Chapter 1

Restoring a sustainable growth path

Hungary is facing one of the most severe recessions among OECD countries. High foreign currency indebtedness gave rise to a loss in market confidence, and unsuccessful market financing of the government deficit coupled with limited foreign exchange reserves led the authorities to request financial assistance from international organisations. Amid high exchange rate volatility, macroeconomic policy had to remain tight despite a deep recession. For the central bank, defending the forint had to take precedence over inflation targeting at times. On the fiscal side, discretionary spending was cut significantly. The crisis was also a catalyst to implement decisive structural reforms, such as a far-reaching tax reform, a pension reform and the introduction of a fiscal council and fiscal rules. These ambitious macro and structural policies served to rebuild confidence. Helped by the world recovery, monetary policy has been eased, and the automatic stabilisers have been partly allowed to play. Avoiding major fiscal slippage, especially during the 2010 election year, should help firmly restore confidence and stabilise the economy.

Looking ahead, the depth of this recession is bound to leave deep marks in productive capacity. Re-stimulating potential growth and reducing the gaps in efficiency levels (across regions, firms and labour force groups) call for structural reforms, encompassing the labour market, education, entrepreneurship and innovation. The shift in tax burden from labour to consumption in 2009 was a positive step in this respect since it reduces economic distortions. The pension reform and the shortening of maternity leave, which will positively impact labour supply, should be sustained. As for the labour market, active labour market policies could be better-co-ordinated. The product market policies should further support innovation. Finally, a sustained policy of fiscal consolidation should help improve the policy mix while eventually opening the way to tax cuts supportive of growth.

Hungary has been in the grip of one of the most severe recessions among OECD countries, with the projected fall in real GDP in 2009-10 being more than double the OECD average. International financial support, a cautious macro policy stance, and decisive structural reforms have set the stage for the return of investor confidence. Even so, growth may only edge up in early 2010 and overall, real per capita income may fall relative to the OECD average, reversing the process of real income convergence. This chapter first analyses the origins of the crisis as well as macroeconomic policy responses, then explores ways of restoring sustainable growth.

Being overwhelmed by the global crisis

The global crisis hit the economy with exceptional force

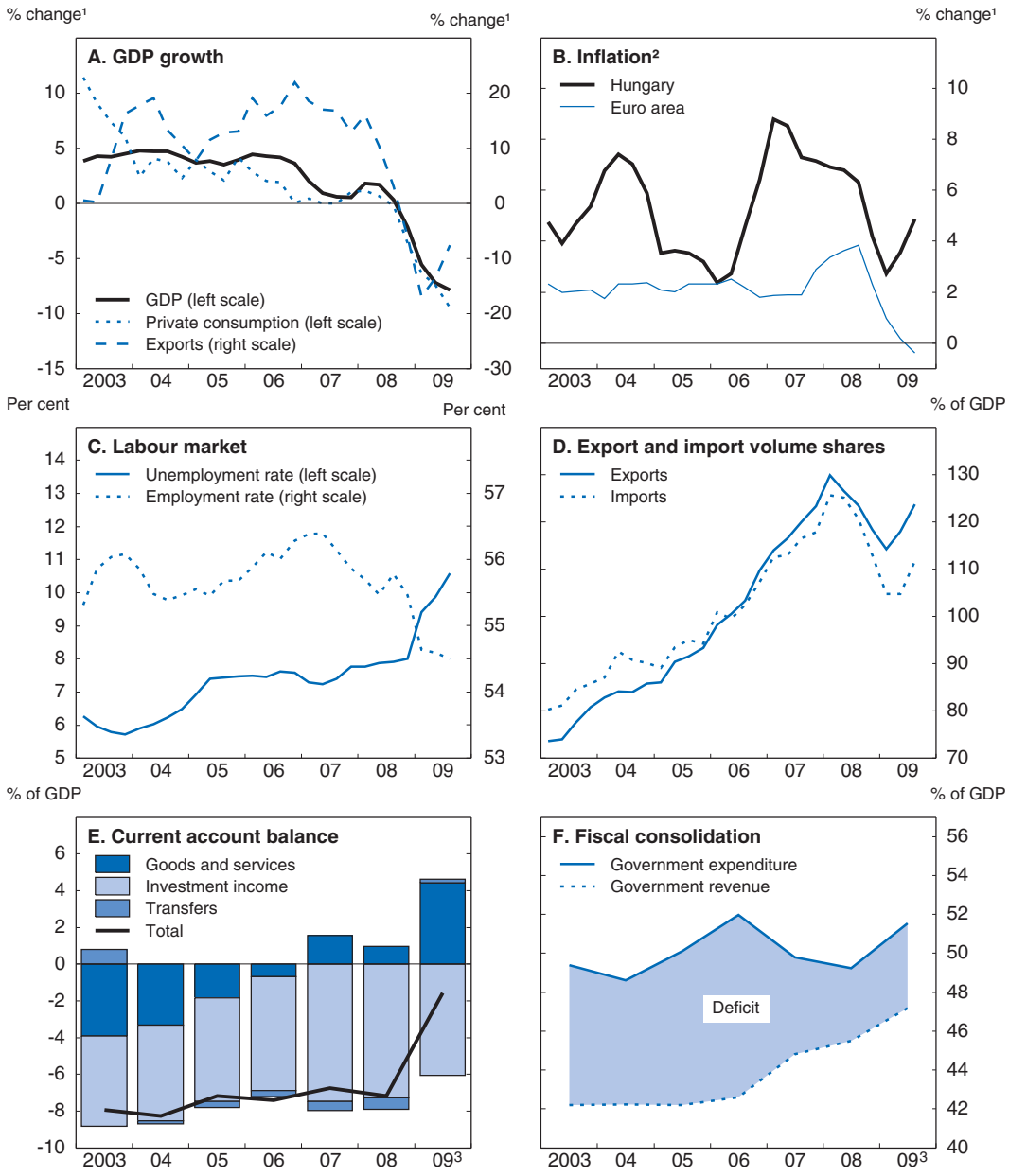
Before the outbreak of the global financial crisis in September 2008, Hungary managed to achieve substantial fiscal consolidation gains. In the space of two years, the general government deficit shrank, from 9.4% in 2006 to 3.7% of gross domestic product (GDP) in 2008 (Figure 1.1). In cyclically adjusted terms, the combined fiscal adjustment was even larger (amounting to about 7% of GDP in 2007-08).

Even so, investor confidence in forint-denominated assets collapsed in mid-October 2008, pulled down by global deleveraging. Government bond auctions began to fail, with non-resident holders of forint-denominated bonds dumping large amounts of securities. Bond yields surged as a consequence, rising by much larger margins than in adjacent countries with lower levels of public and external liabilities (Figure 1.2). In consequence, the nominal exchange rate fell by 25% in October 2008, prompting the central bank to raise its main policy rate from 8.5% to 11.5%, the highest level since July 2004.

As a result, following the outbreak of the financial crisis in mid-2007, real GDP fell more steeply than in other transition economies with flexible exchange rates such as the Czech Republic and Poland (Figure 1.3). Inflation remained persistent, owing to the depreciation of the exchange rate and recent increases in indirect taxes.

International loan facilities granted by the International Monetary Fund (IMF), the European Union (EU) and the World Bank (a combined credit package of EUR 20 billion in November 2008) initially succeeded in stabilising market expectations. A moderate rebound of the exchange rate allowed the central bank to reduce its main policy rate on four occasions between November 2008 and January 2009 (a cumulative cut of 200 basis points), unwinding two thirds of the previous interest rate hike. Exchange rate volatility, though, remained high amid growing gloom about growth prospects for the world economy. As international organisations scaled down output projections for 2009 and 2010 at an unprecedented pace, financial strains quickly reappeared in Central and Eastern European markets. The exchange rate sank to a new record low (317 forints per euro) in early March 2009 (Figure 1.2, panel C). Although monetary conditions tightened with rising capital outflows, policy interest rates were kept on hold in the face of growing economic slack.[1]

Figure 1.1. **Key economic indicators**



1. Year-on-year percentage change.
2. Harmonised consumer price index.
3. Projections for 2009.

Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* and *Main Economic Indicators* (databases), December.

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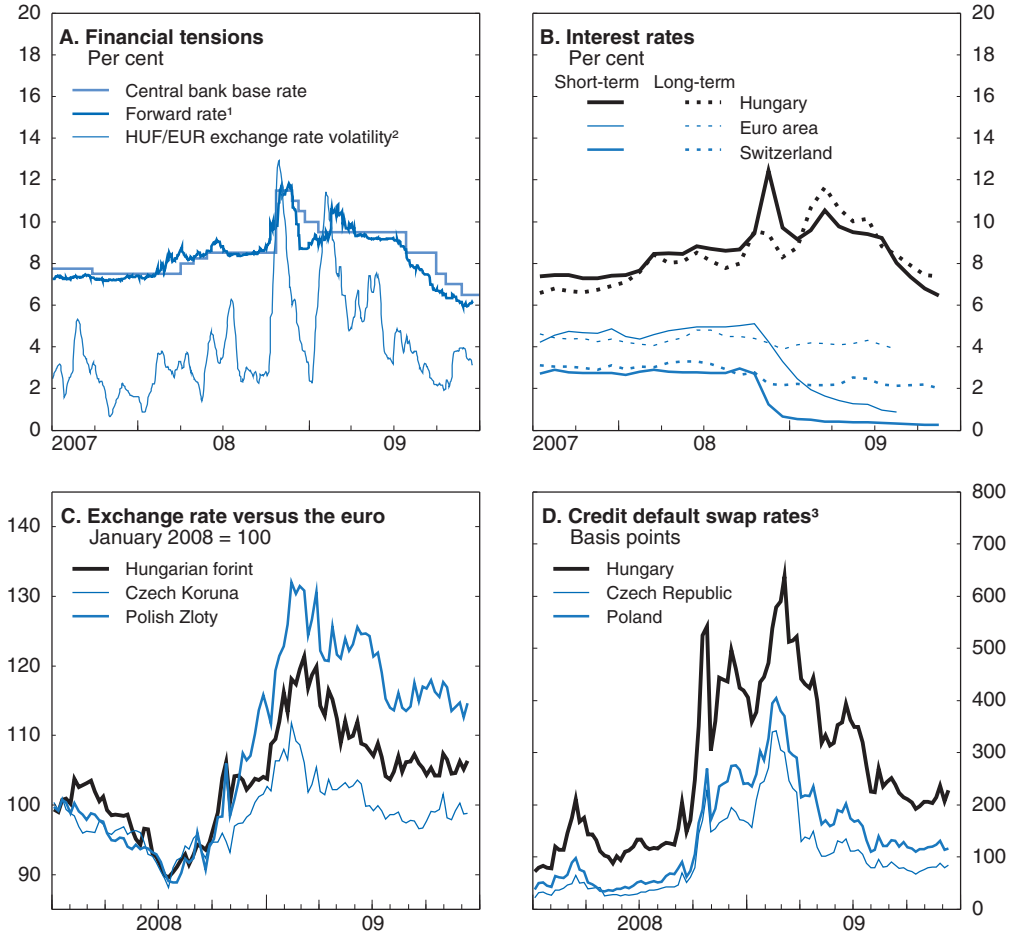
Eventually, tight fiscal and monetary policies, including the adoption of an ambitious fiscal reform package in mid-2009, bolstered market confidence, allowing market interest rates to recede and spreads on credit default swaps to narrow (Figure 1.2, panel D). In parallel, government bond auctions on national and international markets resumed amid falling long-term interest rates, while net capital inflows, exceeding the falling deficit on the current account, created room for both exchange rate appreciation (a rise of 15%

Figure 1.2. **The financial crisis**



1. Average of the forward three month interest rate (one month and three months ahead).
2. Moving standard deviation of a one month window.
3. Five year rates; mid-rate spread between the entity and the relevant benchmark curve.

Source: Magyar Nemzeti Bank, Datastream and OECD (2009), *Main Economic Indicators* (database), December.

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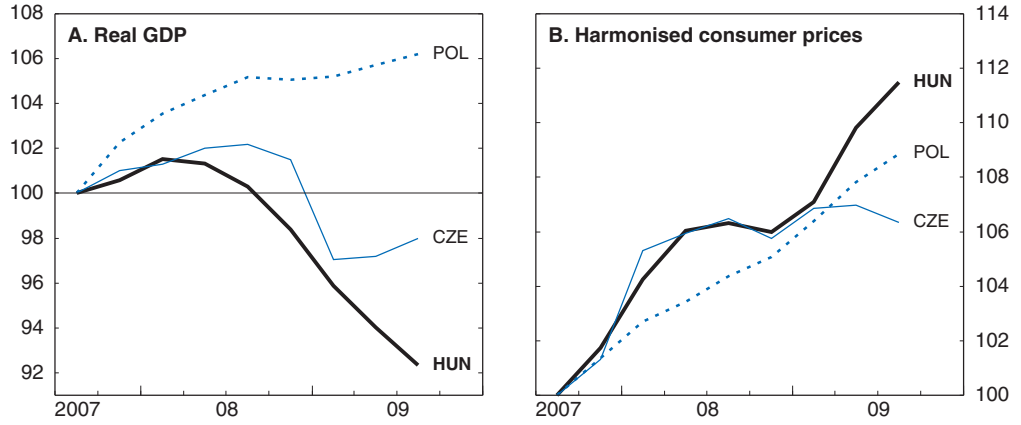
between March and October 2009) and cuts in policy interest rates. The extension of the IMF stand-by arrangement to October 2010 should help sustain confidence.

High external debt was at the root of Hungary's vulnerability

The disproportionate impact of the global financial crisis owed much to the high and rising levels of external debt,[2] exposing Hungary to shifts in market sentiment, especially since gross official reserves fell below the short-term foreign debt at remaining maturity in 2007 and reached a low in 2008 (Figure 1.4). Earlier, Hungary's transition to a market economy and its subsequent accession to the European Union in 2004 led to full liberalisation of the capital account, setting the stage for substantial inflows of capital. While initially consisting of foreign direct investment (FDI), capital imports later took the form of debt-creating inflows, a consequence of a persistent interest rate disparity. The external debt surged as a consequence, rising from 66% of GDP in 2004 to around 120% of GDP at the end of 2008 and to 134% in June 2009 (Figure 1.4). Due to the shortening of

Figure 1.3. **GDP and inflation: comparison with other transition economies with a flexible exchange rate since the outset of the financial crisis (mid-2007)**

Index, 2007 Q3 = 100



Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), December.

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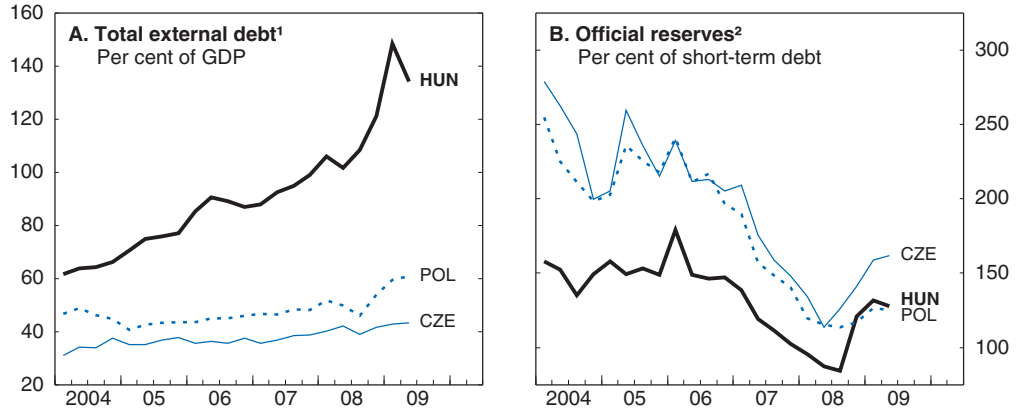
maturity of external debt, in particular the increased stock of banks' short-term debt, gross international reserves increasingly fell short of covering short-term foreign currency debt at remaining maturity. Already in September 2008, one month before the onset of the confidence crisis, gross official reserves only covered 84% of short-term external debt at remaining maturity, down from more than 100% at end-2007, a much more precarious situation than in the Czech Republic or, to a lesser extent, Poland (Figure 1.4). The ratio of official reserves to short-term debt came back above 120% end-2009, reflecting financial support from international organisations.

Figure 1.4. **External debt and official reserves: comparison with other transition economies with a flexible exchange rate**



1. Total external debt in Hungary does not include special purpose entities (former offshore firms). If special purpose entities were included then the debt level would reach 165% of GDP at end 2008.
2. Total reserves excluding gold.

Source: IMF (2009), *International Financial Statistics* (CD-ROM), International Monetary Fund, November; World Bank (2009), *Quarterly External Debt Statistics* (database), December; OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), December; and Magyar Nemzeti Bank.

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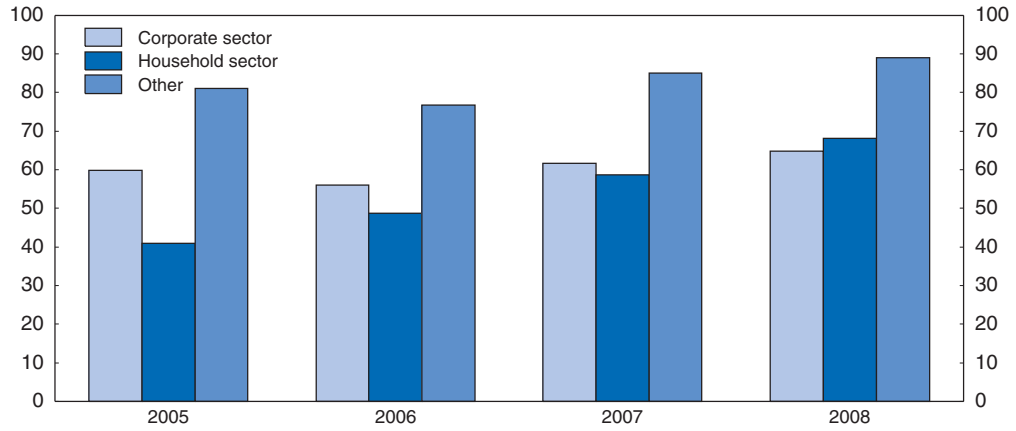
The surge in private households' foreign currency borrowing began in 2003, stimulated by low foreign interest rates, the tightening of home-loan subsidies for loans in forint in 2003 (see Chapter 3), and over-optimistic expectations that Hungary would soon enter the euro area. Helped by easy access to foreign funding and exploiting the huge interest rate differential, foreign-owned banks offered foreign currency-denominated loans at lower cost to Hungarian customers (Figure 1.5). In 2008, the foreign-owned banks accounted for more than three quarters of the banking sector's assets. Domestic banks followed suit, selling foreign-currency debt to private households. A rapidly rising portion of bank lending to the non-financial sector (including the corporate sector) thus came to be denominated in foreign currency (mostly in Swiss francs) (Figure 1.5).

Figure 1.5. **Share of foreign currency loans in total domestic credit**

Per cent



Source: MNB (2009), "Financial Accounts", *Statistical Time Series*, Magyar Nemzeti Bank, December.

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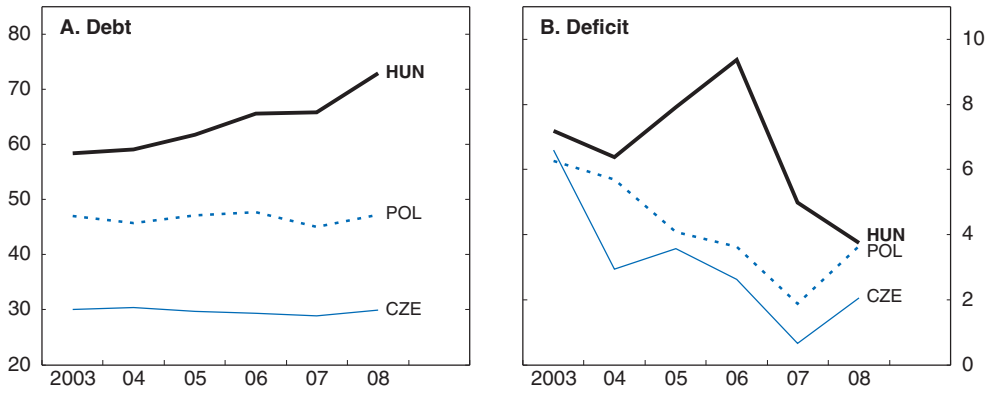
External debt was mainly private debt: the external public debt totalled about 40% of GDP at the end of 2008.[3] However, latent concerns over Hungary's ability to finance its massive external debt were also nourished by a string of large budget deficits (averaging 8% of GDP in 2002-06, before the recent consolidation period), which limited the ability of the government to bail out private parties. Public debt rose sharply, reaching 73% of GDP by the end of 2008, far above levels seen in neighbouring countries (Figure 1.6).

Fiscal consolidation gains may not have been perceived as sustainable since about half of them arose from revenue increases since 2006. From the point of view of stimulating supply potential, the fiscal adjustment comprising higher taxation was sub-optimal. Moreover, expenditure cuts have partly taken the form of lower investment spending, which is also detrimental to supply.

Figure 1.6. **Public sector debt and deficit: comparison with other transition economies with a flexible exchange rate**[1]

Per cent of GDP



1. Gross debt Maastricht definition and general government net lending/borrowing.

Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), November.

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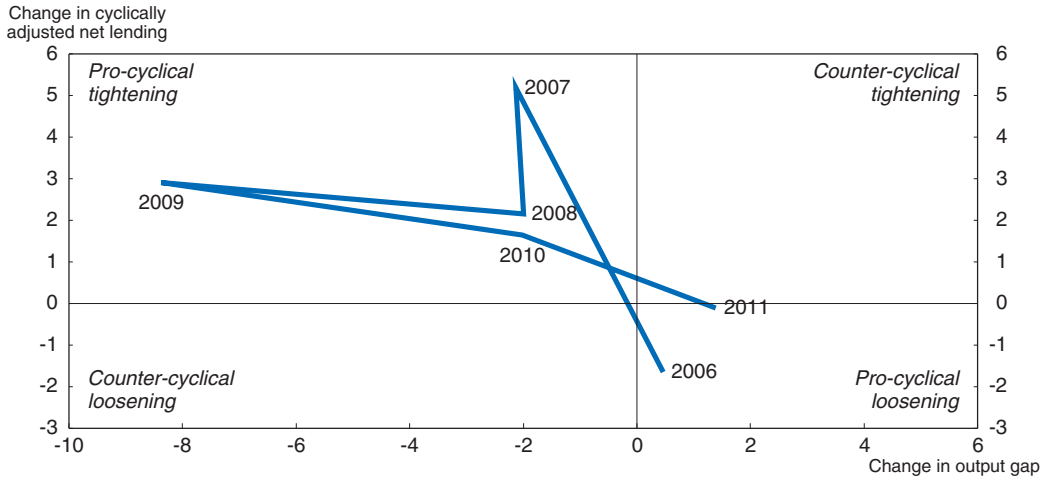
Macroeconomic policies strive to restore financial stability during a deep recession

Continued financial fragility required a pro-cyclical fiscal tightening

Given the scale of external vulnerability, continued fiscal consolidation became unavoidable, even in the presence of the rapidly deepening output slump. The continual rollover of the large outstanding stock of debt called for further efforts in fiscal consolidation to ease concerns about Hungary's solvency. Maintaining fiscal objectives consistent with medium-term debt sustainability, while responding to the rapidly widening economic slack, emerged as the central policy challenge. The pro-cyclical policy stance follows experience in other emerging markets with a debt overhang; in those countries, fiscal adjustment has strengthened confidence, helping reverse capital flows, setting the stage for currency appreciation and interest rate declines. This, in turn, has lightened the burden of the private sector's foreign debt repayment, eventually stimulating activity (Ghosh *et al.*, 2002; IMF, 2008).

The Hungarian fiscal authorities struck a balance between restoring financial stability through fiscal consolidation, which required an overall pro-cyclical policy, and underpinning macroeconomic activity, which implied partly allowing automatic stabilisers to play out. Initially, the 2009 budget plan drawn up in November 2008 was clearly pro-cyclical, envisaging a general government budget deficit of 2.6% of GDP for 2009 (Figure 1.7). This implied a structural fiscal adjustment worth the same amount. Subsequent revisions of the deficit target for 2009 have, however, partly allowed automatic stabilisers to play (3.9% in the revised target agreed with the IMF in May 2009), and were appropriate in light of the growing evidence that the 2009 recession would be much deeper than foreseen. The implied structural adjustments, though, remain significant. Looking ahead, fiscal consolidation, through structural reforms, should continue to help restore market confidence, while avoiding excessive pro-cyclicality if the economy weakens more than anticipated. This would also help improve the co-ordination between fiscal and monetary policies, enhancing the effectiveness of the policy mix. Taking into account the

Figure 1.7. **Fiscal stance**
Per cent of potential GDP



Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), December.
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initial budget plan for 2010, Hungary will have gone through four consecutive years of pro-cyclical tightening (Figure 1.7).

Recent reforms have strengthened fiscal sustainability, giving room for a less pro-cyclical fiscal stance

The confidence crisis led the authorities to adopt in May-June 2009 far-reaching measures of fiscal structural reform that should improve fiscal sustainability. The implemented reforms consisted of tax reform and discretionary spending cuts, as well as the adoption of a fiscal responsibility law. This experience seems to confirm the idea that economic bad times can be propitious for pursuing otherwise politically difficult reforms (Høj *et al.*, 2006). One expected benefit of these reforms is to enable some relaxation of deficit targets in the short run without destabilising financial market expectations of fiscal consolidation in the medium run. In this sense, the timing of the fiscal reform package was appropriate, even if some measures, such as the increase in value added tax (VAT) to shift the tax burden from labour to consumption, may deepen the recession in the short run (see below and Box 1.1).

On the revenue side, the reform raised the VAT rate by 5 percentage points effective from 1 July 2009. It also increased excise taxes effective from 1 July 2009 and introduced a market-based property tax (1 January 2010). Revenue gains from these sources – and other minor ones[4] – are expected to match revenue losses resulting from a reduction by 5 percentage points in employers' social security contributions,[5] the elimination of the special tax on enterprises and the lump-sum health contribution in 2010, as well as a reform in the personal income tax. The authorities estimate the tax-reform to be broadly revenue-neutral *ex ante* (see also Chapter 2).

Due to the switch from labour taxes to consumption taxes, inflation is expected to rise temporarily, reducing output in the short-run; in the medium term, though, improved economic efficiency should stimulate growth, and potentially employment (see Box 1.1). Given depressed demand, the short-term negative impact on consumption may turn out to

Box 1.1. What is the expected macroeconomic impact of a switch from labour to consumption taxes in Hungary?

Governments have recently become increasingly interested in using taxes on consumption, such as sales tax and value added tax (VAT), as a means of financing a larger share of their spending (Johansson *et al.*, 2008). In 1998, Denmark implemented a reform along these lines. More recently, Germany (2007) and Hungary (2009) have increased VAT rates to partly or fully finance cuts in social security contributions, hence the name of "social VAT reform" sometimes given to this kind of reform. Two main reasons are usually advanced in support of such a reform: *first*, international tax competition makes it easier to collect tax on consumption (less mobile) than taxes on labour; *second*, a shift from labour to consumption taxes tends to stimulate growth, and potentially competitiveness and employment. However, in theory as in practice, the final impact of such a tax reform is not easy to establish firmly.

Standard static economic theory of fiscal incidence (McLure, 1975) suggests that a budget-neutral tax shift from labour to consumption should have no economic effect since taxing income is equivalent to taxing consumption (the sum of all incomes over the life cycle is equal to the sum of all expenditures). However, models taking into account the difference in the size of tax bases suggest that the shift can have an impact since consumption is a broader base than labour. Hence, for a revenue-neutral tax reform, a given increase in the consumption tax should be matched by a larger decrease in the tax on labour (Gauthier, 2009), reducing the tax wedge. The shift also affects intergenerational income redistribution, favouring younger generations compared to older ones, as older generations do not benefit from the decreased labour income taxes while being affected negatively by higher consumption taxes.

From a dynamic perspective, usually based on macroeconomic simulation models, the tax shift can also positively affect economic activity in the medium run, although the short run impact could be negative. The tax shift tends to have an immediate negative impact on consumption through the rise in consumer prices (VAT increase) but a progressive positive impact on labour demand (labour cost cuts). There is also a competiveness gain, especially if the exchange rate is fixed, both in domestic and foreign markets. In the domestic market, local producers gain competitiveness because imported goods face the VAT increase although importers do not benefit from labour cost cuts. In foreign markets, exporters improve their competitiveness thanks to lower labour costs.

Over time, the impact of the switch from labour to consumption taxes will depend upon the dynamic adjustment of different variables and the relative speed of adjustment of real variables following changes in nominal variables. Nominal wages may catch up more or less rapidly with higher consumer prices caused by the rise in VAT. This will support consumption but erode the positive impact on labour demand. Conversely, if enterprises do not increase mark-ups following the cut in employers' social security contributions (*e.g.* because of competitive pressures or already weak consumer demand), the VAT increase could have a limited impact on consumer prices, reducing the potential negative impact on consumption while also damping the potential positive impact on labour demand. Finally, the tax shift could have a negative impact on the fiscal balance in the short run since expenditures, indexed to inflation, are likely to grow faster than revenues, depressed by the negative shock on consumption. If the government tries to bring back the fiscal balance to its initial position by increasing taxes or reducing expenditures, it will lower the potential positive impact of the switch from labour to consumption taxes on activity and employment.

Box 1.1. **What is the expected macroeconomic impact of a switch from labour to consumption taxes in Hungary?** *(cont.)*

The potential impact could be even more complicated if the reduction in social contribution is tilted toward low-income workers, who are usually low-skilled workers for whom the reduction in labour costs has a more favourable impact on labour demand. This effect may be magnified by the minimum wage: the tax shift might loosen the binding constraint of the minimum wage, thereby further increasing the demand for low-skilled labour. Overall, if the tax shift increases the demand for labour, this will mostly affect the low-skilled sector. Eventually, investment should be undertaken by firms to increase the capital-labour ratio to its steady-state value. This adjustment means, however, that the economy returns to steady-state growth at a higher capital stock than in the baseline. This effect is a "permanent" result of the tax reform (Gauthier, 2009; Roeger *et al.*, 2008). In an endogenous-growth model, the increased capital stock induces higher research and development expenditures, which further amplify positive growth effects.

Although evaluation results are very sensitive to the underlying assumptions (notably as regards the wage-formation process), macroeconomic models tend to simulate a positive, but limited impact. For example, according to simulation results based on the Quest model (Roeger *et al.*, 2008), a tax shift from labour to consumption amounting to 1% of GDP for the whole European Union increases GDP by 0.1% in the first year and by 0.2% in the long run; while it increases employment by 0.15% in the first year and by 0.25% in the long run. However, in the case of countries with low employment rates, such as Hungary, the effects are larger. For the calibrated Hungarian part of the model, the increase of GDP is about 0.4% and the increase of employment is about 0.5% in the long run (simulations for Hungary have been made by Aron Kiss, Hungarian Ministry of Finance).

In practice, the impact assessment of the tax shift in Hungary will be strongly blurred by the current recession. Reduced total labour cost could merely serve to cushion cyclically-induced employment losses, making it difficult to assess a true positive impact on job creation. However, in depressed demand conditions, an immediate full pass-through of the VAT increase seems unlikely, as confirmed by recent price developments. This may reduce the potential mark-up increase and the negative impact on consumption. The impact on competitiveness of the tax shift could be reduced by the appreciation of the forint, as well as by the high import content of exports. The assessment of tax reform effects is also complicated by government proposals seeking to encourage, through the National Council for the Reconciliation of Interests (OET), a freeze on private wages for higher wage groups and a rise in lower wages by significant margins in 2010. These proposals, as well as discussions to increase the minimum wage, could, if accepted, largely offset desired positive effects on the demand for low-skilled labour.

Finally, the informal sector needs to be taken into account in designing a constrained optimal tax system for Hungary. Taxes on labour and consumption are likely to differ in administrative and compliance costs as well in the possibilities for tax evasion. VAT is easy to enforce because most of the value added is created by large corporations (Stiglitz, 2000). While there are no such studies for Hungary, the tax shift may induce similar gains. The estimated size of the grey economy is estimated at 15-20% of GDP.

be less pronounced than in previous experiences of VAT increases. Indeed, consumer prices rose by only 1.4% in July (over June 2009), compared to a potential VAT-induced increase of 3.4% (MNB, 2009), showing that the indirect tax increases have, at least initially, only partially filtered into prices.

On the expenditure side, pension reform was strengthened by accelerating the rise in the statutory retirement age, broadening the conditions under which the consumer price indexation of pension benefits would apply, abolishing the 13th month pension for all, and reducing pension benefits in proportion to the degree of early retirement (see Chapter 2 for more details). In addition, the authorities curtailed subsidies to homebuyers and tightened eligibility for certain household transfers.

Finally, the adoption of a fiscal responsibility law, introducing fiscal rules and a fiscal council, is likely to reinforce the credibility of the sustainability of fiscal consolidation, an issue taken up in detail in Chapter 2.

Improved confidence has allowed monetary policy to reaffirm the primacy of inflation targeting

Prior to the crisis, the monetary authorities tried to enhance the effectiveness of policy action by progressively putting in place an inflation targeting framework. First, a continuous medium-term inflation target of 3% for the consumer price index (CPI) had been announced in 2005, replacing the system of end-year targets. In February 2008, the authorities relinquished the exchange rate band.[6] The free-floating exchange rate regime was seen as enabling the central bank to focus exclusively on its medium-term inflation target, meeting the nominal Maastricht criterion and preparing for entry into the ERM-II exchange rate system (Government of the Republic of Hungary, 2008).

However, the implementation of a pure inflation targeting framework did not go smoothly. As it turned out, exchange rate appreciation during the first half of 2008 may have increased households' incentives to borrow in foreign currency. Incentives to incur foreign debt were already strong, as the central bank had to keep high nominal interest rates compared to western European countries given latent inflationary risks linked to both the positive output gap and the new system of guaranteed wage minima introduced in 2006 (Box 1.2). As a result of increased foreign borrowing, the pass-through of monetary policy via interest rates weakened further, complicating the conduct of monetary policy.

Due to renewed financial market stress in March 2009, the central bank faced severe communication challenges as it had to give priority to the nominal exchange rate as an intermediate target of monetary policy instead of pure inflation targeting. Given lingering concerns about financial stability, avoiding renewed attacks against the forint became a transitory policy goal. It was announced that net current and capital transfers from the EU would be converted on the foreign exchange market rather than being added to foreign reserves as previously. Interest rates were kept unchanged at high levels from end-January to July 2009, notwithstanding concerns about large and rising economic slack.

Since July 2009, the stance of monetary policy has started to ease as reduced financial market strains lessened concerns about excessive exchange rate volatility. In neighbouring countries, the widening output gap had prompted earlier cuts in policy rates. The central bank lowered the policy rate by 100 basis points to 8.5% in July 2009, the pre-October 2008 level, and then enacted three further interest rate cuts, reducing the policy rate to 6.5% in November 2009, the lowest in three years. Short-term market interest rates fell by 300 basis points between February and October 2009, significantly below pre-crisis levels. Recognising the return of market confidence, the National Bank of Hungary indicated in August 2009 that inflation targeting would again take precedence in rate-setting sessions.

Box 1.2. **Guaranteed wage minima and nominal wage growth**

Two levels of "guaranteed wage minima", depending on experience, were introduced in July 2006 for jobs requiring at least secondary school or a vocational training qualification. Guaranteed wage minima initially exceeded the basic minimum wage by 5% and 10%. The gap widened subsequently to 22.3% by 2009. The system of guaranteed wage minima was intended to rein in the "grey" economy (by forcing the declaration of *de facto* unrecorded earnings or in-kind benefits) and also to raise the supply of scarce skilled labour in the formal economy. Wage minima for jobs requiring tertiary levels of education have also been considered. In 2009, the dependence of guaranteed wage minima on experience was abolished and its amount was only moderately increased.

The net incidence of the wage minima system has been hard to assess. Little is known about the value of cash payments and in-kind benefits among low-income earners. In addition, sectoral wage agreements can override guaranteed wage minima. Finally, the system took effect in a setting of rising unemployment, which tends to disproportionately affect persons with low skills and low educational attainment. According to official estimates, the system of guaranteed wage minima has increased the formal wage and salary bill by 0.3% in 2006, 1.0-1.3% in 2007 and above 1% in 2008. In 2009, the guaranteed wage minima did not significantly increase the wage bill.

While guaranteed wage minima have increased tax receipts, they have also complicated the assessment of inflation risks, the scale of the whitening effect being ambiguous. Estimates by the National Bank of Hungary show that about one half of the increase in the guaranteed wage minima in 2007 reflected the whitening of wages. In contrast, the rise in the guaranteed wage minima in 2008 has been associated with effective increases in the wage bill reflecting wage developments in large corporations and headcount adjustments in the manufacturing and service sectors (MNB [2008], *Quarterly Report on Inflation*, Magyar Nemzeti Bank, May and August; Ministry of Finance [2008], *Report on Economic and Financial Developments*, October, in Hungarian).

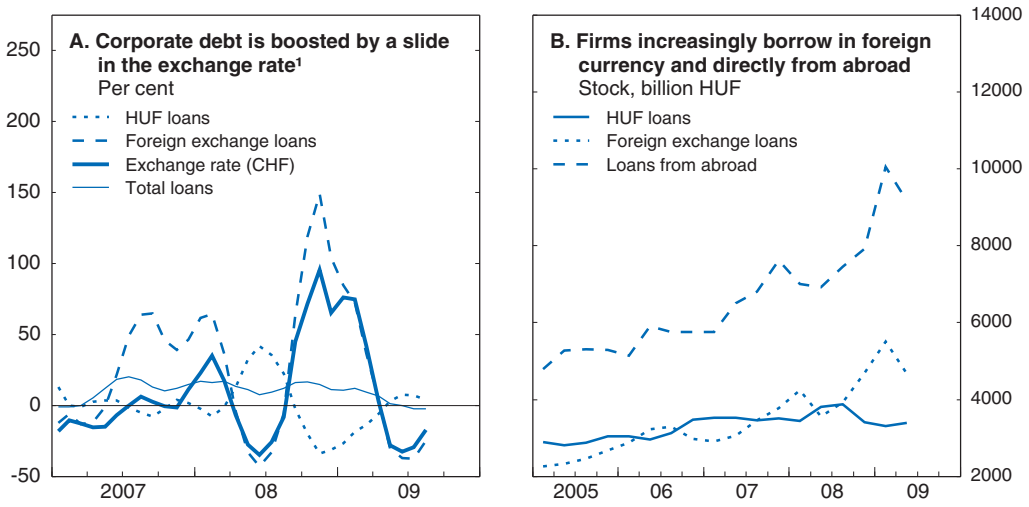
As the economy recovers, monetary policy needs to carefully communicate to avoid financial stability concerns in case of sudden changes in market confidence, as has happened in the past. Moreover, the end of the IMF programme in 2010 calls for a continued close monitoring of indicators that could trigger a confidence crisis, for example the ratio of official reserves to short-term foreign currency debt at remaining maturity. Finally, continual in-depth analysis on the impact of the current recession on potential output is needed to gauge the re-emergence of inflation risks in the medium term.

Macro policy measures have eased credit supply constraints

The slide of the forint in autumn 2008 boosted the share of foreign exchange loans to two-thirds from about a half of total domestic borrowing before the crisis (Figure 1.8, panel A). In contrast to households, the ballooning foreign exchange debt of corporations is a less acute problem as most have foreign currency revenue or are hedged against foreign exchange risk. As a result of larger margins for foreign currency lending rates in Hungary than in other countries, those firms that have access, prefer to borrow from financial

Figure 1.8. **Corporate debt in foreign currency, in particular direct borrowing from abroad, has been soaring**

Per cent



1. Loans (total outstanding, HUF and foreign exchange, not adjusted for exchange rate effects) are expressed in 3-month moving average seasonally adjusted annual rates. The exchange rate is expressed as forints per Swiss franc in 3-month moving average annualised rates.

Source: MNB (2009), "Financial Accounts", *Statistical Time Series*, Magyar Nemzeti Bank, September.

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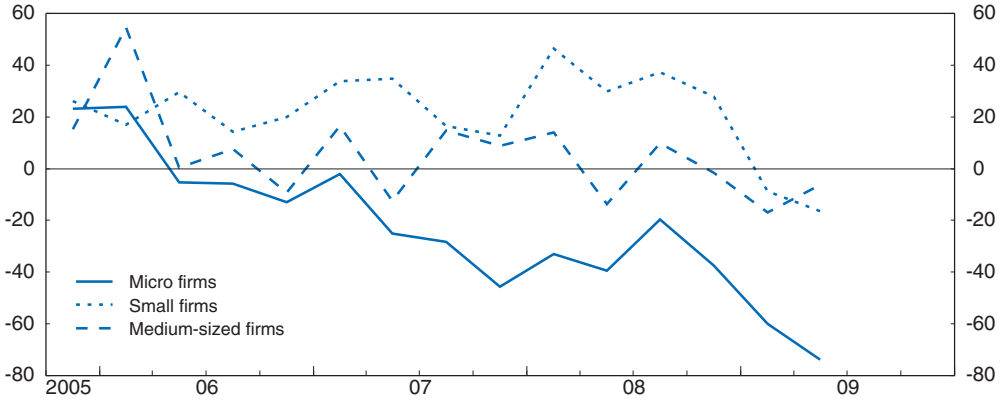
institutions in neighbouring countries. The share of direct borrowing from abroad has reached over 40% (Figure 1.8, panel B). With the tightened liquidity in foreign lending markets, the widening of the margins for foreign exchange loans and the series of domestic interest rate cuts since July 2009, lending in forints is likely to expand more rapidly.

Following the onset of the financial crisis, bank lending to the private sector weakened substantially. On the demand side, many small and medium-sized firms (SMEs) have postponed their investments and are trying to reduce their costs to cope with the crisis. On the supply side, banks became increasingly reluctant to meet credit needs owing to the tightening of their financing conditions and the increase in non-performing loans. Credit supplies thus became increasingly insensitive to interest rates. As a result, many SMEs found it increasingly difficult to get access to credit funds even for purposes of financing working capital (Figure 1.9). SME credits account for 55% of banks' corporate loans.

Some sectors, such as agriculture, food processing, retail and wholesale trade were particularly hard hit by the credit squeeze. The government has introduced guarantee programmes, direct lending through the development bank, interest subsidies and participation in venture companies to address the need for stable financing amid deteriorating credit market conditions. Participation in such programmes, however, has been limited notwithstanding sizeable allocations from EU funds and the budget for such schemes. This is to a large extent related to stringent access conditions. Firms which meet such criteria can borrow in the market and need not pay for government and bank guarantees (2% and 0.5-6.3% of the loan, respectively) in addition to double-digit interest rates. In contrast, firms that fail to meet the criteria for guarantees or direct loans or that cannot afford high financing costs have no choice but to exit from the market.

Figure 1.9. **SME and micro financing has suffered**[1]

Percentage growth, seasonally adjusted annual rate



1. SME: small and medium-sized enterprises.

Source: HFSA (2009), *Time series of sectors supervised by HFSA*, Hungarian Financial Supervisory Authority, October.

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In this situation, the central bank and the government took several measures in the course of 2009 to help ease the credit crunch. In March, the central bank strengthened banks' incentives to lend *via* the introduction of new facilities, including a temporary six-month foreign exchange swap, open to banks which maintain or increase long-term external funding and uphold their current level of lending to the corporate sector. Although seven banks applied for this facility, including four of the six largest subsidiaries of foreign banks, none of the banks utilised the facility owing to stringent criteria. In addition, the central bank put into place a three-month foreign exchange swap, which was priced at least 50 basis points above the six-month facility.

Given the limited room for fiscal manoeuvre, the government took parallel, expenditure-neutral action. In June 2009, it made arrangements to supply firms with financial resources from EU funds of up to EUR 5 billion *via* the banking system under the umbrella of a central programme (June 2009). The package comprised speedier and more efficient use of EU funds, increased micro loans, interest support, the expansion of the partial mortgage debt servicing guarantee scheme for the unemployed, increased venture capital, new refinancing facilities for commercial banks from the Hungarian Development Bank and the Venture Finance Hungary Plc. (new Hungarian working capital credit) and a doubling of the SME guarantee facility.

The economy may slowly edge out of the recession

After a sharp contraction in 2009, real GDP is expected to resume growth during the course of 2010, spurred by stronger foreign demand and easier credit conditions. Nevertheless, on a year-on-year basis, real GDP is still projected to decline in 2010 (a fall of 1%) (Table 1.1). Continued fiscal austerity will curb domestic demand in 2010, with further, albeit reduced, cutbacks in private consumption. In this setting, the rate of unemployment may rise well above 10% in 2010 before edging down in 2011. Large economic slack and currency appreciation may dampen inflationary momentum.

On the external side, financing requirements have eased substantially with the narrowing current account deficit. Helped by imports contracting more strongly than exports, by a stronger income balance and by increased net transfers, the deficit on current

Table 1.1. **Short-term outlook**
Percentage change, volume

	Outcomes		Projections		
	2007	2008	2009	2010	2011
Private consumption	0.4	–0.5	–7.8	–5.3	1.2
Government consumption	–7.4	–0.8	0.0	–0.9	1.0
Gross fixed capital formation	1.6	0.4	–6.6	0.2	4.1
Final domestic demand	–1.2	–0.4	–5.8	–3.1	1.8
Stockbuilding[1]	0.0	1.1	–8.0	0.3	0.0
Total domestic demand	–1.2	0.7	–10.1	–2.8	1.9
Exports of goods and services	16.2	5.6	–11.2	6.0	7.0
Imports of goods and services	13.3	5.7	–18.1	3.0	5.6
Net exports[1]	2.2	0.0	5.5	2.5	1.3
Gross domestic product	**1.0**	**0.4**	**–6.9**	**–1.0**	**3.1**
GDP deflator	5.9	3.4	2.4	2.3	2.0
Memorandum items					
Consumer price index	7.9	6.0	4.5	4.0	3.0
Private consumption deflator	6.2	5.6	4.6	4.5	4.6
Unemployment rate (% of labour force)	7.4	7.9	9.9	10.3	9.3
General government financial balance (% of GDP)	–4.9	–3.7	–4.3	–4.1	–3.6
Current account balance (% of GDP)	–6.7	–7.2	–1.6	–1.8	–2.6

1. Contribution to GDP growth.
Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), December.

account is projected to fall from 7.2% of GDP in 2008 to 1.6% in 2009 (the lowest since 1995). Part of the contribution to the projected contraction of the current account deficit may come from a lower deficit in the net investment income balance, decreased financing costs and reduced expatriation of earnings on inward FDI. Large EU transfers are expected to enlarge the surplus of the current transfer balance. Official external financing by the International Monetary Fund, the World Bank and the European Union should continue to provide a shield against renewed financial turbulence.[7]

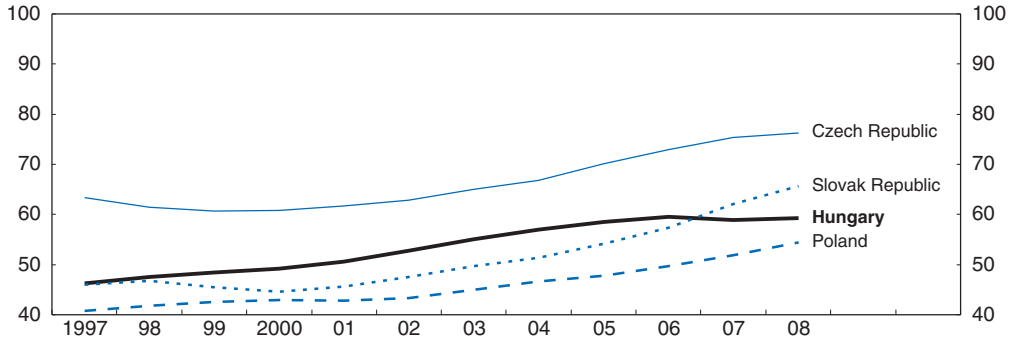
Laying the foundations for stronger sustained output growth

Hungary's productivity gaps were already a major issue prior to the onset of the current economic crisis. In 2007-08, real income convergence came close to a halt, with the real per capita income settling at around 60% of the euro area average per capita income (Figure 1.10). This setback partly derived from a policy-induced slowing of output growth (a consequence of fiscal consolidation) as well as from particularly weak productivity (Figure 1.11). In Central and Eastern Europe, no other emerging market economy experienced a similar stagnation of relative per capita incomes.

Real income convergence is likely to have been reversed in 2009, as Hungary has experienced a comparatively steep fall in output. Income inequality, which only slightly declined between 2005 and 2007, is likely to rise owing to the crisis.[8] Further relative income declines may lie in store, given the scale of the 2009-10 output fall. Potential output has declined, reflecting accelerated scrapping, a fall in the capital stock and fixed investment, and increased structural unemployment (Box 1.3). On the other hand, the 2009-10 tax reform and earlier structural policy initiatives, by augmenting labour supply and stimulating labour demand, may dampen the recession-induced impact on potential output growth, at least in the medium term.

Figure 1.10. **Convergence of real per capita income**

Real GDP per capita in USD at constant prices and constant purchasing power parities, euro area = 100



Source: OECD (2009), *OECD National Accounts Statistics* (database), December.

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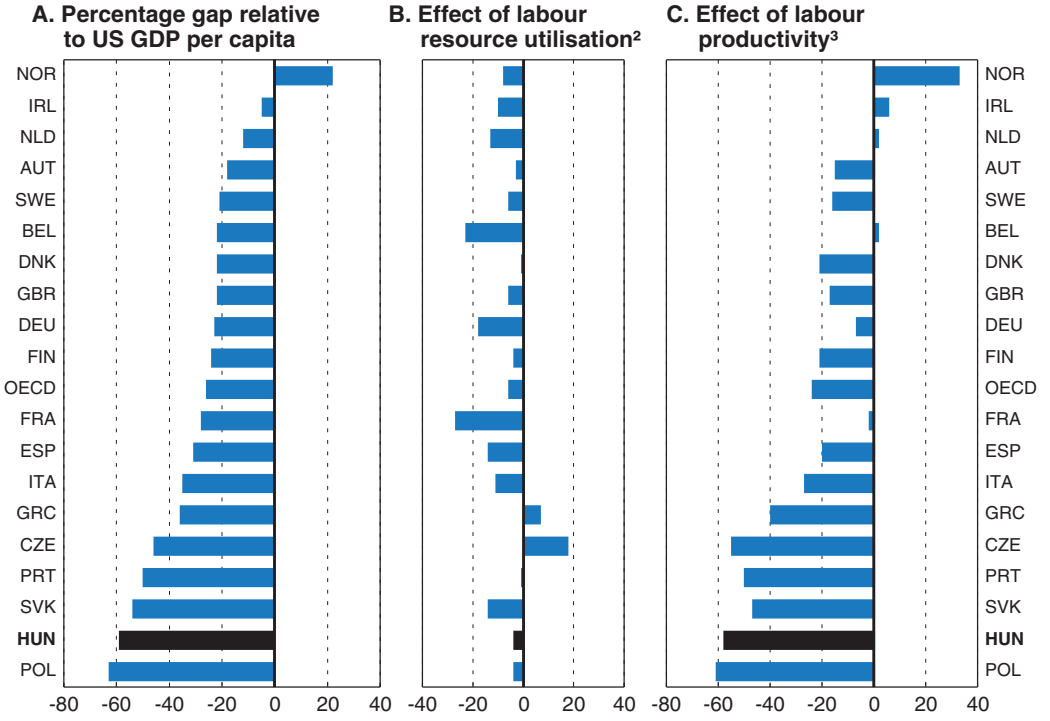
Figure 1.11. **Sources of real income differences**

Percentage point differences in GDP per capita with respect to the United States, 2008[1]



1. GDP in US dollars at current prices and purchasing power parities.
2. Measured as total number of hours worked per capita.
3. Percentage gap with respect to US GDP per hour worked.

Source: OECD (2009), *Productivity database*, June, *www.oecd.org/statistics/productivity*.

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Recent tax reform should lead to labour deepening

Unemployment steadily increased in recent years…

Hungary's labour market has traditionally displayed unusual features setting it apart from most other countries. Prominent among them are relatively low participation rates for

Box 1.3. **The recession-induced weakening of potential output and growth**

The economic crisis has led to important downward revisions of Hungary's productive potential. The revisions concern both the level and the rate of growth of potential output. Negative level effects (permanent losses to output levels) mainly stem from accelerated obsolescence of the capital stock. In the automotive and energy-intensive industries, part of the existing capacities are likely to become permanently redundant (MNB [2009], *Quarterly Report on Inflation*, Magyar Nemzeti Bank, August). The negative effects on potential output growth derive from all three factors of the production function. Capital formation is viewed as being hindered by high real user costs of capital, increased uncertainty and high risk aversion. Structural unemployment seems set to further ratchet up with rising long-duration unemployment and the related decay of human capital. Total factor productivity (TFP) growth may weaken with reduced business research and development spending, notably in the automotive industry, where such outlays are highly concentrated.

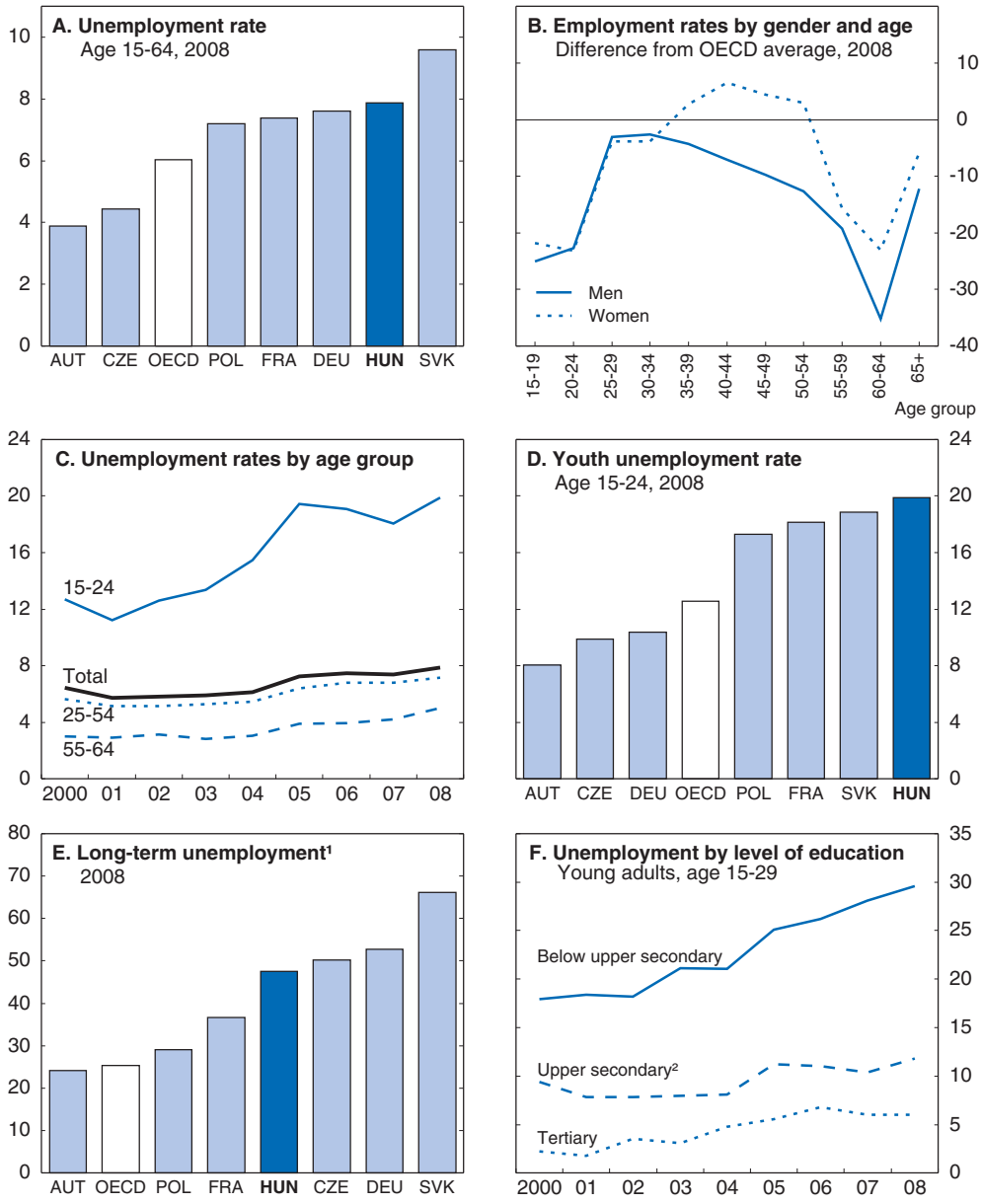
On the other hand, the overall fall in potential output *growth* is likely to be in part cushioned by: falling interest rates (a consequence of continued strong fiscal stabilisation); the 2009-10 tax reform (strengthening labour supply and labour demand); the extension of the effective retirement age; and, perhaps, by stronger competition stimulating TFP growth. Taking all these factors into account, potential output *growth* seems nonetheless set to weaken sharply, averaging 1½ per cent in 2009-11 as against 2½ per cent in 2005-08. Recent estimates done by the central bank are similar, with a potential growth falling to about ¾ per cent in 2009-10 before recovering to barely 2% in 2011. The recovery of potential growth in 2011 is expected to be driven by an increase in total factor productivity and a positive contribution from labour. The contribution of capital deepening is likely to remain significantly lower than prior to the recession for a couple of years.

most categories of the labour force (women, especially women with children, young people and older persons as well as persons with a low level of educational attainment). Another striking characteristic is the low employment rate relative to the OECD average of men at all ages, in particular of prime age men (Figure 1.12, panel B). In contrast, employment rates for highly skilled persons are commensurate with rates seen in other emerging countries. Largely mirroring the profile of employment rates, participation rates are also low by international standards. On the other hand, the number of average hours worked per person, at about 2 000 per year, is among the highest within OECD countries. Thanks to policy initiatives, though, employment rates for men edged up by small margins in 2003-07. This mainly reflected higher employment rates for males aged 25-59 years, contrasting with a sharp fall in employment rates for both young men and women aged 20-24 years.[9]

Labour market outcomes have worsened. As shown in Figure 1.1, the employment rate has been falling since 2007 while the unemployment rate has kept increasing since 2003, except in 2007. Lower output growth, arising from slowdown in productivity growth and vigorous fiscal consolidation in 2007-08, has contributed to a rise of the rate of unemployment from 6% in 2003 to about 8% in 2008. Labour market polarisation naturally increased with the deteriorating labour market performance. The share of long-term unemployed (one year and longer) reached 48% in 2007 compared with 44% in 2003, while the youth unemployment rate (age 15-24 years) climbed to 18% in 2007 compared with 13% in 2003, levels unobserved since 1994 (Figure 1.12, panel C). Since 2005, young persons with low educational attainment (less than upper secondary education) suffered disproportionate increases in joblessness (Figure 1.12, panel F). Increased regional

Figure 1.12. **Labour market outcomes**

Per cent



1. Unemployment duration of one year or longer in per cent of total unemployment.
2. Includes post secondary non-tertiary education.

Source: OECD (2009), *Labour Market Statistics* (database), November and Eurostat (2009), "Population and Social Conditions", *Eurostat database*, November.

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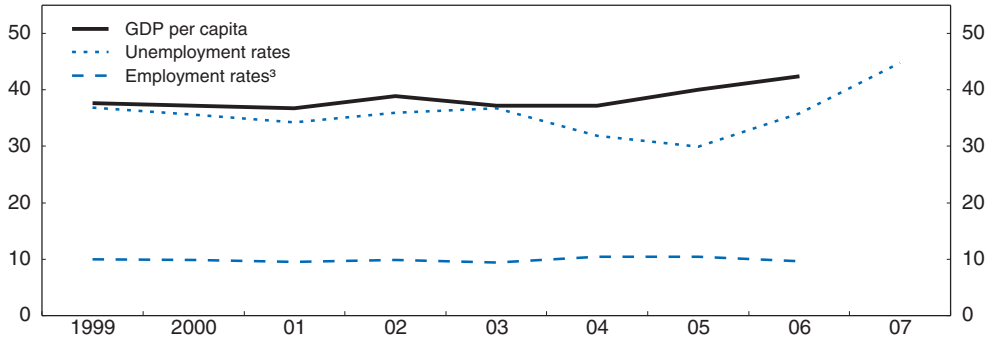
differentiation of labour market outcomes is manifest in the rising dispersion of unemployment rates and per capita incomes until 2007 (Figure 1.13). In terms of per capita income, the regional dispersion is among the highest in the OECD, while it is still slightly below average for unemployment (OECD, 2009).

The labour market performance points to a rise in structural unemployment well before the 2009 economic crisis. Indeed, *prima facie* evidence for deepened labour market

Figure 1.13. **Regional dispersion**[1]
At NUTS 3 level, per cent[2]



1. Measured by the sum of the absolute differences between regional and national levels.
2. NUTS: Nomenclature of Territorial Units for Statistics.
3. Age group 15-64.

Source: Eurostat (2009), "Regional statistics", *Eurostat database*, October.

StatLink http://dx.doi.org/10.1787/785328227677

disequilibrium springs from the synchronous rise in unemployment and the positive output gap in 2003-07 (Table 1.2). On this basis, the structural rate of unemployment may have increased by around 1½ per cent between 2003 and 2007. Unless offset by innovative supply-side policies, notably efforts to improve the skills of job-seekers, the 2009-10 recession is likely to accentuate this trend.

Table 1.2. **Output gap and unemployment rate**
Per cent

	2003	2004	2005	2006	2007	2008	2009	2010
Output gap[1]	1.0	2.0	1.9	2.3	0.2	–1.8	–10.2	–12.2
Unemployment rate	5.9	6.2	7.3	7.5	7.4	7.9	9.9	10.3

1. Deviations of actual GDP from potential GDP as a per cent of potential GDP.

Source: OECD (2009), *OECD Economic Outlook: Statistics and Projections* (database), December.

Notwithstanding rising structural unemployment, aggregate real wages appear to be rather flexible in the current recession. Current surveys show that wage and salary earners generally prefer short-time work and related cuts in pay to layoffs. In 2009, the government subsidised short-time work of companies facing economic difficulties. Wage earners on a four-day schedule are entitled to receive 80% of the pay for the fifth day, provided they meet a number of conditions, including the use of training opportunities. Private real wages are expected to fall by a cumulative 5% in 2009-10.

Real wage flexibility is largely rooted in a non-confrontational, consensual approach towards nominal wage setting. Tripartite co-operation at national level is ensured by the National Council for the Reconciliation of Interests, which provides a forum for regular discussions about labour market issues. The Council recommends average wage increases for the enterprise sector and sets the minimum wage, thereby helping shape voluntary agreements of social partners and the government. Other institutional labour market features underpinning real wage flexibility include: a relatively small coverage by wage agreements in the private sector (less than 30%); low strike activity; a slightly less stringent

stance of employment protection than for the OECD average; and a minimum wage, which decreased (relative to average pay) from 43% in 2002 to 36% in 2008. During the same period, the number of minimum wage earners dropped from 11.4% of full time employees in 2002 to 2.2% in 2008. Guaranteed wage minima may have played a part in this trend (Box 1.2).

... mainly owing to an inadequate tax/transfer system

Underlying the historically low levels of employment and participation rates have been distortions linked to regulations and the tax-transfer system. High social security contributions paid by employers have prompted firms to: *i)* offer unregistered employment (mainly to unskilled workers); *ii)* pay part of the salary "under the table" for skilled or highly skilled workers; or *iii)* to force high earners into a service provider contract. More generally, high tax wedges have tilted individuals against formal labour force participation, favouring activity in the "grey" economy, damping labour mobility and delaying the return to employment of unemployed people. Adverse institutional features of the transfer/social system include a low effective pension age (less than 60 years, the second lowest in the OECD), family support policies (granting one of the longest maternity leaves in the OECD), some earnings-related family allowances and disability benefits.

For educated women with labour market experience, cash benefits paid over the period of three years of maternity leave were considered the "most generous cash support system (financing absence from work) in the developed world" (Bálint and Köllő, 2008). At the same time; it acted as a channel for opting-out from the labour market for women with poor labour market prospects. The system also failed to offer appropriate assistance to women with poor labour market prospects. Until 2009, the system provided an opportunity for working women to stay away from the labour market for up to three years, a longer period of time than is considered necessary from the child-welfare point of view (benefits for the children are usually estimated to be the greatest during the first few months; for a more general discussion, see Galtry and Callister (2005). The recent reform that reduces the maximum duration of maternity leave to two-years is a positive move. While there is room for further reductions in maternity leave, these need to be flanked by stronger support for childcare in the form of part-time work, working from home and nursery services.

The effectiveness of active labour market policies (ALMPs) has also been questioned. The persistence of high vacancies, continuously exceeding 10% of the number of unemployed persons in 1998-2006, points to sub-optimal labour market policies. Outlays on active and passive labour market measures totalled 1% of GDP in 2007 or half the EU15 average. Within this total, the share of active measures (less than 40%) is low relative to the scale of mismatch unemployment. Participation in ALMP programmes steadily declined until 2007, reflecting benefit provisions and job opportunities in the grey economy. Since 2008, ALMPs co-financed by EU funds and financed from the national Labour Market Fund are managed through the same structure, which is likely to increase their effectiveness.[10] The organisational structure of the Public Employment Service was also modified, shifting responsibility from county job centres to regional job centres (regionalisation of public employment services).

The take-up of different labour market programmes has been found to vary with the level of and changes in regional unemployment (Frey, 2008). Training and business start-up subsidies decrease with rising unemployment, while the support for young entrants into the labour force increases with rising unemployment.[11] Similarly, the use of training opportunities and business start-up schemes is typically strong in regions (counties) with

favourable labour market outcomes, while it is weak in disadvantaged regions. Participation in public work programmes, though, tends to be comparatively strong in poor regions. These findings highlight the need to further adapt ALMP to specific needs.

A study by Galasi and Nagy (2008),[12] carried out jointly with the Ministry of Social Affairs and Labour, also finds large differences between categories of ALMP participants. Among the beneficiaries of regular social allowances, unskilled and older people tend to enrol in public work programmes; although they offer short-term employment opportunities without leading to long-lasting labour force participation. On the other hand, beneficiaries of unemployment benefits (usually younger cohorts with more education and shorter unemployment spells) tend to participate in training programmes and benefit from subsidised employment, improving their employment prospects. In response to the conclusions of the survey, a new program was launched in 2009 focusing on the low-skilled. ALMP training programmes need to increase the number of participants and be better balanced in favour of the unskilled workforce.

Recent policy impulses are set to strengthen work incentives

In its special report on Hungary (OECD, 2008a), the OECD concluded that labour reform measures should be guided by the principle of shifting the focus from income support to encouraging people's return to formal employment and official labour force participation. The recommended shift in policy emphasis has become visible in several policy initiatives taken prior to the economic crisis.[13]

One of them is the 2008 *Pathway to Work Programme* aimed at enlarging labour supply and drawing people back into formal employment. It potentially affects 100 000 persons by: helping inactive persons rejoin the labour force; having permanently unemployed persons take up employment; preventing unskilled employees from dropping out of the labour force; and improving employment chances for young adults without complete schooling.[14] The 2009 reform of the tax-transfer system introduces many changes that should continue the trend of improving work incentives, notably through lower tax wedges (see Chapter 2 for details). As described previously (Box 1.1), the shift from labour to consumption taxes should also stimulate labour demand. The removal of the lump-sum health contribution in 2010 will have a particularly strong impact on the demand for low-skilled labour, which is highly wage-elastic. Lower average income tax rates for all income groups, especially for low income-earners, may raise labour supply. In parallel, the tax reform has reduced the marginal effective tax rate (METR) at the level of the average wage, while increasing METRs for higher incomes (Figure 2.14 in Chapter 2). The rise in METRs for higher incomes may turn out to be counterproductive.

Female labour force participation rates may also rise with reduced maternity leave (a labour supply effect) as long as sufficient child-care facilities are provided. Among the 2009 reforms, the eligibility period of child-care allowance has been shortened from three years to two years for children born after 30 April 2010. The eligibility criteria of insurance-based child-care benefit (GYED) have also been tightened as women (or men) need to have a minimum 365 days of insurance before the birth of the child, instead of 180 days previously.

Entrepreneurship remains hindered by a "two-tier" economy

Hungary's openness to competitive forces is manifest in large and growing foreign trade shares as well as in the rising geographical diversification of exports. The OECD

indicator of product market regulation (PMR) reveals no major deviation from the OECD average, but mark-ups in service industries are high (Molnár and Bottini, 2008). EU accession has helped establish modern framework conditions in competition policy and law oversight. Nevertheless, unusually large gaps between efficiency levels across regions and firm categories persist.

In the early 1990s, Hungary's economic transformation into a market economy had effectively given rise to a "two-tier" economy. Swift diffusion of best-practice technologies (a consequence of surging inward FDI) and rapid dismantling of barriers to competition created a class of efficient, export-oriented enterprises. Located in the western and central parts of the country, most of these firms are of large or medium size, with productivity levels far exceeding the national average. Private research and development (R&D) intensity, innovative activity and cluster formation are concentrated in this segment of the economy.[15] Contents of high and medium technology in Hungary's exports are correspondingly high, exceeding levels in many other OECD countries. The convergence of real per capita income (until 2006) owed much to the productive efficiency in this sector.

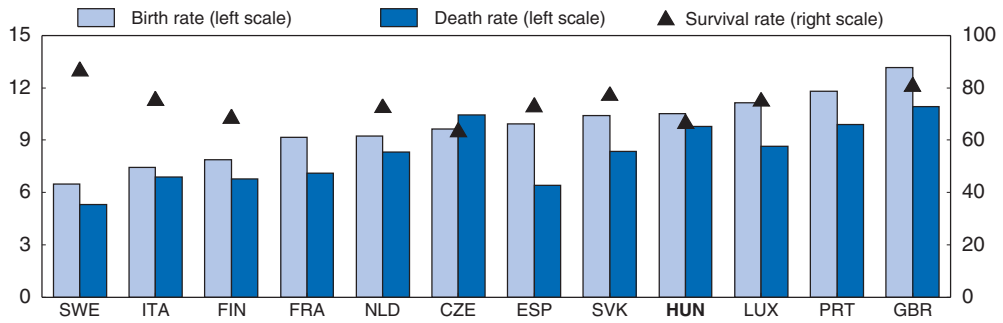
The lagging segment of the economy (the lower tier) is dominated by small and micro firms in manufacturing and services (craft and retail sectors). These firms generally suffer from over-manning and under-endowment of capital, labour skills and entrepreneurial dynamism.[16] Value added per employee, R&D intensity, cluster formation and innovative activity are all correspondingly low. The lagging segment of the economy has slowed the pace of real per-capita income convergence and waits to be integrated into the FDI-based chain with high efficiency levels. Overall, the spatial concentration of inward FDI and the associated high efficiency of production in the upper tier of the economy implied rising gaps in economic conditions across regions (19 counties) and firm classes. Hungary's dispersion of regional per capita income and regional unemployment rates have been rising (Figure 1.13). One way of improving the situation would be to upgrade the capacity to design region-specific development projects to speed up further the release of EU funds.

Entrepreneurial surveys conducted by the Hungarian Ministry of Economy and Transport, the World Bank (*Ease of Doing Business*), and the Observatory of European SMEs (*Euroflash Barometer*) all point to high taxes and social security contributions, complex regulations (red tape) and inadequate investor protection as constraints for entrepreneurial activity (OECD, 2008a and 2008b). In addition, bankruptcy procedures delay business rehabilitation, especially for small enterprises. The overwhelming majority of SMEs are not "bankable", precluding access to finance. Strict collateral requirements for loans, tiny supplies of venture capital, high real interest rates and banks' insufficient expertise in assessing small and micro firms' credit risks combine to constitute a powerful web of financial constraints. The share of venture capital funds in GDP is extremely low by EU standards. Given these barriers, motivation to set up a business are correspondingly low. The 2009 set of financial measures aimed at shielding SMEs during the recession have relaxed some of these constraints. However, further action by the government is necessary to spur firm creation and to stimulate entrepreneurship dynamism.

Overall, partly owing to strong competitive pressures, firm creation has nonetheless been quite high by international comparison. Survival rates, however, have been low (Figure 1.14). The authority might consider the need for taking action to lengthen the survival rate of firms through an improved network of firm advisory services.

Figure 1.14. **The rise and demise of enterprises**[1]

Per cent, average 2002-06[2]



1. Industry and services excluding public administration and management activities of holding companies. The birth and death rates are enterprise births or deaths divided by the number of active enterprises. The survival rate is the number of enterprises in a year who have survived for two years divided by the number of enterprise births two years previously.
2. 2002-05 for death rate.

Source: Eurostat (2009), "Structural Business Statistics", *Eurostat database*, November.

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Overall productivity is hampered by low R&D intensity

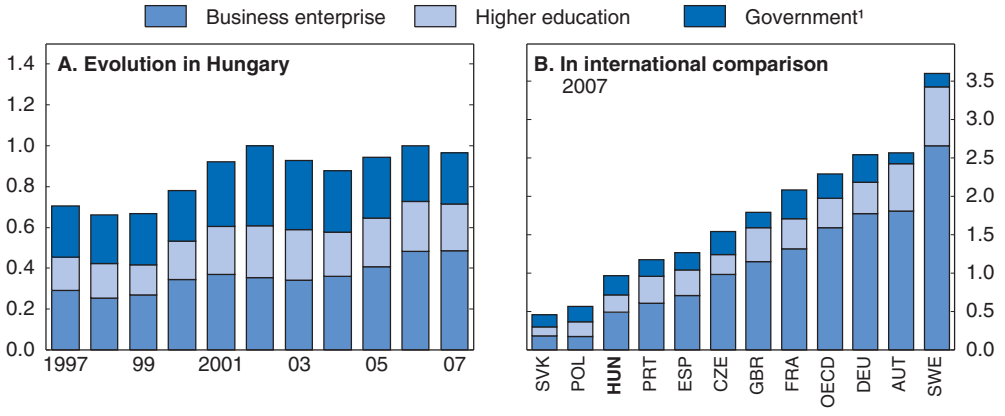
Entrepreneurial activity and innovation tend to be closely connected with each other, innovation driving firm creation and firm expansion, while entrepreneurial dynamism fosters market, product, process, and organisational innovations. In the case of Hungary, the link between these two co-dependent variables is surprisingly asymmetrical. Vibrant firm creation has co-existed with a low level of innovative activity as measured by standard indicators such as patents, publication counts and in-house product and process innovations. According to the 2008 *OECD Review of Hungary's Innovation System* (OECD, 2008b), innovations based on own R&D efforts are low. At 1% of GDP, R&D intensity is low by international standards, even considering Hungary's relative per capita income position (Figure 1.15). Experience in other countries has shown that the capacity to absorb foreign best-practice technology and organisation not only depends on FDI, but also upon the scale of domestic R&D intensity. Moreover, Hungary's R&D spending is highly skewed, private R&D efforts being strongly concentrated in rich regions where large enterprises are located such as Budapest.[17] In contrast, innovative medium-sized firms are virtually non-existent. In 2002-04, the percentage of SMEs developing in-house product and process innovations was the lowest in the OECD.

High and medium-technology products and services account for high shares in Hungary's aggregate output and exports. Yet, apart from mobile telephones, the telecommunication infrastructure is still narrow, as indicated by comparatively low numbers of computer and Internet users, broadband and fixed telephone lines (Figure 1.16). Low diffusion of information and communication technology (ICT) partly reflects high user prices (a sign of anti-competitive forces prevailing in network industries) and low absorptive capacity in disadvantaged regions. Regional disparities in the distribution of information and information technology (IT) providers (hardware and software) are correspondingly large and widening. More than half of suppliers' businesses operate in Budapest.

ICT plays a central part in the interplay between entrepreneurial and innovative activities. ICT and e-business applications offer benefits across a wide range of intra and

Figure 1.15. **Research and development expenditure**

Per cent of GDP



1. Includes the private non-profit sector.

Source: OECD (2009), "Main Science and Technology Indicators", *OECD Science, Technology and R&D Statistics* (database), October.

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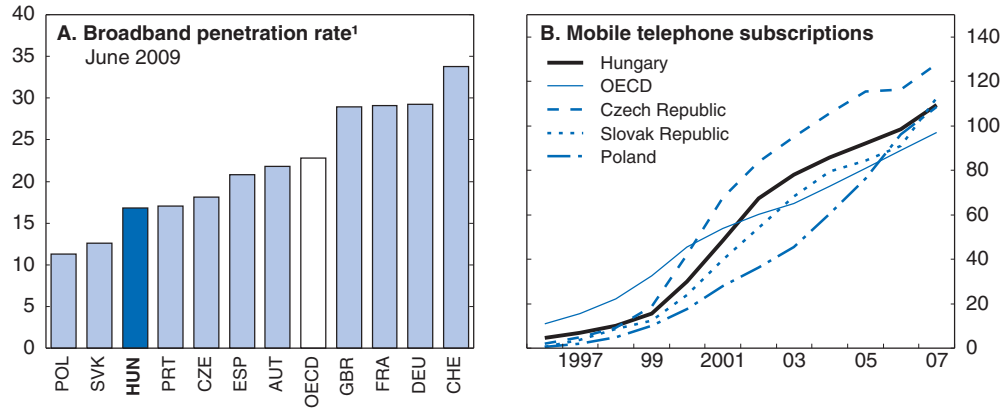
Figure 1.16. **Telecommunications indicators**

Per 100 inhabitants



1. Number of broadband subscribers per 100 inhabitants.

Source: OECD (2009), *OECD Communications Outlook 2009* and OECD Broadband Statistics, *www.oecd.org/sti/ict/broadband*, December.

StatLink http://dx.doi.org/10.1787/785378161006

inter-firm processes, including the internationalisation of SME activities. Wide ICT diffusion also raises the visibility of programme support, stimulating their take-up by small and micro firms. Finally, wide ICT diffusion facilitates the creation and expansion of business support centres (business service stations), enabling network building, data collection and data exchange.

Lifting "excluded" firms in the *lower-tier economy* out of economic inefficiency requires a broad set of framework conditions to be established. These include transportation facilities, education and training opportunities as well as a network of standardised business development centres specialised in giving business advice to small and micro firms. Non-R&D based innovations (wider ICT diffusion and larger supplies of

collateral-free micro finance) are known to be efficient in stimulating firm creation and firm expansion in the *lower-tier economy*. Action along these lines will tend to augment the potential for *bundling* micro and small firms to form clusters or to become part of supplier chains for large companies.

The *upper-tier economy* requires collaborative solutions of a different kind, favouring R&D based innovations through intense interactions between research and business communities. Experience in several OECD countries has shown that collaborative innovations are capable of spurring entrepreneurial and innovative activities (OECD, 2004). The strategy of collective efficiency views social capital as a vital innovation asset, improving SME access to financial resources, infrastructure and knowledge services. This approach emphasises the use of externalities and joint action by ministries, public institutions, social partners, groups of firms, universities and research institutions in the domain of local business programmes (OECD, 2007a).

The potential of collaborative innovations in Hungary is largely untapped. While technological co-operation between large firms is quite advanced, knowledge transfers between enterprises and universities are sparse due to limited mobility between academia and industry. Moreover, public research organisations contribute little to innovation

Box 1.4. **Policy recommendations**

Macroeconomic policies to stabilise the economy

- Continue fiscal consolidation, through structural reforms, to help restore market confidence. Avoid excessive pro-cyclicality if the economy deteriorates more than expected.
- Achieve a well-balanced policy mix through continued structural fiscal consolidation in order to alleviate the task of monetary policy in reaching its medium-term inflation target.
- As the economy recovers, the central bank should continue to carefully communicate to financial markets to avoid financial stability concerns in case of sudden changes in market confidence.
- Continue with in-depth analysis of the impact of the current recession on potential output to help raise the efficiency of monetary policy in conditions of enhanced uncertainty.

Structural policies to restore sustainable growth

- Better target active labour market training programmes to the unskilled and increase the number of participants. More generally, further improve them by better co-ordination and more stringent evaluation criteria.
- Reduce further generous maternity leave to encourage female labour force participation. Expand public support for childcare (*e.g.* part-time work, working from home, nursery services) in parallel.
- Continue to reduce barriers to firm creation and to stimulate entrepreneurial dynamism.
- Up-grade the capacity to design region-specific development projects to speed up the use of EU funds.
- Adopt international best-practices to build an efficient network of business service stations.
- Increase research and development intensity and strengthen collaborative links between research institutions, schools, universities and the business community.
- Improve the structural policy mix through rigorous and continual evaluation of structural policy programmes.

co-operation, although, over the past few years, many "bridging" organisations have been established via international and domestic public funding. Policy schemes have been introduced to foster networking, co-operative capabilities and spin-off firms at higher education institutions and public research organisations. A significant impact on the overall innovative performance, though, has yet to be seen, pointing to sub-optimal policy approaches linked to poor planning and the absence of an evaluation culture (NDA, 2007).

A condition for efficient structural policy action is a high measure of policy consensus and consequent co-ordination among major stakeholders of entrepreneurship, innovation, labour market and education policies (OECD, 2008b). Piecemeal approaches are costly. Insufficient emphasis has been placed upon knowledge-based networking and co-operation at the local level (Gesce, 2005). Not surprisingly, Hungarian firms' networking capacity has remained low, lagging far behind best-practice approaches used elsewhere (Government of the Republic of Hungary, 2007).

Building associative links among all categories of firms requires an efficient infrastructure of public/private business support centres, covering the whole range of entrepreneurial activity (business incubators, innovation laboratories, business development centres and high-value added business advice for high-growth SMEs. The innovative momentum also depends upon the interaction between research institutions, universities and the business community. International best-practice is at hand to build an efficient network of business service stations. Geographical proximity (grouping firms, research institutions and business support centres around universities) is known to greatly enhance the quality of network links and so does entrepreneurial education at school and university level.

Notes

1. Under the initial Stand-by-Arrangement of November 2008 (covering the 17 month period to April 2010), the IMF immediately released one third of its credit facility (EUR 12.3 billion), with the remainder being disbursed in installments, following each of five quarterly reviews. The release of further funds was made conditional upon new government action to reduce the government's reliance upon external financing. The first two installments of the EU's balance-of-payments assistance were disbursed in December 2008 and March 2009, with each installment amounting to EUR 2 billion.
2. External debt data for Hungary are somewhat elevated by the so-called special-purpose entities, which used to be offshore firms until 2006 and which have little connection with the domestic economy. These companies create about 15% of Hungary's external debt and usually import and export capital due to tax optimisation reasons. As a result, while these transactions raise gross debt figures, they have practically zero effect on net debt figures.
3. Owing to greater openness to the global economy, Hungary had entered the 1990s with a higher level of external debt than other emerging economies in Central and Eastern Europe.
4. Such as the broadening of the corporate income tax base, the increase in the general and the simplified corporate income tax rates, and the taxation of offshore incomes from 2010.
5. Effective 1 July 2009, cuts in employers' social security contributions applied to wages and salaries up to twice the basic minimum wage. Effective 1 January 2010, the contribution cuts will cover the whole range of emoluments.
6. Prior to February 2008, monetary policy was conducted in a setting of both inflation-targeting and an enlarged exchange rate band (since mid-2001).
7. In May 2009, under an agreement with the European Commission, foreign parent banks pledged to maintain the funding of their Hungarian subsidiaries. In September 2009, the IMF and the government reached agreement on extending the Stand-By-Arrangement by six months to October 2010 to cover the election period and the transition to a new government. In July 2009, the

government raised EUR 1 billion through sales of euro-denominated bonds on international capital markets, confirming the return of investors' confidence.

8. The research institute TÁRKI (2008) estimates that the Gini index fell from 0.308 in 2005 to 0.288 in 2007. The economic recession may increase inequality. Although it is too early to give a comprehensive assessment of the impact on inequality of the measures taken during the crisis, some will clearly have a detrimental effect on inequality, such as the freezing of family benefit, the increase in VAT and the reduction in the personal income tax.

9. The increased participation in education partly explains the fall in employment of men and women below age 25.

10. Active labour market programmes (ALMPs) are largely financed by the Labour Market Fund with contributions paid by employees and employers. Since 2004, funds from the European Social Fund have played a stronger role in financing ALMPs. EU funded programmes have broadened the scope of ALMPs by streamlining tools apt to raise the employability of disadvantaged people. The Public Employment Service implements most ALMP programmes. Since 2008, the Labour Market Fund implements EU-funded programmes.

11. Subsidy schemes for business start-ups and self-employment were merged in 2007, the new combined scheme providing for interest-free loans or non-repayable grants (up to HUF 3 million) and a monthly payment of up to the minimum wage for a maximum period of six months (Frey, 2008). At 90%, the business survival rate for beneficiaries of the business start-up subsidy (three months after firm creation) was distinctly high.

12. The paper investigates exit probabilities of registered unemployed to active labour market programmes using administrative records from the unemployment register of the Hungarian National Labour Centre. It estimates parametric duration models that summarise variation in exit probabilities with individual characteristics, region and benefit receipt to the three main active programmes (most unemployed, who were participating in any ALMP took part in one of these programmes) – namely training, subsidised employment and public works.

13. The previous *OECD Economic Survey of Hungary* (OECD, 2007b) had welcomed progress in key areas such as early retirement (2007), disability and old age pensions (2006-07), maternity leave and unemployment insurance schemes (front loading of benefits [2005]). The rise in the pension age for men from 60 to 62 years and for women from 56 to 59 years over the period 1998-2003 did contribute to higher participation and employment rates for persons aged 55-64 years (Varga, 2008). Claims for disability benefits have begun to be more thoroughly screened by the newly created National Institute for Rehabilitation and Social Assessment (2007).

14. Under the *Pathway to Work Programme*, eligibility criteria for beneficiaries of the regular social allowance have been tightened. Under new provisions (the "stand-by allowance"), former beneficiaries of the social allowance, who are able to work, are obliged to take up public work organised by local municipalities or, alternatively, to participate in training programmes.

15. Clusters are company alliances based upon geographical proximity (Gecse, 2005).

16. According to the National Development Agency, the majority of small and medium-sized enterprises have no status as real enterprises. They represent involuntary entrepreneurship, a result of self-employment and/or tax evasion (NDA, 2007).

17. Hungary, a centralised country, is composed of 19 counties (3 000 local authorities) which have no decision-making power in the areas of education, R&D and innovation activities. Following EU guidelines, the counties have been grouped into seven statistical planning regions (NUTS 2) for administrative purposes. These regions are recipients of EU Structural Funds, Cohesion Funds and other financing aids. Some disadvantaged regions still lack the capacity for project design delaying the arrival of EU structural funds.

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ANNEX 1.A1

Progress in main structural reforms

This table reviews action taken on main recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed in the relevant chapter.

Past recommendations	Actions taken and current assessment
FISCAL CONSOLIDATION	
Budgeting practices	
A more strategic medium-term outlook in budgeting is needed, which more closely involves local and regional governments.	Fiscal rules have been introduced since November 2008, which requires setting budgetary targets for the subsequent 3 years. No action regarding involvement of local and regional government.
Tax strategy	
Aim for greater transparency, neutrality, simplicity and stability in the tax system.	With the tax changes adopted in 2009, the tax system became more transparent and simple. Many of the tax credits, preferential tax arrangements and temporary taxes have been abolished.
Further broaden the tax base notably through the introduction of taxes on currently untaxed capital revenues.	A tax on interest income has been introduced. Also other measures widen the tax base, such as the stricter conditions of tax allowances (regarding lunch expenses) and the introduction of a new wealth-based tax.
Public expenditure	
Make greater use of performance benchmarks in the supply of public services.	Performance benchmarking was introduced in public administration.
Make tendering for public-sector contracts more competitive, particularly in local and regional government.	No action taken but the government submitted a proposal to Parliament end-2008 to enhance the control mechanism of the Public Procurement Office.
Seek solutions to excessively fragmented public-service provision at the local level.	Access to special deficit funds can be denied for municipalities that fail to embark on sufficient joint provision.
Pensions	
Increase the effective age of retirement by reforming early retirement and by de-emphasising the standard age of retirement.	Significant parametric measures taken in 2009 (raising statutory retirement age, changing the indexation formula, etc.). In particular the introduction of a bonus/penalty system contributes to narrowing the gap between the statutory and the effective retirement age.
The proposals for reform to the old-age pension system currently being developed should include increases in the statutory retirement age beyond 62 years.	Statutory retirement age has been increased to 65 years for both women and men.
HEALTH CARE *(IN-DEPTH REVIEW IN THE 2005 SURVEY)*	
Reforms need to focus on increasing the efficiency of hospital care and cutting back on drug prescriptions.	Some progress in cutting the number of hospital beds and cutting back on subsidies for pharmaceuticals.

Past recommendations	Actions taken and current assessment
STRATEGY FOR FISCAL CONSOLIDATION	
Any fiscal windfalls should be used for deficit and debt reduction.	Partially implemented (the new fiscal responsibility law provides incentives).
The implementation of the new regional hospital network needs to be supported by measures to strengthen the gate-keeping function of general practitioners.	No action taken.
Hospital managers should be given greater responsibility for deficits and debts.	No action taken.
The majority of students should finance their tuition costs but with safety nets to prevent exclusion.	Tuition fee was to be introduced, but following the referendum of March 2008 it was decided not to implement this plan.
LABOUR MARKET	
Taxes and benefits	
Continue efforts to reduce the tax wedge on labour.	As a result of the tax changes in 2009 the tax burden is being shifted from labour to indirect taxes.
For disability benefit, tighten the assessment criteria and make assessment take into account remaining work capacity.	From 2008, persons who have a good chance of reintegrating the labour market (based on their health) are eligible for the rehabilitation benefit rather than the disability pension. Concerning the process of examination, a new set of guidelines has been distributed which are aimed as a first step towards a system that takes more account of remaining abilities and encourages rehabilitation to the workforce.
Monitor the new unemployment benefit system that includes the Job Search Allowance.	Assessment of the allowance and other aspects of unemployment benefit have led to welcome reform towards a more "front loaded" benefit scheme and a more appropriate role for the allowance.
Wage formation	
Avoid a "stop-go" cycle to public sector pay.	For 2009 and 2010 the public sector wage bill has been frozen.
BUSINESS ENVIRONMENT	
Reform both the turnover-based local business tax and the non-residential property tax – both have inappropriate bases.	No action taken.
COMPETITION *(IN-DEPTH REVIEW IN 2004 SURVEY)*	
Network industries	
Phase out price-setting for gas and electricity.	Electricity and gas markets were opened to price competition from January 2007 and July 2009.
For postal services make further progress in dealing with over-staffing and non-viable rural post offices.	Re-structuring is underway, though progress is rather slow. The liberalisation of the postal service has to be implemented by end 2012 according to EU legislation.
Other industries and sectors	
For professional services reduce entry restrictions and price setting behaviour.	No action taken.
LOCAL GOVERNMENT REFORMS	
The audit powers of the State Audit Office should be bolstered by extending them to cover all local government accounts.	No action taken.
Assess the efficiency of the programmes that increase access to finance for small and medium-sized enterprises.	A cut-back in the number of schemes has been made (from about 40 to 30) in an effort to cut back duplication in the system.
Property taxation should be broadened.	A universal wealth tax on real estate is introduced from 2010.
FAMILY POLICY	
Extended maternity leave should be cut back and savings in spending made to help fund childcare services.	Maximum maternity leave has been cut back from 3 to 2 years but no action taken on childcare.
Resumption of the phase-out of the lump-sum employers' health-care contribution should be on the priority list.	Lump-sum health contribution is eliminated from 2010.