# OECD ECONOMIC SURVEYS

1999

SPECIAL FEATURES Structural policies The healthcare system

## HUNGARY

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# OECD ECONOMIC SURVEYS

## 1998-1999

HUNGARY

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

### ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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**OECD 1999** 

### BASIC STATISTICS OF THE REPUBLIC OF HUNGARY

1997

### THE LAND

Area (sq. km)	93 036
Arable land (sq. km)	47 108

### THE PEOPLE

Population (thousands, end-year)	10 135	Population of major cities, (thousands):	
Urban population (percentage of total)	63	Budapest	1 861
Rural population (percentage of total)	37	Debrecen	207
Projected population in 2000 (1990 = 100)	98	Miskolc	176
Employment (thousands)	3 567	Employment by sector (percentage of total):	
Unemployment rate (per cent of civilian		Agriculture	8.1
labour force)	8.9	Industry	33.9
Participation rate	57.8	Services	58.1

### THE PARLIAMENT

Parliament	386 seats
May 1998)	6
Share of seats held by governing coalition (per cent)	56
Next election	2002

### PRODUCTION

GDP (billion forints, current prices)	8 462.0
GDP per capita (US\$, official exchange rate)	4 099.4
Consumption (private, percentage of GDP)	51.1
Gross fixed capital formation (percentage of GDP)	21.0

### PUBLIC FINANCE

State budget balance (percentage of GDP)	-4.0
General government revenues (percentage of GDP)	44.3
General government balance (percentage of GDP)	-4.8

#### FOREIGN TRADE

Exports of goods and services (percentage of GDP)	42.4
Imports of goods and services (percentage of GDP)	43.4
International reserves (billion SDR)	6.2
Total gross external debt (billion US\$)	23.7
Total gross external debt (percentage of GDP)	52.6

### THE CURRENCY

Monetary	unit:	Forint
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Currency units per US\$:	
Year average, 1998	214.26
December 1998	217.11

This Survey is based on the Secretariat's study prepared for the annual review of Hungary by the Economic and Development Review Committee on 14 December 1998.

After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 11 January 1999.

The previous Survey of Hungary was issued in June 1997.

### **Assessment and recommendations**

### Past economic reforms...

The extensive macroeconomic package introduced in 1995 (which included the adoption of a crawling-peg exchange rate regime, an impressive programme of privatisation and a substantial fiscal tightening), as well as the deepening of structural reforms implemented earlier, created the conditions for the remarkable progress of the Hungarian economy over the past two years. As described in the 1997 Economic Survey of Hungary, these measures served to restore the competitiveness of Hungarian industry and substantially reduced both the external and general government deficits. While domestic demand fell sharply, exports expanded rapidly and inflation fell from a peak of 31 per cent in June 1995 to an average of 23.6 per cent in 1996. At the same time, the extensive privatisation of the economy, and particularly of the banking sector, contributed to substantial microeconomic restructuring and rapid productivity growth.

... set the stage for a recovery in output and domestic demand in 1997 and 1998 These developments opened the way to an acceleration of GDP throughout 1997, with growth averaging 4.6 per cent for the year as a whole. All sectors of the non-agricultural economy experienced a strong expansion in output with the most spectacular increase being among exported manufacturing goods, the volume of which rose by 26.4 per cent – principally as a result of new capacity. The improved macroeconomic environment and lower labour costs boosted business sector sentiment, which led to an 8.8 per cent increase in investment. Meanwhile, the pick-up in activity contributed to a small rise in employment (the first one since the beginning of the transition) and a 3.4 per cent increase in real gross wages, factors that resulted in a progressive but modest recovery of private consumption.

These trends persisted into 1998, with industrial output and services production accelerating in the first nine months of the year. Consumer and business confidence continued to rise, as did incomes, with the result that, on a year-over-year basis, private consumption and investment grew by 3.3 and 13.7 per cent respectively in the first three quarters while unemployment fell to 7.7 per cent as increases in employment were partially offset by higher labour force participation. Despite the strengthening of demand and tighter labour market conditions, government efforts to reduce the pace of wage and price increases were successful and inflation had fallen to 11.2 per cent on a twelvemonth basis as of November.

Despite capital outflows and uncertainty concerning export developments... The expansion in trade that accompanied the new exchange rate regime and other stabilisation measures contributed to a further reduction in the current account deficit, to 2.1 per cent of GDP in 1997. This trend was reversed in the course of 1998, as the trade deficit widened (due to a recent slowing in exports and still strong imports) and because of a large repatriation of profits which took place in June and September of that year. Nevertheless, the current account deficit remains relatively low and is projected to stay below 3.7 per cent of GDP in 1998. Nor is its financing likely to pose a problem as foreign direct inflows should cover most of the expected imbalance. On the financial account, election-related uncertainty and the subsequent collapse of the Russian rouble contributed to a \$260 million net equity outflow and a \$684 million sell-off of foreign-held government bonds between May and September 1998. Reflecting these developments, the Budapest stock exchange lost over 50 per cent of its value and the forint moved to the depreciation limit of its fluctuation band.

*messares in the seconomic prospects remain good...* Since then such pressures have eased, with the exchange rate trading at around its central parity and the stock exchange having regained considerable ground. Overall, the economy looks at present competitive and Hungarian firms continue to increase their world market share at a rapid rate. Besides, with Russia accounting for only 4 per cent of Hungarian exports, the crisis in that country should have only limited effects on Hungary. As a result, prospects for

sustainable growth in 1999 and 2000 are favourable. GDP is expected to expand by more than 4 per cent in both years, relying equally on personal consumption and investment, while government expenditures and net exports should exert a small negative to neutral influence on overall growth. Export performance is expected to remain strong, but rapid consumption could cause the current account deficit to widen somewhat. Employment is projected to continue to pick up, growing by about 1 per cent in each year, although rising participation should limit the fall in the unemployment rate. Despite the possibility of further wage drift and some signs of sectoral and regional labour shortages, the still-substantial stock of non-employed and past successes in delivering disinflation are expected to yield lower wage increases in the two years to come. Given strong productivity performance, this would leave room for inflation to fall, on average, to 10 or 11 per cent in 1999, and about 9 per cent in 2000 - *i.e.* as low as 6 per cent, on a twelve-month basis, by the end of that year.

... although contagion effects of the world financial crisis could threaten the expansion

Such an outlook remains subject to a number of risks, however, not the least of which being a further deterioration of the trade balance, arising either from domestic or external factors. The external balance could be adversely affected by a more pronounced slowdown in activity in the European Union. In addition, an independent worsening of the international business climate, could result in a decrease in foreign direct investment inflows and, therefore, growing difficulties in financing the current account. Furthermore, a drop in the savings rate, as consumers seek to assuage pent-up demand, or a stronger than projected nominal wage increase, could lead to higher domestic consumption, imports, and inflation, which in turn would reduce competitiveness and lead to an even larger current account deficit. As a result, higher interest rates might be required to attract capital from abroad, with the risk of slowing the growth of the economy. Hence the need for prudent monetary and fiscal policies in the period ahead.

In such a context, a flexible approach to monetary policy is required... The recent bout of capital outflows and the depreciation of the forint within its  $\pm 2.25$  per cent fluctuation band have substantially altered the challenges facing Hungary's monetary authorities. Whereas previously the independent National Bank of Hungary focused on sterilising capital inflows and maintaining competitiveness through its crawling peg exchange rate regime, the emergence of downward pressures on the currency forced it to intervene in the exchange market, leading to a temporary decline in official reserves and increased interest rates. While the Bank's decision not to widen the currency's fluctuation band during this period probably prevented a more serious depreciation in the face of international capital outflows, over the longer term, such a change appears desirable. Indeed, inflation remains high and, even though the repeated reductions in the rate of crawl (the latest being a drop to 0.6 per cent per month as of January 1999) have allowed the Bank to underpin disinflationary pressures emanating from elsewhere in the economy, the narrow band limits the scope for using interest rates to more directly influence monetary conditions. In any case, as time progresses and the rate of crawl approaches zero, the Bank may need to consider widening the fluctuation margins in order to increase the implicit costs of speculation.

... combined with further fiscal measures if the budget deficit target is to be met

At the same time, it is essential that fiscal policy remains tight and transparent. While the extent of government sector retrenchment over the past few years has been impressive – primary expenditures (net of debt interest payments) fell from 52 to 39 per cent of GDP and the budget deficit from 8.4 to 4.7 per cent of GDP between 1994 and 1998 continued restraint is essential. This is all the more necessary given that domestic demand may be growing at or above the supply-side's current capacity to expand. In this context, the budget proposal submitted to the parliament in late October calls for a 4 per cent of GDP general government deficit. It is predicated on a 5 per cent rate of GDP growth and 10-11 per cent inflation in 1999 and assumes that expenditures will grow by 11.8 per cent and revenues by 13 per cent. It also anticipates that improved tax collection will contribute 35 billion forints to government revenues, while a special 40 billion forint extra reserve is supposed to ensure that the deficit target is met even if growth is only 4 per cent. However, a number of specific measures included in the budget (notably the reintroduction of universal tax deductions for households with children, the reduction of social security contributions and the elimination of all but three marginal tax rates) might increase net expenditures more than expected. Thus, the government should be prepared, if necessary, to undertake additional specific spending cuts or revenue enhancements in order to ensure that slower growth or poor tax compliance do not result in a larger than targeted budget deficit.

While past foreign direct investment and privatisation projects have encouraged restructuring...

Since the beginning of the transition, the government has actively sought to attract and exploit foreign direct investment (FDI). The privatisation process, which is almost complete (85 per cent of GDP is generated outside of the government sector), emphasised sales to strategic and often foreign buyers while various incentive programmes were offered to greenfield investors in an effort to attract foreign capital and know-how. As a result, Hungary has attracted over \$18 billion in FDI or \$1 800 per person since 1989, almost twice the per capita share of the Czech Republic and nine times that of Poland. There are now some 25 700 companies with foreign participation operating in Hungary; they produce 32 per cent of GDP, 45 per cent of manufacturing value added and employ some 25 per cent of private-sector workers. The strong productivity performance and industrial expansion of the Hungarian economy over the past several years owes much to these firms whose share in total employment is growing. Indeed, among privatised firms, those with foreign involvement have restructured more quickly and have had higher productivity and market growth than those bought by domestic agents. As regards product markets, the regulation of monopolies (privatised and state owned) needs improvement. Further, political rather than economic considerations still appear to influence regulated price increases. In this regard, the government's decision to revise the pricing formula for telecoms was welcome, although the productivity decrement is perhaps too small.

... pension reform should help make available a pool of capital to enable enterprises expand operations

As important as the influence of foreign capital has been, over the longer term, domestic enterprises must also begin to generate similar levels of productivity increase if the Hungarian economy is to continue converging towards European levels of development. In this regard, a recent reform of the state pension system should help to create a pool of domestic capital that may serve to finance further expansion of dynamic firms. This new scheme, rather unique among OECD countries, replaced the previous compulsory Pay-As-You-Go (PAYG) system with a three-tier mechanism consisting of a modified PAYG and two fully-funded private tiers, one compulsory and the other voluntary. The fullyfunded components of the system will be operated by private pension funds coming under the close regulatory control of the Pension Funds Supervision Agency (APF). So far, the new scheme has proven very attractive, with new adherents almost doubling the government's original projections. While the concentration of savings in these funds constitutes a great opportunity for potential borrowers, it also represents a significant regulatory challenge. Indeed, with five funds collecting 90 per cent of the subscribers, the other forty will be under significant competitive pressure for attracting the remaining 10 per cent. Thus, the APF will need to be vigilant to ensure that assets of clients are smoothly transferred to other funds in case of consolidation. Thus, as restrictions on the kinds of investments that any fund may make are progressively relaxed, it will be necessary to put in place stringent disclosure rules and to reinforce the regulatory powers of the APF.

At the same time, an increasingly sophisticated and expanding banking sector will challenge supervisory authorities The Hungarian banking system, following several years of restructuring, is also playing an increasingly active role as a supplier of capital to the enterprise sector. The industry's privatisation is all but complete with only 22 per cent of banking capital still in state hands and, although the sector remains over-banked, it is still perhaps the healthiest in the region. For the moment, profits, capital adequacy ratios and loans are of the highest quality, but as banks diversify their portfolios, widen the services they offer and employ increasingly sophisticated instruments, risks are likely to rise and with them the difficulties inherent in their evaluation by the regulatory authority. Indeed, the massive losses

of Postabank and the difficulties of the Realbank, suggest regulatory weakness and illustrate the necessity for all components of bank balance sheets to be brought under scrutiny. Recent moves to re-enforce the powers of the State Banking and Capital Market Supervisory Board should help in this regard, but more needs to be done. Thus, it may be necessary to rewrite the civil code to integrate and rationalise the accumulated changes that have made financial law a difficult-to-enforce patchwork of rules and regulations. In addition, while larger firms have benefited from a 20 per cent expansion in real credit, small enterprises remain too risky for most banks. In response, the government recently passed an act permitting the creation of Mortgage Banks that sell mortgage-backed bonds with an eye to expanding the stock of credits available to such firms. So far, only one mainly state-owned bank has begun offering these services and the success of the whole programme will likely depend upon its experience. Here, continued efforts to enforce creditor rights and speed the updating of the property registry are essential, as, in the past, banks have been reluctant to extend credit to less well established borrowers because of these deficiencies.

Labour market regulations need to be further relaxed if employment levels are to rise...

Another area where further action would be needed is the labour market. The rapid fall in unemployment since 1993 was largely achieved through labour force withdrawal and while employment began to rise recently, employment rates remain distressingly low and the incidence of longterm unemployment too high. The government has moved to relax some of the features that were identified in the 1997 Economic Survey of Hungary as contributing to these problems. Nevertheless, more needs to be done. Indeed one-quarter of the working-age population still receives some form of government benefit, with disability pensions being the largest category. The decisions to reduce implicit state support for early retirement and to make greater use of temporary rather than permanent disability pensions are positive steps. However, despite periodic re-evaluation of temporary disability pensioners, the number of individuals receiving these benefits continues to rise, with many people using them as a more generous alternative to unemployment insurance and other traditional social insurance

schemes. Thus, in order to ensure that adequate support under this scheme remains available to the genuinely disabled, the basis upon which pensions are being awarded needs to be reviewed and further tightened. Elsewhere, active labour market policies should concentrate on less costly measures than the current mix of public-works projects that have uncertain employment impacts, and broad-based training schemes that might be more economically delivered by the traditional education system. Freed resources could then be concentrated on more targeted assistance. Within the education system itself, the new national curriculum should help to reduce regional variations and enhance the average quality of education received, but more needs to be done both in this regard and to prevent the unnecessary streaming of students at an early age. At the tertiary level, admission procedures need to be made less cumbersome and access increased.

... and the tax burden on lowskilled labour should be reduced

In order to expand formal employment and facilitate tax compliance, the government recently introduced "occasional employment" contracts. These make it easier for private employers to hire casual workers and qualify them for some social insurance programmes. The limited take-up of this new work-form suggests that the costs to employers - principally in the form of social security costs - exceed the benefit of bringing this kind of contract into the legal sphere. Here, the recent decision of the government to lower the employer's social security payroll tax from 39 to 33 per cent and to increase the per-head health-insurancetax may help to improve tax compliance while the tendency for the higher health insurance tax to reduce the employment prospects of low-skilled workers will be partially offset by tax credits offered to families with children. More generally, taxes on labour remain too high and the recommendation made in the previous Survey to shift the burden of financing the healthcare sector from labour alone to all sources of income is still relevant.

High mortality rates and chronic cost overruns also make the health insurance system a ripe candidate for reform

Despite a number of positive changes introduced since the beginning of the transition, the Hungarian healthcare system also remains in serious need of reform. Hungarians have the lowest life expectancy in the OECD and, in contrast with almost all other countries, lifetime prospects for adult males have been falling over the past twenty years. While this poor outcome owes much to social and economic phenomena, the effectiveness of the nearly universal national health insurance system is greatly reduced by systemic inefficiency, perverse incentive structures and perennial over-spending. An overwhelming excess supply of specialists, the vast majority of whom are salaried public servants working in hospitals, has combined with weak supervision on the part of the National Health Insurance Fund Administration (HIFA) to yield an excessively hospital-centric and specialist-based pattern of treatment. While there is an excess supply of doctors, there are too few nurses and the wages of both groups are exceptionally low, the supply-side effects of which are mitigated in the case of doctors, and particularly specialists, by widespread - but illegal - "gratitude payments". The relatively few general practitioners that do exist do not act as effective gatekeepers and provide only limited healthcare services partly because their pay is exclusively determined by the number of their patients. Problems also plague the payment systems for inpatient and outpatient hospital care. Neither includes capital costs in their fee structures, leading to serious misallocations of equipment and irrational investment decisions by locally-owned hospitals. At the same time, inadequate supervision of billing has led to a fraudulent inflation in both the number and the "seriousness" of treatments charged to the HIFA.

Currently, strong cost-containment and poor oversight have introduced a number of inefficiencies... The budgetary impact of these exaggerated claims has been contained by a capping of the overall budget of the inpatient and outpatient systems, with the result that, as claims have risen, the amount of money paid per claim has fallen proportionately. While this mechanism (which was relaxed for inpatient care in 1998), has kept costs under control, it has placed significant strain on hospitals. Their ability to respond to these forces would be improved if their legal status were changed to "public corporations". This would reduce direct political influence on their decision making, allow them to adopt more appropriate accounting techniques and give them more flexibility as concerns their staff. An explicit decision to increase the relative earnings of nonsalaried specialists would increase hospitals' ability to manage their variable costs and could be implemented simultaneously with the incorporation of depreciation costs into the payments system. These changes, which should be accompanied by a requirement that hospitals create specific capital funds from which they would make future equipment purchases, would enable hospitals (and provide them with economic incentives) to reallocate both labour and capital resources towards the most efficient and highest quality treatments. In order to redress the aggregate oversupply of doctors, admissions to medical schools should be cut and salaried doctors should be required to retire from the public system at the legal retirement age – although they should be free to continue in private practice.

... which can be resolved by evolutionary changes to the payment system...

There does not appear to be any need to introduce a more complicated payment system than already exists as the advantages of a single purchaser appear, in the case of Hungary, to outweigh its inconveniences. Despite the micro-level distortions that it has generated, the overall budgetary cap and basic payment schemes should not be abandoned; alternative remuneration systems provide even fewer incentives to improve efficiency and quality. Rather, the government should concentrate on allowing hospitals more flexibility in choosing between in and outpatient care. It should also introduce private incentives for the closing down of excess capacities and for investment in undersupplied areas. This could be achieved by introducing an equivalence scale between the different payment systems and by capping the total budget. Regional equity concerns can be addressed by initially subdividing the national budget following a demographically adjusted per-capita formula and making special provisions for national institutes and patients that seek treatment outside of their region. These reforms need to be accompanied by much more accountability, requiring systematic and random audits and significant financial and legal penalties imposed on institutions and individuals found to be making medically unjustifiable charges. While the extent of public care provided in any system remains a societal choice, given that the Hungarian system already allows for supplementary insurance, the overall quality of care could be increased and demand pressures eased by expanding the currently very narrow range of services not covered by the public system.

... and the The pharmaceutical sector, as one of the uncapped areas of pharmaceutical expenditure, is constantly in deficit. Here restrictions on the operations of pharmacies should be relaxed so that market sector forces can help to reduce distribution costs. While the principles by which the level of subsidy of different drugs is determined are sound, actual practice needs to be reexamined and subsidy levels more closely aligned with the lowest cost alternative therapies. Once this is achieved it might be desirable to lift existing controls on the retail price of different brands of drugs. Additional cost savings could be achieved by auditing the use of health cards and further reducing the rates of subsidy or even eliminating drug subsidies for young and middle-aged adults.

**Looking forward** 

Efforts to address these problems have been hindered by endemic conflict between the Ministry of Health (previously Welfare), the self-government of the health insurance fund, the HIFA and the Ministry of Finance, all of whom have or had overlapping responsibilities in the financing, policy preparation and administration of healthcare. A major challenge will be to introduce reforms in a way that reduces these tensions and increases co-operation between agencies. The recent abolition of the health-insurance self government should serve to reduce some of this conflict, but any successful reform will require much more co-operation than has been the case in the past. A key challenge in any reform would be to help citizens to take greater responsibility for their own health by adopting better lifestyles and being more proactive concerning care. Such a transformation in attitudes can only occur slowly, but could be helped along by making full use of popular media, economic incentives (such as dissuasive taxes on "bads") and through improved co-ordination and funding of promotion programmes. The government should also consider developing an integrated disease-based payment system along the lines of the Homogenous Diagnosis Groups that would cover both in and outpatient care. Finally, a wide-range of quality-of-life healthcare services are underdeveloped in Hungary. In this respect, more emphasis needs to be to placed on increasing home-based care, occupational- and physio-therapy services and on making greater use of nursing-homes as opposed to chronic-care hospital beds.

To sum up *In sum*, the Hungarian stabilisation package put into place in 1995 and the structural reforms pursued since the beginning of the transition began to bear fruit in 1997 and 1998 as growth accelerated to high levels, inflation and unemployment fell, while the fiscal and the external balances improved. Given the strength of the economy, which is projected to continue, recent international financial disturbances exercised only temporary downward pressure on the currency. Nonetheless, this episode has highlighted the necessity for both fiscal and monetary authorities to be prudent and to clearly communicate their actions to markets. While recent events suggest problems with bank supervision, the success with which the economy moved through this turbulent period owes much to the health of the banking sector and the restructuring that accompanied past privatisation and associated inflows of foreign direct investment. Further progress will depend increasingly on domestic firms, the financing of which should be helped by the recent pension reform. The economic recovery has contributed to reducing unemployment, but non-employment remains endemic and further labour market changes are required. In addition, Hungary's exceptionally high mortality rates and the disincentives built into the healthcare system make its reform urgent. Nevertheless changes need not be radical; rather efforts need to concentrate on improving co-operation between actors within the system, increasing accountability and clarifying responsibilities while realigning economic incentives with public-policy objectives.

### I. Recent trends and prospects

### **Overview**

The Hungarian economy has undergone a dramatic transformation since 1995 when the government introduced an extensive stabilisation plan to rectify what were then an unsustainable level of domestic demand, rapidly rising inflation and mounting fiscal and current account deficits. GDP grew by about 1.5 per cent in both 1995 and 1996, a period that saw a substantial shift in the distribution of income from labour to capital, a large decline in domestic demand and a restoration of internal and external balance. The economy began to pick up in 1997, initially led by strong investment growth, which progressively translated into higher incomes and additional private consumption (Table 1). The strengthening of domestic demand continued into 1998 with consumer expenditure playing an increasingly important role. The recovery of exports, which followed the 1995 stabilisation measures and the introduction of the new crawling-peg exchange rate regime, intensified in 1997, with both the trade and current account deficits falling to low levels (Figure 1). In the course of 1998, export growth

	$1997^{1}$					1998 <sup>1</sup>			
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q1-Q3
					Per cer	nt			
GDP – total	2.1	4.3	5.1	5.3	4.6	4.5	5.1	5.6	5.1
of which:									
Household consumption	0.6	-0.8	1.7	1.9	2.0	1.5	4.3	4.1	3.3
Gross fixed capital formation (GFCF)	4.1	14.1	13.5	5.1	8.8	7.0	12.7	18.1	13.7
of which: Investments	3.6	13.5	12.9	4.6	8.3	7.0	12.7		
Exports of goods and services	20.4	25.9	26.4	30.3	26.4	28.3	17.1	11.3	18.2
In the set of the set	22.2	26.1	26.3	267	25 5	247	24.8	237	244

Table 1. Quarterly gross domestic product

Year over year rate of growth



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

Note: Data for 1998 are OECD projections.1. The broken lines represent the average for 1992-1997.Source: OECD.

appears to be slowing while imports continue to expand rapidly in response to rising levels of consumption. Reflecting the pick-up in activity, employment began to grow in 1997 and 1998, and the unemployment rate fell to 7.7 per cent. Inflation also dropped substantially, falling from 23.6 per cent in 1996 to 10.3 per cent by the end of 1998. The financial turnoil that followed the collapse of the Russian rouble in August 1998 precipitated an outflow of capital from Hungary, putting temporary downward pressure on the currency. Nevertheless, the economy appears fundamentally sound, and, in the absence of further disturbances in financial markets, prospects for strong and sustainable growth in 1999 and 2000 are good. The following paragraphs examine these developments in more detail.

### Strong growth supported by increasing domestic demand

Overall, GDP grew 4.6 per cent in 1997, with quarterly rates accelerating from 2.1 per cent in the first quarter to 5.3 per cent in the fourth. Data for the first three quarters of 1998 show GDP up 5.1 per cent on the same period of the year before, with growth rates apparently stabilising and capacity utilisation at high rates (Figure 2). In contrast to 1997 when the expansion of output was concentrated in certain sectors (Table 2) and regions, growth in 1998 is more broadly based, with output in industry, manufacturing and construction all up by around 15 or more per cent.

The increase in activity generated improved labour market conditions, rising levels of disposable income and a sharp improvement in consumer confidence. These factors, in turn, led to a 2 per cent pick-up in *private consumption* in 1997 followed by a 3.3 per cent increase in the first three quarters of 1998 and 6 per cent growth in retail sales over the first nine months of that year. Business-sector indicators also picked up, with firms indicating growing order-books and expectations of increased future production. Investment, reflecting a positive overall environment and expanding access to credit (see Chapter III), grew 8.2 per cent in 1997 and accelerated in the first three quarters of 1998 increasing 13.7 per cent. Within the business sector, investment expanded by 12.7 per cent with growth rates in manufacturing and service sectors such as wholesale and retail trade, and financial intermediation in excess of 20 per cent.

### Improved labour market conditions

The buoyancy of economic activity contributed to a marked improvement in the labour market situation. The unemployment rate, as recorded in the labour force survey, peaked at almost 13 per cent in 1992 and has been falling since,



### Figure 2. The climate in the private sector

1. Balance of positive-negative replies. *Source:* OECD, *Main Economic Indicators.* 

		J		0				
		19	97 <sup>1</sup>	19981				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q1-Q3
				Pe	r cent			
GDP – total	2.1	4.3	5.1	5.3	4.5	5.1	5.6	5.1
of which:								
Agriculture and fishing	-9.5	5.6	0.6	-4.4	-6.1	-5.0	-1.2	-3.9
Industry <sup>2</sup>	4.5	7.3	10.7	10.1	13.6	13.1	11.7	12.8
Construction	5.3	8.4	8.9	16.6	13.7	17.5	13.1	14.7
Trade, repair of motor vehicles, personal								
and household goods	0.6	1.3	2.5	2.5	1.0	6.7	6.5	4.2
Hotels and restaurants	5.6	5.8	3.9	7.2	3.7	6.7	5.8	5.6
Financial intermediation	1.3	1.2	2.1	5.2	1.2	9.4	-0.5	0.2
Transport, storage and								
communication	7.5	9.4	9.7	7.4	6.7	7.3	11.0	7.3
Retail sales			0.6	5.6	6.0			

### Table 2. Gross domestic product, by sector

Year over year rate of growth

1. Preliminary.

2. Industry consists of: mining and quarrying, manufacturing and electricity, gas and water supply.

Source: Central Statistical Office.

reaching 7.7 per cent in the third quarter of 1998<sup>1</sup> (Figure 3). The drop in aggregate unemployment worsened regional disparities as the jobless rate declined less quickly in high unemployment regions. Indeed, there are emerging signs of labour shortages in the western part of the country where most foreign-owned industry is located and vacancies increased by 10 000 in the first three quarters of 1998. Employment has begun to increase and was the principal cause of the fall in the unemployment rate in 1998 – in contrast to previous years, when labour force withdrawal to various early retirement and disability programmes drove the decrease in unemployment (see OECD, 1997 and Chapter III). The 3.3 per cent year-over-year increase in dependent (salaried) employment recorded in 1998Q3, is a further indicator of the turnaround in the labour market, suggesting an expansion in the formal economy at the expense of more precarious work forms (the total workforce increased by 1.6 per cent). Despite these positive developments, joblessness remains endemic, with rates of non-employment and the incidence of long-term unemployment both in excess of 50 per cent.

Nominal wage growth has moderated only a little. Following two years of steep real declines, gross earnings per employee rose 22.3 per cent in 1997 and 19.1 per cent in the first ten months of 1998, representing a 3.6 per cent real hike (Table 3). Changes to the tax system meant that take-home pay rises were even



#### Figure 3. Employment, unemployment and the labour force

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

	1996	1997	$1998^{1}$
		Annual percentage chang	ge
Gross earnings per employee <sup>2</sup>	20.4	22.3	19.1
Net earnings per employee <sup>2</sup>	17.4	24.1	19.0
Consumer price inflation	23.6	18.3	15.0
Real gross earnings	-2.6	3.4	3.6
Real net earnings	-5.0	4.9	3.5

### Table 3.Earnings per employee

1. Annual change in the average level for the period January to October.

 Earnings of all employees in the government sector and employees of firms with ten or more workers – approximately 2/3 of all workers.

Source: Central Statistical Office.

larger in 1997. These increases occurred despite central wage bargains that mandated much smaller nominal increases of 18 per cent for 1997 and 16 per cent in 1998. Some of this wage drift may have reflected workers' lack of confidence in the inflation targets that underlay the central bargains, in which case the strong disinflation achieved in 1998 could translate into less wage drift next year. Although the national wage guidelines for 1999 are not yet known, the government has announced that the public-sector wage bill will rise by 13 per cent on average. However, certain groups of civil servants such as teachers, judges, policemen and tax administration workers have been promised substantially larger increases, which may have a detrimental impact on local-level wage bargaining.

### Still high but declining inflation

The process of disinflation that began in 1996 continued through 1998, with the average increase in the consumer price index (CPI) falling from 23.6 per cent in 1996 to 14.3 per cent in 1998. The twelve-month rate of inflation was down to 10.3 per cent by December, well below the governments' year-end target of 12.5 per cent. All components of CPI inflation moderated, including food whose prices grew at above average rates for most of the year (Figure 4, Panel B). The progression of disinflation excluding the volatile food and energy components has been constant with the twelve-month increase slowing to 13.3 per cent by October, the most recent observation for this variable. Price increases in the service sector were higher on average and the pace of disinflation slower, perhaps reflecting the relative isolation of services from the influence of the crawling-peg exchange rate regime. Producer prices which had previously followed consumer



Figure 4. Consumer price developments

Year-on-year percentage change

Source: OECD, Main Economic Indicators.

prices relatively closely, saw their rate of increase fall to about 10 per cent as a number of administered price hikes were deferred.

### **External balance**

Despite the phenomenal growth of exports and imports (Figure 5) the tradeable sector's overall contribution to GDP declined in 1997 and began to be negative in 1998. Both exports and imports (each of which represent about 50 per cent of output) expanded by around 25 per cent in 1997 and appear to be growing at only somewhat slower rates this year. The expansion in exports reflects substantial increases in capacity (see Chapter III) and the underlying competitiveness of the Hungarian economy, while the high import content of these exports and the recent pick-up in consumer demand explain the expansion of imports. Although exports rose faster than markets in practically all sectors, almost half of their total increase came from the 50 per cent growth in machinery and transportation



Figure 5. **Trade performance** Year-on-year per cent change

1. Weighted average of import volumes in the exporting markets of Hungary.

2. Constant prices.

Source: OECD, National Accounts.

equipment volumes. In 1997, the merchandise-trade deficit narrowed to \$2.1 and \$1.7 billion on a customs and balance-of-payments basis respectively.

The assessment of trade in goods in 1998 is rendered extremely difficult by the different pictures emerging from the balance of payments (BOP) and customs-based data (Figure 6). Both the growth of exports and imports according to the BOP source are growing by less than 5 per cent in dollar terms which is in stark contrast to the more than 20 per cent increase recorded by customs figures for most of the year. Historically, despite sometimes large differences regarding the level and rate of growth of trade, the two sources have tended to generate similar measures of the trade balance, with the gap between them never wider than \$400 million. This relationship broke down in 1998 and by November, the customs data indicated a slowdown in export growth that has not been observed in imports and a \$2.5 billion trade deficit, \$680 million more than in the balance of payments.

As discussed in Annex 1, there are several reasons why level differences exist between the BOP and customs data but none of these can adequately explain the differences in the growth rates or the divergences in recorded trade deficits. Of the two data sources, the customs-based information seems to be providing a closer indication of the level of activity and is broadly consistent with other indicators. In this regard, the widening of the trade deficit that it shows may be an indication that domestic demand is growing faster than the economy's supply side can expand. The central bank intends to revise the manner in which it calculates its export and import figures in the balance of payments to conform to Eurostat norms. As a result, the BOP will be based on custom data collection, which should eliminate much of the discrepancy and any misunderstandings that the current differences may cause.

Within the balance of payments, the deficit of the current account fell to just under \$1 billion, or 2.1 per cent of GDP in 1997, down from 3.7 per cent the year before – primarily because of an improvement in the trade balance and better net tourism receipts (Table 4). In 1998, while the latter remained strong, a much larger repatriation of profits in May and September caused a significant deterioration in the incomes balance. As a result, by the end of November, the deficit of the current account was more than 100 per cent higher than in 1997 at \$1.6 billion. Despite some weakening in August, long-term capital inflows continue to be substantial, and proved sufficient to finance the cumulated current account deficit for the year to date (Table 5).

Capital outflows intensified sharply in August, following the collapse of the Russian rouble as foreign investors liquidated positions in Hungary in an effort to rebalance their international portfolios and to cover losses elsewhere (Table 6). Although concerns about the direct impact of the Russian collapse on the Hungarian economy may have played an initial role in these developments,



### Figure 6. Customs versus balance of payments trade data

1. A change in the methodology employed in calculating the balance of payments makes the calculation of growth rates in 1997 meaningless.

Source: National Bank of Hungary and Ministry of Economic Affairs.

Current account balance	127	267	324	-3 455	-3 911	-2 480	-1 677	-981	-382	-523	-432
Unrequited transfers, net	727	860	859	732	909	1 127	922	996	187	253	299
Labour and property income	18	-20	9	-6	-43	-52	-20	-1	7	7	7
Net	-1 414	-1 331	-1 216	-1 130	-1 286	-1 599	-1 177	-951	-298	-273	-140
Expenditures	1 644	1 628	1 636	1 586	1 947	2 357	2 321	2 307	528	466	314
Receipts	230	297	420	456	661	758	1 144	1 356	229	194	175
Other investment income											
Direct investment income	-24	-32	-45	-56	-117	-194	-256	-431	-30	-358	-168
Other services, net	302	67	103	-104	-55	195	-154	-454	-205	-139	-234
Net	345	560	590	442	503	659	1 288	1 428	180	350	515
Expenditures	473	446	641	739	925	1 056	957	1 153	246	307	351
Receipts	818	1 006	1 231	1 181	1 428	1 714	2 246	2 582	426	657	866
Travel	17	05	10	-17	-12	-15	0	-15	10	3	0
Coverment services net	-104	-60	-110	-100	-170	-100	292	_131	04 10	33	50
Services and income	164	80	116	106	176	196	202	151	91	22	56
Trade balance	348	189	-48	-3 247	-3 635	-2 442	-2 645	-1 734	-303	-393	-687
Imports	5 998	9 069	10 076	11 340	11 248	15 252	16 828	21 371	5 043	5 436	5 630
Exports	6 346	9 258	10 028	8 094	7 613	12 810	14 183	19 637	4 740	5 044	4 944
	1990	1991	1992	1993	1994	1995	1996	$1997^{1}$	1998 Q1	1998 Q2	1998 Q3

### Table 4. Current account of the balance of payments Millions of dollars

1. A new classification system was introduced in 1997. As a result, data are not comparable with previous years. *Source:* National Bank of Hungary.

	1000	10071		1998	
	1996	19971	Q1	Q2	Q3
Financial account	-1 739	398	1 578	389	-914
Direct investment, net	1987	1 653	329	531	169
Portfolio investment, net	-799	-1 047	1 000	413	-519
Other investment, net	-2 927	-208	249	-555	-564
of which: Short-term capital	1 012	455	796	91	-850
Change in reserves	-1 458	120	-1 267	-158	-1 308
Memorandum item:					
Net errors and omissions	1 864	296	28	231	58

### Table 5. Financial account of the balance of payments

Millions of dollars

New classification system introduced. Data not comparable with previous years. Source: National Bank of Hungary.

they should have dissipated as Russia is a destination for only 4 per cent of Hungarian exports. Moreover, in contrast to other countries involved in the world financial crisis, Hungarian banks were not very exposed to Russia and its banking system (see Chapter III) and other economic fundamentals are strong (Box 1).<sup>2</sup> Total portfolio-related outflows amounted to \$87 million while \$1.05 billion from forint-denominated government bonds were converted into foreign currency in August and September. The Budapest Stock Exchange index (BUX) lost over

#### Capital flows in the balance of payments Table 6.

Millions of dollars

			1998	1997			
	Мау	May June July August Septembe		September	January- September		
Investment income (net)	-52	-431	-109	-71	-200	-1 338	-1 064
Non-debt financing $(1 + 2)$	-211	29	179	-39	22	918	1 170
1. Foreign direct investment (net)	-27	140	87	19	55	701	885
Abroad (net)	-86	-15	-166	-19	-8	-347	-229
In Hungary (equity only)	60	155	254	38	63	1 049	1 114
2. Portfolio investment (net)	-184	-110	92	-58	-33	217	285
Memorandum items:							
Short-term liabilities							
(stock, billions of dollars)	4.1	4.1	4.0	4.1	4.1	4.1	3.6
Reserves (stocks, billions of dollars)	10.2	9.6	9.8	9.4	8.8	8.8	8.2
Reserves/short-term liabilities	2.5	2.3	2.5	2.3	2.2	2.2	2.3
Reserves/imports	5.8	5.2	4.8	5.6	4.6	4.6	4.9

### Box 1. Hungary and the international financial crisis

The Russian crisis provoked a large sell-off of Hungarian stocks and bonds, and triggered a shift in the Forint to the depreciation side of its fluctuation band. Factors external to Hungary clearly played a role in the liquidation of forint-denominated assets as foreign investors covered losses from holdings in other markets. Nevertheless, some features of the Hungarian economy probably also contributed to making investors nervous, including (in 1997):

- A high foreign private and public debt/GDP ratio (53 per cent).
- A large government deficit (4.8 per cent).
- Inflation rates well above those in western Europe (18.3 per cent).

Nevertheless, while high, each of these variables has been falling. Moreover, the economy is strong in Hungary. For example, the country has:

- A relatively small current account deficit (about 2 per cent of GDP in 1997).
- A primary budget surplus.
- Large international reserves (four months in terms of import coverage).
- A highly competitive export sector, with a rapidly expanding export market share.
- A healthy banking sector with ample reserves and a high share of problem-free loans.
- No signs of any asset bubbles.

While the weight attached to any of these factors in investor decision-making is uncertain, Hungary's status as the pre-eminent destination for foreign direct investment in the region reflects the international community's overall confidence in the country's economic fundamentals.

50 per cent of its value in this period, or about \$2.6 billion in market capitalisation (Figure 7). Since then, the index has recovered somewhat – but remains 30 per cent below its July level. The central bank estimates that the stock of remaining foreign held portfolio investments is \$2.5 billion in shares and \$750 million in government securities.

### The short-term outlook

Despite the turbulence in financial markets, strong growth is expected over the medium term. The export-led recovery has given way to one which is firmly based on domestic demand, and private consumption should grow in the 4 per cent range over the next few years, supported by better job prospects, real wage increases and ample savings (Table 7). Meanwhile, strong international competitiveness and significant domestic opportunities should keep investment



Figure 7. The Budapest stock exchange

Source: National Bank of Hungary.

levels and growth rates high. Improving economic conditions may encourage small increases in the labour force which will be more than offset by rising employment levels, resulting in a 1 percentage point drop in the unemployment rate by the year 2000. The slowdown in exports that was observed in early 1998 is expected to continue over the projection period and imports destined for re-export should also decelerate, but stronger consumption will tend to mitigate this effect somewhat resulting in a deterioration of the trade and current account balances. Overall, output is projected to expand 5.2 per cent in 1998, before falling off to about 4.5 per cent in 1999 and 2000.

The disinflation of past years is projected to continue, and in 1998 the average inflation rate fell to 14.3 per cent, with monthly rates reaching 10.3 per cent at the end of the year. Over the projection period, the decrease in the inflation rate may be less pronounced due to continued wage drift, with an 11 per cent increase in 1999 and a single digit rate in 2000. Monetary policy is likely to continue to support the disinflation process with cuts in nominal interest rates and the rate of crawl following price developments. The government deficit is
	1995 curre billion o	ent prices f forints	1997 <sup>1</sup>	1998	1999	2000				
	Per cent	of GDP	A	Annual percentage change						
Private consumption	3 724.0	66.3	2.0	3.8	4.0	3.7				
Government consumption	617.7	11.0	1.8	2.0	1.8	2.9				
Gross fixed investment	1 125.4	20.0	8.8	12.0	9.2	8.8				
Final domestic demand	5 467.0	97.4	3.5	5.7	5.2	5.0				
Stockbuilding <sup>2</sup>	218.3	3.9	1.1	1.3	0.5	0.2				
Total domestic demand	5 685.4	101.3	4.4	6.4	5.2	4.8				
Exports of goods and services	2 073.0	36.9	26.4	18.8	12.0	10.7				
Imports of goods and services	2 144.4	38.2	25.5	20.1	12.3	10.7				
Foreign balance <sup>2</sup>	-71.4	-1.3	0.2	-1.6	-0.9	-0.7				
GDP at constant prices			4.6	5.1	4.6	4.4				
Memorandum items:										
GDP price deflator			18.5	14.8	10.9	9.4				
GDP at current prices			23.9	20.6	16.0	14.2				
Private consumption deflator			18.0	14.5	11.0	9.0				
Industrial production			11.1	11.5	9.5	8.3				
1 Droliminory			1							

#### Table 7. Short-term projections

'reliminary.

2. Contribution to GDP growth.

Source: OECD.

projected to decline somewhat to about 4.7 per cent of GDP in 1998. For 1999 and 2000, the projection incorporates the measures included in the 1999 budget presented to parliament in October. The deficit in 1999 is projected to be higher than the government's target because of lower growth and less success assumed in improving the efficiency of tax collection.

Several inter-related risks surround this projection. Investors have clearly signalled their risk-aversion and any slackening in the disinflation process or overshooting of the government budget could provoke downward pressure on the currency. This risk is heightened by recent developments in the trade balance, which suggest that the supply elasticity of the domestic economy may not be capable of supporting current growth rates. Thus, a stronger than projected expansion in domestic demand could result in significantly larger trade and current account imbalances. In this regard, the outcome of the 1999 wage bargaining round will be crucial for the external balance and for the disinflation process. In addition, a slower-than-anticipated expansion in Europe (and especially Germany) would place additional pressure on the external balance, while an associated reduction in foreign direct investment and other capital inflows would exacerbate any problems of financing the current account.

# **II.** Macroeconomic policies

The macroeconomic stabilisation undertaken in 1995 by the so-called Bokros package placed Hungarian monetary and fiscal policies on a sustainable path. The crawling-peg exchange rate system provides a clear and predictable environment within which domestic and foreign firms are able to make future contracts without worrying about the possibility of an unforeseen future depreciation. Fiscal policy has been significantly tightened following substantial expenditure cuts and, although the general government deficit remains high at 4.7 per cent of GDP, a primary surplus (revenues less expenditure, net of interest payments) of about 2 per cent of GDP tends to assure the continued reduction of the public debt, which has fallen to about 60 per cent of GDP. Such budgetary restraint and a concerted effort to develop forward-looking wage bargaining have helped the authorities lower the twelve-month inflation rate from a 31 per cent high in 1995 to 10.3 per cent in December 1998, with monetary policy supporting these developments. Despite this substantial improvement in the macroeconomic environment, the recent turmoil in financial markets and the pressure to which the forint has been exposed underline the necessity of further progress - both in terms of lowering still high inflation and in reducing the budget deficit.

#### **Monetary management**

The pre-announced crawling-peg exchange rate system that was adopted in March 1995 serves as a nominal anchor for monetary policy and has allowed the independent National Bank of Hungary<sup>3</sup> (NBH) to efficiently manage the competitive and speculative pressures that derive from the country's high rate of inflation. Under this regime, which is characterised by a narrow 4.5 per cent fluctuation band, the central rate of exchange between the forint and its currency basket (consisting of 70 per cent Euros and 30 per cent dollars, as of 1 January 1999) is depreciated by a fixed amount each day. This rate of crawl is announced several months in advance and is chosen, by the NBH and the government, to be consistent with national and international inflation and productivity developments. As indicated in the previous *Survey*, the crawling-peg system has been very successful at restoring confidence in the currency and creating a stable trading environment. Exchange rate risk in future contracts has been minimised, while the depreciation prevents Hungary's high inflation rate from making domestic firms uncompetitive. For most of the period since its introduction, the forint has been at the appreciation-edge of its narrow fluctuation band, principally because of capital inflows associated with substantial foreign direct investment.

With monetary policy concentrating on the exchange rate, the principal sources of disinflation have been a substantial output gap, large falls in real wages and a tightening of fiscal policy (see below). In addition, the government and the NBH have made a concerted effort to encourage forward-looking wage bargaining. Each year, the Ministry of Finance has announced its inflation expectation for the forthcoming year and used this target as the basis for bargaining in the Interest Reconciliation Council (the body responsible for setting national wage guidelines). The Bank, for its part, has contributed to expectation formation by publicly endorsing the government's targets and conducting a supportive monetary policy. By maintaining the rate of crawl consistently below the rate of inflation, it has helped to ensure that the prices of tradeables rose less quickly than those of domestic goods, adding to downward pressure on domestic inflation. Thus, as the twelve-month rate of inflation has fallen, the rate of crawl has been reduced seven times from 1.9 per cent at its introduction in 1995 to 0.7 per cent in October 1998 and a further move to 0.6 per cent per month is envisaged for January 1999.

#### Interest and exchange rate developments

The National Bank of Hungary concentrates on a wide range of indicators in evaluating the stance of monetary policy (Figure 8). The rapid transformation of the financial sector, the falling rate of inflation, and the rapidly improving supplyside of the economy preclude reliance on any single measure. Monitored variables include the money supply, the external current account, domestic savings and GDP growth, with the relationship between productivity developments and the real exchange rate being of particular importance.

Between 1996 and mid-1998, falling inflation and strong capital inflows led to a steady fall in short-term interest rates, whose influence on monetary conditions was offset in 1996 by the 7 per cent real appreciation of the forint (Figure 8, Panel B). As the Bokros package took hold in 1996, the falling current account deficit, the slowing of inflation, the new-found credibility of the currency and sustained net capital inflows translated into a drop in market interest rates relative to the central bank's repo and reverse-repo rates (Figure 9, Panel A). These nominal developments were reflected in a decline in short-term real interest rates (as conventionally measured) from nearly 10 per cent before the intro-



Figure 8. Monetary conditions

1. The Monetary Conditions Index was computed according to the following formula:  $\begin{aligned} &|(t) = |(t - 1) * [1 + (r(t) - r(t - 1)) + a * log(RER(t))], & where \\ r = real (CPI deflated) short-term interest rate; \\ RER = real exchange rate with respect to the basket; \\ a = the export to GDP ratio. \end{aligned}$ 

2. The fourth quarter figure is an estimate based on October and November data.

Source: National Bank of Hungary and OECD.



# Figure 9. Interest rate and exchange rate developments

Per cent

1. 90-day T-bill rate in Hungary; 3-month FIBOR in Germany adjusted by the respective consumer price index.

 The premium is defined as the annualised interest rate on 90-day Hungarian T-bills less the expected depreciation given the crawling-peg less the weighted average of the corresponding German and US interest rates.
 Source: National Bank of Hungary; OECD. duction of the new regime to about 2 per cent, with some periods of negative rates following regulated price-induced inflation spikes (Figure 9, Panel B). These low rates reflected the Bank's need to limit capital inflows. However, falling inflation meant that *ex-post* domestic real interest rates and interest-rate premia were higher than suggested by the conventional measure and that capital inflows were nevertheless attracted by a 3.5 per cent premium on forint-denominated T-bills (Figure 9, Panel C).

After successfully navigating most of the initial effects of the Asian crisis including a temporary weakening of the Hungarian forint in autumn 1997, the exchange rate came under downward pressure for a period of 6 months in 1998 (Figure 10). Relative weakness arose in the spring, as the currency left the appreciation limit of its fluctuation band. This development probably reflected international investors' concerns over the parliamentary elections and their possible impact on government spending and Hungary's commitment to the disinflation process. These factors combined with increased business profitability – and hence increased repatriation of profits – to yield \$87 million in portfolio outflows



Figure 10. The forint in its fluctuation band

#### **OECD 1999**

Source: National Bank of Hungary.

and a \$1.05 billion selloff of forint-denominated government bonds. In August, following the Russian crisis and the collapse of the Budapest stock exchange (see Chapter I) capital outflows intensified and the forint was pushed to the depreciation limit of its fluctuation band.

Initially the Bank did not react to the weakening of the currency. As downward pressure intensified in August, it announced its intention to lower the rate of crawl in October (implicitly raising the forward-looking return on forintdenominated paper) and expressed its confidence in the economy's fundamentals. In addition, it made two public purchases of forints, thereby signalling its willingness to intervene in support of the currency. As pressure on the currency continued, the Bank began to tighten monetary conditions, raising its one-month reverse-reported by 100 basis points in September and suggesting the possibility of an additional reduction in the rate of crawl in January. Intermittently during September and October, the Bank was obliged to supply relatively small amounts of foreign exchange on the interbank market to keep the currency within its fluctuation band. In September, the fall in official reserves was equal to \$600 million, while at the end of November, they stood at \$8.7 billion or the equivalent of four months of imports (Figure 11). By mid-December, interest rates had declined to their pre-August level and the central bank, in order to reconstitute its reserves, floated a DM 500 million bond issue that was over-subscribed at 70 basis points above LIBOR. Meanwhile, the stock market had recovered some of its losses, although remaining 30 per cent below previous highs.

While Hungary has made substantial progress in foreign exchange liberalisation (all current account operations and a large proportion of capital transactions are free of restrictions), several controls – designed principally to limit the inflow and outflow of short-term capital – remain in place. The authorities accept that such restrictions may cause costly distortions and they plan to relax them as macroeconomic and domestic financial-market conditions permit. Nevertheless, they feel that such controls played a positive role in limiting pressure on the Forint. The following describes the most relevant short-term measures in effect in the summer of 1998:

Outflows:

- Residents other than banks may only invest in OECD securities and government debt issues with a maturity of one year or more, and they may not extend financial credits, irrespective of their maturity (this restriction will be lifted in 1999);
- Hungarian banks may not grant loans abroad with a maturity in excess of one year without prior approval. However, they may grant loans with a maturity of less than one year, and, in addition, they may, like nonbank residents, purchase OECD securities and government issues with a maturity of one year or more. The total of their holdings in foreign



#### Figure 11. Exchange rate fluctuations and official reserves

Source: National Bank of Hungary.

assets may not exceed 50 per cent of their foreign denominated liabilities without explicit permission (the restriction on outward financial credits with a maturity of more than one year will be lifted in 1999);

- Purchases of foreign collective investment securities (*i.e.* mutual funds) and negotiable instruments denominated in foreign currency by residents other than banks are prohibited; banks may make such purchases on their own account, subject to the above 50 per cent limit (restrictions applied to such instruments that are based on underlying foreign assets otherwise available to residents will be lifted in 1999);
- Residents may not hold deposit accounts with non-resident institutions and foreign exchange earnings made abroad must be repatriated.

Inflows:

- Residents other than banks may not accept financial credits from abroad with a maturity of less than one year;
- Non-residents are not allowed to purchase units of Hungarian openended investment funds;
- Non-residents are not allowed to trade in money market instruments, and negotiable instruments, except for the Budapest Stock Exchange index futures (BUX).

# Money and credit

Over the period 1995 to mid-1998 much of the central bank's attention focused on sterilising capital inflows principally in the form of foreign direct investment. Two basic techniques were employed. The first involved using the receipts from privatisation to pay down the foreign-denominated debt of the general government. As a result of these efforts, economy-wide gross foreign debt (including intercompany loans) fell \$3 billion to about \$24 billion by the end of 1997 (52.6 per cent of GDP) and net foreign debt to \$11 billion (24.7 per cent of GDP). Autonomous inflows, principally greenfield investments (see Chapter III), were sterilised through the banking system using the one-month standing facility - introduced in 1996. Here the role of the NBH was passive, commercial banks voluntarily placing excess liquidity with the central bank which paid a predetermined rate of interest on fixed-duration deposits. Over the review period, the central bank experimented with a number of different deposit instruments in an effort to extend the duration of deposits so as to manage better the sterilisation of long-term capital inflows. The Bank's previous reliance on short-term instruments had necessitated recurring interventions on its part as positions of investors were unwound, generating excessive volatility in interest rates. Ultimately, it introduced a 364-day bond in 1997 (initially offered as a tap issue) and suspended the six and twelve-month deposit facilities it was operating at that time. The new bond, which has been auctioned since April 1998, and the NBH's

decision to widen the corridor between its repo and reverse-repo<sup>4</sup> instruments requires commercial banks to play a more active role in managing their own liquidity and in setting interest rates.

While the sterilisation costs of the crawling-peg exchange rate regime have been appreciable, about 0.16 per cent of GDP annually, the system has allowed the country to benefit from a predictable exchange rate, improved credibility and lower interest rates on its debt. The success of the sterilisation in containing liquidity is reflected in monetary aggregates, whose rates of growth have been broadly in line with that of nominal GDP. The increase in the velocity of M1 in recent years, as inflation has fallen and transactions demand risen, may reflect growing confidence in these assets (Table 8). The broadest measure of money supply, M4, has shown the most robust growth, albeit relatively steady, largely as a result of increased demand for government securities and NBH bonds trading outside of the banking sector. Despite low real rates, credit growth, which is discussed in more detail in Chapter III, was weak during the period 1995-97 as banks consolidated their balance sheets. More recently with the sector on a firmer footing, credits are expanding – principally to large enterprises, whose borrowings rose by 30 per cent in early 1998. Lending to households barely rose, and fell in real terms.

Overall, notwithstanding the recent financial turmoil, monetary policy has contributed importantly to the successful restructuring of the Hungarian economy.

Annual percentage change								
	1995	1996	1997	1998				
Monetary growth								
M1	6.4	19.4	22.1	$22.8^{1}$				
M3	20.1	22.5	19.4	$17.5^{1, 2}$				
M4	24.8	26.8	26.5	$24.7^{1}$				
Domestic credit								
Total	12.8	6.5	11.7	$10.9^{1}$				
Large enterprises	18.5	29.4	42.1	$30.2^{1}$				
Households	-7.0	-8.2	1.8	8.21				
Memorandum items:								
Nominal GDP growth	27.4	22.8	23.9					
Income velocity (GDP/M1)	5.6	6.0	6.2					
Income velocity (GDP/M3)	2.2	2.2	2.3					
Income velocity (GDP/M4)	1.9	1.8	1.8	••				

Table 9 Manay and anadit

12 months ending May 1998.

2. Break in series in January 1998.

Source: National Bank of Hungary.

The NBH has helped create a stable trading environment while accommodating disinflationary pressures emanating from elsewhere in the system. So far, the Bank has succeeded in seeing its way through the recent financial market turbulence. The challenges to policy makers posed by this new international environment and those associated with continuing the downward progression in inflation are discussed at the end of this chapter.

# The fiscal stance

Since the beginning of the transition, Hungary has sought to reduce the role of the state in the total economy. Thus, between 1991 and 1996 the share in GDP of general government revenues declined from 52 to 42 per cent and that of expenditures from 55 to 45 per cent (Table 9). Most of this budgetary tightening occurred after the March 1995 introduction of the Bokros reforms (named after the then Minister of Finance) that sought to reduce the dual current account and budget deficits of 9.5 and 8.4 per cent of GDP in 1994. In its first year, the programme entailed draconian spending cuts, principally in the form of public-sector wage restraint and delayed government investment, causing the budget

	1991	1992	1993	1994	1995	1996	1997
			Pe	r cent of G	DP		
Primary revenues <sup>1</sup> Primary expenditures <sup>2</sup>	50.8 51.7	61.8 63.5	50.0 53.0	49.2 51.9	43.8 41.6	40.3 35.9	38.9 35.8
Primary balance	-0.9	-1.7	-3.0	-2.7	2.2	4.5	3.0
Interest revenue Interest expenditure Interest balance	1.6 3.7 -2.1	1.2 5.7 -4.5	$0.9 \\ 4.6 \\ -3.6$	$1.1 \\ 6.8 \\ -5.7$	0.7 9.3 –8.5	1.7 9.1 -7.4	2.3 10.2 -7.9
Gross revenues (net of privatisation revenues) <sup>1</sup> Gross expenditures Gross balance	52.4 55.4 -3.0	$63.0 \\ 69.2 \\ -6.2$	$50.9 \\ 57.5 \\ -6.6$	50.4 58.7 -8.4	$44.5 \\ 50.9 \\ -6.4$	42.0 45.0 -3.0	41.3 46.1 -4.8
Memorandum items: Privatisation revenues Dividends paid by the central bank Transfers to the central bank	0.1 0.0 0.0	1.1 0.0 0.3	0.6 0.3 0.0	0.9 0.5 0.0	3.2 0.0 0.0	3.8 0.1 0.8	3.0 0.0 0.3

Table 9. General government accounts

1. Total revenues and grants less privatisation payments, less interest revenue, less dividends paid by the central bank.

2. Gross expenditures less interest expenditure.

Source: Ministry of Finance.

deficit to fall to 6.4 per cent of GDP. Tightening continued into 1996, with the deficit falling further to some 3 per cent of GDP. Indeed, the extent of spending cuts is somewhat understated by these figures because, over the same period, interest payments on the government debt rose by 4.5 per cent of GDP. Thus, primary expenditure (*i.e.* net of debt service) fell by more than 15 per cent of GDP on a cash-flow basis between 1994 and 1996, from 51.9 to 35.9 per cent of GDP, and the primary budget balance moved from a deficit of 2.7 per cent of GDP to a 4.4 per cent surplus.

The phenomenal rise in net interest payments followed the accumulation of government debt from off-budget sources, including the recapitalisation of the banking sector. Between 1990 and 1993 the gross debt of the government rose from 66 per cent of GDP to 89 per cent or 17 per cent in real terms.<sup>5</sup> However, the increase attributable to the recorded deficit of the central government was equal to only 6.2 per cent of 1994 GDP. Much of the difference stemmed from losses due to the revaluation of existing debt following repeated depreciations, which were directly added on to the debt (Table 10) (see OECD, 1997 and Barabás *et al.*, 1998). Since 1997, the government has moved to make its accounting for these kinds of losses more transparent by swapping the debt previously held by the central bank for government abet is now declining because of slower rates of currency depreciation. As indicated earlier, most of the subsequent decline in debt was due to the use of privatisation revenues to pay off foreign-denominated debt early.

	1990	1991	1992	1993	1994	1995	1996	1997
				Per cent	t of GDP	)		
Debt attributable to:								
Deficit financing of the central budget	20.6	23.2	27.1	28.5	27.8	25.2	26.1	26.0
Foreign exchange losses and subsidised								
loans of the NBH	22.9	31.1	30.2	33.3	33.0	36.0	22.8	22.3
Foreign exchange losses of the central								
government	1.7	4.8	4.6	5.7	5.4	5.8	4.3	3.9
Losses of the extra-budgetary and social								
security funds	0.8	0.6	0.6	1.6	2.3	1.9	1.2	1.0
Other non-deficit sources of debt	16.1	15.0	16.5	21.1	19.7	17.3	18.8	11.4
Total	62.0	74.7	78.9	90.3	88.2	86.2	73.3	64.5
Source: Adapted from Table 4 in Barabás (1998).								

Table 10. Gross debt of the general government

# The 1997 and 1998 budget outcomes

#### General government

These adjustments, and the central bank's move to lengthen the maturity of sterilised funds, restructured the government's debt enough to cause a significant discrepancy between net interest payments calculated on a cash-flow versus an accruals basis. As a result, the extent of the tightening recorded in 1996 was overstated, giving rise to an apparent relaxation of fiscal policy in 1997. While, according to the 1997 cash-flow accounts, the deficit rose to 4.8 per cent – reflecting a 1.1 per cent of GDP increase in expenditures and a 0.7 per cent fall in revenues – unofficial estimates of accruals data (see Kiss, 1998) indicate that the overall stance of fiscal policy in 1997 was broadly the same as in 1996, with deficits of 4.6 per cent of GDP in the first year and 4.7 per cent in the second (Table 11). Independent of the accounting measures used, the 1997 budget reflected a pause in the scaling-down process of the general government.

In 1998, the budget foresaw a stabilisation of the general government deficit to about 4.9 per cent of GDP on a cash-flow basis (Table 12). In the event, economic growth was stronger than initially expected and government estimates suggest that the deficit will be closer to 4.7 per cent of GDP. Most of this improvement is expected to be due to a larger-than-originally-anticipated primary surplus and a smaller-than-projected interest payment. Nevertheless, both the original budget and the estimates for the year indicate a 1.4 per cent of GDP fall in the primary surplus (as compared with 1997), suggesting some relaxation in the stance of fiscal policy.

	1990	1991	1992	1993	1994	1995	1996	1997
				Per cen	t of GDI	þ		
GFS balance GFS balance adjusted for accrual-based	0.3	-2.0	-7.0	-6.5	-8.4	-6.7	-3.1	-4.8
interest payments <sup>1</sup>	0.3	-3.0	-7.0	-7.7	-9.6	-7.3	-4.6	-4.7
Primary balance Real balance <sup>1</sup>	4.3 -4.7	1.0 -3.7	-2.6 -5.5	-2.9 -5.1	-2.7 -5.5	$1.6 \\ -2.1$	4.3 0.6	3.1 -0.4
Change in gross debt Change in net debt	-5.1 -2.2	8.7 2.1	4.0 2.7	11.3 12.7	-2.1 3.9	-2.0 -3.6	-12.9 -7.1	-8.3 -4.9

Table 11. Cash-flow versus accrual accounts

1. Estimates taken from Barabás et al. 1998.

Source: Ministry of Finance, National Bank of Hungary and Barabás et al. 1998.

	1991	1992	1993	1994	1995	1996	1997
			Per	cent of	GDP		
Revenues							
Total revenue net of privatisation payments <sup>1</sup>	52.5	52.6	51.5	51.2	47.7	45.8	44.3
Current revenue	51.8	51.2	49.8	49.3	46.3	44.5	43.0
Tax revenue	42.2	42.0	41.4	39.5	38.4	36.8	36.1
Personal income tax	6.9	7.0	7.3	7.0	6.8	7.1	6.6
Corporate tax	6.0	2.8	2.0	1.9	2.0	1.8	1.9
Social security contributions	13.0	13.8	13.2	12.5	11.3	10.4	10.8
Employers	9.8	10.5	8.9	8.9	8.3	8.2	8.6
Employees	3.2	3.3	3.6	3.2	2.5	2.2	2.3
Payroll taxes	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Property taxes	0.3	0.4	0.4	0.3	0.3	0.4	0.8
Indirect taxes	12.8	13.3	13.8	13.4	12.7	12.8	13.5
VAT	6.0	6.0	8.1	7.7	7.6	7.5	8.0
Import and customs duties	2.5	3.4	3.6	3.4	4.4	3.6	1.9
Other taxes	0.5	1.2	1.1	1.0	0.6	0.5	0.5
Non-tax revenue	9.6	9.2	8.3	9.8	7.9	7.8	6.9
Entrepreneurial income	3.5	2.6	2.4	3.3	1.8	2.8	2.8
Interest income	1.6	1.2	0.6	0.6	0.7	1.6	2.3
Dividends	0.1	0.2	0.6	1.9	0.1	0.3	0.2
Other property income	1.8	1.2	1.1	0.8	1.0	0.9	0.3
Administrative fees and charges and fines	4.0	3.9	3.9	4.0	3.4	3.4	2.7
Other non-tax revenues	2.1	2.7	2.0	2.6	2.8	1.6	1.3
Capital revenue	0.8	1.4	1.8	1.9	1.4	1.3	1.3
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditures							
Total expenditures and net lending	55.4	58.7	57.5	58.7	50.9	45.0	46.1
Total expenditure	56.4	60.4	60.8	60.4	54.3	49.0	49.7
General public services	3.0	3.9	3.8	3.3	2.5	2.5	2.8
Defence	1.2	1.5	2.2	1.3	0.9	0.8	0.8
Public order and safety	1.8	1.8	1.8	1.7	1.4	1.4	1.5
Education	5.1	5.2	5.2	5.1	4.2	4.0	3.9
Health	4.9	5.1	5.1	5.1	4.7	4.4	4.6
Social security and welfare	20.4	21.3	20.6	20.0	17.2	15.3	14.7
Housing and community amenities	4.1	1.8	1.8	1.6	1.8	1.7	1.5
Recreation, cultural and religious allans	17	2.0	2.0	1.0	1.0	14	1.0
Economic officing and comicos	1.7	2.U	2.U 5.0	1.9	1.0	1.4	1.0
Other expanditures	J.2	0.0 10.0	5.U	0.0	4.0	4.2	3.7 16 1
Other expenditures	9.8	12.3	14.8	14.8	15.2	13.8	10.1
Correction – consolidation	-0.9	0.0	-1.6	-0.8	0.0	-0.4	-0.7

 Table 12.
 Consolidated general government revenues and expenditures

1. Total revenues and grants less privatisation payments. *Source:* Ministry of Finance.

#### Central government

Overall revenues in the 1997 consolidated central government budget came in 6.7 per cent higher than originally budgeted. Expenditures were also over budget and the central government deficit increased to 4.5 per cent of GDP. As of October 1998, the Ministry of Finance expected the deficit of the consolidated central budget (net of the health insurance fund and the pension fund) to be 3 per cent of GDP – significantly better than the originally projected 4.6 per cent. This result reflected 10 per cent more than anticipated primary revenues and 2.8 per cent higher expenditures. These projections were confirmed in the unconsolidated accounts of the central budget, which showed that although both expenditures and revenues during the first nine months of the year exceeded budgeted levels, the deficit appeared to be coming in below initial projections (Table 13). This result, however, was significantly affected by the bailout of Postabank which contributed 50 billion forints or 0.4 per cent of GDP to the 1998 deficit.<sup>6</sup>

The budgets of the *social security* funds, which are included in the consolidated central government accounts, have been in deficit almost since their inception. In 1997 their combined deficit was in excess of 50 billion forints, representing 0.6 per cent of GDP (Table 14). This result reflected a 6 billion forints surplus on the part of the pension fund (whose recent reform is discussed in Chapter III), considerably higher than the originally budgeted 9.7 billion forints deficit, and a 56 billion forints deficit in the Health Insurance Fund (which is discussed in Chapter IV). Despite a higher-than-anticipated level of output, revenues from individual contributions came in 8 per cent below budgeted levels, presumably reflecting high rates of tax avoidance. All other sources of revenue came in above budget. Expenditures were approximately in line with the modified budget, with a 7 per cent overrun for pharmaceuticals subsidies being the principal exception. Real expenditures increased moderately or declined except in the category of operational expenditures, where spending rose by 6 per cent in real terms.

Estimates for 1998 show an even more serious social security deficit comprised of a 0.9 per cent shortfall in revenues and a 3 per cent overrun on the spending side. On a consolidated basis the deficit of the pension fund is expected to rise to about 0.3 per cent of GDP as a result of both lower than expected revenues and higher expenditures. The deficit in the health insurance budget is also projected to be much larger than originally anticipated, about 0.4 per cent of GDP – twice that initially projected – principally because of a 4.4 per cent spending overrun.

#### Local government

After falling by about 25 per cent over 1995 and 1996, real local government spending rose slightly in 1997, with cuts in almost all programme areas,

	Actual	Budget	Actual	Budget	Actual/budget	Jan	Sept.	Jan/ Actual/	Sept. budget
	1990	1557	1997	1556	1557	1997	1998	1997	1998
		Millions	of forints		Per cent	t Millions of forints			cent
Revenue									
Total corporate taxation <sup>1</sup> Profit tax excluding	398 773	370 853	352 017	335 332	94.9	210 283	217 459	56.7	64.8
financial institutions	110 876	120 000	144 716	180 000	120.6	53 008	83 810	44.2	46.6
taxation	737 196	893 300	942 282	1 062 850	105.5	669 292	833 833	74.9	78.5
VAT	515 080	627 000	674 770	761 000	107.6	474 664	597 298	75.7	78.5
Total personal taxation	419 663	433 998	460 595	476 210	106.1	324 169	366 687	74.7	77.0
Personal income tax	389 392	400 848	424 504	431 010	105.9	298 324	334 866	74.4	77.7
Revenue of budget-funded									
corporations	277 866	209 506	303 100	252 198	144.7	191 495	262 313	91.4	104.0
Payments from budget-run									
organisations	8 831	4 900	22 624	6 000	461.7	4 771	7 766	97.4	129.4
Revenue from local									
government	2 891	3 600	2 382	3 800	66.2	2 381	3 942	66.1	103.7
Payments from separate									
state funds	4 700	5 600	5 599	19 400	100.0	4 200	9 307	75.0	48.0
Revenues from integrated									
funds	17 392								
Financial operations	20 557	32 495	45 693	38 128	140.6	12 253	27 802	38.6	72.9
Revenue related to Treasury									
assets	12 563	12 124	12 611	15 944	104.0	11 957	3 154	98.6	19.8
Bank profit tax and dividends	16 038	17 500	19 439	31 500	111.1	10 913	12 220	62.4	38.8
Payments from central bank	5 210	55 700	358	62 000	0.6	17 843	55 321	32.0	89.2
Other revenue	24 844	4 184	5 172	6 700	123.6	2 597	4 704	62.1	70.2
Revenue connected to debt									
servicing	127 544	158 136	193 455	64 760	122.3	158 292	60 622	100.1	93.6
Total budget revenue	2 074 068	2 201 896	2 364 580	2 374 822	107.4	1 620 747	1 865 127	73.6	78.5

# Table 13. Central government accounts - unconsolidated

	Actual	ual Budget Actual		tual Budget Actual Budget Actual/bu		Actual/budget	Jan	Sept.	JanSept. Actual/budget	
	1996	1997	1997	1998	1997	1997	1998	1997	1998	
		Millions	of forints		Per cent	Millions	of forints	Per cent		
Expenditure										
Support to companies	114 054	111 660	103 689	129 760	92.9	67 859	94 934	60.8	73.2	
Consumer price subsidies	44 948	50 000	55 235	61 000	110.5	40 726	49 405	81.5	81.0	
Project expenditure	118 445	130 533	147 270	157 524	110.2	90 217	86 071	69.1	54.6	
Support through social										
security for welfare	213 085	207 000	221 165	235 970	106.8	153 647	181 648	74.2	77.0	
Expenditure of budget-run										
organisations	716 371	761 873	908 429	961 479	119.2	573 479	785 266	75.3	81.7	
Support to associations	4 996	3 394	3 390	2 503	99.9	2 638	1 963	77.7	78.4	
Support to local government	327 014	361 811	348 724	409 956	96.4	261 829	303 258	72.4	74.0	
Separate state funds	4 385	150	110	73.3	86	57.2				
Expenditure on international										
financial operations	25 103	48 479	36 447	22 901	75.2	20 261	20 538	41.8	89.7	
Interest payments	614 381	827 674	835 035	734 467	100.9	622 852	588 370	75.3	80.1	
Other expenditures	4 921	7 754	6 117	7 155	78.9	4 168	3 862	53.7	54.0	
General reserves	12 850	14 200								
Targeted reserves	2 050	1 700								
Extraordinary expenditures	21 343	21 379	23 353	23 370	109.2	18 828	14 199	88.1	60.8	
State guarantees	-2539	15 000	14 087	11 770	93.9	13 894	7 171	92.6	60.9	
Total expenditure	2 206 507	2 561 608	2 703 051	2 801 855	105.5	1 870 485	2 142 684	73.0	76.5	
Budget balance	-132 439	-359 712	-338 471	-427 033	94.1	-249 738	-277 557	69.4	65.0	
Privatisation revenue	211 880	50 000	160 854	8 000	321.7	4 476	11 970	9.0	149.6	

# Table 13. Central government accounts - unconsolidated (cont.)

1. Includes corporation tax, excise and gambling taxes and customs duties, and other payments. *Source:* Ministry of Finance.

	1995	1996	1997	1998	1996	1997	$1998^{1}$
		Millions of	1995 forints	Annual	l percentage	change	
Revenues							
Employer's contributions	601 868	567 672	552 055	574 890	-5.7	-2.8	4.1
Individual contributions	116 824	104 709	110 976	103 160	-10.4	6.0	-7.0
Health-care contributions			50 526	56 664			12.2
Collection of arrears	30 611	30 472	25 628	22 375	-0.5	-15.9	-12.7
Other revenues	71 999	63 222	53 075	67 063	-12.2	-16.1	26.4
Total	821 302	766 076	792 260	824 152	-6.7	3.4	4.0
Per cent of GDP	15	13	13	13			
Expenditures							
Pension	511 316	485 236	495 987	539 884	-5.1	2.2	8.9
Sick pay	39 805	27 394	25 369	24 773	-31.2	-7.4	-2.4
Pharmaceuticals	81 584	81 087	82 597	85 908	-0.6	1.9	4.0
Public health	191 022	186 767	186 580	182 737	-2.2	-0.1	-2.1
Operational expenditures	17 810	20 804	22 065	25 242	16.8	6.1	14.4
Other expenditures	20 063	21 798	15 088	11 747	8.7	-30.8	-22.2
Total	861 600	823 086	827 687	870 291	-4.5	0.6	5.2
Per cent of GDP	15	14	14	14			
Balance	-40 298	-57 010	-35 426	-46 139			
Memorandum items:							
Balance (current forints)	-40 298	-68 629	-50 464	-75 443			
Per cent of GDP	-0.7	-1.0	-0.6	-0.7			

Table 14.	Balance	of	the	social	security	funds
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Source: Ministry of Finance.

including health and welfare, offset by increases in "other" and general public services. Real revenues net of privatisation receipts declined by 2.8 per cent and the consolidated balance of local governments was negative at about -0.3 per cent of GDP. Local authorities were not obliged to go into debt, however, as their 1997 privatisation revenues more than offset the loss (Table 15). Estimates for 1998 indicate that the consolidated deficit for this sector will increase to 0.6 per cent of GDP reflecting significant cost overruns (10 per cent over budget) and only partly offset by higher than expected revenues (6 per cent over budget). Once again, higher than anticipated privatisation revenues should obviate the need to take on significant levels of debt.

# The 1999 budget

The principal components of the 1999 budget of the central government were passed by the parliament in December. The budget proposal submitted to

	1991	1992	1993	1994	1995	1996	1997
			Per	cent of C	GDP		
Revenues							
Total revenue and							
grants (net of privatisation) <sup>1</sup>	15.6	17.3	16.4	16.1	14.1	13.4	13.1
Total revenue	5.1	6.7	5.8	5.9	5.6	5.9	6.3
Current revenue	4.6	6.0	4.8	4.7	4.6	5.0	5.4
Tax revenue	2.6	3.1	2.5	2.4	2.7	3.0	3.2
Personal income tax	1.9	2.1	1.4	1.4	1.7	1.5	1.6
Property taxes	0.3	0.4	0.4	0.3	0.3	0.4	0.4
Indirect taxes	0.4	0.6	0.7	0.7	0.8	1.1	1.2
Non-tax revenue	2.0	2.8	2.3	2.3	1.9	2.0	2.1
Entrepreneurial income	0.4	0.5	0.3	0.2	0.2	0.3	0.4
Interest income	0.4	0.5	0.3	0.2	0.2	0.2	0.4
Administrative fees and							
charges and fines	1.3	1.3	1.4	1.4	1.2	1.3	1.3
Other non-tax revenues	0.4	1.0	0.6	0.6	0.4	0.4	0.4
Capital revenue	0.5	0.7	1.0	1.2	1.0	1.0	1.0
Grants	10.5	10.6	10.6	10.2	8.5	7.5	6.8
Expenditures							
Total expenditures and							
net lending	14.8	16.8	16.6	16.9	13.8	12.7	12.3
Total expenditure	14.8	16.9	16.8	17.2	14.3	13.2	13.4
General public services	1.1	1.5	1.5	1.4	1.1	1.2	1.3
Defence	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public order and safety	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Education	3.9	3.9	3.9	3.8	3.1	2.9	2.8
Health	2.3	2.4	2.5	2.3	2.1	1.9	1.8
Welfare	1.2	1.5	1.5	1.7	1.6	1.5	1.4
Housing and							
community amenities	1.4	1.5	1.5	1.4	1.1	1.1	1.1
Recreation, cultural and religious affairs and							
services	0.5	0.6	0.6	0.6	0.5	0.5	0.5
Economic affairs and							
services	0.5	0.6	0.6	0.5	0.4	0.4	0.4
Other expenditures	1.8	2.7	2.5	3.2	2.1	1.7	2.1
Correction – consolidation	2.0	2.1	2.3	2.3	2.1	1.9	2.0

 Table 15.
 Local government consolidated accounts

1. Total revenues and grants less privatisation payments. *Source:* Ministry of Finance.

the parliament in late October is predicated on a 5 per cent rate of output growth and 10-11 per cent inflation in 1999 and projects a general government deficit of 4 per cent of GDP. It includes a 40 billion forints reserve which the government expects to enable it to meet that deficit target, even if output expands by only 4 per cent. In addition, it assumes 35 billion forints in additional revenues (about 1.5 per cent of tax revenues) from enhanced tax compliance. On the one hand, the amalgamation of all tax collection under the state tax authority (previously social security payroll taxes were collected by the Health Insurance Fund) is expected to reduce possibilities for tax evasion, while on the other improved collection techniques are also expected to enhance revenues.

The budget includes a number of changes to the tax system, notably the reintroduction of universal tax allowances of 20 400 forints per child for the first two children and 27 600 forints for additional children. A similar child's benefit was abolished by the previous government and replaced by a means-tested deduction for which nearly 90 per cent of families qualified. Thus, while the proposed change is only expected to add about 36 billion forints to tax expenditures in 1999, this amount will rise over time as family incomes increase in real terms and the absence of means-testing will imply higher foregone revenues. The parliament has also passed a simplification of the income tax system that reduces the number of marginal rates to three, down from the former six (which range from 20 to 42 per cent). Income below 400 000 forints will be taxed at 20 per cent, the next 600 000 at 30 per cent and earnings above 1 million forints at 40 per cent. The maximum personal tax credit will fall to 10 per cent of earnings (from 20 per cent) with a ceiling of 36 000 forints, which is subject to a 100 per cent clawback for those with incomes greater than 1 million forints.

In addition, the budget lowers social security contributions by 6 percentage points, from 39 to 33 per cent of wages. The cuts comprise a 2 percentage point decline in the pension insurance contribution from 24 to 22 per cent, a 4 percentage point reduction in the health insurance contribution from 15 to 11 per cent and a 1 percentage point cut in the Labour Market Fund contribution rate. The 175 billion forints shortfall that these reforms may generate are to be partially offset by an increase in the compulsory healthcare contribution from 2 100 to 3 600 forints, which is expected to yield 60 billion forints. In total, employers' tax savings are estimated to be about 115 billion forints, which will be partially compensated in government revenues by increased taxes on individuals. The social security tax rate on employees will be raised from 10 to 11 per cent and the base expanded to incorporate an imputed income from in-kind fringe benefits (such as company cars) and dividend income. These two measures are expected to generate an additional 45 billion forints in revenues so that the total revenue loss is estimated to be 70 billion forints or 0.6 per cent of GDP. Finally, the Postabank bailout and a decision to help defray some of the privatisation payments to be made to local governments in 1999 by the State Privatisation and

Holding Company (ÁPV Rt) added 182 billion forints to government debt, resulting in an estimated 0.2 per cent of GDP increase in interest expenditure.

While these changes will tend to raise permanently net expenditures by increasing benefits and reducing taxes, many of the countervailing spending cuts in the budget are less clearly of a structural nature. The government has indicated its intention to allow the public-sector wage bill to rise by 13 per cent on average, although some significant groups of public servants, including police, judges and tax administration workers, have been promised increases of up to 20 per cent. In contrast to planned reductions in its labour force, the government's intention to delay a number of investment projects and the planned 1 percentage point cut in the PAYG pension contribution rate (see Chapter III) provide only temporary budgetary relief and do not redress the structural imbalance between the government's spending commitments and its revenues. Finally, the budget expects 0.4 percentage points of the projected fall in the general government deficit to be borne by local governments. However, as there is no concomitant reduction in their responsibilities, it is not clear how they will be able to generate these savings. Thus, unless the government is prepared to make additional spending cuts or tax measures, slower-than-targeted growth, continued difficulties in enforcing tax compliance or poorer-than-anticipated budgetary performance by local governments could mean that the general government deficit will exceed the budget target of 4 per cent in 1999. Additional measures will certainly be required if its stated objective of a 3.5 per cent deficit in 2000 is to be met.

# Assessment and challenges

The international financial turmoil of the past two years has led to a change in the external conditions under which macroeconomic policy is conducted in Hungary. In retrospect, the temporary weakening of the forint in autumn 1997 appeared to be a precursor to the reversal of net capital inflows that occurred in the spring and summer of 1998. While this second period was also temporary, it serves to highlight the need for flexibility on the part of the central bank. Confidence concerning the fundamental strength of the Hungarian real economy should not prevent the Bank from taking steps necessary to support the currency. In this regard, its decision to resist market pressures to widen the fluctuation band was probably appropriate. Given that the pressure on the currency was apparently not speculative in nature, but rather reflected a one-time repatriation of capital as international investors re-balanced their portfolios in response to the Russian crisis, a widening of the band would probably have only served to increase the extent of the depreciation and introduced more volatility into the exchange rate.

Over the longer term, the Bank may want to consider widening the currently narrow  $\pm 2.25$  per cent exchange rate band in order to provide for additional flexibility in setting domestic interest rates as well as increasing uncertainty and the implicit cost of speculation as the crawling-peg falls towards zero. Such a widening will be eventually desirable if, in the future, Hungary is to join the European Monetary Union exchange rate mechanism (ERM II), which uses a  $\pm 15$  per cent fluctuation band. In this regard, the NBH has already announced its intention, as of 2000, to no longer fix the forint with respect to the Euro-dollar currency basket, adopting instead the euro as the sole reference currency. The Hungarian authorities have indicated that they will maintain the crawling-peg until such time as its inflationary and productivity differientials with its trading partners would support a different regime.

Although declining, inflation is still too high and the current regime risks acting as an inflation floor since price increases have converged on the rate of the exchange-rate crawl. Thus the government's plan to reduce further the rate of the crawl to 0.6 per cent per month in January 1999 is welcome. Inflation expectations and wage bargaining, nevertheless, remain important determinants of disinflation in Hungary. While pricing in the tradeables sector appears to incorporate rapidly changes in the rate of crawl, disinflation in the non-tradeables sector is slower and relies heavily on wage adjustments. Here, the results of the centrally-negotiated wage guidelines are important but perhaps even more so is the extent to which wage-drift can be limited. In this respect, the authorities' success in delivering substantially lower inflation in 1998 should enhance the credibility of their 1999 target of 10-11 per cent inflation and help to foster forward-looking bargains at the local level. On the other hand, the government's decision to award substantial real increases to significant sub-groups of the civil service may have undesirable demonstration effects on private-sector wage bargaining. Furthermore, if fiscal policy proves to be more expansionary than projected, this could also aggravate inflation prospects, requiring tighter monetary conditions.

As indicated, based on OECD growth projections it is not clear that the government will meet its target for the 1999 budget deficit of 4 per cent of GDP unless additional measures are taken. Failure to do so may have adverse consequences for inflation, the current account and the long-term credibility of mone-tary policy, but perhaps most importantly for the risk premium on Hungarian debt. With interest payments accounting for 25 per cent of general government revenues, any increase in the risk premium would have serious implications for the budget and future fiscal policy. The problem is made all the more sensitive because that premium will be determined, to a large extent, by markets' evaluation of the government's ability to deliver on its promises. In this respect, it appears essential that the authorities closely monitor developments affecting the budget, the current account and inflation and be prepared to take corrective measures if necessary.

# **III.** Progress in structural reform

The previous OECD *Economic Survey of Hungary* provided a comprehensive assessment of the labour market as part of continuing work on the OECD *Jobs Strategy* and made a number of recommendations for further reform. This chapter follows up on this issue, reviewing changes since then. It also re-examines a number of other structural issues, including the implementation of the 1997 pension reform, as well as the role of foreign direct investment in the restructuring and privatisation of Hungarian firms and recent developments in the banking sector.

# The labour market

The previous *Survey* stressed that a number of labour market institutions tended to generate rigidities that have contributed to Hungary's high nonemployment rate and tenacious long-term unemployment. It highlighted the interaction between relatively generous social programmes, such as early retirement and disability benefits, and the payroll taxes that finance them and how they encourage tax evasion (and avoidance), shift work to the underground economy, distort savings decisions of younger workers, reduce the employment levels of low-skilled workers and reduce the size of the labour force. A summary of the recommendations made and progress to date is provided in Table 16. This section reviews recent developments in these and other areas, highlighting aspects of labour market reform.

# Increasing the flexibility of employment and working-time

# Working time changes

Although provisions surrounding working time and dismissals are strict, they are to a large extent bypassed by both employers and workers. In order to encourage and facilitate compliance, and thereby reduce underground employment, the government recently introduced "occasional employment" contracts. Previously, a worker needed an explicit written contract for any job lasting more

-	0	
1997 recommendation	Action taken	Assessment
I. Increase wage and labour cos	st flexibility	
High taxes on labour should be reduced.	Employer payroll taxes were reduced, partially offset by increases in those of employees.	These changes may create disincentives to hire low-skilled workers. Some programme funding should be shifted to general taxation.
II. Reform unemployment and r	elated benefit systems	
The provisions of the sick-pay and the disability pension systems should be further tightened.	Creation of vocational rehabilitation measures for the disabled, and implementation of a quota system for hiring by employers.	Continue to tighten access to disability benefits and consider mandatory medical re-assessments of the disabled which could be followed by vocational rehabilitation measures.
The treatment of earned income while on benefit under the UI, UA and disability pension systems should be revised to eliminate threshold effects.	No action.	Implement.
III. Increase working time flexib	ility and reform employment secu	urity provisions
Employment protection legislation (EPL) should be reviewed.	Implemented new "occasional employment contract".	Continue to monitor EPL to ensure that it does not become binding.
IV. Enhance the effectiveness of	f active labour market policies	
Efforts should be concentrated on enhancing the effectiveness of existing ALMP expenditure.	A rigorous independent evaluation of ALMPs has taken place.	Revamping and careful controls of wage subsidies and job creation programmes are necessary. The public employment service should be better resourced.
V. Improve labour force skills a	nd competencies	
Continued efforts need to be made to improve the quality of education received by average students.	Introduction of the new National Core Curriculum: modernisation of vocational training.	The quality of and access to tertiary-level education remain problem areas. Continue to monitor developments of new

#### Table 16. Implementing the OECD Jobs Strategy: overview and assessment

#### VI. Enhance the creation and diffusion of technical know-how

None.

Efforts should continue to restructure the science system with a focus on crossdisciplinary research and improving linkages with industry.

Source: OECD.

60

**OECD 1999** 

core curriculum.

Follow recommendation.

than five days (one day in 1997). Under the new scheme casual workers maintain a booklet in which a history of their employment with various employers is tracked, noting their position, pay and hours of work. The booklet simplifies the payment of taxes and social contributions, which can be paid using special stamps purchased at the post office. Labour centres are responsible for issuing the booklets, but employers are expected to enforce their conditions, which include restrictions that users of the booklets may not work more than five consecutive days or fifteen days within a calendar month, and no more than 90 days in a year for a single employer or more than 120 days in any calendar year for any number of employers. This new system should be attractive to workers because it qualifies them for unemployment benefits and healthcare (although sick leave is not covered). For firms, the attraction lies in the simplicity of tax compliance, although they are unlikely to have sufficient knowledge or the desire to ensure that workers respect all of the various regulations concerning working time. Indeed, it is not clear what, if any, penalties exist if they fail to do so. So far, take-up has been low, with only a few thousand workers employed under these contracts.

# Dismissals

No major changes have been made in the area of employment protection legislation, although some minor reforms have been implemented. The possibility that workers could extend their notice period indefinitely by taking repeated sick leave<sup>7</sup> has been eliminated, while legislation concerning collective dismissals was harmonised with relevant EU directives. Now, employers must give a minimum of seven days notice that dismissals will occur, prior to engaging in consultations with works councils or union representatives. Following these talks, a minimum of fifteen days must pass before a final decision is made and no dismissal can take place before 30 days have passed. In addition, Labour Centres must be informed at least 30 days prior to any collective dismissal so that they can prepare to assist displaced workers.

# Taxes and transfers

Hungary has very high marginal tax rates on labour, primarily because most social programmes are funded via payroll taxes and not through general taxation. At current levels, this creates a vicious circle: employers and employees attempt to avoid and evade paying taxes both through undeclared work and under-reporting of wages, which in turn leads to higher contribution rates. The 1997 *Economic Survey of Hungary*, therefore, recommended that efforts to assure tax compliance be strengthened, and that some programme funding, for example healthcare, be shifted to general taxation so as to distribute the overall tax burden more efficiently between capital and labour.

The government hopes to improve tax compliance by combining the collection of both payroll and income taxes under the authority of the state tax

authority; previously the former used to be collected by the social security funds. In addition, following modest employer payroll tax reductions in 1998, the 1999 budget proposes to significantly lower such taxes from 45 to 38 per cent, while increasing those paid by employees (Table 17). There are two main changes:

- The employer's rate will go down by 7 percentage points, including a 2 percentage point decline in pension contributions, a 4 percentage point reduction in health contributions and a 1 percentage point fall in payments made to the labour market fund. These cuts will be partially offset by a 66 per cent increase in the minimum health contribution paid by employers to 3 600 forints, which amounts to about 2 per cent of payrolls; thus the net impact of all changes will be to reduce employer contributions by 5 percentage points. In addition, the exemptions permitted in calculating the base for health insurance will be harmonised with the wider personal income tax base;
- Employee's social security contributions will rise one percentage point and new personal income tax bands will be introduced. All earned income will become taxable with the first 400 000 forints taxed at a rate of 20 per cent, the next 600 000 at a 30 per cent rate and earnings above 1 000 000 forints at 40 per cent. The maximum personal tax credit will fall to 10 per cent of earnings (from 20 per cent) with a ceiling set at 36 000 forints, including a 100 per cent clawback for those earning more than 1 million forints. Families will also be eligible for tax credits with higher amounts for those with three or more children.<sup>8</sup>

While the overall fall in an employer's tax burden may encourage additional hiring and improve tax compliance, the increased compulsory healthcare contribution will raise the rate paid on low-wage workers, perhaps reducing their employment prospects significantly. Moreover, the tax burden of this category of worker will rise appreciably, although families with children will receive significant tax relief.

# Wage formation

In 1998, for the first time, the setting of the national minimum wage was based on expected inflation as opposed to past inflation.<sup>9</sup> This positive step should encourage all agents to become more forward-looking in their wage determination. As regards wage developments, gross earnings dispersion<sup>10</sup> widened to 4.3 (compared with 4.1 in 1996) as earnings increases at the high end outpaced growth at the low end and wage differentials by education level also widened. The minimum wage declined to only 30 per cent of average wages in 1997<sup>11</sup> and is unlikely to be a binding constraint on employment of low-skilled workers.

# Table 17. Proposed compulsory taxes and contribution rates according to earnings

Per cent of gross earnings

Gross earnings <sup>1</sup>		Employer			Employee							
						* 1	Personal		Change	Personal income tax for families with children <sup>5</sup>		
Per cent	Forints/ person/ month	Social security	Labour market	Total	Social security <sup>2</sup>	Labour market	income tax <sup>3</sup>	Total	since 1998 <sup>4</sup>	One	Two	Three
20	13 177	33.0	4.5	37.5	11.0	1.5	8.0	20.5	9.0	0.0	0.0	0.0
30	19 766	33.0	4.5	37.5	11.0	1.5	8.0	20.5	9.0	0.0	0.0	0.0
40	26 354	33.0	4.5	37.5	11.0	1.5	8.0	20.5	5.8	1.5	0.0	0.0
50	32 943	33.0	4.5	37.5	11.0	1.5	8.9	21.4	1.5	3.7	0.0	0.0
100	<b>65 886</b>	33.0	4.5	37.5	11.0	1.5	18.4	30.9	-1.4	15.8	13.2	7.9
150	98 829	33.0	4.5	37.5	11.0	1.5	26.2	38.7	0.7	24.5	22.8	19.2
200	131 772	33.0	4.5	37.5	11.0	1.5	29.1	41.6	0.3	27.9	26.6	23.9
300	197 658	33.0	4.5	37.5	8.6	1.5	32.5	42.6	0.6	31.7	30.8	29.0

1998 mid-year gross average earnings are used. 1.

2.

Employee social security charges are not paid on that portion of annual income in excess of 1 854 200 forints. Personal income tax payable for families with no children. Employees with earnings below 1 000 000 forints are eligible a tax credit of 36 000 forints or 10 per cent. 3.

4.

Percentage point change in employee tax rate as compared with 1998. Tax credits are 20 400 for each child in families with one or two children and 27 600 for each child in families with three or more. 5.

Source: Ministry of Finance.

# **Unemployment and related allowances**

#### Disability benefits

Early retirement in Hungary is widespread and increasingly disability benefits have been used as an additional path to early retirement. A key recommendation from the OECD Jobs Strategy was, therefore, to tighten access to these benefits. Progress has been mixed. While in 1997 the government made access to disability benefits temporary and required more frequent medical evaluations, re-certification remained relatively easy. A further tightening was introduced in 1998, when the authorities introduced a series of measures that will move workers already certified as permanently disabled to the temporary disability pension. Under the new rules, firms employing people whose ability to work was diminished through workplace injury (or other reasons) are expected to make reasonable efforts to find suitable work for them and can receive state financial support to do so. In the event that this is not possible, these workers may then become eligible for a state benefit.<sup>12</sup> In addition, firms employing 20 or more persons must have 5 per cent of their staff from this group, and if this quota is not met, a fine must be paid into the Labour Market Fund. The fine is equal to 56 per cent of the monthly minimum wage for each individual below the quota, and the government intends eventually to raise it to 3 per cent of the gross average wage observed two years before. Firms employing fewer than 20 people, who hire individuals with reduced abilities are eligible for a tax allowance (wage subsidy) of about 3 000 forints monthly. For unemployed persons with changed working ability, the public employment service (PES) provides vocational rehabilitation and endeavours to find them suitable work, drawing on the advice and assistance of a new network of specialised occupational therapists.

Beginning in January 1998, the pre-pension unemployment benefit was abolished and replaced with a less generous early-retirement benefit that is paid at a rate of 80 per cent of the minimum old age pension. Beneficiaries must now also report to the PES for any work that might be suitable. Workers are also eligible for a firm-funded early retirement plan, under which companies placing workers into early retirement are now required to make semi-annual payments into the pension fund, which if not paid are covered by the central budget. Unfortunately, this will do little to reduce firms' tendency to not make payments. A more satisfactory solution would require them to make a single lump-sum contribution in advance to cover the entire period of benefits. Such a measure would only penalise firms that intended to default, while preserving the programme for those willing to abide by its terms.

Although many of these changes should contribute to reducing the large number of persons receiving some form of early retirement/disability benefit, their overall impact would be increased if relatively easy access to these benefits were further tightened. Disability pensioners constitute the largest group of working-age transfer recipients in Hungary and their numbers continue to grow. All told, about one-quarter of the working-age population is in receipt of some form of benefit (Table 18). Although most recipients are no longer classified as being permanently disabled, those receiving the temporary pension benefit are too easily re-certified. Experience from other OECD countries suggests that coercive policies like the new quota systems are not effective tools for promoting employment among the disabled (Fay, 1996). Rather, systems that rely on positive incentives tend to work better. Where used, quotas tend to vary by firm size, thus the Hungarian system may place an undue burden on smaller firms.<sup>13</sup> Instead of relying on quotas, the authorities might consider a stricter reassessment of the working abilities of people in receipt of disability benefits,<sup>14</sup> and providing appropriate support – along with voluntary incentives to firms – both to those who are genuinely disabled and those using the system as an alternative to unemployment insurance.

# Family benefits

Families in Hungary are eligible for a number of benefits, ranging from a general family allowance to various provisions for maternity and parental leave (see OECD, 1997). In 1996, the government sharply curtailed access to many of

	1995	1996	1997	
Unemployment	5.4	5.5	4.6	
Unemployment insurance	2.6	2.8	1.9	
Unemployment assistance	2.8	2.6	2.7	
Active labour market programmes	1.7	1.0	1.2	
Disability benefit	9.7	10.1	10.4	
Sick pay and sick leave	2.8	2.3	2.2	
Sick pay	2.3	1.7	1.6	
Sick leave	0.5	0.6	0.6	
Early retirement	1.3	1.3	1.3	
Early retirement	0.6	0.6	0.6	
Pre-pension	0.7	0.7	0.7	
Parental leave	3.2	3.2	3.2	
Child care allowance	1.5	1.7	2.5	
Child care fee	1.7	1.5	0.8	
Total	24.2	23.3	22.9	

#### Table 18. Benefit recipients by income support scheme

Per cent of working-age population

them, allowing resources to be better targeted on families in need. In particular, the family allowance benefit, as well as the child-care benefit, were made meanstested and the child-care fee – which provided additional income to families with young children – was phased out in April 1998. The new government, however, plans changes to these provisions. In January 1999, general eligibility for the family allowance and child-care benefit will be restored, and there is also discussion on whether to reintroduce the child-care fee. Since 90 per cent of families currently receive the family allowance, the move away from targeted benefits will have little immediate budgetary impact. However, over time, as income levels rise, the forgone savings that would have resulted under the old means-tested system will be lost, implying reduced resources for those most in need.

#### Active labour market policies

Hungary offers the usual package of active labour market policies (ALMPs) found in most OECD countries, from training to wage subsidies and public-sector job creation. Expenditures and participant numbers have remained roughly constant over the last few years at about 0.4 per cent of GDP and 2.5 per cent of the labour force, respectively, and there have been only a few changes to the types of programme offered to the unemployed since mid-1997.

Recent changes include the new vocational rehabilitation programmes for the disabled and a government pilot programme of teleworking primarily targeted on people with physical disabilities. Under this scheme individuals can work at home, with the government supporting the purchase of necessary equipment. Changes to the Employment Act now permit non-profit organisations to bid to run programmes, allowing them to bring to bear their extensive experience in helping disadvantaged groups. Additional financial support is being made available to enterprises that modernise their work places. To encourage geographic mobility, firms that recruit jobseekers who have been unemployed more than six months and who live in different localities are eligible for assistance to defray transportation costs. Despite evidence cited in the previous *Survey* that deadweight losses can be high, more rather than less emphasis is being placed on self-employment programmes for the unemployed.

In its 1997 review, the OECD recommended that existing ALMP programmes be subject to re-evaluation as international evidence suggested that similar programmes did little to improve the employability of participants. A recent evaluation of Hungarian programmes generally supports this assessment (O'Leary, 1998). It found that:

> Training programmes were the most effective in generating employment gains for participants, while individual training had slightly larger impacts than group training. Earnings gains were positive, but disappeared over the longer term;

- Neither public-sector job creation nor wage subsidies led to employment increases. Moreover, participants generally fared worse than they would have had they not participated;
- Self-employment programmes had no impact on employment and led to lower earnings than would have been the case in the absence of participation;
- Results on the effectiveness of the public employment service were mixed: some jobseekers experienced employment and earnings gains, but others did not;
- There is some evidence that programmes worked better for some population sub-groups such as women and middle-aged workers.

More recent OECD (1998*a*) work indicates that programmes in Hungary tend to be too rigid and that schemes such as training and wage subsidies are rarely used in combination with one another. The government hopes to better integrate them in the future, but it may be constrained by limited staff resources in the PES, whose workload is high relative to other OECD countries (OECD, 1997). Low staff levels detract from an individual approach to assistance, something that has been found to help increase job-finding chances of the unemployed. This surfaces in the use of wage subsidies, which tend to be directed towards large groups of jobseekers in distressed regions as opposed to being based on individual need, resulting in high deadweight losses.

Although training was found to improve job-finding chances, evidence from other OECD countries suggests that expanding it may be counter productive because of decreasing returns.<sup>15</sup> Youths tend to be over-represented in training – partly due to a lack of spaces in tertiary education. They use the recentlyestablished modern Regional Training Centres to acquire skills in areas such as computing, but might be better served in the general education system leaving relatively expensive training places to more needy jobseekers, such as older workers.

# **Education and training**

Many of the shortcomings of the Hungarian education system were outlined in the previous *Survey*. These include limited access to tertiary education, cumbersome and time-intensive admission procedures, and excessive streaming at the secondary level, such that students are channelled towards either general or vocational education at a relatively young age, unnecessarily limiting their later educational choices. These and other factors have contributed to relatively high inactivity rates for youths and low enrolment rates at the tertiary level of education. Enrolment rates in full-time education are only about 60 per cent of European averages for 20 year olds and only about 10 per cent of this norm for 24 year olds. Simultaneously, about one-third of young adults, aged 20 to 24, are neither working nor at school. Recent OECD publications, the *Transition from Initial Education to Working Life* (OECD, 1998*a*) and *Towards Lifelong Learning in Hungary* (OECD, 1998*b*), have examined the interactions between the education system and the labour market.

Hungary has carried out a number of reforms of its education and training systems over the 1990s. For example, the education system was decentralised to allow municipalities a significant degree of freedom to determine actual course content. In addition, the private sector has been allowed to open schools, and consultive mechanisms have been enhanced to give employers and unions greater input into education, employment and training polices, although they still remain weak.

As indicated in the previous *Survey*, these changes have led to a wide variation in the content and quality of education delivered. In order to counter these trends and ensure that all students receive a solid grounding with which they could either enter the labour force or pursue advanced degrees, two major changes to secondary level education were recently introduced:

- The 1998 National Core Curriculum extended the period of compulsory general education to grade 10 (*i.e.* from age 14 to age 16). Only then will students choose between vocational and academic tracks. The curriculum replaced traditional mandatory subjects with ten inter-disciplinary study areas under which various educational objectives are expected to be met<sup>16</sup> and provides for the introduction of a voluntary but uniform 10th grade exam;
- A World Bank project Youth Training Project introduced in late 1997 seeks to modernise vocational training in conformity with european standards and to promote market-driven post-secondary vocational training. Secondary vocational schools now offer two years of general education followed by two years of vocational education. This allows students that decide not to pursue vocational education to nevertheless have a good grounding in general education. For those that continue in the vocational stream, training is categorised into thirteen occupational groups that have clear links to market needs.<sup>17</sup>

The effectiveness of these changes will depend to a large extent on their implementation. There still remains considerable scope for reducing the variation in the quality of education delivered by different schools. The decentralisation of the educational system in the 1990s has left municipalities with significant freedom to control content even following these reforms. Perhaps for this reason, counties are being given additional responsibility to co-ordinate education needs across municipalities and to create six-year educational plans. Nevertheless, funding across regions and universities varies widely, leading – inevitably – to

undesirable variation in course quality and content. A more equitable system of financing, perhaps on a per student basis, could help redress this problem.

# Scope for further action

Non-employment remains endemic in Hungary and many people in this situation receive some form of public benefit. Despite a number of recommendations designed to improve employability in the Jobs Strategy assessment, only limited progress has been made. Two areas in particular stand out where further action is warranted. First, although measures have been introduced to help people with disabilities get appropriate assistance, access to benefits remains relatively easy and recipient numbers continue to climb. While it appears that many new beneficiaries are no longer assigned a permanent disability status, those judged as temporarily disabled continue to draw benefits for an extended period of time and even though they are reassessed each year the total number of people on disability is substantially higher than even the poor health of the Hungarian population would lead one to expect. To ensure a speedier return to work, reassessment should include referral to appropriate vocational rehabilitation programmes and the public employment service for job-search assistance where applicable. Here, however, the low staff levels in the PES may hamper its effectiveness in providing individual assistance to its clients and in the running of ALMPs, leading to poorer outcomes for participants. The PES should, therefore, consider scaling back some of the large wage subsidy and job creation programmes, thereby freeing up staff time and financial resources for programmes better focused on the needs of individual jobseekers. Moreover, when used, subsidies and make-work programs should be better targeted to labour market needs.

Proposed tax changes will widen the tax base and expose most workers to lower marginal rates. However, the increased minimum health contribution will decrease the attractiveness and employability of the low-skilled whose average tax rate will rise disproportionately. Taxes on labour remain too high and the recommendation made in the previous *Survey* to shift the financing of the healthcare sector to general tax revenues remains relevant.

As regards other areas covered under the *Jobs Strategy*; on the whole, the reforms in the education system constitute important steps in the right direction that will improve its ability to meet the needs of students and the workplace. Nevertheless, continued effort needs to be made to ensure students in vocational trade schools do not get trapped. Moreover, enrolment rates remain low and greater access to higher education should occur alongside increased quality and modernisation of the curriculum and teaching methods. Funding across regions and types of institutions also needs to be harmonised, and a loan programme

introduced to allow a wider range of potential students to go on to higher education.

#### Implementation of the reformed pension scheme

In 1997, the Hungarian government introduced a number of changes to public pensions in order to place the pension system on a firmer financial footing (see the previous *Survey*). Under the reform, which followed up on an earlier decision to raise retirement ages to 62 by the year 2009, the existing Pay-As-You-Go (PAYG) system is being replaced by a three-tier system, including a modified PAYG system for basic benefits and two fully-funded privately operated tiers, one a new compulsory scheme and the other the pre-existing voluntary system.<sup>18</sup> Workers entering the labour force after July 1998 were required to join the multi-tier system, placing one-quarter of their total pension contribution into a personalised account with a private pension fund that invests the money in a range of securities defined in state prudential regulations. Already-employed workers were given the choice of opting for the new multi-tier system or remaining in a modified PAYG scheme.

The multi-tier system proved to be more popular than originally anticipated. Despite having been designed so that it would be unattractive to workers over 40 years of age, thereby limiting the number of people opting for it and minimising the budgetary costs of the transition between the two systems, over 1.2 million people joined the system – almost double the government's initial estimate. As a result, the PAYG system's revenues will be much lower than originally budgeted, although its costs (which depend principally on those already retired) remain unchanged and the government will need to find an additional 15 billion forints to cover the incremental deficit in 1998.<sup>19</sup>

Currently, 30 pension funds have been granted an operating license and 15 others are collecting members in an effort to be certified.<sup>20</sup> Five of these funds have 90 per cent of subscribers, leaving the other 40 to fight over the remaining 10 per cent. Several concerns are raised by this situation. On the one hand, the substantial concentration of market power among the top five firms means that considerable care will need to be taken to ensure that they do not abuse their market position to the detriment of other firms. On the other hand, the much narrower base from which the smaller funds must operate will necessitate that the Pension Funds Supervision Agency (APF) enforce strictly its prudential regulations so as to safeguard pensioners' savings. In this regard, the government has imposed a 0.4 per cent tax on fund contributions in order to ensure that investors receive a minimum pension benefit in the event of a fund failure. Prompt action by the authorities to ensure the smooth transfer of pension savings either to the State Guarantee Fund or other funds will be essential to maintain confidence in

the system. At the same time, the moral hazard arising from this guarantee may lead future pensioners to take greater risks than otherwise, while high initial operating costs may encourage undue risky investment particularly among smaller funds, to attract clients with high short-run returns. Here, regulators will need to carefully supervise funds' reporting so that investors can accurately judge the risk associated with various funds, and make appropriate retirement savings decisions. In this regard, funds will be required to produce quarterly and annual reports and the government is planning regulations to ensure that information is available to investors on the daily value of fund assets along with their investment grade. In an effort to minimise their exposure to exchange risk, funds were initially not allowed to have foreign holdings, a restriction that will be gradually relaxed, with limits rising by 10 per cent of assets in each year to a maximum of 30 per cent in 2002. As restrictions on the kinds of investments that funds can make are relaxed, the regulatory powers of the APF will need to be enhanced.

Because of concern over large increases in the real value of pension benefits under the PAYG system, the government changed the way in which they are adjusted. The legislation for pension reform stated that until 1999 inclusive, benefits were to be adjusted in line with the previous year's wage increases. In the event, the government decided to revise its position and instead offered a 14 per cent average increase, based upon prospective rather than backwardlooking wage increases. An absolute minimum increase was included in the revised formula, with the result that for the poorest pensioners benefits rose by as much as 25 per cent. In addition, in an effort to compensate for the additional interest expenditures resulting from the Postabank bailout, the government delayed the reduction in the contribution rate to the PAYG fund for individuals having opted for the multi-tier pension scheme. Under the original legislation, in 1999 participants would have paid 7 per cent of their earnings to their private funds and 1 per cent to the state fund. The revised law changed these rates to 6 and 2 per cent respectively. The adjustment is expected to be temporary, with rates returning to those set out in the original legislation in the year 2000. Although both of these changes will help the government reach its overall budget deficit target, they set a precedent by altering in an arbitrary *ex post* manner the rules under which people and firms have made long-term savings decisions. Such changes may undermine individuals' confidence in the new pension scheme and create unwelcome uncertainty in their minds about the likely value of their future retirement income.

Nevertheless, judged by the number of people who have opted for the new system, pension reform has been a resounding success in Hungary. As noted, however, the creation of pension funds poses a series of challenges. While regulations have been introduced to safeguard investor's deposits, the government has yet to put in place additional rules requiring funds to provide transparent information on their financial performance which would serve to keep depositors informed of the risks associated with the various fund portfolios. The authorities need to be particularly vigilant so as to ensure that in case of a shake-out in the industry after the first year, this occurs smoothly with investor deposits being transferred to other funds as rapidly as possible. As concerns the PAYG system the decision to change both benefit levels and contribution rates in 1999 is regrettable as it reinforces the notion that pension benefits are an arbitrary political instrument. In the future the government should only change pension benefits in line with the agreed-to formula.

#### Foreign direct investment, economic restructuring and privatisation

Both in absolute terms, and on a per capita basis, Hungary has been the preferred destination among eastern european countries for *foreign direct investment* since the beginning of the transition. Between 1989 and 1997, almost \$18 billion was invested in the country equivalent to over \$1 800 per person, almost twice the per capita share of the Czech Republic and nine times that of Poland (Table 19). Fully 40 per cent of all FDI into the region ended up in Hungary and there are now some 25 700 companies with foreign participation operating there. They produce about 32 per cent of Hungarian GDP, 45 per cent of manufacturing value-added and employ 25 per cent of private-sector workers. Initially the inflows went into joint-ventures with private Hungarian and state-owned enterprises. Greenfield investments became important after 1992, following the

1995	1996	1997	1998 (January-September)
4 453	1983	2 085	1 353
1 428	1 406	1 813	1 342
11 926	14 668	15 882	17 429
3 025	577	1 241	176
180	118	213	101
59	94	195	100
15.9	14.6	$21.2^2$	
	1995 4 453 1 428 11 926 3 025 180 58 15.9	$\begin{array}{c cccc} 1995 & 1996 \\ \hline 4 & 453 & 1983 \\ 1 & 428 & 1 & 406 \\ 11 & 926 & 14 & 668 \\ 3 & 025 & 577 \\ 180 & 118 \\ 58 & 84 \\ 15.9 & 14.6 \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 19.	Foreign direct investment and the macroeconomy
	Millions of dollars

1. FDI less privatisation receipts.

2. OECD estimate.

Source: National Bank of Hungary; Ministry of Economic Affairs; APV Rt. (Hungarian privatisation and State Holding Company).
success of earlier investments and the introduction of government incentives programmes. Beginning in 1995, strategic investments in privatised firms dominated, while most recently, non-privatisation investments, including both green-field projects and the expansion of existing capacity, represent a large share of the total. FDI revenues more than financed the external current account deficit in each of the past three years, and net of their privatisation component, FDI flows equalled as much as 14 per cent of total gross fixed capital formation. At the same time, privatisation revenues have been used to pay down the government's external debt (see Chapter II).

FDI has also played an important role in enhancing economic efficiency. Firms with substantial foreign participation have enjoyed tremendous success. Although most are not export-oriented, many are, and they produce an estimated 72 per cent of Hungary's gross exports. Foreign-owned firms have also experienced the most rapid gains in productivity and employment. Contrary to popular belief, FDI has neither been solely nor even principally attracted by cheap labour. In the trade sector, the exports of foreign-owned firms are increasingly concentrated in high-tech and high value-added products. This contrasts with firms operating in Poland and the Czech Republic which continue to be concentrated in labour and energy intensive industries (Havlik, 1997). Rather than competing on price, as would be expected of companies exploiting cheap labour, firms have focused on quality and innovation. As a result, their products have become increasingly sophisticated and prices have risen, while their market share has been simultaneously increasing (Landesmann and Burgstaller, 1997). Indeed, a surprisingly large number of firms have moved skill-intensive activities, including their research and development, to Hungary (e.g. Nokia, Knorr-Bremse, General Electric) and the share of high technology products in total foreign trade of Hungary is growing rapidly.

The inflow of FDI did not occur in a vacuum. Even before the transition began, policy was relatively favourable towards foreign investments. Since 1989, this openness was expanded and government policy played an active role in attracting such investments. In addition to a liberal regulation of FDI (foreign and domestic-owned firms have been treated on the same legal basis since 1993), a number of special concessions and financial incentives were offered by both the central and local levels of government (see Box 2). The largest sums of FDI were attracted by the government's post-1995 *privatisation* policy, which emphasised the sale of state-owned enterprises to foreign-based strategic investors. Over the past ten years, about 1 600 companies were privatised, yielding \$11 billion in revenue of which \$9 billion was provided by foreign purchasers representing about 40 per cent of all the FDI that has entered the country (Csáki, 1998). While one of the principal motivations behind this policy was to gain access to foreign currency in an effort to reduce the foreign debt of the country and finance the current account

#### Box 2. FDI regulation

- 1972 Introduction of legislation permitting the establishment of companies with foreign participation.
- 1988 National treatment for foreign investments guaranteed without general restrictions or sectoral prohibitions (except for financial institutions). 50 per cent foreign ownership is possible without prior agreement, a license being required for larger interests.

The law guarantees free and full repatriation of profits and exemption of customs duties for in-kind contributions. Companies with foreign participation are allowed to set up their own customs-free zones and tax allowances are granted depending on the foreign share, size and the sector of investment.

- 1990-93 Incentives for foreign investors (tax relief, repayable or non-repayable grants, specific incentive programmes, etc.) are introduced.
- 1991 Reduction of the allowances given to foreign investors in 1988 and introduction of specific tax incentives to encourage activities in selected sectors (R&D) and regions with high unemployment.

Legislation passed allowing the state to grant concessions with time and renewal limits in exchange for investments in infrastructure.

- 1992 Complete foreign ownership authorised without prior agreement.
- 1993 Abolition of foreigner-specific tax incentives. Existing concessions are grandfathered.
- 1994 An amendment maintains the prohibition of the ownership of arable land by domestic companies and foreigners (both companies and private persons), but introduces the licensing of purchases of non-agricultural land by foreigners.
- 1995 Revised privatisation law introduced to accelerate the process, while the duty-free treatment for in-kind contributions connected to FDI is abolished.
- 1996 Financial support programmes consolidated in the "Targeted Allocation for the Development of the Economy" programme, managed by the Ministry of Industry, Trade and Tourism. Removal of prior requirements for foreign investments into financial institutions.
- 1998 Legislation allowing branches comes into effect.

deficit, it also helped establish a clear corporate governance structure for the newly-privatised firms.

Among privatised companies with foreign involvement, the pace of restructuring, and of productivity and market growth, was much higher than that of privatised companies without foreign involvement. Companies privatised to foreign owners were much more likely to reduce employment levels than stateowned companies or ones sold to a domestic owner (Novák and Szanyi, 1996; Major, 1996*a*, 1996*b*) and their overall performance was better than that of domestic firms (Pitti, 1997). These micro results are reflected in aggregate data, which indicate that across manufacturing sectors, groupings with higher shares of FDI have enjoyed higher rates of productivity growth (Figure 12).

After 1992, following the demonstrated success of previous foreign ventures and as a result of incentives, greenfield investments began to play an increasing role in overall FDI. Initial investments were principally realised by large multinationals such as Ford, Opel, Audi, Thyssen, Knorr-Bremse, IBM, Nokia and Philips that set up assembly activities to service the western european market. A liberal policy towards the establishment of industrial free trade zones (IFTZ) played a large role in attracting this kind of investment in the early 1990s when import tariffs were relatively high. After 1995, when the duty-free treatment of investment-related imports of foreign firms was abolished (see Box 2), there was an even larger surge among investors to establish IFTZs. Unsurprisingly, the



Figure 12. Sectoral productivity growth and foreign direct investment in manufacturing

Note: Ownership shares calculated using cumulated FDI and gross fixed capital formation on a perpetual inventory basis using 1991 capital stock as a starting point. Source: Central Statistical Office Yearbook.

#### **OECD 1999**

share of exports (and imports) accounted for by firms in these areas rose rapidly. While cheap unskilled labour may have attracted some of the initial ventures, increasingly firms operating in IFTZs are involved in high value-added sectors requiring skilled labour. In 1997, 97 per cent of their exports came from the machinery sector, where their share in total exports was about 58 per cent (up from 50 per cent in 1996), representing 75 per cent of the overall increase. Although firms are paying high wages within the context of the Hungarian labour market, labour costs remain relatively inexpensive compared with those in western Europe.

Despite the dominant position of FDI firms in the export sector, survey evidence indicates that two-thirds of foreign-owned firms entered Hungary - either by privatisation or through greenfield investments - in order to exploit the domestic market. This data is supported by calculations that indicate that as much as 80 per cent of FDI was directed at domestic opportunities, with servicesector firms accounting for 58 per cent of total FDI. Even among manufacturing firms, those with below average export/sales ratios represent over 50 per cent of all manufacturing FDI. In some cases, the domestic component of operations is largely distributional – as it is in the other markets of these firms – while in other cases considerable domestic linkages have been created. Within this second group of companies are Auchan, Penny Market, Cora and other firms in the retail and wholesale trade sectors. Although their initial activities may have involved relatively little interaction with the domestic economy and were concentrated in the richest market (Budapest), their business is increasingly leading them further into the hinterland, bringing with them competition, lower prices, new jobs and a different way of doing business. The extent to which manufacturing firms have succeeded in building up domestic supply networks varies widely. Suzuki, for example, seeking to meet EU local content requirements, has built up a substantial network of domestic suppliers, whose share in value added now exceeds 30 per cent. Opel and Ford have also made efforts but with considerably less success, with shares of domestic suppliers in total value added of only 8 per cent, while for Audi the share is less than 1 per cent<sup>21</sup> (see Box 3).

The privatisation process itself is drawing to a close. As much as 85 per cent of GDP is now generated in the private sector and the number of state assets available for sale is diminishing rapidly. Despite predictions to the contrary, progress in 1997 was very strong. Over 200 companies were sold, of which two-thirds were completely privatised and the associated revenues of 350 billion forints (roughly \$1.9 billion) came close to reaching the 1995 record (Table 20). At the end of 1997, the Hungarian Privatisation and State Holding Company (ÁPV Rt) had shares in 211 companies, down from 493 in the previous year, with its average holding equal to about one-third of total equity (Table 21). Of those, it is legally obliged to retain its holdings in 92 companies, of which it has full ownership of 21 and between 25 and 75 per cent holdings plus golden shares in the remainder.

#### Box 3. The automotive industry in Hungary

Over the course of the 1990s, the auto sector in Hungary expanded rapidly as new companies entered the country, and over time, extended their production capabilities. In 1997, production in the sector was valued at \$2.9 billion, of which \$2.5 billion were exported, amounting to close to 15 per cent of total exports. In 1997, 73 000 passenger cars were manufactured in Hungary and 51 000 were exported. As of August 1998, car production had reached 75 000, an increase of 37 per cent over the same period in 1997.

Auto companies such as GM/Opel and Suzuki have become among the largest companies in Hungary, ranking fifth and thirteenth respectively. In some cases, this has involved moving from being simply a spare parts producer to one where new cars are assembled and research and development takes place. Moreover, the share of domestic value-added has grown as some foreign car producers, most notably Suzuki, increasingly extend their network of suppliers to include domestic companies. To further encourage this development, the government and multinationals signed a "Supplier's Charter" in March 1998 to strengthen relations between them and domestic small and medium suppliers. The National Federation of Hungarian Vehicle Spare Parts Producers had 136 members in 1997, producing parts not only for domestic industry but foreign companies as well, such as Rolls Royce.

#### **Automotive manufacturers**

*Audi* founded its first engine and spare parts productions plant in Hungary in 1992. It's Gyor assembly plant assembled 570 000 engines in 1997 and expects to produce more than a million in 1998, along with the introduction of a car assembly operation to produce the new Audi sports coupes. It also plans to open a regional technical development centre, and expects the Gyor site to be the supplier of all Audi engines by the end of the century. In 1996, the company had net revenues of 54 billion forints and currently employs 3 000 staff, which it expects to increase as the scope of operations expands.

*Ford Motor* opened its first spare part subsidiary plant in Székesfehérvár, western Hungary in 1990. In 1992, *Ford Hungaria Kft* began production of fuel pumps, magnetic starters and gears for Ford cars assembled abroad. In March 1998, it announced plans to build a gear and engine production and assembly plant in East-Central Europe and Hungary is a candidate. It employs 1 000 people and net revenues of 17.8 billion forints in 1996.

*General Motors Opel* established its first car assembly, engines and spare parts plant in Szentgotthárd and was the country's largest exporter in 1997. Opel has also set up a regional trade centre in Hungary and had 1 200 employees and net revenues of 113.3 billion forints in 1996.

*Suzuki* established its Hungarian Suzuki Rt in Esztergom (northern Hungary) in 1990. It is Suzuki's principal european production site, manufacturing Suzuki Swift and Suzuki Sedans, and plans to add the Wagon R Ride vehicle in the next two years as well as raising capacity to 120 000 annually. The plant, which is supplied by some 40 locally-owned companies, employs 1 500 people. Its net revenues were 56.8 billion forints in 1996.

Source: MTI Econews.

	1994	1995	1996	1997	$1998^{1}$
Cash:	36.4	446.9	132.9	318.2	127.0
Foreign currency	11.0	411.5	92.6	208.6	
Forints	35.4	35.4	40.3	118.5	
Privatisation loans in forints	29.3	4.0	2.4	0.3	
Privatisation loans in forex	16.8	0.0	0.0	0.0	
Compensation coupons	64.2	30.2	40.7	23.2	17.0
Total	156.7	481.0	176.0	350.4	144.0
In billions of dollars:	1.49	3.83	1.15	1.88	
(Forint/dollar exchange rate)	105.1	125.7	152.6	186.7	
1 Entimote					

# Table 20. Privatisation revenues Billions of forints

1. Estimate.

Source: ÁPV Rt. (Hungarian privatisation and State Holding Company).

These companies span a number of sectors, most notably electricity, water supply, and transportation, post and telecommunications. Full divestment (to the limit allowed by law) will probably not be achieved in 1998, in part because some of the assets remaining will eventually have to be liquidated.

Privatisation of state utilities continued in 1998, with the sale of two of Hungary's three remaining state-owned coal-fired electric power generators – Pécs and Bakonyi. No acceptable offer was made for the third, Vértes. The state-owned electrical utility MVM (Hungarian Power Companies), which controls energy wholesaling, is slated for privatisation in the year 2000, by which time it is expected to have reached an 8 per cent return on capital. Its role in the new EU compatible competitive energy sector has yet to be identified.

The compensation of local authorities for the value of privatised land, and the potential financial burden it might place on the ÁPV Rt, remains a piece of unfinished business. By the end of 1997, the ÁPV Rt had resolved most claims against it, paying out about 126 billion forints, approximately 85 per cent in shares. However, recent court decisions following claims by local governments will drive the ÁPV Rt into deficit. In particular:

- The Constitutional Court recently sided with local governments who argued they were entitled to more than the 40 per cent of privatised companies (particularly gas companies) already distributed to them. While the exact value of this transaction is unknown, the government provided 50 billion forints in its 1998 budget to help defray the costs;
- In addition, the Supreme Court's Unity of Law Council decided that a 20 per cent late payment fee should be paid by the ÁPV Rt in cases

### Table 21. Companies managed by Hungarian Privatisation and State Holding Company by sector

1997 Billions of forints

		Number	Т	otal	ÁPV	Rt. share	Lo: ÁPV	ng-term Rt. share	Sha pri	re to be vatised
		Number	Equity	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital	Equity	Subscribed capital
A.	Agriculture	52	94.1	53.4	84.3	46.3	70.6	37.3	13.7	9.0
B.	Fishing	1	1.0	0.5	0.9	0.4	0.7	0.4	0.2	
C.	Mining and quarrying	2	10.6	9.6	10.6	9.6			10.6	9.6
D.	Manufacturing	52	468.8	184.7	109.7	43.1	81.4	28.1	28.2	14.9
E.	Electricity, gas, heat and water supply	2	235.7	254.2	235.3	253.8	120.2	129.4	115.1	124.4
F.	Construction	3	1.8	1.4						
G.	Wholesale and retail trade	22	29.3	19.0	13.2	7.3			13.1	7.2
H.	Hotels and restaurants	8	13.0	8.0	1.0	0.6			1.0	0.6
I.	Transport, post and									
	telecommunications	31	332.1	146.9	71.7	36.2	30.1	15.9	41.7	20.3
J.	Financial intermediation	8	161.7	107.5	7.8	6.2			7.8	6.2
K.	Land and buildings	19	34.2	30.2	28.5	25.4			28.5	25.4
М.	Teaching	1								
О.	Other	10	0.9	2.4	0.7	2.2			0.7	2.2
Tota	ıl	211	1 383.2	817.8	563.8	431.1	303.2	211.1	260.6	220.0

Source: ÁPV Rt. (Hungarian Privatisation and State Holding Company).

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where compensation was delayed, independent of any dividends that had already been paid;

 A still unresolved dispute involves the contention of some municipalities that compensation should be equal to the value of the shares when issued, not their value when the claim was settled.

Issues surrounding the regulatory framework of monopolies have not been entirely resolved. In particular, there continues to be some controversy over the manner in which laws and regulations are applied (the delay in the raising of energy prices until after the 1998 election, being one example). The government has clarified its rate-setting procedure for telecom prices. Beginning 1 January 1998, it became based on price-cap regulation, using the CPI less a 2 per cent productivity factor. While the introduction of such a productivity factor is a welcome feature, it remains to be seen whether it will be applied. Moreover, the productivity adjustment factor appears low.<sup>22</sup> Further, the use of the previous year's inflation rate in a period of disinflation is unfortunate: a prospective inflation rate which excludes regulated prices – with perhaps an ex-post catch-up factor – would have been preferred.

The progress made on privatisation is commendable and stands out among not only other central and eastern european countries, but also among all OECD countries. As the process comes to a close, a series of issues have yet to be resolved, many of which were highlighted in the previous Survey. While the number of assets in state hands has continued to decline, the government plans to maintain a golden share, and in some cases with sizeable participation, in a number of firms spanning a range of industries. Although this is not an uncommon situation in many OECD countries, there is room to rationalise these holdings. In addition, with few assets remaining in state hands, a decision needs to be made whether the ÁPV Rt should follow a "treasury" model where it has a relatively minor role or a "holding model" where it becomes actively involved in the management of the companies it holds. Of the two the first appears preferable as it reduces the potential for political interference in the operation of state-owned firms. Finally, while it is important that investigations into the possibility of past improprieties at the APV Rt continue, care must be taken to avoid the politicisation of the institution and, by association, of previously or vet-to-be privatised companies.

#### **Banking sector developments**

The previous *Economic Survey of Hungary* recognised that the Hungarian banking sector was among the healthiest in the region. Most indicators point to continued improvement in that sector: the privatisation process is almost completed; the share of problem-free loans continues to increase; banks are wellcapitalised, and although profitability is declining, it remains high.

A further five banks passed into private hands in 1997, reducing the state's share in banking-sector equity by 10 percentage points and bringing the private sector's share in assets to 88 per cent (Table 22). Only seven of the 44 credit institutions (of which 38 banks and six specialised credit institutions) operating that year were state-owned and all but one of the large banks are privately owned: 30 banks representing about 60 per cent of total equity are foreign owned (Table 23).

Restructuring within the banking sector has also proceeded, contributing to an overall improvement in its health. Over 90 per cent of the total portfolio (loans, claims and off-balance sheet items) were problem-free in 1997, and only 1 per cent were classified as non-performing<sup>23</sup> (Table 24). Moreover, capitaladequacy ratios (CAR) are high. Risk-weighted CARs currently range from 15.5 per cent for large banks to over 24 per cent for small banks and 17.3 per cent for the banking sector as a whole, well above the minimum required 8 per cent ratio. Competition within the sector and from other financial institutions has been intensifying. Pension and investment funds, for example are an alternative vehicle for individuals' savings, and foreign-owned companies can draw on parent companies for loans instead of approaching domestic banks. Signs of increased competition can be seen in the fall in market share of the five largest banks (by about 4 percentage points in terms of total assets), the convergence in maximum and minimum lending and deposit rates, and the narrowing in the spreads between

	19	1994		1995		1996		1997	
	Number	Per cent of total assets							
Large banks	7	75.2	7	70.8	7	69.3	7	63.8	
Private	3	50.3	5	50.7	6	54.5	6	57.1	
State	4	24.9	2	20.1	1	14.8	1	6.7	
Medium-sized banks	11	16.7	12	19.6	10	20.1	13	27.2	
Private	8	9.6	7	12.3	7	14.4	12	24.2	
State	3	7.1	5	7.3	3	5.7	1	3.0	
Small banks	25	8.1	23	9.6	24	10.6	21	9.1	
Private	14	4.9	14	6.4	16	8.7	16	6.3	
State	11	3.2	9	3.2	8	1.9	5	2.8	
Total private	25	64.8	26	68.4	29	77.6	34	87.5	
Total state	18	25.2	16	31.6	12	22.4	7	12.5	

Table 22. Breakdown of banking assets by size and ownership

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10	i cent of capital			
	1994	1995	1996	1997
Domestic ownership, total of which:	84.6	64.8	50.0	37.2
Direct state ownership Other companies Private persons	67.3 14.7 2.6	43.2 17.3 4 3	32.8 13.8 3.4	21.7 13.7 1.7
Foreign ownership of which:	14.9	34.7	48.1	60.5
Banks, investment funds Others	14.3 0.6	31.4 3.3	44.2 3.9	59.8 0.7
Preference shares Own shares	0.5	0.5	1.1 0.9	1.5 0.9
Capital (billions of forints)	289.3	211.9	206.7	286.9
Source: National Bank of Hungary.				

#### Table 23. Ownership structure of the banking system

Per cent of capital

#### Table 24. Breakdown of outstanding bank debts by risk categories<sup>1</sup>

	31 Dec. 1994	31 Dec. 1995	31 Dec. 1996	31 Dec. 1997
		Billions	of forints	
Total loans	2 378.6	2 560.8	3 794.6	5 465.4
		P	er cent	
of which:				
1. Problem free	78.0	83.1	86.9	91.8
2. a. To be watched	7.8	7.5	7.4	5.2
b. Substandard	2.1	1.7	1.4	1.0
c. Doubtful	3.6	2.6	1.4	0.7
d. Bad	8.5	5.2	2.9	1.3
Qualified/total assests	22.0	16.9	13.1	8.2
Bad/Qualified loans	38.7	30.7	21.7	15.6
Memorandum items:				
Profitability <sup>2</sup>	0.8	1.4	1.9	1.3
Provisions/total assets	9.6	6.2	3.8	1.8
Memorandum items:				
Provisions:				
To be watched	0-10%			
Substandard	11-30%			
Doubtful	31-70%			
Bad	71-100%			

1. Does not include co-operative financial institutions. Total assets of these institutions amounted to about 5 per cent of the entire financial system in recent years.

2. Defined as pre-tax profits as a percentage of total assets.

Source: National Bank of Hungary.

lending and deposit rates to roughly 3 to 4 percentage points. As banks have fought for market share, they have been willing to accept lower margins on loans, particularly to blue-chip customers and as a result, the spread is now much lower than in many other OECD countries.<sup>24</sup> Real net profits per employee, after almost doubling between 1994 to 1996, therefore, fell off somewhat in 1997 (Table 25).

This decline has been as a result of the narrowing of interest rate spreads (Figure 13), the decline in profits from provision-release and high administrative costs (Table 26). While falling slightly over the last two years, these costs remain high by international standards (see OECD, 1997). This may reflect transitional costs as banks modernise their operations, for example introducing new technology such as automated teller machines (the number of which has more than doubled between 1995 and 1997) and upgraded payments systems or costs associated with expensive branch networks.<sup>25</sup> However, it may also reflect a failure on the part of some banks to restructure. Indeed, one of the principal causes of the fall in profits in 1997 (and presumably in 1998) was the losses of Postabank (see Box 4) and the Realbank.<sup>26</sup> Moreover, some strategies to gain market share such as opening large numbers of branches may be less costeffective than ensuring greater market penetration with lower costs by expanding telephone or internet services. Currently, 70 per cent of bank receipts are generated via interest payments on loans. Banks are, however, expanding the scope of their operations as they move towards universal banking and begin to take on new activities such as stock broking, pension funds, etc. In addition, they are increasingly altering the composition of their loan base. For example, they are targeting retail clients as the corporate market has become more saturated, offering short-term consumer loans, and have also begun to expand lending to fastgrowing sectors of the economy, such as financial services.

	1994	1995	1996	1997
	Pe	r employee, milli	ons of 1990 forin	ts <sup>1</sup>
Total assets	435.2	413.4	439.1	457.8
Profit from banking activities	116.3	124.6	121.5	122.6
Net profits <sup>2</sup>	3.2	5.3	7.4	5.3
Operating costs	14.3	14.4	14.8	16.7
Memorandum item:				
Number of employees	36 078	35 328	33 082	31 810
<ol> <li>Deflated by the producer price index.</li> <li>Before taxes.</li> <li>Source: National Bank of Hungary.</li> </ol>				

Table 25. Measures of banking sector efficiency



Figure 13. Interest rate spreads

Source: National Bank of Hungary.

Table 26.	Decomposition	of the	bank	interest-rate	e spread
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	1994	1995	1996	1997
SPREAD <sup>1</sup>	6.8	6.4	4.6	3.6
Administrative costs	8.6	10.3	9.9	9.5
Tax payments	0.8	0.9	1.1	0.8
Accounting profit margin	1.1	3.1	4.1	2.7
Provisions	9.6	5.1	4.6	3.1
Residual	-5.0	2.0	-2.0	-1.7
Other sources of income (net)	8.3	14.9	13.1	10.9

1. The spread is equal to the difference between lending and savings interest rates. The decomposition represents the contribution of each element to the spread.

Source: OECD, on the basis of National Bank of Hungary data.

#### Box 4. Recent banking sector difficulties: the case of Postabank

Although banks are generally in good shape, the case of Postabank suggests deficiencies in the APTF's ability to regulate the banking sector. Postabank was established in 1988 with a wide range of shareholders, including a direct and indirect state participation of about 70 per cent, comprised of holdings by the Ministry of Finance (22 per cent), Hungarian Post (27 per cent), Hungarian Insurance Company (10 per cent) and Hungarian Electricity Works Corporation (MVM, 13 per cent). Over time, privatisation and new investors saw this share fall substantially. Through its branches in the post office, Postabank rapidly became the second largest retail bank in Hungary. In March 1997, rumours of financial difficulties led to a run by depositors who withdrew 28 billion forints in only a few days. In the event, the rumours proved well-founded. High operating costs, dubious off balance-sheet investments and an under-provisioned loan portfolio meant that by spring 1998, the bank's net worth was negative. Following the run, the state was compelled to intervene. In the hopes of attracting a strategic investor it initially provided a loan guarantee of 12 billion forints (which was in turn guaranteed by the major shareholders) and directed the APV Rt to carry out a portfolio exchange, swapping 10.7 billion of its liquid assets for unsaleable real estate. This failed and in May 1998, the government made a further effort to recapitalise the bank. In an extremely complicated transaction designed to keep the bailout off of the government's books, the government invested 24 billion forints in Postabank through state-owned institutions, including the Hungarian Development Bank (MFB), the ÁPV Rt and MVM while other shareholders invested 25 billion forints. As a result, the state's share via direct and indirect holdings rose once again to about 71 per cent of the bank's equity, which was further supplemented by an additional 6 per cent increase made through the MFB in July. These efforts too proved insufficient and in November 1998, the government made what it hopes will be a final effort to clean up the bank's balance sheet. Following the release of audits commissioned by the government, the entire management of the bank was dismissed. To cover bank losses, the government decided to inject 152 billion forints in capital in Postabank and 40 billion into the MFB (of which 24 billion are to cover Postabank related losses). To this end, it will issue 138 billion forints of bonds (leading to increased government interest payments that must be covered in the 1999 budget), the remaining 54 billion being in cash. Assets amounting to 174 billion forints are to be removed from Postabank's books and transferred to the APV Rt (of which 71 billion are thought to be recoverable and will be guaranteed by the government). Overall, this latest bailout will cost the government close to 200 billion forints, or slightly less than 2 per cent of GDP.

Source: Ministry of Finance and MTI news reports.

The trend towards new markets is reflected in a 20 per cent expansion in real credits since mid-1997, following several years of decline (Figure 14). While the previous tightening of credit conditions was a welcome development, constituting an important part of sectoral restructuring, the return to lending by banks is also welcome and will play an important role in sustaining growth. These trends



Figure 14. Stock of real credit to enterprises

Source: National Bank of Hungary.

reflect a number of supply-side developments, including a more stable policy environment, a proven track record of disinflation, increased domestic savings and much more experience on the part of banks in evaluating risk. On the demand side, a lower risk premia reduced interest rates, which, along with solid growth prospects, increased firms' willingness to take on debt. So far, banks have been able to accommodate the expansion without a serious deterioration in their balance sheets or the maturity-transformation ratio (the ratio of short-term household deposits to long-term loans).

However, the expansion in real credits and competition will necessarily be associated with an overall increase in the riskiness of loans, making prudential supervision all the more important. Regulatory authority of the banking (and financial services) sector resides with the Ministry of Finance, but the *State Banking and Capital Market Supervisory Board* (APTF) has principal responsibility for its oversight, including the issuance and withdrawal of licenses, inspection of operations and prudential control.<sup>27</sup> In 1997, it investigated several financial institutions to gauge the quality of their asset base and risk exposure, and revoked the licenses of two.<sup>28</sup> Its long-term effectiveness, however, remains to be seen. Indeed, the

massive losses of the Postabank and, more recently, the failure of the Realbank indicate that regulators caught problems only well after the institutions were in trouble, requiring the state to step in and take control. In the future, the rapid change in the scope of operations among financial institutions will require staff to keep abreast of new developments in areas where they have limited knowledge and skills. Moreover, the workload of the APTF has increased tremendously during the most recent market downturn, which has weakened the financial position of a number of brokerage houses.<sup>29</sup> While these regulatory challenges are not unique to Hungary, they may be more difficult to meet given the recent growth in the number of brokerage houses, the expansion of banks' balance sheets, and the relative inexperience of regulators. Although recruiting more staff as necessary would help alleviate workload problems, it is unlikely to happen rapidly given the qualifications necessary for such jobs. Recent provisions allow APTF staff to be paid higher wages than normal civil servants, which should help it to retain existing staff and perhaps entice new recruits.

Currently, bank risk exposure does not appear excessive and further regulatory changes are planned to strengthen prudential supervision. With respect to credit risk, there appears to be adequate reserves in place, and, as indicated, the share of problem-free loans is high and continues to rise. Risk undoubtedly increased with the drop in the share of government and central bank loans in total assets (they fell by 4 percentage points each). Nevertheless, this share remains high (Table 27). Country-specific risk due to extra-national lending is small because of regulations requiring approval for all loans to foreign entities of more than one-year maturity (exposure to Russia was, therefore, generally small) (see Chapter II). In addition, legislation requiring banks to set aside provisions against loans made to various groups of countries based on four risk categories was implemented in October 1998.<sup>30</sup> As regards market risk, the traditionally narrow scope of bank operations means that in general, it too is small, although increasing rapidly. For example, off-balance sheet liabilities have almost doubled in the past-year and securities trading may involve significant market risks leading to substantial liabilities. As yet, there are no prudential regulations for capital requirements to cover market risk, but the Ministry of Finance plans to introduce some in mid-1999. Nevertheless, universal operations by banks will be authorised beginning in 1999.

The relative balance between short and long-term assets and liabilities constitutes the main challenge to liquidity. Currently, the short end dominates the structure of both assets and liabilities and it is therefore unlikely that this form of risk is high. Although long-term loans made up almost 50 per cent of new loans in 1997, their share in all loans only increased 1 percentage point to 41 per cent.

		Ass	sets			Liab	ilities	
	1994	1995	1996	1997	1994	1995	1996	1997
		Per cent of	total assets			Per cent of	total assets	
Own funds					8.8 Long t	9.9	10.3	11.5
of which:					Long			
Central budget	19.8	16.6	14.5	12.6	0.4	0.2	0.2	0.1
Enterprises	12.0	11.0	10.7	13.4	0.2	0.3	0.3	0.3
Households	7.2	5.6	4.1	3.1	3.6	3.0	2.7	2.2
Non-residents	1.7	1.4	0.3	1.6	4.4	6.2	5.1	5.4
Central bank	8.0	7.3	6.8	5.9	11.6	7.9	5.0	3.1
Interbank	0.5	0.6	0.4	0.9	0.5	0.6	0.6	0.8
Non-credit/securities	4.4	4.0	3.5	3.9	1.3	1.1	1.3	0.9
Short-term	43.1	47.8	54.2	53.7	63.4	65.0	69.8	71.2
Central budget	1.5	2.5	4.5	3.0	47	4.0	37	3.6
Enterprises	18.4	17.3	18.1	17.3	17.2	17.1	17.4	17.2
Households	0.3	0.3	0.3	0.4	23.6	25.4	26.1	25.5
Non-residents	1.9	2.1	5.4	6.5	6.5	7.7	9.3	10.9
Central bank	10.5	14.6	16.4	13.4	1.5	0.3	0.1	0.1
Interbank	2.7	2.3	4.6	6.5	4.9	4.4	6.5	8.5
Non-credit/securities	0.7	0.6	0.8	1.0	5.0	6.2	6.7	5.3
Other short-term assets	6.9	8.1	4.0	5.5				
Other	3.3	5.8	5.5	4.9	5.7	5.8	4.8	4.4
Total assets (billions of forints)	2 970.1	3 549.2	4 314.5	5 438.5				
Maturity transformation ratio	0.50	0.41	0.40	0.53				

## Table 27. Assets and liabilities of the banking sector

Source: National Bank of Hungary.

OECD

Economic Surveys: Hungary

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Small firms have not shared in the increase in real credit. Banks prefer to do business with large and medium-sized firms, and have moved into the retail market rather than financing small enterprise activities. Assessing loan risks for such enterprises is inherently more difficult because of higher failure rates, a problem which is considerably complicated by difficulties in securing collateral. As a result, banks tend to require as much as three times a loan value in collateral which constrains firms' ability to access credit. Although the government has some loan and guarantee programmes to help provide financing to SMEs, they are not large and experience from other OECD countries tends to find their effectiveness to be mixed.

Pension reform should enlarge the pool of domestic capital that may help to finance the expansion of dynamic firms, including small firms. In addition, a key change to the banking sector in 1997 occurred with the passage of the *Act on Mortgage Banks and Mortgage Bonds* which sought "to improve facilities for the extension of long-term loans required for economic growth". The Act permits the creation of credit institutions that specialise in mortgage loans financed by mortgage bonds. It is hoped that these institutions will serve to provide long-term loans in this area, allowing individuals and small businesses to use their real estate assets as collateral. So far, one state-owned enterprise has opened and one private bank has received a preliminary license, enabling it to establish and eventually prove that it has sufficient capital, followed by an operational license once procedures and policies are approved by the supervisory authority.<sup>31</sup>

There appear, however, to be a number of obstacles to the development of this market, not the least of which is the absence of a well functioning realestate market. As indicated in the previous *Survey*, the insistence of banks on very high collateral derives from the extensive problems they have in securing it when loans are defaulted. A principal problem here is the property register which remains inadequate and although it is being computerised, the process is behind schedule in many municipalities, including Budapest, where the creation of a historical database has been time-consuming. In addition, foreclosure procedures remain long. The existence of these difficulties means that the demand for mortgage-backed bonds (and hence the supply of loans) may remain limited unless a high premium is paid. Here, the operations of the state-owned mortgage company will be critical to the development of this market. In order to ensure investor confidence, its activities and accounts need to be as transparent and as free of indirect subsidy as possible.

To sum up, while the problems of the Postabank indicate that significant deficiencies remain in prudential supervision, the banking sector remains among the healthiest in the region, and prudential supervision has evolved as the scope of banking and financial sector operations has expanded. Here, recent moves to re-enforce the supervisory power of the *State Banking and Capital Market Supervisory* 

*Board* are positive steps. The challenges it faces and the risks to which banks are exposed will grow as they venture into new areas of activity in an effort to maintain and/or expand market share and profits. However, more may need to be done. Although there are no indications that there is a general problem with off-balance sheet items, Postabank and Realbank indicate that scrutiny of these items is important. Moreover, as banks become more sophisticated in their treasury operations, and as the number of instruments grows, more supervision in the latter area may become necessary.<sup>32</sup> In addition, there appears to be scope for a rewriting of the civil code, in an effort to consolidate the many changes that have been made over the last ten years, which have led to a complex and difficult-to-enforce patchwork of laws and regulations covering a wide range of activities not foreseen in the original legislation.

Enforcement of creditor rights still needs to be strengthened and efforts to enhance the property registry need to be pursued both to permit development of mortgage loan companies, but also to allow banks to lower collateral regulations on credits to the household and small business sectors. As the sector is arguably over-banked, it is likely that increased competition will lead eventually to a consolidation either through merger, withdrawal or failure. This is a normal and desirable process and should not raise undue alarm given the standards currently built into the system. In this regard, the kind of state support initially provided to Postabank should be avoided as it impedes the needed restructuring of both banks and enterprises. Rather losses should be assumed by the banks' owners with the state intervening only to smooth the transfer of the banks' assets to new owners. Moreover, when the National Deposit Insurance Fund takes large ownership shares, as it did in the case of Realbank, it is important that state support be limited to the statutory maximum guarantees and that it be restricted to depositors. Unless bank shareholders absorb the losses that they incur there is a real risk that the extensive restructuring achieved over the past that they several years could be slowly undone.

## **IV.** The healthcare system

The system of healthcare delivery in Hungary has a number of strengths, but like those of many countries, it is facing important difficulties. Although the quality of care available to Hungarians is generally good and the dedication of healthcare professionals cannot be questioned, the health status of the population appears to be the worst in the OECD area and there are serious problems with the current institutional organisation of the system. Such a situation is not new and has motivated previous reforms aimed at improving the efficiency, quality of, and more recently containing costs associated with the system. These have included the separation of the financing and delivery of services, the introduction of performance based remuneration for some classes of caregivers and an effort to enhance the system's reliance on primary caregivers. As a result and as compared with other former communist countries, the system of healthcare in Hungary is relatively advanced, with a solid basic structure in place. Nevertheless, additional measures are required.

This chapter first provides an overview of the institutional structure of the Hungarian healthcare system and compares internationally both its outcomes and resource-use. It then discusses a number of problems with the system, referring particularly to: containing costs, re-establishing a balance between healthcare sectors, correcting misaligned incentives and improving the extent to which participants are held responsible for their actions. The final section of the chapter builds on this analysis to offer some suggestions for reform.

#### **Organisational structure**

The Hungarian healthcare system is principally a comprehensive, compulsory, employment-based national health insurance scheme that provides near universal coverage both in terms of treatments<sup>33</sup> and in terms of population, with nearly all citizens receiving care whether or not they contribute. The current structures were introduced beginning in 1990 and represent a substantial improvement over the previous healthcare system which operated as an integral part of the government with no separate budget or accounting system. Within the new scheme, the purchasing and service-provision functions are separated with the National Health Insurance Fund Administration (HIFA) entering into performance-based contracts with hospitals, outpatient clinics and independent caregivers. Most of the HIFA's revenues derive from earmarked payroll and poll taxes levied on employees and employers. These are supplemented by direct subsidies from the central budget which cover an increasing proportion of the HIFA's expenditures. A growing share of total spending is financed privately through co-payments (on pharmaceuticals, some dental procedures and prosthetics), by under-the-table payments made directly to caregivers (so-called "gratitude money") and via direct out-of-pocket payments to private providers operating outside of the national health insurance system. The law also provides for voluntary mutual and private insurance funds to ensure supplementary coverage to the basic healthcare system. However, there is currently little medical activity that is not covered by the public system and, therefore, little for the voluntary funds to supplement.

Overall health policy is determined by the government with the Ministry of Health (formerly the Ministry of Welfare) in conjunction with the HIFA proposing and implementing reforms (Table 28). The financial parameters of the system, including the health insurance premiums paid by employers and employees and the budget of the Health Insurance Fund (HIF), are decided and promulgated each year by parliament in its "Act on the Budget of the Social Insurance Funds". The Ministry of Finance formulates the initial draft of the budget in consultation with the HIFA, which until recently was a subordinate body of the now abolished Health Insurance Self-Government<sup>34</sup> (HISG). The Ministry of Health operates the National Public Health and Medical Officer Service (NPHMOS), a centralised public-health service created in 1991. It is a traditional epidemiology and hygiene service that is also responsible for the licensing and professional supervision of healthcare institutions (such as hospitals and general practitioners' practices), the operation of a number of local-level health promotion and prevention programmes and the facilitation of contracting between the HIFA and local governments. Day-to-day administration of the healthcare system is split between the local governments, who are responsible for service provision and the government's purchasing agent, the HIFA, and its network of 19 County Health Insurance Fund Offices.

Since 1993 the HIFA has acted as a central purchasing agent for healthcare services from hospitals, outpatient clinics and private practitioners. Primary care is paid for by a flat per-patient fee (capitation) that is adjusted for the qualification of the physician and the demographic characteristics of the patient. Outpatient treatment is paid through a German-style *point system* and hospital-care is reimbursed according to Homogenous Diseases Groups (HDGs) inspired by the American Diagnosis Related Groups. Expenditure in the capitation system is effectively limited by the size of the population, while total expenditures for each

Policy making	Administration/Supervision	Financial
Office of the Prime Minister (since July 1990) – Develops health policy	<ul> <li>Supervises the HIFA</li> <li>Co-ordinates the activity of the Ministry of Health (among others)</li> </ul>	
<ul> <li>Ministry of Health (Welfare prior to July 1998)</li> <li>Develops health promotion and healthcare concepts, bills and decrees</li> <li>Co-ordinates health policy with other sectoral policies (education, environmental protection, etc.)</li> </ul>	<ul> <li>Sets, with Ministry of Finance and the HIFA, health-insurance budget</li> <li>Implements legislation</li> <li>Supervises public health via National Public Health and Medical Officer's Services (NPHMOS)</li> <li>Supervises medical education, training and research</li> <li>Interest reconciliation</li> </ul>	<ul> <li>Determines fees paid to care givers</li> <li>Finances national institutions' investments (as owner)</li> <li>Finances the NPHMOS (since 1998), the National Ambulance Service and National Blood-Supply Service among others</li> <li>Supports other public health and curative health services</li> </ul>
<ul> <li>Ministry of Finance</li> <li>Develops concepts for healthcare financing</li> <li>Determines overall funding level of the health care system</li> </ul>	<ul> <li>Sets, with the Ministry of Welfare and the HIFA, health care budget</li> <li>Covers the deficit of the HIF</li> </ul>	<ul> <li>Subsidises investment expenditures</li> <li>Monitors spending and revenues through the Treasury function</li> </ul>
<ul> <li>Health Insurance Self Government (until July</li> <li>Consulted during policy making</li> <li>Right of veto over health-related government decrees until 1996</li> </ul>	1998) – Operated the Health Insurance Fund Administration	- Directed the management of the HIF assets
<ul> <li>Health Insurance Fund Administration</li> <li>Prepared proposals for the HISG (until July 1998)</li> <li>Prepares proposals for the government</li> </ul>	<ul> <li>Responsible for assuring the provision of health services</li> <li>Negotiates and executes contracts with healthcare providers</li> <li>Manages insurance registry</li> <li>Overall financial management and supervision of expenditures</li> </ul>	<ul> <li>Collected (until 1999) social security contributions for pension and health insurance from employers and employees</li> <li>Contracts and pays caregivers according to scales set by Ministry of Welfare and government decrees</li> </ul>

## Table 28. Roles of the institutional actors in the healthcare system

Policy making	Administration/Supervision	Financial
<ul> <li>Local Government</li> <li>Make investment decisions</li> <li>Responsible for provision of healthcare to inhabitants</li> </ul>	<ul> <li>Ultimately responsible for day to day operation of health care institutions</li> <li>Principal owners and operators of hospitals and outpatient clinics</li> <li>Contract with self-employed GPs and supply and maintain doctor's offices and equipment</li> </ul>	<ul> <li>Receive grants from HIFA to cover operating costs</li> <li>Receive grants from central government to cover investments</li> </ul>
<b>Professional organisations</b> – Input into policy making process	<ul> <li>Supervise ethical and professional conduct</li> <li>Represent professional interests</li> </ul>	<ul> <li>Advise expert bodies concerning financing including the revision of tariffs</li> <li>Collect fees to cover own expenses</li> </ul>

## Table 28. Roles of the institutional actors in the healthcare system (cont.)

Source: OECD.

of the HDG and points systems are directly capped.<sup>35</sup> The initial relative weight of each sub-budget in total healthcare expenditure was determined by the share of spending in 1992 and has changed little since. Although caregivers within the sub-systems can compete with one another for their share of the sub-budget, funds cannot be redistributed between them without a parliamentary amendment to the Health Insurance Budget Act and the total payments under the HDG and points systems cannot exceed the budgeted amount. The final major healthcare payment provided by the HIF is out-of-hospital pharmaceutical subsidies, which are paid at varying rates, depending on the drug prescribed. Beginning in 1998, several services (mother and child healthcare nurses, dental health care, the Public Health Service) are given a global budget by the HIFA, while additional drug subsidies for the poor, the National Ambulance Services and the National Blood Transfusion service are financed directly from the central budget (see Box 5).

Local governments are legally responsible for providing primary health care, including family doctor services. They are expected to provide surgeries (office space), basic equipment, building maintenance and in many cases they also pay for utilities. All general practitioners (GPs) and paediatricians contract with the HIFA, with 90 per cent working for a local government and the remainder working independently. Capitation payments to family physicians represent 75 per cent of their revenues from the HIFA, the rest coming in the form of a separate fixed maintenance allowance paid by the HIFA. In order to dissuade doctors from having excessively large practices, and therefore providing poor service, there is a threshold on capitation payments beyond which an adjustment factor is applied to the additional fees earned.<sup>36</sup>

The national network of hospitals has retained many of the hierarchical elements of the previous system.<sup>37</sup> Local and regional hospitals provide a basic range of services and more specialised work is conducted at regional institutions and at the research and teaching hospitals (run by the Ministry of Health and Ministry of Education respectively). The majority of specialists and healthcare employees are salaried public servants and nearly all hospitals are owned and operated by local levels of government (county or municipality), while national institutes and medical universities are run by the central government. A number of private institutions exist within the national system, although their activities are limited mainly to the provision of various specialised medical services such as Computerised Tomography (CT) scans, Magnetic Resonance Imaging (MRI) and kidney dialysis. In addition, many salaried medical professionals also own private clinics that operate outside of the national health insurance system. General practitioners (family doctors) are the only significant group of non-salaried healthcare workers. Most pharmacies are privately-owned businesses while the market itself is tightly regulated and pharmaceuticals themselves heavily subsidised.

Box 5. The structure	of healthcare delivery					
PRIMARY HE	PRIMARY HEALTH CARE <sup>1</sup>					
Basic health services (financed by health insurance)	Public health services (financed from state budget)					
Family physician service Paediatrician family physician practices Night duty service Network of mother and child health nurses	Health education Immunisation Food health Environmental health					
Dental health care School health care Home nursing (mainly private contracts with HIF) Hospices Physiotherapy Occupational health services (since 1996 not covered by compulsory insurance)	Occupational health					
SECONDARY AND TERTIARY CAR	<b>RE</b> (financed by health insurance)					
Outpatient specialist services	Inpatient care					
Outpatient clinics of the hospitals Independent outpatient clinics Dispensaries (pulmonary, psychiatric, dermato-veneral, oncology, alcohol and drugs)	National institutes Medical universities County hospitals					
Mobile gynaecology and pediatrics spe- cialist care (for rural settlements) Diagnostic centres (mainly private con- tracts with HIF)	Local hospitals					
National Ambulance Service (since 1998 fin National Blood Transfusion Service (since	nanced from the state budget) 1998 financed from the state budget)					
<b>COMMUNITY/SOCIAL CARE</b> (fi	nanced by local governments)					
Social welfare homes for the elderly Social welfare homes for the mentally ill Daycare centres for the elderly and the dis Home social care services	sabled					

1. The broader meaning of primary healthcare as defined by the WHO. (Terminology for the WHO Conference on European Health Care Reforms, WHO EURO, 1996).

Within the public healthcare system, gratitude money constitutes an important part of the remuneration of many medical professionals and introduces a significant (albeit illegal) co-payment component to publicly supplied health care.

The fees received from the HIFA for services performed in hospitals and outpatient clinics are used to pay the salaries of specialists, nurses and other healthcare workers as well as other variable costs including pharmaceuticals administered in the hospital. The fees are not meant to cover capital costs including the depreciation of and investment in buildings and medical equipment. These costs, which are the responsibility of the institution's owners, are subsidised from the central budget and the distribution of these funds is determined jointly by the Ministries of Finance, Health and Internal Affairs.<sup>38</sup>

Outpatient care in the new healthcare regime was initially remunerated according to a mixed system, consisting of two components: *i*) a basic budget equal to 70 per cent (initially 60 per cent) of the former year's budget; and *ii*) a relative-tariff fee-for-service system copied from the German "point-system". As of April 1998, the first component has been completely eliminated. The system sets "points" for each type of service, fixing their relative values. The monthly forint value of a point is then determined by dividing the national outpatient care budget by the total number of points earned during the month. Thus, as the aggregate number of points increases (or falls), the forint value of a point falls (rises), although for the economy as a whole, aggregate payments for outpatient care remain constant.

Acute care cases are classified according to HDGs and payment is determined by the weight assigned to that diagnosis.<sup>39</sup> The Hungarian system differs from the American because, in Hungary, HDG payments include doctors' remuneration and, until fully phased out in 1998, raw HDG points were adjusted by a hospital-specific factor, with the result that hospitals with higher unit costs in 1992 (the base year) received as much as four times more than efficient ones.<sup>40</sup> In addition, the national cap meant that the forint value of an adjusted HDG point fell as the total number of points billed rose. Since then, the HDG system has been modified several times. As of April 1998, the money value of a HDG unit was fully equalised across hospitals and they were given a fixed forint value, opening up the possibility that the cap for these procedures could be exceeded. Nevertheless, financing is not strictly activity based. Some hospitals with high costs continue to receive special payments based on inputs consumed rather than services rendered.

The budget of the HIFA has been in deficit almost since its inception. Despite cost-containment measures (see below) that reduced its expenditures from 5.5 to 4.8 per cent per cent of GDP and their real value by 11 per cent, falling revenues left the deficit virtually unchanged at 0.7 per cent of GDP.<sup>41</sup> The principal causes of the drop in revenues were: falling employment, the emergence of mass unemployment, widespread tax evasion by firms and workers and non-payment of contributions<sup>42</sup> (a particular problem among a number of large state-run entities such as the railroad and even the police). While it is difficult to

estimate the exact revenue shortfall from underpayment of contributions, the annual per capita total contribution of the self-employed is one-fifth that of salaried employees, suggesting widespread avoidance. The 1997 withdrawal of central budget contributions made on behalf of pensioners and social assistance recipients placed further pressure on revenues.<sup>43</sup>

The main features of the Hungarian drug reimbursement system came into force in February 1995. Depending upon the drug, medication is reimbursed at a zero, 50, 70 or 90 per cent rate. While drug companies are free to set their own wholesale prices, the price at which a specific chemical is reimbursed is fixed by the Ministry of Health following negotiations between the experts of the HIFA, the ministries of Health and Finance and manufacturers.<sup>44</sup> Individuals who suffer severe chronic disease are eligible for a 90 or 100 per cent subsidy, while certain classes of individuals on social assistance can get a health-card<sup>45</sup> that entitles them to free drugs, medical appliances, dental care and physiotherapy. For health-card holders, the health-insurance subsidy is paid by the HIFA, while the co-payment portion (normally paid by the patient) is financed by the central government.

Since 1990, government-owned wholesale and most retail pharmacies have been privatised. The number of retail pharmacies increased by almost 50 per cent and in 1997 there were 74 wholesalers against only one in 1990. Nevertheless, the market is not very competitive. Drug prices in retail pharmacies are regulated and uniform, with pharmacies having a monopoly on the provision of all drugs for human treatment, whether or not a prescription is required. Ownership of pharmacies is restricted to limited partnerships, where all active partners are pharmacists, at least one of whom must hold a "personal right to operate a pharmacy", and where the active partners hold at least a 25 per cent share in the enterprise. Strict rules also govern the location of pharmacies.<sup>46</sup> Despite all of these restrictions, some chains are beginning to develop, but small independent pharmacies remain the rule.

#### International comparison

Between 1930 and 1960 life expectancy at birth rose by more than 20 years in many OECD countries, as it did in Hungary. Since then, progress has been less rapid, with life expectancy increasing by 8.7 years between 1960 and 1990 in the OECD area and only 1.3 years in Hungary (though with male life expectancy actually falling)<sup>47</sup> (Figure 15, Panel A). As a result, Hungary now has the lowest life expectancy in the area and the 8th highest among 14 former communist countries (NERA, 1998). Outcomes are poor for all age-sex groupings but especially for males between 40 and 60 years of age, whose total life expectancy of 68.8 years has been falling (Figure 15, Panel B) and is seven years less



Figure 15. Life expectancy

Source: OECD Health Data 98.

than the OECD average of 75.9 years (Figure 15, Panel C). Female life expectancy is also the lowest among OECD countries, although it has been rising, and is much higher than for males, the gap between them having more than doubled from 4.4 to 9.6 years between 1960 and 1996.

As with many socio-economic phenomena, better health outcomes are associated with good economic performance – both at the societal level and at the individual level. Thus, in Hungary, a 30 year old male with 15 or more years of education can expect to live 11 years longer than one with less than 8 years of education (Hablicsek, 1995) and residents of Budapest, where per capita income is 80 per cent higher than the national average, can expect to live 4.7 years longer than individuals from Szabolcs-Szatmár-Bereg in eastern Hungary. Although low incomes certainly have contributed to the higher mortality rate, the recent transition process itself does not appear to have been an important cause.<sup>48</sup> The decline in male life expectancy began in the mid-1960s in Hungary, while across transition countries there seems to be little correlation between the severity of national adjustments and changes in life expectancy.<sup>49</sup>

Over-work, poor diet, alcohol and tobacco addiction, unfulfilling work, falls in relative income and feelings of relative disadvantage compared with western Europe are considered to be the principal factors contributing to high prime-age male mortality both now and in the 1970s and 1980s. Alcoholism has been cited as an important source of Hungarian mortality<sup>50</sup> (Figure 16, Panel A), and Hungary has the third highest consumption rates in the OECD. The incidence of smoking is also high; 44 per cent of men and 27 per cent of women smoke (the fifth and eighth highest rates in the OECD) (Figure 16, panel B). Spending on alcohol and tobacco products represent about twenty per cent of total food expenditures with the poorest 10 per cent of the population spending as much as 7.3 per cent of their income on these products. Although total caloric intake per capita is around the OECD average, the traditional Hungarian diet relies excessively on foods with a high fat and sugar content, both of which constitute serious health hazards<sup>51</sup> (Figure 16, Panel C). Deaths per capita from associated diseases exceed OECD averages by a wide margin, with Hungarians having the highest mortality rates in the area for cancers of the respiratory tract, heart diseases and cirrhosis of the liver (Table 29).

Hungary's measured *expenditures* on healthcare are, as a share of GDP, among the lowest in the OECD (Figure 17, Panel A). Although in absolute terms, its spending (\$602 at PPP) is about half the level in Spain and Portugal (Table 30) and only 38 per cent of the OECD average,<sup>52</sup> relative to countries with similar income levels, it is somewhat above average (Figure 17, Panel B). Long-term spending trends and actual spending in Hungary are difficult to establish because of institutional changes and the lack of reliable data concerning gratitude payments<sup>53</sup> and private service provision.<sup>54</sup> Nevertheless, available figures





Source: OECD Health Data 98.



Figure 17. Healthcare expenditure 1996

Expenditure (% of GDP)



Source: OECD Health Data 98.

	of	Car the resp	icers iratory t	ract		Heart	disease	!		Liver o	rirrhosis	5
	1975	1990	1995	Rank <sup>1</sup>	1975	1990	1995	Rank <sup>1</sup>	1975	1990	1995	Rank <sup>1</sup>
Hungary	67	109	117	(1)	330	402	418	(1)	25	75	125	(1)
Australia	49	53	52	(20)	281	202	180	(14)	12	9	8	(23)
Austria	75	65		(16)	303	221	212	(12)	49	40	38	(2)
Belgium	100			(2)	233	129		(21)	17	15		(12)
Canada		69	67	(14)		178	166	(16)		11	10	(20)
Czech Republic	103	99	94	(5)	332	367	310	(3)	23	32	13	(19)
Denmark	69	86	83	(9)	399	293	227	(9)	13	19	21	(9)
Finland	69	66	61	(17)	459	359	304	(4)	10	15	16	(11)
France	49	68		(13)	122	91		(25)	48	25		(12)
Germany	68	74	73	(10)	249	224	222	(10)		30	32	(6)
Greece	55	81	85	(8)	121	137	128	(22)	19	14	10	(21)
Iceland	21	37		(25)	297	233		(7)	1	1		(12)
Ireland	56	60	57	(18)	410	339		(2)	3	3	3	(28)
Italy	58	91		(6)		145		(20)	48	35		(12)
Japan	20	45	55	(19)	44	45		(27)	20	19		(12)
Korea		21	28	(26)		11	16	(28)		47	37	(3)
Luxembourg		86	86	(7)	203	151		(19)	34	31	23	(8)
Mexico		8	9	(28)		40	46	(26)		34	36	(4)
Netherlands	88	95		(4)	287	194	164	(17)	6	6	6	(26)
New Zealand	51	54	51	(21)		232	217	(11)	8	4	4	(27)
Norway	34	49		(22)	325	278		(5)	6	8	6	(25)
Poland					148	194	168	(15)			21	(10)
Portugal	18	38	41	(24)	134	115	103	24	51	37	35	(5)
Spain	34	66		(15)	130	106		(23)	32	29		(7)
Śweden	41	44		(23)	401	270	230	(8)	17	10	8	(24)
Switzerland	65	68		(12)	175	163		(18)	20	14		(17)
Turkey		14		(27)						2		(29)
United Kingdom	108	96		(3)	403	306	259	(6)	4	7	9	(22)
United States	61	75	72	(11)		208	191	(13)	20	14	13	(18)

#### Table 29. Male mortality from selected causes

Deaths per 100 000

1. Rank of the latest available year's data.

Source: OECD Health Data 98, Central Statistical Office.

indicate that in 1997 healthcare expenditures amounted to 6.4 per cent of GDP, a somewhat smaller share than in 1990. The majority of spending (77 per cent) was financed by the compulsory health insurance premiums paid by employees and employers (Table 31), while direct contributions from the central budget covered about 13 per cent of all spending and with the remaining 10 per cent coming from individual co-payments on pharmaceuticals. Since 1990, the share in public spending represented by compulsory insurance premiums has been falling (down 12 per cent) and that of the central budget rising (up 50 per cent), while the share financed by individuals has increased by 250 per cent.

Country	Latest yea
Hungary	602
Turkey	232
Poland	371
Mexico	391
Korea	587
Czech Republic	904
Greece	974
Portugal	1125
Spain	1168
Ireland	1324
United Kingdom	1347
New Zealand	1352
Finland	1447
Italy	1589
Sweden	1728
Japan	1741
Belgium	1747
Austria	1793
Australia	1805
Norway	1814
Netherlands	1825
Denmark	1848
Iceland	2005
France	2051
Canada	2095
Germany	2339
Luxembourg	2340
Switzerland	2547
United States	4090
Average	1558

 
 Table 30.
 Per capita healthcare expenditure at purchasing-power parities

While total real expenditures on healthcare were virtually unchanged between 1991 and 1997, they grew by some 12 per cent between 1991 and 1994. With the application of the Bokros package (see OECD, 1997), real expenditure fell by 10 per cent in 1995 and then a further 5 per cent in the following two years. Within the total healthcare budget, the real value of funds allocated for primary care decreased by 25 per cent between their peak in 1994 and 1997, while over the same period outpatient and inpatient spending fell by 10 per cent. Pharmaceutical subsidies may have contributed to a crowding-out phenomenon as their share in public health expenditure rose from 22 to 30 per cent, remaining approximately constant at an internationally high 1.4 per cent of GDP (Table 32). Pharmaceutical expenditures, both as a percent of GDP and as a percent of total health

	1992	1993	1994	1995	1996	1997	1998 budget
Private contributions	221 017	245 207	287 907	321 983	369 734	471 812	539 879
Employer health insurance							
contributions	173 253	190 778	233 109	269 168	308 224	323 812	357 879
Unemployment insurance							
contributions		9 995	6 608	6 018	5 836	4 642	4 962
Employee contributions	36 098	44 434	48 190	44 960	50 551	62 474	61 571
Accident contributions	• •			1 837	1 593	1 251	1 496
Employer contribution to sick					2 520	7 650	0.000
pay Health tax		••	••		5 550	71 074	9 000
Employer health tay		••	••			71 974	90 171
Health tax paid by	••	••		••	••	11 307	33 320
individuals						386	851
Late payment fees	7 787	10 467	11 196	9 413	8 141	8 466	8 800
Central budget contributions	2 600	5 800	7 000	10 400	12 000	0 100	0 000
Revenues from arrears	2 000	0 000	1 000	13 322	15 426	16 867	20 000
Other related to insurance				10 022	10 120	10 001	20 000
activity	1 279	2 113	4 557	3 318	4 430	3 655	4 158
Central budget for state							
financial service		2 500	4 462	2 500	2 500	2 500	
Repayments by hospitals						1 501	
Income from assets							
transferred by the state					4	8 200	
Transfers between funds	10 103	11 298	54 664	56 726	66  055		
Central budget transfers							
to cover wage increase	1 660	2 371	5 400				
Other							2 840
TOTAL REVENUES	235 775	280 308	79 716	422 915	465 473	499 487	573 174
In-kind provisions	156 203	186 873	241 525	275 749	326 102	389 964	423 704
Curative services	112 123	131 571	170 464	190 174	224 832	265 779	298 300
Pharmaceutical expenditures	39 392	49 535	61 572	69 965	85 495	100 876	108 795
Medical supplies subsidy	3 570	4 698	7 269	10 808	12 118	16 782	17 593
Travel reimbursement	1 118	1 069	1 414	1 767	2 133	2 561	2 981
Other (spa, mothers' milk)		3 035	1 524	1 708	2 250		
Cash benefits	72 895	88 581	107 970	118 243	121 959	141 809	146 942
componsation	36 455	45 034	57 771	68 147	70 265	07 082	05 822
Maternity and child	30 433	45 054	57 771	00 147	19 203	97 902	33 022
allowance	6 419	7 203	8 261	8 904	8 276	6 013	7 200
Sicknay	28 912	35 255	40 833	39 805	32 977	36 138	42 068
Grants related to illness	537	441	428	679	699	865	930
Compensation payments	572	648	677	708	743	810	922
Contribution to joint							
expenditure	24 995	28 834	1 007	1 116			
Operational expenditures			10 439	12 553	15 505	18 157	21 150
Transfers between the funds			32 931	37 116	37 198		
TOTAL EXPENDITURES	257 510	306 033	397 835	445 141	508 959	555 585	595 264
BALANCE	-21 735	-25 725	18 119	22 226	-43 486	-56 098	-22 090

Table 31. Revenues and	l expenditures	of the	Health	Insurance	Fund
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Source: Health Insurance Fund Administration.

	Per o	cent of (	JDP					
	1990	1991	1992	1993	1994	1995	1996	1997
Public expenditure								
Recurrent expenditure		5.9	6.2	6.2	6.6	5.8	5.6	5.2
Investments		0.6	0.6	0.6	0.6	0.3	0.3	0.3
Total		6.5	6.8	6.8	7.3	6.3	5.9	5.5
of which:								
Health Insurance Fund								
Health-care services		3.8	3.9	3.7	3.9	3.4	3.3	3.3
Primary care				0.6	0.7	0.6	0.5	0.5
Family physicians				0.4	0.4	0.3	0.3	0.3
Other primary case				0.3	0.3	0.2	0.2	0.2
Outpatient specialised care				0.6	0.6	0.5	0.5	0.5
Special services				0.1	0.1	0.1	0.2	0.2
Inpatient care				2.1	2.2	2.0	2.0	1.9
Other services				0.3	0.2	0.2	0.2	0.2
Pharmaceutical subsidies		1.4	1.5	1.5	1.6	1.5	1.4	1.4
Other			0.1	0.2	0.0	0.0	0.0	0.1
Total		5.2	5.4	5.4	5.5	4.9	4.8	4.8
Private expenditure								
Co-payments on drugs	0.2	0.3	0.3	0.3	0.5	0.7	0.7	0.6
Total expenditure	6.7	6.8	7.2	7.4	7.9	7.1	6.8	6.4

Source: Ministry of Welfare, Health Insurance Fund Administration.

spending, are the second highest in the OECD (Jacobzone, 1999). Rising prices (principally driven by the entry of western-made drugs) and falling rates of subsidy failed to reduce drug consumption, which when measured by days of treatment increased 12 per cent between 1993 and 1997, although this volume remains at about "normal" European levels.<sup>55</sup>

In Hungary the *supply of healthcare* workers appears to be distorted as compared with other OECD countries. While Hungary has an average healthcare-worker to patient ratio and among the lowest nurse to patient ratios, those of specialists and doctors are the first and the second highest in the OECD respectively, suggesting a serious bias towards high-skill (and high-cost) healthcare workers (Table 33). This distorted pattern of specialisation has grown worse in recent years. Since 1990, the number of specialists increased by 12 per cent, despite internationally high doctor patient ratios even in 1990<sup>56</sup> (Table 34).

While employment in the whole economy fell by 20 per cent between 1991 and 1997, it declined by only 2 per cent in the healthcare sector, partly because of these workers' special status under the public and civil servants acts<sup>57</sup> (OECD, 1997). The increase in physician densities reflects in part a feathering of

	All heal work	th-care ters	Physi	cians	Speci	alists	Gen practit	eral ioners	Nur	ses
Hungary	23.8	(11)	3.4	(4)	2.7	(1)	0.7	(13)	6.2	(17)
Australia	32.3	(7)	2.5	(19)	0.9	(15)	1.3	(4)	9.6	(6)
Austria			2.8	(14)	1.5	(10)	1.3	(4)	8.7	(9)
Belgium	21.1	(14)	3.4	(5)	1.6	(8)	1.5	(2)	6.5	(15)
Canada	25.0	(10)	2.1	(22)	0.9	(15)	0.9	(9)	8.9	(8)
Czech Republic	21.9	(13)	2.9	(11)	2.2	(2)	0.7	(13)	8.1	(10)
Denmark	18.9	(17)	2.9	(11)	0.1	(24)	0.6	(16)	7.0	(14)
Finland	40.2	(3)	2.8	(14)	1.6	(8)	1.2	(7)		
France	26.3	(9)	2.9	(11)	1.5	(10)	1.5	(2)	5.9	(16)
Germany	28.5	(8)	3.4	(5)	2.1	(4)	1.1	(8)	9.0	(7)
Greece	12.2	(24)	3.9	(3)	2.1	(4)	1.3	(4)	3.6	(22)
Iceland	33.6	(5)	3.0	(9)			0.6	(16)	7.3	(13)
Ireland	18.1	(18)	2.1	(22)	0.3	(23)	0.5	(23)	14.8	(2)
Italy	18.0	(20)	5.5	(1)	0.5	(21)			5.5	(19)
Japan	20.4	(15)	1.8	(25)					7.4	(12)
Korea	5.7	(27)	1.1	(28)	0.7	(18)	0.6	(16)	2.6	(24)
Luxembourg	18.1	(18)	2.2	(21)	1.4	(12)	0.8	(10)		
Mexico	6.2	(26)	1.5	(27)	0.7	(18)	0.5	(23)	1.0	(25)
Netherlands	23.8	(11)	2.6	(17)	0.9	(15)	0.4	(25)		
New Zealand	17.2	(21)	2.1	(22)	0.6	(20)	0.8	(10)	10.2	(4)
Norway	71.4	(1)	2.8	(14)	1.8	(7)	0.8	(10)	14.9	(1)
Poland			2.4	(20)			1.8	(1)	5.6	(18)
Portugal	12.3	(23)	3.0	(9)	2.1	(4)	0.6	(16)	3.5	(23)
Spain	11.9	(25)	4.2	(2)					4.5	(20)
Sweden	39.0	(4)	3.1	(8)	2.2	(2)	0.6	(16)	10.2	(4)
Switzerland	51.0	(2)	3.2	(7)	1.1	(14)	0.6	(16)	13.8	(3)
Turkey	3.2	(28)	1.1	(28)	0.5	(21)	0.7	(13)	1.0	(25)
United Kingdom	20.3	(16)	1.6	(26)			0.6	(16)	4.5	(20)
United States	32.6	(6)	2.6	(17)	1.2	(13)	0.2	(26)	8.1	(10)
Average	23.9		2.7		1.3		0.8		7.7	

 Table 33.
 Health-sector employment in the OECD area<sup>1</sup>

 Per 1 000 population (rank)

1. Data for the latest year available.

Source: OECD Health Data 98, Central Statistical Office.

hospital staffs by older physicians who continue to draw a salary in order to supplement their pension incomes. The situation has been further exacerbated by a 40 per cent increase in the number of first-year medical students since 1990 (CSO, 1996). The current 850 medical graduates each year exceeds by 41 per cent the number required to bring physician densities down to the average levels observed in European countries.<sup>58</sup> As a result, many doctors in the Hungarian system are underemployed, performing tasks that in other countries would be performed by less-skilled staff.

Throughout this period, health-sector earnings were falling in real terms, so that relative to national averages Hungarian healthcare sector workers are

	1960	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997
				Empl	loyees p	oer 1 00	0 popu	lation			
Total health employment	5.5	8.4	12.5	15.9	15.9	15.9	16.0	16.0	16.0	16.0	16.9
Practicing physicians	1.5	2.0	2.9	3.7	3.3	3.3	4.0	4.1	4.2	3.4	3.4
General practitioners		0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7
Practicing specialists	1.0	1.4	1.8	2.4	2.4	2.5	2.6	2.6	2.7	2.7	
Certified/registered nurses	1.7	2.7	3.7	4.5		4.8	4.9	5.0	4.9		
	Per cent of all health employees										
Total hospital employment		30	27	24	24	24	24	25	24		
Practicing physicians	28	24	23	20	21	21	21	21	21	21	20
Source: OECD Health Data 98 H	- Tealth Ins	surance	Fund A	dminis	tration						

Table 34. Trends in health-sector employment in Hungary

among the lowest paid in the OECD (Figure 18). Low wages in the sector were initially an inheritance from the previous regime. However, during the 1990s the tendency intensified following repeated austerity packages (aggravated by the failure to adjust employment levels). Nurses' relative salaries fell by some 20 per cent of the average wage (Table 35) while physicians' earnings fell from 50 per cent more than the average wage in 1994 to 36 per cent more in 1996. In that year, their gross wage amounted to 70 000 forints, which compared very unfavourably with those of private-sector workers possessing an advanced degree (between 110 000 and 150 000 forints) and probably even less well with that of owners of small and medium-sized businesses operating in the underground economy.

In contrast to doctors, nurses are in short supply, with significant regional variation. Shortages are felt most keenly among health institutions located in the capital or in towns where there are other industrial or service units attracting

	1992	1993	1994	1995	1996						
	Per cent of average compensation (whole economy)										
Compensation per health											
employee	0.91	0.83	0.88	0.83	0.80						
Physicians mean income			1.53	1.38	1.36						
Nurses salaries			0.92	0.77	0.76						
Source: Central Statistical Office.											

Table 35. Monthly average health-sector earnings


# Figure 18. Health-sector compensation in the OECD 1996

employees with significantly higher wages. Other paramedical professions such as physiotherapists and dieticians are also in undersupply. Increasing enrolments in these professions might go part of the way to resolving the problem, but the principal source of the shortage remains low pay. While adequate training capacity is available,<sup>59</sup> resources are limited, especially at the highest level of education and training.

Compared with European countries, Hungary has relatively few hospitals but, in terms of beds, they are on average among the largest in the OECD (Table 36). Reflecting the preponderance of specialists and physicians among healthcare workers, there is a large number of acute-care beds and very few nursing-home chronic-care beds (Table 37). Partly because of these features, the vast majority (68 per cent) of doctor-patient encounters occur in hospital's outpatient centres under the care of specialists (Table 38) and Hungarians make the second highest (14.6) number of medical visits per capita in the OECD.

Source: OECD Health Data 98.

	Population	Population per hospital (× 1 000)	Rank	Population per bed	Rank	Beds per hospital	Rank
Hungary	10.2	60.3	3	120.5	12	<b>500.5</b> <sup>2</sup>	1
Austria	8.0	24.1	11	106.9	14	225.5	8
Belgium	10.1	30.4	9	134.9	10	225.5	8
Denmark	5.3	55.2	4	202.5	4	272.6	5
Finland	6.1	15.9	14	133.3	11	119.1	15
France	58.2	15.3	15	111.6	13	136.9	13
Greece	10.5	27.3	10	195.9	6	139.6	12
Germany	81.6	22.3	12	103.2	15	216.2	10
Ireland	3.6	17.3	13	136.5	9	126.8	14
Italy	57.2	33.4	8	142.2	8	234.7	7
Netherlands	15.4	54.8	5	177.9	7	308.0	4
Portugal	9.9	176.8	1	370.7	1	476.9	2
Spain	39.1	49.7	6	210.2	3	236.4	6
Śweden	8.8	77.9	2	216.5	2	359.8	3
United Kingdom	58.6	37.3	7	199.6	5	187.1	11

Table	36.	Hos	oital	and	bed	densities
Table	36.	Hos	oital	and	bed	densities

1. Data for the latest year available.

2. Beds permitted, beds in use equals 496.9.

Source: OECD Health Data 98, University of Health.

The distribution of equipment, beds and medical personnel across regions is relatively uneven, although the consumption of medical services is more evenly distributed. Table 39 compares the distribution of health-resources and health-service utilisation across the nineteen Hungarian counties. The concentration of resources in Budapest is striking, the supply of physicians and hospital beds being respectively 87 and 64 per cent higher than the national average. The concentration of financial resources is even more pronounced: per capita expenditures paid by the HIF to health services providers located in Budapest are twice the national average. Nevertheless, the resources that are concentrated in major centres<sup>60</sup> such as Budapest are used by individuals from other counties. As a result, the pattern of resource usage is more equally distributed – although inequalities remain large. The population of Budapest spends 20 per cent more than the national average on per-capita hospital-based care (31 per cent higher in the case of the elderly) and their per-capita drug subsidy is also the most important. Despite the more even distribution of resource consumption, mortality rates are strongly correlated with the geographic distribution of spending, suggesting that proximity to healthcare resources may be an important factor in lowering mortality rates – although incomes and lifestyles may also play a role here.

	In patie	ent care	Acute	e care	Nursing	homes
Hungary	8.3	(13)	5.8	(6)	1.0	(15)
Australia	8.7	(11)	4.3	(11)	4.1	(5)
Austria	9.2	(8)	6.5	(5)	1.9	(12)
Belgium	7.2	(14)	5.3	(7)	1.1	(14)
Canada	5.1	(19)	3.6	(18)	8.1	(2)
Czech Republic	9.0	(10)	6.9	(2)	0.6	(18)
Denmark	4.9	(21)	3.9	(13)		`́
Finland	9.2	(8)	3.7	(16)		
France	8.7	(11)	4.5	(10)	1.4	(13)
Germany	9.6	(7)	6.7	(3)	3.7	(6)
Greece	5.0	(20)	3.9	(13)		
Iceland	14.8	(4)	3.7	(16)	4.3	(4)
Ireland	3.7	(27)	3.4	(19)	5.2	(3)
Italy	6.0	(16)	5.1	(9)		
Japan	16.2	(2)			0.8	(16)
Korea	4.6	(22)	4.0	(12)		(
Luxembourg	10.7	(6)	6.7	(3)	2.6	(9)
Mexico	1.1	(29)				
Netherlands	11.2	(5)	3.8	(15)	3.5	(7)
New Zealand	6.8	(15)	7.1	(1)		
Norway	15.0	(3)	3.3	(21)	10.0	(1)
Poland	5.5	(18)		()		(-)
Portugal	4.1	(24)	3.4	(19)		
Spain	4.0	(25)	3.2	(23)	0.8	(16)
Sweden	5.6	(17)	2.8	(24)	0.5	(19)
Switzerland	20.6	(1)	52	(8)	2.0	(10)
Turkey	2.5	(28)	19	(26)	2.0	(10)
United Kingdom	2.0 4.5	(23)	2.0	$(\tilde{25})$	3.3	(8)
United States	4.0	(25)	3.3	(21)	2.0	(10)
OECD average	7.8		4.4		2.7	

# Table 37. Hospital beds per capita<sup>1</sup>

Beds per 1 000 (rank)

1. Data are for the latest year available. Source: OECD Health Data 98, Central Statistical Office.

### Table 38. Doctor-patient encounters

1995

	Number of physicians	Doctor-patient encounters per 100	Distribution of doctors	Distribution of doctor-patient encounters
		population	P	er cent
Primary health care (1)	6 538	441	25.3	30
Outpatient specialist care (2)	5 649	996	21.8	68
Inpatient care (3)	13 642	23	52.8	2
Total (1 + 2 + 3)	25 829	1 460	100	100
Source: Health Insurance Fund Adm	inistration.			

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	Health	status		Socio-ecor	nomic stat	us	Regi	onal capad	tiies			Regional	consumption	l	
	Standar- dised mortality	Infant mortality	Per capita GDP	Average monthly wage	Secon- dary school	Unem- ployment rate	Beds per 1 000	Doctors per 1 000	Pay- ments	Use of family physician	Hospita- lisation per 1 000	Hospita- lisation of 60+	Per capita hospital expendi- tures	Per capita hospital expendi- tures 60+	Per capita drug subsidy
BUDAPEST	91	92	180	124	146	48	164	187	204	79	108	118	120	131	126
GYOR	94	92	106	92	105	64	98	91	87	100	90	89	103	98	95
VAS	96	59	105	86	103	65	102	93	80	102	86	89	90	89	102
VESZPREM	97	98	79	91	88	90	107	80	79	101	103	113	106	116	95
HAJDU	97	81	83	84	86	150	86	98	104	101	90	82	79	72	91
BEKES	97	139	81	82	87	130	87	70	72	100	103	95	97	85	104
CSONGRAD	97	94	94	87	102	86	106	135	109	98	94	89	88	85	113
HEVES	99	94	71	90	94	122	96	80	84	123	99	93	98	89	92
ZALA	100	76	95	85	90	88	103	89	88	104	90	90	88	84	92
JASZ	101	117	79	80	73	137	80	71	65	103	102	100	94	88	86
FEJER	102	106	96	100	89	86	73	71	64	104	97	98	96	91	89
TOLNA	102	106	95	91	81	130	75	81	70	113	93	87	93	86	97
BARANYA	104	98	84	89	95	114	108	131	115	118	109	108	94	91	115
NOGRAD	105	83	62	76	95	155	83	65	74	113	105	92	104	90	88
PEST	106	129	76	92	86	66	53	59	29	93	97	100	100	105	78
KOMAROM	106	117	80	95	83	110	83	72	70	103	96	98	97	99	92
BORSOD	107	90	69	85	96	175	90	74	82	112	103	100	99	96	81
BACS	108	82	77	80	75	98	84	76	76	107	97	90	92	84	107
SOMOGLY	109	114	77	80	86	120	96	84	88	111	108	103	110	107	85
SZABOLCS	110	130	59	75	82	181	81	64	71	106	101	88	92	84	103
ORSZAGOS	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Correlation with mortality Correlation with	1.00	0.34	-0.69	-0.53	-0.62	0.55	-0.60	-0.57	-0.53	0.50	0.28	-0.11	-0.11	-0.21	-0.42
infant mortality	0.34	1.00	-0.27	-0.07	-0.34	0.25	-0.39	-0.33	-0.34	-0.09	0.41	0.20	0.19	0.11	-0.16

# Table 39. Indicators of health and socio-economic status and of health services levels by region

1996 National average = 100

Source: OECD, based on data from the Central Statistical Office and Health Insurance Fund Administration.

-20

-25

Budapest

Miskolc

These inequalities are summarised in Figure 19 which compares with the national average levels of spending,<sup>61</sup> the payments received by providers in individual regions<sup>62</sup> and the resources consumed by their inhabitants<sup>63</sup> irrespective of where they received treatment. It shows that the residents of the (central) region of Budapest-Pest county consumed 26 per cent more healthcare services than the national average and that the region provided 34 per cent more per capita services than the national average. In contrast, the inhabitants of Szeged, Debrecen and Miskolc regions consumed between 10 and 15 per cent fewer healthcare resources than the average, while providers working in these regions performed 15 per cent less than the average level of services. Thus while, consumption of healthcare resources located in Budapest by residents of other regions served to reduce inequalities, individuals living in the capital region nevertheless consumed 45 per cent more in services than people living in less well endowed regions.<sup>64</sup> Investments in the period 1992-1994 tended to favour those regions already receiving a disproportionate share of resources (Kaló, 1997).

The stock of hi-technology medical equipment is lower than in most OECD countries but has increased rapidly thanks to the investments of private



Szeged

Debrecen

Figure 19. **Regional inequalities in resource use and capacities** Percentage difference from national average

Gyor

Szombathely

Pécs

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-20

-25

Source: Kaló (1997).

for-profit clinics that took advantage of the liberal economic environment, and generous treatment of the "variable costs" granted by the HIF for treatments that use them (Table 40). A large number of clinics (mostly private) are now operating and the gap between the supply of modern diagnostic and therapeutic tools in Europe and Hungary is closing.<sup>65</sup> Nevertheless, the level of private investments is small compared with the total of public investments. Dialysis stations deliver services of a European standard to anyone in need and kidney transplantation has become a routine procedure. The rate of open heart surgery is similar to the European average; however, catheter therapy (that could replace surgery) is

			Mach	nines per m	illion persc	ns (rank)		
	M	RI	Scan	ners	Lithot	riptors	Radia	ition
Hungary	1.4	(22)	5.1	(25)	0.7	(17)	3.3	(13)
Australia	2.9	(14)	18.4	(4)	1.0	(13)	3.8	(9)
Austria	8.4	(3)	24.8	(3)	1.6	(9)	3.7	(12)
Belgium	3.3	(12)	16.7	(8)	1.6	(9)		
Canada	1.7	(21)	8.1	(21)	0.4	(19)	5.3	(6)
Czech Republic	1.3	(23)	8.3	(20)	3.0	(5)	6.4	(5)
Denmark	2.5	(18)	5.8	(24)				
Finland	2.4	(19)	9.0	(17)	0.2	(21)	4.9	(7)
France	2.4	(19)	9.4	(15)	0.8	(14)	7.6	(3)
Germany	5.7	(7)	16.4	(9)	1.7	(8)	4.7	(8)
Greece	1.2	(24)	6.1	(23)	3.3	(4)	6.5	(4)
Iceland	7.4	(4)	14.8	(11)	3.7	(2)	14.8	(1)
Ireland	0.3	(26)	4.3	(26)	0.8	(14)		
Italy	3.5	(10)	17.5	(6)	4.6	(1)		
Japan	18.8	(1)	69.7	(1)	2.5	(6)		
Korea	5.1	(8)	17.4	(7)	3.4	(3)	3.8	(9)
Luxembourg	2.6	(17)	15.7	(10)				
Mexico	0.2	(28)	2.1	(27)	0.2	(21)		
Netherlands	3.9	(9)	9.0	(17)	0.8	(14)		
New Zealand	2.7	(16)	9.2	(16)	0.5	(18)	8.2	(2)
Norway	0.7	(25)	11.6	(14)				
Poland	0.1	(29)	0.3	(29)	0.1	(23)	0.1	(17)
Portugal	2.8	(15)	12.0	(13)	1.2	(12)	0.5	(16)
Spain	3.2	(13)	9.0	(17)	1.8	(7)	3.3	(13)
Sweden	6.8	(6)	13.7	(12)	0.3	(20)	0.8	(15)
Switzerland	7.4	(4)	17.7	(5)				
Turkey	0.3	(26)	1.6	(28)				
United Kingdom	3.4	(11)	6.3	(22)				
United States	16.0	(2)	26.9	(2)	1.5	(11)	3.8	(9)
OECD average	4.1		13.3		1.6		4.8	

# Table 40. Hi-tech medical equipment 1996

# Table 41. Stock and age of conventional medical equipment

(whose unit price exceeds 50 thousand forints)

5 621 1 421 2 122 4 106	12.5 10.6 11.7 13.4
1 421 2 122 4 106	10.6 11.7 13.4
2 122 4 106	11.7 13.4
4 106	13.4
	10.4
6 976	10.9
3 374	12.6
903	9.3
909	7.7
4 802	8.5
3 953	9.2
7 855	9.7
	903 909 4 802 3 953 7 855

Source: National Institute for Medical Technology.

underdeveloped. The reliance on private capital to finance the most expensive medical technology could have freed up public investment funds for maintaining the stock of conventional equipment and the provision of modern equipment to regions unattractive to private firms. However, this has not happened to a significant degree (Table 41) and MRI and other high technology equipment are very unevenly distributed, with Budapest arguably oversupplied and several regions without a single machine. Meanwhile, investment in conventional machines has been inadequate.<sup>66</sup>

# **Policy priorities**

The poor state of Hungarian health outcomes makes improvements in healthcare a national priority. Poor life expectancies cry out for government action, although it is not clear that the healthcare system *per se* is the most appropriate way to improve these outcomes, as general economic prospects and an unhealthy lifestyle probably play a determining role.<sup>67</sup> Since 1988 many reforms have been introduced (see Box 6), which have significantly changed the nature of the sector and improved the efficiency and quality of care (Orosz, Ellena and Jakos, 1998). They include: the adoption of a social insurance model; the introduction of mixed ownership and, to a limited extent, competition in service provision; the separation of the payment and supervision functions; the introduction of performance-related remuneration; the reinforcement of primary care, the reorganisation of professional supervision; and an increase in the autonomy of

# Box 6. A chronology of reform measures in health care

- **1987:** Experiment with HDG launched in 26 hospitals, National Health Promotion Program announced and Reform Secretariat set up
- **1989:** Private practice authorised
- **1990:** Switch from tax-based funding to compulsory insurance National Renewal Program includes section on healthcare reform Ownership of health facilities transferred to local governments Ministry of Social Affairs and Health renamed Ministry of Welfare New system of consensus management in hospitals introduced
- 1991: Establishment of National Public Health Service (responsibility for local hygiene stations transferred from local governments)
   Ministry of Welfare issues "Action Program" in June to supplement Government's National Renewal Program
- **1992:** Social insurance fund separated into a Pension Fund and a Health Insurance Fund

Parliament creates a category of "Public Employees", comprising personnel involved in service provision such as health and education, as distinct from "Civil Servants" comprising personnel in administrative positions, including staff of the Ministry of Welfare

Parliament eliminates universal entitlement to healthcare and defines conditions for eligibility

Family Physician Service is created and capitation-based payment introduced

**1993:** Voluntary "Mutual" Health Insurance (supplementary insurance operated by private non-profit institutions) authorised First election of members of Health Insurance Self-Government with employer and employee representation

Outpatient care remuneration based partly on a fee-for-service scheme, and hospital care remuneration on HDG-type scheme  $% \left( {{{\rm{A}}_{{\rm{B}}}} \right)$ 

- **1994:** The Act on the Hungarian Medical Chamber New National Health Promotion Strategy is adopted by the government
- **1995:** Hospital capacity reduction programme initiated
- **1996:** Act on norms of hospital capacity (capacity reduction)
- Government decree on minimum standard of healthcare facilities **1997:** Act on Health

Act on Services of Compulsory Health Insurance

**1998:** Abolition of the Health Insurance Self-government Creation of the Ministry of Health

institutional management. These reforms have gone a long way to creating a modern institutional structure and the basis for an efficient healthcare system. Nevertheless, problems remain and this section reviews several general areas in need of further attention.

# **Cost containment**

Cost containment, which is distinct from cost-cutting or efficiency improvement, refers to governments' efforts to restrict healthcare spending to predefined limits (WHO, 1997), has been the key stimulus for the healthcare reforms of the 1980s and 1990s in many OECD countries (OECD, 1994, 1995). Technological improvements, rising living standards and the low marginal cost for individuals of additional healthcare services tend to expand demand. In both private and public comprehensive insurance schemes, the absence of a price mechanism means that cost-containment must come from the supply side. In public systems government-defined spending limits represent the political expression of the aggregate demand for healthcare services.<sup>68</sup>

In Hungary prior to the transition, cost containment was achieved automatically within the context of the annual negotiations for resources in the plan. Initially, following the political reform, controlling expenditures was not an issue as policy makers saw the move towards a social insurance system as a means to increase the quality and quantity of resources going towards healthcare. Only more recently has cost containment been recognised as an important issue. The introduction of explicit and tightly controlled caps on outpatient and inpatient care plus the capitation-based payment system for GPs have proved very effective instruments and were the principal mechanisms by which costs were brought under control after 1994.

Spending on speciality services such as MRI and dialysis systems, which are not capped but remunerated on a fee-for-service basis, grew much more quickly due to a lack of effective control mechanisms. Their share in the HIFA's healthcare expenditures increased from 5 to 6.6 per cent between 1993 and 1997. Pharmaceutical subsidies are also not capped and their share in HIFA spending rose from 22 to 30 per cent between 1990 and 1997 or from 1.0 to 1.4 per cent of GDP. These increases would have been even larger if different pricing strategies and continuous changes to the subsidy system had not been applied, including a tripling of pharmaceutical co-payments from 0.2 to 0.6 per cent of GDP. These now represent about 30 per cent of total prescription expenditures (Table 42). Medications delivered by hospitals (worth 18.4 billion forints in 1996) are not included in the pharmaceutical subsidy but are paid for indirectly through the HDG and points systems.

Cost pressures on the healthcare system are likely to intensify in the future, although the economy's capacity to pay will also be improving. Several decades of neglect under communism and the necessity of increasing healthcare workers' salaries, upgrading existing technological infrastructure and demographic pressures will all place upward pressure on costs. Figure 20 attempts to shed some light on these pressures. Panel A illustrates the evolution of expected demand by age group assuming an 1.25 income elasticity of demand. It reflects

	Health Insurance Fund					Со-ра	ayments	Cost sharing rates		
	Sales	Budgeted	Actual	Balance	Balance	Health-card <sup>1</sup>	Private	Total	HIFA	Government <sup>2</sup>
		Billions o	of forints		Per cent	Billions	of forints	;		Per cent
1993	66.2	35.5	51.1	-15.6	-44.0		15.1	15.1	77.2	77.2
1994	83.9	50.7	60.9	-10.2	-20.1	2.5	20.5	23.0	72.6	75.6
1995	108.7	67.7	72.8	-5.1	-7.5	5.5	30.4	35.9	67.0	72.0
1996	130.5	72.0	86.2	-14.2	-19.7	6.8	37.5	44.3	66.1	71.3
1997	156.4	86.7	101.7	-15.0	-17.3	8.8	46.1	54.9	65.0	70.7

Table 42. Retail pharmaceutical spending and subsidies

The government pays the co-payments of low income of health-card holders.
 HIFA + government.

Source: Health Insurance Fund Administration.

demographic changes in the population, increasing demand from all groups which is offset (as a per cent of GDP) by productivity growth and higher levels of employment. While this graph clearly indicates that upward pressure from the demand side is unlikely to reverse itself in the future, Panel B shows that under a wide range of assumptions, the current quality gap between Hungarian and European healthcare systems is likely to be closed within the next 25 years. It shows the evolution of healthcare supply, assuming expenditures of 6.5 per cent of GDP, under four scenarios, based on assumptions of higher or lower long-term levels of employment and productivity growth. In all cases, Hungary catches up to current European levels of consumption within the next 25 years – suggesting that the while the need to restrain demand through cost containment will continue unabated, under a wide range of assumptions, the economy's capacity to pay will expand sufficiently rapidly so as to close relatively quickly the current European quality and quantity gap.

# Microeconomic inefficiencies

While the use of spending caps enabled costs to be more or less contained, a number of factors severely reduce the efficiency with which the limited resources available to healthcare are employed. A confused policy and administrative structure, weak supervision and policing of the payment system, fraudulent behaviour on the part of service providers and a number of awkward incentives constitute some of the most serious problems with the system.

# Policy and administrative problems

The process of policy formation and review is underdeveloped and plagued by inter-organisational conflict. Needs are not assessed at regular



### Figure 20. Projected healthcare demand and supply

Source: OECD; for assumptions see footnote in main text.

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intervals and there is no mechanism for prioritising the distribution of financial resources. Here, a significant part of the problem stems from the fragmentation of healthcare statistics; as noted, there is no integrated source of data and therefore no means of monitoring and comparing healthcare expenditures and provision across different systems<sup>69</sup> or regularly assessing the health of the population. Disenchantment with the healthcare system is widespread, and although healthcare is a perennial election issue, political and public interest in a policy debate is limited.<sup>70</sup> The politics of reform are considerably complicated by the immediacy of its perceived costs compared with the medium to long-term nature of its payoffs.

Many of the problems reflect a general tension between the desire to reduce the role of the central government, which, since the beginning of the transition, has been perceived as having starved the system (and the people) of funding levels consistent with good quality medical care, and the need to control supply and alleviate some of the worst distortions inherited from the previous system. The creation of the HIFA in 1994 separated the payment and provision functions of the healthcare system and at the same time the health insurance selfgovernment (HISG) was assigned the task of ensuring that insurance premia were not used by the government to fund non-health related activities. Unfortunately, the delineation of responsibilities and authority between the government and the HISG was never well defined and conflicts emerged almost immediately between the HISG, the HIFA and the Ministries of Finance and Welfare over both health policy and the financing of the system. Inevitably, the lack of clear responsibility led to policy paralysis. The confusion and lack of direction extended to the administration of the system because the HIFA was simultaneously: a subordinate body of the HISG; an institution answerable to the Ministry of Welfare on health policy and quality questions; and required to execute the budget issued by the Ministry of Finance. These problems were further complicated by pressures from various interest groups - not least that of doctors.

Although the Ministries of Welfare and Finance shared many common concerns, their underlying preoccupations were, naturally, quite different. The Ministry of Finance focused on keeping costs at sustainable levels, while the Ministry of Welfare's principal goal was to improve the quality of care. Meanwhile, the HISG tended to behave as if it were a representative of sectoral interests rather than a body responsible for the provision of cost-effective quality health care. In successive budget proposals, it asked for increases in its expenditures in excess of its own receipts and the economic capacity of the economy. In part, the conflict between the HIFA and the Ministry of Health (Welfare) derived from the separation of management and financial responsibility. Thus, the Ministry of Health set prices and supply but did not pay bills, while the HIFA paid bills but has only limited authority to offset costs. It is not able to refuse to contract with public providers, cannot dictate supply limits and cannot enter into performance contracts in an effort to improve the quality of services delivered. Further, as administrator of the healthcare system, the HIFA's execution of government decisions was unsatisfactory. It failed to develop contractual relations that clearly defined the responsibilities of providers and which controlled for the quality of services performed. There was little concrete progress to improve collection methods or control those healthcare costs under its control.<sup>71</sup> Expenditures were consistently over budget among the open-ended medical services – drug-subsidies, sick pay and disability pensions<sup>72</sup> – so that the HIFA was unable to balance its budget, despite the expenditure reducing effect of the spending caps.

Because of these operational and organisational difficulties, the process of policy reform has been relatively confrontational with many of the recent reforms having been imposed on the healthcare system by the Ministry of Finance – principally as cost-containment measures.

Organisational problems exist at the sub-national level as well (Orosz, 1997). As part of the overall political transformation, the system of public administration was greatly decentralised during the 1990s and the co-ordinating function of the county governments was eliminated. Local governments (both municipal and county) were given responsibility for the development of their own healthcare infrastructure and hospitals (among other state-owned assets) were transferred to them because national and regional mechanisms for co-ordination had been abolished. As a result, the significant duplication and excess capacities that developed under the communist regime have not been redressed. Financially, hospitals were exposed to an imbalance between the large catchment areas they were meant to serve and the often very small communities to which they belonged. A number of hospitals were unable to meet demands without generating large deficits. Part of the responsibility for these deficits lies with the local governments who, as owners, failed to exercise effective control over their hospitals and were unable to finance the deficits themselves but simultaneously refused to give up ownership and control. As a result, the central government has been placed in the position of bailing out the hospitals or letting them go bankrupt. Understandably, the former option was taken, but this has generated a serious moral hazard problem.

Reacting to the over-supply and duplication of services, the government (beginning in 1994) attempted to dictate the number of beds required in each hospital (Table 43). After meeting with widespread opposition, this programme was replaced by a somewhat more flexible approach in 1996, by which the government stipulated for each county maximum outpatient capacities and the maximum number of inpatient beds by speciality. The decision regarding which beds or hospitals to close was left to "consensus committees" in each county. This process led to the elimination of 6 300 acute-care beds (9 per cent of the acute hospital capacity) but, because few facilities were closed<sup>73</sup> and there was no

concomitant reduction in personnel, there were only limited financial savings.<sup>74</sup> Hospital cases actually rose by 9 per cent between 1993 and 1997 and, in acute care, the number of HDG points charged to the HIFA rose 17.4 per cent, reflecting a 30 per cent increase in the hospitalisation of individuals over 60 years of age.

Successive governments have acknowledged the need to improve public health and reduce the role of hospital-based care in Hungary. Nevertheless, little concrete action has been taken and prevention has played a decreasing role in overall healthcare spending. Public-health employees enjoy little prestige either professionally or within society at large: the National Health and Medical Officer Service is underfunded; government anti-tobacco and public-health campaigns are underdeveloped; tobacco taxes are relatively  $low^{75}$  and little emphasis has been placed on preventive health care.<sup>76</sup> In addition, the gate-keeping function, the mechanism by which access to expensive care is limited to patients most in need, is weak. Patients can and do visit hospital-based specialists directly when in many cases cheaper and even better care might be available at lower levels within the system. Until recently, there was no effective system to control excessive use of high-cost techniques, such as those employed by the many healthcare systems (including private ones), *i.e.* requiring referrals or prior authorisation for certain treatments, restricting the treatments covered or dictating which doctors may be seen.

The creation of the Family Physician Service sought to enhance the role of general practitioners as gate-keepers and expand the role of primary healthcare in the overall system. The initial reform envisaged expanding preventive medicine, programmes of education, and quality assurance. A programme of training was introduced to improve the skills of GPs, but its overall effectiveness

	T	D. J.	Beds per Bed		HDG points	HIF payments	
	Institutions	Beds	institutions	Per cent of total			
National institutes	12	5 422	452	6.5	5.4	7.3	
Medical universities	6	8 041	1 340	9.7	13.2	13.3	
Hospitals of Budapest <sup>1</sup>	22	13 936	633	16.7	15.6	16.0	
Regional hospitals	21	25 400	1 210	30.5	32.7	30.5	
City (local) hospitals	64	24 098	377	28.9	28.8	27.1	
Specialised hospitals	16	3 471	217	4.2	2.3	2.9	
Sanatoria	6	1 338	223	1.6	0.2	1.0	
Children's hospitals	8	1 549	194	1.9	1.8	2.0	
Total	155	83 255	537	100.0	100.0	100.0	

Table 43. Hospital size and revenue by type

1. Excluding universities and national institutes.

Source: OECD calculations based on Ministry of Health data.

was limited in part because older doctor's (who represent a large proportion of GPs<sup>77</sup>) did not participate. In the event, doctors' practices have not changed much and the principal achievement of the reform was limited to the "functional privatisation" of the GPs practice and the introduction of the capitation system. GPs continue to offer mainly prescription and referral services and exercise only a weak gate-keeping function. Inertia doubtless explains part of their failure to play a more active role, but neither do they have any economic incentive to alter or expand the range of services they provide.<sup>78</sup>

Overall, the system remains hospital centric and, despite the reforms, the rate of hospitalisation has increased and the share of primary care in healthcare resources has decreased. As the medical techniques employed for a given illness, the intensity of services, and the quantity of their utilisation are heavily influenced by the number, structure and qualification of doctors – this orientation has substantial implications. The concentration and compartmentalisation of resources in the hospital sector has contributed to the underdevelopment and underfunding of primary-care services, nursing homes and preventive medicine. Meanwhile, any market-driven trend towards these kinds of care is effectively stopped by the lack of flexibility in the distribution of the healthcare budget. In aggregate, the medical profession cannot reallocate financial resources between the primary, chronic, outpatient and inpatient systems because the sub-budgets for each of these systems is fixed in the national budget. Worse, the funding proportions are based on historical spending patterns rather than medium to long-term analysis of healthcare needs.

# Ineffective supervision

In part because of the sharing of responsibility for healthcare administration between the HISG, the HIFA and the Ministry of Welfare, the supervision and administration of the system has been neglected with the result that widespread fraud has become endemic. The pre-existing bias towards hospital-based treatment by specialists has been exacerbated both by financial incentives and by a human resources policy that would appear to have substituted low wages for restructuring, with the unfortunate effect of magnifying the tendency towards, and the associated distortions arising from, the gratitude system. As a result patients are treated at a higher (and more expensive) level of the healthcare system than required and services such as targeted screening, health education, and rehabilitation are underdeveloped, while institutions (nursing homes, home care) primarily caring for the elderly are almost entirely missing.

The excessive tendency for hospitals to treat patients on an inpatient basis appears to reflect economic rather than medical motivations. The fee paid for the treatment of a given problem on an inpatient basis is higher than on an outpatient basis, correctly reflecting the lower costs of the latter.<sup>79</sup> Normally if the

marginal return incorporated into the fees were the same, hospitals would be indifferent between the two treatment methods. In reality, however, hospitals prefer the former because of their high fixed costs, which the inpatient fees cover better. These higher costs in turn derive principally from excessive staffing levels. The problem lies not with the financing method but rather the hospital cost structures. By increasing the variable portion of its costs and reducing its fixed costs, outpatient care would become a more attractive option for the hospitals. Here, the regulations of the Act on Public Employees, which governs hospitals' relations with its salaried staff pose a serious problem.

### Inappropriate incentives

The problem is further complicated because the capitation, HDG and points-based payments of the HIF do not cover depreciation costs. Funding for this – and other capital costs – are the responsibility of hospital owners (local governments) and are subsidised on an *ad hoc* basis from the central budget. As a result, health institutions have no financial incentive to use their equipment rationally. Medical decisions are unduly influenced by the availability of equipment , while investment choices are subject to political and budgetary pressures that are greatly removed from medical and economic considerations. Examples of substantially over-used equipment often coexist with dramatic under-use within the same institution. Investment decisions follow neither a logic consistent with public policy (equal access to service provision) nor one that guarantees a rational allocation of resources across competing needs. While economically irrelevant for an individual hospital, superfluous and under-used investment capacities draw resources away from other areas where they could help to contribute to improving service provision and cost-effectiveness.<sup>80</sup>

The legal status of hospitals as "budgetary institutions" has two important implications in this regard. Perhaps most importantly, this status means that hospital staff – and in particular specialists – are civil servants and are, therefore, subject to relatively stringent job protection legislation making it very difficult to adjust staffing levels (see OECD, 1997). In addition, this status means that hospitals are obliged to use an inappropriate accounting system incapable of performing cost analysis. While most hospitals operate parallel systems and calculate the depreciation of their assets, no reserves are built up to finance future capital purchases. The budgetary status also restricts the autonomy and responsibility of hospital managers. Decisions on investments and capacity reductions are made by the local assembly and the hospitals are not allowed to borrow.

Within the hospital sector, the budgetary cost of the oversupply of doctors and the apparent feathering of hospital staff with functionally retired doctors has been offset somewhat by the fall in doctors' salaries, itself an indirect result of the strict capping of HDG and points-based payments. However, the budgetary and health cost of the undersupply of nurses and other healthcare workers should not be under-estimated. The relative undersupply of physiotherapists, chroniccare facilities (such as nursing homes) and home-care nursing programmes reflects the oversupply of specialists and their institutional attachment to hospitals and inpatient treatment. At the same time, it leads to the perverse situation where doctors are performing duties normally fulfilled by nurses. Not only would greater use of nurses and other healthcare professionals reduce costs in many respects, it might well improve outcomes – especially for the quality of life of long-term care patients. As the low salaries are accompanied with an excess supply of specialists and a shortage of other lower-paid healthcare professionals, the obvious solution would be to reduce the supply of the former and use the savings to raise the wages of the latter and hire more nurses. While such a "solution" appears simple, its implementation would be difficult and could only be achieved over a period of several years.

The low earnings of salaried health personnel need to be distinguished from their incomes which, in the case of some specialists, can be very high because of gratitude money. These illegal payments are a serious problem for the rational reform of the healthcare system. For some groups of influential doctors they represent a substantial undeclared – and therefore untaxed – portion of total income which makes them resistant to some kinds of reform. In addition, gratitude payments are said to influence treatment choice as patients tend to make larger payments for riskier interventions such as surgery. More importantly, they are increasingly transforming the health-case system into one, where the quality of care and waiting periods experienced may depend upon a patient's ability to provide gratitude money. In addition, indirect payments from medical equipment suppliers may also be playing a distortionary role.

Over-reporting of the seriousness of diagnoses and superfluous service provision have greatly inflated the apparent quantity of services provided while at the same time some individuals are denied access. The failure of the HIFA to adequately police the payment system manifested itself in a substantial inflation in HDG units and points claimed by hospitals and outpatient clinics. Thus although the population is declining, since 1994 the number of outpatient cases has risen 38 per cent and that of inpatient cases by 10 per cent (Table 44). While these increases do not reflect a deterioration of the population's health, virtually no effort was extended by the HIFA to verify or refuse payment of dubious claims. Although prior to 1998 they had no financial impact – because of the caps – to the extent that the additional charges actually represent additional treatments, they likely do contribute to an increase in overall costs. In this regard, the trend towards higher HDG billing continued in 1998 when the cap was lifted. By August, HDG unit claims had increased by 10 per cent and the supplementary reserve for the whole year was already exhausted. Although the law requires revision of the

	1992	1993	1994	1995	1996	1997
Outpatient						
Cases per 100 inhabitants			539	583	655	745
Billed acts per 100 inhabitants			1 759	2 118	2 551	2 943
Payments per case $(1994 = 100)$			100	96	82	72
Inpatient						
Cases per 100 inhabitants	22.0	22.1	22.6	23.3	24.2	24.4
Cases per bed	23.1	22.7	23.6	25.8	26.5	29.5
Payments per case $(1994 = 100)$		94	100	90	80	78
Source: Health Insurance Fund Administr	ration.					

Table 44. Inpatient and outpatient activities and billings

prospective fee in such circumstances, it has not been done and the HDG system will likely generate a substantial deficit in 1998.

Administration of the pharmaceutical system has also failed to sufficiently emphasise cost consciousness. In Hungary, as in most OECD countries, the system seeks to make available high quality pharmaceutical products while maintaining the overall affordability of the system. Affordability is supposed to be ensured by basing reimbursement levels on the price of the lowest-cost equivalent.<sup>81</sup> In practice, the influence of generic drugs on the level of subsidy is limited by the requirement that the low-cost drug has been continuously available for eight to twelve months previously and that its share in the market of drugs containing identical agents has reached 5 per cent. Competition has served to reduce the price differences between generics and brand name drugs but pharmacists are not obliged to substitute generics, although they may do so unless explicitly prohibited by the prescribing physician.

Further, it appears that health-cards, which entitle individuals on social insurance to free drugs, are being abused. The cards are distributed by local governments and guarantee payment of the co-payment of drug purchases by the central government. The fact that the distributors of the cards and the regulators of their use, local governments, have no financial incentive to minimise associated costs, may explain why they represent 16 per cent of all pharmaceutical spending.<sup>82</sup> Although such evidence supports the disproportionate consumption of drugs by cardholders,<sup>83</sup> no study has attempted to compare the actual needs of this population group with their drug consumption although the HIFA does have a county-based monitoring system that is supposed to control for health-card abuse. More general controls on the prescription system have yet to be put in place, although implementation efforts have been underway for several years (see below).

# **Reform of the system**

# **Recent policy steps**

Recent reforms have reinforced the role of the GP as gatekeepers. Decrees issued in December 1997 place some limitations on the specialised services that an individual can access without referral but a wide range of services remains generally available.<sup>84</sup> Access to hospital care can be gained following referral by a specialist or family physician, while only specialists can order MRI, CT and Digital Substraction Angiography (DSA) scans and only those working in hospitals can prescribe positron emission tomography (PET) examinations. Since January 1998 co-payments are required if patients normally requiring referral consult directly a specialist or if they deal with a specialist other than the one to which they were referred. In such cases, service providers bill patients directly and the latter must pay with a postal-order. The government decree defines some basic fees but allows the providers (outpatient clinics, hospitals) to reduce or even waive fees. If the patient does not pay the bill, the institution is responsible for collecting the money. There is no information as to how these provisions work in practice.

So far, the government has not put forward a long-term strategy for the funding of the HIF. In the autumn of 1998, it transferred the premium collection role of the HIF to the tax office in an effort to improve collection efficiency and allow the HIFA's staff to concentrate on their main responsibilities (half of the HIFA's staff and much of the top management's intellectual energy has been concerned with revenue collection). Finally, the Ministry of Finance has explored the possibility of managed care cost-control techniques, of extending the use of co-payments, encouraging voluntary insurance and even the possibility of abolishing the HIF's monopoly position in favour of a multi-pillar financing system.

# Scope for further action

The necessity of pursuing the reform effort in the healthcare system is apparent. Successive governments have introduced a wide range of measures, which have contributed to a significant improvement in the allocation of resources within the system. In particular, the introduction of the HDG and points based systems were significant achievements. Nevertheless, as indicated in the previous section, there remain a large number of distortions and inefficiencies that need to be addressed. Although problems exist at all levels within the system, reform should proceed in an evolutionary manner with priority being given to measures that improve the allocation of resources and which emphasise outcomeoriented changes to the service-delivery system.

Perhaps the most critical key to improving the health status of Hungarians will be efforts to influence their own behaviour and to increase the extent to which they take responsibility for their own health by choosing healthier life styles. While the government cannot dictate people's attitude towards their own health, it can attempt to modify behaviour by using economic incentives – such as dissuasive taxes on products and activities known to contribute to poorer health – and also through concerted programmes of health promotion. Here television advertising, educational programmes aimed at the whole family but directed explicitly towards children and programmes of sensitisation delivered by general practitioners can have an important effect. To help in this regard the presently fragmented health promotion activities and agencies should be integrated. Furthermore, a more flexible and holistic approach to healthcare is required, necessarily implying less emphasis on hospital-based care, and a much greater use of outpatient care, nursing homes, occupational and medical rehabilitation and other services for the chronically ill. The government's decision to include a specific budget line for homecare in the 1999 budget, is an important step in the right direction. At the same time proposals to introduce an additional performance-based payment to the GP financing system could, if enacted, help to boost the role of primary care.

The recent history of healthcare in Hungary has suffered from conflicts between different agencies and care-giver interest groups. A major challenge will be to introduce reforms in a way that reduces these tensions and increases cooperation among agencies. While it is difficult to indicate precisely how to do so, it is clear that a programme of consultation and integration of stakeholders in the reform process is a necessary starting point. The decision by the Prime Minister's Office to create a health policy task force including representatives from his office, the Ministries of Health and Finance as well as the HIFA should help as will interministerial working-level committees.

Notwithstanding the need to promote better co-operation, the abolition of the Health Insurance Self Government was a positive step and should be followed up by a decision to subordinate the National Health Insurance Fund Administration (HIFA) to the Ministry of Health. While the HIFA has been justifiably criticised in the past for its failure to aggressively pursue cost containment and implement the policies of the government, at least some of the responsibility for these failures lay with its confused governance structure. There is no reason to expect that in the future it will not efficiently perform its function as purchaser and administrator of the health system, although, to do so, its relationship with the Ministry of Health needs to be clearly defined and an unambiguous set of goals, with appropriate incentives imposed. Here, increased use of performancebased and goal-oriented pay for managers and more use of specific-task employment contracts could help realign the private objectives of its employees with those of society at large. As yet, however, this relationship and these responsibilities have not been defined.

As indicated in Chapter III and the *1997 OECD Economic Survey of Hungary*, the system's reliance on a payroll tax (under the guise of a compulsory insurance

premium) for its financing unnecessarily raises labour costs, contributes to nonemployment and the underground economy and raises the spectre of large portions of the population being uncovered. The recent government decision to reduce employer contributions, while broadening the base upon which the tax is calculated and raising the obligatory payment should reduce some of the disincentive effects. However, the increasing reliance on the compulsory health insurance contribution makes the system even more digressive to the detriment of low-skill workers. A less distortionary response would explicitly acknowledge that some 50 per cent of the working-age population does not work and would, therefore, widen the tax base to include all forms of personal income. Such a regime would have the additional advantage of allowing for lower tax rates, while the link in the minds of tax payers between the costs of healthcare and their contributions could be preserved by maintaining the earmarked nature of the tax and using a separate line on the tax form. The decision to transfer collection responsibilities from the HIFA to the Tax Authority is welcome in this regard. It will allow the HIFA to concentrate upon its much neglected supervisory and administrative roles, while the consolidation of these tax collection functions should help reduce evasion.

There does not appear to be any need to introduce a more complicated payment system than already exists. International experience suggests that for a country such as Hungary the advantages of a single purchaser outweigh its disadvantages. A single purchaser can use its monopsonistic power to monitor closely service provision and, based on comparisons, pressure caregivers into following best and low-cost practices. While some countries do operate healthcare systems relying principally on multiple insurance funds (private or public), these systems tend to compete for good risks and generate a great deal of additional administrative costs without substantial additional savings from the competition between purchasers. There is, however, considerable scope for increasing the capacity of the HIFA to influence the quality of care that it purchases. Here, the ability to enter into selective (the right to refuse to contract with some suppliers) and performance contracts could introduce a significant element of competition among service providers. Finally, as the Hungarian scheme already allows for supplementary insurance, cost savings within the public system and increased competition could be introduced by the adoption of an explicit minimum healthcare package and expanding the currently very narrow range of services not covered by the universal regime. In this regard and as has been done in other OECD countries, there may be scope for improving the effectiveness of spending by favouring procedures and medical services that have been proven to have an above-average payoff in terms of improved health status and quality of life.

By the same token, despite the micro-level distortions that it has generated, the overall budgetary cap and basic payment schemes should not be abandoned. Alternative remuneration systems, such as global budgets for individual hospitals, provide even fewer incentives to improve efficiency and quality. Rather, the government should allow for substitutability between payment systems by providing an equivalence scale between capitation points, HDG performance units, outpatient points and chronic-care points and then capping the total budget. Hospitals would then be free to choose (from any of the systems) the treatment that was most economically and medically effective. Further, they would have a private incentive to close down excess and high cost treatment systems. The possibility that the hospitals in certain regions attract a disproportionate share of resources could be avoided, if the envelope, from which the combined services were funded was first divided on a regional basis using a demographically-weighted capitation scheme. To the extent current imbalances are judged to be inappropriate, special investment funds could be used to speed the rate at which have-not regions are able to catch up to Budapest. Special provisions could be made for the National Institutes and for those patients who seek treatment outside of their region as they are in the United Kingdom, while the system would still be centrally managed by the HIFA. Such a reform would have the additional advantage of increasing the proximity of the purchaser and provider, thereby raising the former's ability to evaluate and influence the activities of the latter. Ideally these regions (which need not correspond to current or past political and administrative areas) should be relatively small and geographically contiguous.

The various payments systems should be revised to include depreciation costs, but this reform must be coupled with the requirement that hospitals place these additional payments into capital funds, from which they would make future equipment purchases. Including the depreciation costs would realign incentives between treatment choices with different capital intensities, while the creation of a capital purchase fund would transfer responsibility for deciding on what equipment a hospital requires to those best able to judge, the hospital's doctors and administrators. Over time, it should ensure that hospitals rationalise the distribution of their capital equipment. Under this scheme, a hospital with more x-ray machines than it requires, need not replace all of them and could use some of the depreciation money to purchase ultrasound machines or some other equipment that is in short supply.

In this regard, a number of OECD countries have improved both the quality and efficiency of healthcare delivery by providing hospital administrators greater freedom to manage their institutions and to take advantage of their generally high level of training and expertise. In the case of Hungary, such a change could be accomplished by changing the legal status of hospitals to that of public-utility companies. This would increase the autonomy of hospital managers and reduce the current tendency for political interference in investment decisions. In addition, it would allow them to adopt a more accurate and meaningful accounting system, promoting the more efficient use of resources. This change in

legal status of the hospitals would imply that hospital employees would no longer be civil servants and therefore provide more flexibility to administrators in managing their labour force. Here the need to increase the wages of hospital workers can be used to smooth the reform process. Except for a small sub-set of managers/specialists, funding for specialists working independently of the hospital system should be increased more rapidly than funding for those who remain hospital employees. The salarial portion of current HDG points could be made explicit and would be paid to the hospital or the physicians directly depending on whether or not the practitioner was a salaried employee. Currently, the gatekeeper function of the GPs is under-developed. In this regard, the recentlyimproved requirement that referrals be required prior to visits to specialists in some instances represents a step in the right direction. However, the list of exempted specialities needs to be reduced and the penalties for non-compliance need to be stiffened. A move to complement capitation payments with an activity based system could help provide GPs with the economic incentive to provide more comprehensive primary care.

At the same time, in order to hasten the re-establishment of an equilibrium in the supply and demand for healthcare professionals, admissions to medical schools should be dramatically reduced in line with the calculations of the Ministry of Welfare (1995). In addition, doctors working as salaried civil servants should be required to retire from those posts when they reach the legal retirement age, although they should be allowed to continue to work in private practice for as long as they are competent to do so.

The introduction of depreciation payments and the integration of the three separate funding baskets must be accompanied by a much stricter system of accountability – legal, professional and medical. If the reform is to successfully eliminate distortions by decentralising decision-making responsibility, then it must be possible to hold those making the decisions accountable for them. In this regard, the government's decision to crack down on the currently widespread practice of fraudulently over-billing for services provided should be reinforced. But more needs to be done. In practical terms, a system of monitoring needs to be established along with systematic and random audits. The Ministry of Health should set norms for the incidence of HDG and outpatient procedures – using internationally available data – and hospitals or clinics that exceed these should be subject to audit and be required to prove that the anomaly was medically justified or face legal penalties. The HIFA, as the administrator of the system, should have the right to decide on the foundation of these claims subject to appeal to the courts.

Over the longer term the government should consider eliminating the points-based system which is procedure-based and includes a natural bias towards over treatment (supplier induced demand). The government has been experimenting with an "Ambulatory Visit Group" (AVG) system similar in conception to the HDG. Such a system would be preferable to the current one but may take some time to develop. Alternatively it might be possible to move towards a more integrated healthcare system that would provide for a more active role for the general practitioner as gatekeeper. Several innovative systems are operating in different OECD countries which could, possibly, be adapted to the Hungarian context, perhaps after some initial small-scale or regional experiments. In general, efforts should be made to increase the flexibility of the system – which to date retains a number of excessively bureaucratic and command and control elements.

The conditions and rules governing the ownership, location and operation of pharmacies should be relaxed as they serve no apparent economic or medical purpose but constrain competition and could promote corruption as entrepreneurs compete for the right to operate a pharmacy at a lucrative location. The pricing system of pharmaceuticals is excessively rigid and should be relaxed, but not until competition within the distribution system is introduced. Stricter controls on the use of the 100 per cent Health Card need to be instituted and the computer system of the HIFA should be used to identify those who are apparently over using their cards and the doctors (if any) that are over prescribing to these people. Efforts are needed to develop guidelines for the cost-effective use of drugs and to rationalise physician prescription habits and patient demands. Consideration should be given to scrutinising more closely the basis upon which, in practice, fixed pharmaceutical subsidies are decided - with an eye to favouring the use of low-cost drugs. Finally, if cost savings are a large priority, the government might consider reducing the rates of subsidy provided on drugs or even eliminating drug subsidies for young and middle-aged adults. Currently, subsidy rates are higher than the European average.

The new government has indicated its desire to focus efforts on reforming the healthcare system. Many of its proposals and intentions are consistent with the recommendations of this chapter. In particular, it is committed to preserving universal access to healthcare and to maintaining the system's reliance on the solidarity principal for its financing. The government also intends to keep the single purchaser system but will be investigating the possible benefits of introducing a regional component to the scheme. At the same time, it would like to enhance provider competition and, in this regard, will attempt to strengthen the purchasing capacity of the HIFA. It, in addition, hopes to further refine the payment system in order to shift incentives from hospital- to ambulatory-based care. Finally, in order to improve the capacity of GPs to provide definitive care and to enhance their role as gatekeepers, the government intends to continue GP training programmes while it is considering adding a productivity-based payment system to the current capitation scheme. It has also expressed the intention to expand home- and chronic-care capacities in order to free up resources in acutecare facilities.

# Notes

- 1. Employment figures are on an internationally comparable basis and have been adjusted by the Central Statistical Office (CSO) to exclude people on child-care leave. Therefore, such figures and the unemployment rate differ somewhat from those normally published by the CSO.
- 2. The vast majority of exports, 83 per cent, flow to other OECD countries.
- 3. For more information on the goals of the NBH and its relationship with the government see the 1997 Economic Survey of Hungary.
- 4. The reverse repo is a standing deposit facility of the central bank that is issued with maturities of one day and one month.
- 5. GDP fell by some 4 per cent over this period.
- 6. In the Hungarian system of government accounts the increase was 2 per cent of GDP because it includes the capital transfers that accompanied the bailout above the line. In contrast, the National Accounts and international accounting practice place such transactions below the line.
- 7. Thus, any sick leave less than fifteen days now requires no additional notice period, while in cases of sick leave in excess of that length additional notice must be given up to a maximum of 30 days. Other changes have also been made to ensure that legislation in this area conforms to EU norms. For example, changes have been made to legislation concerning the rights of workers and trade union officials when enterprises change ownership, and setting the lowest age for employment at 15.
- 8. All individuals are eligible for a 25 per cent tax credit on their pension contributions.
- 9. Wage guidelines are usually set by the *Interest Reconciliation Council* (IRC), which is a tripartite body consisting of workers', employers' and government representatives.
- 10. Ratio of the gross earnings of individuals on the border between the tenth and ninth decile to those in the first decile, the so-called D9/D1 ratio. Differentials would be lower on net earnings given progressive income taxation.
- 11. Evidence presented in the 1997 *Employment Outlook* indicate that among OECD countries, Hungary ranks at the lower end of its minimum wage relative to median full-time earnings, and about in the middle with respect to earnings dispersion.
- 12. There are several types of benefits: a regular disability allowance; a temporary allowance for people expected to reach retirement age within five years and a regular social allowance for people who have lost 50 per cent of their work ability; an invalidity benefit for people aged 25 or less; and a benefit for the severely disabled.
- 13. The authorities hope that small firms may meet the quota by hiring among the group that has the least diminished work ability. However, they will be competing for them against larger firms with better resources and ability to pay.

- 14. People in receipt of temporary disability benefits are reassessed once a year. However, this rarely leads to individuals being certified as ready for work, rather the tendency is for them to be recertified – albeit sometimes at a different level of disability.
- 15. Decreasing returns set in because the quality of training declines and tends to become less targetted.
- 16. The ten study areas are: mother tongue and literature; a modern foreign language; mathematics; man and society; man and nature; earth and environment, arts; music and drama; information science; life management and practical studies; and physical education and sports.
- 17. Hungary has three different types of vocational schools, including the four-year secondary vocational schools, three-year vocational training schools, which provide apprenticeship training, and two-year schools for people with disabilities or other disadvantages, which lead to vocational school certificates.
- 18. Voluntary pension funds have existed in Hungary since December 1993. There are currently 245 organisations with nearly 900 000 members.
- 19. The original reform sought to limit the number of individuals opting for the new plan in order to keep the PAYG system's deficit to less than 2 per cent of GDP, an amount considered manageable by the authorities (see OECD, 1997).
- 20. The reform envisaged that participants place their contributions with one of a number of private pension funds, which must pass through a two-stage process to get an operating license. In the first, they can collect membership fees for 180 days and prove that they are viable, which implies at least 2 000 members. In the second stage, funds are granted an operating license, but in cases where the license is refused, or not desired, a member can opt to have any savings transferred either directly to another fund, or temporarily to the State Pension Guarantee Fund to which all funds are required to pay 0.4 per cent of their revenues.
- 21. Data on the share of local suppliers was taken from Nepszava (Hungarian daily), 24 January 1998.
- 22. A similar adjustment factor is used in the United Kingdom in the electricity sector, but efficiency gains in this sector would be expected to be lower than in the telecoms sector. Furthermore, when set low, the possibility that new owners can extract large monopoly rents increases.
- 23. Loan classifications are based on international standards. Credit institutions report their portfolio quality to the State Banking and Capital Market Supervisory Board every three months.
- 24. Other factors are, of course, important in the narrowing of spreads, including the decline in inflation and a more stable economic climate.
- 25. Such networks have tripled since 1995. Horváth and Zsámboki (1998) note that it is more common for foreign entrants to buy branch networks than go through the costly process of setting up networks.
- 26. The Realbank is a small bank that ran into financial difficulties in September, 1998. It apparently had a complicated ownership structure that hid the extent of its problems from regulators. An on-site examination revealed that its losses far outweighed its capital. This required the National Deposit Insurance Fund, in agreement with shareholders, to take a majority stake in the bank, which it expects to sell off once the bank has been stabilised.

- 27. The Ministry of Finance ultimately has control over whether banks should be shut. If it decides that shutting down a bank would be costly to taxpayers, it can override the decision of the APTF but, in such a case, it must inject a sufficient amount of capital to meet standards set by the regulatory body. In addition, the National Deposit Insurance Fund (NDF), which insures bank deposits, has a mandate to take the least costly option of closing down a bank. For example, it could decide that an injection of capital would be more cost-effective than paying off depositors. This was the situation recently taken with the Realbank. Since it's goal is not to intervene in the management of the bank, NDF plans to sell off its share when conditions warrant. In both cases, therefore, a recommendation made by the supervisory body can be overturned, but, in each case, a necessary injection of capital would have to be made.
- 28. In 1996, the State Banking Supervisory Board investigated 16 banks and 162 savings co-operatives. In 1997, the APTF investigated 24 credit institutions, 138 savings co-operatives and 29 investment companies and commodities exchange members.
- 29. The Budapest Stock Exchange also has a role to play, having some regulatory authority over members, but it's investigative capacity is limited and the main regulatory body remains the APTF. Severe difficulties in one area, for example brokerages, however, could dominate activities of the APTF, taking time away from routine regulatory work, which implicitly relaxes overall supervision in the sector.
- 30. All countries will be grouped into risk categories. The first risk category is for countries where risk is deemed to be small and therefore no reserves have to be set aside. In the next, 10 per cent of the value of loans will have to be set aside when less than 75 per cent of the capital base, and 20 per cent for any amount above this limit. In the third risk category, the amounts are 15 per cent up to 50 per cent of capital and 25 per cent above this limit. And in the highest risk category, a bank would have to set aside 20 per cent for loans under 20 per cent of the capital base and 30 per cent for any loans above this value.
- 31. Each licensing stage lasts three months, and prospective entrants can apply for both licenses concurrently.
- 32. In general, off-balance sheet items do not necessarily generate additional risk since they are often used to offset risks associated with balance sheet items.
- 33. Occupational healthcare and some part of dental care for those aged 18-60 were excluded from compulsory insurance in 1995.
- 34. The HISG, which was abolished in July 1998, was an independent partially-elected body to which parliament had delegated responsibility for managing the Health Insurance Fund. In 1993 and 1994, it actually submitted a separate budget to the parliament which was obliged to choose between this proposal and that of the Ministry of Finance.
- 35. There is no explicit cap on the capitation system but the size of the population effectively fixes the total amount.
- 36. The adjustment is imposed if a doctor's practice earns more than 2 400 points. Patients of different ages have different points associated with them, such that a child 0-4 years old represents 4.5 points, one 5-14 years old earns 2.5, individuals 15-34 years old generate 1.0 point, 35-60 year olds are worth 1.5 points and individuals over 60 years of age 2.5.
- 37. The 64 local hospitals provide general internal medicine, general surgery, obstetrical and gynaecological services as well as, to a more limited extent, neurological, psychiatric, urological, opthomological and ear-nose-and-throat services. On average, they

have 377 beds. County hospitals (on average 1 210 beds) provide a wider-range of diagnostic and therapeutic services (besides the traditional specialities, cardiology, haematology and immunology, metabolism and endocrinology, gastroenterology, nephrology, dialysis, and perinatal intensive care, *etc.*). Some local hospitals with large catchment areas provide a similar range of services. University hospitals and national institutes and clinics represent centres of excellence for the various specialities as well as serving as supra-regional hospitals for some forms of illness.

- 38. About 100 local governments own a hospital, but not every hospital receives capital funds each year. Support from the state budget is given only for larger investments, following application. Every two years a law is passed for targeted or "earmarked" investment projects of local governments including healthcare.
- **39**. The main diagnosis and intervention, plus their combination with other acts of the same nature determine classification within the main HDG categories. The length of stay is also taken account in determining the payment.
- 40. In 1993, the value of a HDG unit ranged from 14 000 to 60 000 forints and in exceptional cases went as high as 100 000 forints.
- 41. These figures include non-healthcare expenditures of the HIFA, such as sick leave, maternity payments and disability benefits.
- 42. Accumulated arrears represented 19 per cent of annual revenues in 1996.
- 43. These payments were never adequate to cover the likely health costs of these individuals, even assuming that they generated only average costs.
- 44. In line with the ECC Directive 89/105 concerning the transparency of drug reimbursement policies, the principles of the Hungarian system were published in the Welfare Gazette in 1996.
- 45. A "health-card" is distributed by the local governments under the social assistance system and should be distinguished from the "insurance card" given to all insured individuals.
- 46. Public pharmacies must serve at least 5 000 inhabitants and may not be closer than 250 metres from another pharmacy (in cities) and 300 metres in towns.
- 47. The increase reflected improvements in female life-expectancy only; the life-expectancy of males fell by 1.5 years.
- 48. Across countries, life expectancy increases with income up to a certain threshold, after which more equal distributions of income are associated with higher life expectancies. In central and eastern Europe infant death rates are well correlated with income levels, but adult death rates are more closely related to the distribution of income (Preker and Feachem, 1995 and Bobak and Marmot, 1996, p. 423).
- 49. Despite the evident attractiveness of the hypothesis, there is no evidence that declining life expectancies are associated with the economic transition or even the extent of economic disruption undergone. Preker *et al.*, (1996) show that, although "average life expectancy at birth for males declined markedly between 1989 and 1993 in Hungary, Bulgaria, Russia and Ukraine" and that of women stagnated, declines were "not universal during the early transition contrary to what is frequently assumed and the magnitude of changes is apparently not associated with the extent of overall socioeconomic decline. Albania, Romania and Slovenia saw little change in male life expectancy, while Czech Republic, Poland and Slovakia have seen a modest improvement. All of these countries with the exception of Czech Republic have suffered greater declines in real income during the transition than has Hungary".

- 50. Saltzman and Figueras (1997), p. 20.
- 51. Average consumption of fat exceeds the recommended maximum by more than 30 per cent and that of sugars by more than 60 per cent.
- 52. Regression analysis indicates that spending of 5.7 per cent of GDP would be 'normal" given Hungary's present income level.
- 53. World Bank data reported in NERA (1998) estimate these expenditures to have been 0.6 per cent of GDP in 1996 or about 10 per cent of the total for that year.
- 54. Private insurance expenditures (not included in Table 30) are estimated to equal 650 billion forints (500 to voluntary mutual funds and 150 million to private insurers).
- 55. Data reported in NERA (1998) indicate that Hungarians consume 82 per cent of the defined daily dose as compared with 100 per cent in Sweden, 90 per cent in the Czech Republic and 83 per cent in Norway.
- 56. Since 1980, the increase is even more stark, with a 28 per cent increase in healthsector employment, comprised of a 44 per cent increase in physicians, a 50 per cent increase in specialists and a 30 per cent increase in nurses.
- 57. See Chapter IV of the 1997 Economic Survey of Hungary.
- 58. Ministry of Welfare (1995) in its so-called "Yellow book" indicates that if retirement at age 60 were strictly enforced and graduates held to 600 a year it would be possible to bring the physician per 1 000 ratio down to the European average of 2.6 by the year 2015.
- 59. Since 1994, the educational programme of nurses has been reoriented and the level of training upgraded to reflect the new needs of the health sector and european standards. The Ministry of Health is responsible for the training of practical nurses and nurse's aides and the Ministry of Education is for registered nurses. The principal priorities of the Ministry of Health have been to standardise the legal and professional criteria for nurses and simultaneously to increase the educational level of existing staff and expand training capacity. As much of a professional nurse's training occurs outside of the classroom and differs according to specialisation, enrolments tend to be continuous and to follow medical requirements. As a result, the teaching hospitals (and the local governments that own them) bear a significant responsibility in determining supply.
- 60. The case of Pest county is special as Budapest provides hospital care for the majority of population living there. Baranya, Csongrád and Hajdu counties have medical universities which provide regional-level care for neighbouring counties.
- 61. Needs were estimated using the SANA-formula, currently used by the British healthcare system.
- 62. The regional division is identical to the division used for the planned Regional Health Care Councils in 1994. On the figure the individual regions are denoted by the regional centres.
- 63. Expenditures consumed by the population are calculated as the sums paid by NHIF for the services used by the permanent residents of the region (whether or not those services were used in the given region or outside the region).
- 64. Difference between the consumption of residents of Budapest and that of the unweighted average of residents from other regions.

- 65. In 1990 Hungary had 0.1 MRI per 1 000 people, one-eighth of the OECD average as compared with 1.5 per 1 000 in 1996 or one-third the OECD average and 50 per cent of the average excluding the United States.
- 66. In 1998, the Ministry of Health launched a national campaign to upgrade the stock of x-ray machines, spending 18 billion forints by the end of 2000.
- 67. The statistics on healthcare outcomes probably underestimate the important positive role that healthcare plays in improving the quality of life of ill people, by limiting the deterioration of their health and by minimising the limitations placed on their every-day activities both at work and at home.
- 68. In private healthcare systems, the insurer's rules are often the only objective constraint on demand. Moral hazard means that in both private and public systems an insured individual has no private motivation to restrain his insured spending. At the societal level, the cost of insurance serves as an economic limitation, but one which in public systems is channelled through the political framework and emerges as various forms of supply restraint.
- 69. There are no comprehensive and systematic statistics available as to what percentage of GDP is devoted to healthcare (the data provided here are OECD calculations). The Health Insurance Institute only registers data concerning its own expenditures. The reports by the institutions, containing data on the amount of funds received from the local governments, are collected by the Information Service of the Tax Office. These data are not processed. The regulations concerning what the reports should contain and how the data should be classified change almost every year, which makes it difficult to compare one year to the other.
- 70. It was not until 1994 that the government produced a general report on the health of the population and when it organised a debate in parliament neither it, nor a 1997 WHO report *Investment for Health in Hungary* raised much political or public interest. Local governments, generally speaking, are not concerned about the health status of the population, only problems relating to institutions.
- 71. In fact, very little is known about the unit costs of healthcare in Hungary.
- 72. An exception was spending on sick pay which was affected by the requirement, introduced in 1996, that employers pay one-third of the benefit paid out by the HIFA.
- 73. According to the Ministry of Welfare, the HIFA stopped financing 8 institutions, 8 premises, 74 wards and 23 units.
- 74. Overall since 1990 the number of beds has decreased by 18 per cent although the resources available to each patient (bed) increased.
- 75. The excise duty on tobacco actually fell during the 1990s, from 50.9 per cent in 1990 to 40.8 in 1998 well below the rate required by EU directives (57 per cent of the retail selling price for cigarettes of the price category most in demand).
- 76. Although part of its electoral programme, the previous government failed to pass its bill on the "protection of non-smokers".
- 77. 75 per cent of GPs are over 45 years old and 20 per cent are over the legal retirement age.
- 78. Initially, physicians competed in an effort to attract and register as many patients as possible, but now the system has settled down to a stable equilibrium.
- 79. NERA (1998) reports that outpatient payments may be between 10 and 15 per cent lower than equivalent inpatient payments.

- 80. For example, Hungary has 53 CT scanners, but only 350 000 CT exams were performed in 1996 a number that could probably have been performed by half as many machines.
- 81. In principle the price at which drugs are subsidised is determined by comparing new drugs prices with those of similar therapeutic agents already available in Hungary as well as with the ones of the least expensive european drugs. Further savings should derive from the rule that bio-equivalent drugs are subsidised a fixed amount, based on the price of the least expensive alternative product included in the group (health-card prescriptions account for about 10 per cent of the total prescription subsidies).
- 82. Components on health purchases represent 16 per cent of all payments, which may be an under-estimate of total health-card expenditure.
- 83. Cardholders are estimated to spend 7.5 times as much on a per capita basis than the rest of the population.
- 84. No referral is required for: dermatology, oto-rhino-laringology, gynaecology, surgerytraumatology, ophthalmology, oncology, urology, psychiatry, and dispensaries (psychiatric dispensaries, dispensaries for pulmonary diseases, dermato-venereological, oncological and dispensaries for alcoholics and drug-addicts).

# Glossary

APF	Pension Funds Supervision Agency
APTF	State Banking and Capital Market Supervisory Board
ÁPV Rt	Hungarian Privatisation and State Holding Company
BUX	Budapest Stock Exchange
CSO	Central Statistical Office
СТ	Computerised Tomography
DSA	Digital Subtraction Angiography
HDG	Homogeneous Diseases Group
GFS	Government Finance Statistics
HIF	Health Insurance Fund
HIFA	National Health Insurance Fund Administration
HISG	Health Insurance Self-Government
IFTZ	Industrial Free-Trade Zone
IRC	Interest Reconciliation Council
MRI	Magnetic Resonance Imaging
NBH	National Bank of Hungary
NDF	National Deposit Insurance Fund
NPHMOS	National Public Health and Medical Officer Service
PET	Positron Emission Tomography

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### Annex I

### Why do balance of payments and customs-based data differ on trade?

In US dollar terms, over the period January to September 1998 the value of exports as measured by the balance of payments (BOP) increased 4.8 per cent while it grew 21.3 per cent based on customs statistics. It is not uncommon in OECD countries for data derived from customs statistics and those from the balance of payments to differ. However, the extent of the difference is unusual in Hungary principally because, in contrast to other countries, the Hungarian BOP is derived exclusively from bank transactions. A number of studies\* have suggested the following reasons for the large gap between the customs and BOP data:

- Prior to 1997, the BOP data did not always distinguish clearly between goods and services, allowing some transactions to be recorded as non-specified.
   Following methodological changes in 1997 the net errors and omissions component fell by 75 per cent to \$300 million. As a result, 1997 BOP export and import growth rates are meaningless.
- Balance of payments (BOP) data are based on information collected from banks on payments for export and import transactions, while customs data pertain to the value of goods crossing the border. Temporary divergence's are possible because of lags between the shipment of goods and the recording of payments, although such differences have always existed and *a priori* should be smaller now than in the past.
- The value of the goods may be recorded at different exchange rates and also reflect differences in the accounting of shipment costs etc.
- Discrepancies exist on how goods brought in for reprocessing are recorded. As regards customs-based data, when imported their total value is recorded by customs officials, and after re-processing in Hungary, this plus the domestic value-added are recorded as the export value. The balance of payments data only include the value-added component, leading to a level difference between the two sets of data. In addition, while the value-added is supposed to be recorded as a service under the balance of payments, reporting institutions do not always follow this rule. This might imply that when reprocessing is growing faster than other trade components, growth rates could diverge.
- Customs-based data include transactions not in the BOP for which no payments are made. Although the size of these items (such as barter and reprocessing) are growing in size, their share of total exports is declining. For example, in 1997 exports of goods where no payment is made amounted to just over

<sup>\*</sup> See Antalóczy (1998); Belyó et al. (1998); and Eorsi (1998).
\$3 billion (or about 15 per cent of exports) compared with \$2.8 billion in 1996, while such imports grew from \$3.5 to 3.6 billion (17 per cent).

- The shift to higher value-added exports may have increased the gap.

The value of inward- and outward-processing trade, which includes the re-export of items for which no payment is paid, can be estimated in the customs data. Subtracting these items and contributions in kind and other transactions that are excluded from the BOP allows an estimate of the exports and imports on a "BOP basis" from the customs data (Table A1). While such an adjustment does lower the value of exports and imports in the customs data, the gap between the adjusted data and the BOP data remains large – especially as concerns growth rates.

	1005	1000-1	100ch1	1007	January-October			
	1995	199681	1990D1	1997	1996	1997	1998	
			Milli	ions of do	llars			
<b>BOP data</b> Exports Imports	12 810 15 252	14 183 16 828	2 2	19 637 21 371	10 095 12 025	15 957 17 357	16 664 18 233	
<b>Customs data</b> Exports Imports	14 496 16 783	15 954 18 613	15 704 18 144	19 100 21 234	12 823 14 805	15 264 17 085	18 536 20 818	
<b>Adjusted customs data (BOP basis</b> ) <sup>3</sup> Exports Imports	11 957 13 285	13 080 14 746	12 914 14 736	16 149 17 501	10 480 11 955	12 828 14 015	15 538 17 293	
	199	31	1997		January-October			
		5	1557		1997	1	998	
			Per	cent cha	nge			
<b>BOP data</b> Exports Imports	10. 10.	7 3	2 2		2 2		4.4 5.0	
<b>Customs data</b> Exports Imports	10. 10.	1 9	21.6 17.0		19.0 15.4	2	21.4 21.8	
<b>Adjusted customs data (BOP basis)</b> <sup>3</sup> Exports Imports	9. 11.	4 0	25.0 18.8		22.4 17.2	2	21.1 23.4	

## Table A1. Customs and balance of payments trade data

A vertical bar | denotes a break in a time series.

1. Customs data prior to 1996 exclude enterprises operating in free trade zones. Data in column 1996a exclude these firms in order to allow calculation of growth rates with 1995. Data in column 1996b include enterprises operating in free trade zones.

2. A change in the methodology by which the balance of payments was calculated, beginning in 1997, precludes the calculation of meaningful growth rates for that year.

3. Customs data net of inward and outward processing trade, contributions in kind and other data not included in the BOP.

Source: Ministry of Economic Affairs; National Bank of Hungary.

# Annex II

# **Calendar of main economic events**

## **1997**

#### June

NBH lowers its one week repo and reverse repo rates by 0.5 percentage points to 26.75 and 20.75 per cent respectively.

Six and twelve-month NBH fixed-term deposit facilities are terminated, replaced by the 364 day NBH bond.

#### July

European Commission publishes – as a part of "Agenda 2000" – an evaluation of Hungary's progress in legal harmonization.

One week repo and reverse-repo interest rates are lowered to 26.00 and 20.00 per cent, respectively.

The 2 per cent import surcharge is abolished.

 $\operatorname{NATO}$  invites Hungary, along with the Czech Republic and Poland to join the Organisation.

The pension reform package is passed by parliament.

The government sets aside 1.1 billion for ints for the foundation the Land Credit & Mortgage Lt. Co.

## August

The rate of the crawling peg is reduced from 1.1 to 1.0 per cent per month.

## September

One week repo and reverse-repo interest rates are lowered to 25.75 and 19.75 per cent, respectively.

Accession negotiations with NATO begin.

## October

The Land Credit & Mortgage Lt. Co. is established.

The NBH suspends all reverse repo facilities and replaces them with fixed-term deposit facilities with the same conditions, but which cannot be called prior to maturity.

## November

The Budapest Stock Exchange (BUX) falls almost 2 000 points due to the first round of the Asian crisis, before recovering in mid-November.

The parliament decides to join NATO, with public support at 85 per cent (based on a referendum).

## December

One week repo and reverse-repo interest rates are lowered to 25.25 and 19.25 per cent, respectively.

1998 budget is accepted by the parliament.

The EU agrees to start accession negotiations with Hungary (along with the Czech Republic, Estonia, Poland and Slovenia) in March 1998.

#### **1998**

#### January

The new three-pillar pension system comes into effect, replacing the previous pay-asyou-go scheme.

The rate of the crawling peg is decreased to a monthly rate of 0.9 per cent.

#### February

One-week repo and reverse-repo interest rates are lowered to 25.00 and 19.00 per cent, respectively.

#### March

One-week repo and reverse-repo interest rates are lowered twice in March to 24.75 (18.75) per cent and then 24.375 (18.375) per cent respectively.

## April

Repo rates are lowered again to 24.125 and 18.125 per cent.

EU negotiations begin.

Act on Venture Capital and Venture Capital Companies is passed.

## April-May

The BUX falls from 9017 on 23 April to 7049 on 28 May in response to election uncertainty.

#### May

General elections are held.

One-week repo and reverse-repo interest rates are lowered to 23.875 and 17.875 per cent.

Moody's upgrades Hungarian long-term foreign exchange debt from Baa3 (positive outlook) to Baa2 (positive outlook).

#### June

The rate of crawling peg is decreased to 0.8 per cent monthly.

NBH lowers one-week repo and reverse-repo interest rates to 23.5 and 17.5 per cent respectively.

## July

The Young Democrats (FIDESZ) form a new government in coalition with the Smallholders party.

A new Ministry of Economic Affairs is formed, having the responsabilities of the former Ministry of Industry, Trade and Tourism and some areas previously covered by the Ministry of Labour. The Ministry of Health is formed and the Ministry of Family and Social Affairs is also created, replacing the Ministry of Welfare and taking over the remaining functions of the previous Ministry of Labour. The Prime Minister's Office is strengthened and the responsability for long-term economic planning is transferred to the Ministry of Economic Affairs.

The Ministers of Finance and Economic Affairs, and the Governor of NBH declare that the economic policy stance would remain unchanged.

BUX peaks at 8313 points and begins to fall in response to the Russia crisis.

The NBH lowers the one-week repo and reverse-repo interest rates to 23 and 17 per cent respectively.

### August

The self-governments of the Health Insurance Fund and the Pension Funds are abolished.

One-week repo and reverse-repo NBH deposit facilities are discontinued and the onemonth reverse repo becomes the main policy instrument.

The National Bank of Hungary officially intervenes twice in the exchange market to support the forint.

### September

NBH increases its one-month reverse-repo rate 100 basis points to 18 per cent in support of the forint.

#### October

The rate of the crawling peg is decreased to 0.7 per cent monthly and the government announces a further 0.1 percentage point decrease for 1 January 1999.

Government introduces regulations for the allocation of reserves by financial institutions on the basis of country risk.

1999 budget is submitted to parliament for debate.

#### November

NBH reduces the overnight and one-month repo rates 50 basis points to 21.50 and 17.50 per cent respectively.

The NBH lowers policy interest rates on 11 and 24 November. The overnight repo rate is lowered to 21 and then 20.75 per cent while the one month reverse repo is cut to 17.75 and 17.5 per cent. The overnight reverse repo is lowered only once to 14.25 per cent on 24 November.

## December

Standard & Poors upgrades Hungarian long-term foreign-exchange debt from BBB-(positive outlook) to BBB (positive outlook).

The NBH lowers policy interest rates twice, the overnight repo rate drops to 19.75 on 11 December and 19.5 per cent on 21 December, while the one month reverse repo is lowered to 17 and 16.75 per cent on these dates. The overnight reverse repo is lowered once, to 14 per cent on the second date.

BASIC STATISTICS: INTERNATIONAL COMPARISONS

# **BASIC STATISTICS: INTERNATIONAL COMPARISONS**

Units	Reference period <sup>1</sup>	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece
Population Total	1996	18 289	8 060	10 157	29 964	10 316	5 262	5 125	58 380	81 877	10 465
Net average annual increase over previous 10 years %	1996	1.3	0.6	0.3	1.3	0	0.3	0.4	0.5	3	0.5
Total civilian employment (TCE) <sup>2</sup> Thousands         of which: Agriculture       % of TCE         Industry       % of TCE         Services       % of TCE	1996 1996 1996 1996	8 344 5.1 22.5 72.4	3 737 (94) 7.2 (94) 33.2 (94) 59.6 (94)	3 675 (95) 2.5 (95) 26.7 (95) 71.4 (95)	13 676 4.1 22.8 73.1	4 918 6.3 42 51.7	2 593 4 27 69	2 087 7.1 27.6 65.3	21 951 4.6 25.9 69.5	35 360 3.3 37.5 59.1	3 824 (95) 20.4 (95) 23.2 (95) 56.4 (95)
Gross domestic product (GDP)       At current prices and current exchange rates       Bill. US\$         Per capita       US\$         At current prices using current PPPs <sup>3</sup> Bill. US\$         Per capita       US\$         Average annual volume growth over previous 5 years       %	1996 1996 1996 1996 1996	398.9 21 812 372.7 20 376 3.9	228.7 28 384 172.4 21 395 1.6	268.2 26 409 222 21 856 1.2	579.2 19 330 645.1 21 529 2.2	56.2 5 445  2	174.9 33 230 118 22 418 2.2	125.1 24 420 96.7 18 871 1.6	1 536.6 26 323 1 198.6 20 533 1.2	2 353.5 28 738 1 736.1 21 200 1.4	91.2 (95) 8 722 (95) 133.5 12 743 1.3 (95)
Gross fixed capital formation (GFCF)       % of GDP         of which: Machinery and equipment       % of GDP         Residential construction       % of GDP         Average annual volume growth over previous 5 years       %	1996 1996 1996 1996	20.3 10.2 (95) 4.6 (95) 5.6	23.8 8.8 (95) 5.9 (95) 2.1	17.3 7.5 (95) 4.6 (95) 0.3	17.7 6.6 5.4 2.2	33  9.4	16.7 7.9 (95) 3.2 (95) 2	$ \begin{array}{c} 16.1 \\ 6.4 (95) \\ 3.5 (95) \\ -4.1 \end{array} $	17.4 7.8 4.4 -1.5	20.6 7.6 7.3 0.2	17 (95) 7.7 (95) 3.3 (95) 0.5 (95)
Gross saving ratio <sup>4</sup> % of GDP	1996	18	21.9	22.2	17.8		17.6	19.6	18.7	20	16 (95)
General government           Current expenditure on goods and services         % of GDP           Current disbursements <sup>5</sup> % of GDP           Current receipts         % of GDP	1996 1995 1995	17 35.6 34.9	19.8 48.6 47.4	14.5 52.2 49.9	18.7 45.8 42.7	21.5	25.2 59.6 58.1	21.9 55.9 52.8	19.4 50.9 46.9	19.8 46.6 45.9	20.8 (95) 52.1 45
Net official development assistance % of GNP	1995	0.36	0.33	0.38	0.38		0.96	0.32	0.55	0.31	0.13
Indicators of living standards         Private consumption per capita using current PPPs <sup>3</sup> US\$         Passenger cars, per 1 000 inhabitants       Number         Telephones, per 1 000 inhabitants       Number         Television sets, per 1 000 inhabitants       Number         Doctors, per 1 000 inhabitants       Number         Infant mortality per 1 000 live births       Number	1996 1994 1994 1993 1995 1995	12 596 460 496 489 2.2 (91) 5.7	12 152 433 466 479 2.7 5.4	13 793 416 449 453 3.7 (94) 7.6 (94)	12 959 466 576 618 2.2 6.3 (94)	282 209 476 2.9 7.7	12 027 312 604 538 2.9 (94) 5.5	10 282 368 551 504 2.8 4	12 506 430 547 412 2.9 5.8 (94)	$12 \ 244 \\ 488 \\ 483^8 \\ 559 \\ 3.4 \\ 5.3$	9 473 199 478 202 3.9 (94) 8.1
Wages and prices (average annual increase over previous 5 years)         Wages (earnings or rates according to availability)         %         Consumer prices	1996 1996	1.7 2.4	5.2 2.9	2.7 2.2	2.4 1.4	 11.9	3.2 1.9	3.8 1.5	2.6 2	4.2 3.1	11.8 11.6
Foreign trade       Exports of goods, fob*       Mill. US\$         As % of GDP       %         Average annual increase over previous 5 years       %         Imports of goods, cif*       Mill. US\$         As % of GDP       %         Average annual increase over previous 5 years       %         Total official reserves <sup>6</sup> Mill. SDRs	1996 1996 1996 1996 1996 1996	60 288 15.1 7.5 61 374 15.4 9.7 10 107	57 870 25.3 7.1 67 376 29.5 5.9 15 901	$     \begin{array}{r}       170 \ 223^{7} \\       63.5 \\       7.6 \\       160 \ 917^{7} \\       60 \\       5.9 \\       11 \ 789^{7}     \end{array} $	202 320 34.9 9.7 170 931 29.5 7.7 14 202	21 910 39  27 721 49.3  8 590	51 030 29.2 6.2 44 987 25.7 5.6 9 834	40 576 32.4 12.1 30 911 24.7 7.3 4 810	288 450 18.8 6.3 271 348 17.7 3.9 18 635	521 263 22.1 5.4 455 741 19.4 3.3 57 844	11 501 12.9 (95) 5.8 27 402 30.4 (95) 6.6 12 171
As ratio of average monthly imports of goods Ratio	1996	2	2.8	0.9	1		2.6	1.9	0.8	1.5	5.3

\* At current prices and exchange rates.
1. Unless otherwise stated.
2. According to the definitions used in OECD Labour Force Statistics.
3. PPPs = Purchasing Power Parities.
4. Gross saving = Gross national disposable income minus private and government consumption.
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. End of year.

 A Data refer to the Belgo-Luxembourg Economic Union.
 B. Data refer to western Germany.
 Including non-residential construction.
 Including non-residential constructing non-residential construction.
 Including non-residential International Financial Statistics.

# **BASIC STATISTICS: INTERNATIONAL COMPARISONS** (cont'd)

	Units	Reference period <sup>1</sup>	Hungary	Iceland	Ireland	Italy	Japan	Korea	Luxembourg	Mexico	Netherlands	New Zealand
Population Total	. Thousands . Number . %	1996 1996 1996	10 193 77 -0.3	270 3 1.1	3 621 52 0.2	57 473 191 0	125 864 333 0.4	45 545 458 1	418 161 1.3	96 582 48 2	15 494 380 0.6	3 640 14 1.1
Employment         Total civilian employment (TCE) <sup>2</sup>	. Thousands . % of TCE . % of TCE . % of TCE	1996 1996 1996 1996	3 605 8.4 33 58.6	142 9.2 23.9 66.2	1 307 10.7 27.2 62.3	20 036 7 32.1 60.9	64 860 5.5 33.3 61.2	20 764 11.6 32.5 55.9	212 (95) 2.8 (95) 30.7 (90) 66.1 (90)	32 385 (95) 23.5 (95) 21.7 (95) 54.8 (95)	6 983 3.9 22.4 73.8	1 688 9.5 24.6 65.9
Gross domestic product (GDP) At current prices and current exchange rates	. Bill. US\$ . US\$ . Bill. US\$ . US\$ . %	1996 1996 1996 1996 1996 1996	43.7 (95) 4 273 (95)    -2.4 (95)	7.3 27 076 6.3 23 242 1.5	70.7 19 525 68.8 18 988 7.1	1 214.2 21 127 1 148 19 974 1	4 595.2 36 509 2 924.5 23 235 1.5	484.8 10 644 618.5 13 580 7.1	$     \begin{array}{r}       17 \\       40 791 \\       13.5 \\       32 416 \\       4.8 \\     \end{array} $	329.4 3 411 751.1 7 776 1.7	396 25 511 324.5 20 905 2.3	65.9 18 093 63.6 17 473 3.7
Gross fixed capital formation (GFCF) of which: Machinery and equipment Residential construction Average annual volume growth over previous 5 years	. % of GDP . % of GDP . % of GDP . %	1996 1996 1996 1996	19.3 (95)   -0.9 (95)	17.5 6.7 3.9 -1.4	17.2 5.5 (95) 4.9 (95) 6	$     \begin{array}{r}       17 \\       8.8 \\       4.5 \\       -1.4     \end{array} $	29.7 10.1 (95) 5.3 (95) 1.3	36.8 13 7.6 6.9	20.8  0.2	18 8.8 4.7 -0.7	19.7 9.4 5 2.2	20.9 10 5.6 9.6
Gross saving ratio <sup>4</sup>	. % of GDP	1996		15.6	21.7	20.5	31.4	34.2	37.5	22.7	25.7	16
General government Current expenditure on goods and services Current disbursements <sup>5</sup> Current receipts .	. % of GDP . % of GDP . % of GDP	1996 1995 1995	24.9 (95)  	20.8 35.1 36	14.1 39.2 (94) 39.3 (94)	16.4 49.5 44.5	9.7 28.5 32	10.6 15.1 25.1	13.6 	9.7 <sup>10</sup> 	14 51.8 50	14.4  
Net official development assistance	. % of GNP	1995			0.29	0.15	0.28	0.03	0.36		0.81	0.23
Indicators of living standards         Private consumption per capita using current PPPs <sup>3</sup> Passenger cars, per 1 000 inhabitants         Telephones, per 1 000 inhabitants         Television sets, per 1 000 inhabitants         Doctors, per 1 000 inhabitants         Infant mortality per 1 000 live births	. US\$ . Number . Number . Number . Number . Number	1996 1994 1994 1993 1995 1995	 212 170 427 3.4 11	14 244 434 557 335 3.9 (94) 6.1	10 020 264 350 301 3.4 6.3	12 224 517 429 429 3.0 (94) 6.6 (94)	13 912 342 480 618 1.7 4.3	7 354 115 397 215 1.6 (92) 9	17 811 544 564 261 1.8 (94) 5.3 (94)	5 045 91 93 150 1.1 17 (94)	12 477 383 509 491 2.2 (93) 5.5	10 895 457 470 1.6 7.2 (94)
Wages and prices (average annual increase over previous 5 year Wages (earnings or rates according to availability) Consumer prices	rs) . % . %	1996 1996	23.2	2.6	3.7 2.2	3.5 4.5	1.8 0.7	5.3	2.4	-1.6 19.7	2.4 2.5	1.5 2
Foreign trade         Exports of goods, fob*         As % of GDP         Average annual increase over previous 5 years         Imports of goods, cif*         As % of GDP         Average annual increase over previous 5 years         Marker annual increase over previous 5 years         As % of GDP         Average annual increase over previous 5 years         Average annual increase over previous 5 years         Average annual increase over previous 5 years         As antio of average monthly imports of goods	. Mill. US\$ . % . Mill. US\$ . % . % . Mill. SDRs . Ratio	1996 1996 1996 1996 1996 1996 1996 1996	15 674 35.9 8.9 18 105 41.4 9.6 6 812	1 891 26 4 2 032 27.9 3.4 316 1.9	48 416 68.5 14.8 35 763 50.6 11.5 5 706 1.9	250 842 20.7 8.2 206 904 17 2.5 31 954 1.9	411 067 8.9 5.5 349 149 7.6 8 150 663 5.2	129 715 26.8 12.5 150 340 31 13.9 23 670	··· ·· ·· ·· ·· ··	96 000 29.1 17.6 89 469 27.2 12.4 13 514 1.8	203 953 51.5 8.9 184 389 46.6 7.8 18 615 1.2	14 316 21.7 8.2 14 682 22.3 11.8 4 140 3.4

\* At current prices and exchange rates.

\* At current prices and exchange rates.
1. Unless otherwise stated.
2. According to the definitions used in OECD Labour Force Statistics.
3. PPPs = Purchasing Power Parities.
4. Gross saving = Gross national disposable income minus private and government consumption.
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. End of year.

 A Data refer to the Belgo-Luxembourg Economic Union.
 B. Data refer to western Germany.
 Including non-residential construction.
 Including non-residential constructing non-residential construction.
 Including non-residential International Financial Statistics.

# **BASIC STATISTICS: INTERNATIONAL COMPARISONS** (cont'd)

	Units	Reference period <sup>1</sup>	Norway	Poland	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Population Total Inhabitants per sq. km	Thousands Number %	1996 1996 1996	4 370 13 0.5	38 618 123 0.3	9 935 108 -0.1	39 270 78 0.2	8 901 20 0.6	7 085 172 0.8	62 695 80 2	58 782 240 0.3	265 557 28 1
Employment         Total civilian employment (TCE) <sup>2</sup>	Thousands % of TCE % of TCE % of TCE	1996 1996 1996 1996	2 110 5.2 23.4 (95) 71.5 (95)	14 977 22.1 31.7 46.2	4 475 12.2 31.4 56.4	12 394 8.7 29.7 61.6	3 963 2.9 26.1 71	3 803 4.5 27.7 67.4	20 895 44.9 22 33.1	26 088 2 27.4 71	126 708 2.8 23.8 73.3
Gross domestic product (GDP) At current prices and current exchange rates Per capita At current prices using current PPPs <sup>3</sup> Per capita Average annual volume growth over previous 5 years	Bill. US\$ US\$ Bill. US\$ US\$ %	1996 1996 1996 1996 1996 1996	157.8 36 020 106.7 24 364 4.1	117.9 (95) 3 057 (95)  2.2 (95)	103.6 10 425 130.1 13 100 1.5	584.9 14 894 587.2 14 954 1.3	251.7 28 283 171.4 19 258 1	294.3 41 411 180.6 25 402 0.1	181.5 2 894 383.3 6 114 4.4	1 153.4 19 621 1 095.5 18 636 2.2	7 388.1 27 821 7 388.1 27 821 2.8
Gross fixed capital formation (GFCF) of which: Machinery and equipment Residential construction Average annual volume growth over previous 5 years	% of GDP % of GDP % of GDP %	1996 1996 1996 1996	20.5 8.4 2.6 (94) 2.8	17.1 (95)  5.4 (95)	24.1 11.7 (93) 5.2 (93) 2.2	20.1 6.1 (95) 4.3 (95) -1	14.8 7.9 1.9 -2.6	$\begin{array}{c} 20.2 \\ 9.3 \\ 11^9 \\ -0.8 \end{array}$	25 11.9 8.4 (95) 6.9	15.5 7.6 3 1.3	17.6 8.3 (95) 4.1 (95) 6.9
Gross saving ratio <sup>4</sup>	% of GDP	1996	29.9		21.6	20.7	16	27.1	22.3	14.6	16.6
General government Current expenditure on goods and services Current disbursements <sup>5</sup> Current receipts	% of GDP % of GDP % of GDP	1996 1995 1995	20.5 45.8 50.9	16.9 (95)  	18.5 42.5 (93) 39.8 (93)	16.3 41.2 37.9	26.2 63.8 57.5	14.3 47.7 53.8	11.6 	21.1 42.3 (94) 37.2 (94)	15.6 34.3 32.1
Net official development assistance	% of GNP	1995	0.87		0.27	0.24	0.77	0.34	0.07	0.28	0.1
Indicators of living standards         Private consumption per capita using current PPPs <sup>3</sup> Passenger cars, per 1 000 inhabitants         Telephones, per 1 000 inhabitants         Television sets, per 1 000 inhabitants         Doctors, per 1 000 inhabitants         Infant mortality per 1 000 live births	US\$ Number Number Number Number Number	1996 1994 1994 1993 1995 1995	11 593 381 554 427 2.8 4	186 131 298 2.3 13.6	8 522 357 350 190 3 7.4	9 339 351 371 400 4.1 (93) 6 (94)	10 096 406 (93) 683 470 3.1 4	15 632 451 597 400 3.1 (94) 5	4 130 47 201 176 1.2 46.8 (94)	11 865 372 489 435 1.6 (94) 6.2 (94)	18 908 565 602 816 2.6 (94) 8 (94)
Wages and prices (average annual increase over previous 5 y Wages (earnings or rates according to availability) Consumer prices	ears) % %	1996 1996	3.2 1.9		5.6	5.8 4.7	4.8 2.7	2.2	 81.6	4.9 2.7	2.7 2.9
Foreign trade         Exports of goods, fob*         As % of GDP         Average annual increase over previous 5 years         Imports of goods, cif*         As % of GDP         Average annual increase over previous 5 years         As % of GDP         Average annual increase over previous 5 years         As ratio of average monthly imports of goods	Mill. US\$ % . Mill. US\$ % % Mill. SDRs Ratio	1996 1996 1996 1996 1996 1996 1996 1996	49 576 31.4 7.8 35 575 22.5 6.9 18 441 6.2	24 417 20.7 37 185 31.5  12 409 	24 614 23.8 8.6 35 192 34 6.1 11 070 3.8	102 067 17.5 11.2 121 838 20.8 5.5 40 284 4	84 836 33.7 9 66 825 26.5 6 13 288 2.4	79 581 27 5.3 78 052 26.5 3.2 26 727 4.1	23 301 12.8 11.1 43 094 23.7 15.1 11 430 3.2	259 941 22.5 7 287 033 24.9 6.5 27 745 1.2	625 075 8.5 795 289 10.8 10.3 44 536 0.7

\* At current prices and exchange rates.

\* At current prices and exchange rates.
1. Unless otherwise stated.
2. According to the definitions used in OECD Labour Force Statistics.
3. PPPs = Purchasing Power Parities.
4. Gross saving = Gross national disposable income minus private and government consumption.
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. End of year.

 7. Data refer to the Belgo-Luxembourg Economic Union.
 8. Data refer to western Germany.
 9. Including non-residential construction.
 10. Refers to the public sector including public enterprises.
 5. Sources: Population and Employment: OECD, Labour Force Statistics. GDP, GFCF and General Government: OECD, National Accounts, Vol. I and OECD Economic Outlook, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, Main Economic Indicators. Foreign trade: OECD, Monthly Foreign Trade Statistics, Series A. Total official reserves: IMF, International Financial Statistics International Financial Statistics.

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