22</sup> indicate that the markets expect that the CPI differential between Hungary and its euro partners will come down to as little as 1½ to 2 per cent by the end of 2004. This result is obtained by assuming a zero risk-premium on exchange rates; the expected inflation differential is even smaller if an exchange rate premium is factored in (see Panel B of Figure 16). The financial markets therefore seem to endorse the declared policy objective of an early accession of Hungary to the euro zone<sup>23</sup> (Box 2).

### ***Real interest rates increased but risk-premia remain subdued***

Since the widening of the exchange-rate corridor in May 2001, the Central Bank has reduced its rates by a total of 275 basis points (Figure 14). Yet, even larger progress in disinflation led to a slight increase in real short-term interest rates. Figure 14 shows that the short-term interest rate differential *vis-à-vis* the euro area has not fallen immediately after the band widening and the end of the crawl, reflecting the higher exchange-rate risk in the new environment, but declined after the currency demonstrated its robustness in the first months of fluctuation. The pattern of volatility of the risk premium shows that the confidence of investors in the Hungarian capital market continues to be sensitive to global concerns, but its evolution also indicates that forint-risks begin to be priced more independently (from risk perceptions in other emerging markets), which is a welcome development (Figure 14, Panel C).

The net outcome of real exchange-rate appreciation and short-term real-interest rate increases was a tightening of monetary conditions in 2001 (Figure 15). Yet, longer term yields have fallen significantly since the band widening and reached their historical minima in January 2002, confirming the positive long-term expectations of investors and the diminishing capital costs for borrowers (Figure 16).

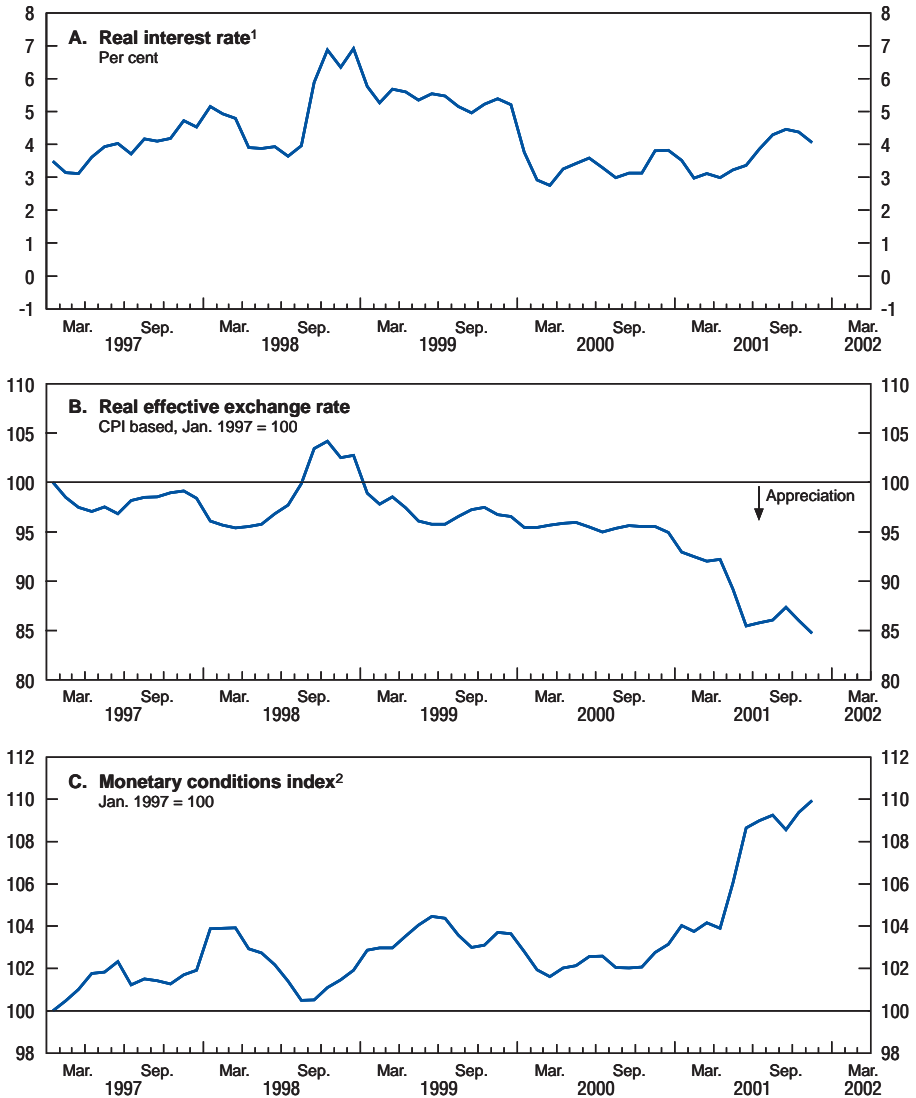
Figure 14. Policy rates and risk premia



1. Central bank reference rate was the rate of the 4-week reverse repo standing facility before 6th October 1997, then the rate of 4-week deposit facility until 1st March 1999, when its maturity was shortened to 2 weeks. Since 13 July 2001 the base rate has been equated to the reference rate.
2. HUF 3 month benchmark yield is the interest rate on 90 day Hungarian Treasury bills; 3 month euro benchmark yield is that calculated by the European Central Bank as a weighted average of euro denominated Treasury bills of member countries.
3. Spread in USD denominated long-term government bonds, between a weighted portfolio of emerging market country securities and 10 year US Treasury bonds.
4. Spread in DEM denominated long term government bonds, Hungarian (2 of 10 years and one of 7 years, maturing 2003 to 2005) minus German.

Source: National Bank of Hungary; OECD, *Main Economic Indicators*.

Figure 15. Monetary conditions

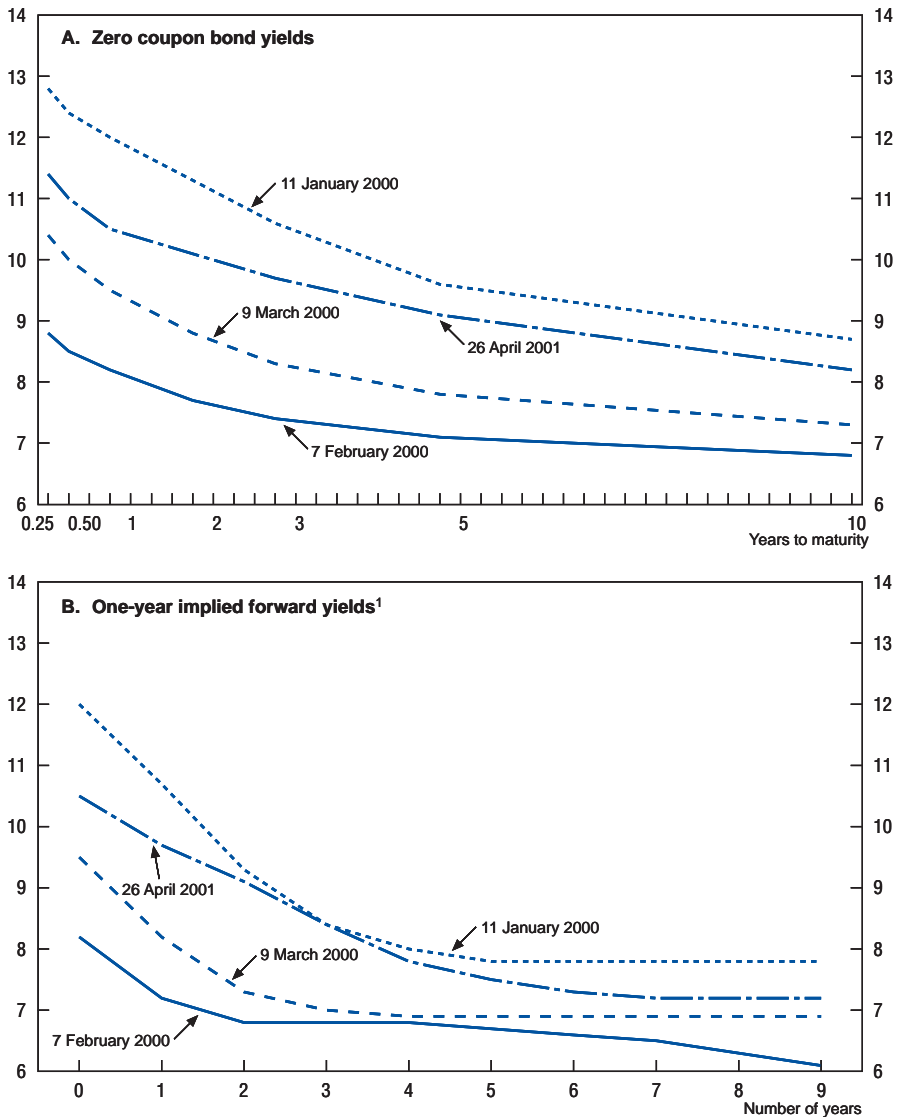


1. Twelve month interest rate deflated by expected inflation derived from Reuters poll.

2. The Monetary Conditions Index was computed according to the following formula:  
 $I(t) = I(t - 1)[1 + \{r(t) - r(t - 1)\} - a\{\ln[RER(t)] - \ln[RER(t - 1)]\}]$ , where  
 $r$  = 12 month interest rate deflated by expected inflation derived from Reuters poll;  
 $RER$  = real (CPI deflated) exchange rate with respect to the basket;  
 $a$  = the average annual export to GDP ratio.

Source: OECD, *Main Economic Indicators*; National Bank of Hungary.

Figure 16. Yield curves  
Per cent



1. The implicit forward rate at time  $t$  is the rate of return on a one-year bond issued in year  $t$  that would equalise the overall return on a single bond issued at time 0 of maturity  $t+1$  and the total return on the one-year bond issued at  $t$  plus that of a bond issued at time 0 of maturity  $t$ . It is, therefore a proxy for the market's expectation of the one-year rate of interest that would prevail at time  $t$ .

Source: National Bank of Hungary.

### *The currency composition of credit growth justifies further risk hedging*

The development of the principal monetary aggregates is shown in Table 11. The Central Bank does not consider monetary aggregates to be intermediate targets, allowing the quantity of money to be freely determined by demand at the prevailing interest rates. In the old narrow-band exchange rate regime, the effects of foreign-exchange transactions were sterilised via the Bank's tenders and the growth of monetary aggregates was confined. In the new regime, the need for sterilisation has weakened as the currency can freely appreciate.<sup>24</sup>

Credit growth decelerated for enterprises and households in 2001 in phase with the cycle (Table 11).<sup>25</sup> The currency composition of enterprise credits reflected the arbitrage opportunities available to borrowers until mid-2001.<sup>26</sup> Both exporting and non-exporting companies had borrowed massively in foreign currencies, and a number of them closed their positions after the appreciation of the currency. Still, many enterprises continue to carry large foreign-denominated liabilities, representing up to 35 per cent of the total corporate credit stock in early 2002. These positions are probably not hedged fully by the asset and revenue structure of borrowers or by forward exchange-rate contracts. Full liberalisation of foreign exchange transactions, including the derivative transactions by resident and non-resident investors,<sup>27</sup> created a deeper and more liquid market for hedging assets. Policymakers, observing the resilience of large open positions

Table 11. **Money and credit**<sup>1</sup>

	1995	1996	1997	1998	1999	2000	2001 <sup>1</sup>
	Year-on-year percentage change						
<b>Monetary growth</b>							
M1	6.4	19.4	23.5	17.2	19.2	11.6	16.5
M3	20.1	22.5	19.8	15.2	16.1	12.4	16.6
M4	25.0	26.9	26.9	20.0	19.0	14.8	16.1
<b>Domestic credit</b>							
Total	13.7	7.6	12.0	13.9	-5.5	15.8	0.6
Enterprises	18.5	29.3	42.6	16.1	17.7	30.5	4.7
Households and sole proprietors	-10.4	-8.8	4.1	16.9	31.8	41.7	4.9
<b>Memorandum items</b>							
Nominal GDP growth (per cent)	28.6	22.8	23.9	18.1	12.9	15.4	13.1
Income velocity (GDP/M1)	5.4	5.6	5.6	5.6	5.3	5.5	5.4
Income velocity (GDP/M3)	2.1	2.1	2.1	2.2	2.1	2.2	2.1
Income velocity (GDP/M4)	1.7	1.7	1.6	1.6	1.5	1.5	1.5

1. Break in series in January 1998 and from 2000 new definitions are used (refer to the National Bank of Hungary Monetary Survey for more details).

Source: National Bank of Hungary.



among a wide variety of borrowers (of uneven levels of financial sophistication), have recently multiplied calls for a broader utilisation of hedging facilities. The present situation may indeed contain a dose of systemic risk under the new exchange-rate regime.

### ***Convergence to euro zone inflation is subject to an equilibrium differential***

The continuing economic integration of Hungary with the EU is bound to have significant consequences for monetary policy. The Central Bank declared repeatedly that joining the euro area is its principal longer-term objective to be achieved in 2006 or 2007. The Bank emphasises that after the widening of the intervention band, the abandonment of the crawling-peg regime and the abolition of the remaining foreign-exchange restrictions, the Hungarian monetary system has become nearly compatible with the requirements of the Exchange Rate Mechanism (ERM II), the “waiting room” for prospective European Monetary Union candidates (see Box 2). With a view to EU accession in the time period 2004-05, the remaining challenge is to achieve fiscal consolidation and price stability in line with Maastricht criteria. Due to the Balassa-Samuelson effect, the expected inflation differential between Hungary and the euro zone has been estimated by the Central Bank at between 0.8 and 2.2 per cent,<sup>28</sup> which implies that to achieve the Maastricht inflation criterion, Hungary would have to bring down the inflation on tradables to a lower level than the European Monetary Union (EMU) members. In this process, output and employment costs are inevitable, but their magnitude will depend on future productivity patterns, the fiscal policy stance and inflationary expectations. Taking the ECB’s monetary policy as given, the challenge for economic policy will be to minimise the growth cost of meeting the inflation target.<sup>29</sup>

### **Fiscal policy**

#### ***Fiscal policy loosened in the last phase of an electoral cycle***

The government had achieved significant progress in fiscal consolidation in 2000 by reducing the general government deficit (on an accruals basis) to 3 per cent of GDP. In 2001, a significant loosening of the fiscal stance of up to 2½ per cent of GDP took place, reflecting both voluntary spending measures and unforeseen expenditure surprises, notably in the health area. The loosening is likely to continue into 2002, in the context of the last phase of the electoral cycle,<sup>30</sup> with the deficit likely to exceed 5 per cent of GDP in both years. This loosening, which was set in train before the international and domestic slowdown, now looks to be counter-cyclical, going far beyond the working of automatic stabilisers.<sup>31</sup>

This reversal of the fiscal restraint will need to be followed by a sharp fiscal tightening. Given the targets proposed in the government's medium-term pre-accession programme to the European Commission, significant spending cuts will be required in the period 2003-04. The pursuit of the disinflation objective outlined in the earlier section will also call for a prudent fiscal policy in the event of the projected international recovery. This section presents a discussion of the recent evolution of general government revenues and expenditures and evaluates the outturn of the biennial 2001-02 budget to date as well as the government's medium-term proposals.

#### Box 4. Measurement of the fiscal stance

The previous *Survey* highlighted the need for both internationally-comparable and economically meaningful general government accounts. Despite the progress achieved by the authorities, the situation remains somewhat unsatisfactory. In addition to its official accounts based on the GFS methodology and described in Chapter III, the government has presented rudimentary fiscal data based on the ESA95 methodology in its 2001 Pre-accession report and Notification report to the European Union. Another source for accruals-adjusted data is the National Bank of Hungary (NBH) that estimates balances of the general government sector by adjusting the GFS fiscal data to obtain, for analytical purposes, a deficit measure reflecting the macroeconomic impact of changes in the fiscal stance.

Both estimates of the accruals-based balances indicate that a significant fiscal loosening took place in 2001. The GFS primary balance declined from 1.5 per cent of GDP in 2000 to 0.8 per cent in 2001 implying a fiscal stimulus of 0.7 per cent of GDP. The Central Bank's *Quarterly Report on Inflation* published in February 2002, taking account of off-budget expenditures, indicates a significantly stronger stimulus measured by the change in primary balance, amounting to 2.5 per cent of GDP. Concerning 2002, the GFS primary balance according to the government will decrease slightly to 0.7 per cent of GDP, implying no significant tightening, whereas the NBH projects an adjusted primary balance deteriorating by a further 0.7 per cent of GDP.

The principal difference between the two available accruals-based measures is the absence of the quasi-fiscal activities of the Hungarian Development Bank and of the National Motorway Corporation in the government's ESA95 data, but their inclusion in the NBH estimates. The OECD estimation of the fiscal stance is closer to the latter because it incorporates most of the NBH adjustments to the official GFS accounts (see Annex I).

Table 12. **General government accounts, OECD basis**

	1997	1998	1999	2000	2001
	Per cent of GDP				
Primary revenues	42.2	42.9	42.8	43.1	42.9
Primary expenditures	41.7	45.2	42.4	41.7	44.2
Primary balance	0.5	-2.2	0.3	1.4	-1.3
Interest revenue	2.8	1.9	2.0	1.4	1.1
Interest expenditure	10.5	8.0	7.5	5.8	4.9
Interest balance	-7.7	-6.1	-5.5	-4.4	-3.6
Total revenues	45.0	44.9	44.8	44.5	44.0
Total expenditures	52.2	53.1	50.0	47.5	49.1
Overall balance	-7.2	-8.3	-5.2	-3.0	-5.2
<i>Memorandum items</i>					
Public employment (persons)	814 026	822 615	799 722	791 436	788 600
GDP growth (per cent)	4.6	4.9	4.2	5.2	3.8

Source: OECD.

### ***The already expansionary 2001 budget spent its additional "revenue windfalls"***

The 2001 part of the biennial 2001-02 budget had been predicated on 5½ per cent growth in output, on inflation of 6.3 per cent, and targeted a deficit of 3.4 per cent in GFS terms (4.3 per cent of GDP in ESA95 terms).<sup>32</sup> The budget included a strong commitment to increase spending on public-sector wages, motorways, housing, small and medium enterprises, and generous income-tax breaks for families with children. In the event, GDP grew by less than 4 per cent, consumer inflation averaged 9.2 per cent and the general government deficit reached 5½ per cent of GDP. The government has nevertheless achieved its cash-deficit target of 3.4 per cent; which has been possible thanks to revenue windfalls due to higher-than-projected inflation and infrastructure spending taking place partly through off-budget channels (see Chapter III).<sup>33</sup>

The higher-than-planned inflation resulted in additional tax and social-security contribution revenues amounting to some HUF 260 billion (1.7 per cent of GDP). Other factors were responsible for additional extra revenues of some HUF 60 billion in the central budget (including social-security funds). After taking care of the mandatory pension increases of HUF 55 billion,<sup>34</sup> the remaining HUF 265 billion could not be spent entirely because non-tax revenues fell short of the target by HUF 122 billion, allowing the government to spend only the remaining surplus (HUF 143 billion). Pensioners received additional HUF 13 billion in excess of the amounts implied by the indexing formula. The public health system was provided with HUF 32.5 billion in additional drug subsidies. The state-owned Privatisation and Holding Corporation got a transfer of HUF 44 billion, mainly to

finance capital injections to state-owned electricity and airline corporations. The state-owned television network became the recipient of another HUF 10.5 billion. The remaining sum was first allocated to general reserves (HUF 48 billion) but then spent mostly on investment in the last month of the year.

Table 13 shows that the government gave stimulus to aggregate demand by increasing both its investment and consumption activities. The massive increase in public infrastructure spending is recorded partly in the gross fixed investment row, partly in subsidies and goes partly off-budget. The strong expansion of public-sector wages has been driven by the high minimum-wage increase (see Chapter IV), the massive increase of salaries in the top echelon of public service and the long-overdue wage hikes for teachers and health workers.<sup>35</sup> Social-security benefits paid by the government increased faster than GDP because the

Table 13. **Consolidated general government revenue and expenditure, OECD basis<sup>1</sup>**

	1997	1998	1999	2000	2001
	Per cent of GDP				
<b>Revenue</b>	45.0	44.9	44.8	44.5	44.0
Indirect taxes (VAT, customs, excise)	16.4	16.6	16.9	16.6	15.7
Direct taxes	8.5	8.7	9.1	9.4	9.8
On households	6.6	6.5	6.8	7.2	7.4
On business	1.9	2.2	2.3	2.2	2.4
Social security contributions	13.9	13.8	13.2	12.9	13.4
Local taxes and misc. fees	3.4	3.9	3.7	4.2	4.0
Property income received	2.8	1.9	2.0	1.4	1.2
<b>Expenditure</b>	52.2	53.1	50.0	47.5	49.1
<b>Current expenditure</b>	48.3	46.5	45.7	41.8	44.2
Government consumption expenditure	20.0	19.3	19.3	19.1	21.1
Final wage expenditure	10.6	10.6	10.7	10.3	11.2
Final non-wage expenditure	9.4	8.7	8.6	8.8	9.9
Social security benefits paid	11.3	11.9	11.9	11.1	11.9
Other current transfers paid	2.2	2.3	1.9	1.2	1.2
Subsidies	4.3	5.0	5.1	4.6	5.1
Property income paid	10.5	8.0	7.5	5.8	4.9
<b>Capital expenditure</b>	3.9	6.6	4.3	5.6	4.9
Government fixed capital formation	4.6	4.7	3.9	4.2	4.4
Net capital transfers	0.7	-2.0	-0.4	-1.5	-0.6
<i>Memorandum items</i>					
Net interest	-7.7	-6.1	-5.5	-4.4	-3.8
Primary balance	0.5	-2.2	0.3	1.4	-1.3
Overall balance	-7.2	-8.3	-5.2	-3.0	-5.2
Public employment (thousand persons)	814	823	800	791	789
GDP (HUF billion)	8 541	10 087	11 393	13 075	14 849

1. Final results for 1997-99, preliminary data for 2000 and projections for 2001.

Source: OECD.

government increased pensions well above the amount implied by the statutory formula. On the other hand, falling interest rates resulted in a substantial fiscal saving, amounting to 1 per cent of GDP. The structure of revenues was relatively stable; the only significant change being a decline in the indirect tax share amounting to almost 0.9 per cent of GDP (see Chapter IV for an explanation of this reduction).

### ***The 2002 budget will continue to loosen...***

The 2002 part of the biennial budget assumes 5.5 per cent GDP growth, inflation of 5 per cent and aims at achieving a cash-based deficit of 3.2 per cent of GDP<sup>36</sup> (3.5 per cent in ESA95 terms). Due to the higher than projected inflation in 2001, lagged income-tax and VAT revenues will increase the original budget figures significantly, despite a revenue loss of some HUF 15 billion resulting from the government's decision to exempt old-age pensions fully from the calculation of taxable income. As in 2001, the authorities are expected to target the budgeted cash deficit while increasing the planned expenditures in line with higher than expected revenues. The major extra-spending item financed by surplus revenues is likely to be the public-sector wage bill. The government intends to increase public sector wages by an additional 19 per cent in 2002 (in addition to the 22 per cent increase in 2001), without any major decrease in the number of government employees.

### ***... while EU accession commitments imply a sharp tightening in the following two years***

In its mid-term pre-accession economic plan (PEP) submitted to the EC, the government committed to reduce the primary fiscal expenditures on an ESA basis to 41.5 per cent and the corresponding deficit to 2 per cent of GDP in 2004. The actual fiscal performance deviated from the PEP assumptions for the years 2001-02, making the spending cuts implied for 2003-04 all the sharper.<sup>37</sup> On the other hand, official budget transfers from the EU amount to 0.4 per cent of GDP in 2001 and are anticipated to reach, on the net basis,<sup>38</sup> "only" 1.8 per cent of GDP in 2004 (well below the "4 per cent of GDP" target implied by limits on structural fund transfers for EU members).

It is to be hoped that these commitments will be implemented, even if they imply drastic adjustments in 2003-04. The implementation of these plans will be easier with mid-term expenditure ceilings. The experience of other OECD countries suggests that it would be useful if the government formulated and Parliament approved rules that would reduce fiscal activism and improve co-ordination with monetary policy. A credible medium-term spending target, or a cyclically-neutral deficit target, would indeed make budget policy more resilient. Such a framework would deal with cyclical strains in more transparent and predictable ways, would

Box 5. **The three components of general government finances in 2001**

**Central government**

The central government accounts for approximately one-half of revenues and expenditures of the general government. In the first 11 months of 2001, the state budget's outturn was characterised by a deficit reaching only 37 per cent of the planned annual target, partly because the government reserved some spending facilities for the end of the year in a traditional seasonal pattern and partly because the amended budget act was approved by Parliament late in the year. The central government revenue for the whole year significantly exceeded the planned level as a result of unexpectedly strong customs duties and profit taxes although VAT and PIT revenues were lower than expected in the amended budget. The expenditure side expanded less than planned because interest payments as well as subsidies turned out to be significantly lower than projected levels. Savings in the central budget were used to compensate for the deficits generated by the social security funds and local governments.

Table 14. **Central government accounts – unconsolidated, GFS basis**  
HUF billion

	2000 outcome	2001 budget	2001 modified budget	2001 preliminary outcome	2002 budget
1. Primary revenues	3 587.2	3 762.3	3 948.6	3 984.1	4 002.1
2. Primary expenditures	3 257.5	3 592.3	3 778.6	3 781.7	3 842.8
<b>3. Primary balance (1-2)</b>	<b>329.7</b>	<b>170.0</b>	<b>170.0</b>	<b>202.4</b>	<b>159.3</b>
<b>In per cent of GDP</b>	<b>2.5</b>	<b>1.2</b>	<b>1.2</b>	<b>1.4</b>	<b>1.0</b>
4. Privatisation revenues	0.9	0.0	0.0	0.0	0.0
5. Interest revenues	93.8	79.1	79.1	99.4	68.1
6. Interest expenditures	792.2	730.1	730.1	715.1	713.4
<i>Interest balance</i> <i>(domestic + foreign + NBH) (5 – 6)</i>	-698.5	-651.0	-651.0	-615.6	-645.4
7. Gross revenues (1 + 4 + 5)	3 681.9	3 841.4	4 027.7	4 083.6	4 070.2
8. Gross expenditures (2 + 6)	4 049.7	4 322.4	4 508.7	4 496.8	4 556.3
9. GFS balance (7 – 8)	-367.8	-481.0	-481.0	-413.2	-486.1
<b>10. GFS balance, privatisation</b> <b>revenues excluded (9 – 4)</b>	<b>-368.7</b>	<b>-481.0</b>	<b>-481.0</b>	<b>-413.2</b>	<b>-486.1</b>
<b>In per cent of GDP</b>	<b>-2.8</b>	<b>-3.3</b>	<b>-3.3</b>	<b>-2.8</b>	<b>-3.0</b>

Source: Ministry of Finance.

Box 5. **The three components of general government finances in 2001** (*cont.*)

**Social security**

The social-security deficit considerably exceeded the 2001 target and comparable levels of the previous year (Table 15). The principal cause of the deterioration was higher spending of the health fund, reflecting the sharp growth in drug subsidies, sick pay and old-age disability pensions financed by health contributions. The revenues of the health fund were slightly below the projected level, reflecting the surprisingly stagnant employment that resulted in less intake from the flat-rate health charge. Pension contributions increased due to wage windfalls and, despite strong increases in benefit levels, the pension fund ended the year with a small surplus, including central budget transfers.

Table 15. **Balance of the social security funds, GFS basis**

	2000 outcome	2001 budget	2001 modified budget	2001 preliminary outcome	2002 budget
<b>HEALTH CARE FUND</b>					
1. Revenues	734.1	832.4	889.9	884.7	897.8
2. Expenditures	797.7	842.4	900.0	914.4	915.0
<b>GFS balance (1 – 2)</b>	<b>-63.6</b>	<b>-10.1</b>	<b>-10.1</b>	<b>-29.7</b>	<b>-17.2</b>
<b>In per cent of GDP</b>	<b>-0.5</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.1</b>
<b>PENSION FUND</b>					
1. Revenues	1 003.5	1,117.2	1 173.8	1 175.4	1 232.5
2. Expenditures	1 021.2	117.2	1 173.8	1 175.0	1 232.5
<b>GFS balance (1 – 2)</b>	<b>-17.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>
<b>In per cent of GDP</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Source: Ministry of Finance.

**Local governments**

Preliminary figures indicate that the local government level generated a deficit amounting to 0.3 per cent of GDP (Table 16). Receipts were below the targeted level in spite of one-off revenues related to the compensation of local governments for earlier privatisation of local gas distributors; the corresponding transfer from the Privatisation and Holding Corporation consisted of HUF 23 billion in cash and HUF 30 billion in bonds. Local expenditures exceeded the targeted level.

Box 5. **The three components of general government finances in 2001** (cont.)

Table 16. **Local government accounts, GFS basis**  
HUF billion

	2000 outcome	2001 budget	2001 modified budget	2001 preliminary outcome	2002 budget
1. Primary revenues	1 589.4	1 628.6	1 633.2	1 690.2	1 728.6
2. Primary expenditures	1 641.8	1 643.6	1 648.2	1 737.2	1 740.2
<b>3. Primary balance (1 – 2)</b>	<b>-52.5</b>	<b>-15.0</b>	<b>-15.0</b>	<b>-47.0</b>	<b>-11.6</b>
<b>In per cent of GDP</b>	<b>-0.4</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.3</b>	<b>-0.1</b>
4. Privatisation revenues	37.1	7.0	7.0	39.0	6.0
5. Interest revenues	29.6	14.0	14.0	18.5	11.8
6. Interest expenditures	9.3	6.0	6.0	10.5	6.2
<i>Interest balance (domestic) (5 – 6)</i>	20.3	8.0	8.0	8.0	5.6
7. Gross revenues (1 + 4 + 5)	1 656.1	1 649.6	1 654.2	1 747.7	1 746.4
8. Gross expenditures (2 + 6)	1 651.1	1 649.6	1 654.2	1 747.7	1 746.4
9. GFS balance (7 – 8)	5.0	0.0	0.0	0.0	0.0
<b>GFS balance, privatisation revenues excluded (9 – 4)</b>	<b>-32.1</b>	<b>-7.0</b>	<b>-7.0</b>	<b>-39.0</b>	<b>-6.0</b>
<b>In per cent of GDP</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.3</b>	<b>0.0</b>

Source: Ministry of Finance.

allow the automatic stabilisers to operate, and could free fiscal policy from the pressures of the electoral cycle.

### **External and public debt balances remain sustainable**

How did recent macroeconomic policies affect the sustainability of the external balances and of the internal public debt burden? The fiscal deterioration, during 2001-02, is not likely to last long enough to threaten significantly the basic soundness of external and public debt balances.

The *foreign account* evolved favourably, as described in Chapter I. The deficit of the current account is financed in non-debt creating ways, by FDI and portfolio inflows. The current account is therefore not a pressing constraint on output growth. Yet, the resilience of the current account will be tested when business investments build up again and solicit more national and international savings. Fiscal discipline will then become important.



Table 17. **Gross public debt**  
End of year

	1999	2000	2001
	Per cent of GDP		
Central government <sup>1</sup>	63.4	59.9	56.0
Social security funds	0.6	0.8	0.3
Local authorities' gross debt	1.1	1.3	1.5
General government gross debt <sup>2</sup>	63.4	60.4	55.5

1. Including extra-budgetary funds and APV.

2. Amounts may not add up due to intra-governmental consolidation.

Source: National Bank of Hungary.

The *gross public debt as a ratio of GDP* kept on decreasing – in spite of a primary deficit in 2001<sup>39</sup> (Table 17). The currency appreciation reduced the amount of debt expressed in forints (approximately one-third of public debt is denominated in foreign currencies). Due to falling interest rates, government interest payments fell from 6 per cent of GDP in 2000 to 5 per cent in 2001. If inflation, GDP and the public-sector deficit develop in line with the programmes of the NBH and the government, such expenditure can be expected to decline by an additional 1 per cent of GDP over the next two years. Still, it must be noted that the inflation and currency appreciation “windfalls” which upheld public finances in 2001 will not be available in the future, especially if disinflation is successful. Any active tax reduction programme, for example any significant cuts in labour taxes as discussed in Chapter I, would put the existing equilibria under strain. The future fiscal and public debt balances will depend on the success of the structural budget reforms discussed in the next chapter.

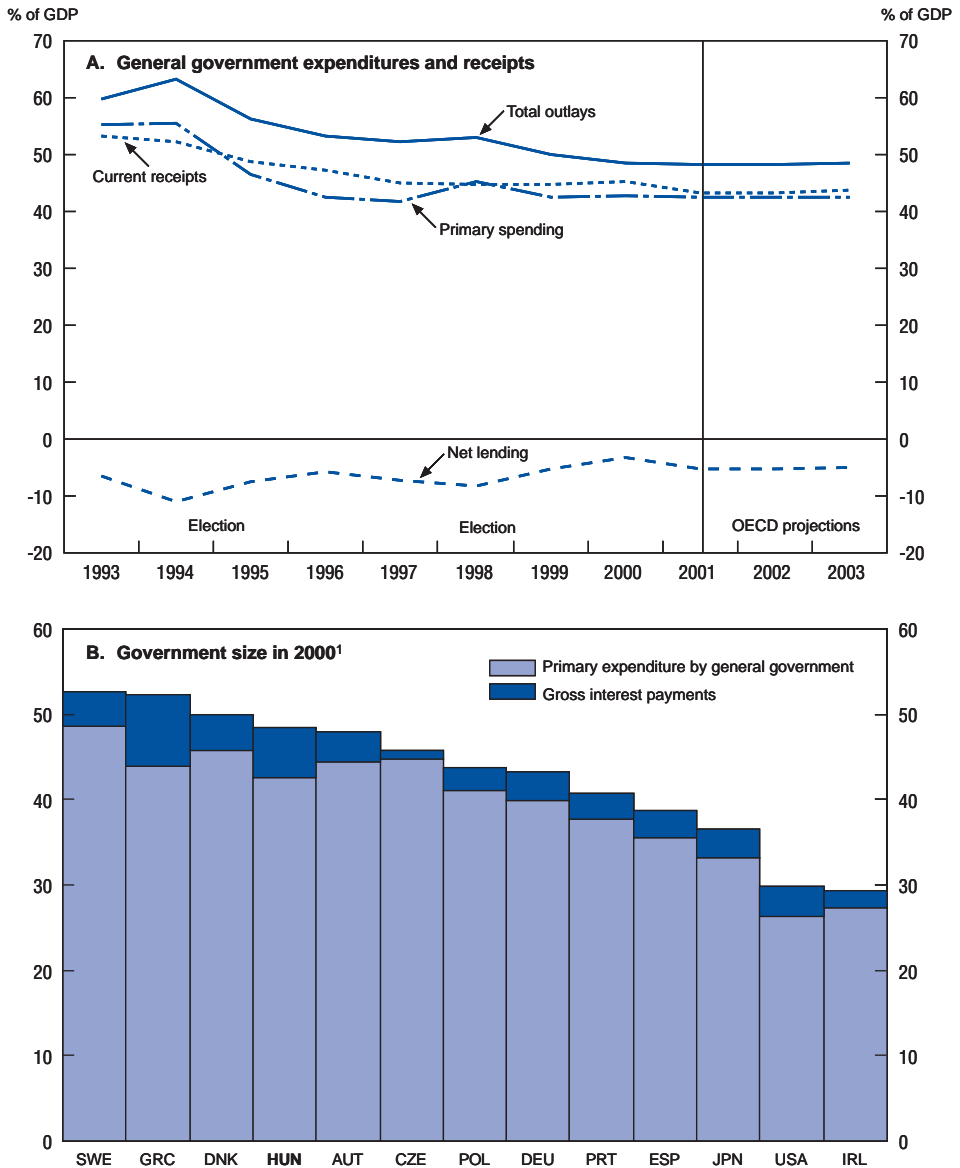
### **III. Strengthening the management of public spending**

In spite of persisting efforts to decrease total public spending and taxation since the beginning of transition, Hungary remains a relatively high spending and high taxation country (Figure 17). In order to stimulate private savings, investment and growth, policymakers intend to reduce the share of taxes and spending in GDP, as outlined in the medium-term economic programme submitted to the European Commission in 2001. This implies a significant fiscal tightening, which could be accommodated by public expenditure reform. International experience shows that it is possible to simultaneously reduce aggregate taxes and public spending, and still improve the allocation of public resources to equity-enhancing and growth-friendly uses. Reforming budgetary structures, procedures and institutions is key in this respect. This chapter reviews the Hungarian public expenditure system with a view to identify ways of decreasing the aggregate cost of realising policy objectives and improving the allocative and technical efficiency of government expenditures. It examines the structure of spending in international comparison, the spending-containing and spending-inducing features of current budget procedures, the possibilities for redeploying resources to growth-friendly areas in a medium-term framework, and the room for improving the efficiency of existing programmes by reforming service supply structures. Policy recommendations are summarised in a concluding section.

#### **Hungary remains a relatively high tax and high spending country**

Public expenditures as a share of GDP have grown in the first half of 1990s because of the decline of output and in response to the spending pressures of early transition. However, following an emergency stabilisation package in the mid-1990s, the ratio has declined sharply, decreasing from 63.4 per cent in 1994 to 48.3 per cent in 2000. This rationalisation appears to have ended in 2000, the ratio increasing again to 49.1 per cent in 2001 and to an expected 49.2 in 2002 according to OECD projections. At the same time, signs of fiscal loosening emerge<sup>40</sup> – as reviewed in Chapter II. Hungary appears today as a relatively high tax and high spending country, particularly among economies with a similar level of GDP per

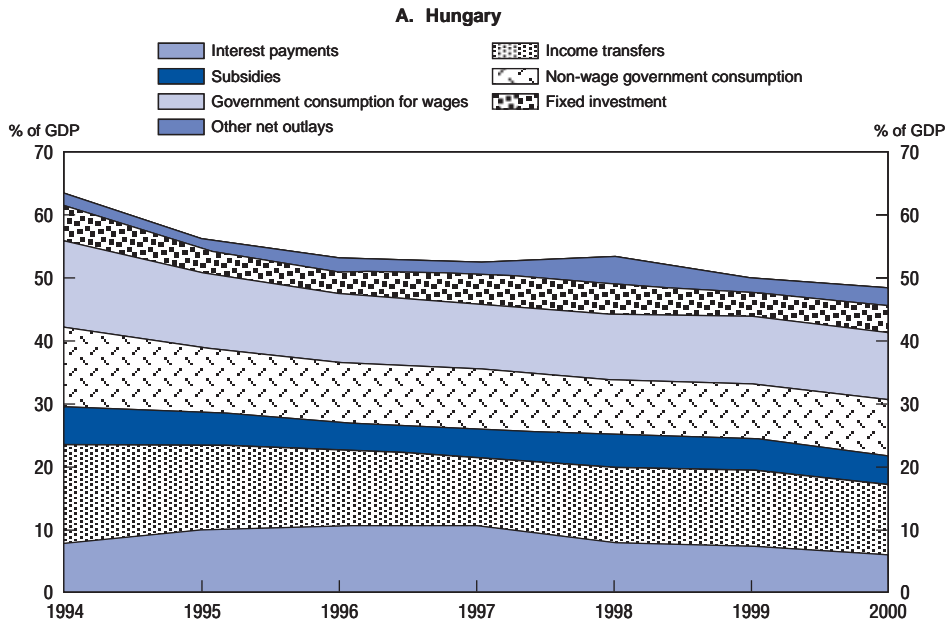
Figure 17. Government spending



1. Share of total government expenditure in GDP. For Japan, outlays include capital transfers to the Deposit Insurance Company. For the United States, data include outlays net of operating surpluses of public enterprises.

Source: OECD, revised GFS (Government Financial Statistics) accounts; Central Statistical Office.

Figure 18. General government outlays by economic category

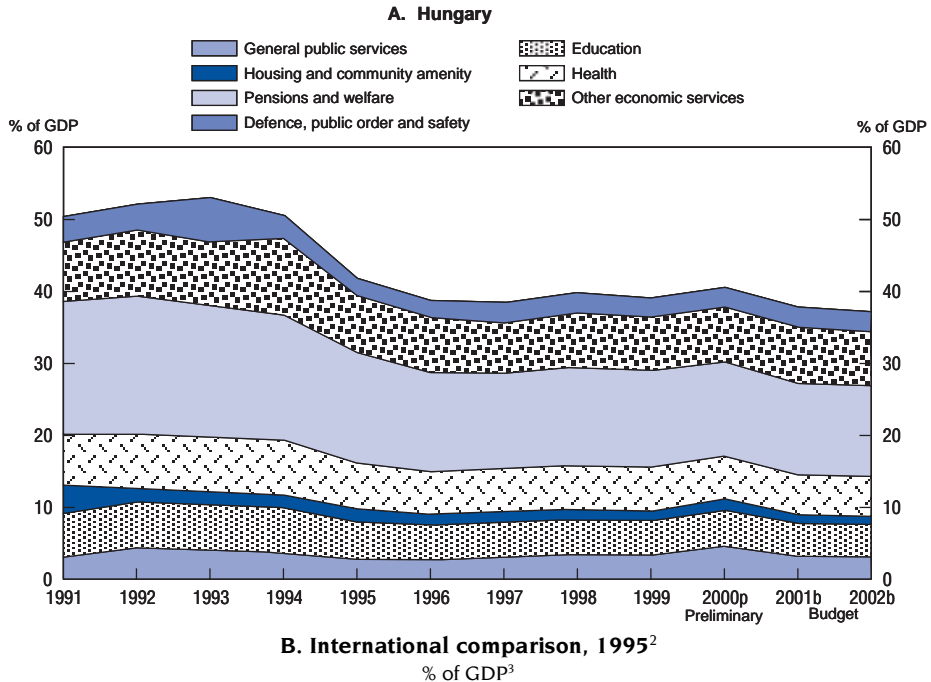
**B. International comparison, 2000**

% of GDP

	Income transfers	Subsidies	Interest payments	Consumption of which: wages		Gross fixed investment	Other net transfers	Total outlays
Austria	18.7	2.6	3.5	19.4	11.3	1.7	1.8	47.7
Czech Republic	13.6	3.0	1.0	20.4	7.6	3.5	4.8	46.3
Denmark	16.8	2.1	4.1	24.7	16.6	1.8	0.3	49.8
France	18.0	1.3	3.3	23.3	13.5	3.0	2.2	51.0
Germany	18.8	1.7	3.4	19.0	8.1	1.9	-1.4	43.3
Greece	16.3	0.2	8.4	15.6	11.8	4.1	7.9	52.5
<b>Hungary</b>	<b>11.3</b>	<b>4.7</b>	<b>5.9</b>	<b>19.4</b>	<b>10.5</b>	<b>4.0</b>	<b>3.3</b>	<b>48.5</b>
Ireland	8.2	0.7	2.1	13.4	7.9	3.8	1.2	29.3
Italy	16.7	1.2	6.5	18.0	10.5	2.4	-0.3	44.4
Japan	10.1	0.8	3.5	16.6	6.8	5.1	0.5	36.6
Korea	4.0	0.3	0.8	10.0	7.2	5.7	2.5	23.1
Poland	18.9	1.1	4.7	15.8	10.9	3.4	-0.1	43.8
Portugal	14.0	0.9	3.1	20.5	14.8	4.2	-2.0	40.7
Spain	12.3	1.1	3.3	17.4	10.3	3.3	1.4	38.8
Sweden	18.4	1.9	4.3	26.1	16.5	2.5	-0.6	52.7
United Kingdom	13.3	0.6	2.8	18.6	7.4	1.3	1.5	38.0
United States	10.6	0.4	3.7	14.4	9.2	3.2	-2.4	29.9
Euro area	16.6	1.4	4.1	19.8	10.5	2.5	0.3	44.8
OECD <sup>1</sup>	12.5	0.9	3.7	16.9	9.3	3.7	-1.0	36.6

1. Weighted average.

Source: OECD, revised GFS (Government Financial Statistics) accounts.

Figure 19. Main components of primary general government outlays<sup>1</sup>

	General public services	Education	Housing and community amenity	Health	Pensions and welfare	Economic services and subsidies	Defence, public order and safety
Austria	3.6	5.3	0.4	5.7	18.8	3.1	0.9
Czech Republic (1997)	2.3	4.5	0.4	6.2	12.1	5.7	1.6
Denmark	4.3	6.5	2.3	5.1	18.5	5.6	1.7
France (1993)	6.3	5.9	1.3	7.1	19.6	3.1	2.9
Germany	3.8	4.5	0.8	8.0	17.4	4.5	1.4
<b>Hungary (1998)<sup>4</sup></b>	<b>7.3</b>	<b>4.4</b>	<b>0.8</b>	<b>5.2</b>	<b>12.5</b>	<b>5.4</b>	<b>1.0</b>
Italy	4.8	4.5	0.0	5.3	17.9	4.6	1.7
Japan	3.6	3.8	2.9	5.6	9.9	5.3	0.9
Korea	2.8	3.6	0.1	1.8	1.7	3.7	2.9
Portugal	6.1	5.4	0.1	4.7	12.0	6.3	2.2
Spain	8.5	4.8	0.2	5.5	14.7	5.9	1.4
Sweden	3.1	6.6	2.1	5.7	19.1	3.4	2.3
United Kingdom	2.2	4.6	2.1	5.7	13.5	3.3	3.2
United States	4.0	5.0	0.6	6.5	8.8	2.8	5.2

1. The sum of the components is not equal to total primary outlays since only the main components are shown in the graph.
2. This comparative functional decomposition of government expenditures is only available for the year 1995 for the majority of countries.
3. Expenditures by function may not add up to total expenditure as these are derived from different sources. In particular, expenditures by function refer to fiscal years and total expenditure to calendar years. Total expenditure is net of capital transfers received.
4. All the Hungarian figures except for education, health and the unemployment component of pensions and welfare come from the GFS data provided by the Hungarian Government.

Source: OECD, *National Accounts*, Social Expenditure Database, *Education at a Glance* and Survey of Current Business; Ministry of Finance of the Czech Republic; Ministry of Finance of Hungary.

capita. The often-mentioned burden of the public debt is not the only explaining factor of this weight of public spending in GDP, as confirmed by international comparisons of total and primary expenditures (Figure 17).<sup>41</sup>

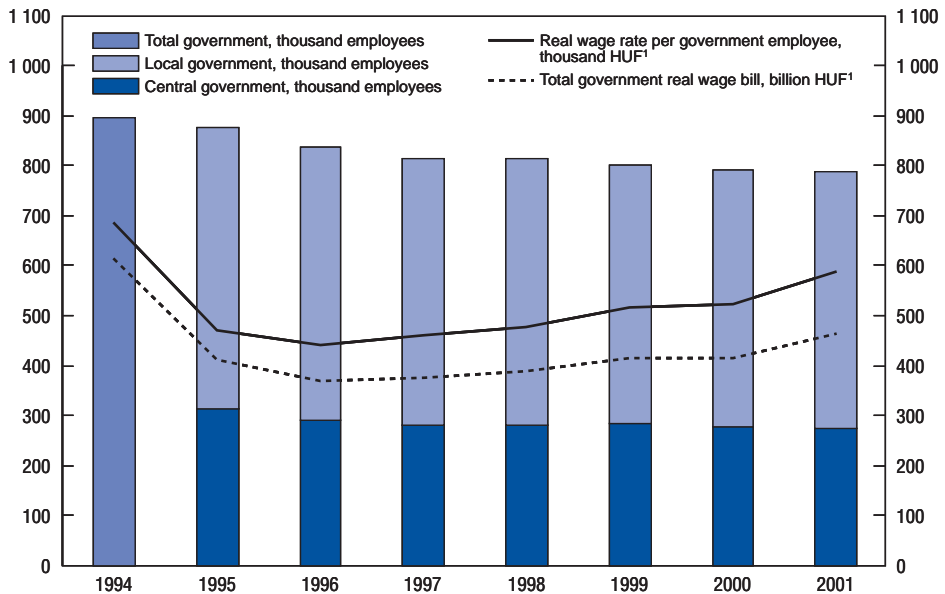
In terms of the broad picture of fiscal spending, total government outlays amounted to 48.3 per cent of GDP in 2000 and were composed of welfare transfers and subsidies (19.4 per cent of GDP), direct government consumption (19.4 per cent), investment in public infrastructure (4 per cent) and the service cost of public debt (5.9 per cent). Functionally and in international comparison,<sup>42</sup> spending items commanding a large portion of expenditures are general public services (one of the highest share in GDP among OECD countries at 7.3 per cent), subsidies to production and consumption<sup>43</sup> (5.4 per cent of GDP), while social spending in education, health and pensions, without reaching proportions attained in the top spending countries, represent also a significant share of expenditures (22.1 per cent of GDP in aggregate). The composition of expenditures resembles that of high-tax and high-spending Western European countries, hinting at additional spending pressures which may result from the increasing demand for public services with a high income elasticity<sup>44</sup> (Figures 18 and 19).

The general government has a particularly large share in total employment.<sup>45</sup> The public sector remained labour intensive through transition as a result of the combined impacts of job protection, labour market strains which were met by public sector job creation, and limits on productivity-enhancing investments, notably IT applications. These factors have been particularly acute in local governments, which are the largest public sector employers (see below). The 1995 emergency package was aimed at job cuts but ended up with drastic real wage reductions rather than widespread employment adjustments (Figure 20). The challenge now is to achieve high quality public service supply with adequately skilled and paid employees. This will require to downsize employment.

### **Budget procedures need to be strengthened further**

Hungary has made an important progress in improving the transparency and accountability of its public finance system. The budget which, at the beginning of transition had “failed to secure aggregate fiscal control and even to provide information about the ways public moneys were spent”<sup>46</sup> has been transformed, through successive institutional innovations<sup>47</sup> into a much improved fiscal management system which matches the fiscal practices of several other OECD countries. The relatively comprehensive coverage of the budget, together with clear procedures which govern its preparation, approval, implementation and audit, underlie this progress. Achievements in each area have been considerable but design features and actual practice also reveal certain shortcomings. The scope of the budget, its preparation procedures, its implementation techniques, and its auditing

Figure 20. Government employment and wages



1. Deflated by CPI, base year 1995.

Source: Central Statistical Office.

and closing principles are examined below with a view to increasing the efficiency of resource allocation and improving the room for public sector consolidation.

### Coverage and transparency of the budget

The Public Finance Act defines general government comprehensively, in accordance with international standards<sup>48</sup>. The boundaries of public finance activities included in the budget encompass the accounts of the central government, of social security funds (the health insurance and pension funds), two extra-budgetary funds (see Box 6) and local governments. Local governments have limited own revenues, are funded in a large proportion from the central budget and “shared” (redistributed) personal income tax revenues, and are responsible for carrying out most public services, while 910 central budget institutions (CBIs) and more than 13 000 local budget institutions<sup>49</sup> (LBIs) are identified and financed individually.

The budget is prepared, and its implementation monitored, in accordance with Government Financial Statistics (GFS) standards, *i.e.* on a cash basis. Additional non-cash obligations are also included in order to keep the contingent liabilities of the government under control. Notably, official loan guarantees are made subject to strict quantitative limits. Budget provision is made for calls on

**Box 6. Extra-Budgetary Funds**

The role of extra-budgetary funds (XBFs) has been considerably reduced. Their number dropped from 35 to 2 at the occasion of the 1995 reforms. In contrast to other OECD countries the pension and health insurance funds have always remained sub-sectors of the general government and are governed by the same law as the central budget, but retain an administrative identity to facilitate their multi-yearly management. The two XBFs are the Central Nuclear Financial Fund (CNFF) and the Labour Market Fund (LMF). The LMF, mainly financed by the earmarked contributions from employers and employees, provides benefits to the unemployed and is a main financial resource for implementing Active Labour Market Programs (ALMPs). Though they are subject to the same budget process and parliamentary approval as the state budget, the management of XBFs are allowed to depart from budgetary rules. Both funds are authorised to keep cash assets, cumulate them over years and may ask for liquidity loans from the Treasury; they can also carry over their total surplus between budget exercises. In fact, LMF has accumulated HUF 26.3 billion from higher than budgeted revenues and lower than budgeted expenditures in 2000 and unspent residuals from the years before 2000. XBFs are allowed to allocate spending at their full discretion and commit higher-than-budgeted expenditures if they can fund them within the stipulations of the respective laws establishing them. Due to the drastic reduction in their number, however, present XBF expenditures account for no more than 1.2 per cent of total government spending.

these guarantees. There is an overall ceiling to the total amount of cover given to individual enterprises in terms of a percentage proportion of total budget expenditures, and a ceiling in nominal forint terms for government financial institutions such as Eximbank, the Export Credit Guarantee Institution, the SME Credit Guarantee Institution, the Rural Credit Guarantee Foundation and the Hungarian Development Bank. Budget provisions for government financial institutions are made on a risk-weighted, actuarial basis, based on confidential risk analyses, while expected call rates on guarantees are published. The overall ceiling on individual guarantees which was set at 2.2 per cent of budget expenditures in law, was raised to 3 per cent via an amendment to the budget law of 2001 in December 2001 – mainly in order to support large sport infrastructure projects.

The guarantees to the SME financing activities may cover up to 90 per cent of SME credit risks in selected commercial loans. Additional guarantees were made available to the Hungarian Development Bank, under separate limits granted under the 2001 budget amendment, for its motorway financing activities which have limited reimbursement prospects (see below). The central government also covers the loans extended in Hungary by international public financial



institutions. At the end of 2001, the outstanding amount of individual guarantees was almost HUF 170 billion (1.1 per cent of GDP), the outstanding amount of all guarantees reaching HUF 803 billion (5.2 per cent of GDP).<sup>50</sup> Some of the recently extended guarantees may worsen the quality of the guarantee portfolio which was, traditionally, conservatively managed. If the new risks prove higher than those of the traditional guarantees, budget provisions would need to be increased (Table 18).

The expenditures and liabilities of the government-owned financial and non-financial institutions constitute the single most important soft spot in the coverage and transparency of the general government accounts. Privatisation has narrowed down this sector and has curbed the scope for policy driven spending by such organisations.<sup>51</sup> In addition, explicit government guarantees and counterguarantees to this sector are capped. Still, recent developments point to persisting and in certain instances growing resource commitments by off-budget quasi-fiscal entities. They are limited in number but each of them has become very active. The most important cases are:

- the state holding company APV, which is in charge of privatisation but continues to run a large portfolio of companies where it reinvests its privatisation income;
- the Hungarian Development Bank (MFB), which finances the motorway development programme but also invests in a range of low revenue companies; and
- the state railway company MAV which invests, including via direct borrowing, 0.3 per cent of GDP per year, while running recurrent operating losses (which approached 1 per cent of GDP in some of the previous years and amounted to 0.2 per cent of GDP in 2001).

There are also off-budget municipal holdings and utility companies, active in a wide variety of areas including housing, many of which accumulate operating losses.

In principle, GFS methodology includes the reporting of policy loans as budget spending, but this does not apply to loans by off-budget institutions.<sup>52</sup> Only direct government transfers to APV are included in the budget, but APV's own activities are only reported in a regular annex to the overall budget report. Its full revenues, expenditures and deficit, which are quasi-fiscal, are transparent but not integrated in the general government accounts. As *transfers, guarantees and counterguarantees* granted by the budget to these government financial institutions do not delineate their actual spending – they have significant own revenues and can borrow and spend on their account – it is justified to include their policy-driven expenditures, revenues and deficits in the budget after netting out their mutual transactions (Table 19). The Public Finance Act has been amended in 2001,

Table 18. Growth and risks of loan guarantees

	Liability ceiling <sup>1</sup> (HUF billion)		The use of liability ceiling <sup>1</sup> (HUF billion)		Risk (estimates, per cent)		Value at risk (HUF billion)	
	1998	2001 <sup>2</sup>	1998	2001 <sup>2</sup>	1998	2001	1998	2001
<b>Individual guarantees</b>								
Within per cent limit	28	135.2	25.6	106.9	30		40	
Beyond per cent limit	16	67	37	114.8	5		1.8	
<b>Guarantees to activities of specific institutions</b>								
MFB – Hungarian Development Bank	80	480	50	124.5	5		2.5	
Eximbank	75	185	50	133.7	7		3.5	
MEHIB – Export-import insurance company	185	250	110	74.8	8		8.8	
Hitelgarancia RF- Credit Guarantee Company	55	150	42	109.4	5		1.0	
Rural Credit Guarantee Foundation	33	45	10	11.4	5		0.5	
<b>Guarantees to International Financial Institutions</b>	Unlimited	Unlimited	Unlimited	181.8				
<b>Total</b>	472	1 312.2	324.6	857.3				

1. The total amount of new guarantees issued in respective years in case of *individual guarantees*, the total outstanding amount of guarantees as of year-end in case of *Guarantees to activities of specific institutions*.

2. 2001 figures are as of Budget Amendment.

Source: Hungarian authorities, Polackova *et al.*

Table 19. Expenditures of selected state-owned companies

	MAV <sup>1</sup> 2000	MFB <sup>2</sup> 2000	APV <sup>3</sup> 2001 plan	Total
Expenditures, HUF billion	201.4	319.9	100.5	621.8
Proportion of general government current expenditure in 2000, per cent	3.7	5.8	1.8	11.3
Proportion of general government investment in 2000, per cent	36.9	58.6	18.4	113.9
Proportion of GDP in 2000, per cent	1.5	2.4	0.8	4.8

1. Direct costs and other expenses.

2. Change in equity investments, amount of loans and other assets.

3. Investment activity, reorganisation and operational costs.

Source: OECD.

mandating that these units provide budgetary authorities with a quarterly report compatible with ESA 95 principles. The Ministry of Finance is authorised to designate by decree the entities subject to this obligation and to fix the scope of reporting. There appears to be some resistance to this new reporting principle and practice will reveal the efficacy of this amendment.

Another weakness of the GFS based government accounts is the lack of a depreciation account; consequently the depletion of the public capital stock is not measured. General government investment is reported on a gross basis, and therefore includes the corresponding amount of depreciation, but current spending is reported at a lower level. Actual depreciations which are lost from sight have been estimated at above 4 per cent of GDP yearly.<sup>53</sup> This imperfect accounting for depreciation makes the constitution of capital reserves more difficult and appears as an additional source of strain in the maintenance and management of public capital stock<sup>54</sup> – an important issue today.

The Ministry of Finance has initiated work for preparing accrual-based accounts.<sup>55</sup> The main differences in Hungary between cash- and accrual-based accounts concern: *i*) unspent reserves transferred between budget exercises and accruing partly in the year of origin; *ii*) accrued but not entirely collected tax revenues;<sup>56</sup> *iii*) accounts payable by central and local budget institutions; *iv*) interest accruing on public debt; *v*) social security contributions of government employees (accruing both as government expenditures and revenues, while they are netted out in cash-based accounts); and *vi*) debt assumption over financial and non-financial institutions (which does not show up in cash accounts). Accrual-based accounting generally leads to a mark-up of expenditures, and the mark-up is likely to be significant in Hungary (Table 20). This technique is only partly applied in other OECD countries; still it would contribute highly to the content of government accounts.<sup>57</sup>

Table 20. **Differences between cash and accrual-based accounts**  
As per cent of GDP

	2000			2001			2002		
	Cash-based GFS <sup>1</sup>	Accrual-based SNA <sup>2</sup>	OECD adjusted <sup>3</sup>	Cash-based GFS <sup>1</sup>	Accrual-based SNA <sup>2</sup>	OECD adjusted <sup>3</sup>	Cash-based GFS <sup>1</sup>	Accrual-based SNA <sup>2</sup>	OECD adjusted <sup>3</sup>
Total revenues	43.0	45.9	44.5	41.7	43.4	44.0	38.5	42.0	43.8
Primary revenues	42.1	45.2	43.1	41.1	43.0	42.9	38.1	41.7	43.0
Total expenditures	46.4	48.9	47.5	45.1	47.7	49.1	41.7	45.5	49.3
Primary expenditures	40.3	43.0	41.7	40.1	42.6	44.2	37.3	40.9	44.6
General government balance	-3.1	-3.1	-3.0	-3.4	-4.3	-5.2	-3.2	-3.5	-5.5
Primary balance of the general government	2.2	2.2	1.4	1.0	0.4	-1.3	0.8	0.8	-1.6

1. Official data, Ministry of Finance.

2. ESA 95 estimation of the Pre-Accession Economic Programme.

3. These estimates consolidate certain off-budget expenditures and adjust some cash items into accruals; see Box 1 on the details of methodology.

Source: OECD.

Table 21. Tax expenditures<sup>1</sup>

	1997		1998		1999		2000	
	HUF billion	Per cent of GDP	HUF billion	Per cent of GDP	HUF billion	Per cent of GDP	HUF billion	Per cent of GDP
1. Personal income tax	200.5	2.3	283.3	2.8	253.1	2.2	267.8	2.0
<i>of which:</i>								
Employee tax credit	131.2	1.5	154.3	1.5	75.4	0.7	78.4	0.6
Investment incentives	8.4	0.1	11.6	0.1	3.4	0.0	2.9	0.0
Mutual savings	13.7	0.2	21.0	0.2	25.4	0.2	7.6	0.1
Pensions	29.8	0.3	75.6	0.7	91.7	0.8	104.3	0.8
Contribution	0.0	0.0	35.8	0.3	49.1	0.4	55.5	0.4
Benefits	29.8	0.3	39.8	0.4	42.6	0.4	48.8	0.4
Insurance premium	5.8	0.1	7.5	0.1	9.5	0.1	11.9	0.1
Tax paid abroad	3.8	0.0	5.4	0.1	6.6	0.1	9.1	0.1
Tuition in higher education	1.4	0.0	1.4	0.0	1.4	0.0	1.9	0.0
Housing repayments	1.0	0.0	1.2	0.0	1.6	0.0	2.2	0.0
Savings for housing	0.2	0.0	0.2	0.0	0.2	0.0	0.2	0.0
Disability credit	1.0	0.0	1.3	0.0	1.3	0.0	1.4	0.0
Donation for public purposes	0.8	0.0	0.7	0.0	0.7	0.0	0.8	0.0
Farmers credit	0.8	0.0	0.8	0.0	0.4	0.0	0.5	0.0
Commercial loan	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Intellectual activity	2.5	0.0	2.2	0.0	2.0	0.0	1.9	0.0
Family credit	0.0	0.0	0.0	0.0	33.3	0.3	44.8	0.3
2. Corporate income tax	64.8	0.8	94.6	0.9	90.2	0.8	101.4	0.8
<i>of which:</i>								
Tax credit to joint ventures	39.0	0.5	48.7	0.5	39.8	0.3	38.7	0.3
Interest payments on loans	1.0	0.0	0.5	0.0	0.2	0.0	0.1	0.0
Tax credit authorised individually by government	15.5	0.2	20.2	0.2	8.1	0.1	7.9	0.1
Tax credit to investments over HUF 1 billion	1.6	0.0	10.1	0.1	15.6	0.1	18.7	0.1
Tax credit to investments over HUF 3 and 10 billion	0.0	0.0	n.a.	0.0	5.5	0.0	9.6	0.1
Tax credit to selected regions	3.5	0.0	4.1	0.0	3.9	0.0	6.3	0.0
Tax credit to enterprise zones	0.1	0.0	0.2	0.0	0.2	0.0	0.2	0.0
Tax credit on membership due in trade chamber	0.0	0.0	0.5	0.0	0.6	0.0	0.4	0.0
Tax exemption on non-profit organisation	0.3	0.0	0.8	0.0	1.8	0.0	0.6	0.0
Tax paid abroad	0.1	0.0	0.1	0.0	0.5	0.0	0.1	0.0
Other tax credits	3.7	0.0	9.4	0.1	13.9	0.1	18.8	0.1
Total tax expenditure excluding VAT	265.3	3.1	377.9	3.7	343.3	3.0	369.2	2.8

1. The figures are derived from declaration of tax paid. Thus they do not include tax-exempted income and income subject to the preferential rates.

Source: The Hungarian tax collection agency.

Table 22. **State aids**<sup>1</sup>

	1993	1994	1995	1996	1997	1998	1999	2000
	Per cent of GDP							
<b>General government</b>	<b>5.9</b>	<b>7.0</b>	<b>6.0</b>	<b>5.9</b>	<b>5.2</b>	<b>7.6</b>	<b>7.2</b>	<b>7.4</b>
<b>Central budget</b>	<b>3.4</b>	<b>4.0</b>	<b>3.5</b>	<b>3.3</b>	<b>2.9</b>	<b>3.3</b>	<b>4.0</b>	<b>4.7</b>
<i>of which:</i>								
Agricultural subsidy	0.0	1.7	1.3	1.3	1.0	1.1	1.2	n.a.
Railway production subsidy	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.5
Indirect subsidies to households	0.9	0.8	0.8	0.8	0.8	0.7	0.8	0.6
<i>of which:</i>								
Railway transport	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Long-distance bus	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Local transport	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Interest subsidies via banks	0.3	0.1	0.2	0.1	0.1	0.0	0.0	0.0
Capital transfers to enterprises <sup>2</sup>	0.1	0.2	0.3	0.6	0.4	1.8	0.9	1.9
<b>Extra-budgetary funds</b>	<b>0.5</b>	<b>0.9</b>	<b>0.5</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>
<b>Social security funds</b>	<b>1.5</b>	<b>1.6</b>	<b>1.5</b>	<b>1.5</b>	<b>1.4</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>
<i>of which:</i>								
Medicine subsidies	1.4	1.4	1.3	1.2	1.2	1.2	1.2	1.2
<b>Local governments</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
<b>APV</b>				<b>0.6</b>	<b>0.3</b>	<b>0.4</b>	<b>0.8</b>	<b>0.4</b>

1. State aid includes the capital transfers which are recorded as capital outlays in the SNA.

2. Capital transfers to enterprises in 1998 include the capital injection of HUF 132 billion to Postabank.

Source: Ministry of Finance.

To improve the transparency of the budget, additional information is provided on tax expenditures at the end of the budget year, a feature not available in many OECD countries. This is an *ex post* report however, and *ex ante* expenditure estimates are not completely included in the draft budget. The draft budget contains a list of allowances and exemptions from corporate and personal income taxes (Table 21).

State aids have been made transparent following a European Union recommendation. Information is reported on an ex-post basis and shows the large share of transport and pharmaceutical subsidies.<sup>58</sup> The continuing significance of capital transfers (equity investments) in government-controlled enterprises is also noticeable (Table 22).

### ***The preparation of the budget***

After successive reforms, budget preparation now follows a rigorously defined schedule (Box 7).

### Box 7. The schedule of budget preparation

The budget preparation for the following year begins with the Minister of Finance issuing, *by mid-April*, guidelines which include “spending and deficit targets as a proportion of GDP” for the budget year, together with background forecasts for the following two years. These guidelines are adopted by the government *by mid-May*,<sup>1</sup> before line ministries submit their budget requests to the Ministry of Finance *during the summer months*. The Ministry of Finance evaluates and negotiates them bilaterally with the line ministries before submitting a draft budget to the cabinet *by end-August*. The cabinet considers and approves the draft budget and submits it to the Parliament *by end-September*. The volume budgets of line ministries, in 28 chapters, together with a “three years prognosis” outlining forecasts for the following two years are formally submitted (although actual discussion begins earlier) to the Parliament *by mid-October*. The main fiscal aggregates and the budget chapters are first approved by a parliamentary resolution in *November*, before details are discussed and the final central government budget is voted normally by the end of the year.<sup>2</sup> It is only at this stage that local government budgets, funded more than half by the central budget, are finalised and voted by municipal councils *by end-March* – three months into the year they apply to. Local budgets include varying amounts of own revenues, including local taxes, service fees, asset sales and bank borrowing, which is capped by municipal law.<sup>3</sup> Given these additional revenue sources, expenditures of local budgets may exceed the amounts forecasted in the general government budget. Furthermore, once they are voted by local bodies, the central government and Parliament have no leverage on them, so that genuine expenditure control problems can arise at the tail end of quite an intensive process. The Act on Public Finances also authorises budget procedures’ taking place once every two years, leading to a bi-annual budget as was the case in 2001-02.

1. June in election years. Most recently the budget guidelines have not been endorsed by Parliament but were approved only by the government.
2. If the budget is not voted by end-December, the Minister of Finance establishes interim limits on expenditures on the basis of budget appropriations of the previous year.
3. Municipalities are authorised to borrow yearly up to 70 per cent of their net (after interest payments) own revenues.

A distinct feature of this finely orchestrated<sup>59</sup> process is the low-key political character of the initial budget outlines. This document, which sets the stage for the entire three-year period is prepared in reference to the government programme but is not backed formally by a visible and binding policy statement.<sup>60</sup> The basic objectives of public spending remains therefore inarticulate and/or implicit. The low-key character of the procedure may be functional in certain respects, as it

preserves a room of manoeuvre for subsequent budget negotiations within the government and Parliament. However, it also amounts to a lack of strong prioritisation as a disciplining strategic framework.

Lack of strategic foundation for the guidelines is accentuated by the non-binding character of the three-year (budget year plus two following years) framework which accompany them. This three-year framework constitutes an important innovation introduced in 1997, which potentially provides a strategic perspective to the budget. However, it is of little or no practical importance in the budget process. The three-year outline issued in April is not binding for the “three year prognosis” formulated in October. In the recent past, there have been important differences between the two which have been little noticed and discussed, as these frameworks are anyway perceived as not operational.<sup>61</sup> Such a status is not supportive of a strategic approach, where important shifts in public expenditures can successfully be introduced only in a multi-year framework.<sup>62</sup>

The acquired legal rights of beneficiaries make the multi-year forecasts particularly important. Entitlements under the social security system generate the so-called “mandatory expenditures”, which are a formal contingent liability of the government for the years to come, and constitute in principle an exogenous constraint on future budgets in the absence of amending legislation.<sup>63</sup> The expected expenditures of social security (pension and health) funds can then be calculated in a long time horizon, with the help of well-developed models which are also available in Hungary. However, the government happens to add additional elements to parametric formulas year after year, as has been the case with the calculation of pension benefits,<sup>64</sup> of health benefits<sup>65</sup> and of pharmaceutical consumer subsidies.<sup>66</sup> Such year-on-year changes transform “mandatory expenditures” into actually “discretionary” spending between budget exercises. This change of status facilitated their upward drift in the past – with the notable exception of 1995 where benefit parameters were radically revised downward. Multi-year budget frameworks would made discretionary variations in benefits less likely, while allowing upward adjustments in accordance with improving economic circumstances or an explicit change in priorities.

In 2000 the government introduced a two-year budget voted as an integrated package by the Parliament, to be applied in 2001-02. This exercise turns the second year of the three-yearly budget projections into actual appropriations, and may in principle be seen as a step toward multi-year budgeting. However, actual practice did not fully bear this out. Multiple departures from the 2001 budget law (Chapter II) tended to erode the practical relevance of the second year draft. The transparency was also reduced in the first year by the growth of off-budget activities, amendments and spending drift. Although the 2001 budget law could be amended in the framework of the Report on the Fulfilment of the Annual Budget Law of 2000, the absence of a fully-fledged budget discussion at the end



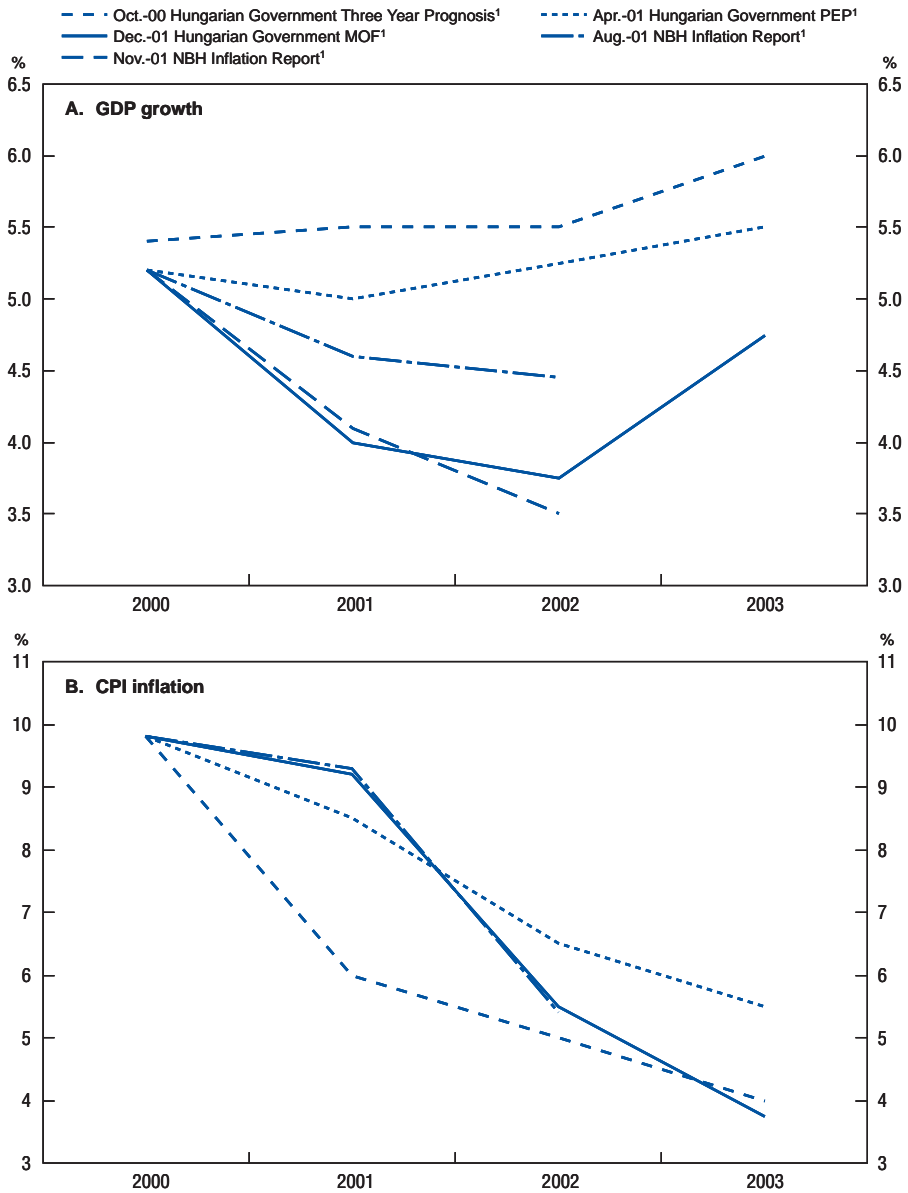
of 2001 raises concerns about the loosening of the legislative control over budget formation and execution.

Another source of weakness in the budget preparations is the fact that macroeconomic assumptions underlying the budget are not thoroughly examined and debated, both by the public opinion and the Parliament. They exist in draft budget documents but may prove overly optimistic, as they did in several OECD countries in 2000-02. The sensitivity of fiscal outcomes to domestic and international economic developments is not studied in detail as an input to budget discussions.<sup>67</sup> For example, had such a sensitivity analysis been discussed, the fiscal impacts of the ongoing domestic and international downturn could have been better gauged. Short and medium-term budget projections – those included in the domestic budget documents as well as projections submitted to the European Union partners in the context of accession talks – would then have included alternative scenarios closer to more recent forecasts (Figure 21).<sup>68</sup>

Introducing cyclically-neutral (structural) fiscal objectives and targeting spending objectives in volume independently from the cycle, while letting the automatic stabilisers determine actual government revenues and deficits, might in principle help better address macroeconomic uncertainties. This approach may necessitate more macroeconomic information than presently available; notably on the potential growth rate of the economy and the revenue and expenditure elasticities of the budget to GDP growth. The post-transition Hungarian economy has not yet gone through an entire economic cycle so that the required empirical background information is limited. Still, developing this approach, even tentatively, and making the information on the structural and cyclical assumptions of budget forecasts public should be technically in reach today (see Chapter I).

Another specific feature of budget preparation in Hungary has shorter-term consequences: Budget preparations are focused on the general government deficit *as a percentage share of actual GDP*, and, secondarily, on expenditure objectives *as a percentage share of actual GDP*. Such benchmarks permit updrift in the actual volume of revenues and expenditures when growth and inflation are higher than predicted – as long as percentage targets for the deficit are respected.<sup>69</sup> Notably, inflation windfalls have been a systematic source of additional revenues and expenditures in past budget exercises, usually of more than 1 per cent of GDP. The spending autonomy granted to central and local budget organisations, which are authorised to spend unplanned increases in their revenues, goes in the same direction.<sup>70</sup> If “windfall revenues and spending” reach certain thresholds, *ex post* budget amendments become necessary, but the Parliament approved them in the past as long as *percentage deficit targets were met*.

Figure 21. **Macroeconomic assumptions of budget forecasts**



1. The projections are the midpoints of the given range.

Source: Ministry of Finance (MOF); National Bank of Hungary; OECD; Pre-Accession Programme of the Republic of Hungary (PEP), April 2001.

### *The implementation and control of the budget*

Once the budget is voted, actual spending is carried out under the surveillance and operational management of the central Treasury. The Treasury was reorganised in 2001 into a Public Finance Office (PFO) and a Cash Management Office (CMO) reporting to the Minister of Finance.<sup>71</sup> The PFO records all budget appropriations, proceeds to the planned disbursements, and check the compliance of operations with budget law and rules. It also enforces the proper application of public tender laws to the procurement of goods and services.

Most importantly, the CMO executes a corporate-type cash-management and treasury function, with monthly surveillance of the departures from planned cash-flows. It signals any unplanned drifts to the Minister of Finance who sets forward proposals to the government to tackle them by immediate cuts and freezes in discretionary expenditures. If such reductions reach more than 10 per cent of the appropriations concerned or 0.1 per cent of the total budget, the government has to *report* to the Parliament about them. If this does not suffice to ensure the achievement of the approved budget *balance*, a supplementary budget proposal becomes necessary. If the target *balance* is preserved however, no such action is needed. If overspending concerns mandatory expenditures (in pensions and health-related obligations for instance, where overspending has been frequent), parliamentary approval is not necessary.

Overall, this centralised system proves effective in the attainment of the deficit targets, but less so in the enforcement of budgeted revenue and expenditure volumes. The Public Finance Office has no authority to control the expenses of the local governments which are partly financed from local revenues, but can only check the proper utilisation of central government grants and territorial tax equalisation transfers. As central transfers represent up to 70 per cent of all municipal revenues, these rules give nevertheless a wide room for scrutiny to central authorities. From 2002, the PFO has also been authorised to control *ex ante* the regularity of the local government demands for Central Government transfers. The State Audit Office monitors the adherence to the legal borrowing caps by local governments (see below).

Tax revenues of municipal governments increased from a low base (Table 23), but the rise has been constrained by that of taxable incomes (and the readiness to pay more taxes) of local constituencies, and by some emerging competition between municipalities to attract mobile business investments.<sup>72</sup> Asset sales and service concession revenues, which topped-up municipal incomes by as much as 10 per cent in the late 1990s, have come down, as marketable assets diminished and municipalities are banned from privatising the capital stock needed for “core services” (such as hospital and school buildings). In 2001 privatisation proceeds represented only 2.3 per cent of local revenues.

Table 23. **The growing role of local taxes**  
Local government revenues by source as a percentage of total local revenues

	1995	1996	1997	1998	1999	2000	2001 <sup>1</sup>
<b>Shared taxes</b>	<b>12.2</b>	<b>11.3</b>	<b>12.0</b>	<b>14.0</b>	<b>13.7</b>	<b>15.5</b>	<b>16.0</b>
PIT	11.9	10.5	11.3	13.4	12.8	14.6	15.2
Vehicle tax	0.3	0.7	0.7	0.7	0.8	0.8	0.7
Tax on land leasing	0.0	0.0	0.0	0.0	0.1	0.1	0.1
<b>Own current revenues</b>	<b>19.4</b>	<b>24.7</b>	<b>26.8</b>	<b>29.4</b>	<b>30.8</b>	<b>30.8</b>	<b>31.2</b>
Local taxes	4.9	8.4	9.3	10.9	13.2	13.4	14.3
Fees and charges	1.5	1.6	1.5	1.6	1.6	1.8	1.8
Fines	1.1	1.2	1.7	1.8	1.7	1.9	1.5
Interest income	1.4	1.7	2.8	2.6	2.1	1.8	1.3
Own revenues of LBl's	8.7	8.4	8.0	8.5	8.3	8.0	8.2
Others <sup>2</sup>	0.9	3.3	3.5	4.1	3.7	3.9	3.7
<b>Capital revenue</b>	<b>11.5</b>	<b>12.4</b>	<b>15.4</b>	<b>9.0</b>	<b>8.6</b>	<b>10.9</b>	<b>10.1</b>
Sale of real assets	5.5	4.5	4.3	3.8	4.0	4.6	4.1
Privatisation	3.3	4.9	7.5	1.4	1.5	2.2	1.1
Accumulated revenues	2.7	3.0	3.6	3.7	3.1	4.1	4.9
EU transfers	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Grants and transfers</b>	<b>37.8</b>	<b>33.8</b>	<b>29.0</b>	<b>30.3</b>	<b>30.0</b>	<b>25.9</b>	<b>27.0</b>
Normative grants	29.4	24.1	21.5	20.2	19.2	15.9	16.2
Normative subsidies for fixed purposes	0.0	0.8	1.0	1.4	2.0	3.8	3.5
Theatre grants	0.3	0.4	0.4	0.4	0.4	0.3	0.3
Grants to disadvantaged localities	0.9	0.6	0.6	0.6	0.8	0.8	0.8
(Centrally appropriated) other assistance	4.1	5.5	2.4	4.0	3.9	1.0	1.6
Addressed and targeted grants	3.1	2.4	2.6	2.6	2.6	2.9	3.7
Grants for regional equalisation	0.0	0.1	0.6	0.8	0.6	0.6	0.5
Targeted, decentralised grants	0.0	0.0	0.0	0.2	0.5	0.6	0.4
<b>Specific grants</b>	<b>17.4</b>	<b>17.6</b>	<b>16.8</b>	<b>17.2</b>	<b>17.0</b>	<b>16.9</b>	<b>15.7</b>
Social security assistance	16.1	15.4	14.0	14.2	14.1	13.9	13.1
Extra-budgetary fund transfers	0.4	1.3	1.8	1.9	1.8	1.5	1.0
Funds from central budgetary organs	0.8	0.8	0.9	1.0	1.1	1.5	1.5
Other budget supplements	0.2	0.1	0.1	0.1	0.0	0.0	0.1
<b>Total revenues (GFS basis)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Share of local government tax revenues in total general government revenues</b>	<b>7.2</b>	<b>8.0</b>	<b>8.9</b>	<b>9.9</b>	<b>10.4</b>	<b>10.7</b>	<b>n.a.</b>

1. Based on the preliminary budget figures.

2. Includes value-added tax revenues from the sale of local government services, and revenues originating outside the government sector.

Source: Ministry of Finance.

Local governments have not yet made full use of their – rather strict – borrowing rights (Box 8). The municipal credit market has grown more slowly than in other countries in the region. Beyond limited available funds from the financial market – *i.e.* banks' and capital markets' reluctance to lend to municipalities in the absence of central government guarantees – the availability of other funding

**Box 8. Borrowing rules for local governments**

Between 1990 and 1995 there were no formal rules concerning local government borrowing. In 1995, three villages were in default due to over-borrowing. In response, three separate acts were passed, creating a comprehensive legal framework on local government debt:

- i) Debt service limits for local governments were integrated into the Local Government Act in 1996. Annual debt service is limited to “corrected own revenues”, *i.e.* to 70 per cent of own local revenues subtracting the amount of short-term liabilities. Assets and revenues sources which may not be used to secure loans or bonds include: primary assets, normative grants, share of personal tax other state contributions, revenues received from state budget.
- ii) The Local Government Bankruptcy Act of 1996 sets out the rules for restoring the ability to pay of local governments while providing effective legal protection to creditors. This sophisticated act explicitly waived all central government guarantees to municipal borrowing and prescribed bankruptcy procedures in case of defaults.
- iii) Financial transparency and reporting requirements to accompany the issuance of municipal bonds were included in the Securities Act.

sources also constrained this market. Today these alternative funding sources (including cheaper alternative sources from local privatisation revenues, central government grants, and, to a lesser extent, interest free loans and interest rate subsidies from the central government) are in decline and increased banking competition has led the commercial banks to prospect the municipal market actively. It is important that borrowing remains proportional to the ability of local governments to generate additional revenues. As long as links of additional funding to local economic activity and output are secured, further investment would contribute to local development. From the viewpoint of the general government budget however, this may add to spending pressures and weaken overall fiscal restraint.

As a result of recent housing policies (see Chapter II), new borrowing by municipalities for housing development purposes has been freed from borrowing caps. Municipalities have created local holdings and utility companies, including in the area of housing and other public services, whose revenues and expenditures are off-budget and therefore outside general government accounts. When such companies governed by commercial law can finance themselves on capital markets, they tend to develop their expenditures freely. According to one estimate, they are expected to initiate projects worth up to 2 per cent of GDP in

early 2000s.<sup>73</sup> On the other hand, they are not subject to public procurement rules and local governments can be easily tempted to grant less competitive market conditions to local utilities in order to attract private investors.<sup>74</sup> These developments are not fully monitored at present.

The most limiting aspect of the present budget implementation system is the quasi-exclusive focus of treasury controls on the conformity of spending to *legal and procedural rules*. Appropriations are laid out in detail in budget documents, and the PFO and CMO focus on their actual disbursement in stated uses. There is no checking mechanism in the system scrutinising that expenditures cater efficiently to their objectives – or that services are provided in the technically most effective ways. Spending agencies, either line ministries or central and local budgetary institutions, receive a rather free hand in determining their “technologies” and organisations as long as these conform to legislated appropriations. Most often these are inherited from past exercises and reflect older organisational and supply structures.

This “input focused” approach to budget controls, which takes the existing supply organisations and their efficiency as given, contrasts with a “task focused” approach, which would target the outcomes of public services in terms of service availability and user benefits, and would seek to attain the most efficient ways for their delivery. The reliance of actual practices on the first approach is epitomised by the fiscal management of municipalities, which offer the bulk of public services. In the early transition, and in the wake of efforts to develop local democracy,<sup>75</sup> municipalities throughout the country were vested with a large range of responsibilities to provide services in sectors as diversified as education, health, social assistance, water treatment, waste management etc. The funding of services was assured through central government grants (see Box 9).

The present local government system consists of a large number of very small municipalities. Their average size is 3 000 and their median size 1 000 residents.<sup>76</sup> Even if Hungary is not unique with respect to the small size of municipalities,<sup>77</sup> its specificity is that these are vested with a very large number of tasks in comparison to their size. Serious questions then arise on the capacity of local governments to carry out these tasks efficiently. Beyond the problem of general managerial capabilities, they cannot cultivate any actual competition between alternative service units<sup>78</sup> and cannot practice any benchmarking between the quality and costs of services by different providers. The Local Government Act incorporates a chapter allowing local governments to create joint service supply organisations, and a new Act on Municipal Associations and Inter-Municipal co-operation was passed in 1997, but actual incentives are limited for such co-operation.<sup>79</sup>

The potential role of “counties” (the traditional intermediary layer between the central and local government) in public service provision may

### Box 9. Central funding grants for local service provision

Following transition, the older 20 "county governments" have lost their prerogatives and municipalities have inherited very wide public service responsibilities (Table 24). The Local Government Act of 1990 mandated the central government to contribute to funding the costs of provision of these services.

Table 24. Service responsibilities of local governments

	Nordic countries	Southern Europe <sup>1</sup>	Hungary
Kindergartens	X		X <sup>2</sup>
Primary education	X		X <sup>2</sup>
Secondary education	X		X
Daily child care	X		X <sup>2</sup>
Health	X		X <sup>2</sup>
Social welfare	X		X <sup>2</sup>
Public safety	X		X
Public lighting	X	X	X <sup>2</sup>
Roads	X	X	X <sup>2</sup>
Water	X	X	X <sup>2</sup>
Sewerage	X	X	X <sup>2</sup>
Garbage collection	X	X	X
Fire protection	X		X
Parks and recreation	X		X
Cemeteries	X	X	X <sup>2</sup>
Housing	X	X	X
Minority rights			X <sup>2</sup>

1. For municipalities below 5 000.

2. Indicates compulsory.

Source: World Bank, 2000.

The most important transfer types are the so-called *normative grants*. They contribute to the performance of local services according to elaborate service cost and service need formulas. There are 20 broad categories within the normative grant system, including entitlements such as child protection, housing services, basic healthcare services, tourism, institutions for the homeless, etc. Each category is broken down into numerous sub-categories. For example, the size of a normative grant for primary education differs by the facilities and services available in school buildings, the proportion of ethnic minority members or handicapped persons in the population, etc. The formulas determining the grants are subject to annual discussions within the budget process. These normative grants account for 60 per cent of total government transfers to municipalities; some grants fund the full costs of provision of services, but generally they co-fund the costs for 60-70 per cent while the municipalities provide the remaining top-up.<sup>1</sup> A characteristic of normative grants has been the possibility of their re-allocation, by local governments, to other than originally intended purposes, a practice conflicting with the objective of earmarking central government transfers for priority areas.

Box 9. **Central funding grants for local service provision** (*cont.*)

*Specific grants* are less extensive and are not automatically granted. They are allocated on a more *ad hoc* and discretionary basis and come in two categories. *Specific grants allocated under normative rules* are dedicated to service areas. They are provided for instance for water purification, additional primary school services, hospital equipment, waste water collection etc. *Specific grants distributed on an individual basis* are allocated to specific projects approved by line ministries. They have recently financed many local economic development projects (such as tourism infrastructures). They also include the so-called “*grants for disadvantaged localities for reasons beyond their control*” which are offered to low-income local governments which lack sufficient revenues for the performance of their daily tasks.

1. The co-funding by municipalities was intended to add an incentive for cost-effective service supply by local governments. In practice, however, this incentive seems to have remained relatively weak.

deserve a re-examination. The counties do not have local tax authority and do not receive a share of the personal income tax. As a result, they are almost wholly dependent on the central government for financing. On the other hand, their tasks partly depend on decisions made by local governments. If a municipality is not able to finance secondary and vocational educational institutions, or a health care institution, it may transfer, at its own discretion, its responsibility to the county. The county then receives the associated normative grants, but only following the opt-out by the local government.<sup>80</sup> The lack of an effective intermediary level between the central government and municipal levels appears as a structural problem in service supply because it limits the room for consolidation, scale economies, competition and quality and cost benchmarking between alternative service units.

### **Reporting, auditing and closing of the budget accounts**

Strict rules of reporting, auditing and closing of budget accounts are defined by the Public Finance Act, independently from imperfections concerning the coverage and implementation of the general government budget. Final accounts for the central government, social security funds and extra-budgetary funds are presented to the Parliament within eight months of the year-end. They are audited by the State Audit Office (SAO) which has two months to give its opinion about these reports. During the year, monthly reports covering the central, social security and extra-budgetary accounts (but not of local governments) are



sent within one month of month-end by the Ministry of Finance to the State Audit Office, the Government Control Office (GCO) and Parliamentary Budget Committee.

The GCO, operating under Prime Minister's office, effects internal audits and controls within the government, and verifies the effective workings of the control and audit units of the central budget organisations. The SAO is an independent constitutional agency. Its chairman and two vice-chairmen are appointed by Parliament for 12 years, and decide themselves their auditing priorities and programme. The *ex-post* audits of the SAO can cover any area with an incidence on the state budget, including the accounts of the central government, social security funds, extra-budgetary funds, transfers to local governments as well as the economy of local governments. In case of the more than 3 000 local governments the frequency of the SAO audits is varying, the audit of local governments with significant budgetary contacts takes place every second or third year while the smaller ones are audited less frequently.<sup>81</sup> The SAO also conducts *ex ante* audits, by reporting to Parliament on the reasonableness of budget law projections and the feasibility of revenue forecasts. The SAO makes all its reports public<sup>82</sup> and, when it detects irregularities and if the character of these irregularities is such, it will initiate the judicial declaration of responsibility in each case.

The SAO is a credible and well-functioning agency, its main strength being *ex-post* legal, regularity and expediency audits. To its credit, it also detected unrealistic budget forecasts such as the underestimation of health spending projections in the 2001-02 budget. Its contributions can be reinforced by an extension of the Agency's rights and resources to cover local government accounts and to carry out task-oriented (functional) audits. One contribution in the area of functional audits was its inquiry into the inefficiencies of public debt management, which subsequently led to the creation of a specialised agency.<sup>83</sup> Since functional audits in big cost items such as education and health require several years to complete with SAO's "bottom up" approaches, the agency has not undertaken such inquiries in practice.

### **The challenges of reallocating resources in a medium-term perspective: the case of infrastructures**

The characteristics of budget institutions described above make substantive reallocations of resources in the budget system tricky. The low-key status of strategic policy orientations, and the lack of medium-term frameworks in the mainstream budget process,<sup>84</sup> in order to provide strategic focus for step-by-step shifts in spending composition (in progressive and politically acceptable ways) seem to make change more difficult. This inertia of expenditure composition conflicts at times with the emerging needs of the economy and society and pushes policy makers to develop special purpose entities outside the normal, transparent budget process.

There are several areas where there will be more demand for public resources and services in the future. These include the institutional and physical requirements of EU accession;<sup>85</sup> demands for more even service quality across regions;<sup>86</sup> public health activities in the face of the unsatisfactory health status of the population;<sup>87</sup> the need to better integrate the Roma minority through more effective human capital formation and labour market policies;<sup>88</sup> upgrading the Research and Development infrastructure of the country;<sup>89</sup> and international obligations, including defence.<sup>90</sup>

Infrastructure development is one of these increasingly solicited spending areas. Many infrastructure developments have been transferred to the market by privatisation of network utilities including electricity, gas and telecommunications services, but investment needs remain in water utilities<sup>91</sup> as well as in road, water, rail and air transportation. In certain domains the “division of labour” between market and public services remains in flux, due to privatisation difficulties (air and bus transportation) or social and political obstacles (rail and postal services). Even in those areas where the completion of privatisation is in sight, fixed infrastructures will likely remain public and may necessitate large investments. This is now true of the road network, the electricity grid, the air traffic control system, as well as regional airports, the railway tracks and waterways in the geographical areas where these transportation modes have a role to play.

The management of public infrastructures has been erratic during the transition, where overly ambitious projects and underinvestments, privatisation and protection of central and local public monopolies have alternated.<sup>92</sup> The international benchmarks and state-of-the art regulatory arrangements have also been a moving target, and this may have slowed reforms. As a result, capital intensive public infrastructures have fallen behind, notably in road, rail and regional air transportation, compared to the streamlining and growth of private economic activities. These developments have generated a considerable gap between available and necessary infrastructures.

Public opinion has reacted strongly to this state of affairs, particularly as infrastructure shortcomings became patent (long and unpredictable transportation times between many cities and regions, on all modes) and as foreign investors expressed discouragement in this area and began discriminating between locations according to infrastructure availability. This led also to strong political reactions. The main policy response was the elaboration of the “Szechenyi Plan”, centred on motorway development across the country, and local infrastructure and facility development endeavours by local governments (see Box 10).

These activities have not found an appropriate place in the general government budget procedures. The lack of budget resources (captured by traditional expenditure items), and of multi-year planning horizons capable of directing them to new infrastructures drove the new plans and projects to off-budget courses. The

### Box 10. Road development in the Szechenyi Plan<sup>1</sup>

In the early period of transition, in a context characterised both by the need for freeway development and capital constraints, an international investment system in road concessions was devised. Consortia of local construction companies and private investors were granted construction and operating rights on individual routes, departing from established international practice where independent road operators first win concession tenders and then contract with road builders. The vertical integration model applied in Hungary led to soaring construction and material costs, and the freeway tolls rose to levels that most local motorists could not afford. The greater part of the traffic was forced back to old roads, with severe congestion – and pollution – problems, and the largest concession companies went bankrupt, though some of them were saved by budgetary bailouts. The general government also had to fund the precipitated construction of bypasses in the old road network to keep traffic flowing. The medium term development of the road network was not on a sustainable path.

When EU projects aiming at a European-wide road network took shape in the mid-1990s, the so-called “Helsinki channels of communication” targeted 1 230 kms of motorways in Hungary, with European and regional relevance. Only half of the nominated channels were of adequate “freeway” status (expressway or motorway). Hungary then re-designed its long-term domestic road development programme in reference to the European vision, with the objective of gradually raising its expressway intensity from 10 kms for one thousand square kilometres to the European 40 kms, in a 30 years perspective. A 30-year road development programme has been finalised; this aims at a total of 3 700 kms of national freeways being in service in 2030 (among them 2 000 kms of expressways), effectively connecting Hungary to all neighbouring countries.

As a first step in its implementation, a ten-year construction programme of 702 kms of new freeways by 2010 was finalised in 1999. At the turn of 2000, in response to both market pressures, notably by FDI investors who concentrated their investments in Budapest, its suburbs, and northern Transdanubia because of road network availability, as well as to more policy-driven motivations to stimulate remote regional economies and the construction sector, the government decided to accelerate the road development programme. Its planned duration was reduced from ten to seven years and a special momentum was given in 2001-02, in the framework of the Szechenyi Plan centred on additional public and private investments.<sup>2</sup> Three major projects were phased in: the development of the M3 expressway between Fuzesabony and Polgar (65 kms), the reconstruction of the M7 expressway between Budapest and Zamardi (94 kms), and the construction of a bridge over Duna at Szekszard (19 kms together with associated freeways).

The organisation and financing of this effort takes place outside the general budget. The National Expressway company (NEL) was created, with a majority participation of the Hungarian Development Bank (MFB). NEL will execute the motorways programme, including preparing for construction, contracting-out and supervising the works. It is not subject to public procurement rules and selects

**Box 10. Road development in the Szechenyi Plan<sup>1</sup> (cont.)**

bidders by its own decisions and criteria. MFB provides the majority (around 80 per cent) of the required resources, by direct loans (financed by issuing its own bonds) and providing guarantees to commercial banks lending to NEL. The State Expressway Management Company (SEH) was also created, by merging three existing state-owned motorway companies; it will be in charge of operating and maintaining the network. NEL and SEH are expected to recuperate only the maintenance costs of roads through toll revenues, and only in a medium-term perspective, with the recovery of the fixed investment in the road network through commercial revenues not being anticipated. The NEL spent HUF 90 billion on road investments in 2001, and is expected to spend HUF 180 billion in 2002.

1. See Ministry of Economic Affairs (2001).
2. A review of the Szechenyi Plan and its forecasted macroeconomic impacts can be found in OECD (2000a).

cost of the planned central and local infrastructure projects has been projected to reach up to 8-9 per cent of GDP in the medium term, upon EU accession.<sup>93</sup> If these additional expenditures were funded on an annual basis from the general budget, without offsetting cuts in other spending areas, they could easily move the share of primary expenditures in GDP back onto a growth path again.

In the case of the Szechenyi Plan the Hungarian Development Bank (MFB) has been activated, with new borrowing facilities and public counterguarantees (See Box 10). At the local level municipal investments are also expected to increase, as the total costs of the targeted projects has been estimated at a yearly 4-6 per cent of GDP during 2001-03. These estimates reflect local government intentions however and their intended funding sources (government grants, capital markets or international institutions) are not separately identified. Among these local initiatives, projects to be funded by off-budget utility companies may represent up to 2 per cent of GDP.<sup>94</sup>

These new developments raise serious concerns about the full public transparency, parliamentary accountability, cost-benefit fundamentals, managerial efficiency and future budget liabilities of the infrastructure projects. The "road construction" nexus including MFB, NEL and SEH (see Box 10) raises the greatest concern. MFB is a specialised credit institution coming under the Law on Credit Institutions, and hence under the surveillance of the Financial Supervisory Authority, but its special law gives it certain exemptions from standard prudential rules. Also, the "business confidentiality" of its operations, with the resulting restrictions

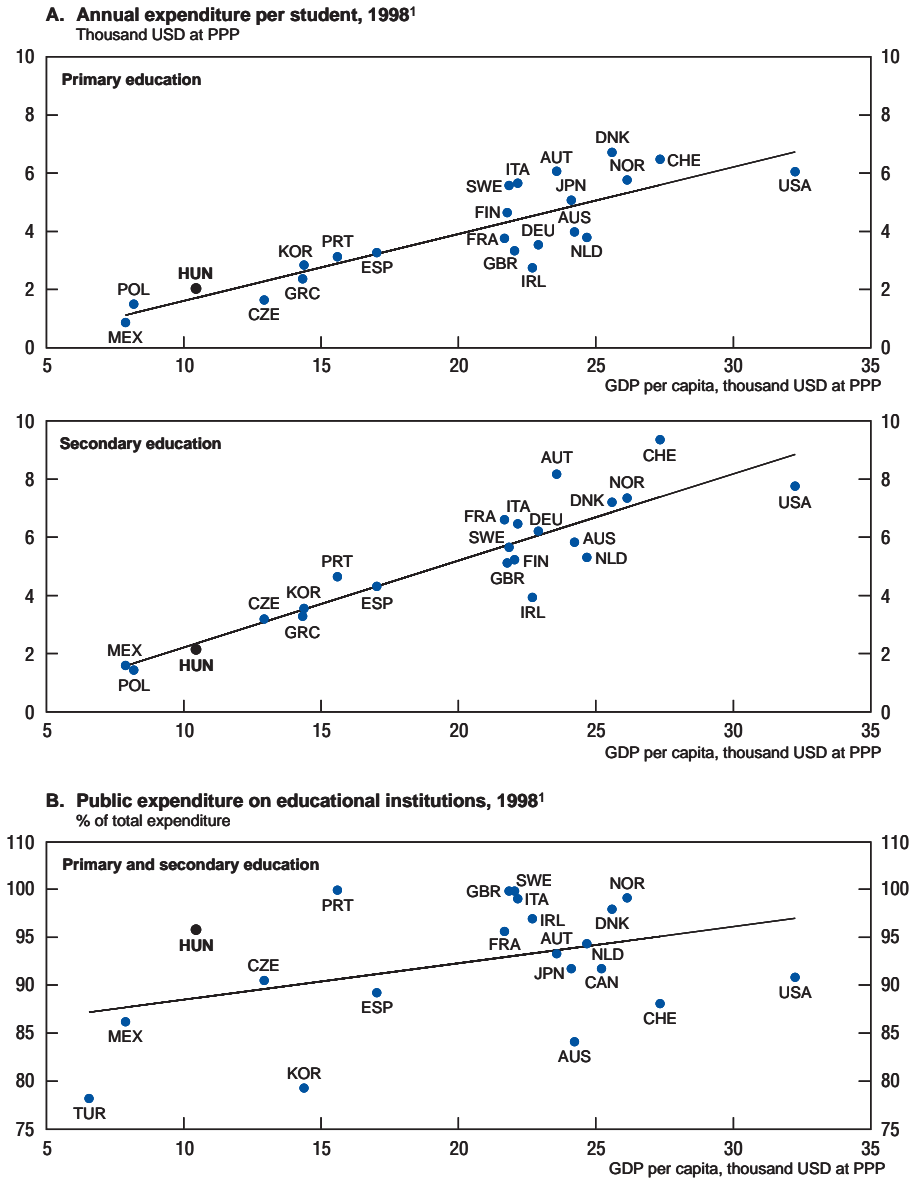
and lags in government and public information on its activities,<sup>95</sup> and the lack of control of Parliament over the activity of the bank causes discomfort. The large public works involved in road construction are also not subject to competitive Public Procurement Law, compounding the public concerns about the implications of departures from hard-won budget transparency and control rules.<sup>96</sup>

On the other hand, frustrations with the rigidity of budget procedures as well as with the poor state of the existing road network may be behind some of the current support, among the public and market players,<sup>97</sup> to the activism of the Szechenyi Plan – even if it uses unorthodox public finance procedures. Recognising such a trade-off would amount however to responding to one imperfection (lack of strategic focus and flexibility in budget procedures) by creating another more serious distortion (circumventing the transparency of public spending and undermining recent budget accountability efforts). There is a way out of this dilemma; the budget could be vested with a strategic multi-year framework with all public investments being integrated in the general government accounts, including and to begin with, the road investments of the Szechenyi Plan. Multi-year infrastructural budget appropriations could then be based on transparent cost-benefit analyses debated in public and approved by Parliament and could be “protected” from other budget contingencies, with large size public works being subjected to competitive procurement rules. In a more medium-term perspective however, and more fundamentally, as the total budget costs of all implied infrastructure investments might be excessively demanding for the Hungarian budget, soundly designed avenues for effective private sector participation in long-term infrastructure planning and investment should be explored.<sup>98</sup>

### **Service supply structures can be considerably improved: the case of education**

Spending on education, of around 5 per cent of GDP, corresponds to the average OECD pattern. As the number of students fall and GDP grows at a fast average pace, the real value of education spending has increased in recent years. Even if the level of expenditures per student remains, not surprisingly, below wealthier OECD countries, the high share of public funding in total education spending is similar to the funding structure of education in many wealthier countries (Figure 22). This results from a law mandating free public education for all students until age 18 (and above in defined cases of vocational and higher education) and determining the minimum level of state support, which, in terms of the annual amount, cannot be lower than 90 per cent of total educational spending two years earlier. As teachers' wages are low by international standards, current funding ensures the commitment of large human resources to public education. The performance of Hungarian students in international tests used to be strikingly good<sup>99</sup> and the attractiveness of Hungary for foreign direct investors is obviously due to the availability of highly skilled labour at competitive costs. International

Figure 22. Education spending per student is in line with national wealth but uses more public resources than elsewhere



1. Public and private institutions.  
 Source: OECD (2001) *Education at a Glance*.

firms are prepared to provide additional on-the-job training to a basically well-educated workforce.

Nevertheless, there are emerging concerns about the quality and effectiveness of public education in Hungary. The most recent vintage of educational tests, which employ new student performance measurement methodologies, do not confirm the usual above-average performances of Hungarian students. In the new 2001 PISA<sup>100</sup> tests, which focus on applied skills, Hungarian students as a group found themselves for the first time among the “students performing significantly below the OECD average” in reading comprehension. Comprehensive tests of this character had not been conducted on a wide scale in Hungary before. Interpretations differ on the origin of this apparent deterioration of measured student performance. Policy makers and educators tends to recognise that student performance may not have kept pace with international progress and admit that success cannot come without reforming the educational methods, in order to equip students with modern problem-solving skills.<sup>101</sup> Earlier national tests had indeed indicated that the deterioration in student performance has not been sudden. The National Assessment of Student Achievement had shown a decline of 12 per cent in 8th grade reading performance and a 3 per cent fall in mathematics performance between 1991 and 1995, together with a growing regional disparity and a disparity between school types in results. These inequalities may explain the exceptional diversity of performances by Hungarian students in international tests,<sup>102</sup> likely reflecting the differentiation of their educational backgrounds across urban and rural areas, regions and individual education institutions.

Radical decentralisation of the education system during transition has shaped present supply structures. Local governments have been vested with not only the responsibility of owning and managing primary and secondary schools,<sup>103</sup> but also of deciding the content of education, *i.e.* pedagogic programmes, within broadly defined national curricula. 1 800 municipalities took over primary schools and 230 municipalities also secondary schools. The costs of primary and secondary schools were financed by central government grants, as in all other public services (see Box 9). After 1993, no centrally-defined teaching methodology was mandated as a general rule. A wave of innovation resulted which was, however, severely curtailed by the significant (around 36 per cent) fall in real wages of teachers between 1990 and 1998. As a consequence, many competent teachers left the profession. The situation was similar in non-profit schools run by foundations, and in the so-called “denominational” institutions, which grew in importance over the same period.<sup>104</sup> The net outcome entailed many successful educational projects throughout the country, but also a large number of failures in establishing and implementing effective education. A 1998 survey revealed that one-third of primary and secondary schools were not able to prepare and operate their own curriculum but had to use curricula from outside sources. New frame-

work curricula from the Ministry of Education (see below) aim at remedying this shortcoming.<sup>105</sup>

In the late 1990s, the Ministry of Education reacted to these outcomes of extreme fragmentation, which had been qualified by an OECD experts group as “one of the most decentralised education systems in the world, if not the most”.<sup>106</sup> The Ministry introduced a new policy of educational quality improvement, based on four pillars: modernising and enhancing educational content by the framework curricula; developing a national system of quality assessment and development; increasing central funding; and introducing a modern in-service training system for teachers. The main changes have been the publication of a new Framework Curriculum in 2000, more specific and mandatory than the previous Core Curriculum; the re-specification of the national diploma to be granted at the end of secondary school (GCSE) according to reinforced and homogenised examinations, to be effective in 2005; an education quality improvement programme, Comenius 2000, whereby schools are encouraged to implement a quality development system known from the industry,<sup>107</sup> in connection with the launching of a comprehensive evaluation scheme, as well as a career model for teachers.

The basic economics of the education system remains as follows. Schools, especially those in smaller settlements, are in a position of local monopoly – even if, legally, new schools can be created. In other areas, under the influence of demographic decline and the possibility of free choice between schools, education institutions compete for students. Educational institutions are funded on a per student-basis, within an output-oriented normative grant system that provides school operators (local governments, churches and foundations) the authority to decide the best utilisation of education grants, permitting them to reduce costs.<sup>108</sup> However, an unintended outcome of this system has been the occasional re-allocation of education grants to other local government needs, making the operators of local schools decide on the amount of resources available for education. Beyond this implementation difficulty, and despite constraints in the adjustment of staff levels, operators of educational institutions have authority over staff level determination and organisational rationalisation (Table 25).

Local governments have carried out some reorganisation measures, but these have nearly always entailed serious local conflicts. The planning of reorganisation was supported by the amendment to the Act on Public Education, which mandated the preparation of county development plans in 1996 and of institutional-operational plans in 1998. This regulation was aimed at ensuring better planning and better provision on the part of municipal governments. County development plans can encourage establishing associations of municipal governments; this arrangement could contribute to the rationalised operation of the fragmented administrative system. After 1998, an incentive programme was launched for small settlements where the number of students was too low for the effective



Table 25. **Teaching and non-teaching staff in the education sector**  
As a percentage of the total labour force

Selected countries	Teaching staff				Administrative personnel	Maintenance and operations personnel	Total teaching and non-teaching staff <sup>1</sup>
	Pre-primary education	Primary and secondary education	Tertiary education	All levels of education			
Hungary	0.8	3.6	0.5	4.9	0.8	1.4	7.1
Czech Republic	0.4	2.1	0.4	2.9	0.9	0.8	5.4
France	0.5	2.7	0.5	3.7	0.3	0.6	6.0
Italy	0.5	2.9	0.3	3.7	0.5	0.5	5.0
Japan	0.2	1.5	0.7	2.4	0.3	0.2	3.2
United States	0.4	2.2	0.7	3.3	0.7	1.0	6.4
OECD mean	0.3	2.6	0.6	3.5	0.5	0.6	5.4

1. Includes teacher aides and teaching research assistants; professional support for students; management – within or beside the sub-categories of this table.

Source: OECD, 2001b (Table D2.4, D2.5).

employment of specialised teachers: small settlements received support in exchange for undertaking certain tasks contributing to quality education and more effective operation. Generally, the number of non-teaching personnel also appears to be exceptionally high.

Regarding demand, recipients of services (students, parents, business organisations, etc.) are increasingly characterised by the will to be better informed; and, as a result of the competitive situation and the quality development programme, a portion of the schools are responsive to these efforts. At the same time, in settlements where parents have limited selection possibilities, these processes are slower. School catchment areas have been widened recently, permitting well-informed and motivated parents in large urban areas to select the school for their children according to reputation and quality. In addition to the central funding they receive proportionally to the number of students that they are able to attract, schools located in wealthier municipalities and those run by well-off foundations or churches can also get additional resources directly from local governments or through fees for extra-curricular services (additional courses, day care, etc.) from students' families with the ability to pay. The largest problem remains in the regions and areas where these mechanisms of market emulation, reward and sanction do not operate, and where school principals and teachers have eroded incentives.<sup>109</sup> With recipients of services having little information, no choice and no ability to pay, a strong central "principal" (the Ministry of Education) as a purchaser of services, rewarding and funding the schools according to performance and output norms, may help enhance performance and quality. The Ministry of Education's recent efforts go in this direction.

The rigidity of teacher employment is not stronger in Hungary than in other OECD countries, but raises more difficult challenges as the student population shrinks.<sup>110</sup> In consequence, teacher-to-student ratios have become particularly high in international comparison.<sup>111</sup> As an unintended result, and although Hungary spends the same share of its GDP per capita per primary and secondary student as other OECD countries,<sup>112</sup> teachers' wages hardly reach the per capita GDP.<sup>113</sup> Due to measures aimed at wage increases over the last few years, however, teachers' wages in 2002 will be above (112 per cent) the national average wage. Moreover, a teaching diploma in the rapidly developing Hungarian economy proves marketable, allowing many teachers to change their career. Present efforts to raise the real wages of teachers, as well as the teacher's career model in preparation aim at facing this challenge.<sup>114</sup>

In a longer-term perspective, the resources that the country will decide to make available for education services will be a matter of national preference. There are large spending claims in this area (for instance, Hungarian schools are under-equipped in new technologies<sup>115</sup>) and new targeted skills for students require new approaches and new competencies from teachers.<sup>116</sup> Meanwhile part of the most dynamic teachers (and would-be teachers) have alternative opportunities in the labour market, so that the opportunity costs of employment in education are growing. The education problems facing the Roma population also claim additional resources and measures.<sup>117</sup> In the future, the national education priorities and the resources available for them should be made more explicit through long-term government-level strategies, with a multi-year funding framework.

### **Policy recommendations and summary**

Hungary has achieved much progress in the management of its public finances through the first decade of transition but there remains significant room for further advances, both in order to diminish the total tax burden and to improve spending outcomes by making it more responsive to the changing needs of the economy and society. Two guiding principles in strengthening the management of public expenditures should be: *i*) more legislative control and commitment, more clarity and longer time horizons in decisions on spending priorities; and *ii*) an improvement of public service supply structures with local taxpayers and central funding agencies playing a more informed and active role in controlling the efficiency of services and the relevance of their supply modes. The following box summarises the recommendations arising from this analysis of the public expenditure system (Box 11).

**Box 11. Strengthening the management of public spending****The share of public spending and taxation in GDP**

- Reduce the share of total primary spending in GDP to 41.5 per cent by 2004 (as announced in the PEP of April 2001).
- Fix a subdued real expenditure growth target, and build a social and political consensus on it (the rate could lag the potential growth rate by 1 per cent).
- Make a conservative GDP growth assumption for the budget baseline, and dedicate the majority of revenue and inflation windfalls (say 75 per cent) to deficit reduction and a smaller portion to discretionary expenditure and tax reductions.
- Explore avenues for private sector participation in long-term infrastructure planning and investment. Devise more economically efficient methods than in the past, by taking into account the best-practice international experience. This can be applied notably to the development of new roads and regional airports.
- Analyse the efficiency of the existing public service supply. In areas where excessive fragmentation between municipalities curbs competition and efficiency, consolidate supply structures via voluntary associations or by furthering the role of an intermediate level of government.
- In areas where local monopolies are natural, reduce their costs and increase the quality of their services by giving local taxpayers and central funding agencies more direct control over their activities (by making them more powerful “principals” for their services). In education services, this may be done by utilising performance benchmarks in re-confirming the mandates of school principals – who should preserve some discretion over the effective utilisation of “per student” grants.

**The coverage and transparency of budget procedures**

- Consolidate all quasi-fiscal activities in the budget (the policy-driven activities of APV, MFB and the National Motorway Company). In this context, create public service accounts for MAV and integrate them into the general government budget.
- Publish the expected realisation (call) rates on new MFB and SME guarantees and provision the budget accordingly.
- Fix a target date for producing accrual-based ESA 95 budget accounts on a regular (quarterly or monthly) basis and provide the Central Statistical Office with the necessary resources.

**The preparation of the budget**

- A government policy statement should be elaborated at the beginning of each legislature as a strategic policy framework.

**Box 11. Strengthening the management of public spending (cont.)**

- A medium-term budgetary framework based on medium-term expenditure targets should serve as a reference for annual budgets.
- A task-oriented budget (organised into functional chapters) should accompany the institutionally-oriented budget.
- A yearly policy statement should outline the corresponding priorities of the budget
- An integrated national infrastructure investment programme should be prepared. Interdependencies between infrastructures (notably between transportation modes) and between national and regional networks should be clarified. Cost-benefit analyses should be a standard input to this programme.
- Involve local governments in the multi-year strategic budget process recommended above. Have local governments produce their own medium-term fiscal programmes and frameworks.
- Clarify macroeconomic assumptions of the multi-year and annual budget frameworks. Open alternative scenarios to public discussion and make the fiscal risks transparent.
- Estimate structural (cyclically-neutral) budget expenditure, revenue and deficit targets.

**Budget implementation and control**

- Building on the development of accrual-based ESA 95 accounts, develop accrual-based budget monitoring in addition to cash monitoring.
- Apply public procurement rules to quasi-fiscal organisations (Motorways companies, MAV, MFB, APV).
- Extend monthly budget monitoring to local governments.
- Set performance benchmarks for service supply efficiency. Trigger management and organisation changes when targets are not met.
- Replace (gradually, also using pilot projects) input-oriented financing with output-oriented financing.
- Consolidate inefficient local service supply units by administrative means.
- Monitor local governments' off-budget utility companies' activities in the framework of local government budgets.
- Revise the exemptions to local borrowing caps. Replace sectoral exemptions by exemptions based on project characteristics (for example, degree of actual risk sharing by private investors, or availability of audited cost-benefit analyses).
- Extend public procurement rules to all local investment spending (including by off-budget utility companies) above a critical threshold level.

Box 11. **Strengthening the management of public spending** (*cont.*)

**Auditing and closing of accounts**

- Develop further the functional audit capabilities of the State Audit Office (SAO) and require pre-defined output indicators to be provided by public service agencies.
- Encourage additional functional audits in the main functional areas of the budget (such as higher education, primary and secondary education, primary, secondary and tertiary health services, social assistance schemes). Make research grants available for the study of the functional performance of services by independent research bodies. Involve private consultancy companies in such functional audits.
- Develop the regional activities and agencies of the SAO for local government audits.

## IV. Structural policies for strengthening economic growth

### **Hungary's impressive economic performance results from bold structural reforms...**

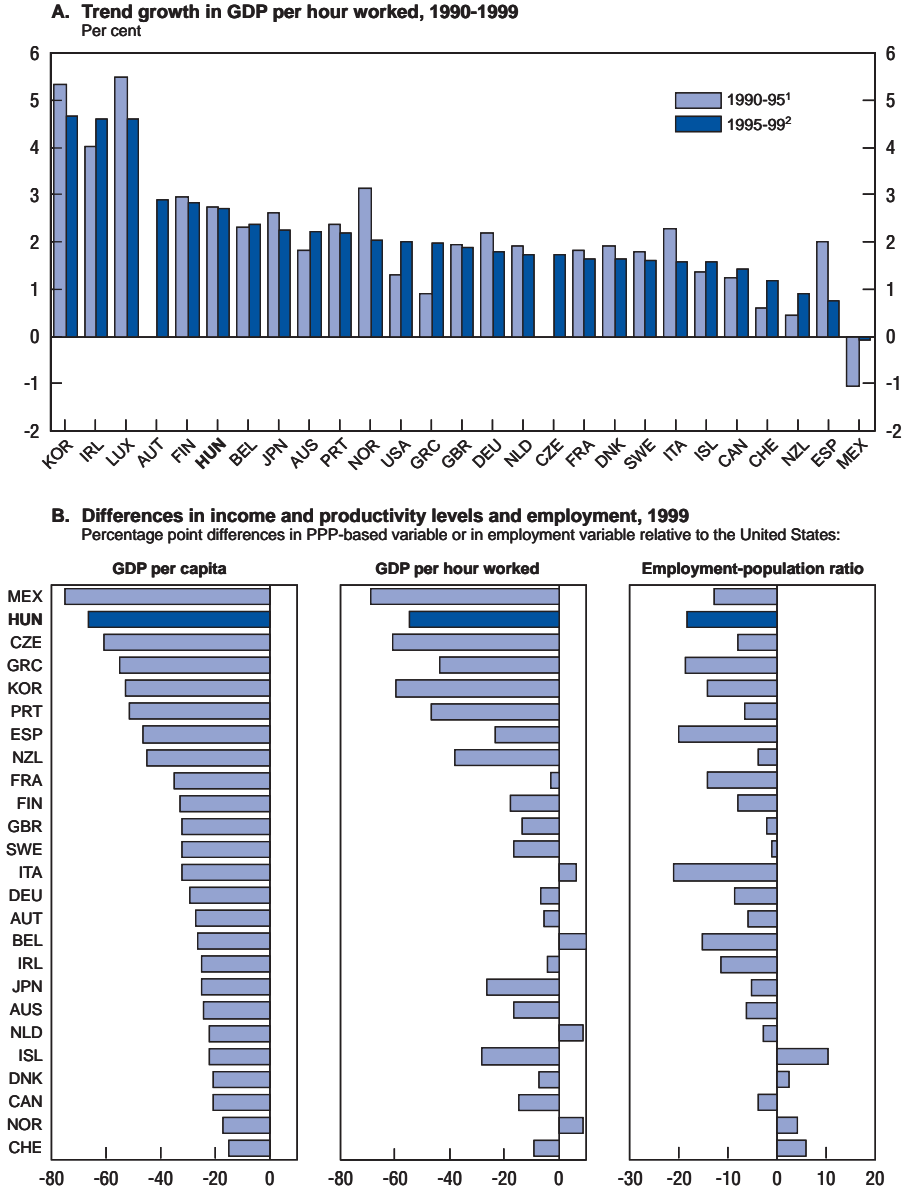
Hungary has managed to modernise the supply side of its economy and improve its structural performance through successive microeconomic reforms. The principal policy challenge is to close as fast as possible the still large gap in living standards, measured by GDP per capita, separating Hungary from advanced OECD economies. To accomplish that, it is necessary to improve both trend productivity growth and employment. The experience of many OECD countries demonstrates that trend productivity growth can be boosted by opening markets to competition while labour participation rates are significantly influenced by the incentives embedded in social programmes. While the nation's productivity growth performance had been impressive over the last decade, placing it in the sixth place among the OECD economies ranked in Figure 23, employment rate is low (see also Figure 2).

The catch-up process was unleashed by bold structural reforms. Key factors of productivity advance included policies that created strong pressures on firms to reduce costs, entailed a radical opening of the economy to foreign investment and imports, and established a business-friendly environment with a reasonably flexible labour market. This improved significantly the economy's supply conditions and made it attractive as a location for foreign investors. Productivity was subsequently enhanced by massive inflows of foreign direct investment that introduced best business practices, contributed significantly to capital formation in the private sector, and upgraded the labour skills of half a million employees.

### **... which should be continued**

How advanced is the catch-up process? The most recent comparison of living standards based on purchasing power parities indicates that Hungary's per capita GDP reached 52 per cent of the OECD average in 2001.<sup>118</sup> This is a significant improvement from 47 per cent in 1996. A successful closing of the remaining gap in the longer term presupposes that the nation succeeds in mobilising effectively its

Figure 23. Productivity: growth rates and levels



1. Data for Germany, Hungary, Iceland, Mexico and Switzerland refer to 1991-95.  
 2. Data for Austria refer to 1996-99; data for France, Japan, Korea, Portugal and Switzerland refer to 1995-98.  
 Source: OECD, *STI Scoreboard 2001* and *Employment Outlook 2001*.

latent labour reserves and that Hungarian firms can produce cost-competitive and increasingly sophisticated goods and services as low-technology manufacturing activities may well gradually move to countries with lower wages.<sup>119</sup>

To accelerate growth of national income per capita, policies can target its immediate causes (accumulation of human and physical capital, including infrastructure) as well as the underlying factors (competition, openness, demand and supply conditions) and fundamental influences (institutions).<sup>120</sup> In the Hungarian context, investment incentives address the immediate causes while regulatory reform and liberalisation improve the underlying factors. The institutional change is driven by the nation's deepening economic and political integration with the European Union.

This chapter examines selected structural policy issues that have decisive impacts on growth of productivity and employment in the longer term. The next section outlines the state of privatisation and regulatory reform activities. The subsequent section describes the financial intermediation available to the business sector. Then labour market issues are discussed. The final section presents some public-sector issues that impact on productivity performance in the long run. The principal accomplishments of microeconomic reforms and the tasks lying ahead are summarised in Table 26.

### Product market issues

Hungary privatised the bulk of industry, banking and trade in the 1990s, often by sales of controlling stakes to strategic investors from abroad. This process was essential to the nation's impressive economic turnaround.<sup>121</sup> The privatisation process has slowed down considerably since 1998; the previous *Economic Survey* emphasised the need to revive and complete the process and further reduce the state's involvement in the hands-on management of firms. However, the authorities decided to keep the renationalised *Postabank* in state ownership, expressed interest in the acquisition of the natural gas unit of an earlier privatised energy monopolist (MOL) and allowed a significant expansion of activities of the national power corporation (MVM), thus apparently delaying earlier plans for its privatisation.<sup>122</sup>

The state-owned Privatisation and Holding Corporation (APV) continues to own stakes in 162 businesses (Table 27). An amendment to the Privatisation Act that was passed in December 1999 opened the way for active management of these firms by APV; this reduced transparency of state involvement in operations of such firms while increasing the scope for implicit cross-subsidies that were criticised in the previous *Survey*. The amendment also increased the number of strategic entities from 89 to 93 firms. Although the Corporation was supposed to finish its privatisation programme in 2001, it was able to achieve only partial fulfilment of this requirement. With respect to major transactions taking place over the last



Table 26. **Structural surveillance: key issues**

Key issues/ 2000 recommendations	Action taken	Assessment	Follow-up recommendation
Panel A: Product markets			
<b>Privatisation</b>			
Reduce state holdings in enterprises and the number of strategic firms.	The government sold only a few firms and had to increase financial support to money-losing state-owned entities.	The privatisation has come to a halt.	Restart the privatisation programme and reduce the number of strategic firms to the minimum level compatible with national legislation.
<b>Liberalisation</b>			
Speed up liberalisation of network industries.	New telecoms act promulgated in December 2001. New electricity and natural gas acts submitted to Parliament in the fall of 2001 and promulgated in 2002.	Recommendation partly implemented in the telecoms sector.	Complete swiftly the market opening of fixed-line telephony and accelerate liberalisation of the energy sector.
Part B: Financial markets			
<b>Supervision</b>			
Increase independence of the financial supervision authority.	A new act on financial markets supervision increases the legal and financial autonomy of the authority.	Recommendation was implemented.	None.
<b>Privatisation</b>			
Proceed rapidly with privatisation of Postabank.	The government shifted ownership of <i>Postabank</i> to the Post Office.	Recommendation was ignored.	Reverse the decision to nationalise <i>Postabank</i> and offer it for sale to strategic investors.
Panel C: Labour markets			
<b>Employment policy</b>			
Improve the employment of the Roma population.	The government increased funding for special education, training and workfare programmes for Roma.	There is no evidence of improving participation and integration of Roma.	Continue efforts to enhance the employability of Roma by improving their access to both higher education and effective training programmes.
Tighten access to early retirement and disability benefits.	New rules on early retirement and disability drafted by the government.	The inactive working-age population of early retirement and disability benefit recipients keeps growing.	Tighten rules on early retirement and disability benefits immediately.

Table 26. **Structural surveillance: key issues** (*cont.*)

Key issues/ 2000 recommendations	Action taken	Assessment	Follow-up recommendation
<b>Science and industry</b>			
Restructure the science system with a focus on cross-disciplinary research and linkages with industry.	The government approved an R&D action plan, including support of research centres to improve linkages between industry and universities. Action taken	The implementation of the action plan achieved some positive results.	Monitor and evaluate systematically the R&D action plan.
Panel D: Public sector			
<b>Tax reform</b>			
Widen the tax base to include all forms of personal income.	None. The interest income remains tax exempt.	The current taxation of personal income creates microeconomic inefficiencies.	Reduce the personal income tax burden and increase taxation of consumption.
Shift the financing of healthcare to general tax revenues.	None.	The current system of public health financing is counterproductive.	The recommendation remains pertinent.
<b>Ageing</b>			
Complete the pension reform, increasing contribution rates to the 2nd pillar individual accounts in line with the original programme.	None.	Further delays of the contribution rate increase threatens to undermine the ability of pension funds to meet their statutory pay-out obligations in the mid-2010s.	The recommendation remains pertinent.
Improve work incentives for the elderly.	The government decided to exempt old-age pensions fully from taxation.	The measure improves significantly work incentives.	None.
<i>Source:</i> OECD.			

year, APV sold its minority stake in Budapest Bank on the Budapest Stock Exchange, concluded an agreement for privatisation of the dominant pharmaceutical distributor (Hunгарopharma) and privatised CDH, a large state-owned real estate corporation. It has yet to find strategic investors for large state-controlled companies such as the national airline (Malev), the Volan group of 27 inter-city bus operators, the second largest steel producer (Dunaferr), the national shipping

Table 27. **Companies managed by APV, by sector**  
Value, HUF billion

	Number of employees	Number of companies		Total value		Value owned by APV		Value to be retained long term by APV		Value to be privatised	
		Total	To be retained long term by the state	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital	Equity
December 2000											
Agriculture, hunting and forestry	26 107	48	45	57.3	106.9	53.7	101.1	42.4	83.8	11.3	17.3
Fishing	343	1	1	0.5	0.9	0.4	0.8	0.4	0.8	0.0	0.0
Mining and quarrying	249	3	0	9.7	1.2	9.7	1.2	0.0	0.0	9.7	1.2
Manufacturing	41 746	34	8	172.1	647.6	48.3	174.2	1.1	3.3	47.2	170.9
Electricity, gas and water supply	18 097	6	2	357.7	431.5	212.5	274.0	104.5	136.6	108.0	137.4
Construction	266	2	0	0.2	0.6	0.2	0.4	0.0	0.0	0.2	0.4
Wholesale and retail trade	2 863	9	1	11.7	18.6	6.2	11.8	0.0	0.0	6.2	11.8
Hotels and restaurants	91	3	0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0
Transport, storage and communications	47 622	29	27	141.9	519.0	34.4	77.7	16.8	38.2	17.6	39.5
Financial intermediation	13 365	8	5	135.6	336.7	71.3	139.8	61.7	124.1	9.6	15.7
Real estate, renting and business activities	540	14	3	27.4	27.3	27.2	27.1	2.3	0.1	24.9	27.0
Other community, social and personal service activities	1 710	15	1	7.1	17.2	6.4	16.5	3.0	11.4	3.4	5.1
<b>Total</b>	<b>152 999</b>	<b>172</b>	<b>93</b>	<b>921.3</b>	<b>2 107.6</b>	<b>470.4</b>	<b>824.6</b>	<b>232.2</b>	<b>398.3</b>	<b>238.2</b>	<b>426.3</b>
December 1998											
Agriculture, hunting and forestry	29 966	52	45	58.2	106.4	50.6	95.5	39.9	77.8	10.7	17.8
Fishing	407	1	1	0.5	0.9	0.4	0.9	0.4	0.7	0.1	0.2
Mining and quarrying	341	2	0	9.6	10.7	9.6	10.3	0.0	0.0	9.6	10.3
Manufacturing	47 018	55	11	235.5	674.7	54.9	150.6	28.1	96.8	26.7	53.8

Table 27. **Companies managed by APV, by sector** (cont.)

Value, HUF billion

	Number of employees	Number of companies		Total value		Value owned by APV		Value to be retained long term by APV		Value to be privatised	
		Total	To be retained long term by the state	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital	Equity
December 2000											
Electricity, gas and water supply	23 407	8	2	484.3	487.2	274.0	270.4	129.4	128.3	144.6	142.0
Construction	2 454	4	0	1.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Wholesale and retail trade	2 585	20	2	19.2	47.6	6.8	12.6	0.1	0.1	6.8	12.5
Hotels and restaurants	2 168	7		8.2	14.3	0.6	1.0	0.0	0.0	0.6	1.0
Transport, storage and communications	52 337	31	27	147.0	373.2	36.2	77.3	16.0	31.8	20.2	45.4
Financial intermediation	13 625	9	0	106.4	124.9	8.3	8.5	0.0	0.0	8.3	8.5
Real estate, renting and business activities	766	17	1	28.0	31.3	23.3	25.7	0.0	0.0	23.3	25.7
Other community, social and personal service activities	372	10	0	2.4	0.9	2.2	0.7	0.0	0.0	2.2	0.7
<b>Total</b>	<b>175 446</b>	216	89	1 097.8	1 874.7	466.9	653.5	213.9	335.4	253.1	318.0

Source: APV (Hungarian Privatisation and State Holding Company).

company (Mahart), and the major food-processing conglomerate (Babolna). Following the government's decision to keep the renationalised Postabank in public ownership, the APV's stake in the bank was transferred to the Hungarian Post Office in early 2002. At the same time, control over the Babolna conglomerate was shifted from the APV to the state-owned Hungarian Development Bank which should complete its privatisation.<sup>123</sup>

Although APV intends to complete its privatisation programme, no target date was set and no major privatisation deals appear to be ready for completion. The large number of investment, employment and other guarantees included in privatisation contracts until now has placed significant costs on the holding company. This underlines the importance of the selective rather than standard use of such commitments in the future. Further, the authorities are encouraged to proceed rapidly with privatisation while reducing the number of golden shares and state-owned firms to the minimum levels compatible with national legislation.<sup>124</sup> Moreover, the government should propose to Parliament an amendment to reduce the extent of strategic holdings specified by the relevant legislation that appears to be excessive. Some candidates for the removal from the list of 93 strategic companies are the 27 regional bus operators, two salami producers, two porcelain manufacturers, a Tokaj wine producer as well as a few horse-breeding farms.

## The FDI sector

The FDI orientation was the essential component of Hungary's modernisation strategy.<sup>125</sup> Annex III highlights the significance of the FDI sector for national productivity growth.<sup>126</sup> A comparison of the economic contribution to the Hungarian economy of the FDI and domestically-controlled sectors is provided in Table 28. The share of capital of foreign-controlled firms jumped in the 1990s from negligible levels to three-quarters of the capital stock in manufacturing and over 60 per cent in the economy as a whole. The majority of large multinational corporations established subsidiaries in Hungary, often by means of greenfield investment.<sup>127</sup> Consequently, the share of high-technology manufacturing production and exports increased considerably.<sup>128</sup>

Entries for the last few years in Table 29 show that FDI inflows (including reinvested earnings of FDI firms) remain significant but also that Hungary faces increasing competition from other European transition economies. Tax incentives for large firms (Table 30 and Box 12) remain strong but are increasingly criticised by the EC authorities because they conflict with the Union's competition rules. Some observers pointed out that fiscal aid favours large FDI firms over smaller domestic enterprises. The authorities responded to such concerns by compensating the domestic SME sector through specific incentives (see Box 12) to offset the relative disadvantage *vis-à-vis* the financially stronger FDI firms.

Table 28. **Economic indicators in the non-financial business sector**

	Per cent		
	FDI firms <sup>1</sup>	Domestic firms	Total
<b>Employment</b>			
1996	24	76	100
1997	26	74	100
1998	27	73	100
1999	27	73	100
<b>Book Value Added</b>			
1996	43	57	100
1997	48	52	100
1998	49	51	100
1999	49	51	100
<b>Pre-Tax Profit</b>			
1997	67	33	100
1998	65	35	100
1999	67	33	100
<b>Profit-Tax Burden</b>			
1997	10	32	17
1998	10	28	17
1999	12	30	18
<b>After-Tax Profit</b>			
1996	82	18	100
1997	73	27	100
1998	70	30	100
1999	72	28	100
<b>Gross Fixed Capital Formation</b>			
1996	52	48	100
1997	50	50	100
1998	57	43	100
1999	57	43	100
<b>Import</b>			
1996	70	30	100
1997	74	26	100
1998	74	26	100
1999	76	24	100
<b>Export</b>			
1996	69	31	100
1997	75	25	100
1998	77	23	100
1999	80	20	100

1. Competitive sector firms with foreign ownership above 10 per cent of equity.

Source: Central Statistical Office.

Table 29. **Foreign direct investment inflows<sup>1</sup>**  
\$ million

	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>2</sup>	Cumulative	Cumulative \$ per capita
Czech Republic	654	869	2 562	1 428	1 300	3 718	6 324	4 986	4 916	26 757	2 605
Hungary <sup>3</sup>	2 443	1 143	4 810	2 556	3 134	2 649	3 454	3 483	4 322	27 995	2 794
Poland	1 715	1 875	3 659	4 498	4 908	6 365	7 270	9 342	6 927	46 559	1 205
Slovak Republic <sup>4</sup>	166	255	300	301	220	684	390	2 117	1 475	5 930	1 098

1. Refer to IMF Balance of Payments Statistics Yearbooks and Special Data Dissemination Site for details of methodological variations across countries and time.

2. Preliminary, cash only for Poland.

3. OECD estimate of reinvested earnings was used to derive a comparable time series for Hungary.

4. Cash basis.

Source: Balance of payments of respective national banks, national accounts and OECD.

Table 30. **Tax incentives**

	Tax credit	Disadvantaged region	Period
Value of investment exceeds			
HUF 1 billion	50 per cent	No	5 years
HUF 3 billion	100 per cent <sup>1</sup>	Yes	10 years
HUF 10 billion	100 per cent	No	10 years

1. Full tax credit is available for manufacturing activities only.

Source: Ministry of Finance.

While praising the performance of foreign-controlled companies, Hungarian authorities have been disappointed by the slow development of production linkages and technology transfers between such companies and domestic businesses. The so-called “dual economy” has been broadly characterised by a growing performance gap between the FDI sector and the domestically-controlled sector, although the comparison at the firm level is more ambivalent.<sup>129</sup> About 100 multinational corporations (MNCs) operate in their own free-trade zones (FTZs)<sup>130</sup> as pure assembly plants with a limited local supplier network. The number of firms operating in FTZs remains stable, despite falling tariffs and the Hungarian membership in the Pan-European Cumulation system (PEC) that permits no customs drawback.<sup>131</sup> To improve the integration of the FDI sector into the host economy, the Ministry of Economic Affairs has operated a special assistance programme for potential domestic subcontractors over the last few years, supporting a gradual deepening of linkages between domestic and multinational firms. By now about one-fifth of intermediate inputs of the MNCs operating in the FTZs are

**Box 12. Investment incentives: old and new**

Investment promotion has been and remains the key modernisation strategy of Hungarian policy makers. The incentives include tax breaks, free trade zones and industrial parks as well as grants, interest subsidies and loan guarantees for the SME sector. Despite the criticism voiced frequently by EC officials who insist that tax concessions used in Hungary (see Table 29) are not compatible with Community rules and should be stopped, the authorities have expressed their intention to keep them until EU accession. In addition to these concessions, R&D expenditures are fully tax deductible from 2001. Free-trade zones are utilised by over one hundred multinational companies; it is unclear whether they will have to be dismantled upon accession. The use of industrial parks and SME incentives appears to be compatible with the relevant EU rules and the government plans to keep using these policy instruments. It also intends to develop a new investment incentives strategy, concentrating on high value-added projects such as those in the business services sector and the R&D sphere. The authorities also aim to encourage more multinational companies to establish their regional headquarters in Hungary while using measures that conform to EU rules.

The firms investing in selected regions, where *inter alia* the unemployment rates exceed the national average, can apply for corporate tax relief. Investments with a threshold of HUF 1 billion are rewarded with a 50 per cent reduction of the corporate income tax. For investment projects above HUF 3 billion, the tax relief is provided up to 2011 and available to any investor prior to Hungary's accession to the EU. Small and medium-sized enterprises that finance tangible investment with the aid of a loan are entitled to a tax allowance amounting to 40 per cent of the annual interest paid, up to the ceiling of HUF 5 million.

sourced from over 3 000 subcontractors based in Hungary.<sup>132</sup> The FTZ sector as a whole contributes significantly to the sustainability of the trade balance, producing a growing trade surplus.<sup>133</sup> Relations between the authorities and FDI firms have not always been harmonious.<sup>134</sup> Foreign investors complain about excessive red tape (especially in the area of customs clearance, although a number of measures have been worked out to ease the procedure),<sup>135</sup> inappropriate use of price-setting regulations in diverse industries (electricity, gas, pharmaceuticals) and the inadequacy of public-procurement rules.<sup>136</sup>

Furthermore, a recent report by the Economist Intelligence Unit (EIU) on costs of doing business in 31 countries which attract the bulk of inward direct investment places Hungary in the leading position.<sup>137</sup> Another EIU report, examining the business environment in 60 countries over the period 1996-2000 puts Hungary in the 28th position and expects it to move to the 27th rank in the period 2001-05



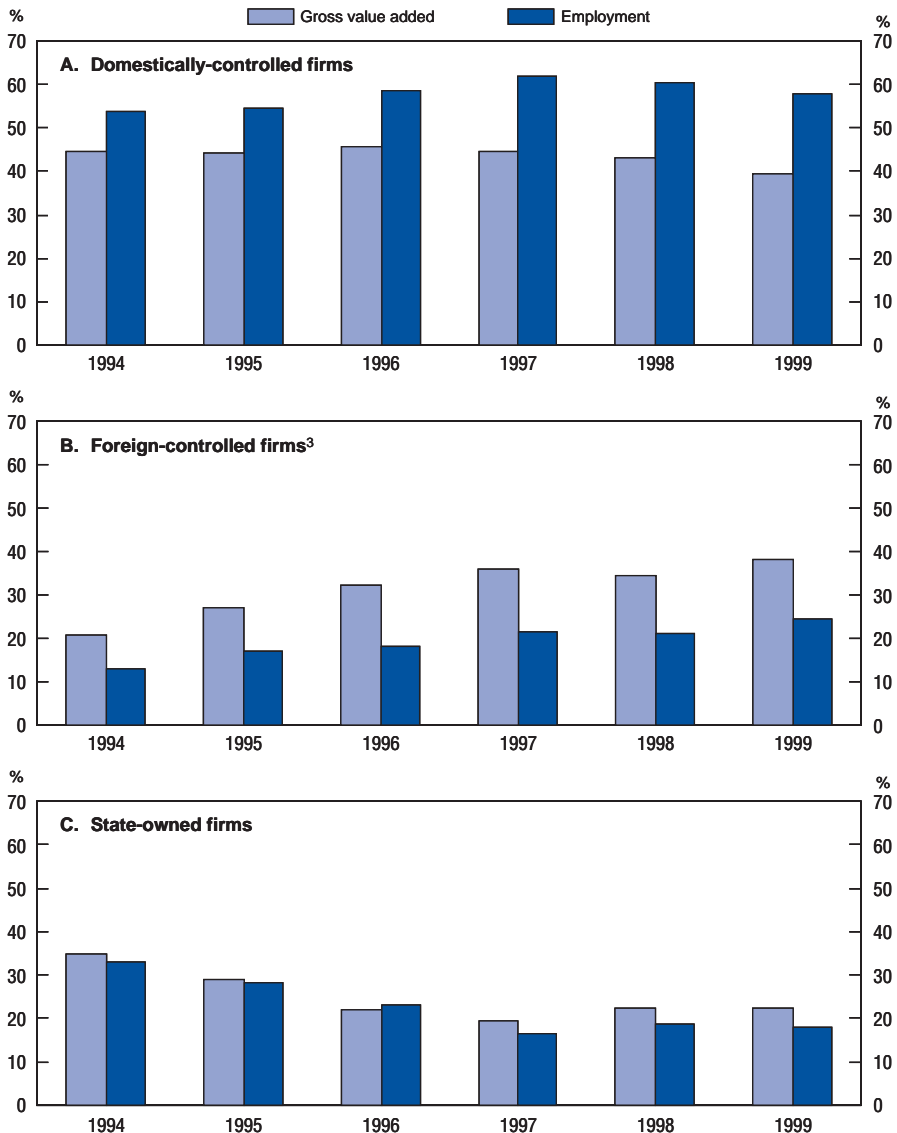
(EIU, 2001). This suggests that FDI inflows to Hungary will continue to be significant over the medium term. Hungary's principal advantages are related to very low profit taxes, total labour costs (among the lowest in Europe, despite recent increases), the liberal foreign trade and exchange regime, pro-FDI policy orientation and the relatively flexible labour market. Shortcomings in the business environment include limited availability of skilled labour with knowledge of western languages, the relatively large extent of perceived corruption,<sup>138</sup> relatively high telecom charges and the still underdeveloped motorway network. In order to further improve the environment for doing business, the authorities are promoting human capital formation by modernising the education sector, encouraging investment in remote regions by improving the road infrastructure and providing special investment incentives, and pursuing liberalisation of the telecoms sector (see below). At the same time, however, recent wage policy measures may induce significant increases in labour costs that could erode Hungary's comparative advantage in some industries (see Chapter I). Another factor driving up business costs results from the government's inability to promote transparent tenders resolutely; this may force firms to divert funds for developing special relationships with contract-awarding agencies.

### ***The domestically-controlled business sector***

The development of industry was decisively helped by the early adoption in Hungary of a comparatively strict bankruptcy code that assures that non-viable companies are forced to exit from the marketplace. In contrast, the Czech Republic, a country of similar size and comparable ambitions for joining the EU in the near future, failed to introduce such hard-budget constraints on privatised firms early on and thus has contributed to its substandard performance in the productivity growth league.<sup>139</sup> However, Figure 24 shows that there exists a considerable labour-productivity gap between the FDI sector and domestically-controlled businesses. Despite employing nearly 60 per cent of workers in the competitive non-financial sector, domestic privately-owned firms account only for less than 40 per cent of output. Given the ability of larger and well-capitalised FDI firms to benefit more from investment tax incentives, the after-tax profit receipts of domestically-controlled firms amount to less than 30 per cent of the total. A natural explanation of the performance differential in manufacturing industries and the trade sector is the relatively large size of FDI firms with superior economies of scale and scope while domestic private firms tend to be small or medium sized (see Annex II).

Just like their counterparts in western Europe, Hungarian SMEs suffer from some competitive disadvantages, lower productivity, higher administrative compliance costs per worker,<sup>140</sup> and poorer access to modern technology than large firms. The attention of policy makers shifted in recent years from promoting high-technology manufacturing through FDI inflows to the development of domestic

Figure 24. **Employment and production in the non-financial business sector<sup>1</sup>**  
Distribution by ownership<sup>2</sup>



1. Non-financial firms with double-entry book-keeping.

2. For example in 1995, 44% of value-added was produced by domestically-controlled firms, 27% by foreign-controlled firms and 29% by state-owned firms in Panels A, B and C respectively.

3. Firms in which the share of foreign held equity exceeds 50%.

Source: Central Statistical Office.

small businesses and disadvantaged regions. The one-year old economic development programme of the Hungarian government, known as the Szechenyi Plan, includes promotion of SMEs.<sup>141</sup> The government aims to reduce the relative backwardness of the SME sector by helping it to bid for supplier contracts from foreign-controlled firms through provision of information and know-how, by allowing it to access industrial parks with developed infrastructure, services and local tax allowances, and by stimulating its productive investment by tax breaks, grants, interest subsidies and loan guarantees. During its first year of operation, the Szechenyi Plan grants to the business sector totalled HUF 55 billion (€ 220 million); the bulk of funds were received by SMEs, with 90 per cent of them domestically owned. According to estimates of the Ministry of Economic Affairs, each forint disbursed triggers additional investment spending of 4 forint.

What needs to be done to improve the environment for doing business? Both big and small businesses complain about excessive red tape. Whereas large firms emphasise their dissatisfaction with slow and cumbersome customs procedures and the lack of transparency governing large public infrastructure programmes without open tenders, small businesses are overwhelmed by the administrative tasks related to the complex and oft-changing tax system, criticise the relatively high social-security charges and bemoan the difficulty of entering public tenders.<sup>142</sup> The government's ambitious programme to expand the motorway network has been implemented in a highly anti-competitive manner. The contractor selection process had the declared aim of favouring domestic companies; instead of calling for tenders, the National Motorway Company selected three Hungarian construction firms as general contractors. The independent Competition Authority criticised that practice in its 2000 Annual Report to Parliament, but to no avail. To improve the environment for doing business, the authorities are encouraged to improve the public tender system, both by increasing its scope and providing easy access to all potential bidders on the internet. It would be also important to keep cutting the still high statutory charges and to simplify the tax schedules for small businesses as well as allowing them to access all relevant forms and complete returns via the internet.

How easy is it to enter and exit? With the exception of a few industries (air transport, healthcare, railways, basic postal services, utilities) entry is relatively easy, with a minimum of capital or no equity at all; the Ministry of Justice provides a reasonably efficient one-stop registration. Despite the comparatively good bankruptcy code, the actual exit of unsuccessful businesses is rather lengthy if they owe money to creditors because courts are overwhelmed with applications for liquidation, a process that takes about two years to complete. Since a rapid turnover of firms tends to improve productivity, policy makers should amend the relevant legislation and allocate more resources to commercial courts to increase their capacity to handle bankruptcy and liquidation cases promptly.

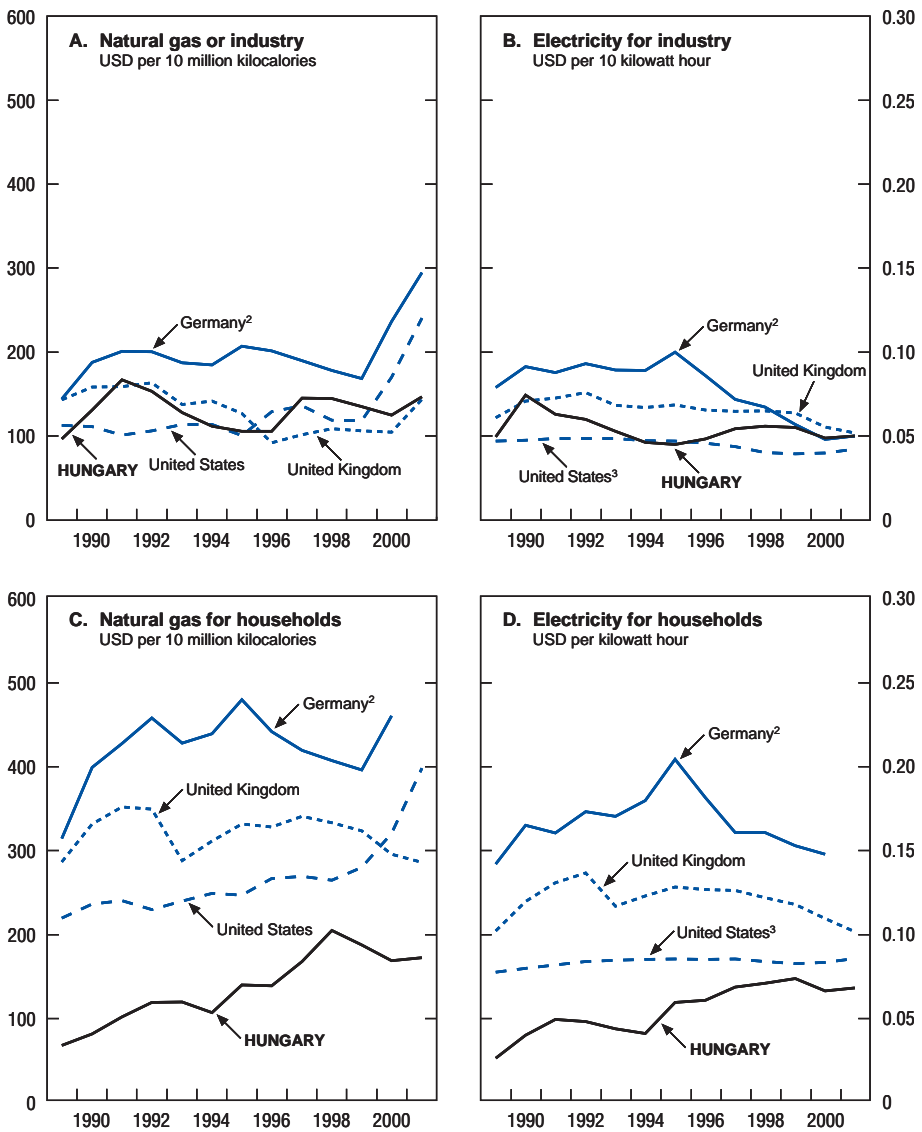
## **Network industries**

Given the importance of network industries to costs, relative prices, resource allocation and technical progress, it is crucial that the authorities regulate them as efficiently as possible. How far did Hungary progress in this key area since the last *Survey*? The progress has been mixed in the energy sector due to further delays in the process enabling more competition. Long delays in adopting the framework legislation governing the opening of the energy sector, lack of enabling legislation and unclear perspectives for full independence of the competent but powerless regulator are worrisome. However, the telecom sector appears to be set for a faster advance to market opening based on international best-practice standards within a couple of years.

### *Energy sector liberalisation*

The government repeatedly delayed partial opening of the electricity market, shifting its target date from January 2001 to January 2003. Following a comprehensive redrafting in 2001, the new Electricity Act was finally approved by Parliament in December 2001. From 2003 on, a couple of hundred large industrial users should be able to choose their Hungarian as well as foreign suppliers, subject to the requirement that each of them purchase at least one-half of total supply from domestic generators. There is no specific timetable for the full liberalisation of the market. Similarly, the natural gas market is scheduled to be opened gradually during this decade. Figure 25 shows that full and rapid liberalisation would entail a significant readjustment of prices; although the electricity and gas prices in the industrial sector are comparable to those observed in advanced economies with relatively open markets, Hungarian households still pay considerably less. The new legislation has increased the independence of the Hungarian Energy Office (MEH) but left the key pricing decisions for non-eligible consumers in the hands of the government.

Although privatisation of a significant part of the power sector was completed a few years ago, the state-owned wholesaler and grid operator (MVM) continues to own fully the country's largest power producer (Paks nuclear plant) plus 43 per cent of the medium-sized state-owned Vertes power plant and significant stakes (25-26 per cent) in two privatised generators (Dunamenti and Matra). It would thus appear that the sale of MVM, the last major state-owned enterprise, has been put on hold while the Ministry of Economic Affairs has kept playing a decisive role in the price-setting decisions that are dominated by concerns related to the impact of the notional cost-plus pricing<sup>143</sup> on the population's welfare. The authorities justify the artificially low prices in the household sector by the need to protect the real income of population and to restrain the overall level of consumer price inflation.<sup>144</sup>

Figure 25. Energy prices: an international comparison<sup>1</sup>

1. Data for 2001 are averages of available quarterly data.

2. Western Germany for 1989. Data for electricity in 2000 and natural gas in 1999 and 2000 are estimates based on indices of energy prices for Germany.

3. Electricity prices exclude tax.

Source: IEA, *Energy, Prices and Taxes*, 2001.

In the gas sector, the state's 25 per cent strategic stake in the dominant oil and gas company (MOL) as well as its control over the price formation process resulted in mounting losses of MOL's gas division.<sup>145</sup> This company litigated against the government while the American-owned AES energy group sued the government and MVM, alleging that they broke the long-term power purchase agreement with one of its Hungarian power plants (Tisza II). While AES settled its dispute in an out-of-court settlement, the MOL lost its case.<sup>146</sup>

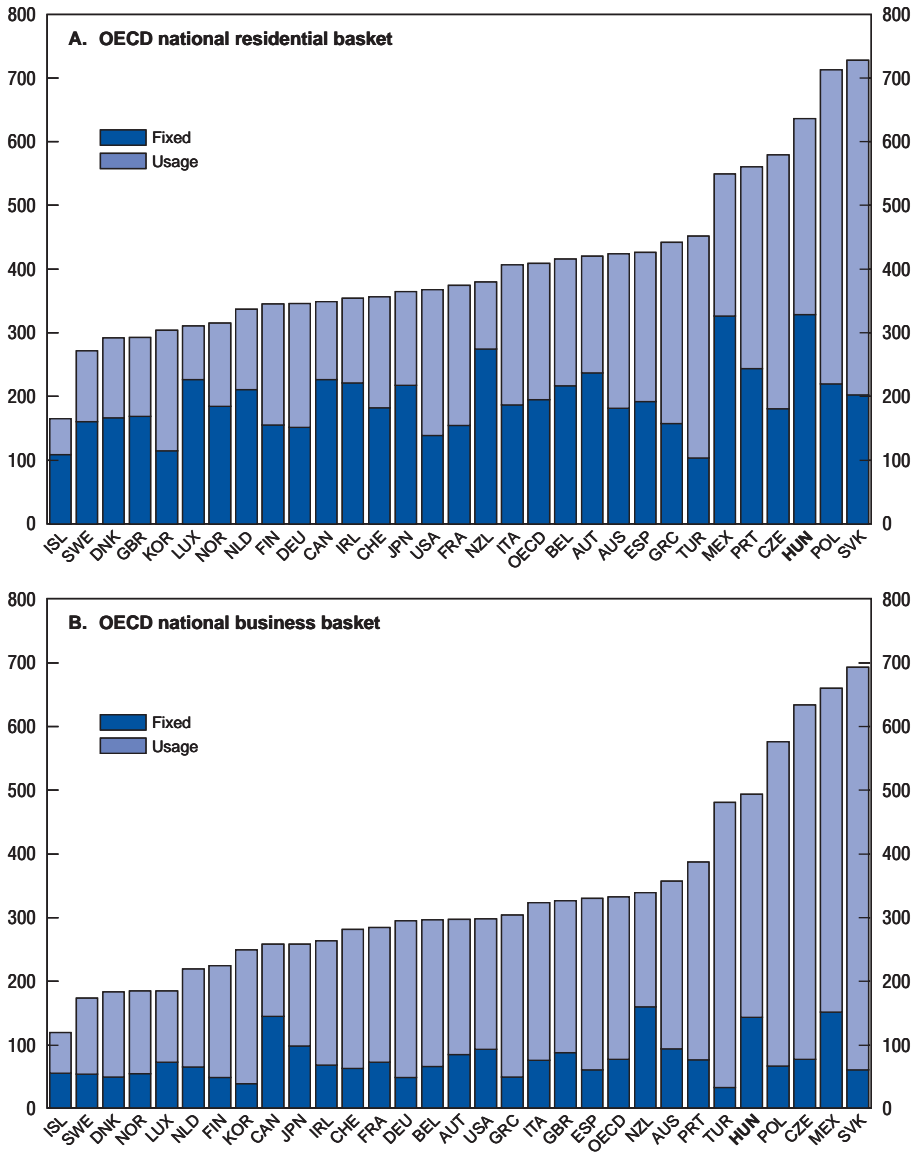
Aside from the legal issues and their possible adverse effects on future foreign investment decisions, there is a major economic problem associated with the government's heavy-handed regulation of energy prices. Unless the prices are brought in line with long-run costs, there will be efficiency losses associated with suboptimal allocation of resources as well as negative signals to all prospective foreign investors. Social sensitivity concerns related to the abolition of cross-subsidies can be addressed more effectively by targeted transfers from the central government's budget. To improve allocative efficiency, it would make economic sense to break up MVM and either sell its wholesaling and generating stakes separately or at least impose complete unbundling of these activities. Then it would be possible to establish a system operator independent from any special commercial interests or government interference, in line with recommendations of the International Energy Agency (IEA). The new Electricity Act established a system operator in February 2002; however, this entity is fully state owned and supervised by the Minister of Economy. Last but not least, it remains important to complete MEH's independence by enabling it to issue regulations on its own.<sup>147</sup>

### *Telecom liberalisation*

The new Communications Act was promulgated on 23 December 2001, providing a unified regulatory framework for telecom, internet, broadcasting and postal services. The new Act is harmonised with relevant EC rules and provides for entry of new operators to the telecom sector with the right to access networks of incumbent operators (the dominant firm Matav and several local operators). New entrants are entitled to unbundling of the local loop on the basis of cost pricing, providing that they make minimum infrastructure investments.<sup>148</sup> Users will be entitled to both carrier selection and number portability, albeit with a significant time lag of approximately two years. The new legislation endows the Hungarian Communications Authority (HIF) with the powers needed by an independent regulatory agency.

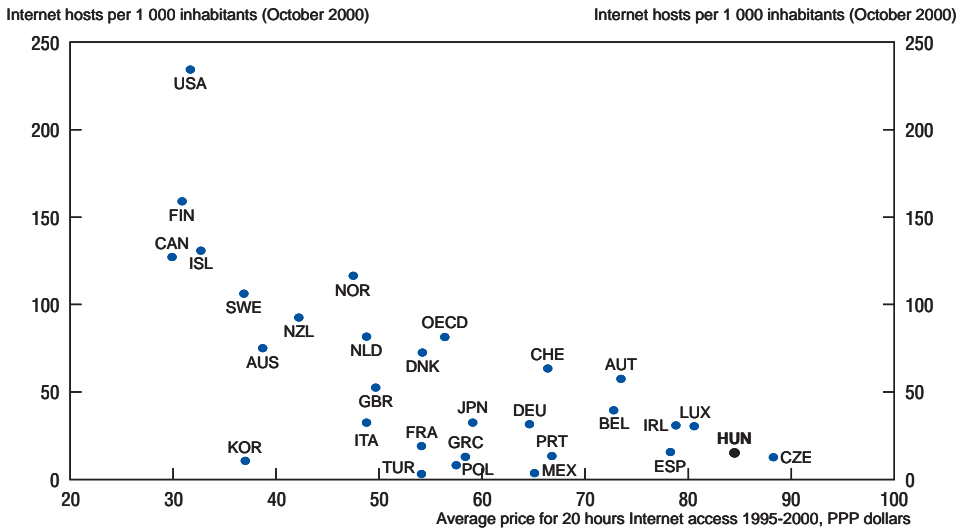
Are prices likely to tumble? Figures 26 and 27 show that Hungarian businesses and consumers pay steep prices for using telecom and internet services. This is due to the privatisation method chosen for the sale of the national fixed-line telephone company (Matav) that provided the strategic investors (Ameritech

Figure 26. **Telecommunication tariffs**<sup>1</sup>  
Purchasing power parity in USD



1. As at November 2001. Excluding international calls and calls to mobile networks. Residential basket includes VAT, business basket excludes VAT.

Source: OECD, STI; Teligen.

Figure 27. Internet access prices and Internet hosts<sup>1</sup>

1. Internet access costs include VAT and cover both peak and off-peak.

Source: OECD, *STI Scoreboard 2001*.

and Deutsche Telekom) with exclusive monopoly rents in exchange for a multi-year infrastructure investment programme and a significant amount of cash. The introduction of the new Communications Act coincides approximately with the end of this exclusive concession contract. The internet access charges were cut by 13-19 per cent by government decree in January 2002. Further, to make the new legislation effective in the face of Matav's reluctance, the government and HIF issued a number of decrees assuring swift implementation of cost-based interconnection fees as well as free carrier selection. Nevertheless, number portability is unlikely to be available until the end of 2003.<sup>149</sup> The gradual liberalisation of fixed-line telephony should result in significant savings to both businesses and households, thus contributing to Hungary's modernisation drive. There is already a competitive environment in mobile telephony that would be enhanced by the increasingly competitive pricing of fixed-line services, providing that both types of telephony operate on a level-playing field. Current regulations result in cross-subsidies at the expense of fixed-line telephony and thus injure fixed-line operators who do not own strong mobile operators.<sup>150</sup> Hence, the telecommunications authority ought to eliminate such cross-subsidies as soon as possible.



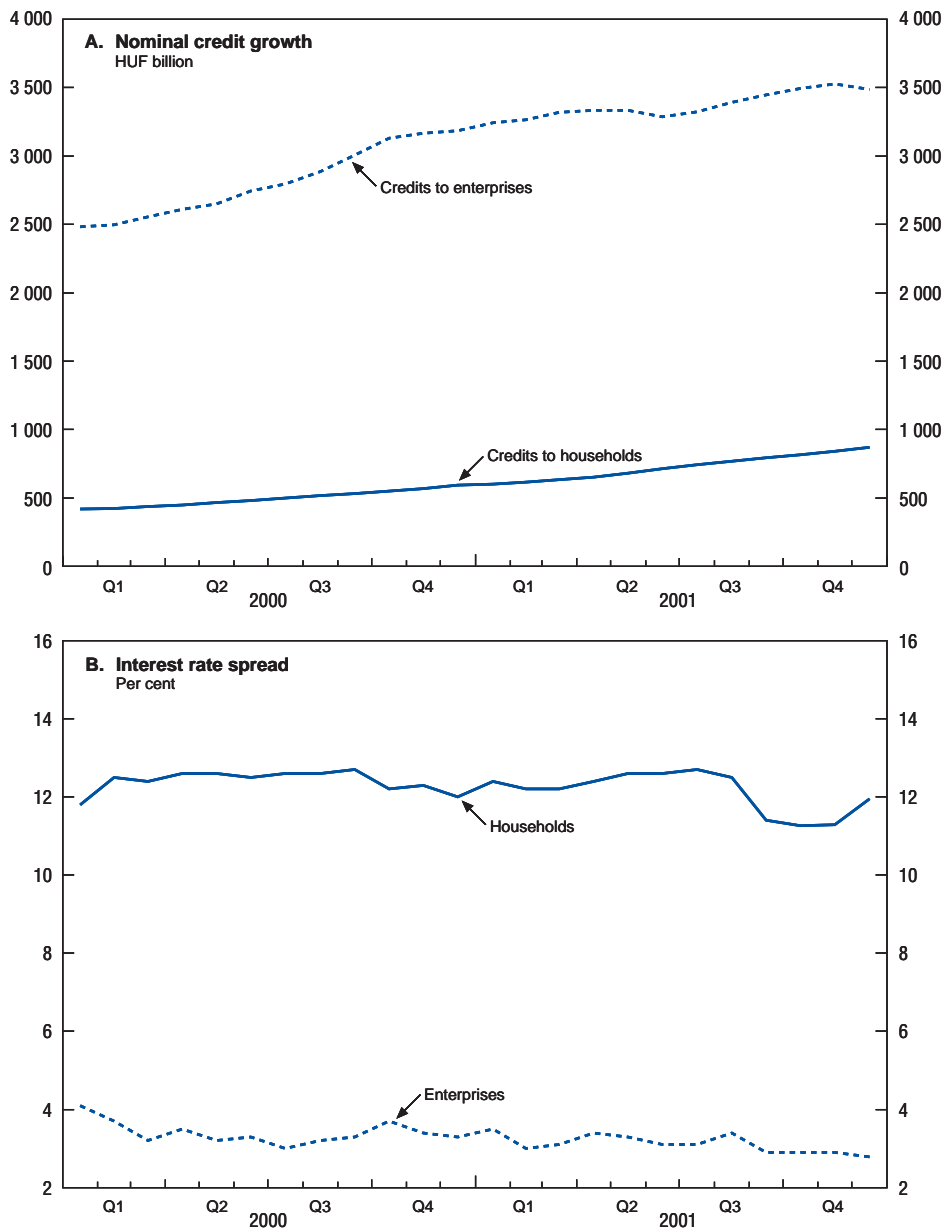
## Financial market issues

Following the successful macroeconomic stabilisation and the rapid development of the banking sector in recent years, debt financing plays the key role in the non-financial corporate sector that is dominated by large and medium-sized companies. The financial leverage of the corporate sector, measured by the debt-equity ratio, increased rapidly over the last couple of years from comparatively low levels to those characteristic of developed European countries. Consumer credits are accessible to small firms but the use of household loans for business purposes is significantly more expensive than that of standard business loans (see Figure 28).

In contrast to the preceding years, since 2000 growth of credit to small and medium-sized companies (SMEs) has exceeded that of larger companies, reflecting their improving access to credit markets and the impact of expanding subsidy programmes. The share of SME loans reached one-third of the total amount of domestic commercial bank credits in the first half of 2001 while this proportion was below 20 per cent at the end of 1999. The growth rate of credit to small enterprises (below 50 employees) was even more dynamic; these firms now account for some 55 per cent of outstanding SME credits. The expansion into the riskier SME sector is partly due to stronger competition in the banking sector that forces banks to move towards retail loans. The government's SME financing programme also contributed to the upsurge in loans to smaller companies. The main element of the programme consists of guarantees provided by the state-owned Hitelgarancia – such guaranteed loans in 2001 approached HUF 60 billion or 5 per cent of total credit to SMEs. Another financing channel available to SMEs is provided by the state-owned Hungarian Development Bank (MFB) whose capital was significantly increased in 2000.<sup>151</sup>

MFB's principal objective is to contribute to the modernisation of the Hungarian economy by financing major infrastructure programmes, in particular motorways, and by providing special financing schemes to assist development of SMEs (for details, see Chapter III). MFB's special status was enhanced by new legislation promulgated in May 2001 that relaxed the regulation on large exposure; however, the control of the Financial Supervision Authority (PSzAF) over its activities remained unchanged while delegating some responsibility for scrutiny of MFB accounts to the State Audit Office. The Prime Minister's Office, being the representative of the owner, and the Government Control Office also has the right to control specific activities of MFB. Furthermore, prudential rules regarding MFB's risk-taking are significantly looser than those applicable to commercial banks – the authorities argue that its involvement in infrastructure investment requires MFB to take larger risks than is usual in normal banking activities. While the government's aim to speed up infrastructure

Figure 28. Credits by sector



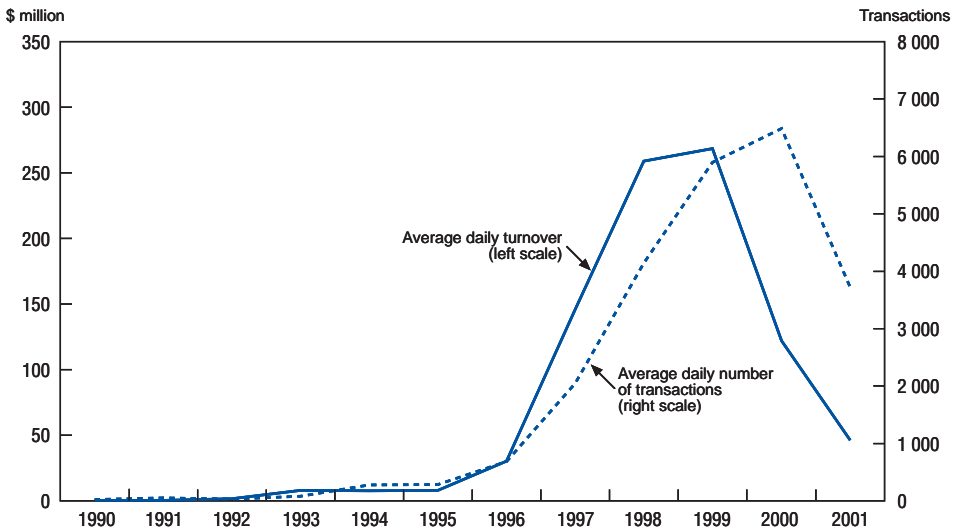
Source: OECD; National Bank of Hungary.

development is commendable, the relaxation of prudential controls over MFB appears to be problematic.

In September 2001, the government introduced a new student loan programme, which attracted more than 70 000 students to date. Although the system was designed to be competitive, the government amended it to accord a predominant role to the state-owned Postabank. Postabank has been given the exclusive right to manage student loan accounts, thereby receiving a considerable advantage over other banks in access to prospective clients. Furthermore, all successful applicants are obliged to open an account at Postabank to repay their loans. In November, the Competition Authority initiated an abuse of dominance procedure against that practice. In December, the state-owned Hungarian Development Bank purchased the student-loan provider from Postabank. Hence, privately owned banks continue to be shut out from the student loans business.

The Budapest Stock Exchange has experienced a sharp decline in daily turnover in recent years, following the trends in many newer stock markets (Figure 29). Falling equity prices resulted in a noticeable increase of takeover activity on the exchange. In 2001 five listed companies were bought out by

Figure 29. Liquidity of the Budapest Stock Exchange



Source: Budapest Stock Exchange.

mainly domestic private equity companies<sup>152</sup> – three of these buy-outs were followed by delisting. Besides takeovers, the companies delisting reacted to limited opportunities to attract investment capital from the Hungarian market. The number of listed equities declined from 66 in 1999 to 60 by the end of 2000 and further to 57 by the end of October 2001, while three further withdrawals were under way. The capitalisation of the equity market, equal to HUF 4 145 billion at the end of 1999, fell to HUF 3 394 billion by the end of 2000 and further to HUF 2 465 billion by the end of August 2001.<sup>153</sup> It now amounts to around one-fifth of GDP compared to 36 per cent at the end of 1999, lagging behind the levels observed in advanced economies.<sup>154</sup>

The main reason for the limited importance of capital markets is the dominant role of foreign strategic investors in restructuring and re-capitalising of the corporate sector. The main form of equity financing in the first half of the 1990s was provided by privatisation to strategic investors. Consequently, the capital structure of large Hungarian companies is characterised by the predominance of closely held equity; free float exceeds 50 per cent of equity in half a dozen of the listed blue chips only. However, in corporate finance, inter-company loans, retained profits, direct borrowing from abroad and domestic bank loans play the dominant role. There are only a few Hungarian companies that are large enough to access funding from international markets. The largest Hungarian telecommunications company (Matav) is listed on the New York Stock Exchange and in London, and other Hungarian blue chips are listed and/or traded in London (SEAO), Frankfurt, Munich, Stuttgart and Vienna. About one-half of the turnover of Hungarian equities has been dealt in the SEAO market, almost one-half in the Budapest Stock Exchange. The remaining stock exchanges share in less than 5 per cent of the total turnover. There was only one corporate bond issue placed abroad since the fall of 2000.<sup>155</sup> However, since 2000 the number and volume of domestic bond issues increased while the maturities became longer.

Due to loopholes in the legislation governing takeovers, the Financial Supervision Authority (PSzAF) continued to be unable to protect effectively interests of minority shareholders. At the end of 2000 one of the largest Hungarian petrochemical companies was subjected to a concerted take-over action, orchestrated by a single investor. Different companies, registered in different countries but apparently with the same interest behind them, separately but in a concerted manner started to acquire more than 50 per cent of the targeted firm's shares. According to the then valid Hungarian takeover rules, any investor with the intention to obtain – directly or indirectly – more than 33 per cent of voting shares in a public company was required to make a public bid to all shareholders. In view of the lack of transparency and the significant role played by the company taken over in the Hungarian petrochemical sector and on the

capital market, special attention was paid to the case by the Financial Supervision Authority. Although the supervisor used all legal means available to it in order to reveal the true circumstances of the acquisition at hand that jeopardised the transparent operation of the Hungarian capital market, it was unable to stop the takeover. Following this fiasco, the authorities tightened further the rules governing takeovers;<sup>156</sup> however, it remains unclear whether full disclosure can be ensured regarding the ownership structure including the beneficiary owners. The new rules have extended the powers of the Financial Supervision Authority relating to investigations of takeovers, the imposition of fines and suspension of shareholders' rights in the case of serious misconduct. Powers of PSzAF should be further enhanced so that it can issue its own regulations and thus react promptly to developments in financial markets – the government approved the relevant legislation but it did not get the required two-third majority in Parliament at the end of last year.<sup>157</sup>

It is unlikely that Hungarian mid-sized companies will finance their expansion by initial public offerings (IPOs) on the BSE in the foreseeable future. There were only two IPOs since 1999<sup>158</sup> in spite of the availability of listing on the second-tier market.<sup>159</sup> Starting from a very low base, venture capital inflows exceeded \$100 million in 2000, targeting mainly start-up ICT firms. These inflows collapsed in 2001, reflecting the global downturn of the ICT sector. Even though a number of promising high-technology firms were started in Hungary over the last decade, none of them managed to exceed the \$50 million annual sales threshold. The thinness of the domestic equity market makes the exit of venture capital funds through IPOs unlikely, forcing them to exit in trade sales instead.<sup>160</sup> According to BSE brokers, the interest in management buy-outs backed by local private-equity investors increased in recent months, signalling the possibility of a new wave of restructuring of domestically-controlled firms.

### **Labour market issues**

Since the last *Economic Survey*, labour market developments have been contradictory. Unemployment fell below 6 per cent while employment stopped growing in 2001. Consequently, the labour-force participation rate started to diminish. Although the unemployment rate differentials across the seven large statistical regions (NUTS2) declined in recent years, unemployment differentials among the smaller and more labour-market relevant regions (NUTS3) actually increased.<sup>161</sup> Skilled labour bottlenecks in the relatively advanced areas have continued to co-exist with significant excess of unskilled labour in backward regions, the weak public infrastructure network inhibiting the flow of capital to the latter. Wage growth picked up considerably, despite a significant nominal

appreciation of the currency in 2001 (see Chapter I for a detailed discussion of recent developments).

### ***Growing wages, falling participation rates***

Structural unemployment in Hungary is characterised by a mismatch between the demand for workers with specific skills and the excess supply of labour without such skills, resulting in labour shortages in particular sectors and regions coexisting with high involuntary unemployment elsewhere. The relatively low worker mobility<sup>162</sup> has been associated with limited availability of affordable rental accommodation. Given the spatial and qualification constraints on the labour supply, the size of the available labour reserves is limited in the short run but could be improved in the longer term. Box 13 reviews three measures of unemployment that have been used by Hungarian authorities.

The measures of unemployment mentioned above, ranging from 2.5 to 8 per cent, underestimate the extent of latent labour reserves because they ignore the fact that Hungary lags most OECD countries with respect to labour force participation. If the country were able to achieve the OECD average participation rates, the labour force would increase by 16 per cent and the unemployment rate would jump to 19 per cent, assuming an unchanged level of employment.<sup>163</sup> These calculations indicate that Hungary has a hidden labour reserve of more than half a million persons that is not reflected in any of the official measures of unemployment. Given this chapter's focus on economic growth, the crucial issue is how to mobilise such latent manpower reserves so that the private-business sector can not only overcome the current shortages of skilled workers but expand employment and output more dynamically than hitherto. The share of the 20-64 old group in total population is projected to increase slowly for one more decade, followed by a steep decline afterwards.

One obstacle to higher utilisation of labour is posed by the rapidly escalating wage costs. A 57 per cent augmentation in the minimum wage in January 2001 and an additional increase of 25 per cent in January 2002, almost doubling the monthly statutory rate within two years,<sup>164</sup> have been a key factor behind the reported wage increases that shifted the wage-distribution curve upward (Figure 31). The CSO data indicate that the statutory minimum shifted from about 30 per cent of the average wage in 2000 to almost 40 per cent of the average wage of all employees or 55 per cent of the average wage of blue-collar workers in 2001. However, the authorities<sup>165</sup> believe that most of the 2001 increase was effectively paid by enterprises before the imposition of the higher statutory minimum wage, but disbursed "under the table" to minimise social-security taxes. The actual degree of this statistical distortion is a matter of conjecture

### Box 13. How big are the labour reserves?

Three measures of unemployment have been used by the authorities. As shown in the figure below, they provide significantly different estimations of the latent unused labour force in the economy.

#### 1. The Labour Force Survey and the ILO definition of unemployment

According to the ILO definition used in the labour-force surveys of the Central Statistical Office (CSO), the unemployed are those persons who have not been employed, but looked actively for work, during the last four weeks and are ready to be hired within two weeks. In theory, the ILO methodology ensures that all those who do paid work – even those active in the informal economy – are counted as employed; and those who neither work nor actively seek job opportunities are classified as economically inactive. According to the ILO definition the unemployment rate was 5.6 per cent in the final quarter of 2001. However, this figure excludes discouraged workers, *i.e.* non-employed individuals of working age who no longer look for a job actively. It is estimated by the CSO that there are around 100 000 discouraged workers, or 2½ per cent of the labour force.

#### 2. Registered unemployment

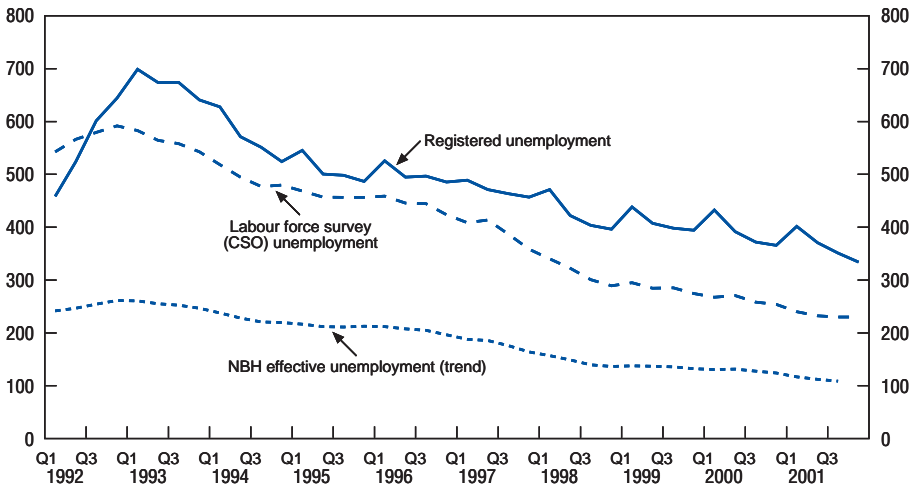
Registered unemployment refers to the persons who have registered at local labour offices to claim benefits; monthly figures are published by the National Employment Office. This measurement is influenced by changes in the unemployment benefit, disability benefits and social-assistance eligibility rules. It is estimated that approximately one-half of those registered by labour offices are actually not unemployed – such persons are either employed in the informal economy or are not in the labour force according to the ILO definition. The measure based on registration indicated unemployment at 8 per cent of the labour force in the final quarter of 2001.

#### 3. Effective labour reserves estimated by the Central Bank

The measures above may not capture accurately the portion of the labour force ready to participate in economic activity at a cyclical pick-up. Obsolete qualifications and skills, and remote geographical location, exclude part of the unemployed from effective labour pools. Microeconomic empirical research helps the Central Bank estimate and publish the remaining effectively available labour reserves.<sup>1</sup> This approach focuses on the purely cyclical component of unemployment, and yields the lowest estimation of its rate, at 2½ per cent in the third quarter of 2001.

1. See *Inflation Report*, March 2001.

Figure 30. **Three measures of unemployment**  
 Thousand persons



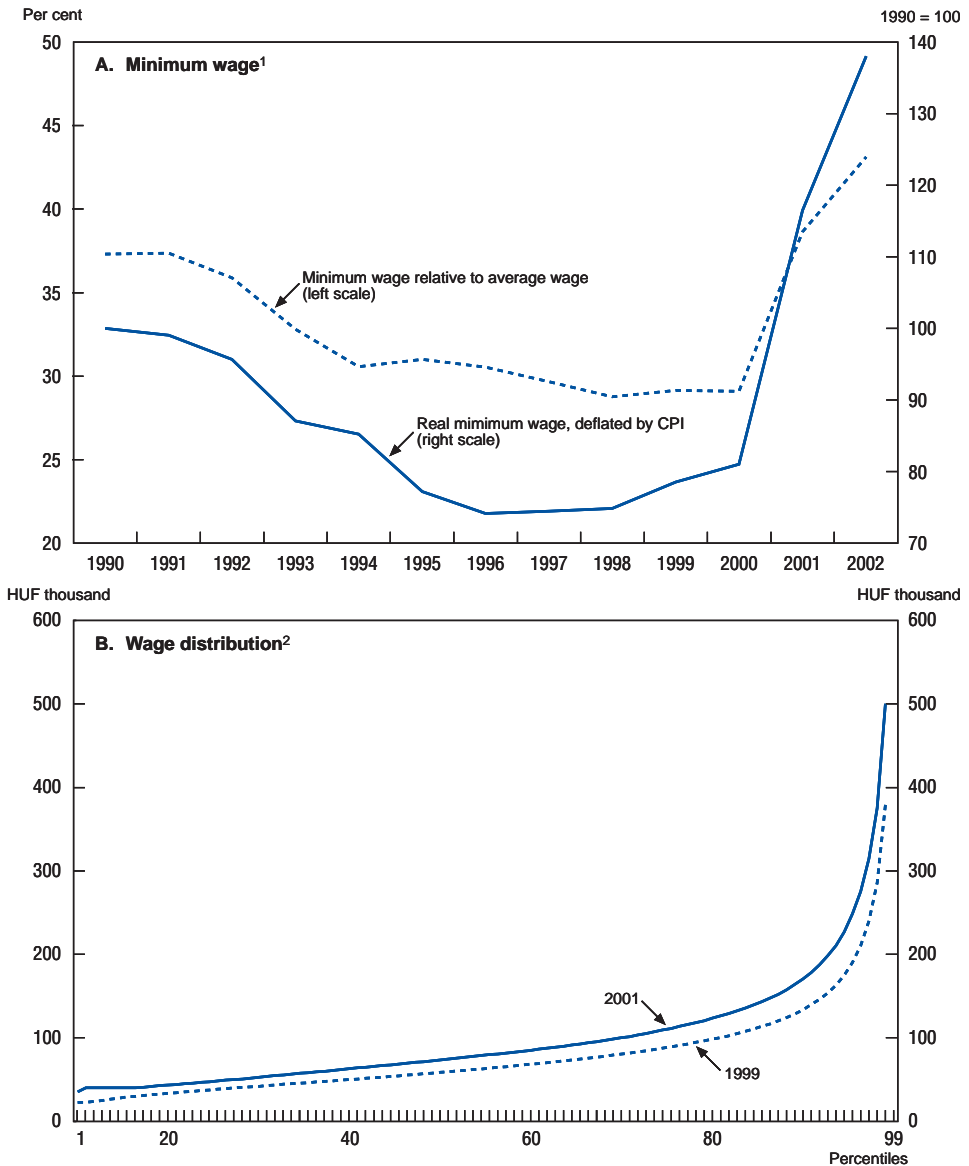
Source: Central Statistical Office (CSO); National Bank of Hungary (NBH); OECD, *Main Economic Indicators*.

(see Box 14).<sup>166</sup> Secondly, government wages were augmented in the course of 2001.<sup>167</sup> These rises, driven by government decisions, have not diffused spontaneously in the entire labour market, but nevertheless total average gross wages grew by 18 per cent in 2001 (22.4 per cent in the public sector and 16.3 per cent in the private sector). The resulting flattening of the wage structure in the short term contains additional latent wage pressures in the context of a tight labour market.<sup>168</sup>

The government introduced in recent years a number of measures to promote growth of labour force participation and employment (see Box 15 below). The outcomes have been disappointing to date, especially since the second quarter of 2001 when the labour force started to decline again after a few years of expansion. The declining participation presents a puzzle, given the spectacular wage increases in both private and public sectors. The labour account data of the Central Statistical Office, available with a significant time lag only up to the end of 2000, indicate that two groups of the working-age population kept increasing in recent years: students and early retirees. While the growing number of students may well improve the nation's human capital, the continued growth of the inactive working-age population receiving retirement and disability benefits slows down the ongoing catch-up process. Previous *Surveys* emphasised the need for further



Figure 31. The increase of the minimum wage and impact on wage structures



1. OECD estimates for inflation and wages in 2002.

2. Gross monthly earnings of full-time employees in May of each year plus 1/12 of non-regular payments from previous year, in enterprises with 10 or more employees.

Source: OECD; Central Statistical Office; Ministry of Economy; National Employment Office.

#### Box 14. The incidence of the minimum wage increase

The minimum wage increase has impacted both private sector and government employers. In the private sector, the increase was felt directly in low labour cost industries such as agriculture, tourism and textiles while higher wage sectors are likely to be impacted with a time lag of one to two years as the relative wage structure readjusts. Between 2000 and 2002, while raising the monthly minimum wage from HUF 25 500 to HUF 50 000,<sup>1</sup> the government also cut the pension contributions payable by employers for all workers by 4 percentage points and increased the flat-rate health contribution from HUF 3 900 to HUF 4 500 per month. The total labour cost of unskilled labour increased from HUF 38 962 to HUF 71 250, *i.e.* by 83 per cent over two years.<sup>2</sup> Given the practice of “under-the-table” wage payments in the SME sector, the first-round incidence of the official increase impacts fully employers in the government sector (where 180 000 of the officially reported 750 000 minimum wage earners belonged in 2001) and the self-employed.<sup>3</sup> According to estimates of the Ministry of Economy, one-third of wage earners receive the statutory minimum in 2002.<sup>4</sup> This proportion exceeds significantly the percentage of workers receiving statutory minimum wages in other OECD countries.

Strong minimum wage hikes affect most adversely low-wage sectors where some private-sector employers responded by cutting full-time employment and increasing the use of part-time contracts while others applied for a special subsidy to offset the cost-increasing impact of the minimum wage. Given the high proportion of workers receiving the minimum wage, it can be expected that ratchet effects will restore a less extreme structure of relative wages within a few years. The associated cost-increasing impact on businesses is likely to be offset by a wider use of part-time contracts and, providing that employers expect the higher wage levels to last, more capital-intensive production methods.

1. € 208 in April 2002. The monthly minimum wage is € 189 in the Czech Republic, € 235 in Poland, € 406 in Portugal, € 473 in Greece, € 516 in Spain and € 1 009 in Ireland.
2. In the government sector, the increase in total labour cost of a minimum-wage recipient was from HUF 38 580 in 2000 to HUF 70 500 in 2002, *i.e.* by the same percentage as in the business sector. The difference in the total cost levels is due to the fact that government employers are exempt from paying a training charge amounting to 1.5 per cent of gross wages.
3. The self-employed are authorised to report their actual income at the level of minimum wages, and pay social security contributions (but not income taxes) on this basis.
4. Only one-tenth of workers in the business sector were paid minimum wages two years ago. See OECD (2000a), p.115.

tightening of access to early-retirement and light-disability benefits as well as for rehabilitation and reintegration into the labour market of members of the latter group. The authorities have reportedly prepared such measures but failed to enact them to date.

### Box 15. Recent policies to promote labour force participation and employment

Since the last *Survey*, the authorities have tried to address the labour-supply shortcomings by five new measures. First, they lowered the replacement rate, mainly by increasing the minimum wage significantly. Second, they made employment more attractive to retirees by exempting pensions fully from the calculation of taxable income, motivating them to participate again in the labour force.<sup>1</sup> Third, they authorised ethnic Hungarians living in neighbouring transition countries to work in Hungary for up to six months a year.<sup>2</sup> Fourth, they tightened unemployment benefit rules, eliminating the special social assistance available to the persons whose unemployment benefit expired. They also increased social benefits accessible in the form of income-tax relief, reduced welfare benefits and discouraged their use by a rigorous claw-back provision.<sup>3</sup> The “work-fare” scheme, already applied at the time of the last *Survey*, also encourages labour market participation. Finally, to improve the worker mobility constrained by the shortage of affordable rental accommodation, the government started to subsidise significantly construction of municipally owned housing estates in 2001; Parliament approved a continuation of this programme in 2002.

The authorities also aimed at stimulating labour demand by the following measures. First, the social-security charges paid by employers have been reduced by 2 percentage points per year, falling from 33 per cent in 2000 to 29 per cent in 2002. However, the *relative* price of low-skilled labour increased as these cuts in percentage rates were accompanied by hikes in flat-rate health-insurance charges.<sup>4</sup> A portion of the Labour Fund reserves were used in 2002 to finance labour subsidies to the sectors affected most by the minimum wage growth (see also Box 13).<sup>5</sup> Finally, tax relief was provided to employers of “disabled” persons; there are some 600 000 “disabled,” including many middle-aged workers displaced by post-transition adjustments and provided with access to disability benefits on social rather than medical grounds.<sup>6</sup>

1. Although old-age pensions were tax free, their amount counted in the determination of taxable income which increased the pensioner's work income, pushing it into a bracket with a higher tax rate.
2. In selected occupations. Otherwise the time limit is three months per annum. Moreover, the December 2001 intergovernmental agreement with Romania stipulates that all Romanian citizens, regardless of their nationality, will be eligible to apply for temporary jobs in Hungary. In all cases, the applicants will be eligible to get only jobs that were advertised but not filled for at least a month. This ensures that citizens of Hungary continue to have preferential access to local jobs. Further, responding to public concerns, the government capped the number of the valid work permits issued to foreign citizens at 81 000 on any given day of the year.
3. Since May 2001 the local authorities are entitled to impound property of persons who receive welfare benefits. In case of death of a recipient, the local government can obtain compensation by selling his or her estate.

**Box 15. Recent policies to promote labour force participation and employment (cont.)**

4. The health-insurance contribution paid by the employer consists of the sum of a proportional tax (11 per cent of gross wages) and a flat charge per worker; the latter was increased from HUF 3 900 per month in 1999 to HUF 4 200 in 2000 and HUF 4 500 in 2002.
5. Subsidised employment expenditure exceeded 0.2 per cent of GDP in 2000. In 2001, a new kind of wage subsidy was introduced to compensate small firms employing low-skilled workers for the increase of wage costs associated with the higher minimum wage. The total amount of the new subsidies was relatively low (less than HUF 2 billion or 0.01 per cent of GDP). In 2002 the Labour Market Fund plans to distribute a larger amount (HUF 15 billion) of such subsidies to SME firms and self-employed that were impacted most by the rising minimum wage (most applicants are expected from low-wage industries such as hotels and catering, and textiles); the eligibility will be determined on a case-by-case basis.
6. A proportion of wages paid to handicapped workers can be deducted from the reported income of the employing firm. The upper limit for this income-tax deduction is defined by 50 per cent of the minimum wage; it rose steeply in step with the minimum-wage increases in the period 2001-02.

### **Human capital**

How well does Hungary's education system contribute to the accumulation of human capital that tends to reduce the extent of structural unemployment? The previous chapter has drawn attention to the decline in student performance and the growing disparity across regions and between school types. This chapter focuses on issues related to opposite poles of the educational spectrum and recent initiatives of the science and development policy. The share of the 25-64 year old population with university education is an indicator showing the approximate level of highly-skilled human capital. Its value in Hungary (14 per cent) corresponds to the mean of OECD countries.<sup>169</sup> The identical share of the labour force is higher for Hungary and exceeds the OECD mean by 1 percentage point. The *rate* of accumulation of human capital in Hungary increased phenomenally in the post-communist era; the net entry rate<sup>170</sup> to university education in recent years exceeds 50 per cent and is surpassed by three OECD countries only (New Zealand, Finland and Sweden).<sup>171</sup> The 72 per cent increase in the tertiary education enrolment rate observed in Hungary between 1995 and 1999 was surpassed only by Poland where it grew 73 per cent.<sup>172</sup> The rapidly growing enrolment in Hungarian tertiary education ensures further development of a highly educated population and labour force and a gradual closing of the existing skills gap.<sup>173</sup>

A special challenge in the formation of human capital is presented by the numerically large Roma minority that accounts for some 10 per cent of students at the primary level. Despite the government's medium-term programme to improve social integration of this ethnic minority, the Roma continue to suffer from a lack of decent schooling. Given the absence of official data on the educational achievement of the ethnic minority,<sup>174</sup> the most reliable source is provided by a recent study of independent researchers whose estimates are presented in Table 31. The comparatively low proportion of Roma students who enter the secondary school stream means that their proportion in post-secondary education remains extremely low, despite the availability of scholarships provided by the government.<sup>175</sup> Using the available information on scholarship recipients that was provided by the Ministry of Education, the OECD estimates that Roma represent about 0.2 per cent of total student population in colleges and universities, *i.e.* the same proportion as in 1993. The majority of the Roma primary school leavers continue their studies in apprenticeship schools with curricula of limited labour-market relevance, despite targeted education and training programmes financed by the government and the EU.<sup>176</sup>

In addition to formal education, the on-the-job training in large FDI firms helped to upgrade skills of approximately half a million Hungarian workers. Large national firms also upgrade skills of their employees on a significant scale but the domestically-controlled small business sector is different in the sense that skilled labour is employed but not much training is provided.<sup>177</sup> Hidden employment of unskilled workers is reported to be routinely practised by small businesses in contrast to large firms that are better supervised (GKI, 2001*b*). The role of smaller firms in human capital formation is less spectacular than that of MNCs but they enable workers to maintain their general labour-market skills and provide entrepreneurial experience.

**Table 31. Educational achievement and ethnicity**

Percentage of pupils continuing education after basic schooling (8th grade), 1998-99

	Roma <sup>1</sup>	Non-Roma <sup>1</sup>	National data <sup>2</sup>
No continuation	14.9	3.2	4.4
Vocational training school	9.4	3.2	1.8
Apprenticeship school	56.5	26.8	23.0
Specialised secondary school <sup>3</sup>	15.4	38.1	39.1
General secondary school <sup>3</sup>	3.6	18.4	31.7

1. The sample included pupils of 192 schools where the share of Roma exceeded 25 per cent or where their absolute number exceeded 100.

2. The national data are provided by the Ministry of Education.

3. The school-leaving certificate is required for entering tertiary education or for work in several occupations.

Source: Havas *et al.* (2001), Ministry of Education.

### *Science and technology policy*

A small open economy such as Hungary,<sup>178</sup> passing through a relatively early stage of the catch-up process, is more likely to be a user rather than a generator of technological advance. The nation's R&D indicators are consistent with this. During the 1990s, the strong reliance on foreign investment as well as the need for fiscal stabilisation meant that the science and technology policy was sidelined. Consequently, Hungary's technological dependence deepened while the research intensity declined significantly. The former, measured by the standardised dependence index, is close to the levels observed recently in Austria while the latter, measured by the proportion of R&D spending in GDP, remains at 1.1 per cent in 2001 well below the OECD average, even though Hungarian subsidiaries of some large multinational corporations in telecommunications and pharmaceutical industries started to operate research laboratories while employing increasingly local talent.<sup>179</sup> Generally, linkages between public R&D institutions and the business sector have remained weak (see Papanek, 2000), despite partial improvements produced by the government-sponsored co-operative research centres linking universities and industry.

In response to the weakness signalled by R&D indicators, the authorities have decided to promote more actively domestic inventions and innovations. The government's 2000 science and technology action programme introduced five national R&D initiatives, four of which seek to maximise Hungary's comparative strengths in narrowly focussed fields within the following areas: pharmaceutical research, IC technologies, environmental and materials research, and biotechnology. The fifth initiative provides support for contemporary social research that is relevant to societal cohesion, including investigations of the living conditions of the ethnic minority. Implementation relies on high amortisation rates for R&D expenditure and direct funding from two central budget chapters, providing for incentive schemes attracting research labs of multinational corporations to Hungary and R&D aid to SMEs (Ministry of Education, 2000*b*). The government's programme aimed to double the R&D share in GDP from 0.8 per cent in 2000 to 1.6 per cent in 2001. In the event, the outcome was 1.1 per cent and the authorities expect the R&D share in GDP to reach 1.5 per cent in 2002 with the aid of subsidies, tax allowances and EU funds.

With respect to human resources for research and development, the situation remains unsatisfactory. According to the Central Statistical Office, in 2000 the share of Hungarian R&D personnel in employment amounted to 0.6 per cent – this indicator is not only low in comparison to western Europe but also to other OECD transition economies. Approximately 27 per cent of this group were employed in R&D units of enterprises, mostly foreign-owned. However, enterprises accounted for 41 per cent of current expenditure and 71 per cent of capital expenditure<sup>180</sup> – this indicates that they pay much more for personnel and equipment than public-

sector R&D units at the Academy of Sciences and higher education institutions. Also the growth rates of R&D spending in the business sector exceeded those observed in the public sector in recent years. The public-sector R&D units appear to employ too many relatively aged researchers who receive relatively low salaries. To improve the situation, the government has introduced new incentives to increase mobility of researchers between universities and the private sector.

### **Public sector issues**

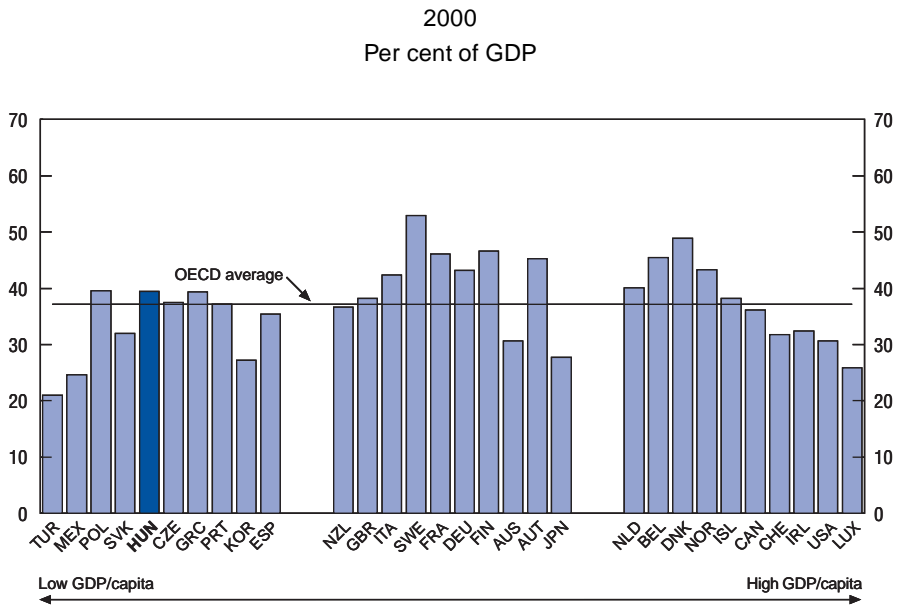
The previous *Economic Survey* examined in detail the tax system and long-term impacts of the ageing process on social security and economic growth. Both tax and pension reforms are important issues for Hungary's business sector perspectives and its future attractiveness as a destination for FDI inflows.

### **Tax reform perspectives**

Tax reforms in Hungary appear to be driven by the desire to further improve the environment for doing business and by the commitment to gradually harmonise regulations with the EU. The overall tax burden remains relatively high (Figure 32), especially for a country at Hungary's stage of development, and exceeds the average level observed in the low-income group of OECD economies. The structure of taxation is described in Table 32. In contrast to the OECD average, Hungary's tax revenue depends much more on social-security contributions and consumption taxes while the shares of revenue generated by income taxes on capital and labour as well as property taxes remain relatively low.

Does the structure of taxes improve in the sense that the proportion of revenues that distort saving decisions and reduce work incentives declines?<sup>181</sup> In recent years, the government strived to compensate employers for massive increases in minimum wages and generally strong wage inflation by cutting the social-security contributions which fell between 2000 and 2002 from 33 to 29 per cent of gross wages, moving closer to the OECD average. It would be desirable to continue this process. The share of taxes on consumption in total revenues declined since 1999, partly reflecting the working of a fiscal drag;<sup>182</sup> this trend is not positive because taxes on goods and services are less likely to distort savings and work incentives, and thus more likely to encourage growth, than taxes on income and property. Furthermore, to enhance the nation's growth prospects, the authorities ought to reduce the use of multiple rates of VAT as social policy instruments.<sup>183</sup> A gradual move in this direction is likely to result from further harmonisation of VAT rules with the EU. Similarly, excise duties on alcohol and tobacco products are to be gradually adjusted to higher EU levels so that the proportion of consumption taxes in total revenues would rise. The authorities are encouraged to accelerate this process while cutting the pension and health contributions as rapidly as consistent with the longer-term fiscal adjustment mentioned above. In the

Figure 32. The overall tax burden in OECD countries



Source: OECD, Analytical Database, based on national accounts.

new context of relatively low inflation (see Chapters I and II), it would be advisable to widen the tax base for personal income by including interest income. The extra revenues generated by taxing interest income could be used to finance off-setting cuts in taxation of wages, further improving the incentives to employment.

The Hungarian income-tax regime provides an advantageous environment for the business sector. The statutory profit tax is linear and, at 18 per cent of earnings, the lowest in the OECD area while the effective tax rate has amounted to 10-12 per cent in recent years.<sup>184</sup> The generous incentives mentioned above assure that large corporations can achieve tax breaks by investing above minimum thresholds – their profits becoming exempt from corporate taxation for up to 10 years (see Table 30). Repatriated profits are taxed at rates ranging from 0 to 20 per cent, depending on provisions of the relevant bilateral agreement. Another possibility for minimising profit tax is provided by easy registration of offshore firms in Hungary; these firms are subjected to a profit tax of only 3 per cent providing that Hungarian nationals account for at least one-half of employment in all ranks. The rising profitability of the Hungarian corporate sector in 2000 and 2001 was based to a significant extent on the dynamic growth of the earnings of such offshore firms in the financial services sector (*Flash Report* of the Finance Ministry,



Table 32. **The structure of taxation by type of tax**  
1999

	Corporate income tax	Individual income tax	Unallocable taxes on income, profits and capital gains	Social security and payroll taxes	Goods and services taxes <sup>1</sup>	Other taxes, including property taxes
Per cent of total tax revenue						
Australia	15.9	43.3	0.0	6.4	26.5	7.8
Austria	4.1	22.9	1.9	40.5	27.9	2.6
Belgium	7.9	30.6	0.0	31.7	24.9	4.8
Canada	9.8	38.1	0.9	15.7	24.9	10.6
Czech Republic	9.5	12.9	0.0	43.7	31.0	2.9
Denmark	5.9	50.6	1.7	4.8	33.1	3.9
Finland	9.1	31.9	0.0	25.4	30.7	2.9
France	6.4	17.6	0.0	38.2	27.1	10.8
Germany	4.8	25.1	0.0	39.3	27.4	3.5
Greece	8.7	14.2	3.7	31.4	37.8	4.3
<b>Hungary</b>	<b>5.9</b>	<b>17.3</b>	<b>0.0</b>	<b>34.0</b>	<b>38.9</b>	<b>3.9</b>
Iceland	4.2	34.9	0.0	7.9	45.9	7.1
Ireland	12.1	30.1	0.0	13.3	38.7	5.8
Italy	7.7	26.4	0.6	28.6	27.4	9.3
Japan	12.9	18.5	0.0	37.2	19.2	12.2
Korea	8.9	15.6	0.2	17.4	37.9	19.9
Luxembourg	17.6	18.7	0.0	26.0	26.3	11.4
Mexico <sup>2</sup>	..	..	28.6	17.8	50.0	3.6
Netherlands	10.1	15.2	0.0	40.0	27.8	7.0
New Zealand	11.1	41.8	4.7	0.8	36.0	5.6
Norway	7.6	28.2	0.0	24.5	37.4	2.3
Poland	7.4	23.1	0.0	28.7	34.4	6.5
Portugal	11.7	16.9	0.2	25.4	41.3	4.5
Slovak Republic	8.0	12.6	2.7	40.2	32.8	3.6
Spain	8.0	19.5	0.2	34.8	29.5	7.9
Sweden	6.0	35.6	0.0	32.9	21.6	4.0
Switzerland	7.2	29.0	0.0	35.6	18.5	9.8
Turkey	7.6	23.8	0.0	18.5	36.1	14.0
United Kingdom	10.4	28.8	0.0	17.1	32.6	11.2
United States	8.3	40.7	0.0	23.9	16.1	10.9
<b>Average OECD</b>	<b>8.8</b>	<b>26.3</b>	<b>1.5</b>	<b>26.1</b>	<b>31.3</b>	<b>7.1</b>

1. Includes value-added taxes, data for Hungary refers to 1998.

2. Corporate and individual income taxes are included in unallocable taxes.

Source: OECD Revenue Statistics 2001.

December 2001). However, this offshore regime has been contrary to the EU Code of Conduct and listed as “potentially harmful” by the OECD.<sup>185</sup> In 2001, the government also helped reduce the tax burden on SMEs by eliminating a special turnover tax on tourism transactions, speeding up the pace of VAT refunds and by providing an income tax credit amounting to 40 per cent of interest paid on investment loans, up to the ceiling of HUF 5 million (see Box 12).

Low taxation of profits coexists with relatively high social-security contributions and payroll taxes. The direct cost of labour is augmented by the following mark-ups on gross wages: pensions (18 per cent), health (11 per cent and a flat-rate health contribution of HUF 4 500 per employee per month), unemployment (3 per cent) and training (1.5 per cent). Government employers are exempt from paying the training charge. Further, all employers have to finance 33 per cent of sickness benefits. Despite repeated cuts of the pension contribution rate from 22 to 18 per cent in recent years, the overall burden of social-security contributions and payroll taxes remains heavy. Starting in 2002, the government allows firms to apply the training payroll tax amount towards improving skills of their own employees rather than contributing to a general fund. While welcoming this step, representatives of business interests pointed out that collection of social-security charges remains inefficient; instead of collecting all social security and payroll taxes at once, the authorities continue to force employers to register, declare and pay social security, unemployment and training charges separately.<sup>186</sup> Given the consolidation of tax collection agencies in 2000, the use of separate procedures ought to be discontinued. In addition to streamlining the tax collection, further reductions in payroll taxes would contribute to lowering labour costs and, given the low replacement rates and lack of excessive job protection in Hungary, result in increasing employment levels. Social-security contributions increase the cost of labour, and thus reduce labour demand, especially for the low-skilled since the demand is more price-elastic for this category of workers. Specifically, the elimination of the flat-rate health charge that amounts to 9 per cent of the minimum wage would be most conducive to higher employment of low-skilled labour.

### ***Whither pension reform?***

The previous *Survey* described the evolution of the Hungarian pension reform in recent years. To recapitulate, the 1998 social-security reform aimed to improve the viability of the public-pension system by strengthening positive effects of an earlier approved gradual increase of the statutory retirement age to 62 years; it replaced the traditional PAYG system with a mandatory two-pillar scheme and was to phase in an indexing system that adjusts benefits by the average of wage and consumer price increases. In the event, the retirement age kept increasing as planned and reaches 62 years for men and 58 years for women by now.<sup>187</sup> The second pillar consisting of mandatory but privately operated pension funds was established but the government failed to increase the allocation of PAYG contributions to the individual retirement accounts from 6 to 8 per cent of gross wages by 2001, as originally planned. The financial impact of this default has been mitigated by the significantly higher than expected number of older workers who joined 2nd pillar funds voluntarily. Further, the authorities cut the pension contributions paid by employers much more than planned, reducing them from

22 to 18 per cent of gross wages between 2000 and 2002. The new indexing formula was adopted in 2001 but the actual pension increases exceeded the statutory amount by 3 percentage points; the government announced that the pension hike would exceed the formula-based amount by the same percentage in 2002. In the longer term, there is consequently the danger of sharply rising public liabilities related to the public pension system, even though the growth in pensions over the period 2001-02 is projected to exceed the average wage growth only slightly.

The government has recently decided to gradually change the PAYG system into a notionally defined contribution (NDC) scheme and to permit participants in the 2nd pillar funds to divert all of their pension contributions to the 1st (PAYG) pillar up to the end of 2002. The abolition of the mandatory nature of the 2nd pillar and of the state guarantee of minimum retirement benefits generated by the 2nd pillar pension funds was intended to encourage older workers, who joined the 2nd pillar funds despite the low likelihood of accumulating sufficient contributions, to reswitch to the PAYG system.<sup>188</sup> While some calculations show that a pure NDC system would do no worse over a 50-year long period, providing that the notional rate of interest were equal to GDP growth, the associated political risks are greater and there would be no beneficial effects on capital markets (Rocha and Vittas, 2001). Further, the forthcoming "competition" between private operators of the 2nd pillar pension funds and the reformed PAYG system might seriously damage the ability of the funds to pay even the minimum annuities mandated by the original pension legislation to the first wave of retirees between 2015-20.<sup>189</sup>

The previous OECD *Economic Survey* provides a number of arguments supported by numerical simulations that show why the government should restore the originally planned level of contributions to the 2nd pillar. Specifically, the government's original pension reform was based on a productivity and employment-growth scenario that is subject to a number of downside risks. To minimise such risks, the authorities have been encouraged to raise the individual social-security contribution that is allocated to the individual retirement account to 8 per cent of gross wages from the current 6 per cent. If this step is not taken, the comparative advantage associated with an early start of the pension reform will be lost. The apparent concern with the short-term impact of increasing contributions to the individual retirement accounts on the headline government deficit is understandable in the context of the EU accession<sup>190</sup> but the longer-term effect would be beneficial.

The last *Survey* also emphasised the negative effects of the particularly low employment of the elderly population in the context of sustainability of Hungary's social-security system. Although the employment rate of the elderly has started to improve in recent years,<sup>191</sup> it still remains well below the OECD norm. To encourage the continuation of the welcome reversal in the employment rate,

the government decided to exempt old-age pensions fully from taxation as of 2002. This measure improves work incentives for the retirees, reducing the marginal tax rate on earned income, and is likely to induce further growth in their economic activity.

## Notes

1. The accrual-based current account is an estimate of the OECD Secretariat. Hungarian current account data is published on a “net cash” basis. For international comparability, these net-cash based measurements have been adjusted according to the standard practice of factoring in reinvested earnings as capital inflows.
2. In purchasing power parity terms.
3. The unemployment rate is relatively low but the activity rate of the working age population is even lower compared to other countries – indeed the second lowest among OECD countries. In 2000 and 2001 the employed share of the population in Poland declined to Hungary’s level, but this is due to an exceptionally high unemployment rate (18 per cent in Poland against 6 per cent in Hungary). The activity rate in Poland remains well above that of Hungary.
4. In December, the widely used business and consumer composite confidence index of the GKI Co. has improved, as a result of the steady strengthening of households’ expectations and a slight recovery in business sentiment.
5. The OECD Secretariat has calculated the output gap at around –0.2 per cent in 2001, on the basis of an estimation of the potential growth rate at 4 per cent per year (see Box 1). This potential growth estimation revises slightly downward the earlier calculations (OECD 2000a, Hviding, 1999).
6. Communication by Hungarian authorities. The capacity utilisation rate estimated by the company KOPINT-DATORG shows a decreasing trend. It was of 81 per cent in Q1/2001, 80 in Q2, 79 in Q3 and in Q4. These data are unadjusted; seasonally adjusted data would show a more pronounced decline.
7. On basis of business survey statistics, interest rates and consumer price inflation.
8. The actual magnitude of this increase is debated, due to statistical uncertainties. See Chapter IV.
9. The most important of the adjustments concerns the effect of the minimum wage increases. The Central Bank estimates that the 2001 increase in minimum wages represented no more than mere officialisation of “under the table” payments, they did not necessarily cause an increase in actual wages paid. The Central Bank index also adjusts for the effects of changes in the sectoral and structural composition of employment and for variation in the number of working days.
10. The crawl was officially abandoned as of 1 October 2001; however, the widening of the band on 4 May 2001 made the crawl operationally irrelevant from that date.
11. There is a risk that the strong dependence of Hungarian exports on the procurement networks of large FDI firms extends the lag between competitiveness developments and trade outcomes. The measured evolution of Hungary’s export share in interna-

tional markets shows various degrees of deceleration depending on the indicators used. According to the OECD Secretariat calculations, using the trade structure in 2000 as a benchmark, Hungarian performance remained positive in the first half of 2001 at a rate of 0.7 per cent, contrasting with the double digit market share gains observed in earlier semesters (export market performance is calculated as the ratio of export growth to export market growth).

12. The elasticity of labour demand to wages reportedly attained  $-1.0$  in 1999 in high-skill markets (up from  $-0.6$  in 1996), and  $-1.8$  in 1999 for lower skills (up from  $-1.5$  in 1996). See Köllö (2001*b*).
13. The number of part-time workers in the private sector increased by 23.4 per cent to 117 000 in 2001, while the number of full-time workers decreased by 1.2 per cent. It is presumed however that part of these shifts may be apparent only and destined to minimise social-security taxes. In the public sector, the number of part-time workers increased by 6.1 per cent to 40 000 in 2001.
14. Recent trends might be explained partly with low-skilled workers' discouragement with their inability to find jobs at the new minimum wage. It is also possible that minimum wage rises have increased employment in the informal economy – in ways not visible in official participation and activity rates, although there is no hard evidence to support this conjecture. Authorities estimate the size of the informal sector at around 20 per cent of GDP and some recent research suggested that this rate is on a trend decrease (Toth and Sik, 2001). See also Government of Hungary and European Commission (2001), p. 5. Finally, it could be that the more stringent registration requirements discouraged those welfare recipients who have sufficient other sources of income.
15. For details, see the previous *Economic Survey*. The difference between adjusted (net) customs trade deficit and the BOP merchandise trade deficit narrowed significantly in 2001. Given the fact that the customs-based data are more detailed as well as more suitable for economic analysis, the NBH has decided to replace its payments-based merchandise trade data by customs-based data in 2003.
16. While according to normal accrual-based measurements in other OECD countries FDI earnings should first be accounted for as investment income outflows, and then re-recorded as capital entries.
17. Although this factor is probably less relevant in Hungary because of the favourable tax regime.
18. The currency could not appreciate by more than 2.25 per cent from its reference rate which was depreciating by 0.2 per cent per month.
19. In 2001, non-interest sensitive capital inflows (including the retained earnings of FDI firms and net direct investment) have amounted to € 4.4 billion as a yearly total, interest-rate sensitive portfolio inflows were € 1.7 billion, and other investment recorded a net outflow of € 3.3 billion.
20. Given the net demand position of the government sector, the NBH purchases foreign exchange in the market in equal daily instalments in a transparent manner (the details of operations are published). Since the government adopted a new debt management strategy, the Monetary Policy Council of the NBH decided in November to suspend these daily purchases as of 1 January 2002.
21. According to estimates of the Central Bank, the exchange rate exerts direct influence over more than one-third of the consumer basket, affecting another 20-30 per cent indirectly.

22. The differential of yearly forward implied rates as explained in footnote 1 of Figure 16.
23. These exceptionally favourable mid-term rates may also reflect some “excess” demand by internationally diversified investors in the thin market for forint assets.
24. The Central Bank remains ready to intervene in case of extraordinary capital inflows. If such an intervention occurs, subsequent sterilisation may again become necessary.
25. There is a downward bias in the measurement of credit growth which explains only a part of the recent deceleration: The stock of foreign currency credits at the end of the year is discounted in forint terms, after 2001’s currency appreciation. The credit flow measured as the difference between beginning-of-the-year and end-of-the-year credit stocks is therefore not fully reflecting credit expansion during the year.
26. In the crawling peg regime the cost of forint credits was higher compared to that of foreign currency denominated credits. In addition, the appreciation of the exchange rate within the wider band resulted in a one-off financial profit in the corporate sector’s balance sheet. Nevertheless, for companies whose open foreign exchange position does not have a hedging role, the new exchange rate regime results in a significant increase in exchange rate risk. The corporate sector’s reaction to the new circumstances is ambiguous. On the one hand, the proportion of foreign currency borrowing has declined somewhat, showing enterprises’ willingness to reduce open positions. On the other hand, the corporate sector’s reluctance to hedge position via forward exchange market was not reversed – despite the widening range of hedging assets accessible in commercial banks or in the stock exchange.
27. The capital account liberalisation was completed by waiving the last remaining foreign exchange restrictions bearing on future and derivative transactions in July 2001.
28. The equilibrium inflation differential has been estimated at a similar range (1-3 per cent) in a cross-country review on five Central European countries (IMF, 2001a). Financial markets, on the basis of forward rates, seem to imply a smaller mid-term inflation differential *vis-à-vis* the euro area.
29. If sustainable (relative-price equilibrating) price increases cannot be accommodated (this problem was not foreseen at the time of the design of European Monetary institutions: the productivity catch-up and price equilibration potential in other accession countries such as Spain, Greece and Portugal was of lower magnitudes), Hungarian policymakers may be driven to artificial inflation reducing measures in order to meet the Euro-zone targets, possibly only formally and temporarily (for example by delaying long overdue regulated price adjustments, transitory indirect tax reductions, or engineering an *ad hoc* slowdown of the economy as a temporary sacrifice).
30. General elections were held in April 2002 and municipal elections scheduled for autumn 2002.
31. The slowdown of GDP growth to 3.8 per cent in 2001 and 3.5 per cent in 2002 is estimated to lead to an additional budgetary deterioration of 0.1-0.25 per cent of GDP through the operation of automatic stabilisers. According to available estimates, 50 per cent of the actually observed stimuli are lost for domestic GDP because of revenue drains abroad from the small open economy of Hungary.
32. See Government of Hungary (2001).
33. For instance, the \$2 billion motorway construction programme is financed off-budget by the Hungarian Development Bank (MFB). See Chapter III.

34. Pension benefits are to be increased according to the following “Swiss” indexing formula:  $P(t) = \frac{1}{2}CPI(t) + \frac{1}{2}W(t)$ , where  $P(t)$  refers to the percentage increase of the pension benefit in year  $t$ ,  $CPI(t)$  denotes the annual average inflation and  $W(t)$  is the percentage growth of net average earnings.
35. Many of these partly highly educated professionals were paid at minimum wages in early 2001. Still, their large numbers make their total budget cost particularly sizable (see Chapter III).
36. See Government of Hungary (2001).
37. A new PEP will be submitted to the EC in August 2002.
38. After deduction of the Hungarian contribution to the EU budget.
39. For the Central Bank’s evaluation, see Box 3.
40. The OECD estimate of an SNA-compatible government deficit shifted from 3 per cent of GDP in 2000 to 5.2 per cent in 2001 and is projected to reach 5.5 per cent in 2002.
41. Current primary expenditure rather than total primary expenditure is used for this comparison, as public sector capital building is included to different degrees in the general government accounts of various countries – according to the organisation of public utilities.
42. Internationally comparable information on functional expenditures across the OECD area is available for the year 1995.
43. The bulk of price subsidies go to railway and long-distance bus services and to pharmaceutical price top-ups (consumers pay lower prices than those received by pharmaceutical companies). It should be mentioned that similar transfers may take less transparent forms in other countries, including through cross-subsidies within public companies and insurance funds, and are not always reflected in general government accounts.
44. Notably in the health, education and pension areas.
45. At 20.3 per cent of total employment without public enterprises and 25.1 per cent by including them. According to available data, the share of general government employment in total employment is about 12-15 per cent in most countries, employment in public enterprises adding an average 2-3 percentage points to this proportion (except in the Czech Republic where the additional public enterprise employment amount to 7 per cent of total employment).
46. Polackova *et al.* (1999).
47. The Public Finance Act of 1992, its Amendment in 1996, and the Government Decree For the Rationalisation of Public Finances of 2000 have shaped the budget procedures and institutions.
48. See IMF (2001*b*).
49. These comprehend specialised service providing organisations including kindergartens, schools, clinics, garbage collection services etc.
50. Actuarial risk calculations are available only for guarantees to government financial institutions.
51. All banks but two have been privatised and business enterprises still controlled by the government represent 5 per cent of total employment.
52. The “lending and repayments” reported in the 1999 closing budget accounts were nil.



53. The Central Statistical Office calculated the consumption of fixed capital in 2000 at HUF 556 billion, or 4.2 per cent of GDP. The IMF had previously estimated the economic depreciation rate of the public capital stock at 3 per cent yearly.
54. In 2000 the OECD Territorial Development Service estimated that local government investments remained below replacement rates.
55. According to the system of national accounts (SNA), and their European specifications under the European system of accounts (ESA 95) norms.
56. These have two components: tax arrears (declared but not paid taxes) and tax evasion (anticipated but not declared taxes). The Ministry of Finance has initiated a project to estimate and monitor both sources of tax losses – an estimate of which is not available at present. Cash-based accounts have an element of caution in this respect, as they safeguard against the registration of unpaid taxes as (potentially fictitious) revenues.
57. Fiscal reporting to the European Union will likely quicken these efforts, as reporting will need to be done according to ESA 95 standards. Hungary has already submitted tentative accrual-based budget forecasts to the EU in spring 2001, with a new set of such numbers planned for spring 2002. In contrast, the use of accrual accounts in domestic budget documents is not yet in sight.
58. The final distribution and incidence of these transport and pharmaceutical transfers between enterprises and the households receiving their output at lower prices (*i.e.* public transportation and pharmaceutical products) is not known.
59. The efficacy of the process supposes the timely and proper execution of interdependent steps. In recent budget exercises some steps had to be curtailed (the scope of certain budget documents fell short of the initial design). These shortcomings can be seen as teething problems.
60. See, on the importance of this element of the budget process, P. Atkinson and P. Van den Noord (2001) and OECD (2001*h*).
61. In 2000 for example, for the purposes of the 2001-2002 budget, the Parliament did not discuss the macroeconomic framework as it did not approve the budget guidelines. The government decided to keep the guidelines prepared for the 2000 budget.
62. Otherwise, in the experience of many countries and except in extreme crisis situations, resource shifts meet strong political and societal resistance. If resource shift proposals are perceived as “temporary” within a short-term yearly budget, resistance may reinvigorate and reforms may stall.
63. According to Ministry of Finance estimations in 2001, the share of mandatory expenditures *in an intermediate sense* (including health expenditures, old-age pensions, social welfare transfers, transport and pharmaceutical subsidies and debt servicing costs, but excluding government employees’ salaries) amounted to 53 per cent of general government expenditures in 2001. If *health expenditures and pharmaceutical subsidies are excluded* the proportion diminishes to 45 per cent.
64. In December 2000 the government announced a 2.6 per cent additional one-off increase in old-age pensions. A similar augmentation of 1.5 per cent was also granted in December 2001. The law authorises both increases: additional pension increases must be carried out in November (with retroactive effect as of 1 January the same year) if expectations on CPI and net wage increase for the current year exceed by at least 1 per cent the projections used in the calculation of the rate of pension augmentation in the beginning of the year. This was the case in both 2000 and 2001.

65. Health expenditures are *de facto* rationed, and their level depends on budget resources available. They are therefore, from an economic viewpoint, not exogenous but endogenous to the budget. See Orosz and Burns (2000).
66. If regulated pharmaceutical prices rise, there are upward pressures on pharmaceutical subsidies.
67. Various scenarios are examined in the Ministry of Finance but not in the Parliament.
68. An alternative scenario available in the pre-accession economic programme was not significantly different from the baseline projection.
69. The elasticities to inflation of fiscal inflows and outflows are asymmetric in Hungary and create net taxation gains. Inflation having a more than expected impact on actual tax pressure, independently from output growth, diminishes the predictability of budget outcomes.
70. Share of own revenues, including user fees, in central and local budgetary institutions (CBIs and LBIs) can attain in certain cases up to 30-40 per cent of their expenditures.
71. The Government Decree on the Reorganisation of Public Treasury of Autumn 2000, created three new agencies: a Public Finance Office (PFO) which took over most treasury functions, a Cash Management Office (CMO) and a Public Debt Management Agency. The Public Debt Management Agency was created in 1996 but was reorganised in joint-stock company form (presumably destined to facilitate flexible financing, hiring and staff management) in 2001.
72. And maybe household settlements (OECD, 2001f).
73. World Bank (2000a).
74. Such initiatives are a way of responding to market needs but to find the proper balance between private investment incentives and user interests should be their permanent concern.
75. Through the Local Government Act of 1990.
76. Half of municipalities have therefore a population of less than 1 000 persons and 300 (10 per cent of all municipalities) a population of below 200. The large difference between average and median populations reflects the weight of the municipality of Budapest where 18 per cent of the country population lives.
77. For example in France and the Czech Republic the average population per municipality is lower than in Hungary.
78. Competition *for markets* remains in principle possible in local service markets which are natural monopolies. Bids for time-limited public service concessions are the medium of such competition. However, their design necessitates advanced management capabilities by municipalities (which should write contracts which balance investors' protection against commercial risks with consumers' protection against price abuse).
79. There is one minor financial incentive for municipalities to create associations for joint service supply, amounting to an additional one per cent top-up to central government grants.
80. An additional level of regional policy was created recently: To ensure that the country's regional policy is compatible with EU requirements and order to get access to the structural funds, seven statistical regions were put in place in 1996 (according to the NUTS2 level), but without real administrative competencies.
81. The State Audit Office is indeed entitled to audit the financial management of the almost 3 200 local governments, from the aspects of legality, expediency and – in

theory – effectiveness. Besides the various individual audits, the SAO also presents a general appraisal of the financial management of the local government system each year to Parliament. However, the SAO does not have the capacity to perform almost 3 200 local government audits each year, especially to carry out performance and effectiveness analysis. To strengthen the financial control, independent external audits were added to the local Government Act in 1995. Counties, cities with county rights, the capital city, districts of Budapest, as well as any local government with expenses of more than HUF 100 million *and* outstanding loans or credit are required to commission an auditor. According to the law, the municipalities have to carry out internal financial control, but only few local governments have the technical knowledge or sources to conduct effective internal financial control. The availability of such audits should facilitate municipal borrowing on capital markets in the future, and this provides municipalities an additional incentive to comply. Recognising the weakness of their internal audit capacity, some local governments have set up associations to co-operate on this issue.

82. Except in specific cases involving state secrets.
83. A working group with representatives from the Agency, Ministry of Finance, Central Bank and other state organs is examining currently the means of further improving the quality of public debt accounting. More accruals-based monitoring of debt costs, principles concerning face *versus* market value accounting of public debt, and the conversion of foreign currency denominated liabilities in a floating exchange rate system are on the agenda. An equally important matter seeking clarification and where little progress has been made is the monitoring of the total liabilities of quasi-fiscal off-budget institutions (including the state holding corporation APV, the development bank MFB and the railways company MAV) whose financial and other liabilities are *de facto* covered by the general government. The insufficient representation of the expenditures of these institutions in the general budget is echoed in the incomplete monitoring of total public debt.
84. A medium-term budgetary framework is prepared in the context of the pre-accession economic programme submitted to the European Commission but it is not part of national policy-making.
85. The total cost of adjustment to EU environmental regulations has been estimated, by the government, at around HUF 1 820 billion over 2000-15, HUF 470 billion of which being earmarked for the period 2010-15. This amounts to total annual costs of 0.8 per cent of GDP in the first decade (2000-09).
86. These differences seem to have increased in the recent period, resulting from the “municipalisation” of public services under uneven local tax bases.
87. Health outcomes are unsatisfactory at present and deteriorated in a number of dimensions. They put Hungary at the bottom of OECD rankings. See OECD *Health Data Base*, 2001.
88. According to several indicators the Roma minority, representing between 5-10 per cent of the population, is falling behind in various dimensions of social development. Notably school achievements and labour market performances are extremely worrying. Only 1.6 per cent of Roma graduate from high school, compared with 23.8 per cent for non-Roma, while 0.24 per cent graduate from university, compared with 9.45 per cent for non-Roma. The non-employment rate for Roma reportedly attains 70 per cent. See US Department of State (2002). See also World Bank (2000a).
89. The objective of the government is to make the public R&D system, heir to a brilliant scientific tradition, more responsive to market needs, by increasing the private/public

- joint financing of research projects. The government aims to double the share of R&D expenditures in GDP from 0.8 per cent to 1.6 per cent in the early 2000s. This implies a strengthening of the public research facilities, notably in capital equipment and staff quality.
90. When acceding to the North Atlantic Treaty Organisation in 1998, Hungary committed to increase the share of defence expenditures from 1.5 per cent to 1.8 per cent of GDP in the 2000s.
  91. Water utilities have not been transferred to the market sector. They are still operated by enterprises which are exclusively owned by the state or local governments.
  92. A particularly illustrative case was the fate of the national motorway M1, the main highway between Budapest and Western Europe (see Box 10).
  93. Communication to OECD by Hungarian authorities.
  94. See World Bank (1999), IMF (2000).
  95. The exercise of the shareholder's information and corporate governance rights in MFB is, according to its special law (paragraph 13), the prerogative of the "Minister designated by the Government". This task was re-allocated several times in the past among various ministries and is currently exercised by the minister leading the Prime Minister's Office (MEH). The other ministries get information with a lag: "The exerciser of the shareholder rights" gives account to the cabinet on a year's activities until 30 June of the following year. This regulation implies that the government has no control over the operation of the bank.
  96. See *Financial Times* (2001).
  97. 57 per cent of 500 business enterprises surveyed in May 2001 estimated that the Szechenyi Plan was contributing to long-term economic growth and dynamism.
  98. See for example the discussion of the Public-Private Partnership method to infrastructure development in OECD Working Party I (2002*b*).
  99. OECD (2001*b*) details test results in various disciplines in 1995 and 1999.
  100. Programme for International Student Assessment. See OECD (2002*a*).
  101. A consultation with the Ministry of Education experts revealed that the authorities are well aware of the issue at hand.
  102. Hungarian students are the group where the standard deviation of performance results increased the most (by 6 percentage points) between 1995-1999. See OECD (2001*b*).
  103. When local municipalities are too small to host a secondary school, counties own and manage secondary schools.
  104. Foundations of civil, religious and ethnic groups created most of these new institutions. These receive the same central grants as municipal schools, which they then top up with their own resources. In 2001, they represented 6.5 per cent of schools and 5.2 per cent of students at primary (8 grade) level, and 17.4 per cent of schools and 10.1 per cent of students at the secondary level.
  105. See OECD (2001*e*).
  106. OECD (2001*e*).
  107. Additional grants are made available to education institutions participating in these efforts. At the same time, those primary and secondary schools willing to stick to their original curricula and education programmes may continue to do so if they obtain proper quality control and certification by national authorities.

108. In principle, average school costs which are taken into consideration in establishing the normative grant levels can be calculated on the basis of educational best practices. The application of this principle requires a refined understanding of school costs in different geographical and social environments (and when dealing with different types of student groups).
109. National data bases of education programmes, practices and curricula have been developed and constitute useful public reference tools. Their effective use depends on school principals' and teachers' incentives and abilities.
110. The 15-19 age cohort of secondary school students comprised 856 000 members in 1995 and 654 000 in 2000.
111. In primary education, the average ratio of student per teacher was 12.1 in 1991, 10.8 in 1996 and 11.2 in 2000. In secondary education the averages were 14.4 in 1991, 13 in 1996 and 12.4 in 2000.
112. The proportion is above the OECD average in higher education.
113. With average annual wages of \$10 000 at PPP rates for tenured (15 years' experience) teachers in secondary education in 1999, Hungary pays, together with the Czech Republic and Turkey, the lowest teacher salaries in the OECD area. It is one of four Member countries where teachers' average wages are lower than per capita GDP.
114. The real wages of primary and secondary school teachers had fallen to 64 per cent of their 1990 level by 1998. A catch-up policy, started in 1999, granted them a 7.6 per cent real increase in that year, 3.3 per cent in 2000, 6.7 per cent in 2001 and the government pre-announced a 15 per cent real increase for 2002. The stated objective is to offset most of the earlier accumulated losses by the end of 2002.
115. Hungary had one of the lowest computer equipment rate in its schools in 1999, with 48 per cent of schools equipped against an OECD average above 70 per cent (OECD, 2000*b*). World Information Technology and Services Alliance (2000) confirms this comparative IT lag of Hungary in education; see the section on worldwide installed base of PCs in education markets.
116. Innovative "training-in-service" programmes have been put in place by the Ministry of Education. Grants fund not the existing teacher-training organisations but directly the purchasers of services (schools and teachers) which can work with the institutions of their preference -including newly entering for-profit (commercial) service providers. The Ministry of Education certifies the skills of these private organisations and accredits them for participation in the programme.
117. Until recently, it was common that students with weaker backgrounds would drift to educational dead-ends, including into institutions for children with mental disabilities. In 1999, an amendment in the Public Education Act tried to contain such drifts by making more resources available for dealing with this problem. Today the fact of disability can only be declared by "Professional and Rehabilitational Committees" on the basis of complex examinations. 3.6 per cent of basic education students are at present enrolled in schools for disabled students, 82 per cent of them having slight mental disability. A re-examination is obligatory in order to direct a student back into normal school when possible.
118. See Schreyer and Koehlin (2002), p. 4.
119. A good illustration of this possibility is provided by the last year's decision of the German Mannesmann corporation to close its low value-added operation for production of car radios in Hungary and shift it to China. Other multinational firms that have

- left Hungary since 2000 include a Japanese cassette tape deck assembly plant and a German-Swiss cement producer. See G. Jahn, "Global firms leaving Hungary", Associated Press, 1 January 2001.
120. For a comprehensive discussion of the immediate, underlying and fundamental growth factors see Australian Productivity Commission (1999).
  121. The Hungarian privatisation process was characterised by the predominance of direct sales of majority stakes to foreign investors. This encouraged transfers of know-how and best international business practices. See Kaminski and Riboud (2000).
  122. However, the new Electricity Act does not preclude privatisation of MVM at a later date.
  123. The only privatisation transaction completed by the Hungarian Development Bank to date involved the sale of Salgotarjan Steel Works to a group of the firm's managers in February 2002.
  124. Act 39 of 1995 lists the minimum long-term state ownership interest in a number of firms. The actual extent of state ownership still exceeds the legally specified minimum in some large companies; *e.g.* the Act provides for one golden share in the privately owned energy conglomerate MOL but the state continues to own 25 per cent of ordinary shares as well.
  125. Hungary started to pursue the objective of attracting foreign direct investment (FDI) earlier and more effectively than any other former socialist country. In addition to using pecuniary incentives and benefiting from its proximity to both western and eastern European markets as well as from the EU agreements, post-socialist Hungary provided foreign investors with a politically stable environment, a pool of relatively skilled and moderately priced labour as well as good infrastructure in Budapest and north-western regions of the country. By the second half of the 1990s, foreign-controlled firms dominated major sectors of the economy, including manufacturing, utilities, trade and financial services.
  126. Although many preconditions for the materialisation of strong FDI inflows are the same as those for strong productivity growth, the latter does not follow automatically from the former unless a country manages to absorb foreign investment effectively. This was apparently the case in Hungary which, similarly as western European countries in the post-war period, possessed good initial conditions for productivity-intensive growth. See Doyle *et al.* (2001).
  127. For a description of the significance of greenfield investment see OECD (1999a) as well as Antaloczy and Sass (2000).
  128. See Éltető (2001a). The share of high-tech exports of Hungary to the EU reached 35 per cent in 1998, *i.e.* considerably more than in Estonia (22 per cent), Czech Republic and Slovenia (17 per cent), and Poland (14 per cent); the share of FDI firms in the manufacturing exports of Hungary reached 86 per cent in 1988, well above 50 per cent observed in the Czech Republic and Poland and 35 per cent in Estonia and Slovenia. See Éltető (2001b).
  129. Foreign-owned firms tend to be larger, better capitalised and more efficient than domestic companies. While this seems to be the prevailing case, Hamar (2001) shows that some indigenous firms developed very dynamically and outperformed FDI firms in some industrial sectors.
  130. Hungary has a unique, simple and liberal regulation of industrial free-trade zones (FTZs) that can be established for individual plants. Thus a single company may set up

- multiple FTZs. At the end of 1999, 115 FTZs were established by 101 companies. See Antaloczy and Sass (2000).
131. The system includes 31 countries, including the EU, EFTA and 10 EU candidates; Hungary joined in July 1997. Exporters located in the Hungarian FTZs and using inputs from outside the PEC territory cannot obtain refunds on the associated duties, *i.e.* “they no longer have free-trade access to EU markets, which accounted for 94 per cent of their foreign sales in 1997...” Kaminski and Riboud (2000), p.27.
  132. According to the Ministry of Economic Affairs, the share of Hungarian firms among the suppliers of local affiliates of MNCs increased from 16 per cent in 1999 to 21 per cent in 2000.
  133. In 2001, firms operating in the FTZ sector produced a trade surplus amounting to some \$3 billion; in contrast, firms operating outside the FTZ sector generated a deficit exceeding \$6 billion.
  134. For instance, Danone’s plan to rationalise its operations in Hungary met with stiff resistance of local authorities and moral suasion from the central government. This signals that similarly as in Danone’s own domestic market, exit is more difficult than entry.
  135. *The World Competitiveness Yearbook 2001* of the Swiss-based International Institute for Management Development indicates that Hungary lags the advanced countries but also Estonia and Slovenia with respect to two criteria: bribing and corruption in the public sector and customs bureaucracy hindering the efficient transit of goods. A number of measures, however, have been worked out by the Hungarian authorities to accelerate customs clearance. Last year simplified procedures were introduced, providing the possibility of local clearance through electronic data transfer to the customs authorities. Furthermore, an accelerated customs clearance procedure (the real-time electronic filing of all customs documentation) also became possible.
  136. The American Chamber of Commerce surveyed 560 member companies that invested in Hungary since 1989. The survey indicates that the public procurement act is flawed because losing bidders are unable to review the winner’s estimate, the public are unable to monitor the implementation of contracts, and fines for improper conduct are too low. See Transparency International (2001), p.128.
  137. For highlights of the report, see EIU – Country Economic News, “Hungary Economy: Worldwide business cost ranking”, 2 January 2002.
  138. In terms of corruption, Hungary ranks in the 15th place among the 31 countries surveyed by the EIU. According to Transparency International (2001), a corruption perception index places Hungary in the 31st place (along with Trinidad and Tunisia) among the 91 countries investigated, behind advanced OECD economies but also behind Botswana, Taiwan, Estonia and Namibia. The other OECD transition economies, *i.e.* Poland, the Czech Republic and Slovakia are ranked in the 44th, 47th and 51st place respectively.
  139. For details, see Kornai (2001) and OECD (2001a).
  140. GKI (2001b) reports that in Hungary administrative compliance costs per worker grow rapidly with the diminishing firm size. This is consistent with the experience of SME firms in other OECD countries. See OECD (2001d).
  141. The relevant legislative framework was provided by the 1999 bill on SME development.
  142. In Hungary, the bulk of the administrative compliance costs of small and medium-sized firms is associated with the administrative requirements of tax regulations – see GKI (2001b).



143. The regulated energy prices include a cost element based on a return on assets of 8 per cent, providing that certain standards of efficiency are met.
144. The government's policy of keeping household prices at artificially low levels has costs that are borne by domestic energy firms. The state-owned MVM group announced that the 5 per cent cap on retail prices of electricity imposed by the government in January 2002 will result in a loss of HUF 42 billion (10 per cent of MVM's annual revenues).
145. Chief executive of MOL stated publicly that due to the government's caps on gas price increases, his company lost \$800 million over the period 2000-01.
146. For a more comprehensive description of current issues in the Hungarian energy sector see Eddy (2001*b*).
147. The rationale for the MEH's independence was elaborated in IEA (1999) and emphasised again in the previous *Economic Survey*.
148. Alternatively, they will have to pay a 20 per cent mark-up on access prices.
149. The regulatory authorities asked Matav to assure number portability towards the end of 2001 – the dominant operator claims that it needs at least 18 months to implement this requirement.
150. This is the case of the second largest fixed-line operator owned by Vivendi of France that is forced to subsidise its mobile service competitors. Fixed-line operators have to pay a HUF 37/minute termination fee to mobile operators for calls from a fixed line to a mobile phone. Mobile operators pay only HUF 5/minute to fixed-line operators for the termination of mobile-to-fixed line calls. Matav dominates both fixed and mobile telephony and is thus not injured by such cross-subsidies from one mode to another. Vivendi, having invested some \$600 million in the development of its fixed-line network, complained repeatedly of having to subsidise mobile telephony and losing customers to the unfairly subsidised mobile competitors. See Reuters, "Vivendi hurt in Hungary's telecoms race", 17 December 2001.
151. In addition to the state-owned Eximbank that provides financial assistance to export-oriented SMEs, institutions that take part in financing of SMEs include the Grant and Contribution Management Organisation (TJKSZ) and the Rural Credit Guarantee Foundation (AVHA).
152. Ibusz by Innova Invest Rt., Eravis and Pick by Arago, Graboplast by ABC Management, controlled by former managers of Graboplast., Skala-Coop by Callum Vagyonkezelő Rt.
153. Hungarian equity markets are dominated by foreign investors who account for 70-80 per cent of equity capitalisation.
154. Market capitalisation relative to GDP is comparable in the Czech Republic and Poland while it exceeds 50 per cent of GDP in Germany and 100 per cent of GDP in the United States.
155. MOL (the Hungarian oil and gas company) issued in a private placement two series of foreign exchange bonds, one with maturity of ten years and in the nominal value of \$72 million, and the other one with maturity of 12 years in the nominal value of \$53 million. The Hungarian Development Bank also issued a private placement foreign-exchange bonds with maturity of five years, in the nominal value of € 450 million.
156. For instance, the mandatory threshold for a public bid to all shareholders was lowered from 33 to 25 per cent.



157. In the Hungarian jurisprudence, the right to issue regulations is usually reserved for the government. Probably that is why Parliament has remained reluctant to delegate this right to independent supervisory authorities. However, the telecommunications regulator (HIF) acquired the legal right to issue regulations in 2001.
158. Synergon (1999), Graphisoft (2000).
159. Companies listed in the so-called B-category have less strict reporting requirements than the A-category blue chips and the minimum market value is set at only HUF 100 million (about € 0.4 million).
160. See *Budapest Business Journal*, 19-25 November 2001, p.11.
161. Given the relatively high cost of public transport, the effective labour market in relatively poor parts of Hungary is estimated to be confined by a radius of 10 miles or less.
162. In the 1990s, the average of 2.3 per cent of the working-age population changed residence annually; about one-quarter of employees had been commuters. Both indicators remained practically constant despite fundamental socio-economic changes over the decade. See Government of Hungary and European Commission (2001).
163. The hypothetical unemployment rate would be about 15 per cent, if one were to adjust the calculation for the very low level of part-time employment in Hungary. Ten years ago, Hungary's labour force participation rate was equal to that in the United States, *i.e.* above the OECD average. See OECD (1995), p.42.
164. On a gross wage basis. HUF 50 000 of the minimum gross wage in January 2002 amounts to a take-home pay of HUF 37 750.
165. Government ministries and the Central Bank.
166. The Central Bank estimates that in 2001 actual wages were virtually not affected by the minimum wage increase. This may appear very lenient, if considered together with government schemes destined to offset the impact of the minimum wage increase on low-skill labour intensive industries (see Box 14). The Central Bank expects the incidence of the additional 25 per cent increase in January 2002 to be significantly higher.
167. Average wages increased through 2001 by 15.5 per cent in the health sector, 20.9 per cent in education, and 27.2 per cent in public administration.
168. The Gini coefficient declined from 0.35 in 2000 to 0.33 in 2001 while the ratio of the top decile to the lowest one declined from 4.9 to 4.2. Both measures indicate a significant decline in the inequality of earnings.
169. See OECD (2001*b*), p.42. The comparison refers to level including the tertiary-type A and advanced research programmes.
170. The net entry rate is the proportion of the first-time entrants to university education in the total population of the same age group.
171. The 1999 entry rate for Poland is slightly higher than that for Hungary but since it was calculated on the gross basis (*i.e.* it includes re-entry), the two are not directly comparable. See OECD (2001*b*), p.155.
172. See OECD (2001*b*), p.158.
173. "While a decade ago 11% of 18 to 23-year-olds were enrolled at higher educational institutions, today the proportion is 35%." Ministry of Education (2000), p. 250.
174. Legislation pertaining to protection of privacy prevented the Central Statistical Office from collecting comprehensive data on the ethnic minority since 1993.

175. The actual utilisation of such scholarships implies that there are at least six hundred Roma enrolled in Hungarian colleges and universities.
176. Government measures entail extra funding for ethnic minority education, remedial programmes, and special scholarships while the EU provides financial support for projects aiming at improving access of Roma children to kindergartens, development of primary school infrastructure, training courses promoting employment of young Roma, etc.
177. The authorities expect the new Act on Adult Education to induce a significant improvement in this respect.
178. In Hungary, the value of foreign trade turnover in goods and services is close to 140 per cent of GDP.
179. This may explain why resident patent applications in Hungary, adjusted for the size of population, are higher than in other transition economies as well as in Greece and Portugal, and on par with Spain.
180. See Hungarian Central Statistical Office (2001), p. 12.
181. Distortionary taxation in the endogenous growth theory includes personal and corporate income taxes, payroll taxes, property taxes and social-security contributions. Non-distortionary taxation entails taxes on consumption. See Bleaney *et al* (2001). Joumard (2001) shows that in addition to being relatively neutral towards savings and investment decisions, consumption taxes create fewer disincentives to work than other forms of taxation and do not affect external competitiveness.
182. The Hungarian personal-income tax (PIT) brackets have not been fully indexed for inflation; this means that the proportion of PIT in total revenues tends to increase.
183. The previous *Economic Survey* presented estimates of implicit VAT subsidies and their impacts on income deciles that illustrated the inefficiency of such redistribution. The Finance Ministry provided the Secretariat with calculations that broadly confirm these results. If one uses the household survey data, there is no significant discrepancy. An alternative estimation of the Finance Ministry based on the weighting system used in CPI calculations shows a somewhat stronger redistributive impact at the level of terciles; however, the highest income tercile still receives more than one-half of implicit subsidies.
184. Hungary's statutory corporate-income tax rate is likely to be undercut by Ireland's move to 12½ per cent in 2003.
185. The EU Code of Conduct on business taxation is not legally binding; however, if tax breaks are considered equivalent to cash subsidies, they are subject to provisions of the Maastricht Treaty concerning state aid. See Joumard (2001), Annex II.
186. See *Budapest Business Journal*, 21-17 January 2002, p.3.
187. The statutory retirement age for women will rise in biennial increments to 62 years by 2009.
188. The mandatory character of the 2nd pillar was abolished by Parliament in November 2001; the new legislation became effective in January 2002 and allows new entrants to the labour force to choose whether to join the 2nd pillar whereas members of the 2nd pillar funds can return with their cumulated contributions to the PAYG system until December 2002. See Kun (2001), p.73. The state guarantee of the minimum level of performance of the 2nd pillar pension funds was abolished at the same time.

189. The minimum annuity rule assures that participants in the two-pillar public pension system will receive at least 93 per cent of the full PAYG pension.
190. The Eurostat rules do not permit a reduction of the fiscal deficit on the basis of a partial shift from the PAYG to the fully-funded pension system, despite an economic rationale for such adjustment. Therefore, the candidate countries that have implemented a pension reform of this kind (Hungary and Poland) indicate a worsening in their fiscal deficits reported to the EU as pension contributions are diverted to individual accounts although they have improved the long-term sustainability of their public finances.
191. The employment rate of the population above the statutory working age kept falling for a number of years until 1998 when it bottomed out at 3.9 per cent. It has started to increase in 1999 and reached 5½ per cent in 2000.

## Glossary

<b>AUT</b>	Austria
<b>AUS</b>	Australia
<b>ALMP</b>	Active Labour Market Policy
<b>APV</b>	Hungarian Privatisation and State Holding Company
<b>BEL</b>	Belgium
<b>BSE</b>	Budapest Stock Exchange
<b>CAN</b>	Canada
<b>CHE</b>	Switzerland
<b>CZE</b>	Czech Republic
<b>CSO</b>	Central Statistical Office
<b>DEU</b>	Germany
<b>DNK</b>	Denmark
<b>ESP</b>	Spain
<b>EUR</b>	Euro
<b>FDI</b>	Foreign Direct Investment
<b>GBR</b>	United Kingdom
<b>GFS</b>	Government Finance Statistics
<b>GRC</b>	Greece
<b>FIN</b>	Finland
<b>FRA</b>	France
<b>HUF</b>	Hungarian forint
<b>HUN</b>	Hungary
<b>IMF</b>	International Monetary Fund
<b>IRL</b>	Ireland
<b>ISL</b>	Island
<b>ITA</b>	Italy
<b>JPN</b>	Japan
<b>KOR</b>	Korea
<b>LUX</b>	Luxembourg
<b>MATAV</b>	Hungarian Telephone Company
<b>MAV</b>	Hungarian Railway System
<b>MEX</b>	Mexico
<b>MVM</b>	Hungarian Electricity Company
<b>MOL</b>	Hungarian Oil and Gas Company
<b>NBH</b>	National Bank of Hungary
<b>NOR</b>	Norway
<b>NLD</b>	Netherlands
<b>NZL</b>	New Zealand
<b>POL</b>	Poland

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<b>PRT</b>	Portugal
<b>PSzAF</b>	Financial Markets Supervision
<b>SNA</b>	System of National Accounts
<b>SVK</b>	Slovak Republic
<b>SWE</b>	Sweden
<b>TUR</b>	Turkey
<b>USA</b>	United States

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### Annex I

## OECD adjustments to the GFS accounts in Hungary

The OECD data on public expenditure in Hungary used in this *Survey* are derived from the official GFS data but with adjustments in several aspects in order to enhance international comparability, since SNA93 (or ESA95) accounts are not yet available.<sup>1</sup>

The most notable changes include the treatment of privatisation revenues, of “lending minus repayments” as financing items rather than *above the line* transactions (that affect the budget balance), and the inclusion of an estimation of infrastructure investments by off-budget companies. The social security contributions paid for its own employees by the government, which are usually consolidated within the general government according to the GFS accounts, are added back to both the government revenues and expenditures in accordance with SNA93 principles. In addition, the net balance of the APV (the Privatisation and State Holding Corporation), which is classified as a part of the general government sector according to the Eurostat, is added to the aggregate spending – but not the consolidated revenue and expenditure due to a lack of data. The final adjustment that affects the balance and the overall spending level concerns the accrual adjustment of interest payments and value-added-taxes. For these figures, OECD relies on the figures estimated by the National Bank of Hungary.

To enhance the cross-country comparability of expenditure components, spending items are rearranged in the following way to reflect the nature of spending. Healthcare payments paid by the compulsory insurance regime, which are booked as income transfers in the GFS, are rearranged as government non-wage consumption. Similarly the indirect price subsidies to households, categorised as income transfers in the GFS accounts, are reclassified as a part of subsidies to enterprises – they include the transportation subsidies for students and elderly, and subsidies on pharmaceutical products. The unallocated expenditures (and revenues) are assumed to constitute a part of capital transfers as the nature of the spending is not known.<sup>2</sup>

While these adjustments intend to bring the published GFS accounts closer to the SNA standard, data may not be fully in line with the ESA95 accounts which will be available in the near future (at present the ESA95 deficit and debt figures are available only for 1997-2000, and they are claimed to be preliminary and subject to change). For example, the coverage of general government in the GFS on which the OECD adjustments are based is narrower than that in the ESA95. Though the *balance* of the APV is included in that of general government, lack of further details on APV's revenues and expenditures limits the full reflection of its activities in the general government accounts. In a similar vein, the fiscal activities of 120 non-profit organisations – that are left outside of the GFS accounts but which are to be included as a part of general government by the ESA95 – are ruled out in calculating general government expenditures (although, fortunately, the deficits of those institutions are usually covered by the transfers from the state budget and therefore are included in the budget bal-

ance already). Expenditures of the national motorway company are included in the OECD and ESA95 accounts but excluded from the GFS accounts. In addition, a lack of relevant information leads the OECD to add accrual adjustment of *net interests payments* to the spending side only. No imputation for the depreciation of government fixed capital has been made.

The OECD estimates are broadly in line with the ESA95 budget balance for those years where both are available, and historical trends are similar between the OECD estimates and those of the National Bank of Hungary.

## Notes

1. A similar method of converting the official GFS data into the SNA-compatible format was also made for the Czech Republic whose public spending was reviewed by the last *Economic Survey of the Czech Republic*.
2. For example, the unallocated expenditure of HUF 120 billion for 2000 appears to be used to pay for a one- off increase in wages and old-age pensions, housing rent programs and subsidies to the APV, while some of this expenditure remained on the Treasury account and was spent in 2001.

## Annex II

### The Hungarian productivity growth: stylised facts

The long-term productivity growth, measured by per capita GDP, averaged 1.95 per cent per annum in Hungary during the 20th century.<sup>1</sup> Following the productivity growth slowdown over the period 1978-88 to the historical trend rate and the subsequent decline associated with a fundamental change of political and economic institutions from 1989 to 1992, productivity growth resumed and averaged 3½ per cent over the period 1993-2001. Until the mid-1990s, improving productivity was due mainly to employment cuts resulting from privatisation and restructuring while output growth remained subdued. In the second half of the 1990s, the process was characterised by rapid output growth and increasing employment. The following features characterise the Hungarian productivity scene at present.

With respect to *ownership*, labour productivity observed in multinational companies (MNCs) in the non-financial business sector is 2.7 times higher than in comparable Hungarian companies while wage costs are 1.9 times higher. This hints at a superior profitability of MNCs that is reinforced by generous fiscal incentives. Capital stock data are not available in constant prices by ownership sectors so that an unambiguous comparison of capital intensities cannot be performed. Differences in labour productivity between MNCs and domestically-owned firms vary across industries, with the differential being largest in the motor vehicles production and telecommunications (5-6 times) and lowest in metallurgy, machinery production, transport and warehousing (about 1½ times).

With respect to *size*, large firms (250 and more employees) account for only 0.1 per cent of the total number of firms in the business sector, but approximately 31 per cent of industrial employment, 56 per cent of GDP and 75 per cent of exports.<sup>2</sup> The most dynamic part of the economy consists of some 100 subsidiaries of multinational corporations located in their own free-trade zones – these firms accounted for over 60 per cent of GDP growth over the period 1994-2000 while producing a growing trade surplus.<sup>3</sup> Generally, efficiency and profitability of Hungarian firms are positively correlated with their size. The proportion of foreign equity is also correlated with size, ranging from 28-29 per cent in micro-enterprises (up to 9 employees) and small companies (10-49 employees), to 35 per cent in mid-sized firms (50-249 employees) and 44 per cent in large firms.<sup>4</sup>

Potential gains of per capita GDP were foregone in the 1990s due to the relatively low utilisation of labour. According to a recent study of the Central Statistical Office, employment declined by 11 per cent over the period 1990-2001. Aggregate employment kept falling until 1997 and, despite picking up in the following years, its 2001 level is only equal to that obtaining in 1993. Annual withdrawals keep exceeding new entries into the labour market; however, the differential between withdrawals and entries declined from 60 per cent in 1993 to 5 per cent in 2000.

## Notes

1. This and next paragraph are based on Lorant (2001) and Lorant (2002).
2. See Ministry of Economic Affairs (2001).
3. Preliminary CSO data indicate that the free-trade zone sector generated a trade surplus equal to some 6 per cent of GDP in 2001 while all other firms generated a trade deficit approximately twice as large.
4. See Nyers (2001), p. 15.

*Annex III***Calendar of main economic events****2001****January**

The statutory minimum wage is increased by 57 per cent to HUF 40 000 per month.

The government increases prices of local transport, telephone and postal services by 6 per cent.

The Central Bank (NBH) reduces its key policy rate to 11½ per cent.

**February**

The NBH reduces its key policy rate to 11¼ per cent.

**April**

The NBH reduces the rate of monthly crawl to 0.2 per cent.

**May**

The NBH widens the forint's trading range from 4½ to 30 per cent.

**June**

The NBH adopts an inflation-targeting regime.

The remaining restrictions on capital account transactions are lifted by a cabinet decree.

Financial Action Task Force of the OECD puts Hungary on a list of 19 non-co-operative countries.

**July**

The new Central Bank Act becomes effective.

The unchanged key policy rate of the NBH becomes the basic rate.

The government allows natural gas prices to increase by 6 per cent until the end of the year.

**August**

In agreement with the government, the Monetary Council of the NBH accepts to abandon the crawling peg devaluation of the forint with effect from 1 October 2001.

**September**

The Government announces that natural gas prices would remain fixed until the end of June 2002.

The NBH reduces its base rate to 11 per cent.

**October**

The NBH abolishes the crawling devaluation of the official central parity rate.

The NBH reduces its base rate to 10¾ per cent.

**November**

Parliament approves new legislation that abolishes the mandatory nature of the 2nd pillar of the pension system for new entrants and permits all participants in the second pillar to reswitch to the PAYG system until the end of 2002. The new rules become effective in January 2002.

Parliament approves a closing budget act, permitting the Government to spend up to HUF 285 billion of revenue windfalls.

The NBH reduces its base rate to 10¼ per cent.

**December**

Parliament approves new anti-money laundering legislation.

Parliament approves new electricity act, providing for a gradual opening of the market from 2003 onwards.

A new telecommunications act becomes effective, providing for increasing competition in the industry.

The NBH reduces its base rate to 9¾ per cent.

**2002****January**

The statutory minimum wage is increased by 25 per cent to HUF 50 000 per month.

The Hungarian Post Office takes over full control of Postabank.

The government increases prices of electricity by 5 per cent.

Prime Minister announces that the government intends to purchase the money-losing natural gas division from the privately owned MOL energy group, operate it as a fully state-owned company and allow the Hungarian gas prices to converge to world market levels within eight years.

The NBH cuts its base rate in two steps to 9 per cent.



**February**

MOL energy group announces that it would lead exclusive talks on the sale of its money-losing gas division with the state-owned Hungarian Development Bank.

The NBH cuts its base rate to 8½ per cent.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16  
PRINTED IN FRANCE  
(10 2002 10 1 P) ISBN 92-64-19152-6 – No. 52529 2002  
ISSN 0376-6438