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Czech Republic

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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– to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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Publié également en français.

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BASIC STATISTICS OF THE CZECH REPUBLIC, 2003

LAND

Area (1 000 km^2)	79	Major cities, 31.12.2002 (1 000 inhabitants)	
Agriculture, 2002 (%)	54	Prague	1 187
Forest, 2002 (%)	34	Brno	387
		Ostrava	315

PEOPLE

Population (1 000)	10 211	Employment (1 000)	4 698
Inhabitants per km^2	129	Agriculture (%)	5
Natural increase in population (1 000)	–18	Industry (%)	40
Net immigration (1 000)	26	Services (%)	56

GOVERNMENT

Public consumption (% of GDP)	24	Chamber of Deputies, as at March 2003	Seats
General government total revenue (% of GDP)	42	Social Democratic Party	70
Public debt, national accounts definition (% of GDP)	37	Civic Democratic Party	58
		Communist Party	41
		Freedom Union/Christian Democratic Union – People's Party Coalition	31
		Total	200

PRODUCTION

GDP, current prices (billion CZK)	2 551	Origin of value added (%)	
GDP per capita (USD, current prices)	8 864	Agriculture	3
Gross fixed investment (% GDP)	27	Industry	38
		Services	59

FOREIGN TRADE

Exports of goods and services (% GDP)	62	Imports of goods and services (% GDP)	65
Main exports (% of total merchandise)		Main imports (% of total merchandise)	
Machinery and transport equipment	50	Machinery and transport equipment	43
Manufactures	35	Manufactures	31
Chemicals	12	Chemicals	11

CURRENCY

Monetary unit: Czech koruna		Currency units per euro	
Currency units per \$, 2003	28.13	Year 2003	31.84
		Aug 2004	31.63

Note: An international comparison of certain basic statistics is given in an annex table.

Executive summary

Following accession to the European Union the big issue for the Czech Republic is to strengthen growth prospects. Growth potential at present is somewhat above 3 per cent, implying a moderate pace of catch-up to living standards in the EU and elsewhere. There is room for greater ambition in growth performance, and it is welcome to see this reflected in the programme of the new Czech government. This *Survey* underscores four main challenges.

Fiscal consolidation

Fiscal consolidation is the dominant challenge for macroeconomic policy, and is not only necessary to cope with ageing and to bring down the tax burden but is also needed to fulfil euro-area entry conditions. A welcome programme of fiscal reform has begun, including proposals for a system of multi-year aggregate spending ceilings and significant expenditure cuts. However, to date, mainly revenue-raising measures have been implemented while the full impact of expenditure measures is yet to be realised. The attempt to secure broad political consensus on pension reform is commendable, but it must be underscored that whatever reform is finally implemented, it will have to bring considerable fiscal savings. Health-care reform also has to deliver savings, but concrete proposals have yet to be made. To facilitate assessment of the true fiscal position, extra-budgetary funds need to be more fully integrated in mainstream government budgeting procedures. Also, with the further decentralisation of public services, the need for good budgeting practices and accountability in regional and municipal governments is all the more important.

A successful entry into the euro area

The Central Bank and the Ministry of Finance have formulated a transparent strategy for entering the euro area, that foresees minimising the time spent in the Exchange Rate Mechanism (ERM II). Annual reports will assess the economic conditions in relation to the Maastricht Criteria and a request to enter ERM II will only being made if the probability of a positive first assessment by the EU authorities is high. The choice of a 3 per cent inflation target for the run-up to euro entry is justifiable on medium-term grounds. However there may be some difficulty communicating the consistency of this target with the Maastricht criterion for price stability. The Czech authorities should therefore pay *close attention to how the Maastricht criteria are interpreted and applied by the European Commission and the ECB and adjust their communication strategy accordingly*.

Making the environment for business more growth-friendly

Most of the catch-up in living standards will have to come from boosting productivity growth. This means swifter re-allocation of resources across firms as well as stronger in-firm productivity growth. While the Czech Republic is a strong competitor for attracting foreign direct investment, policy towards poorly performing firms and business start-ups has problems, slowing down the exit and entry of firms. Bankruptcy procedures are cumbersome, often long and usually end up in liquidation, with asset stripping not uncommon. Reforms have long-since been planned, and it is welcome that new legislation looks finally set to go ahead. The legislation aims at strengthening the role of creditors, speeding up proceedings and allowing composition to play a bigger role. Likewise, efforts to streamline business registration are welcome and should be implemented as soon as possible. The general business climate is also damaged by issues in network-industry competition, as some services, notably Internet, are expensive in international comparison.

Improving the functioning of the labour market

Mobility between jobs and regions is weak. Administrative extensions of collective wage agreements, strict employment protection legislation (EPL) on individual dismissals, rent control, severe poverty traps (particularly for families) and a high tax wedge have contributed to considerable long-term unemployment. The Roma population is hit especially hard in this respect. Migration is to some extent mitigating the labour-market rigidities with Slovaks filling skilled vacancies and other eastern Europeans (mainly Ukrainians) taking up unskilled jobs that are unattractive for locals. Tackling the unemployment problem requires measures across a wide front, but most notably social benefit reform is needed along with reduction in the tax wedge as well as easing of EPL. The widespread social and economic exclusion of the Roma needs more attention, particularly in the education system. A more open immigration policy is needed to address immediate issues such as the inconsistency between granting work permits as well as for better alignment of immigrants' skills with those needed on the Czech labour market.

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

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The economic situation and policies of the Czech Republic *were reviewed by the* Committee *on* 11 October 2004. *The draft report was then revised in the light of the discussions and given final approval as the agreed report by the whole* Committee *on* 28 October 2004.

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The Secretariat's *draft report was prepared for the* Committee *by* Philip Hemmings, Ann Vourc'h, Dana Hajkova *and* Boris Cournede *under the supervision of* Andreas Wörgötter.

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The previous Survey of the Czech Republic *was issued in* April 2003.

Assessment and recommendations

Growth has picked up, reflecting past reforms

Growth in the Czech Republic is projected by the OECD to be around 4 per cent, somewhat above potential, this year and next, marking substantial progress over past performance and reflecting the success of past reforms. Investment and exports are expanding rapidly, taking over from a period of strong increase in domestic consumption. This good performance needs to be sustained, and preferably bettered, for living standards to catch up with the OECD average at a reasonable pace. This means creating the right conditions for continued capital deepening, efficient utilisation of labour resources and the further development of relevant skills. In many areas, good policy has already created healthy conditions for growth. For some years now, inflation has been low and stable and membership of the EU has prompted further progress in structural reform. Indeed, institutions and policies now closely resemble those in many other OECD countries.

But challenges need to be addressed in a broad range of policies for real convergence to be sustained in a more growth friendly environment

At the same time, however, there are challenges related to the fiscal position, business conditions and the labour market. These will need to be addressed alongside the approaching challenges of euro entry and accelerated ageing of the population. The key policy issues can be summed up under four headings:

- *Fiscal consolidation*. Government spending has increased over the past few years, generating a high deficit and a large tax burden, notably a high tax wedge on labour. The high deficit needs to be brought down and budgetary reform has to deliver sustainable spending cuts so as to bring down the influence of taxes and transfers in household and business decision making. Particular attention is needed to reform health and pension systems as

Czech demographic trends are set to bring a rapid rise in the old-age population in the next few years.

– *Successful entry to the euro area*. Monetary policy has to stay on course to reap the benefits of euro entry; difficult decisions have to be made regarding the best implementation of the strategy for entry so as to avoid untimely pressures on the real economy and exchange rates.

– *Improving policy towards business*. Increases in labour productivity have to do most of the work to catch up with levels of GDP per capita in more advanced OECD countries. Among the many structural policies influencing the business environment, the administration and legislation for dealing with non-viable firms and relatively cumbersome business-start-up procedures are of particular concern.

– *Improving the labour market and increasing skills*. The labour market is not performing as well as it should and this is reflected in rising unemployment. The intention to reintroduce legal extensions in wage setting would risk reducing the flexibility of wage determination. Furthermore, the high-tax wedge damps both demand and supply and leads to grey-sector activity. In addition, employers face difficulties in applying the regulations for letting go underperforming or surplus workers. Poor performance has not only arisen from labour market inflexibilities but also poverty traps, particularly for unemployed families, and low mobility partly linked to problems in the rental market for housing. In terms of increasing skills, tertiary education programmes are lagging behind rapidly increasing enrolments and new curriculum demands. In addition, there are specific challenges in the education system for the Roma where unemployment rates are well above average.

Momentum on fiscal reform needs to be boosted

The fiscal reform programme that began last year marks a positive commitment to consolidation. The programme has already resulted in economies in spending and revenue-raising measures. And, a proposed new budgeting framework has the capacity to harden spending constraints and force a longer-term outlook through its legally binding three-year spending ceilings. *Implementation of the fiscal pro-*

gramme should meet its objectives while avoiding any dilution of the expenditure ceilings. It should, furthermore, stick to the agreement that windfall revenues will only be used for deficit reduction. While the new budgeting framework is set to be introduced as planned, pension reform has gone back to the drawing board, and concrete proposals for healthcare-system reform have yet to emerge. In addition, there has been a degree of compromise on some measures to increase VAT revenues. Though implementing fiscal reforms is difficult given the narrow majority of the coalition government, *every effort should be made to push through and communicate to the public reforms of both expenditure programmes and budgetary procedures*.

The intended fundamental pension and health reforms need to contribute significantly to fiscal consolidation…

Earlier pension reform is starting to pay off and employment rates among older workers have been rising, in contrast to most other OECD countries. The recent relaxation of work restrictions on those getting pensions is a good move that should further boost rates. Furthermore, the possibility for the unemployed to get two years of early retirement pension has been removed and rules that allow invalidity pensions to be converted to unconditional early retirement pensions will be phased out. The government has asked an expert commission to provide the inputs for a discussion among all parliamentary parties about the main direction of pension reform. Although the effort to seek political consensus is commendable, *further delays should be avoided.Moreover, fundamental public-pension reform, whether only through parametric change to the* PAYG *system or through the introduction of a new pension, has to generate savings for the budget and should be announced as soon as possible*. In health, even though regionalisation is to some extent hardening budget constraints and forcing economies in the hospital sector, a major health reform is still needed. T*he reform should include fewer universal services and more private provision as well as greater use of fees, preventive measures and outcome-based resource allocation*.

… and procedures in extra-budgetary funds and sub-national governments need attention

Though the fiscal reform programme covers important bases, some issues are not tackled. D*espite substantial recent progress to increase transparency, some extra-budgetary funds continue to obscure the government's true fiscal position and all of them should be more fully integrated in mainstream government budgeting procedures*. Increases in transparency are needed elsewhere too. In particular, *clearer distinction in communication on the different government accounts is needed, particularly regarding the* Ministry *of*

Finance's adjusted-cash account and the ESA95 *account produced by the Central Statistical Office and reported to the European authorities.* In addition *a permanent financing system for the regions needs to be finalised*, following the decentralisation of responsibility for providing hospital services and secondary schooling. The decentralisation means good accounting practices in sub-national government matter all the more. In this regard, *debt developments in municipal government should be closely monitored following the removal of borrowing constraints. Decentralisation also raises the importance of diffusing best-practise in public spending to ensure outcome orientation and efficiency gains in provision.*

The euro-entry strategy is generally sound

The strategy on euro entry has much to commend it. The risks of ERM II membership are to be minimised by only entering when conditions look set for the fulfilment of the Maastricht criteria. Also, commitment to euro entry a long way in advance is being avoided through annual assessment and decision on whether conditions are right to join ERM II. Credibility of the strategy has been heightened by a process of dialogue and explicit agreement between the government and the Central Bank.

Communication of the inflation target needs to pay close attention to the interpretation of the price stability criterion

The choice of a 3 per cent inflation target for the run-up to euro entry is justifiable on medium-term grounds. However there may be some difficulty communicating the consistency of this target with the Maastricht criterion for price stability. The Czech authorities should therefore pay *close attention to how the Maastricht criteria are interpreted and applied by the European Commission and the European Central Bank and adjust their communication strategy accordingly.*

There have been steps to increase co-ordination in business policy though key specific issues still need to be tackled

Positive organisational changes have been made in business policy. A deputy prime minister position has been created to enhance the co-ordination of growth policy. Also the administration of business policy has been put under one umbrella organisation – the Business and Investment Development Agency (CzechInvest) and co-ordination and cross-fertilisation in policymaking will also be enhanced by a newly formed advisory council. As in many other countries there is a host of programmes to attract FDI, support small-and-medium enterprise and encourage R&D and the use of new technologies. T*he enhanced facilities for co-ordination in business policy should be complemented with regular evaluation of the com-*

position and cost effectiveness across general and targeted financial support schemes for businesses. More generally, *reform to regulatory frameworks should get high priority*. In terms of specific issues:

– The *corporate tax rate* of 28 per cent is to be cut back to 24 per cent by 2006 and targeted tax advantages mean the effective tax rate is much lower than this. However, targeted tax breaks are distorting and less visible. For this reason, the *efficiency of the tax system could be improved through reduction in targeted tax breaks, creating room for tax cuts.*

– In regulatory reform, the most significant developments are taking place in *bankruptcy legislation*. Productivity growth has long since been hampered by a system that allows too many poorly performing firms to continue operating and does not adequately prevent asset stripping. And, even when operations cease, assets can be tied up in long legal proceedings. In addition to a pending amendment to strengthen the position of creditors a new act on bankruptcy legislation looks set to be implemented that should cut back incentives to delay application for bankruptcy and increase the possibilities to salvage viable parts of businesses through a "reorganisation" procedure. T*he implementation of reform to bankruptcy legislation should no longer be delayed*.

– The Czech Republic ranks rather poorly in international indicators of the administrative requirements to set up a business, and this detracts in particular from the incentives to set up small enterprises. Entry on the *commercial register* is the most widely criticised aspect of the administrative process, involving extensive paperwork and often taking several weeks to complete. T*he prospect of speeding-up business registration, as contained in pending legislation, is therefore welcome and further delays of reform should be avoided*.

– A reputation for *corruption* is also weakening the business profile of the Czech Republic and the development of countermeasures needs to continue. Plans to introduce "integrity testing" for civil servants should help dissuade corrupt arrangements between the public sector and business and plans for a "crown witness" programme should help successful prosecution in corruption as well as other illegal business practices. In addition most ministries have introduced hotlines to allow the public to report suspicions about corruption. *Cutbacks in regulation and red tape would also help reduce opportunities and incentives to engage in corruption.*

Weak network-industry competition is making communication and energy services unattractive for businesses

Competition issues remain in some network industries and are also a mark against the business environment. In telecommunications, despite the progress in reform, dominance of previously state-run Cesky Telecom is a concern. Prices for some telecommunication services are, on average, high and delay in infrastructure and market development has slowed the spread of high-speed Internet. It is intended that this issue, along with others, including the efficiency of the regulator, will be dealt with in a new telecommunications act. Strong market dominance is also an issue in the energy sector. The state-owned *gas* company was sold entirely to the German company RWE and competition remains weak. In *electricity*, vertical and horizontal unbundling has to be completed and the incumbent, CEZ, still has significant interests across production, distribution and sales. *Across the network industries, unbundling is an important instrument to enhance competition and should be implemented wherever appropriate.*

In the labour market, more "administrative extensions" in wages could damage competitiveness

In wage setting, an otherwise flexible system could be challenged by administrative extensions and there are worrying intentions to widen the scope of legislation to include more sectors of the economy. Widening the extensions would bring even more sectors of the economy under the risk of excluding low skill workers from employment. *This should be an important consideration in proposals to introduce discretionary extensions of sectoral collective agreements.*

Recent reform of the system of sick-leave payments should help labour-market efficiency

The system of state subsidy of sick-pay has contributed to high, and rising, levels of sick leave. Employers have little incentive to check the authenticity of sick leave and, reportedly, sick leave is often encouraged when business is slack so as to cut back on labour costs. Cuts in the state payouts made this year should ease the problem. *Plans to make employers entirely responsible for the first two week's of sick-pay and to increase the strictness on medical certificates would also be positive steps. Provisions to successfully prevent abuse are, however, weak and should be strengthened together with the implementation of the planned reform.*

Workers have to move more easily between locations…

Unemployment is highly regionalised, partly because of wide geographic diversity in structural change and economic growth, but also because of weak labour mobility. Problems in the rental market for housing are an important factor constraining mobility. More than one quarter of households live in rent controlled apartments and account for most of the rental market These households remain effectively protected by old rent-control rules that cap rents and are reluctant to terminate the contracts; this contributes to high prices and limited turnover in the open market. In addition, the subsidised mortgages increase the transaction costs of moving house. F*inal steps to liberalise the rental market need to be taken. Welfare issues caused by rising rent costs for poorer households should be dealt with through compensatory measures in state benefits. At the same time, support for home ownership should be reduced.*

… as well as between jobs

Stringent employment-protection legislation is weakening demand for labour. Employers wanting to dismiss individual workers face a cumbersome process to prove unsatisfactory performance that strongly protects the employee and instead will typically justify dismissal on the basis of re-organisation, even though this means paying redundancy. Czech redundancy rules require the same payout no matter how long the worker's tenure – making dismissal costs a significant share of labour costs when employment is short. T*he rules on redundancy payments should be brought in line with typical practice elsewhere, with payments linked to tenure. More generally, the legislation on dismissals for those on standard contracts should be eased.* Such measures could, for example, be incorporated in the government's intended new labour code.

Alternative contracts are used to avoid taxes and regulation

Unlike developments in some other countries, the strict rules protecting workers on standard contracts have not brought widespread use of temporary contracts, despite light regulation. Instead, employers find a variety of other arrangements preferable. Most notable is a practise of subcontracting with "self employed" workers, which not only avoids dismissal regulation but typically entails lower tax and social-security costs for both the employer and employee. The recently adopted employment act offers better opportunities for employers to hire from temporary work agencies and is a welcome development. In addition, the draft labour code aims at lighter rules on standard contracts and tightening up on abuse of alternative arrangements, better aligning social contributions across the different types of contract.

Cuts in the tax wedge are needed to boost both demand and supply of labour

The use of subcontracting arrangements reflects strong incentives to evade paying the tax wedge on labour; fiscal revenue demands combined with pressures for competitive corporate taxation mean personal-income tax and both employee and employer social contributions bear a heavy burden. This is particularly hampering formal employment at the low end of the labour market, where social benefits limit wage flexibility and poverty traps are widespread. In addition, grey sector activities are increasing – partly in response to the high tax wedge – and are further diminishing the tax base. *Therefore cutting back the wedge should be a general priority for the government in the process of fiscal consolidation. Opportunities and scope for such cuts could be created by more fully exploiting under-utilised tax bases – properly designed property and environmental taxation in particular.* The recent introduction of caps on social security contributions has cut the tax wedge for better-paid workers. *However, given the concentration of unemployment among the low-skilled, cuts at the lower-end of the labour market are more urgently needed in order to reduce poverty traps.*

Poverty traps for the unemployed still need to be tackled

The welfare system has long since given financial support to the non-employed, particularly to families, that is generous in relation to earnings prospects and often given without strict application of eligibility conditions, allowing distorting grey-sector activity. *The government should not hesitate in implementing plans to use variation in the social assistance system to strengthen implementation of entitlement criteria. The introduction of joint income taxation would increase the incentives to take up work in families that do not have any earned income. However, in designing the tax schedule for joint income taxation the authorities should ensure that it does not create disincentives for second earners to take up work in particular through interaction with the transfer system. As a general strategy, the gap between the average wage and the minimum subsistence amount should be allowed to widen over time. Such a move could be made more effective by strengthening activation measures, in particular by putting more weight on placement services.*

A more open approach to immigration could bring increased benefits

Alongside the high rate of structural unemployment, there are substantial shortages of labour in some regions and occupations, further underscoring the problems in the labour market. Immigration has partially relieved these labour shortages. Higher-skilled vacancies tend to be filled by Slovaks while low-skilled jobs that Czech workers find unattractive are taken mostly by other Central and Eastern Europeans. While gains from labour migration have already been realised from the special agreement on the free movement of labour with Slovakia, the policy approach to other potential source countries, such as the Ukraine, has to-date been rather restrictive. The Czech Republic has gradually become an immigration country since 1990, but legal immigration from countries other than Slovakia is still low in international comparison, though, as elsewhere, actual immigration is higher because of undocumented migrants. The recent pilot project that facilitates the granting of permanent residence using a points system is a positive sign of new thinking in immigration policy. A more open and long-run approach to standard legal immigration could help formalise labour inflows and increase the integration of foreigners and thus go towards easing problems created by the rapidly ageing Czech population. O*ne step would be to widen the avenues to permanent residence and citizenship*. A *less restrictive system of work permits, including the use of less precisely defined permits would complement such measures and be beneficial in fiscal terms, as more activities would be declared*. *At the same time, the trade licensing system for foreigners should be aligned to the work permit system, as it has become abused as a means of legal entry*. Information to develop immigration policy needs to be improved. In particular, *more statistics are needed on the number and activities of immigrants to help develop policy*.

The basic education of the workforce is sound but tertiary education needs to be more responsive to skills required on the labour market

Results of the OECD's PISA survey suggest the Czech workforce has good levels of basic education, and this is a plus for the business profile of the country. However, beyond basic levels, the education system has not evolved rapidly enough to match changing labour market demands. The system is geared towards vocational qualifications and the share of those with non-degree level, post-secondary education is above the EU-15 average. However vocational qualifications have not always kept pace with changing demand. In addition, the tertiary enrolment rate for degree-level courses has only recently risen to a level comparable with other OECD countries and attainment in the population as a whole is very low in international comparison. Though the rise in tertiary enrolment is encouraging, the system does not encourage a rapid enough reaction of students and public universities to changing opportunities and returns in the labour market from different degree-level courses. Resource allocation within the public university system entails a large element of supply side flexibility, but demand prospects for future skill requirements have insufficient weight in programme development. *The introduction of tuition fees for students in public universities that at least partially reflect the cost of tertiary courses would make for better decision making by students and faster reaction of universities to changing vocational demands. If fees are introduced a system of income-contingent student loans should be considered so as to ensure accessibility to tertiary education.*

... and poor education is a major factor behind the economic and social problems of the Roma

As in other countries, widespread social exclusion prevents the Roma population from accumulating labour market relevant skills and contributes significantly to very high unemployment and low incomes among this ethnic minority. Better education needs to be a key element of a long-term comprehensive strategy to cope with this challenge. A *draft school act proposes to take a positive step by eliminating the system of special schools that the majority of Roma children attend*. The special schools are not in fact aimed at catering for the Roma and have contributed to poor education outcomes and weak integration into mainstream Czech society. With the closure of the special schools, *more special teaching assistance and adaptation of curricula and teaching methods is needed to make primary education more inclusive for Roma children.Inclusion and education prospects would also be helped if more Roma children went to kindergarten and the government proposal for one year of compulsory pre-school is therefore welcome*. The scheme of financial support for Roma going to secondary school has been reasonably successful at encouraging enrolment and similar support should be considered in tertiary education. In terms of general support to the Roma, the development of policy is often hindered by a lack of information. In particular, census data on individual ethnic background is not representative. *One possible solution is a "mapping" of Roma communities (as opposed to individuals) similar* *to that carried out in Slovakia* though the Czech Republic's relatively dispersed Roma population may require adjustment of survey techniques. This would assist in providing the much-needed deepening of targeted inclusion policies for the Roma.

A more economic approach to further reduction in greenhouse-gas emissions and air pollution is needed

The Kyoto target on greenhouse-gas emissions should be reached comfortably and emission reduction will be helped by membership of the EU emission trading scheme. However, intentions to give away all permits for free will imply windfall gains for past polluters. E*mission trading should be accompanied by an excise duty on household coal to dissuade households from using coal-fired heating which is not subject to the permit system*. In addition, *plans for new brown-coal power plants and relaxation of environmental regulation for mining brown coal should be reconsidered*, both for environmental and cost reasons. More generally, artificially low prices are encouraging energy consumption and *the policy of bringing retail energy prices to market levels should be completed. State spending on renewable energy is too high in relation to the estimated gains from lower air pollution and reduced greenhouse-gas emissions and should be cut back to economic levels*. Though air pollution has been reduced significantly, levels remain relatively high. More cost-effective instruments need to be used in bringing levels down further. In this regard, *the introduction of emission-related taxes on commercial vehicles is welcome and should be extended to all vehicles*. T*he introduction of road pricing in urban areas should also be considered*.

1. Economic conditions and policy challenges

Membership of the European Union has marked the end of the Czech Republic's transition to a market economy. Institutions, policies and, in broad terms, the role of the state in markets and the structure of economic activity now differ little from many other OECD countries. Furthermore, an impressive record of low inflation has been maintained. With such positive developments a strong process of catch-up would normally be expected. Czech GDP per capita is considerably below the more affluent OECD countries and under the right conditions the economy should have a healthy margin of growth on high-GDP-per-capita countries. The reasonably strong growth of recent years is a welcome sign that catch-up is underway, though a weak long-term record warns against complacency. There is broad support in the current political climate to tackle the basic economic challenges, though pushing reforms through has to date often been hampered by political complexities (Box 1.1).

Growth has picked up

Growth in recent years has been relatively strong, in 2003 it was 3.1 per cent and virtually the same in terms of GDP per capita – population growth is currently close to zero.[1] The pace of GDP increase is expected to be greater for this year and to continue at least through to 2006, driven by an encouragingly strong pick-up in investment and exports. The OECD's autumn 2004 projection expects growth of 3.9 per cent in 2004 and projects growth of 4.2 per cent and 4.1 per cent in 2005 and 2006 respectively (Box 1.2). This is echoed in other projections, for instance the Central Bank's quarterly *Inflation Report* for July 2004 also projects growth of close to 4 per cent for 2004 and 2005 (Czech National Bank, 2004). The Ministry of Finance's October 2004 projection expects annual growth of 3.8 per cent for 2004 and 3.6 per cent in 2005, reflecting a tradition of conservative projections by the Ministry.

However, the long-run average rate of growth is more modest and there is a risk that the encouraging recent performance will not be sustained. Average annual growth in GDP per capita between 1995 and 2003 was under 2 per cent, a little below that in the euro area and United States and close to 2 percentage

Box 1.1. The political situation

Following the elections to the European Parliament in June (where coalition parties only won 4 out of the 24 seats), changes in leadership took place both in the Czech Social Democratic Party (CSSD) and the Freedom Union. In late June, Vladimir Spidla resigned, both as Prime Minister and the Head of CSSD, and the government resigned formally on 1 July – the main reason was the low confidence of the CSSD in the coalition government. Stanislav Gross (former Deputy Chairman of CSSD and Minister of Interior) became the new leader of CSSD, and the President appointed him to the position of Prime Minister on 26 July 2004. Gross launched negotiations to form a cabinet with the previous centre-right coalition members, the Christian Democratic Party (KDU-CSL) and the Freedom Union. A new cabinet was appointed by the President on August 4 comprising 12 members nominated by the CSSD, 3 by the KDU-CSL and 3 by Freedom Union. There are some notable changes in the composition of Deputy Prime Ministers, the Minister of Finance is not longer included as a Deputy Prime Minister and Martin Jahn, formerly head of CzechInvest, has been appointed to cover economic affairs. The new government won a vote of confidence from the Parliament on 24 August, though it will again be supported by only a very narrow majority (of 101 out of 200 in the lower house).

The main priorities of the new government have as yet only been expressed in broad terms but reflect in many respects those of the previous government – including, importantly, a focus on fiscal consolidation. The new coalition also broadly supports market-oriented and liberal economic reform and the main opposition party has a similar outlook. However, though the general direction of change is agreed on by many, political positioning can make agreement on precise actions difficult, both within the government and when proposals are put before Parliament. The narrow majority in Parliament means that government often has to seek consensus with opposition parties for legislation to have a strong chance of parliamentary approval – the setting up of a multi-party committee on pension reform by the previous coalition government earlier this year bears witness to this.

points below that in neighbouring Hungary, Poland and Slovakia (Figure 1.1). To some extent this performance can be explained by special circumstances. The Czech experience with soft loans and the subsequent banking and economic crisis brought negative growth in 1997 and 1998 whose severity was not matched in the other Visegrad countries. In addition, efforts to bring inflation down have been more vigorous in the Czech Republic and this may have damped growth. Despite these caveats, the long-run rate of growth suggests that the stronger

Box 1.2. The OECD's autumn 2004 economic projection

Demand, output and prices

	2001	2002	2003	2004	2005	2006
	Current prices billion CZK	Percentage changes, volume (1995 prices)				
Private consumption	1 192.3	2.8	4.9	3.5	3.6	3.6
Government consumption	513.0	4.5	2.2	–0.4	–0.2	0.5
Gross fixed capital formation	638.6	3.4	7.4	9.5	7.2	6.0
Final domestic demand	2 343.9	3.3	4.9	4.1	3.7	3.6
Stockbuilding[1]	30.0	0.1	–0.4	0.6	0.0	0.0
Total domestic demand	2 374.0	2.8	4.2	4.5	3.7	3.6
Exports of goods and services	1 539.3	2.7	6.2	16.7	12.0	10.5
Imports of goods and services	1 598.0	4.9	7.8	17.3	11.2	9.6
Net exports[1]	–58.7	–2.2	–2.2	–2.7	–0.9	–0.6
GDP at market prices	2 315.3	1.5	3.1	3.9	4.2	4.1
GDP deflator		2.8	1.7	4.1	1.5	1.6
Memorandum items	–					
Consumer price index	–	1.8	0.1	3.0	3.1	3.0
Private consumption deflator	–	0.7	–0.7	2.1	2.5	2.4
Unemployment rate	–	7.3	7.8	8.4	8.3	8.2
General government financial balance[2, 3]	–	–6.8	–12.6	–4.3	–4.6	–4.0
Current account balance[2]	–	–5.6	–6.2	–6.5	–6.6	–6.4

1. National accounts are based on official chain-linked data. This introduces a discrepancy in the identity between real demand components and GDP. For further details see OECD *Economic Outlook* Sources and Methods, (*www.oecd.org/eco/sources-and-methods*).
2. Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
3. As a percentage of GDP.
4. Since the change in methodology in 2004, high-risk state guarantees are classified as capital transfers as soon as they are called for the first time. In 2003, the activation of guarantees issued mainly for the banking sector accounted for about 7.7 percentage points of the deficit.

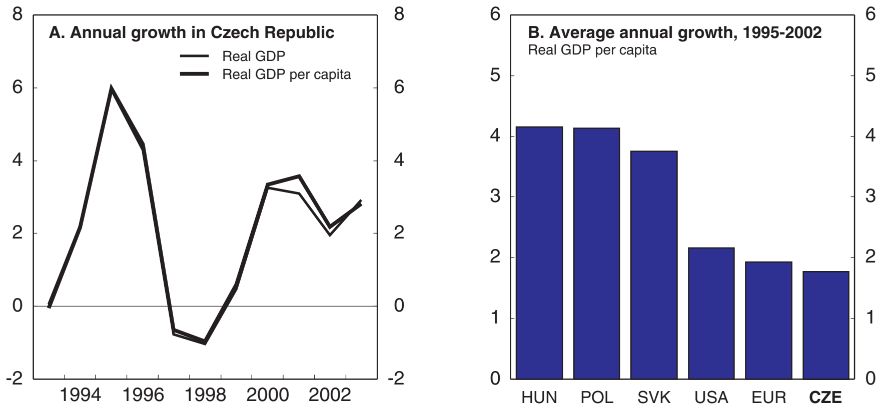
Source: OECD Economic Outlook 76 database.

performance of recent years can only be ensured with a broad range of policy measures.

If the current pace of growth is sustained, or preferably bettered, then real convergence can get properly under way. For example, if growth in GDP per capita in the euro area remains around 2 per cent then 3 per cent growth in the Czech Republic will bring close-to complete real convergence in about 50 years. If Czech growth can be sustained at 4 per cent, the period of catch-up would roughly be halved (Figure 1.2).

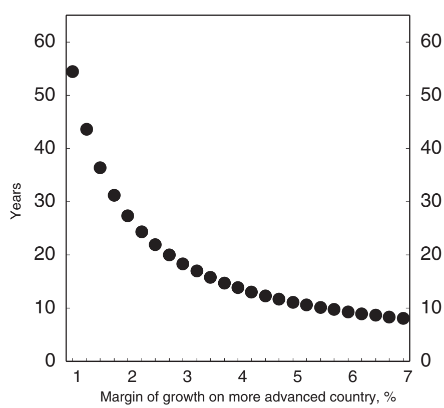
Figure 1.1. **Output growth**

Per cent



Source: OECD, Annual National Accounts Database.

Figure 1.2. **Years required for catch-up**[1]



1. Estimates are based on a simple compound growth formula. It is assumed that the initial ratio of GDP per capita (more advanced:CZE) is 1.7 and the annual growth of GDP per capita of the more advanced country is 2 per cent.

Source: OECD; UN, *World Population Prospects 1950-2050* (the 2002 revision).

Monetary conditions are good

The Czech Republic has had relatively stable and low inflation in the process of economic transition. Price increases after initial liberalisation steps were large but inflation was kept below 10 per cent thereafter, contrasting sharply with Poland and Hungary which have taken longer to tackle high inflation. During 1998 inflation made a level shift downwards and has remained below 5 per cent since then (Figure 1.3). Real interest rates are now also low indicating that financial markets expect inflation to stay low.

The most striking feature of monetary conditions over the past couple of years is that inflation spent a prolonged time below the target band set in the Central Bank's inflation-targeting regime. In part this was caused by regulated prices movements, where increases were expected to contribute to about 1 to 1.5 percentage points to CPI but in fact prices declined. In addition, exchange rate appreciation and large domestic harvests contributed to strong falls in agricultural prices. These exogenous factors aside and with the benefit of hindsight, the Central Bank admits overestimating the downward stickiness of prices. The Bank has since increased the sensitivity of some areas of pricing to a negative output gap in its modelling system.

Fiscal policy and public expenditure reform

The fiscal position needs improving

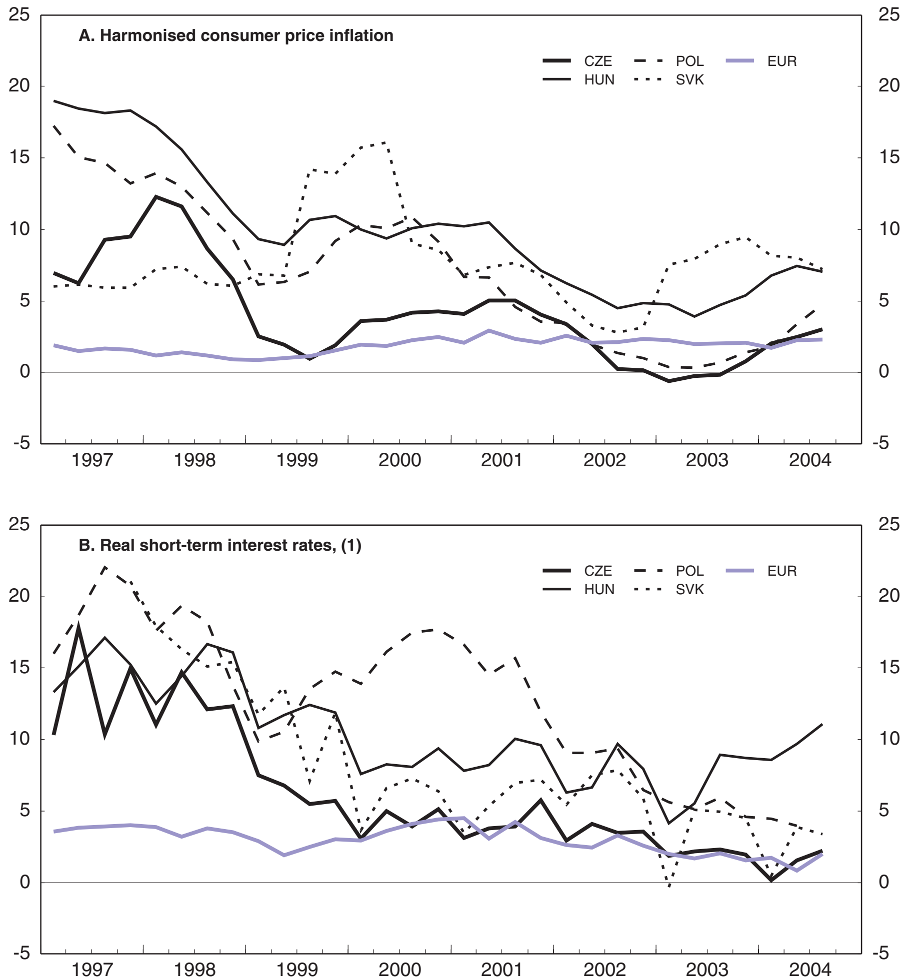
Fiscal conditions have deteriorated and improving them through sustainable fiscal consolidation is a key policy challenge. Through much of the 1990s, the unwinding of state involvement in the economy brought decline in government spending relative to GDP. However, since 1999 spending has increased. According to the Ministry of Finance's adjusted-cash account, general government spending was close to 40 per cent of GDP in 1998 and rose to over 45 per cent by 2003 (Figure 1.4). The increase lies primarily in current expenditures (both in the provision of services and transfers), rather than capital spending or debt-servicing costs. The latter remain relatively low thanks to the low interest rates and, as yet, a moderate level of debt (see below).

The growing general-government deficit is essentially reflected in a growing state-budget deficit. As seen in Figure 1.4, the general and state budget deficits are closely correlated. In other words, the deficit has not – at least in an accounting sense – been primarily driven by rising deficits in the social-insurance funds, extra-budgetary funds or by deficits in regional and municipal governments' accounts. However, transfers from the state budget are sometimes used to cover losses in other government entities such as public health insurance. Therefore, to some extent, deficits are generated in accounts outside the state budget but end up recorded in this budget anyway.

As might be expected, the deficit increases have often been unplanned. In 1997 and 1998 the state-budget deficit outcome turned out worse than the

Figure 1.3. **Inflation and interest rates**

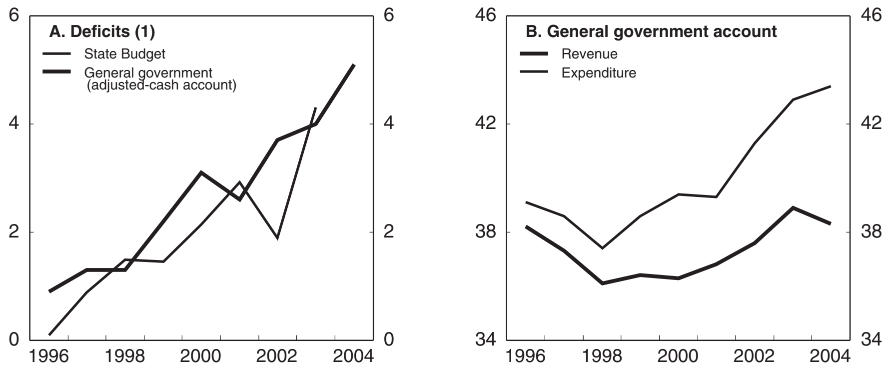
Per cent



1. Three month interbank rates deflated by the quarterly harmonised consumer price inflation rate. For Hungary, 90 day Treasury bill yield. For the euro area, weighted average of national rates before 1999, EUR 11 up to 2000 and EUR 12 from 2001 onwards.

Source: OECD, *Main Economic Indicators*.

Figure 1.4. **Trends in government deficit, expenditure and revenue**
Per cent of GDP



1. The general government deficit is from the cash-based GFS account adjusted by the Ministry of Finance. The state budget deficit is from the cash-based GFS account voted by Parliament.

Source: Czech Statistical Office.

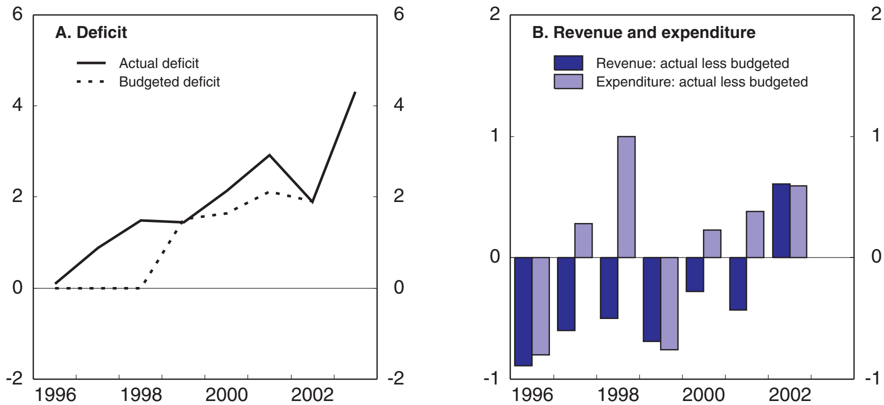
zero-deficit budget plans, with budgeted revenues being over-estimated and expenditures under-estimated (Figure 1.5). In 1999, the authorities appear to have abandoned budgeting for a zero deficit and adopted more realistic budgeted deficits. Nevertheless, 2000 and 2001 saw repetition of over-estimation in revenue and under-estimation in expenditure. In 2002, the deficit came out as expected though growth in both revenues and expenditures was greater than expected in the budget. The 2003 budget outcome was shaped by unexpected outcomes in VAT revenue and surprise expenditures arising from a court case and from flood damages (a detailed account of the outcome is in Chapter 2).

The revenue shortfalls underscore a weak capacity for tax-raising measures. The tax wedge on labour, including the large employer and employee social contributions, is already fairly high (Figure 1.6). A fresh increase would push up labour costs further and might prompt adverse reactions, such as shifts into the already sizeable grey economy. In addition, concerns for international competitiveness dissuade revenue increases in corporate taxation. Indeed, at 28 per cent the corporate tax rate is already high in comparison to other countries in the region (this issue is discussed further in Chapter 2).

Despite the deficit increases, debt levels have yet to reach alarming levels. The general-government debt-to-GDP ratio was just under 22 per cent in 2003 according to GFS86 accounts, though a higher figure of close to 40 per cent is recorded in

Figure 1.5. **Budgeted and actual deficits in the State Budget**

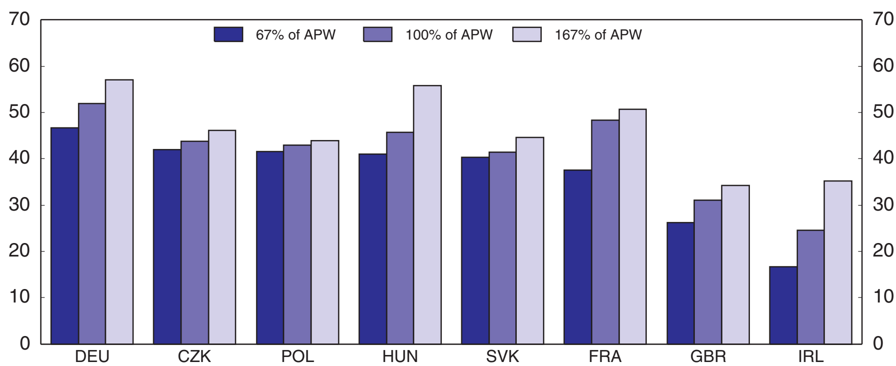
Per cent of GDP



Source: Czech Statistical Office.

Figure 1.6. **Average tax wedge for a single person, 2003**[1]

Per cent of labour costs



1. The tax wedge is the ratio of income tax plus employee and employer social security contributions less cash benefits as a percentage of labour costs. The tax wedges have been calculated at different percentages of the average production worker wage (APW). Data are ranked by the wedge for 67 per cent of the average wage level.

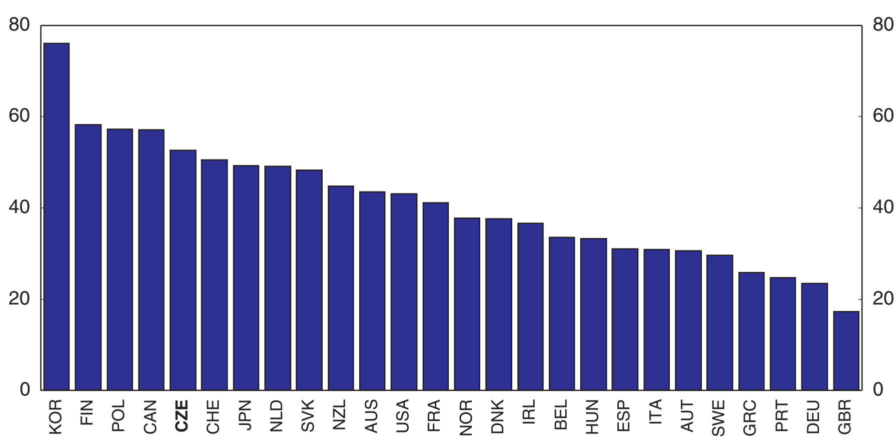
Source: OECD, *Taxing Wages 2002-2003*.

ESA95 accounts (approximately 10 percentage points of the ESA figure is attributable to state guarantees). While many other OECD countries have to undergo a painful consolidation process to reach sustainable debt levels during the coming period of population decline, the Czech Republic is in a much more comfortable position though this should not be put at risk through postponing necessary fiscal reforms (Chapter 2).

Ageing is adding to fiscal challenges

Ageing has already advanced further in the Czech Republic than in most other European OECD countries and is set to present an increasing headwind against increases in GDP per capita. Within the next few years the working-age population will be shrinking by about ½ a percentage point faster than the total population and this figure is set to rise rapidly further into the future. So, any given level of growth in GDP per capita will have to be achieved by faster growth in output per head of the working-age population, either through a wider and more active working-age population or through additional productivity gains. Ageing populations bring, of course, specific challenges for public budgets. By 2020, the old-age dependency ratio will have risen by over 50 per cent, one of the largest increases in the OECD, raising questions about the sustainability of state-pension and health systems (Figure 1.7). Ageing also raises broad questions about

Figure 1.7. **Percentage increase in old-age dependency ratios by 2020**[1]



1. Calculated as the percentage increase between 2004 and 2020 in the ratio of the population aged 60 and above to that aged 20 to 59 years.

Source: UN, *World Population Prospects 1950-2050* (the 2002 revision).

how to design family policy and whether migration policy can be used as a tool to mitigate the ageing process (Chapter 6).

Policy for a smooth entry to the euro area

The long-term gains from euro-area membership are potentially large

For the Czech Republic the main long-run gains from euro-area membership will come from the removal of exchange-rate risks from much of its large trade and capital flows as well as increased transparency in international comparisons of costs and prices. Aside from removal of day-to-day hedging costs, membership would reduce the risk of periods of monetary turbulence and instability in the financial sector due to sharp fluctuations in the exchange rates arising from large capital movements. Membership would also add pressure for sustainable fiscal consolidation.[2]

Indeed, the gains from entering common currency areas look now to be larger than many had previously thought. Until recently it was commonly thought that the removal of exchange-rate risk does not boost trade by much. However research results emerging over the past few years suggest that the effect of common currencies on trade may be quite considerable.[3] Micco *et al.* (2003) for instance look at the 12 countries that joined EMU and conclude that a common currency boosted trade by about 15 per cent above the level of trade which would be expected on the basis of growth in demand and other factors.

But entering the euro-area presents challenges for macroeconomic policy

The conditions for euro-area membership present significant challenges for monetary and fiscal policy, involving difficult decisions on the timing and strategy for entry. There are four interrelated challenges which are addressed in Chapter 3:

- Ensuring that fulfilment of the Maastricht fiscal criteria is made through sustainable fiscal consolidation. As the preceding section underscores, keeping momentum on fiscal reform going is the major macroeconomic policy challenge that needs to be addressed to improve growth prospects. Therefore, meeting the Maastricht criteria needs to come about through permanent spending cuts and efficiency improvements in public services, not through temporary measures.
- The process of achieving the inflation criterion for entry should not interfere with the business cycle. For example, untimely damping of the real side of the economy to meet the criterion could inflict an unnecessary entry cost in terms of real output. The presence of a significant inflation differential of catching-up economies (Balassa-Samuelson effect) presents a further complication.
- The currency has to lock into the euro at an appropriate exchange rate. In particular, entry at an exchange rate significantly above that sug-

gested by economic fundamentals can do lasting damage to exports: domestic prices then have to adjust downwards relative to those of trading partners, and this can be painfully slow if prices are sticky.

– There has to be sufficient cyclical convergence with the euro area economy on entry so that euro-area monetary policy is appropriate for economic conditions. There are some subtleties in this issue. While joining the euro without full cyclical convergence risks incongruent monetary policy, it is also the case that being a member of the euro area can help convergence.[4] So the "optimal" time to enter from this perspective probably lies some time before full convergence is achieved.

Improving policy towards business

Business-sector productivity growth is key to catch-up

Increases in business-sector productivity growth have to do most of the work in the process of catch-up. Though Czech GDP per capita is about 70 per cent of that across the EU25, it is considerably below that in the high-GDP-per-capita countries, both within the EU and elsewhere. For example, Czech GDP per capita is estimated to be only a little above 40 per cent of that in the United States.[5] This gap can only partially be closed through increased labour utilisation. There may be room for increasing the employment rate by about 10 per cent (see below), implying only about one fifth of real convergence can be achieved through the increased mobilisation of labour resources. The rest of the gap has to be closed through productivity increase, and the business sector has to fulfil the major role. In this process, export-driven manufacturing firms are likely to continue playing a key role by bringing in more high-productivity plants but also through exposing the domestic sector to competition and international best practice (Box 1.3).

And significant weaknesses in the business environment need to be addressed

A host of policies influence business-sector productivity growth. Good framework conditions are essential; here much work is of course performed by macroeconomic policies in influencing general price conditions, interest rates and exchange rates.[6] Inflexibilities in the labour market are also relevant in the Czech Republic (see below). In addition, more immediate policy influences on businesses are of importance. Chapter 4 looks at the following key areas of policy:

– **The legal and administrative environment for business.** Legislation and regulations for business have long-since been criticised as dealing inefficiently with non-viable firms. In addition, the time and energy required to fulfil registration and other requirements for setting up a business has also long been recognised as excessive. The cumbersome nature of regulations is probably also contributing to the Czech

Box 1.3. The structure of Czech business

Similar to other countries in the region, there are sharp divides between foreign and domestic controlled enterprises. Foreign operations are generally large scale and are backed by big multi-national enterprises. The large domestic enterprises have often struggled in the process of transition and the large number of the many small and medium-sized enterprises are not strongly exposed to foreign competition or advanced business models.

In the manufacturing sector, large foreign-owned and export-oriented manufacturing operations have spearheaded the introduction of new capital and business techniques, and have been responsible for a significant proportion of growth in productivity. There are also some large domestic manufacturing firms that have successfully weathered transition to become international players, albeit often with significant foreign capital and expertise (*e.g.* Skoda). Exports and FDI developments illustrate the significant growth in large-scale manufacture (the value of exports is now equivalent to over 65 per cent of GDP). Total annual FDI inflows have been equivalent to between 9 and 12 per cent of GDP over the past few years (with the exception of 2003 when privatisation receipts were very low), with manufacturing-sector FDI representing between 1½ and 4 percentage points of the total.

Alongside the successful manufacturing operations, some traditional large-scale enterprises have not weathered the economic transition process easily. The most notable examples are coal mining and steel production. These sectors have been supported by considerable subsidy in the past. Concern about the consequences of severe and typically highly localised economic collapse, combined with active political support have both contributed to sustaining the subsidies. At the same time, however, a network of domestic manufacturing firms (typically small and medium-sized enterprises) has emerged that supplies the new large-scale manufacturing plants. This has been helped by policies to bring foreign firms and domestic suppliers together.

In some private-sector services, notably in retailing and banking, big international players are already playing a significant role in domestic markets, bringing new competition through large-scale operations and leading-edge business models. In addition, a demand for outsourced services has brought opportunities in some other sectors, also bringing them into contact with international business practices. In other services sectors, the scale of operations is typically small and economic efficiency relies on there being strong local competition.

Republic's disappointing image for corruption by increasing the incentives to break rules and to short-cut official procedures.

– **Business taxation and targeted support.** Corporate taxation and special support schemes are the main focal points of efforts to attract large investors. Targeted support to small business includes measures to develop links between small domestic firms and the large FDI-based enterprises as well as general measures to encourage entrepreneurship in the economy.

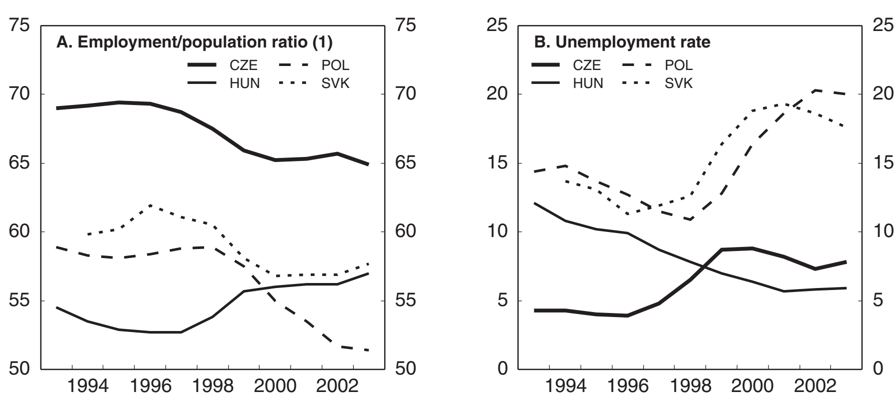
– **Regulation and administration of network industries.** The Czech Republic has gone some way in privatising energy and communications, and developed a regulatory framework to encourage competition. However, as is often the case elsewhere, this process has not yet resulted in strongly competitive markets. As a result, businesses and households can face relatively high prices and poor quality services.

Improving the reallocation of labour

Structural unemployment has emerged

Weak labour utilisation and labour-market inefficiencies have become increasingly apparent in recent years. Over the 1990s, the employment rate remained relatively high and unemployment low (Figure 1.8). This was initially interpreted as a sign that either the Czech Republic was in need of less labour-market restructuring than other transition countries, or that restructuring was much smoother than elsewhere. This view has since been proved wrong, high employ-

Figure 1.8. **Labour utilisation**
Per cent



1. Employment and population aged 15-64 years.
Source: OECD Employment Outlook.

ment and low unemployment were in fact reflecting too slow labour-force adjustment. To some extent this was a reflection of a somewhat slow process of reform and adjustment in the economy as a whole. But also, the slow labour-market adjustment was reflecting serious problems within the labour market itself. Since the macroeconomic crisis of the late 1990s, the unemployment rate has roughly doubled and the latest OECD projection estimates over 8 per cent unemployment for 2004. There are now many long-term unemployed, the share of those unemployed for more than one year has risen to more than 50 per cent, one of the highest shares in OECD countries.

Much of the labour shed from declining, non-viable activities effectively leaves the workforce, either through long-term unemployment or early retirement. This is partly because of generous benefits with light eligibility conditions. But labour-market inflexibilities are also to blame, notably stringent rules on dismissals. These not only reduce job-openings for the unemployed but also make it more difficult to increase productivity. In addition, the high tax wedge on labour constrains labour demand and encourages tax evasion, either through cheaper legal alternatives to labour contracts, or through grey-sector activity. Many of those on welfare benefits are also engaged in the grey economy, the result of light checks on income tests and job search requirements. The recently passed employment act aims to address this issue through stricter conditions on the provision of benefits (Chapter 5).

Weak labour mobility is also contributing to high unemployment and exit from the labour market. This is reflected in large unemployment black-spots in previously industrialised areas. Unemployment is highest in Northern Moravia and North-Western Bohemia, generated by significant downsizing and closures in mining, metallurgy and heavy manufacturing. Most notably, since late 1990s, the subregions of Moravskoslezský and Ústecký face unemployment rates above 13 per cent – more than three times that in Prague. The persistence of these large differences in regional unemployment rates suggests those made redundant from restructuring have weak incentives to go to where employment prospects are better. Indeed, according to surveys, Czechs are not keen on migrating for work.[7] Chapter 5 looks at the key role that low-rent housing is playing in this problem.

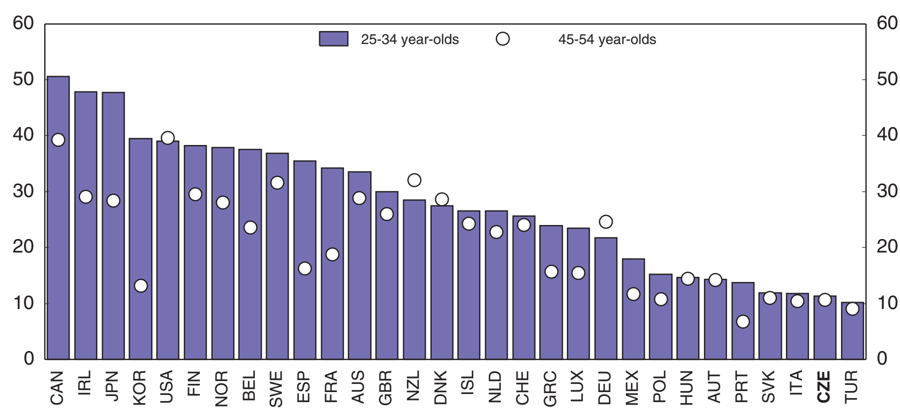
Attachment to the labour force is weakest at the younger and older ends of the working-age population. Since 1995 the employment rate for 55 to 59 year-olds has risen from 55 per cent to over 56 per cent, providing some good news on the labour-market attachment of older cohorts. However youth unemployment rates are high. Though increasing numbers go into higher education, those that do enter the labour market face high unemployment rates with long unemployment spells.[8] The unemployment rate among 15 to 19 year-old for men is about 30 per cent and over 40 per cent for women (2002 figures) – both figures are very high in international comparison.[9]

How much scope is there for increasing labour utilisation in the Czech labour market? Recent OECD calculations suggest perhaps 10 percentage points of the working-age population could be mobilised through reduction in unemployment and increases in labour force participation rates (OECD, 2003b).[10] About half of the reserves are among those aged 55 to 64, highlighting the need for reforms that extend the standard age of retirement and reduce early retirement.

There are structural mismatches in skills

Structural mismatch between the skills of the labour force and the demands of employers also hampers the labour market. Shortages in skilled labour are frequently reported by employers and in the press. A recent study by Czech researchers confirms this (National Employment and Education Observatory and the National Training Fund, 2003). The study finds skill-shortages among companies employing highly-qualified blue-collar workers as well as among IT specialists, programmers, managers, and engineers.[11] To some extent labour shortages are part and parcel of economic restructuring. But they also reflect issues in the level and mix of educational attainment and weaknesses in the education system. Low educational attainment is particularly striking in tertiary qualifications (Figure 1.9) partly reflecting that enrolment in tertiary education has only

Figure 1.9. **Percentage of the population that has attained tertiary education, 2001**[1]



1. Countries are ranked in descending order of the percentage of 25-34 year-olds who have attained tertiary education.
Source: OECD, *Education at a Glance*.

recently reached levels comparable with other OECD countries (Chapter 5). It should however be noted that though the level of degree-level tertiary education attainment is low, the education system has a strong focus on non-degree-level post secondary courses and enrolment in this regard is relatively high in the Czech Republic. In addition degree-level education has, until recently, focussed on providing master's level degree courses rather than shorter ordinary level courses.

Economic and social problems continue for the Roma

The Roma population is generally thought to be less numerous in the Czech Republic than in other Central and Eastern European countries, but nevertheless an important ethnic minority. There are no precise population estimates as many Roma do not identify themselves in census questionnaires; for example, only 11 000 persons declared Roma ethnicity in the 2001 census. Expert assessments put the population at between 100 000 and 200 000 (*i.e.* between 1 and 2 per cent of the total population).[12]

The Roma face major integration problems and often suffer from poverty and social exclusion.[13] With low education levels and typically with low-skilled jobs, the Roma were hard hit by economic transition, in particular from the downsizing and closure of state-owned firms. Re-entry to the labour market has proved difficult for many Roma and long-term dependency on welfare benefits is common. Linked to these problems are inadequate housing, a lack of access to social and public services (notably health), and a long history of discrimination and limited communication with the majority of the population (Ringold *et al.*, 2003). These policy issues are examined in greater depth in Chapter 5.

Immigrants play an increasing role in the labour market

Immigrants are playing an increasing role in the Czech labour market, and policy issues raised by this are getting more attention alongside migration issues raised by EU membership. A special agreement on labour movement with Slovakia means the countries effectively share the same labour market and this has helped smooth out imbalances, the Czech Republic typically being a net recipient of workers. In addition, high-skilled foreign workers have played an important role in management and specialist positions in FDI-based firms. At the same time, relatively good wage and employment conditions are attracting increasing numbers from further east, notably the Ukraine, typically to fill jobs at the lower end of the labour market. To date, Czech immigration policy has been conservative, with a work permit system that focuses on giving out job-based permits, rather than general permits. In addition, opportunities to become a permanent resident or a citizen are limited, requiring very long periods of residence even by European standards. One basic challenge is to construct a more comprehensive system of immigration that copes better with the increasing role of immigrants. In addition, the conservative approach to immigration is not necessarily optimal given the Czech Republic's declining and ageing population. These policy issues are examined in a special chapter on migration (Chapter 6).

Other policy challenges: the environment

Issues in air pollution and greenhouse-gas emission are discussed in Chapter 7 – as part of country-by-country reviews of sustainable development issues. The air quality in the Czech Republic was poor at the start of the transition to a market economy in the early 1990s. Although significant improvements have taken place since then, emission levels of some pollutants remain high in international comparison, notably in sulphur dioxide and nitrogen dioxide, and are continuing to contribute to problems relating to soil acidification, smog and ozone in some regions. Similarly, greenhouse gas emissions have come down considerably but remain high by international standards, though official estimates suggest Kyoto target levels will nevertheless be achieved.

Notes

1. Note that Czech GDP data has recently been revised. The revision has resulted in quite large changes in nominal GDP, but the changes in real GDP growth are relatively small (Annex 1.A1).
2. For some other countries, joining the euro area has brought real interest rates down because of reduction in the level and volatility of inflation. However, in the Czech case, inflation is already quite low and real interest rates very close to those in the euro area, so further substantial gains to a low inflation environment are not likely.
3. The recent research on the link between common currency and trade has been led by Andrew Rose (Berkeley) whose initial work suggested that small economies who have adopted a major foreign currency, such as the US dollar, British pound, French Franc, have about three times the amount of trade of those that have not. The initial results were regarded with some scepticism but the major lines of criticism have not seriously challenged the basic finding. And, similar results (though not usually as dramatic) have been observed in other cases where common currencies have been adopted. Andrew Rose has recently published a review of the empirical results (Rose and Stanley, 2004).
4. Such a hypothesis has been found in line with empirical observations for Austria (Hochreiter and Winckler, 1995).
5. The latest Cardiff Report assessment of the Czech economy estimates that Czech GDP per capita will come out at 69.9 per cent of average GDP across the EU25 in 2004 (European Commission, 2004). OECD calculations using purchasing-power parities indicate Czech GDP per capita to be 59 per cent of that in the euro area and 42 per cent that of the United States.
6. The importance of macroeconomic stability for investment flows is illustrated in a recent CNB Working Paper that makes an econometric examination of the determinants of FDI flows (Kral, 2004).
7. According to one cross-country survey, only 16 per cent of Czechs are willing to migrate if they have no job in their present residence and were offered one elsewhere, compared to 19 per cent of Hungarians, 25 per cent of Dutch and 39 per cent of British (Flek and Vecernik, 2004).
8. Since 1993 the number of unemployed 15-19 year-olds has in fact remained roughly constant while employment has shrunk considerably. More than half of 15-24 years old unemployed have been unemployed for more than six months.
9. For older cohorts of youth, the unemployment situation is less exceptional in international comparison. For instance, the unemployment rate is 13-14 per cent for 20 to 24 year-olds, which is about the OECD average.

10. The OECD calculations of potential labour resources assume that unemployment rates can be brought down to 5 per cent and that labour force participation rates can be brought up to the third-highest rate in the OECD labour market (OECD, 2003b).
11. The analysis of job shortages in the study by the National Employment and Education Observatory and the National Training Fund combines information from surveys of employers, labour offices and private labour agencies, analysis of job announcements, and a survey carried out by CzechInvest among Czech and foreign investors in the manufacturing industry.
12. During the communist era, the population censuses did not include questions on ethnic origin, but data collectors used to tick off forms filled by people "looking or living as Gypsies". In 1980, 89 000 persons were counted as Roma, or 0.9 per cent of the population.
13. The original "Czech" Roma community (about 5 000 persons) was almost wiped out during the Second World War. After the war, many Roma came, often involuntarily, from Hungary, Romania and eastern Slovakia to the evacuated Czech border area and throughout the industrial areas of Bohemia and Moravia. Another migratory movement from eastern Slovakia took place in the 1960s.

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Annex 1.A1

Recent revision of GDP data

The authorities have recently revised the national accounts to harmonise them with EU legislation. Revised real GDP and components on a quarterly and annual basis for 2001 onwards were released in late spring of this year and further backdates were released over the summer.

In the revised series, nominal GDP is about 6 to 8 per cent greater than in the previous series. Among the changes made, a user-cost method in the calculation of spending on dwelling services has been introduced. And there has been a shift in method regarding consumption of fixed capital in non-market services, *e.g.* road-transport assets, that uses a replacement cost method, rather than historic cost in the calculation method. In addition, the revision included the results of an updated business register that recorded more active units than would have been recorded under the previous register.

In terms of overall growth in real GDP the revised figures differ little from previous ones, but there are changes in composition. The new data show somewhat weaker consumption growth and stronger investment growth over the past year or so than was previously recorded.

2. Fiscal policy and public-expenditure reform

The importance of making fundamental reforms to public expenditure is increasing. As Chapter 1 illustrates, the widening deficit is reflecting strong increase in spending as a share of GDP against a relatively flat revenue profile. Looking forward, rapid growth in the number of old people in coming years will increase spending on pensions and boost demand for health care. In addition, the authorities must ensure appropriate investment in public infrastructure and make sure that sufficient funds are being spent on education and training to bring goals of developing a highly skilled and adaptable workforce to fruition. These spending pressures have to be addressed in an environment where revenues from privatisation are drying up and where increases in taxation add to a tax burden that is already adversely affecting job growth and detracting from the attractiveness of the Czech Republic as a place to invest. In addition to these general factors, meeting the deficit and debt criteria for entry to the euro area provide additional incentive to increase the efficiency and sustainability of public spending,

The current administration is fully aware of the fiscal challenges it faces and has taken significant steps towards fiscal reform. In June 2003, the government approved a resolution proposing wide-ranging measures. The resolution, along with a first wave of implementation and a 2004 budget in concordance with reform plans, was passed by Parliament in November 2003. Further implementation is in progress and there are also plans for a "second phase" of reform, notably in pensions and health. However, some of the original reforms have already been diluted in the parliamentary process and there is a risk of further dilution as well as delay in the implementation of the remaining items on the reform agenda.

This Chapter first takes a detailed look at the 2003 budget outcome. This is followed by an overview of the fiscal reform programme, an assessment of budgeting issues (including the new medium-term budgeting framework) and progress in active tax and spending measures. The final sections of the Chapter look at issues in public spending reform. The policy recommendations of the chapter are summed up in Box 2.1.

Box 2.1. Policy assessment on fiscal policy and public-expenditure reform

Central government budgeting

- The **medium-term budgeting framework** has the capacity to harden budget constraints and force a longer-term outlook through its legally binding three-year spending ceilings. In finalising the details and evaluating performance of the framework the authorities should be vigilant against dilution of the impact of spending ceilings, ensure avenues to abuse the rules on cyclical spending are closed and avoid inappropriate use of windfall revenues by sticking to the agreement that these are only used for deficit reduction.
- Despite substantial recent progress to increase transparency, some **extra-budgetary funds** continue to obscure the government's true fiscal position and all of them should be more fully integrated into mainstream budgeting procedures.
- A clearer distinction in the authorities' **communication on the different government accounts** is needed, particularly regarding the Ministry of Finance's adjusted-cash account and the ESA95 account produced by the Central Statistical Office and reported to the European Authorities.

Reforming taxation

- Larger cuts in the **corporate tax rate** than those scheduled should be considered, rather than making other forms of tax-expenditure on firms, such as the planned increases in depreciation rates.
- Cuts in the **tax wedge** need to focus more on low income households so as to increase demand and supply of jobs in the segment of the labour market where unemployment is most prevalent.
- The authorities should also consider avenues for widening **revenue sources**, notably through greater exploitation of property taxation.

Reducing government expenditures through spending reform

- The **pension reform**, whether only through parametric change to the PAYG system or through the introduction of a new pension system, has to generate savings for the budget and decisions for reform resulting from the expert assessments and discussions currently under way should be announced as soon as possible.
- It is important that the authorities begin the process of **health care reform** as soon as possible by setting a deadline for the finalisation of government proposals for reform. The reforms should take on board the messages of review on health in the previous *Survey*, namely: more narrowly defined universal health services combined with liberalisation of private markets for complementary services, a greater role for user fees, greater attention to preventive policies and resource allocation based more strongly on the likely outcomes of categories of treatment.

Box 2.1. **Policy assessment on fiscal policy and public-expenditure reform** (*cont.*)

- In **road transport**, plans to revise legislation so as to speed-up planning approval for roads are welcome. Planned legislative changes to improve public-private partnership deals should hopefully lead to improved efficiencies in road building and other infrastructure projects.
- Having given the **regions and local authorities** more fiscal freedom, good accounting practices in sub-national government matter all the more. The central government has to make sure accounting practices are timely and transparent and that hard budget constraints are maintained. In particular debt developments should be closely monitored and particular efforts should be made to ensure the central authorities have a comprehensive and timely picture of finances.
- **Decentralisation** also raises the importance of diffusing best-practice in public spending to ensure outcome orientation and efficiency gains in provision. In part, central government can do this through budgetary discipline, but it also has to take a lead in the development of benchmarking and output assessment that encourage the efficient service delivery. At the same time, the central government has to be careful that regulations in the provision of public services are not overly prescriptive and so allow local government scope to manage their responsibilities.

Deficit outcomes in 2003 and 2004

The 2003 deficit outcome is shaped by revenue and expenditure surprises

The 2003 general-government deficit turned out at 4.0 per cent (adjusted-cash basis, see Box 2.2 for an explanation of the accounts). Expectations of a much larger deficit had built up over the year; for instance in autumn 2003 the Ministry of Finance was predicting a deficit of 6.2 per cent. In part this reflects a systematically conservative bias in the Ministry's planning and outlook for budgets. In addition two one-off expenditures were driving up the deficit estimates: the government lost a court case against the foreign broadcasting company, CME, and had to pay out CZK 10.6 billion.[1] There were also unexpected expenditures of about CZK 7.2 billion relating to damage caused by the 2002 floods.

The high deficit was not realised partly because VAT revenues towards the end of 2003 were substantially higher than expected. This was in part due to purchases in anticipation of changes to VAT rates in 2004. Another contributory factor was that some allocated funds were not fully spent, notably in the infrastructure fund that is largely responsible for road building. This is not the first time this has

Box 2.2. Government budget accounts

The two most important government accounts for analytical purposes are the State Budget account and what is referred to in this Survey as the "adjusted cash" account. ESA95 accounts have to be used in communication with EU authorities on budget issues but these have not yet become very commonly referred to (though recent OECD projections have begun using the ESA95 accounts). However, reference to them is increasing in the press and general public debate, though this is often leading to confusion with other account figures. The authorities are also developing accounts using the IMF's GFSM2001 methodology (for further details on all accounts see Annex 2.A2 and Annex 2.A3).

The State Budget account

The State Budget is the account voted on by Parliament and uses principles similar to the IMF's GFS86 guidelines. Considerable detail on the state budget account is made available to the public, including month-by-month updates. The account's status as the budget account combined with frequent and timely updates means it is a key reference point for analysts and the press in coverage of budgetary performance. The account is not a pure central government account as it also includes social-security transactions and some extra-budgetary accounts. Because of the significant role of regional and local government, revenues and expenditures in the State Budget account fall well short of general government revenue and expenditure (especially if social-security financing is excluded).

The adjusted general government GFS account (or "adjusted-cash" account)

This account is the most widely used in analysis and is typically the account used in this *Survey*. The account is produced by the Ministry of Finance based on its GFS86 cash account. To bring the account closer to SNA accounting principles, various adjustments are made. Irregular income and expenditure in the cash account is excluded, notably privatisation revenue and costs relating to bad debt taken over by the government (so called transformation costs). Alterations to the composition of revenue and expenditure are also made.

The ESA95 general government account

As a Member of the EU, the Czech authorities have to produce accrual-based ESA95 accounts. These accounts, for example feature in Convergence Programme documents and the deficit and debt from the account are used in assessment of the Maastricht criteria for entry to the euro area. Although the Ministry of Finance's cash-adjusted account goes part way towards this type of accrual account, a completely new set of accounts has to be made for full compliance with ESA95 methodology. The ESA95 accounts are produced by the Czech Statistical Office (CZSO) (unlike all the other accounts which are produced by the Ministry of Finance). Despite continuing refinement of the ESA95 government account, it is still not widely used in analysis because of lengthy production delays and difficulties in year-by-year comparability.

occurred and is a curious feature of the Czech budgeting system (this is discussed further below).

The 2003 deficit recorded in the accrual-based ESA95 accounts (*i.e.* that reported in the Convergence Programme) is distorted by a one-off accounting adjustment. The deficit is recorded as 12.6 per cent, compared with 6.8 per cent in 2002.[2] About 7.3 percentage points of the deficit arises because, as of 2003, the *full* amount of state guarantees are now reported as a capital transfer at the moment the guarantee is called for the *first time*, irrespective of when the remaining part of the guarantee is called (Ministry of Finance, 2004). This change in method triggered a large volume of guarantees to be logged as expenditure in the 2003 account. Without the guarantees, the ESA95 deficit would therefore be about 5 per cent.

The very big difference between the adjusted-cash deficit figure and the ESA95 figure for 2003 highlights that a clearer distinction in the authorities' communication on the different government accounts is needed as the presence of two deficit figures in the press risks misunderstanding among markets and the public on the development of the fiscal position and on progress towards fiscal goals.

The expected deficit outcome for 2004 is partly contained by revenue measures

Despite the fiscal reform programme (see below), the 2004 deficit outcome looks likely to continue the upward deficit trend. In September 2004, the Ministry of Finance projected the deficit would rise to nearly CZK 141 billion in 2004, equivalent to about 5.1 per cent of GDP, a slippage of 1.1 percentage points on 2003. However, as in 2003, it is likely that there will be under-spending in infrastructural funds and this may take about half of a percentage point off the projected figure.

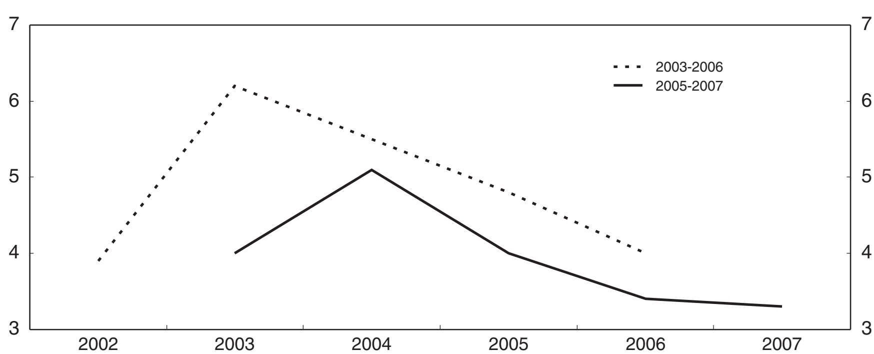
The fiscal reform programme improves budgetary procedures and starts with tackling the deficit

The fiscal reform programme was launched in 2003 when the government proposed a first round of fiscal reforms. The broad objectives of this round of reforms are to improve discipline in spending through a new medium-term budgeting framework, and to make an initial attack on the deficit through a range of active tax and expenditure measures. A second round of reforms is envisaged entailing more fundamental expenditure reforms, most notably through implementation of long-discussed pension and health-care reform. The reforms were outlined in a document on public finance reform in June 2003. The 2004-2006 *Budget Outlook* (Ministry of Finance, 2003) submitted to Parliament in September 2003 reflected reform intentions with a new format that included more comprehensive medium-term spending plans than was done previously. A number of the specific tax and revenue measures proposed in the *Budget Outlook* were passed by Parliament in the course of voting the 2004 budget in November 2003. Others have been passed in subsequent parliamentary votes, *albeit* sometimes diluted from original proposals. The legislation for the new budgetary framework was passed by Parliament in August 2004. Details of the first and second-round reforms are listed in Annex 2.A1.

The 2004-2006 *Budget Outlook* of 2003 set out plans for a 4 per cent deficit for 2006 and in the 2005-2007 *Budget Outlook* sets plans for a 3.3 deficit per cent for 2007 (Figure 2.1). These deficit ambitions closely follow those laid out in the May 2004 Convergence Programme report to the European Commission (Czech Government, 2004).[3] The fiscal reform programme aims to meet deficit targets by active expenditure cuts and revenue increases roughly in the ratio of 2 to 1. On the expenditure side, reductions in employment and wage restraint in the public sector are expected to do a lot of work towards achieving targets along with savings from a reform to sickness-benefit payouts. On the revenue side, active measures to increase VAT and excise revenues are expected to play a key role. In the longer term, savings from planned reforms to health and pension systems are expected to strengthen the sustainability of the consolidation process.

Figure 2.1. **Deficit ambitions in the Ministry of Finance's Budget Outlooks for 2003-2006 and 2005-2007**[1]

Per cent GDP, adjusted-cash account



1. The Budget Outlook is a government-approved document that complements detailed budget proposals put before Parliament. The second year of each scenario shown is the estimated deficit outcome (the Budget Outlooks are written in early autumn). The deficits for the following three years are based on calculations of economic conditions and the assumed implementation of active measures indicated in the Budget Outlook.

Source: Ministry of Finance.

Assessing the proposed new budgetary framework

The introduction of the medium-term budgeting framework is a welcome step to harden expenditure constraints.[4] Under this system, the government submits to Parliament, together with the standard state budget, a new document (the medium-term expenditure framework, MTEF) that outlines three-year deficit targets and, importantly, spending ceilings for not only the state budget but also for seven state extra-budgetary funds. The approach in the MTEF is to outline a three-year deficit profile, project a revenue stream (taking into account active measures) and from this derive expenditure ceilings. Key features of the system are:

- The MTEF will be treated the same way by Parliament as the state budget. Importantly, if the document is not approved the draft is returned for revision. The MTEF will be made annually – and is therefore a rolling medium-term framework.
- The framework stipulates conditions that limit the deviation from the ceilings of the previous year. In particular, the legislation only allows deviations in order to accommodate budgetary rules or in cases of extraordinary macroeconomic conditions.
- The aggregate spending ceiling is the only legally binding ceiling. However, the government aims for detailed chapter-by-chapter information to be provided to Parliament and budget committees and expects chapter administrators to treat constraints as hard, only to be broken in situations of extraordinary and unpredictable expenditure.

On paper the introduction of the MTEF looks like a positive step. However, much depends on the strength of commitment to make it work properly. Clear evidence, right from the start that the process is being taken seriously by politicians and bureaucrats is obviously crucial for the process to gain credibility. Success also depends on getting the details right. In this regard the authorities should keep an open mind as to making improvements to the system as its strengths and weaknesses emerge. To this end the authorities should bear in mind the following:

- The system needs to have safeguards against misappropriate use of windfall revenues. Experience in other countries shows there can be a tendency to use “windfall” revenues to initiate new structural spending programmes. In this regard it is important that the government sticks to its agreement that windfall revenues will only be used for deficit reduction.
- The system needs to ensure there are no avenues to exploit the rules on cyclical spending. For instance, “savings” in unemployment benefit payouts during an upturn may be absorbed by permanent increases in other

areas of spending. One solution is to remove the key cyclical items from the expenditure envelope, as has been done, for example, in the United Kingdom.[5]

– Experience in other countries has shown that spending ceilings can provoke tax expenditure.

Extra-budgetary funds

A number of recent steps should improve transparency and budget discipline in extra-budgetary funds – and this is particularly welcome given that past progress has been rather slow on this front:

– Some important extra-budgetary funds are scheduled to be scrapped, either ceasing to exist altogether, or having responsibilities transferred to central-government officials. Notably, the National Property Fund (responsible for managing privatisation) is set to be liquidated by end-2005 and the Czech Consolidation Agency (responsible for managing bad debt, principally from the banking crisis of the late 1990s) by end-2006. Furthermore, a review is underway to consider the future of the remaining funds.

– The legislated nominal three-year spending caps of the new budgeting system will extend to seven extra-budgetary funds, and will therefore be subject to the same level of spending discipline as central government.

– The introduction of the rule in ESA95 accounting that the full amount of the guarantee has to be reported the moment the guarantee is called for the first time (see above) means guarantees of extra-budgetary funds will be recorded sooner and more comprehensively.

Despite this substantial progress, some of the remaining extra-budgetary funds continue to obscure the government's true fiscal position and all of them should be more fully integrated in mainstream government budgeting procedures. The infrastructure fund in particular creates problems in budget planning because of repeated underspending of budget allocations. The underspending partially reflects unforeseen delays in the implementation of projects. However there is also a suspicion that the managers of the infrastructure fund find it advantageous to bid for high budget allocations – and are successful in this, in part, because the infrastructure fund's budget proposal is presented to Parliament as a separate item from the state budget and is therefore not seen in the context of the overall budget (indeed, typically the fund's budget gets voted in without significant opposition). As the experience in the 2003 budget shows, the underspending means the Ministry of Finance bases public budget estimates and projections on inaccurate expenditures, contributing to a confusing situation for analysts assessing progress towards fiscal targets. The difficulties raised by the infrastructure fund would be at least partly resolved if the process of parliamentary approval was integrated with that for the central budget.

Progress and prospects in active tax and revenue measures

The 2004-2006 *Budget Outlook* proposed a range of fiscal measures with the aim of passing them through Parliament as part of the 2004 budget or through subsequent legislation. On the revenue side, the most significant proposals were for increases in VAT and excise duty, and reductions in the corporate tax rate. In total the revenue measures were expected to raise CZK 62.7 billion over the three budgets 2004 to 2006 (Table 2.1). The *Budget Outlook* estimated that about CZK 190 billion in expenditure savings on the passive scenario would be needed to reach targets and proposed savings in the government's wage bill through staff cuts as a major component. As can be seen in Table 2.2 the *Budget Outlook* specified expenditure measures worth only CZK 121.5 billion between 2004 and 2006; subsequent revision of estimated spending levels, plus government coalition agreement to further cuts, eliminated the gap between the expenditure measures and required spending cuts.

Tax measures

The key measures on the revenue side of fiscal reform – changes to VAT rates, increases in excise duty and reduction in the corporate tax rate – have gone ahead, though with some degree of compromise.

In VAT, a range of services were moved from the "reduced rate" of 5 per cent to the "standard rate" of 22 per cent in January 2004, including notably telecommunications (Annex 2.A1). More shifts were made in May 2004, but not as many as were aimed for in the second tax package agreed in February 2004. Nota-

Table 2.1. **Fiscal effects of revenue measures on the State Budget as outlined in the *Budget Outlook* 2004-2006**
CZK billion

	2004	2005	2006	In total
Total taxes	20.8	22.7	16.5	60.1
Value added tax	10.7	17.2	18.1	46.0
Excise duties	11.8	14.5	17.5	43.8
Corporate income taxes	–4.1	–8.7	–15.7	–28.5
Personal income taxes	–2.4	–1.0	–0.8	–4.2
Other property taxes	4.8	0.7	–2.6	2.9
Social security	–1.0	0.8	2.8	2.6
Total taxes and Social security	19.8	23.5	19.3	62.7

Source: Ministry of Finance, *Budget Outlook*, 2003-2006 (2003).

Table 2.2. **Fiscal impact of expenditure measures on the State Budget as outlined in the *Budget Outlook* 2004-2006**

CZK billion

	2004	2005	2006	In total
Active expenditure measures agreed by coalition in total	25.4	43.5	52.6	121.5
Pensions – parametrical change	–0.1	–0.1	0.0	–0.2
Pensions – pace of valorisation	2.5	4.8	1.3	8.6
Sickness pay	6.1	7.4	8.7	22.2
State social assistance	0.1	0.5	0.7	1.3

Source: Ministry of Finance, *Budget Outlook*, 2003-2006 (2003).

bly, a VAT increase on hotel services has been postponed and planned increases on a number of items including water, sewage and cultural events have been cancelled altogether. In addition it was decided to lower the standard VAT rate from 22 to 19 per cent and to introduce one-off compensation to households for the VAT-related price increases (neither of these measures was in budget proposals). The compensation package includes increases in parental allowances and one-off payments to all pensioners and families. As of June 2004, it was estimated the VAT reforms will raise revenue equivalent to about 1.2 per cent of GDP, and that the compensation package will cost about 0.3 per cent of GDP.

Various excise duties were increased on 1st January 2004, including increases in duty on retail petrol and diesel, alcohol and cigarettes. The increases in the latter are driven by EU directives and are the first in a series of increases that are scheduled to increase the excise duty to the equivalent of EUR 60 per 1000 cigarettes by 2007.[6]

Corporate tax was reduced from 31 per cent to 28 per cent on 1st January 2004, the first of three cuts that will bring the rate to 24 per cent in 2006. The cut was partly offset by base-broadening measures, including a reduction in the period allowed to carry losses forward from 7 to 5 years and abolition of a tax credit on withheld taxes on dividends. At the same time, however, new tax expenditures are envisaged. At the beginning of 2005, it is aimed to increase depreciation rates on assets and to raise the maximum tax deduction on R&D spending.

The fiscal reform programme also envisages tax expenditures on families. It is aimed to introduce an optional joint taxation scheme for married couples with children (see Chapter 5). In addition it is hoped to replace the child tax deduction with a tax credit. There are also plans to introduce a cap on social contributions for those earning more than five times the average wage.

The implemented tax changes obviously bring much-needed revenue increases and help towards narrowing the deficit – even though in the case of VAT the revenue impact will be less than was originally hoped for. In planning further tax measures the authorities are recommended to:

- Improve the efficiency of the tax system through reduction in targeted tax breaks for business to create room for tax cuts elsewhere, for example in the corporate tax rate or in the tax wedge on labour. The tax breaks are distorting and not very transparent for investors. Cuts in the corporate tax may be a desirable way of using the savings made because of concerns to maintain competitive effective rate of business taxation as well as make the "headline" rate of business tax more attractive. Compared with the Czech rate of 28 per cent (scheduled to be 24 per cent in 2006), the Polish and Slovak rates are currently 19 per cent and the Hungarian rate has recently moved from 18 to 16 per cent.
- Focus cuts in the tax wedge more on low-income households so as to increase demand and supply for jobs in the segment of the labour market where unemployment is most prevalent. The introduction in the cap on social-security contributions does indeed cut the tax wedge but addresses a relatively low policy priority, benefiting high income earners (and their employers) where supply and demand elasticities are low. The proposals to cut taxes for low-income households as part of the second-phase of structural reform are therefore welcome (Chapter 5).
- Create opportunities for cuts in the tax wedge by more fully exploiting under-utilised tax bases, notably tax on property. Greater flexibility and revenue potential in local property taxation would broaden the tax base and improve income options for local government. At present property-tax revenue is relatively low in international comparison. 2001 figures, for example, show revenue to be only 0.2 per cent of GDP; in many other European countries revenue is much higher. This being said, the authorities would have to be careful in the design of any new property tax system to avoid the problems that are often seen in this form of taxation elsewhere.

Expenditure measures

Progress in implementing the fiscal reform's expenditure measures has so far been reasonable. Reforms in the sickness benefit system, estimated to yield about CZK 20 billion between 2004 and 2006, have gone ahead as planned. In addition some progress has been made on the much larger cuts in the government's wage bill. A specific group of top public officials including MP's, ministers and judges have had a wage freeze imposed and savings from integrating 13th and 14^{th} month payments into standard monthly wages for all public employees are set to go ahead in 2005. In addition, the authorities made some progress in the goal to cut public-sector employment by 30 000 between 2004 and 2006.

However, there are signs that the hoped for economies in the public-sector wage bill may fall well short of those planned. There are reports that budget planning for 2005 may aim for far fewer job cuts than are needed to reach the target cut in public-sector employment. In addition large wage increases for the police, customs officers and firemen have been agreed for 2005 that were not factored in to the original fiscal-reform plans. These risks to the achieving expenditure goals need to be countered by reinforced commitment to the planned cuts in employee numbers and the authorities might also consider additional saving measures to offset the unplanned increases in the public-sector wage bill.

Privatisation measures

Privatisation revenues have been an important source of government revenue in past years and there is still some revenue potential remaining. The state's equity interests are held in the National Property Fund. The Fund currently holds shares in 165 companies, though in 40 of these companies only "golden shares" are held. Of these 165 companies there are about ten large enterprises yet to be privatised. The largest potential revenues from future privatisation are expected from CEZ, Cesky Telecom and Unipetrol (Table 2.3).[7] The total revenue potential

Table 2.3. **The main remaining sources of privatisation revenue**

Company	Current stake (per cent)	Current situation regarding privatisation	Expected date of final deal	Estimated revenue
Unipetrol (petrochemicals)	62.99	The directly owned state stake and the various UNIPETROL interests held by the Czech Consolidation Agency (CKA) are due to be sold to the company PKN, pending a decision relating to state aid by the European Commission.	2004	CZK 13.05 billion
Cesky Telecom	51.10	A financial advisor to the government has been appointed and a commission is being formed to co-ordinate the privatisation process. A formal proposal for privatisation is to be submitted.	2005	Minimum CZK 50 billion (approximate estimate)
CEZ (electricity)	67.61	The government does not see finalisation of privatisation before 2006. (Note, the transmission company (CEPS) is now fully state run following the purchase of CEZ's 34 per cent share by the Ministry of Finance.)	2007	Minimum CZK 100 billion (approximate estimate)

Source: Ministry of Finance.

from these three privatisations is estimated to be CZK 156-160 billion, roughly equivalent to 6 per cent of GDP. There have been recent developments regarding Unipetrol. In June 2004 the state signed a privatisation deal with a Polish company PKN Orlen which will pay CZK 13.05 billion for the state share. However, the deal has still to be approved by the European Commission. Among the smaller privatisations, deals were struck on two coalmining enterprises, Sokolovska Uhelna and OKD, in September 2004. In addition, there remain some state companies that have not yet been converted into joint-stock companies – the most important being the Czech Post, Czech Airports Authority and the network component of Czech Railways.

Pension reform

Main issues

The Czech Republic looks set to experience one of the strongest rises in old-age dependency ratios in the OECD area over the coming 50 years. This ageing will put strong upward pressure on public pension spending in the absence of corrective measures, and there is widespread agreement that reforms of the retirement income system are necessary to avoid any destabilisation of public finances. The main issue for policy makers is how to make the public pension system financially sustainable without compromising the income adequacy of the elderly or reducing the production capacity of the economy (See Kral, 2000 and Ministry of Labour and Social Affairs, 2001).

Performance

The Czech Republic is confronted with one of the most serious ageing-related fiscal challenges in the OECD area. For example, OECD calculations (Table 2.4) project an increase in pension outlays from around 9.2 to over 16 per cent of GDP in the period 2000-2050. The public retirement system is financed by contributions levied on labour, on a pay-as-you-go basis. In the period from 1996 to 2003, fiscal transfers of around 1 per cent of GDP have been made to cover the deficit between expenditure and contribution revenues. Although a number of changes have been made to the public pension system since the early 1990s, they have not been sufficiently extensive to decouple prospective developments in pension outlays and the rise in the old-age dependency ratio along the lines achieved in, for example, Hungary and the United Kingdom (Figure 2.2).

Although average pensions have fallen relative to average wages since the early 1990s (Figure 2.3), the public pension system provides most pensioners with reasonable resources. The net income per person in pensioners' households is equal to about 90 per cent of that in working households. Public pensions make up the bulk of retirees' income (95 per cent). The ratio of the average public

Table 2.4. **Performance indicators: sustainable retirement income**

	Projected increases in old age pension spending	Low income rate of the elderly[1]	Relative disposable income of the elderly[1]	Private pension funds 1999	Age of withdrawal, 1994-1999		Participation rate, 2001, per cent		
								Aged 55-64	
	Change in per cent of GDP 2000-2050	Per cent of the elderly with income less than 50 per cent of median disposable income	Per cent of the disposable income of all individuals	Per cent of GDP	Male	Female	Aged over 65	Male	Female
Australia	1.6	16.1	67.6	63.8	59.7	61.3	6.0	60.0	36.9
Austria	2.2	14.9	86.6	3.6			2.8[1]	42.1[1]	17.5[1]
Belgium	3.3	13.8	77.9	6.1			1.3	36.6	15.7
Canada	5.8	2.5	97.4	45.7	62.6	61.1	6.0	61.3	41.7
Czech Republic	**6.8**[5]	**10**	**91.4**	**2.0**[6]	**60**[7]	**56**[7]	**4.0**	**55.0**	**24.5**
Denmark	2.7	9.2	73.0	24.4	62.4	61.5	4.6	65.5	51.8
Finland	4.8	7.5	79.0	10.7	59.8	60.0	3.7	51.2	49.5
France	3.9[2]	10.7	89.7	6.3	59.3	59.8	1.2	43.8	34.1
Germany	5.0	10.4	85.6	3.2	60.5	60.8	3.0	50.6	32.4
Greece		29.2	76.8	4.6	61.7	62.2	5.0	57.0	23.6
Hungary	1.2	6.0	85.2	2.2			3.1	36.3	15.4
Iceland				86.0			19.9	92.8	81.7
Ireland		16.7	74.6	57.8			7.9	66.1	29.5
Italy	–0.3	15.3	84.1	3.0	59.3	58.4	3.4	57.8	26.6
Japan	0.6			18.7	69.1	66.0	21.8	83.4	49.2
Korea	8.0			3.2	67.1	67.5	29.6	71.3	47.9
Luxembourg		6.7[3]		. .			0.0	38.1	14.3
Mexico		32.9	85.3	2.4			30.5	80.5	27.6
Netherlands	4.8	1.9	86.3	119.3	61.6	60.1	3.1	52.0	26.9
New Zealand	5.7			. .			8.6	74.6	51.7

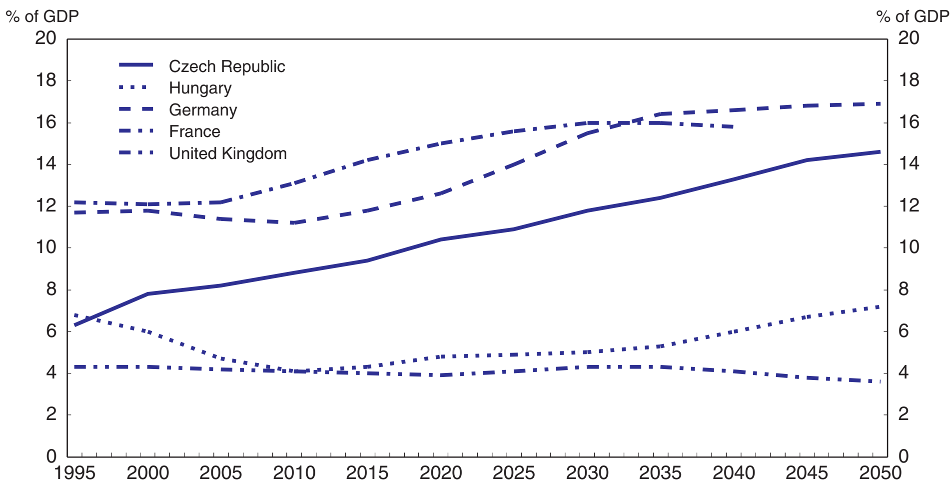
Table 2.4. **Performance indicators: sustainable retirement income** (*cont.*)

	Projected increases in old age pension spending	Low income rate of the elderly[1]	Relative disposable income of the elderly[1]	Private pension funds 1999	Age of withdrawal, 1994-1999		Participation rate, 2001, per cent		
							Aged over 65	Aged 55-64	
	Change in per cent of GDP 2000-2050	Per cent of the elderly with income less than 50 per cent of median disposable income	Per cent of the disposable income of all individuals	Per cent of GDP	Male	Female		Male	Female
Norway	8.0	19.1	74.1	7.4	64.2	64.7	13.2	73.6	63.2
Poland	–2.5	8.4[3]		. .			7.5	41.5	24.1
Portugal				11.4	65.3	66.5	19.0	63.7	41.9
Slovak Republic							1.1	43.0	11.2
Spain	8.0	11.3[3]		2.3	61.1	61.1	1.6	61.4	23.6
Sweden	1.6	3.0	89.2	. .	63.3	61.8	9.4	73.5	67.4
Switzerland		8.4[3]		97.3[4]			11.4	82.4	56.1
Turkey		23.1	92.7	. .			18.1	50.8	18.4
United Kingdom	–0.7	11.6	77.8	84.1	62.0	61.2	4.8	64.4	44.6
United States	1.8	20.3	91.7	74.4	65.1	64.2	13.1	68.1	53.0

1. National submission for the Czech Republic. Förster and Pellizzari (2000) for other countries.
2. Secretariat estimate in OECD (2001). Official reports suggest a 4.4 per cent increase on unchanged labour market policies for the period 2000-2040 (COR, 2001).
3. Jesuit and Smeeding (2002).
4. 1998.
5. Does not include impact of reform of public finance in 2003.
6. 3 per cent in 2003.
7. The Czech figures here refer to data from 2001.

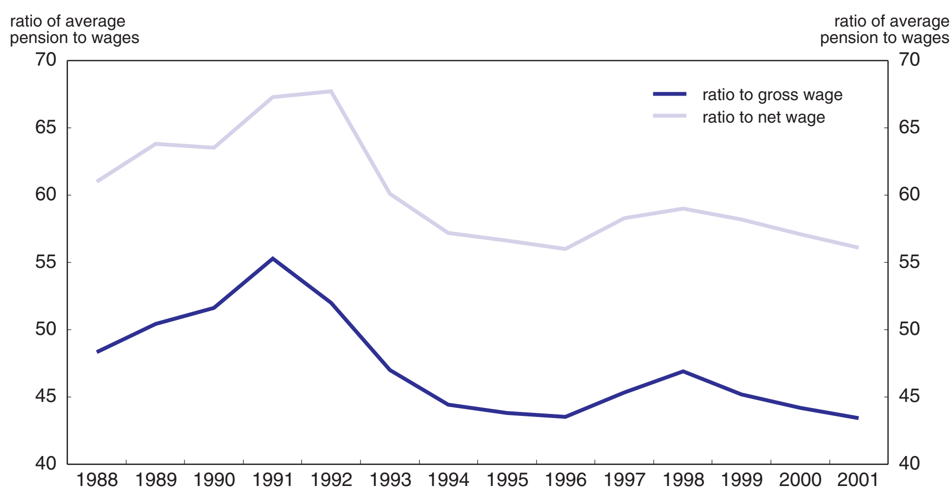
Source: Förster and Pellizzari (2000); Jesuit and Smeeding (2002); OECD *Labour Force Statistics*; Scherer (2002).

Figure 2.2. **Old-age pension cost development relative to GDP, an international comparison**



Source: Dang, Antolin and Oxley (2001).

Figure 2.3. **Aggregate replacement rate of pensions in 1988-2001**



Source: Ministry of Labour and Social Affairs.

pension to the mean wage close to 45 per cent in gross terms but approaches 60 per cent in net terms since pensions are untaxed (Krejdl and Bezdek, 2003).[8] This average ratio hides markedly different replacement rates across earning levels as the public pension system redistributes income within each generation. Low income earners receive much higher pensions relative to their past wages than high income earners.[9] These redistributive features have greatly limited poverty among the elderly, whose relative poverty rate is below that in many more advanced countries (Table 2.4).

Recent policy measures on state pensions

In order to tackle the financial sustainability problem, the authorities can in principle use three alternative means and any actual reform is likely to be a combination of them. However, it is illustrative to observe that the extent of adjustment would have to be very large if only one lever were used to make the system viable until 2030:

- Pension contribution rates would have to rise by 10 percentage points from their current level of 28 per cent. Such a rise would adversely affect labour supply and reduce the productive potential of the economy.
- The average pension replacement rate would have to fall by 12 percentage points on top of the 10 percentage point reduction since the early 1990s. Some fall in the replacement rate will already occur as the reference period for calculating pensions is raised to 30 years by 2016. Such a sharp additional fall could raise concerns about income adequacy in retirement.
- The average effective age of retirement would have to rise substantially.

The employer's contribution rate for public pensions has been raised from 26 to 28 per cent in January 2004. As a result, pension accounts are expected to be on balance or in slight surplus until 2013 (Table 2.5). At the same time, however, the contribution rate for unemployment insurance was reduced from 3.6 to 1.6 per cent, meaning that the policy has not improved the overall public sector

Table 2.5. **Pension cost relative to GDP**

Per cent

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Income	9.2	9.3	9.3	9.3	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Expenditure	8.8	9.2	9.8	10.8	11.5	12.4	13.4	14.7	15.6	16.2	16.7	16.7	16.5
Difference	0.4	0.1	–0.5	–1.5	–2.0	–3.2	–4.2	–5.5	–6.4	–7.0	–7.5	–7.5	–7.3

Source: Ministry of Social Affairs and Labour.

balance but shifted the deficit to other parts of the government. This aside, the minimum contribution base for the self-employed has been increased from 35 to 50 per cent of the difference between income and costs, which cannot be lower than half the average wage. In principle, this measure should raise revenue but, along with other changes targeted at entrepreneurs, it may induce them into the grey economy.

No matter what final form pension reform takes (see below), further increases in the retirement age are the most feasible avenue for ensuring fiscal sustainability. A further increase in pension contribution rates should be excluded because of its damaging effect on long-term growth and major reduction in replacement rates would imperil income adequacy, so most of the containment of state pension funding has to come from increased retirement ages (or the equivalent thereof). One route would be through additional parametric change to the PAYG system, for example by annual increases in retirement of, say, 2 months until a retirement age of 67 is reached.

As part of the reform of public finance, some moves have been taken to increase the age at which people start to draw government pensions. At the end of 2003, the authorities built on an earlier policy to raise the retirement age and have scheduled a further one year increase in the retirement age for men and two years for women, to be introduced in the period 2007 to 2013.[10, 11] This would bring the retirement age for men and women (with no children) to 63. Nevertheless such a figure will still be below that planned by many OECD countries. In addition, the continuation of lower retirement ages for women who have had children is costly and is unlikely to have a significant effect on fertility.[12] At the same time, a decision has been made to close one route into early retirement (temporarily reduced early-retirement pensions).[13] The possibility of those who have been registered as unemployed for six months to draw a temporarily reduced early retirement pension for two years prior to the standard retirement age has been ended. In addition, the possibility of those who have received an invalidity pension to change to a retirement pension before the standard retirement age will be phased out by 2006. However, the scheme whereby workers can draw their pensions three years before the standard retirement age on the condition not to work during this period (permanently reduced early retirement pensions) remains unchanged after a minor reform undertaken in 2001. Closing one out of two early retirement schemes may be of limited effectiveness in reducing expenditure, as people may just enrol in the scheme that remains open rather than finding employment. For this reason it is important the option of early pension withdrawal is actuarially fair. Recent calculations by the Ministry of Labour suggest that the actuarial adjustment for early retirement is fair. However, changes are needed for those retiring *after* the standard retirement age to make this aspect of the system actuarially fair. Such reforms would contribute to increasing the incomes of the elderly by removing the remaining disincentives to work at older ages.[14]

State subsidy of voluntary private-pension saving

To offset the inevitable reduction in state-pension replacement rates in the coming decades, the authorities have put in place institutions and incentives to encourage private retirement saving. Voluntary pension savings are subsidised by partially-matching state contributions. Extensive tax incentives are also used to stimulate saving in supplementary pension schemes operated by pension funds and in pension insurance products sold by life insurance companies. These allow *premia* to be deducted (subject to a ceiling) from income for tax purposes, the investment income by institutional investors to be taxed at a concessionary rate and pension payments also to be taxed at a low rate.[15] All in all, the state provides large percentage subsidies to private pension saving. The subsidies make this form of saving very attractive, and around half of the labour force contributes to private retirement saving, though often contributions are relatively small because of caps on the amount of contributions that are subsidised (only the first CZK 12 000 of annual contribution are subsidised). A World Bank report on voluntary pension saving in the Czech Republic shows that the average monthly contribution is equivalent to less than 3 per cent of the gross average wage (World Bank, 2003). Overall, however, it is not clear how far this subsidy system has dealt with the public-finance problem because the associated loss in public saving may be equal to (or even greater than) the increase in private saving.

A potential problem in attracting voluntary private pension saving is that there remains a degree of public wariness of financial institutions following the failure of two pensions funds in 2001. While the Ministry of Finance and the Securities Commission already have significant powers to sanction institutions, a reform is currently underway to further reinforce prudential supervision. Besides, the overall performance of pension fund investments has been relatively weak. The requirement that the value of assets under management should not diminish in any calendar year has led to a very low proportion of shares in pension fund portfolios. This obligation should be re-considered as it is unlikely to be the least-cost method to protect investors.

The current state-of-play on major pension reform

Major pension reform has been pushed back. For some time the authorities were heading towards a final decision on reform which involved the introduction of a notional-defined contribution system. However in spring 2004 it became clear that the authorities have decided to go back to the drawing board. Two committees on pension reform were formed, one looking at reform of the state system and another looking at third-pillar issues.[16] The motivation for this renewed examination of the options appears to be to ensure broad political consensus, for example the committee discussing the state pension reform includes representatives from five political parties.

In discussion of reform to the state pension four options are being considered. One option is to remain permanently under the current PAYG system and rely on parametric changes to increase retirement age and adjust generosity. Other options would gradually introduce a new system. The possibility of strengthening compulsory engagement in a contribution-based pension through an NDC system remains on the table. There are two proposals that move in the opposite direction by making the state pension system provide a basic pension, rather than a pension that is linked to contributions. One proposal is for a minimum pension, possibly funded out of taxation, rather than a PAYG fund. A variant of this is also proposed in which individuals could choose to partially opt out of the state system and re-channel contributions to third-pillar accounts. The government aims for calculations of the financial implications of specific variants of these schemes to be available for internal policy discussions in the second half of 2004. Parliamentary discussion about creating a special pension fund has also emerged. For example, some policymakers are advocating that some, or even all, privatisation revenues be earmarked for a special fund – rather than for infrastructural projects as is the current arrangement. There is also debate as to whether the fund should be actively managed or not.

The introduction of a notional defined contribution system could put the state pension system on a solid footing in the long term, though of course much depends on the details of the system. Such a change would diminish the implicit tax on continued work that is currently embedded in the pension system and thus help raise the effective average retirement age. By bringing pensions closer to contributions, a notional defined contribution system could also make workers perceive contributions as savings rather than tax payments, thereby reducing the negative effect of contributions on labour supply. The closer a reformed system is to full actuarial neutrality, the bigger its positive effects on the labour market. However, there is, of course, a trade-off between the degree of actuarial neutrality and the extent to which a pension system can redistribute income within age groups.

In principle the NDC option has considerable merit but there are risks for financing and how it stacks up against the alternatives depends very much on the details of the systems proposed. NDC pension systems can be expensive compared to PAYG alternatives because there is less (or even no) cross-subsidy from high to low contributors. In addition, NDC systems involve explicit commitment by the authorities on a rate of return – which can prove onerous. Furthermore, some sort of safety net pension has to either be built into the NDC system or provided by other means. The general risk of the three non-NDC systems proposed is that individuals might not put enough extra money aside in the form of pension contributions or other saving to give them the living standards they expect in retirement, raising the possibility of political pressure to bail out pensioners further down the track.

Whatever option for pension reform is chosen, the system has to have lower pension entitlements. Unless a new pension system is introduced rapidly, reform has to include further adjustments to the current PAYG system as many retirees will continue to get pensions under the old scheme. Rapid increase in the pension population is set to occur in the next few years, and unless the new pension system is in some way "backdated", pensions under a new system would perhaps first come on stream in 2010 but it would not be until perhaps 2040 before all pensions were paid under the new scheme. It is possible, for example, to backdate an NDC system by basing the initial value of notional accounts on past PAYG contributions.

In addition, in the process of reform, it is important that changes to the system of third-pillar incentives are co-ordinated with reforms to the state system and have to guard against heavy deadweight losses. The introduction of an NDC system would suggest perhaps cut backs on the state subsidy of voluntary pension contributions. Under the alternatives being considered, well-designed third-pillar incentives potentially form a central part of the overall pension system.

Progress in health care reform

A review of the health system in the previous *Survey* underscores excess capacity and over-consumption as the key inefficiencies in the large publicly funded health network. The main recommendations are for: a more narrowly defined universal health services combined with liberalisation of private markets for complementary services, a greater role for user fees, greater attention to preventive policies and resource allocation based more strongly on the likely outcomes of categories of treatment.

Though the need for reform of the health care system is recognised by policymakers, concrete actions have yet to emerge. This postponement of tackling health reform is unfortunate and increases the need for a vigorous and concentrated reform effort when the issue comes back on the policy agenda.

Independent of efforts at a system-wide reform, regionalisation appears to have been forcing economies in the hospital sector. When hospital services were a central government responsibility the budget constraints were relatively soft, making it easier for loss-making hospitals (reckoned to be about half of all hospitals) to remain in business. With the transfer of hospital services to regional authorities at the beginning of 2003, the budget constraint has hardened – the regions being less able to underwrite hospital debt accumulation.

Other issues in public-expenditure reform

Spending on transport infrastructure

A strategy document on transport will be published next year outlining plans for the period 2005 to 2013. In rail, continued support is advocated, particularly in the track system, and links to Bavaria, Austria and western Poland are seen as priorities for development. In the road network, the completion of motorways to Bavaria and Saxony in Germany and the improvement of links to Poland, Austria and Slovakia are stressed. In air transport, responsibility for regional airports was transferred to the regions in July 2004 with a view to privatisation and there are proposals to make Prague airport a joint stock company (but fully owned by the state). There are also EU-driven plans for state involvement in creating logistic centres for freight with a view to advocating greater use of mixed transport systems (*e.g.* combined road and rail links).

In road transport, plans to revise legislation so as to speed up planning approval for roads are welcome. As discussed above, infrastructure funds are not always fully spent because of delays in the approval and implementation of road-building projects. As is typical in other countries, the approval of plans is complicated by a need for consensus among interested parties in both local and regional government and non-governmental organisations. Even after plans are approved, the land purchase in the Czech case is reportedly slow, although the state has special powers once plans are approved through declaration that projects are in the national interest.[17]

Planned legislative changes to improve public-private partnership deals may lead to improved efficiencies in road building and other infrastructure projects, though international experience continues to underscore that getting a good outcome from such deals for the public authorities is not easy. The authorities are aiming to have a fresh attempt at using public-private partnerships to help fund the road network. The first large-scale public-private partnership project, to fund the D47 motorway, met with difficulties and, partly in response to this, new general legislation on public-private partnerships is being drawn up by the Ministry of Finance. There are also plans to widen the scope of tolls on the road system through the introduction of an electronic system (in which, for example, vehicles are fitted with electronic devices that trigger a toll as they pass by special gantries), thus increasing user-based revenues. It is planned to first introduce the system in 2006 for trucks above 12 tonnes.

Public-sector tenders

A new law was passed on public tenders in October 2003, the main motivation being to bring legislation into line with EU directives. The new law contains a number of elements that should increase the scope, efficiency and transparency of the tender system. The reform includes setting up a central registry of suppliers (though registration will be optional) and each public contract will be made publicly transparent through publication in the EU's on-line database for public tenders. Increased transparency and non-discrimination is also anticipated by only allowing very limited avenues for exceptions. For instance, only relatively small contracts – those with a value of less than CZK 2 million – will be exempt from the new system.[18]

E-government

E-government is being developed at a reasonable pace. The Ministry of Informatics has set up a public-administration portal (*www.portal.gov.cz*) as a one-stop shop for both households and businesses. Among the services provided by the portal are facilities for filing income tax declarations and declarations for a number of other taxes. The portal also provides some facilities for making applications for social-security benefits. It is aimed to significantly increase the number of online services by 2006.

The role of sub-national government in fiscal policy

Background

Following further decentralisation, local and regional governments are now responsible for an even larger share of public services than before. There are over 6 000 local authorities and in 2001 14 regional authorities were created and given a number of responsibilities, including the running of secondary schools.[19] Until end 2002, there were also 76 "districts" which were local branches of central government (*i.e.* unlike the municipalities and regions they did not have elected representatives). The districts had a range of responsibilities including, notably, social security administration and some health services. In 2003, district responsibilities were divided between 205 so-called "municipalities of extended scope", the regions and the state. Notably, responsibility for running general hospitals was transferred to the regions (Table 2.6).[20]

While responsibility and policy powers have increased for sub-national government, funding remains fairly strongly controlled by central government. In local government, revenue comes principally from a direct apportionment of 16 per cent of centrally collected tax revenue and the rest from central-government grants for specific spending areas. The apportionment of centrally collected tax revenue is on a per-capita basis using the national average tax revenue, rather than, for example, alternatives that link the revenue to that collected in the local government entity itself. Locally collected tax revenue is relatively small. Although the financing options for local government are substantial (the only restriction in recent years was a 15 per cent debt-servicing ceiling imposed only in 2002) there are no signs this has prompted irresponsible borrowing.[21] Indeed, though there have been some worrying deficit episodes in a small number of local governments, there are no signs of an endemic problem. The most notable deficits have occurred in large cities, particularly Prague. At the same time, however, local authorities reportedly often run extra-budgetary accounts and so the true budgetary picture may be less benign.

For regional government there is a provisional funding arrangement similar to that for local government, except that there are no powers whatsoever to

Table 2.6. **Key features of public finance across the three layers of government**

Budget	Main revenue sources	Main expenditure responsibilities	Debt financing	Influences on budget containment
State	Labour and corporate income tax (about 25 per cent of revenues) Indirect tax (about 30 per cent of revenues) Social security contributions (about 40 per cent of revenues) Non-tax income (about 5 per cent of revenue)	Transfers to other budget institutions Tertiary education Defence and security Specialist hospitals Rail network and major roads Debt coverage of transformation institutions Compensation of public-sector employees Social benefits (about 35 per cent expenditure)		Annual budgeting including parliamentary scrutiny and recently introduced 3-year binding expenditure ceilings
Regional government (*current financing arrangement is temporary and due to be replaced with a permanent system*)	Transfers from the state budget Direct share of state tax revenue	Secondary education (transferred from central government in 2001) General hospitals (transferred from districts in 2003) Social care facilities (transferred from districts in 2003) Construction and maintenance of secondary highways (transferred from central government in 2001)	No constraints on type of borrowing. Bonds issues and foreign borrowing are possible	No government guarantee No borrowing limit
Local government	Direct share of state tax revenue Grants from the state budget Local property tax	Primary education child-care Accommodation facilities (notably for older persons) Basic social security)	No constraints. Bonds issues and foreign borrowing are common, particularly in large municipalities	No government guarantee (demonstrated by cases where municipalities have had to bring debt burdens down by sell-offs of municipal-owned properties No borrowing limit (a 15 per cent debt-servicing ceiling operated in 2002)

raise tax revenue. Attempts to end the provisional funding arrangements and establish a permanent system have met with difficulties. In 2003, a bill on regional budgeting was prepared by government that would automatically transfer much greater amounts to regions but this failed to pass through Parliament. The regions are advocating a greater allocation of tax revenue (an increase from 16 to 20 per cent has been discussed) with offsetting reduction in grants, thus giving them greater flexibility. Not surprisingly this has met with opposition from spending ministries, who see fewer tied grants as weakening the ability to guide policy.

As is often the case in other countries political considerations appear to block any prospect of merging the very large number of small municipalities into bigger units so as to cut back on administrative overheads and increase economies of scale in the provision of services.[22] However, in the Czech case, the degree of inefficiency is perhaps not as severe as it appears. The system of using "municipalities of extended scope" means that some services are already grouped into more sensibly sized operations. In addition municipalities can, and frequently do, form local associations to provide certain services.

Assessment

The re-organisation of sub-national government has passed on significant new responsibilities to the municipalities and regional government. On the positive side, greater say in policy by regional and local elected officials can make government more accountable and allow local electorates to have a greater influence on policy. And stronger sub-national government can inject a healthy degree of competition in the provision of services. On the negative side, decentralisation can introduce inefficiencies through reduced specialisation, replicated tasks and additional complexities in administration. Furthermore, regional variation in policy is not always a good thing as multiple standards can result in opacity. Also some forms of competition between authorities are undesirable, such as "races to the bottom" in social assistance which, for example, could further aggravate the social problems of the Roma population (Chapter 5). Decentralisation can also threaten central government efforts for fiscal consolidation through loss of financial control and weaker leverage to reform practices in public expenditure.

The new structure and responsibilities of sub-national government and the evolving financing arrangements mean that specific strengths and weaknesses are as yet difficult to identify, though two general observations and service provision can be made:

– Having given the regions and local authorities more fiscal freedom, the central government has to make sure reporting practices are timely and transparent and that hard budget constraints are maintained. At the regional level it is clearly important for a more permanent system of financing to be established. In local government, the lifting of all borrowing constraints and apparent use of extra-budgetary funds suggests that, debt developments should be closely monitored and particular efforts should be made to ensure the central authorities have a comprehensive and timely picture of the state of municipal finances. An auditing process with teeth would seem to be essential.

– Decentralisation also raises the importance of diffusing best practice in public spending to ensure outcome orientation and efficiency gains in provision. The transfer of large spending items, such as health and education means that, one way or another, central government has to be able to encourage regional and local government to develop more efficient delivery of public services. In part, central government can do this through budgetary discipline, but it also has to take a lead in the development of systems that encourage the efficiency of service delivery, for example through benchmarking and assessment across municipalities and regions. At the same time, the central government has to be careful that regulations in the provision of public services are not overly prescriptive and so allow local government scope to innovate in managing their responsibilities.

Notes

1. The communications company, CME, sued the Czech government for not being able to protect investor rights. CME set up the first private television company in the Czech Republic. In doing so, according to Czech law, the licence for broadcasting had to be held by a Czech citizen. This was arranged by separating out broadcasting from production and putting broadcasting under a Czech director. However, friction emerged between the two operations with CME finding that it had little power over broadcasting operations, and was effectively excluded from conducting business in the Czech Republic.
2. The 2004 *Convergence Programme* (Ministry of Finance, 2004) provides further detail on the reasons for the large 2003 deficit.
3. The May 2004 Convergence Programme report sets out goals in ESA95 general government accounts of 4.9 per cent deficit in 2005, 4 per cent in 2006 and 3.5 per cent in 2007.
4. The legislation for the new medium-term expenditure framework is part of an amendment to the Act on Budgetary Rules and was effective from August 2004.
5. The UK budgeting system sets hard three-year departmental budget constraints except in areas where cyclical and other influences make hard constraints difficult to implement (*e.g.* social-security benefits, tax credits). These areas of spending are subject to a separate system of targets and monitoring.
6. EU Directives on excise duty on cigarettes stipulate that *i*) the excise duty must be at least 57 per cent of the final retail price and *ii*) that the duty must be at least EUR 60 per 1 000 cigarettes (this latter condition is the more relevant in the case of the Czech Republic). The Directives must be fulfilled by 1 January 2007.
7. Smaller privatisation revenues are set to come from the privatisation of some coal mining enterprises. In 2004 the companies Sokolovska uhelna and OKD were privatised with revenues of CZK 2.6 and 4.1 billion respectively. There are plans to privatise another company, Severoceske doly, sometime in 2005-2006, estimates put the revenue at between CZK 6 and 10 billion.
8. An average pension equal to 57 per cent of the net mean wage corresponds to an income per head ratio of 91 per cent because retirees' households are on average smaller than those of working people.
9. For instance, after 40 years of work at 0.7 times the average wage, the gross replacement rate is 63 per cent. For those who earned double the average wage over the same period, the gross replacement rate is 28 per cent only.
10. The authorities have already taken measures to raise the official retirement age by two years for men and four years for women over the period 1996-2007 so as to reach 62 for men and to within the range 57 to 61 for women (depending on the number of children raised).

11. Men and women on average retired at the ages of 60 and 56 respectively in 2001 against standard retirement ages of 61 for men and 55-59 for women (depending on the how many children they raised).
12. Every child (up to the third child) lowers the retirement age by one year. Two further children lowers the retirement age to 59.
13. Until recently workers could use one of three options of early retirement: *a*) up to three-years early retirement with permanently reduced pension; *b*) two years temporarily reduced pension if the worker has accumulated 25 years of insurance and had been at least 180 days registered by the Labour Office as job applicant; *c*) between two and five years early retirement on a temporarily reduced pension if the worker has already been on disability pension, depending on whether the worker has been on partial or full disability pension.
14. The January 2004 changes included abolishing the limitation of work income in the two years following retirement, which should help improve labour force participation in older age groups though at the cost of removing one incentive to retire later.
15. At present, the average contribution in voluntary funds is equivalent to 2.8 per cent of average incomes, with the government contributing a further percentage point. The ceiling for the tax deduction is set at an amount equivalent to 8 per cent of average earnings.
16. The committee looking at third-pillar reform produced a short informal note on the issues in June 2004. Understandably to a large extent the proposals for third-pillar pensions have to be co-ordinated with reform proposals of the state system.
17. It has been known for those against certain road projects to buy narrow strips of land in the path of proposed roads to add further delay to road-building projects.
18. The new legislation on public tenders appears to loosen the rules regarding sanctions on procedural errors. In the previous system, the sanction for a procedural error by the awarding authority (*i.e.* the government) was 30 per cent of the value of the contract and 10 per cent for a procedural error by the contracted firm. These sanctions have been reduced to 5 per cent in both cases.
19. The transfer of responsibilities to the regions also included changes to financing arrangements. For example the wages and salaries of secondary school staff are paid by a subsidy to the region from the Ministry of Education, Sport and Youth.
20. Though general hospitals are now run by regional governments, they continue to be financed by health care insurance (and, exceptionally, by transfers from the state budget).
21. The history of borrowing restrictions on municipalities is in fact quite complex. From 1994 to 2002 there was a government resolution in force instructing the ministries and the state funds to take into account indicators of debt servicing when deciding on subsidies for municipalities. In the first half of 2002 legal amendments were made that introduced a 15 per cent debt-servicing ceiling. The amendment however did not specify calculation of debt-servicing and this caused a lot of problems in interpretation. This, along with other difficulties, led to the removal of the restrictions in July 2002. As of April 2004 a similar resolution to that applying between 1994 and 2002 has been in force.
22. Legally, it is possible to merge municipalities through a community referendum (though it is also possible for the same legislation to be used to split up a municipality).
23. Based on a Eurostat recommendations, the CZSO has been including the following accounts into the general government accounts sector since 2002: CKA subsidiaries (K*onpo*, *Česká finanční* and P*risko*), *Česká inkasní* and Viticulture fund; and since 2003 Railway Transport Route Administration (SZDC).

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Annex 2.A1

Progress on implementing the 2003 fiscal reform proposals

The "first phase" of fiscal reform is contained in Government Resolution 624/2003. Some parts of the resolution have since led to the implementation of measures, other parts of the resolution are still under discussion in Parliament and some have yet to be presented to Parliament.

The content of "second phase" reforms is more uncertain. The authorities have stated intention to reform the pension and health care systems, however concrete proposals are yet to be presented to Parliament.

Implemented tax measures

Corporate taxation

– The corporate tax rate was reduced to 28 per cent in 2004 and is scheduled to be cut to 26 per cent in 2005 and 24 per cent in 2006. Some revenue-increasing measures were taken that would partially offset the impact of the rate decrease including a reduction in the period allowed to carry losses forwards from 7 to 5 years and the abolition of a tax credit on withheld taxes on dividends.

Small-business taxation

– All entrepreneurs with annual turnover more than CZK 6 million now have to make "double entry" accounts.

– A minimum tax has been introduced for entrepreneurs (based on half of the average wage)

– The minimum turnover for VAT registration was lowered in two stages from CZK 3 million to CZK 1 million so as to be in line with Accession Treaty conditions of a limit of EUR 35 000.

Personal taxation

– Tax on real estate property transfer has been reduced from 5 per cent to 3 per cent.

– The inheritance tax for non-direct relatives has been increased.

– A limit on the depreciation allowed for tax purposes on used cars was introduced.

VAT *reform*

On 1st January 2004, items moved from the reduced rate of 5 per cent to the standard rate were (22 per cent) included:

– Telecommunications (except cable TV).

- Real estate services.
- Data processing services.
- Research and development.
- Legal and accounting services.
- Technical testing and analysis.
- Investigation and security services.

On 1st May, more goods were moved to the standard rate, including:

- Constructions services not for household.
- Restaurant services.
- Goods rail transport.
- Water transport.
- Education other than supplied by schools.
- Veterinary care.

The measures included on 1st May were diluted from the original plan of fiscal reform:

- The standard rate was been lowered from 22 per cent to 19 per cent.
- One-off compensation to households for VAT measures was introduced (see below).

Compensation for VAT *increases*

The social compensations of VAT measures (voted by the Parliament on 27 February 2004) comprised:

- Increase in "Parental Allowance" from current CZK 2 552 (1.1 times the adult's minimum subsistence amount (MLA) to CZK 3 573 (1.54 times MLA) as of 1 May 2004.
- An extra one-off child-allowance payment of CZK 2 000 in May for each child in families who are eligible for regular child allowances.
- An extra one-off allowance payment of CZK 1 000 in June to all pensioners (receiving any type of pension).

Estimates of the budgetary impacts of these measures are as follows:

Type of benefit	Budgetary expenditures (CZK billion)
Parental allowance	2.31
One-off child allowance	3.96
One-off pensioner allowance	2.69
Total	8.96

Another measure currently discussed in the Parliament concerns persons working as self-employed as a secondary activity who are receiving parental allowance or partial disability benefits: their monthly minimum social contribution amount will be reduced from CZK 997 to CZK 499.

Excise duties

- Excise duties on cigarettes, alcohol and diesel were increased as of 1 January 2004. Subsequent increases are scheduled that will bring a total increase of taxation of 60 per cent by end-2006.

Envisaged tax measures

Tax spending towards families: introduction of an optional common income taxation for married couples with at least one child for 2005 (estimated cost CZK 0.5 to 1 billion); child tax deduction replaced by a tax credit (estimated cost CZK 3.5 to 5 billion).

Tax-spending in corporation tax: increases in depreciation rates; increase in the maximum tax deduction from R&D spending.

New bills are intended that would:

- Tighten control of excise duty on spirits
- Increase obligation to reveal assets by households
- Legislate international assistance at certain financial debt recovery

Proposals have been made for amending the acts on:

- Real estate tax (388/1992 Coll.)
- The road tax (16/1993 Coll.)

Implemented expenditure-reducing measures

Parametric changes of the pension system:

- Abolition of early retirement schemes with only temporarily reduced pension benefits.
- The statutory retirement age will continue to rise beyond 2007 at the same pace as present, until the target age of 63 years for men and childless women is reached. The original reform plans envisaged removal of special treatment for women who have had children but this was not implemented.
- Indexation of pension benefits will be kept to the statutory minimum (*i.e.* an index comprising a two-thirds weight on consumer price inflation and a one-third weight on real growth in average wages).
- Restriction in the study years spent over the age of 18 that are recognised as contributory periods and acquired before 1 January 1996.

Other measures on pensions include cancellation of the restriction on drawing pension benefits simultaneously with earnings exceeding double the minimum subsistence level in the first 2 years following retirement.

System of sickness benefits:

- Lowering the level of sickness benefits for the first three calendar days of sick-leave from 50 to 25 per cent of the daily assessment basis.
- Reduction of the assessment basis from 100 to 90 per cent for the first 14 days of sick leave.
- Freezing of the current reduction caps for defining the assessment basis.
- Extension of the decisive period for the assessment basis from 3 to 12 months.

System of state social support:

- The level of the subsistence minimum decisive for eligibility for benefits and the level of benefits will be increased only by the minimum required by law (*i.e.* on the basis of CPI growth for the entire household).
- In assessing the eligibility of self-employed persons for benefits, it will be presumed that they earn a minimum notional income of 50 per cent of the average wage. This is expected to yield savings because of significant under-reporting of true earnings among the self employed.
- Abolition of the transportation benefit.

Some expenditure increasing measures have also been taken, including removal of the upper limit on the earnings of parental allowance recipients.

Envisaged expenditure-reducing measures

- A reduction in the total number of employees in the centrally controlled administration by 6 per cent over a 3-year period from the level given by the State Budget of the Czech Republic for 2003 (the level is approximately 500 000 employees, implying a cut of 30 000 employees).
- Reform of central bodies of the state administration, including reduction in the numbers of the bodies.
- Acceleration of the termination of the activity of the National Property Fund of the Czech Republic by the end of 2005.
- Acceleration of the termination of the activity of *Česká konsolidační agentura* and *Česká inkasní*, s. r. o., operationally by the end of 2007, including the obligation of the government to make no transfers of any assets to this agency and follow-up take-over of all external liabilities of this agency by state.
- Amendment to the acts on the joint stock company *České dráhy* (Czech Railways, Act No. 77/2002 Coll.), state enterprise *Správaž elezniční dopravní cesty* (Railway Transport Route Administration) and on amendment to Acts Nos. 266/1994 Coll. on railways, to prevent the increase in the indebtedness of the state enterprise *Správaž elezniční dopravní cesty*.
- Measures to increase public-private partnerships.
- New act on health insurance having expected effect from 1 January 2005 and proposal for new legal regulation of payment of social benefits having expected effect from 1 January 2006.

Annex 2.A2

Background information on government accounts

Account types

The State Budget account

The State Budget account is cash-based (using the IMF's GFS86 guidelines) and it is the account which is voted on in Parliament. Considerable detail on the account is available, including month-by-month updates (typically issued with a lag of about 1 month). The account's status as the Budget account combined with the frequent and timely updates means it is a key reference point for analysts and the press in coverage of fiscal performance during the course of the budget year. The State Budget is not a pure central government account as it also includes social-security funds and some "extra-budgetary" accounts. Because of the significant role of local and regional government, revenues and expenditures in the State Budget account fall well short of general government revenue and expenditure (especially in the variants of the account where social-security financing is excluded).

The general government GFS86 account

This general government account is cash-based (using the IMF's GFS86 guidelines) and produced annually. Estimates of the final account are made available soon after the year's end though the finalised account is not available until in the summer. The deficit recorded in these accounts is a "pure" cash-deficit, notably including all irregular income and expenditure, such as privatisation revenue.

The Ministry of Finance's adjusted GFS account (the "adjusted-cash" account)

Much of the analysis of fiscal policy by both government and the private sector (as well as in this *Survey*) uses an adjusted version of the general government GFS86 account produced by the Ministry of Finance. The adjustments bring the GFS account closer to an accrual account based on SNA and ESA95 accounting principles. The main adjustments are as follows:

- The account includes: the state budget, extra-budgetary funds (seven state and two privatisation funds), social security funds (health insurance companies) and local government (*i.e.* municipalities) and, since 2001, regions.
- "Transformation costs" (*i.e.* costs relating to prior privatisation or banking sector stabilisation) are not treated as general government expenditure-revenue items and only appear as financing items due to the transfers made from government to the "transformation institutions" (*i.e.* the full balance sheets of the transforma-

tion institutions are excluded from the general government account, only the subsidies are seen).

- Privatisation revenue received by relevant agencies (*i.e.* the National Property Fund and the Czech Land Fund) is also treated as a financing item without any direct impact on general government balance, being viewed as a financial transaction resulting from the exchange of one financial asset (shares) for another (cash).
- Government loans and receipts of principal payments are also treated as financing items in the adjusted-GFS account (these are treated as revenue or expenditure in the official cash account).

The *general government* ESA95 *account*

As a member of the EU, the Czech authorities have to produce accrual-based ESA95 accounts. Although the Ministry of Finance's cash-adjusted account goes part way towards this type of account, a completely new set of government budget GFS accounts has to be constructed for a fully compliant ESA95 account. The ESA95 accounts are produced by the Czech Statistical Office (CZSO) (unlike all the other accounts which are produced by the Ministry of Finance).

Despite continuing refinement of the ESA95 government account, it is still not widely used in analysis because of lengthy production delays and difficulties in year-by-year comparability:

- There remains a considerable lag in the production of the ESA95 account.
- The inclusion of the Czech Consolidation Agency (CKA) accounts makes the accounts between 2000 and 2002 difficult to compare (see below).
- The 2003 account is affected by a change in the treatment of state guarantees and other accounting measures:
  - On the basis of Eurostat recommendations, the Czech Statistical Office has implemented methodological changes that reclassify called state guarantees into the government debt and deficit. As a result, in the 2003 account state guarantees are reported as a capital transfer at the moment the guarantee is called for the first time, irrespective of when the remaining part of the guarantee is called. This has meant in 2003 a large one-off "spending" item *via* guarantees. These are recorded under the accounting items "AF.42" (long-term loans) and "D.99" (other capital transfers from the central government). There remain difficulties in the approach. As yet, if some of the principal of a guarantee is paid off this is not reflected in a cut in the spending on guarantees (as in theory it should be). There are some non-standard guarantees (mainly to banks) that are problematic.
  - To reflect the CKA's purchases of assets at a price substantially higher than the market value, a capital transfer is recorded from the CKA to the financial sector (or non-financial sector). This imputed capital transfer has significant impact on the amount of the general government deficit in the years 2001-2003

The Czech Statistical Office made a revision of the annual National Accounts from 1995 to 2002 and published the time series in August 2004. The National Accounts for the year 2003 will be published at the end of 2004. A new figure of the GDP for the year 2003 has been reported to Eurostat.

The general government GFSM 2001 *account*

Accounts according to the IMF's (ESA95 compatible) GFSM 2001 account are produced using a bridging table from the GFS86 account. These accounts are used principally in communication with the IMF.

Treatment of the Czech Consolidation Agency (CKA) *in government accounts*

The institutional status of the CKA makes it difficult to decide whether its revenues and expenditures should be recorded in the general government account or whether only the net transfers to the CKA should appear. Until 2001, the CKA financial group (including subsidiaries such as *Česká finanční* and *Konpo*) could be regarded as a regular player in the financial markets, albeit subsidised by the government. Under both GFS and ESA95 accounting this would suggest putting the CKA in the financial sector, though there are differences of opinion on this (see below). In 2001 the CKA took over the responsibilities of the Consolidation Bank (KOB). Importantly, when the KOB was absorbed into the CKA it ceased to be a bank and the CKA had the job of managing the debt of the KOB but lending or borrowing activities were discontinued. The absorption of KOB meant that the CKA financial group was much more like a straightforward government agency than a provider of financial services. Because of this it can be argued that the revenues and expenditures of the CKA should be fully recorded in the general government account.

In practice the treatment has been as follows:

- In the **official GFS86 general government accounts** (*i.e.* as used in budget preparations) the CKA is not classified as a government entity (though transfers to it do, of course, appear in government accounts). It is argued by the authorities 1) that the CKA only has accrual accounts and these are considered impossible to convert to a cash account and 2) that reclassification of CKA as a general government agency would generate a major inconsistency in the actual time series.
- In the **ESA95 account**, the CZSO began incorporating both expenditures and revenues of the CKA into the general government sector in the 2001 account.* This creates problems in comparing the accounts for 2000 to 2002. The former Czech Consolidation Bank was abolished as a bank and market unit (in August 2001) and the Czech Consolidation Agency was established (in September 2001). The classification of the CKA in the central government sector (in the year 2001) is based on disscussion with Eurostat.

Extra-budgetary funds

There are a total of nine extra-budgetary funds (see Table 2.A2.1 for estimated revenues and expenditures) that generate considerable guarantees and off-budget liabilities (Table 2.A2.2). The main fund is the National Property Fund (more on this below) and the other main funds are vehicles for government support in infrastructure, agricultural, the environment and housing.

* Based on a Eurostat recommendations, the CZSO has been including the following accounts into the general government accounts sector since 2002: CKA subsidiaries (*Konpo*, *Česká finanční* and *Prisko*), *Česká inkasní* and Viticulture fund; and since 2003 Railway Transport Route Administration (SZDC).

Table 2.A2.1. **Extra-budgetary funds**[1]

Revenues and expenditures, consolidated basis

	1995	1996	1997	1998	1999	2000	2001	2002	2003
	CZK billion								
Revenue									
Revenue and grants	15.4	8.7	8.0	7.1	5.8	8.5	35.2	31.9	44.9
Revenue	15.4	8.7	7.9	6.8	5.8	5.4	30.8	28.9	38.0
Current revenue	15.3	8.6	7.8	6.8	5.8	5.4	30.8	28.9	38.0
Tax revenue	0.1	0.0	2.6	2.3	2.0	1.7	18.8	19.8	20.7
Non-tax current revenue	15.2	8.6	5.2	4.6	3.8	3.6	12.0	9.1	17.3
Capital revenue	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditures									
Expenditures and net lending	2.7	–1.1	7.2	10.7	3.8	17.9	10.8	–8.3	65.5
Expenditures	25.5	17.7	18.7	24.6	21.1	37.1	70.8	115.2	78.9
Current expenditure	21.5	14.4	15.7	21.1	17.8	28.0	50.2	79.1	42.3
Expenditure on goods and services	0.7	1.0	1.2	1.8	1.4	1.4	2.5	6.9	2.8
Interest payments	1.6	0.5	0.3	0.0	0.0	0.2	1.3	0.9	0.0
Subsidies and current transfers	19.1	12.9	14.2	19.3	16.4	26.4	46.4	71.3	39.5
Capital expenditure	4.0	3.3	3.0	3.6	3.3	9.0	20.6	36.1	36.5
Fixed investment	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
Capital transfers	4.0	3.2	3.0	3.5	3.3	9.0	20.5	36.0	36.3
Lending minus repayments	–22.8	–18.8	–11.4	–13.9	–17.3	–19.2	–60.0	–123.6	–13.4
Extra-budgetary funds balance	12.7	9.8	0.8	–3.6	2.0	–9.4	24.3	40.2	–20.6
Extra-budgetary funds balance excluding lending minus repayments	–10.1	–9.0	–10.6	–17.6	–15.3	–28.6	–35.6	–83.3	–34.0
Memorandum item:									
Privatisation revenue	27.1	25.7	13.8	15.5	26.0	20.5	59.9	126.6	25.4

1. GFS86 basis. Extra-budgetary funds include the National Property Fund, the Land Fund, the Environmental Protection Fund, the Cultural Fund, the Cinematography Fund, the Soil Fertilization Fund, the Housing Fund and the Transportation Fund (both since 2000), the Agricultural Intervention Fund (since 2001).

Source: Ministry of Finance.

The National Property Fund (FNM) is a quasi-commercial entity governed by special statutes. The operating budget (covering administrative expenses) is approved by Parliament but the main fund collection and distribution activity is under internal management, acting according to relevant laws and implementing decisions under government guidance. The Auditor General may control specific FNM activities that implement government decisions but cannot audit its overall performance. The main function of the FNM is to recycle privatisation proceeds and to process bad debt purchased from privatised banks – largely debt bought when the government bailed out the banking sector in the late 1990s. The debt processing is carried out by the CKA. As discussed in the previous Annex, treatment of the CKA in government accounts varies.

Significant post-privatisation liabilities also result from the "environmental clean-up" commitments granted to industrial firms following privatisation. These commitments cover privatisation investors for *ex-post* increased costs due to tightened environmental regulations. In contrast to banks' bad loan assets, these commitments and their underlying costs are not transparent in the budget documents presented to Parliament. The outstanding financial lia-

Table 2.A2.2. **Guarantees and off-budget liabilities**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	CZK billion									
Consolidation Bank (KoB)/Czech Consolidation Agency (CKA)[1]	81.4	78.9	70.4	86	84.6	133	164.0	126.8	170.2	144.9
Ceska inkasni[1]	29.8	24.9	32.2	32.2	27	20.4	12.8	6.1	1.3	0.0
State guarantees[2]	100.4	160.6	172.3	173.9	280.4	257.3	245.5	456.6	491.4	610.9
Guarantees and off-budget liabilities	211.6	264.4	274.9	292.1	392.0	410.7	422.3	589.5	663.0	755.8
Guarantees and off-budget liabilities (per cent of revised GDP[3])	**17.9**	**19.1**	**16.6**	**16.4**	**20.0**	**20.1**	**19.6**	**25.5**	**27.5**	**29.8**
Reported gross government debt (GFS)	207.8	210.9	206.7	217.5	240.0	275.2	332.4	404.5	444.5	553.0
Reported gross government debt (per cent of revised GDP[3])	**17.6**	**15.3**	**12.4**	**12.2**	**12.2**	**13.5**	**15.5**	**17.5**	**18.4**	**21.8**
Memorandum item:										
FNM environmental guarantees[4]	17.4	20.6	35.4	35.2	35.5	35.4	34.3	32.3	29.4	27.7
FNM other guarantees[5]	5.1	5.0	4.8	4.6	4.6	3.6	8.8	7.7	7.2	6.8
Implicit pension rate (per cent of GDP)[6]	127.9	119.9	115	117.4	117.7	124	128	130		

1. Consolidated stock of debt at the end year. Updated figures were taken from Convergence programme, May 2004. CKA is taken account since September 2001 – a point when CSO has included CKA into the government sector, similarly as regards Ceska inkasni – since 2002.
2. Stocks of state guarantees as of end year (apart from 1994-1997: state at half year) including guarantees on behalf of Czech export bank (CEB), Export guarantee and insurance corporation (EGAP) – apart from 1997 – figures unavailable, state guarantee on behalf of CSOB (firstly occurred in 2000), since 2001 guarantees on behalf of CKA and finally since 2003 guarantees on behalf of Railway infrastructure administration (SZDC).
3. The denominators used are the revised GDP figures as of September 2004 (apart from 1994 and 1995 as data for these years have not yet been updated).
4. Risk weight (30 per cent) derived from long-term observation of the actual settlement as compared to notional amount guaranteed.
5. Exclusive of one guarantee for KOB/CKA which will not be called.
6. These figures were not updated.

Source: Ministry of Finance, September 2004.

bility arising from environmental commitments, as estimated by FNM, appears to have increased significantly in recent years. Additional problems for government finances comes from the State Agricultural Intervention Agency (the Agency is now included in government accounts). This Agency is heavily dependent on the state budget as it is responsible for implementing both state and EU agricultural subsidies.

The financing of extra-budgetary funds takes various forms. In the Czech Republic, infrastructure funds have traditionally had privatisation revenues passed on to them. The State Fund for Transport Infrastructure also receives a portion of the excise taxes on petrol and the State Environment Fund is entitled to pollution tax revenue. Otherwise financing is often through sales of assets and depletion of reserves. However, the State Agriculture Intervention Fund and State Environment Fund have also resorted to bank financing in recent years and the State Fund of Transport Infrastructure has utilised its revolving credit facility. For the time being, except for the CKA, the debt of extra-budgetary funds has remained relatively limited.

Annex 2.A3

General government accounts

Table 2.A3.1. **Adjusted-cash general government accounts, 2000-2004, as a percentage of GDP**

	2000	2001	2002	2003	2004
Revenue (adjusted cash version and official cash version are the same)	36.3	36.8	37.6	38.9	38.3
Total current revenue	35.8	36.2	37.0	38.0	36.8
Tax revenue	33.5	33.8	34.5	35.3	35.1
Indirect taxes	11.5	11.0	11.0	11.1	11.2
VAT	6.8	6.5	6.4	6.5	6.7
Excises	3.3	3.3	3.3	3.3	3.5
Other taxes on goods and services, duties	1.4	1.2	1.3	1.3	1.1
Direct taxes	8.1	8.5	9.1	9.4	9.2
Personal income tax	4.6	4.5	4.7	4.9	4.9
Enterprise tax	3.5	4.0	4.4	4.6	4.3
Social Security contributions	13.4	13.8	13.9	14.2	14.1
Other taxes	0.6	0.5	0.5	0.6	0.6
Non-tax current revenue	2.3	2.4	2.5	2.7	1.8
Capital revenue	0.4	0.4	0.5	0.4	0.4
Grants	0.1	0.1	0.1	0.5	1.0
Expenditure (adjusted-cash version)	**39.4**	**39.3**	**41.3**	**42.9**	**43.4**
Expenditure (official cash version including lending minus repayments)	39.2	39.0	38.0	44.1	43.7
Expenditure (official cash version excluding lending minus repayments)	40.4	41.6	43.9	44.1	44.3
Current expenditures	35.4	36.7	38.6	38.5	38.2
Goods and services	8.4	7.9	8.6	8.1	8.0
Wages and salaries, including social contributions	3.3	3.3	3.4	3.2	3.1
Other goods and services	5.1	4.6	5.2	4.8	4.9
Transfers	18.7	18.9	19.4	19.9	19.3
Health insurance	5.2	5.5	5.5	5.6	5.5
To households	12.4	12.2	12.6	12.6	12.0
Pensions	8.7	8.7	9.0	8.9	8.5
Other transfers (to non-profit institutions)	3.7	3.6	3.6	3.7	3.5
Transfers abroad	1.0	1.0	1.2	1.2	1.1
Subsidies	0.1	0.1	0.1	0.5	0.7
Interest payments	7.3	9.0	9.9	9.7	9.8
Capital expenditures	1.0	0.9	0.7	0.8	1.1
Fixed investment	5.0	4.8	5.3	5.6	6.1
Investment transfers	1.8	1.8	2.3	2.6	3.1
Lending minus repayments	–1.2	–2.5	–5.9	0.0	–0.5
Lending minus repayments (excluding Pvt)	–0.2	0.0	–0.6	1.0	0.4
Privatisation revenues (receipts of NPF, CLF)	–1.0	–2.6	–5.2	–1.0	–1.0
General government deficit (adjusted-cash version)	**–3.1**	**–2.6**	**–3.7**	**–3.9**	**–5.2**
General government deficit (official cash version)	–2.9	–2.3	–0.5	–5.1	–5.5
General government deficit (excluding net lending)	–4.0	–4.8	–6.4	–5.2	–6.0
Current deficit	0.5	–0.5	–1.6	–0.6	–1.4
Primary deficit	–3.1	–3.9	–5.7	–4.4	–4.9
Debt	15.5	17.5	18.4	21.8	24.7
Memorandum items					
General government deficit (ESA 95 account)	**–3.7**	**–5.9**	**–6.8**	**–12.6**	
General government debt (ESA 95 account, Maastricht definition)	18.2	25.3	28.8	37.8	

Note: The percentages are calculated as a percentage of the revised nominal GDP figures. The data for 2004 are Ministry of Finance estimates as of October 2004. In the adjusted-cash deficit and expenditure net lending and expenditures of transformation institutions are excluded.
Source: Ministry of Finance.

Table 2.A3.2. **Adjusted-cash general government accounts, 2000-2004**

CZK billion

	2000	2001	2002	2003	2004
Revenue (adjusted cash version and official cash version are the same)	780.7	851.1	906.8	985.4	1 046.8
Total current revenue	770.0	838.7	893.2	961.8	1 007.5
Tax revenue	721.1	782.0	833.	894.7	959.6
Indirect taxes	247.6	255.5	265.4	282.1	307.4
VAT	145.9	150.9	154.4	164.4	182.8
Excises	70.9	76.3	79.5	84.2	94.8
Other taxes on goods and services, duties	30.8	28.3	31.5	33.6	29.8
Direct taxes	174.1	196.4	220.1	238.9	250.4
Personal income tax	98.3	104.4	114.4	123.0	133.9
Enterprise tax	75.8	92.0	105.7	115.9	116.5
Social Security contributions	287.4	318.9	335.0	359.7	385.5
Other taxes	12.1	11.2	12.6	14.0	16.3
Non-tax current revenue	48.9	56.7	60.1	67.2	47.9
Capital revenue	9.5	9.7	11.2	11.2	11.0
Grants	1.20	2.8	2.5	12.4	28.3
Expenditure (adjusted-cash version)	847.5	911.1	996.2	1 085.5	1 187.5
Expenditure (official cash version including lending minus repayments)	842.7	903.3	918.6	1 115.6	1 196.5
Expenditure (official cash version excluding lending minus repayments)	867.6	962.2	1 060.2	1 116.7	1 211.1
Current expenditures	760.0	850.1	931.7	975.9	1 045.7
Goods and services	179.6	183.8	208.6	204.6	219.7
Wages and salaries, including social contributions	70.3	76.3	83.1	81.9	85.3
Other goods and services	109.3	107.5	125.5	122.7	134.4
Transfers	401.8	436.8	467.5	505.0	526.7
Health insurance	111.4	126.6	132.6	142.2	149.5
To households	266.3	283.4	303.8	319.2	328.2
Pensions	186.9	201.1	217.5	225.3	233.6
Other transfers (to non-profit institutions)	79.5	82.3	86.3	93.9	94.6
Transfers abroad	21.4	23.5	28.2	30.0	28.9
Subsidies	2.7	3.2	2.9	13.6	20.1
Interest payments	20.9	20.1	15.7	19.9	31.0
Capital expenditures	107.6	112.0	128.5	140.8	165.5
Fixed investment	68.2	70.3	71.8	75.6	82.0
Investment transfers	39.3	41.7	56.7	65.2	83.4
Lending minus repayments	–24.9	–58.8	–141.6	–1.1	–14.7
Lending minus repayments (excluding Pvt)	–4.4	1.0	–15.0	24.4	12.3
Privatisation revenues (receipts of NPF, CLF)	–20.5	–59.9	–126.6	–25.4	–26.9
General government deficit (adjusted-cash version)	–66.8	–59.9	–89.3	–100.1	–140.8
General government deficit (official cash version)	–62.0	–52.2	–11.7	–130.2	–149.7
General government deficit (excluding net lending)	–86.9	–111.0	–153.4	–131.3	–164.4
Current deficit	10.0	–11.4	–38.5	–14.1	–38.2
Primary deficit	–66.1	–90.9	–137.6	–111.4	–133.4
Debt	332.4	404.5	444.5	553.0	675.5
Memorandum items					
General government deficit (ESA 95 account)	–78.5	–137.0	–163.0	–319.1	
General government debt (ESA 95 account, Maastricht definition)	392.2	586.2	696.5	956.1	
Nominal GDP following 2004 revision, CZK billion	2 150.1	2 315.3	2 414.7	2 532.4	2 735

Note: The percentages are calculated as a percentage of the revised nominal GDP figures. The data for 2004 are Ministry of Finance estimates as of October 2004. In the adjusted-cash deficit and expenditure net lending and expenditures of transformation institutions are excluded.

Source: Ministry of Finance.

3. Policy for a smooth entry to the euro area

The Czech Republic, along with the other nine recent members of the European Union, is committed to joining the euro area and in broad terms also committed to undertake policies which facilitate entry. These are certainly not unwelcome conditions of EU membership. Indeed there is little doubt that there are potentially significant economic benefits, not only because of gains from joining a large currency area but also because the conditions for entry encourage maintaining low and stable inflation, and reductions in government deficit and debt that in themselves would improve growth prospects. However, the conditions for membership present challenges and, as Chapter 1 points out, these involve difficult decisions regarding the best timing and strategy for entry.

Prospective members of the euro area have considerable influence over the entry process and to a large extent can *de facto* influence when membership takes place. It is national governments who decide to set the official process of entry under way through choosing when to apply to join the ERM II. In addition, it is of course national governments, in combination with central banks, that pull the policy levers to fulfil the fiscal and monetary conditions laid out in the Maastricht criteria (the criteria are detailed in Annex 3.A1).

This chapter looks first at the strategy of the Czech authorities in joining the euro and then at specific issues involved in fulfilling the key Maastricht criteria. The assessment of policy is summed up in Box 3.1.

The Czech strategy for adopting the euro is sound

The strategy for adopting the euro is the result of close co-operation and dialogue between the Central Bank and the government, most notably the Ministry of Finance. The Central Bank first made an official statement to the government at the end of 2002 about euro entry. This formed the basis for discussion and was followed by a second statement by the Bank in July 2003. The strategy was finally approved in a government resolution in October 2003 and accompanied by a formal joint statement on the entry strategy by the Central Bank and the government (CNB and Czech Government, 2003). Though the Central Bank has played a key role in developing the strategy and will also play a key role in ensuring a smooth

Box 3.1. Policy assessment on entry to the euro area

– The **Czech strategy on euro entry** has much to commend. It is anchored in a process of dialogue and explicit agreement between the Central Bank and the government that has helped shape expectations and therefore reduce uncertainties among markets. The strategy itself is also sensible. In particular the aim to avoid a prolongation of ERM II membership beyond two-years will reduce the risk of undesirable exchange-rate volatility. In addition, the more risky approach of announcing the date of entry to ERM II or the date for joining the euro area a long way in advance is avoided through an annual assessment process.

– The high budget deficits present the most immediate challenge in meeting the **Maastricht criteria** and tangible progress in fiscal consolidation is needed for fiscal conditions to have a chance of being assessed positively by the EU authorities.

– The Central Bank's 3 per cent **inflation target** for the run-up to euro entry is justifiable on medium-term grounds. However, there may be some difficulty in communicating the consistency of this target with the Maastricht inflation criterion. The Czech authorities should therefore pay close attention to how the Maastricht criteria are interpreted and applied by the European Commission and the European Central Bank (ECB) and adjust their communication strategy accordingly.

entry to the euro, the final decision on joining ERM II will of course be made by the government.

The strategy for adopting the euro is fairly conservative, the key elements are:

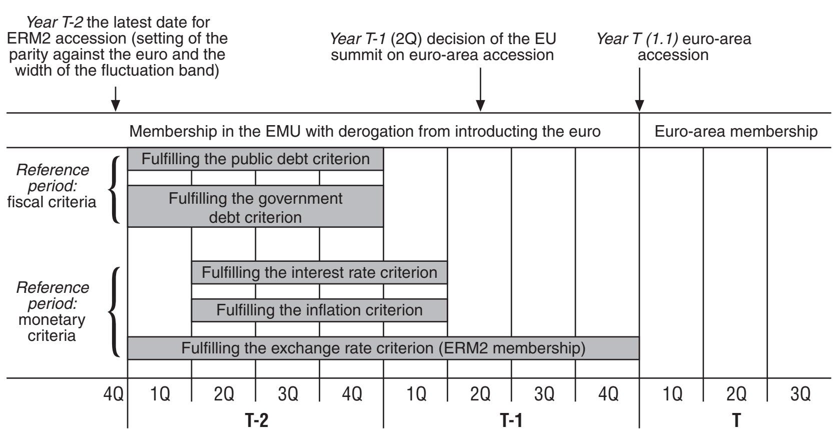
– Entry to ERM II should only be made if there is a very good chance of a positive assessment by the EU authorities on the Maastricht criteria (in principle an assessment report can be completed a little over two years after joining ERM II). This does not necessarily mean that the criteria have to be fulfilled prior to joining ERM II but it has to be judged that they will be fulfilled in time for assessment (see Box 3.2 for details on the timing of entry). Of particular concern with respect to the monetary criteria is the interaction between inflation and the exchange rate. Though the current inflation targeting regime necessarily already pays attention to exchange-rate movements because of the very open nature of the economy, ERM II imposes the additional constraint of an explicit exchange rate target. The risk is that achievement of price stability may

Box 3.2. Timing of the assessment process for euro entry

Joining the euro area is essentially a two-step process. First the member country takes a decision to join ERM II and has to remain in this system for a minimum of two years. At the end of these two years a process of assessment on the basis of the Maastricht criteria begins. An assessment can be made at any time at the request of the Member State so that in principle an assessment is possible in time for the end of the two-year membership of ERM II, and so a country can, in theory, join a few months after the end of the compulsory ERM II membership period. Two assessment reports are made, one by the European Commission and another by the ECB. These assessments are independent (though there may be some informal exchanges of view in the preparatory stages), and make parallel evaluation of the country's fulfilment of the Maastricht criteria. The final decision on whether the country can join the euro area is taken by the Council.

To get a positive assessment first time round, the critical periods regarding the Maastricht criteria occur during ERM II membership. Importantly, inflation is assessed over a 12 month period prior to assessment and the deficit criterion says that the deficit must not exceed 3 per cent at the end of the financial year preceding the European Commission's and ECB's assessment (Table 3.1). Depending on the timing of the assessment and the process of finalising budget figures this could mean that, strictly speaking, the critical deficit figure could be that in the first or the second year of ERM II membership. Of course, the auxiliary condition that the criterion can be met even if the 3 per cent deficit is not achieved as long as it has "declined substantially and has reached a level close to 3 per cent",

Table 3.1. **Timing issues in the fulfilment of Maastricht criteria**



Source: Komárek *et al.* (2003).

Box 3.2. **Timing of the assessment process for euro entry** (*cont.*)

provides the possibility for less stringent adherence, but also leaves wider discretion to the ECB and the Commission. The fulfilment of the exchange-rate criterion is based on an assessment of the performance of the currency while in ERM II (see main text).

The EU authorities have a policy of "equal treatment" regarding the Maastricht criteria, *i.e.* that exactly the same assessment rules should be applied to prospective members as were applied previously. As is discussed in the main text, this implies applying the inflation reference value calculation to the EU25, rather than the EU15.

become inconsistent with the exchange rate target and *vice-versa*. It is crucial in this context to make sure that wage determination remains market driven.

– There is to be an annual assessment of the preparedness of the Czech economy for entry to ERM II and euro-area accession. Notably, the assessment includes not only evaluation of the capability of fulfilling the Maastricht criteria but also of the degree of alignment of the Czech economy with that of the euro area.[1] The assessment will be made by the CNB in conjunction with government ministries and includes a proposal to the government on whether to initiate entry to ERM II. The first assessment is due to be made by the 31st December 2004. The CNB is intending to make the analytical background of the report available to the public and to present its findings in a meeting with analysts.

The strategy on euro entry has much to commend it. The process of dialogue and explicit agreement between the Central Bank and the government has helped shape expectations, thus reducing uncertainties among markets. The strategy itself is also sensible, in particular the plan to minimise the time in ERM II in order to reduce the exposure to speculation against the exchange rate. Furthermore, the authorities are avoiding risky promises concerning the date of entry to ERM II or the date for joining the euro area a long way in advance. While advanced notice of the target entry date can help discipline policies to reach the monetary and fiscal targets, this approach is only credible if the achievement of targets seems plausible to the markets. There would be a risk that the advanced notice would need to be changed and this could cast doubt on the commitment of policy to reaching monetary and fiscal targets.

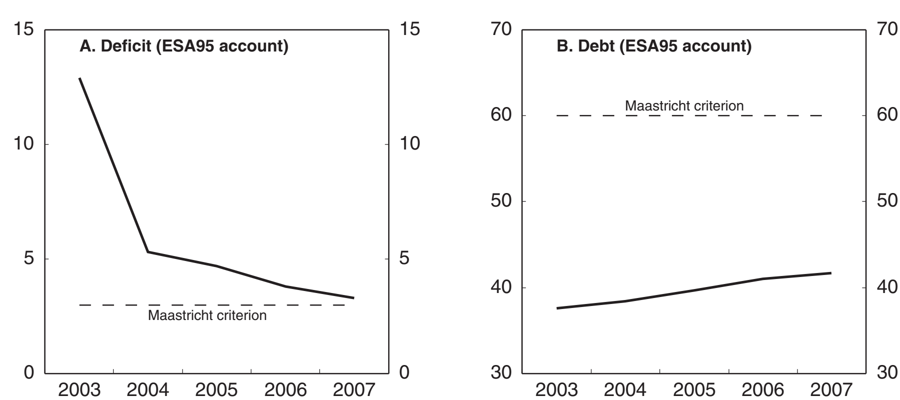
Though the authorities' strategy for euro entry does not entail formal commitment to a date of entry, documents released by the government and the Central Bank suggest entry is likely either in 2009 or 2010 (CNB and Czech Government, 2003).

Fulfilling the Maastricht criteria is tricky

The fiscal criteria are tight but necessary anyway

High deficits present the most immediate challenge in meeting the Maastricht criteria and tangible progress in fiscal consolidation is needed to have a chance of being assessed positively by the EU authorities. For a strong guarantee of a positive assessment a deficit of 3 per cent of GDP or less has to be reached (Annex 3.A1). As described in Chapter 2, the authorities are aiming for a 3.3 per cent deficit, by 2007 (ESA95 accounts) (Figure 3.1). It would seem likely future plans will be for a deficit of 3 per cent or below in 2008. This fits in with the scenario of euro adoption in 2009 or 2010 mentioned by the Czech authorities, indeed it leaves a margin of one or perhaps two years. However, as Chapter 2 discusses, a lasting structural consolidation is yet to be seen. Targeted revenue and spending measures aimed to bring the deficit under control have to some extent been delayed or diluted and detailed proposals for deep reforms to expenditure

Figure 3.1. **Maastricht fiscal criteria and 2004 Convergence Programme ambitions**[1]
Per cent GDP



1. Projections for 2004-2007. Data refer to general government.
Source: Ministry of Finance.

and service provision in the important areas of pensions and health have yet to be agreed on by the government.

The debt criterion for euro adoption should easily be fulfilled, unless of course fiscal consolidation is derailed completely. According to the ESA95 accounts used in assessing the fiscal criteria, the debt is currently at 37.6 per cent of GDP and there is therefore some way to go before the 60 per cent benchmark is breached.

The monetary criteria

Achievement of three of the Maastricht criteria depends mainly on successful monetary policy. First, the rate of inflation has to be no greater than a special reference rate over a specified 12-month assessment period. Second, the currency has to not only remain in ERM II for at least two years but also be judged as having a satisfactory performance within ERM II. Finally, there is a long-term interest rate criterion (Annex 3.A1). This condition is generally regarded as being less relevant as it would usually be fulfilled along with the inflation criterion.[2]

The inflation criterion

In spring 2004, the CNB announced that a flat central target of 3 per cent with a ±1 percentage point tolerance band would apply from January 2006 and that this will be maintained through to entry to the euro area (see Box 3.3 for more detail on inflation policy). The choice of a 3 per cent inflation target is justifiable on medium-term grounds as, given Balassa-Samuelson effects (see below), a target pitched significantly lower than this would imply a restrictive monetary policy with risks to growth. For instance, a target of 2 per cent, allowing for a Balassa-Samuelson effect of 1 per cent, would be equivalent to a 1 per cent inflation target in more advanced economies.

However, there may be some difficulty communicating the consistency of the 3 per cent target with the Maastricht inflation criterion and the Czech authorities should pay close attention to how the criterion is interpreted and applied by the European Commission and the European Central Bank and adjust their communication strategy accordingly. The criterion says that inflation must not exceed by more than 1½ percentage points that of the "three best-performing" EU member states. Since May 2004, this has implied a calculation based on all 25 EU member states, not just the EU15 as for previous applicants for euro entry. Until recently, the "three best-performing" were simply identified as the three counties with the lowest inflation and as Figure 3.2 illustrates this suggested that the reference rate could be volatile and possibly quite low. However, neither the European Commission nor the ECB are strictly committed to this specific formulation and it is possible that a variant of it will be applied when the Czech Republic's inflation record is assessed. Indeed, the Commission's Convergence Report issued in

Box 3.3. The Czech National Bank's inflation targeting regime

Monetary policy is conducted by the Czech National Bank using an inflation targeting regime that closely resembles those used in other OECD countries. The regime was introduced in 1998 when conditions made the then policy of targeting money supply and maintaining a fixed exchange rate untenable. As with other inflation targeting regimes, it is accompanied by wide dissemination of the inflation (and output) forecasts that are used as a basis for policy decisions by the CNB Board. The CNB's quarterly *Inflation Report* is the main vehicle for publishing the forecasts and it underscores the forward-looking nature of policy decisions; in particular, it stresses that the period of most effective transmission of policy actions lies between 4 and 6 quarters ahead. In addition, a summary of the monthly meetings of the CNB Board is also made public.

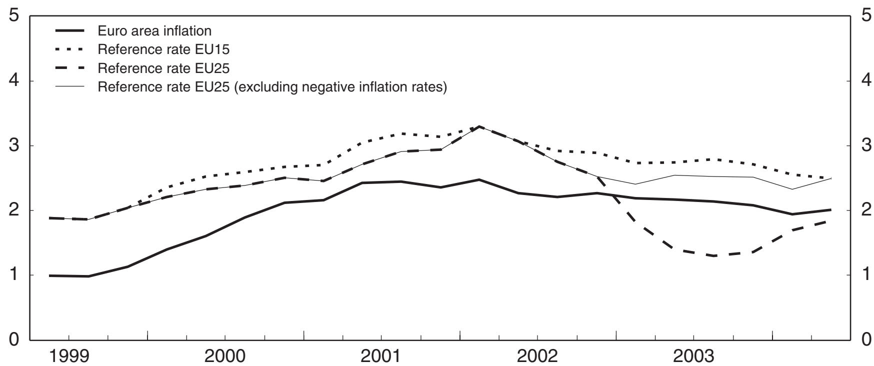
The target was initially couched in terms of headline "net" inflation, defined as headline (*i.e.* CPI) inflation net of changes due to regulated prices and indirect taxes. In 2002 the CNB shifted to targeting headline inflation with a declining inflation band from a range of 3 to 5 per cent in January 2002 to 2 to 4 per cent in December 2005. In spring 2004, a central target of 3 per cent from January 2006 with a ±1 per cent tolerance band was announced.

The main monetary policy instrument is through repo tenders, *i.e.* short-run deposit facilities tendered out by the Central Bank to commercial banks. 14-day, variable rate tenders are conducted and the declared repo rate is the maximum rate at which banks bids can be satisfied in the tender. Other open market operations include foreign exchange operations and securities operations, though these are rarely used.

Special arrangements have been made to prevent foreign capital inflows due to privatisation from putting undue pressure for currency appreciation and so avoiding unwanted deflationary pressures on prices. A joint agreement between the government and the CNB was first made in 2000 and was revised in 2002. Under the 2002 agreement the government parks 20 per cent of its forex proceeds from privatisation (up to an equivalent of CZK 25 billion) with the CNB in order to pay for outstanding state guarantees to the CNB that are due to be paid in 2007. The remainder of the privatisation proceeds are converted to koruna for the government by the CNB – *i.e.* not on the open currency market. The CNB charges 3 per cent for the initial CZK 50 billion, 6 per cent for the next 50 billion and 9 per cent thereafter.

October 2004 calculates the references value (2.4 per cent) as described above, except Lithuania is excluded on the basis that "countries with negative inflation are not considered to be best performers in terms of price stability" (European Commission, 2004, page 3). Based on historical data, it looks as though excluding negative inflation outcomes makes the reference rate considerably smoother and closer to the euro area average inflation and closer to the reference rate used for

Figure 3.2. **Reference rates for the Maastricht inflation criteria**[1]
Per cent



1. The reference rate is average inflation of the three EU15 (or three EU25) countries with the lowest inflation PLUS 1.5 percentage points. The calculation is made on four-quarter moving averages of annualised HICP inflation.
Source: Czech National Bank; Eurostat; OECD.

the first wave of euro-area entrants (Figure 3.2). Nevertheless, even using this latest calculation method, the reference rate is typically well below 3 per cent and without good communication on developments in the reference rate in the context of Czech monetary policy, the CNB's target may become a weak signal in forming market expectations because markets may believe that the CNB will in fact have to aim well below target – at least for the period of assessment for euro entry.

The CNB's announcement of the new inflation target involved some changes in strategy. First the stress on the central 3 per cent figure signals a shift away from a band-type target towards greater importance for the centre of the band. Second, the Bank's medium-term model is to play a greater role in the inflation forecasts (previously the inflation forecasts relied more heavily on short-term forecasts and expert judgement). Greater use of the medium-term model will mean certain key variables, notably the exchange rate, will be explicitly endogenous to the inflation forecast. This should allow for rather tighter monitoring of the Bank's inflation forecast and performance in reaching inflation targets. As part of this new approach, there has also been a change in communication strategy on exogenous inflationary influences. Previously the Bank explicitly listed events that were not considered within its responsibility in achieving inflation targets. The list of "escape clauses" included price changes in international commodities, major changes in the koruna's exchange rate which were not connected with domestic fundamentals and domestic monetary policyand, changes in regulated prices and indirect taxes.[3] The Bank has now stopped referring to this list in its communication strategy.

The exchange-rate stability criterion

For countries such as the Czech Republic, with an inflation targeting regime and a floating exchange rate, maintaining membership of ERM II, and moreover a positive assessment by the EU authorities of fulfilling the exchange rate criterion, are by no means automatically guaranteed. For a positive assessment the exchange rate has to remain "close to" the central parity without "severe tensions", this implies remaining a lot closer to central parity than the 15 per cent band that, if breached, under normal circumstances would trigger ECB-assisted intervention.[4] In assessing deviation from central parity there is more tolerance of appreciation than depreciation (more on this below). So in effect the exchange rate is narrowly pegged and cannot be used to absorb exogenous shocks. Furthermore, the implicit peg can invite speculative attacks by the markets and this is likely to be the greatest vulnerability during ERM II membership.

Of likely less importance in fulfilling the exchange-rate criterion are issues raised by the Balassa-Samuelson effect. The upward pressure on the real exchange rate from the Balassa-Samuelson effect can make for tricky trade offs in deciding whether to take the real appreciation in the form of higher inflation (and that may have to be damped at the expense of growth) or in the form of faster nominal exchange rate appreciation (potentially threatening fulfilment of the exchange-rate stability criterion). A recent review by Egert *et al.* (2004) calculates the annual inflation due to the Balassa-Samuelson effect from 11 studies covering the Czech Republic and finds a range of 0.2 to 4.3 per cent. However, five of the studies have a value close to 1 per cent, suggesting this is the most likely magnitude of the effect, which – if realised – would not pose problems *per se* for the inflation targeting while complying with the exchange rate criterion necessary for a positive evaluation of ERM II membership.

The assessment of the exchange-rate criterion is not always understood by markets and analysts, and to clarify the situation the CNB has made an explicit statement of the position of the European authorities and its interpretation of it (CNB, 2003). The key points of the statement are:

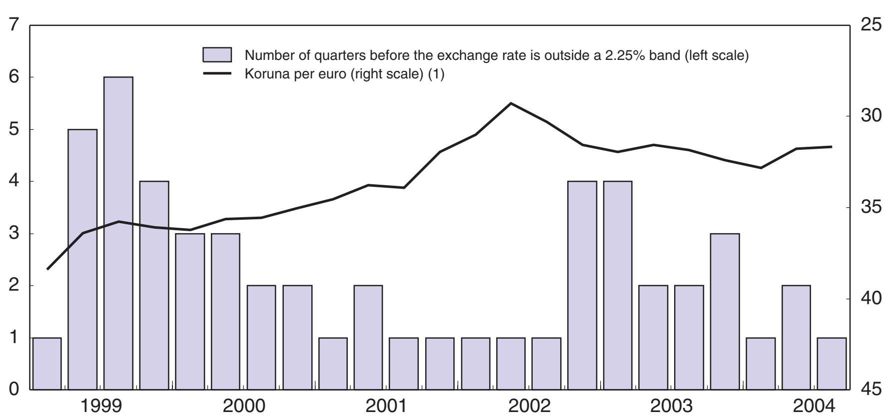
- That no downward realignment of the central parity within the two-year examination period will be possible. The Bank interprets this as implying that upward realignment is implicitly possible.
- That a 2.25 per cent band will serve as the benchmark for assessment. The Bank's interpretation is that if excessive interventions or non-market measures have to be used to remain in the band, this could jeopardise fulfilment of the criteria. If the band were breached, the Bank's understanding is that breaches of the upper limit are more admissible

than those of the lower limit (see Annex 3.A2 for the full text of the CNB's interpretation).

A very crude impression of the difficulties in remaining close to central parity is illustrated in the past history of exchange rate movements. Figure 3.3 shows for each end-of-quarter exchange rate the number of quarters the rate remains within 2.25 per cent of the initial rate. From this it is clear that exchange rate has not remained within any 2.25 per cent band for the past few years for any great length of time, implying that the Central Bank will be unlikely able to conduct "business as usual" in its inflation targeting and be confident that the exchange rate will remain close to the central parity set at the beginning of ERM II entry.

However previous exchange-rate movements are of course an inaccurate indicator of the policy challenges for the monetary authorities as the dynamics of inflation and exchange rates will be different in ERM II. In particular, announcement of a central parity can help smooth currency fluctuations. In addition, exchange rate movements in the koruna, at least over the past couple of years, have been lower compared with some of the prospective members of the euro area, notably Hungary and the Poland.[5] From this perspective it seems likely the Czech authorities will face less of a challenge in meeting the exchange-rate criterion compared with some other countries.

Figure 3.3. **A 2.25 per cent band in the context of past exchange rates**



1. Rates are for last day of each quarter. A rise (decrease in rate) indicates appreciation.
Source: Eurostat; OECD calculations.

Notes

1. It is planned for the annual report on the preparedness of the Czech economy for entry to ERM II and euro-area accession to comprise of two parts. The first part will assess progress in meeting the Maastricht criteria and in progress in nominal convergence. The second part will examine progress in alignment of the Czech economy to the euro areas economy and will cover a wide range of structural and cyclical alignment issues.
2. The Maastricht interest rate criterion is often criticised as an imperfect indicator of a country's commitment to price stability, and possibly more an indication of market expectations about the country's chance of adopting the euro.
3. The inflation influences the CNB, until recently, explicitly listed as being outside its responsibility were:
   - major changes in world prices of raw materials, energy-producing materials and other commodities;
   - major changes in the koruna's exchange rate which are not connected with domestic fundamentals and domestic monetary policy;
   - major changes in the conditions for agricultural production which have an impact on prices;
   - changes in regulated prices whose effects on inflation would exceed 1 to 1½ percentage points;
   - step changes in indirect taxes.
4. The ECB however is in fact not strictly obliged to intervene when an ERM II currency hits the boundary of the 15 per cent band. Interventions are in principle automatic and unlimited unless they, to quote from official ECB sources, "conflict with the primary objective of price stability in the member state or the euro area" (ECB, 2003).
5. The differences in volatility between the Visegrad currencies are illustrated in calculations of the standard deviation of the monthly euro exchange rates over the past 2 years or so. For the Czech koruna and the Slovak koruna, the standard deviation has been equivalent to a little above 2 per cent of the average exchange rate. For the Hungarian forint it is about 3½ per cent and for the Polish zloty, a little over 6 per cent.

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Annex 3.A1

The Maastricht criteria for entry to the euro area*

The four convergence criteria are set out in Article 121of the EC Treaty and reflect the degree of economic convergence that member states must achieve. Each member state must satisfy all four criteria in order to be able to participate in the euro area.

Price stability

The Treaty stipulates: "The achievement of a high degree of price stability [...] will be apparent from a rate of inflation which is close to that of, at most, the three best-performing member states in terms of price stability".

In practice, the **inflation rate** of a given member state must not exceed by more than 1½ percentage points that of the three best-performing member states in terms of price stability during the year preceding the examination of the situation in that member state.

Government finances

The Treaty stipulates: "The sustainability of the government financial position [...] will be apparent from having achieved a government budgetary position without a deficit that is excessive [...]".

In practice, the Commission, when drawing up its annual recommendation to the Council of Finance Ministers, examines compliance with budgetary discipline on the basis of the following two criteria:

– **The annual government deficit:** the ratio of the annual government deficit to gross domestic product (GDP) must not exceed 3 per cent at the end of the preceding financial year. If this is not the case, the ratio must have declined substantially and continuously and reached a level close to 3 per cent (interpretation in trend terms) or, alternatively, must remain close to 3 per cent while representing only an exceptional and temporary excess;

– **Government debt:** the ratio of gross government debt to GDP must not exceed 60 per cent at the end of the preceding financial year. If this is not the case, the ratio must have sufficiently diminished and must be approaching the reference value at a satisfactory pace (interpretation in trend terms).

* Text reproduced from the European Union website, September 2003: *http://www.europa.eu.int/scadplus/leg/en/lvb/l25014.htm*.

Exchange rates

The Treaty stipulates: "the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other member state".

The member state must have participated in the exchange-rate mechanism of the **European Monetary System (EMS)** without any break during the two years preceding the examination of the situation and without severe tensions.

In addition, it must not have devalued its currency (*i.e.* the bilateral central rate for its currency against any other member state's currency) on its own initiative during the same period.

Long-term interest rates

The Treaty stipulates: "the durability of convergence achieved by the member state [...] being reflected in the long-term interest-rate levels".

In practice, the **nominal long–term interest rate** must not exceed by more than 2 percentage points that of, at most, the three best-performing member states in terms of price stability (that is to say, the same member states as those in the case of the price stability criterion). The period taken into consideration is the year preceding the examination of the situation in the member state concerned.

Annex 3.A2

The CNB's statement on the exchange rate criterion

The following text is taken from page 3 of the document issued by the Central Bank in July 2003 on its interpretation of the assessment that the EU authorities will use regarding exchange rate performance (CNB, 2003a):

"The present position of the European authorities as regards assessing the exchange-rate stability criterion can be summed up as follows (the CNB's interpretation in parentheses):

a) Participation in ERM II for at least two years at the time of the assessment is mandatory.

b) No downward realignment of the central parity within the two-year examination period (upward realignment of the central parity is implicitly possible).

c) By the CNB's current understanding, and following consultations with the competent EU and ECB authorities, fulfilment of the criterion requires the exchange rate to have been maintained within a fluctuation margin of ±2.25 per cent (*i.e.* narrower than the standard band) around the central parity in ERM II "without severe tensions" (in other words, maintaining the exchange rate within the narrow margin of ±2.25 per cent at any cost by means of excessive interventions or non-market measures will not necessarily be assessed as successful fulfilment of the exchange-rate stability criterion). If the exchange rate moves outside this band, a distinction is to be made between a breach of the upper margin and a breach of the lower margin (a breach of the upper margin being implicitly more admissible). In such a case it is necessary to examine the duration of the deviation, the reasons for it, and interest rates and intervention policy at the time of the deviation.

4. Improving policy towards business

Policy towards business has evolved considerably over the past decade or so and is now broadly similar to that found in many other OECD countries. The corporate-tax system includes targeted tax relief tilted towards poorer regions and favourable treatment of R&D spending as well as special support to small-and-medium enterprises. Markets are overseen by an independent competition authority, now backed up by the European Commission. And through privatisation the government has reduced direct ownership and control of production to levels comparable with many other OECD countries. Notably, the banking sector has been fully privatised (and there is now a strong foreign presence) and systems have been set up to encourage the development of competitive network industries.

In addition, Czech policy recognises the special challenges of business support that arise from the important role of foreign capital and foreign-owned enterprises in the economy. Given the intense competition for FDI, policy is attentive to the international image of the Czech Republic as a place to invest. Also, efforts are being made to encourage spillovers from the foreign sector to the domestic sector as the foreign sector not only brings new business for supply firms but also exposes the domestic sector to best practices.

Nevertheless, as Chapter 1 points out, policy issues remain. Indeed, Chapter 2 has already drawn attention to the fact that, despite further scheduled cuts, the corporate tax rate is likely to remain relatively high compared with key peer countries, such as Hungary, Poland and Slovakia. This Chapter first looks at three topics in the environment for business where good regulatory conditions are crucial for boosting productivity growth: bankruptcy procedures, the administration of firm start-ups and corruption. This is followed by an overview of developments in targeted measures to help businesses. The final section looks at progress towards competitive markets in telecommunications and energy. The policy assessment is summed up in Box 4.1.

The legal environment for business is hampering restructuring

Bankruptcy: assessing progress towards a better system

Productivity growth is held back by weaknesses in bankruptcy legislation. Poorly performing enterprises are able to continue operating and, even when they

Box 4.1. Policy assessment on the business environment

The legal environment for business

- A **draft bankruptcy act** addresses key problems of the current legislation its finalisation and presentation for parliamentary approval should be given priority so that reform in this area is no longer delayed
- The prospect of speeding up **business registration**, as contained in pending legislation, is welcome and further delays in reform should be avoided
- Further measures may be needed to bring corruption levels down and the plans to **introduce integrity testingand a crown witness system** are welcome. Cutbacks in regulation and red tape would also help reduce opportunities and incentives to engage in corruption.

Targeted support for business

- The creation of a new deputy prime minister position for coordinating growth policy and the amalgamation of all targeted **support for businesses in one agency** are welcome steps in business policy along with the setting up of a new advisory council on business policy.
- A critical look at the **cost-effectiveness of targeted financial support** to businesses should be made and policymakers should ensure that strategies also focus on general measures to improve regulatory environments.
- **Barriers to academics setting up a business should be removed** to allow greater opportunities for direct management and financial interest in commercial applications in science and technology
- The schedule to end **the support programme in steel** agreed with the European Commission is welcome and the authorities should not push for further extension. The payouts for redundancy and one-off sickness **compensation to mining and steel firms** should only serve towards helping firm closure and not be used as a means to help sustain unviable businesses.

Network industries: telecommunications and energy

- It is important for the regulator to be more committed to introducing and implementing regulations to create a more competitive environment in **telecommunications markets**. Local-loop unbundling has to become more widespread, especially as this is a key factor in high Internet prices.
- Vigilance has to be maintained towards monopoly tendencies in the **electricity industry** and the independence and legal powers of the regulators need to be sustained particularly in setting the quality criteria for service supply.
- In the **gas sector**, implementation of the amended Energy Act looks set to bring welcome increase in market access. The Act's impact should nevertheless be monitored with a view to further steps if the level of competition continues to be weak.

close down, assets can be tied up in long legal proceedings.[1] The bankruptcy system is an important factor contributing to asset stripping, along with a framework of corporate governance which, according to some analysis, does not adequately deal with related party transactions and other self-serving activity.[2] There are three key problems with present bankruptcy legislation:

– It is relatively easy for debtors to delay the start of legal proceedings and use the time gained in asset stripping. The Bankruptcy and Composition Act (passed in 1991) stipulates that debtors have to inform courts of insolvency and provide company accounts. However, the risks in delaying formal notice are low as successful prosecutions are rare due to difficulties in proving deliberate misconduct in accounting and reporting. When stripping assets, debtors often claim that accounting records have been "lost". Failure to produce accounts incurs a penalty of only CZK 50 000, though imprisonment is possible if it can be then proven that the accounts were intentionally lost or destroyed.[3]

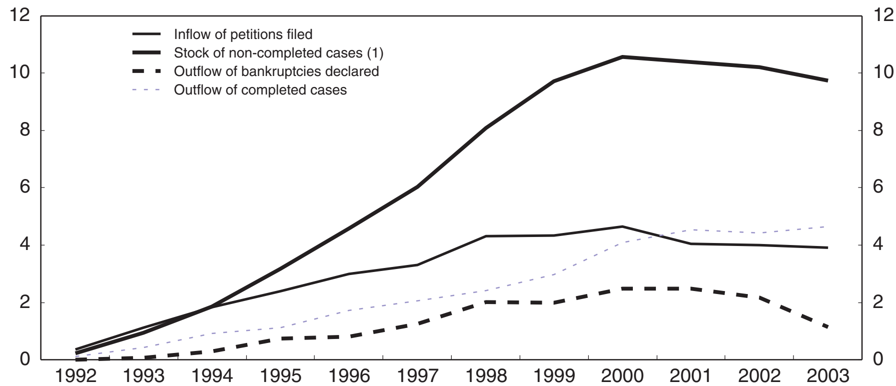
– If a firm is declared insolvent it invariably ends up being liquidated, *i.e.* attempts to turn firms around through re-structuring, thereby boosting the prospects for creditors are rare. The courts seldom support applications for composition (re-structuring that leaves the current debtors in place but with restrictions and supervision). And restructuring by bankruptcy (re-structuring involving the takeover of the business by a trustee) is rarely successful, in part because asset stripping often leaves businesses with no viable prospects.

– Most of the legal proceedings still under way have passed the first stage of having a decision taken on whether the firm is bankrupt or not. However, subsequent proceedings are often long, particularly in the common case of liquidation.

The problems in bankruptcy legislation have been recognised for some years and solutions have been sought through amendment of the Bankruptcy and Composition Act. The most recent amendment, made in May this year, aimed at removing excessive delays in proceedings. Even before this amendment comes into effect, it looks as though the case backlog has stabilised and is being brought down a little (Figure 4.1). Nevertheless it is clear that there are a large number of cases in the pipeline and many have been there for some time.

A new bankruptcy act has long since been mooted by government officials; indeed the previous *Survey* was provided with details on a new act that was in preparation but which did not then make it through to parliamentary approval. At present the prospects of a new act being passed by Parliament look stronger. A draft act has been prepared and meetings have been held with interest groups in summer 2004 and formal ministerial consultations are set to begin end November.

Figure 4.1. **Case-loads in bankruptcy and settlement**
Thousands



1. Where either bankruptcy has not been decided or it has, but other proceedings continue.
Source: Ministry of Justice.

The draft Bankruptcy Act addresses key problems of the current legislation and its finalisation and presentation for parliamentary approval should be given priority so that reform in this area is no longer delayed. The draft Act proposes to tackle the problems outlined above in the following ways:

– Firms will be encouraged to declare bankruptcy through a number of mechanisms. Contrary to the present system, debtors may file for a three month period of protection whether it is themselves filing insolvency or the creditors.[4] Also, firms will be able to file for "imminent" bankruptcy, from which they can withdraw at any time but which also gives time to put forward a proposal for reorganisation (see below). The attraction for debtors is that taking the lead with a reorganisation proposal may be preferable to delaying the claim of insolvency which would typically give creditors more control. The new law also promises faster proceedings when the debtor files an insolvency petition, as the court must decide on the existence of insolvency within 15 days. Normally the person filing a petition on insolvency can also submit a proposal on how to resolve the insolvency *i.e.* it is possible for the court to not only determine whether there is indeed insolvency but to give approval of the proposed solution procedure.

- Possibilities for "reorganisation" along the lines of the US and German systems will be introduced. The system will enable a judge (following evidence provided by creditors and debtors) to impose a schedule for the partial repayment of debt which if successfully completed will mean the remainder of the debt being written off. The introduction of this alternative way of resolving a firm's in financial difficulty should increase the chances for businesses to be turned around. This should help protect creditors' interests and add to debtors incentives to file for bankruptcy, rather than engage in asset stripping.
- The new draft legislation also aims to favour creditors in other ways. In particular creditors would have more influence on the solution to insolvency chosen, the appointment of the trustee and procedural control of the trustee. It should be noted that the authorities aim to give creditors more influence over the appointment of the trustee before the new Bankruptcy Act comes into force with an amendment to current bankruptcy legislation.

There is no strong focus on cutting back the length of cases in the draft act, though it is aimed that better procedural provisions in the new legislation will help towards reduction in case length. Recent data indicate that there is already some shortening of case length, suggesting that previous policy efforts are paying off. In addition, the new legislation proposes the introduction of an electronic insolvency register and this should also help cut back on some of the procedural delays.

Administrative requirements for setting up a business are cumbersome

Administrative requirements for setting up a business have a reputation for being lengthy and cumbersome. World Bank indicators show the number of procedures to be relatively large and time consuming compared to the OECD average though it is difficult to conclude there are large differences compared with peer countries such as Hungary, Poland and Slovakia.[5] Preliminary results of a recent compilation of structural indicators by the OECD broadly confirm the message of the World Bank data. It is interesting to note that, according to the World Bank indicators at least, the problems in business set-up are limited to administrative burdens in terms of the time and "hassle"; the direct costs of business set-up in terms of administrative fees and minimum capital requirements are not exceptionally high.

Entry onto the Commercial Register is the most widely criticised aspect of setting up a business (details of the process of commercial registration are shown in Annex 4.A1). All firms, except the self-employed, have to enter the register and the process has a reputation of being demanding and for taking a long time to complete. There are also problems in the consistency of court decisions, uncertainties about the documentation required and there are instances where, reportedly, the Registry Court goes into excessive depth with applications. Furthermore, the complexity of proceedings often leads to demands for corrections or completion of proposals by the courts.[6]

Some steps have been taken to help firms in applying to the commercial registry. Notably, the Ministry of Justice in conjunction with the non-government-organisation *Transparency International* have prepared model application forms. The Ministry of Justice also points to an easing of the backlog of applications to the Commercial Register, indeed the backlog of applications has come down from over 30 000 in 1998 to around 15 000 in early 2004. Based on initial proposals in 2003, a new draft law on commercial registration was in preparation by mid 2004 aiming at the standardisation of forms and the introduction of electronic applications. This should help reduce delays due to incomplete forms being sent back for revision. There are also aims to shorten the deadline for standard application cases (currently 15 days), lighten the checking of applications, reduce the number of participants in the application process and to no longer require registration to be accompanied by an official court resolution. The prospect of speeding up business registration is welcome and further delays in reform should be avoided.

The trade licensing system is also cited as a source of frustration and delay for those setting up business. Most business activities require a trade license, with conditions for granting the license varying depending on the activity. A one-stop-shop service allowing combined application for commercial registry and for trade licenses would help ease the administrative burden and has been considered by policymakers, but plans for implementation remain long-term.

One-stop-shop services in general are limited, though moves are under way to remedy this. In July 2004 plans developed by the recently formed Business Environment Development Council were presented to the government. These include the development of integrated information and application systems as well as a network of about 200 offices. The proposed system is aimed at supporting business start-up for the self-employed as well as for incorporated businesses and will assist in applications to the commercial registry and for trade licences, provide guidance on application for targeted support schemes as well as provide general advice and assistance (see below). These moves towards introducing one-stop-shop services for businesses are welcome and should be followed through.

Corruption: assessing the latest policy initiatives

Assessments both by international bodies and the Czech authorities acknowledge that corruption is a significant problem. For instance a report by the Council of Europe (Council of Europe, 2003) assesses corruption to be a serious problem. This was echoed by the 2003 Regular Report by the European Commission and quantitative indicators of corruption generally back this up.

When compared across other OECD countries, the Czech Republic indeed ranks poorly, for example, in the World Bank's general corruption indicator.[7] However, it should be stressed that the Czech Republic ranks much less poorly when a wider selection of countries is considered. For instance, in the context of a broad eastern European grouping the Czech Republic has one of the better rankings according to a recent survey by the World Bank on corruption in transition countries (World Bank, 2004b).[8, 9]

Current policies to reduce corruption are based on a package of measures introduced in 1999 and include legislative and organisational changes, training and media promotion and international co-operation. The measures include commitment by the Ministry of Interior to produce an annual report on corruption. In 2002 additional steps were taken, notably by increasing access to tax records for police investigation. In addition, tax officers joined special anti-corruption teams in the Ministry of Interior and Ministry of Finance to assist in securing damage claims arising from criminal activities and the identification and collection of tax arrears. In 2003 organisational changes were made with the merger of specialised police anti-corruption units.

Despite the continuing efforts to bolster anti-corruption measures, the Ministry of Interior's assessment of progress remains sceptical. The 2003 Ministry's annual report on corruption sees little progress in the results of measures and highlights that corruption remains a serious problem in key areas including state administration, police forces, healthcare, banking and the judiciary, as well influencing the political sphere.[10] The Ministry has since established an anti-corruption commission, responsible for detecting internal corruption and telephone and email lines to most ministries have been set up for citizens to submit complaints about corruption.[11]

Looking forward, there are plans to introduce "integrity testing" for some government employees. A proposal submitted to the government in mid-2004 proposes a system of checking personal finances through an obligatory triennial asset declaration for civil servants, members of security and armed forces, judges, prosecutors and officers of self-governing entities and publicly funded organisations, such as the National Property Fund. Employers would assess the declarations and report suspicious cases to either the financial or law enforcement authorities.

There are also plans to introduce a "crown witness" system – the absence of which is limiting powers of prosecution in serious corruption cases. Crown witness instruments are to be included in a new Criminal Code currently in preparation with the aim of enforcement in 2006. The instruments are to allow discontinuation of an individual's prosecution if they disclose information that could contribute significantly to the detection of a serious crime. Eligibility for this protection requires the individual to confess to the crime for which they are prosecuted, surrender any financial gains from the crime and provide compensation for criminal damage.

The plans to introduce integrity testing and a crown witness system are welcome but further measures may be needed to bring corruption levels down.[12] Cutbacks in regulation and red tape would also help reduce opportunities to engage in corruption.

Targeted support schemes for business are widespread

Positive steps have been taken in the administration of business policy as well as in the capacity for developing new policy proposals. A deputy prime minister position has been created to enhance the co-ordination of growth policy, the position is currently held by the former head of CzechInvest. Also, in January 2004 a new agency, the Investment and Business Development Agency covering support to both large and small-scale business (both international and domestic) was created by merging CzechInvest, the Agency for Business Development (ARP) and the Agency for Development of Industry (CzechIndustry). The new agency will operate under the already established name of CzechInvest. In addition an advisory body, the Business Environment Development Council, has been created. The Council comprises public and private representatives, as well as government officials and is responsible for putting policy proposals before government. Putting all targeted support for businesses in one agency is welcome and the new advisory body, if properly balanced in its membership, should be able to make a positive contribution to the development of policy.

One general criticism of targeted support for business, not unique to the Czech Republic, is that a fairly large number of financial support schemes are being run but they are inadequately assessed, either individually or collectively, in terms of either the short or long-term fiscal consequences or in terms of effectiveness in boosting economic growth. Furthermore, a key message from OECD assessment of business support in general is that it is often too focussed on targeted financial support at the expense of measures to improve regulatory environments for business (OECD, 2003 and Annex 4.A2). The recent efforts to tackle problems in bankruptcy and business registration are a welcome sign that Czech business policy is paying due attention to regulatory aspect of business and it is important this continues. A critical look across all the various schemes for financial support would help policymakers further improve the focus of business policy.

Support to investment in manufacturing investment and selected service sectors

Within the international rules on international investment (notably EU rules on state aid), countries heavily reliant on FDI such as the Czech Republic tend to make substantial use of targeted tax and subsidy measures in order to attract investors. Targeted support to large-scale investors is provided through the Act on Investment Incentives. The centre-piece of support is tax-relief for up to 10 years (Box 4.2) which contributes to making the effective rate of business

Box 4.2. Targeted support for manufacturing and selected service sectors

Three programmes provide investment subsidy or tax relief and subsidies for job creation and training for manufacturing activities and selected service sectors. The level of support and eligibility conditions depend on regional unemployment levels, following the approach to state aid taken by the EU. The maximum total support cannot exceed limits set by EU rules on state support. In the Prague region, support for large firms cannot exceed 20 per cent of the value of investment, in the rest of the country the support limits lie between 46 and 50 per cent. Somewhat higher limits are set for small-and-medium enterprises (Box 4.3).

Support for manufacturing

The Investment Incentives Act No. 72/2000 provides support for both new production and expanding existing production.

The main incentives offered are:

- **Corporate tax relief.** Full tax relief for newly established companies and partial tax relief for expanding companies. Both forms of tax relief can be granted for up to 10 years.
- **Job creation grants.** Up to CZK 200 000 per employee depending on the unemployment rate in the district.
- **Training and re-training grants.** Up to 35 per cent of the costs of the training in the regions where the unemployment rate is higher than the country's average.

The key eligibility criteria are:

- Minimum investment amounts ranging between CZK 100 million and CZK 200 million, depending on the regional unemployment rate. At least half of the investment must be covered by the investors own funds.
- At least 40 per cent of the investment must be in machinery.

Support for "technology centres" and business support services

This support is covered by the Framework Programme for support of Technology centres and Business Support Services and has been operating since February 2004 and is a follow-up to two schemes introduced in 2002. The support for "technology centres" is aimed at high-tech activities such as innovation in manufactured products and processes. Assistance to business support services is aimed at various activities including business headquarters and call-centres.

The main forms of support are:

- **Subsidy of business costs** (up to 50 per cent). The costs covered can either be the value of investment into tangible and intangible fixed assets purchased within the first 5 years or the value of two-years of salary of the employees employed within the first 3 years.

Box 4.2. **Targeted support for manufacturing and selected service sectors** (*cont.*)

- **Subsidy for training and re-training.** Subsidy up to 35 per cent of the specific training costs and 60 per cent of the general training costs. Maximum subsidy of CZK 100 000 or CZK 150 000 for each job position depending on the number of job positions created.

The main eligibility criteria are:

- Minimum investment of CZK 15 million or CZK 30 million, depending on the activity (*e.g.* software development requires a minimum investment of CZK 15 million while call centres require CZK 30 million). At least half of the investment must be self financed.
- A minimum of 15 or 30 new jobs have to be created, depending on the activity.

Support for job creation in high unemployment regions

This support is provided by the Job Creation Support Programme For Regions Worst Affected By Unemployment and has been in place since June 2004. The programme enables manufacturing activities and forms of certain business support to qualify for subsidies to job creation and training under less stringent eligibility conditions compared to those above if they are located in regions with more than 14 per cent unemployment.

The main forms of support are:

- **Subsidised job creation.** Up to 200 000 CZK per employee, total amount of this subsidy must not exceed 50 per cent of the value of two years salary (65 per cent in the case of small or medium enterprises).
- **Financial support for the training and re-training of employees.** Up to 35 per cent of the costs of the training in the regions – maximum CZK 30 000 per employee.

The main eligibility criteria are:

- Minimum investment of CZK 10 million, half of which has to be covered by own equity.
- Creation of at least 10 jobs.

Source: CzechInvest website.

taxation lower than the corporate tax rate.[13] EU membership has meant amendment to the Act. Changes include incorporation of the EU regulation on state aid and the transfer of inspection powers on state support from the anti-monopoly office to the European Commission.

A scheme aimed at encouraging high-tech activities (*e.g.* product and process development of manufactures) and business services (*e.g.* head offices and call centres) has begun in 2004, following up on similar schemes introduced in 2002. Access to the scheme is conditional on some job-creation requirements, and provides subsidies either to investment costs or to wage costs. A special job subsidy scheme for manufacturing and selected service sectors that locate in high unemployment regions has also been set up in 2004 (Box 4.2).

Support to small-and-medium enterprises (SMEs)

There has been little fundamental change to targeted measures for SMEs lately, though recent fiscal measures may be affecting SME behaviour. SMEs are provided with general financial support in the form of guarantees and low-cost loans. In addition there are a large number of more targeted schemes (see Box 4.3). Recent changes to taxation are likely to have a mixed impact. On the one hand, corporate tax rates have been reduced (Chapter 2). On the other hand a new minimum tax payment has been introduced and the turnover threshold for VAT payment has been lowered (it was previously relatively high compared with other OECD countries). There is some tentative evidence that the self-employed may have been negatively affected by these changes; in early 2004, the labour force survey recorded a rapid increase in the number of self-employed registering as being unemployed but this observation has yet to be backed up by other evidence. A possible concern is that the tax changes may be driving more of the self employed into the grey sector.

The government intends to give SME support additional impetus through an "innovation strategy". Until this proposal, there has been no comprehensive strategy on this front – although several aspects of SME policy already deliver incentives for innovation. An outline has been circulated round Ministries that proposes increasing the intra-government co-ordination and support for innovative business activity as well as additional measures for financial support and administrative assistance. The strategy also places emphasis on improving the commercial orientation of university research where there appear to be a number of barriers to incentives. In particular, there are legislative barriers to academic staff wanting to set up a company. As a result, university professors can often only develop commercial spin-offs to research by working with existing companies. Barriers to academics setting up businesses should be removed so as to allow greater opportunities for direct management and financial interest in commercial applications of science and technology.

There is concern that lending to SMEs is constrained by a lack of credit information that contributes to an already relatively prudent approach by the commercial banks. The Central Register of Credits, created in 2002, has

Box 4.3. Support to small-and-medium enterprises (SMEs)

The legal definition of SMEs used for eligibility to support is based on the number of employees and assets. In terms of employees, an SME has less than 250 employees and a "small business' less than 10 employees. The EU rules limit the maximum support to SMEs to 30 per cent of the value of investment for the Prague region and between 61 and 65 per cent in other regions.

There are two general schemes of financial support. Both of these are administered by the Ministry of Trade and Industry with support disbursed by the Czech-Moravian Guarantee and Development Bank:

- "**Guarantee**". Subsidised guarantees on operating loans (maximum subsidy CZK 3.5 million over three years), subsidised guarantees on capital investment (maximum subsidy CZK 0.25 million per capital investment) and underwriting of bonds for bids in commercial tenders (maximum CZK 5 million).
- "**Credit**". Fixed-interest loans where rates and repayment period depend on the region and on recommendations from government business advisory services. The maximum value of a loan that can be subsidised is CZK 7 million.

In addition there is a host of more targeted schemes to support SMEs:

- "**Start**". Interest free loans of up to CZK 1 million for first-time entrepreneurs.
- "**Market**". Subsidies to certification costs for EU environmental standards.
- "**Co-operation**". Subsidies (maximum value CZK 1.5 million) for joint projects between SMEs in information systems, marketing and training.
- "**Village**". Subsidies equal to 5 per cent interest on a bank loan to entrepreneurs in municipalities with populations of less than 3 000.
- "**Regeneration**". Subsidies equal to 3 per cent interest on a bank loan to entrepreneurs in towns and villages identified as of historic and cultural interest.
- "**Special**". A CZK 4 000 per month subsidy for up to four years for each person employed from a disadvantaged group.
- "**Marketing**". 50 per cent subsidy of marketing expenses (maximum subsidy CZK 100 000) aimed at increasing export capacities of SMEs.
- "**Consulting**". Subsidies for enterprise consulting, subsidised rents and service charges in business centres, subsidised training for entrepreneurs and special support for the association of women entrepreneurs.
- "**Design**". 50 per cent subsidy for design services.

improved the situation (Annex 4.A3). And, in a welcome move, the Central Register of Credits will publish aggregate indicators of enterprise debt burden and debt quality by enterprise characteristics. This should in particular help assessment of first-time borrowers where a lack of credit history hampers risk assessment.

Encouraging R&D and the use of high-level technologies

Goals have been set, though not typically achieved, in terms of state support to R&D. The current targets are for support worth 0.58 per cent of GDP in 2004 and for this to increase to 0.6 per cent in 2006. As in many other countries, support is partly provided through favourable tax treatment of R&D expenditure. In this regard, support is set to increase with the increase in the maximum tax deduction on R&D spending to 10 per cent of a firm's tax base in January 2005 (Chapter 2). In addition new targeted schemes have been launched recently. Notably, the Ministry of Industry and Trade has launched three R&D programmes this year. "Impuls" aims at promoting R&D in new materials, industrial products, manufacturing technologies, information technologies and control systems. In addition, "Tandem" aims to strengthen links between business and the scientific community and "Pokrok" provides financial support to public and private research institutions for research into engineering processes and materials as well energy research.

There have also been developments in legislation on patents and trademarks. Legislation regarding patent attorneys was approved in November 2003 and includes setting up a professional chamber of attorneys as part of harmonisation with EU legislation. Legislation on trademarks has also been harmonised with EU standards and a new act on industrial design aimed at more strongly encouraging applicants for patents has been proposed.

Support to the steel and mining sectors

Support for the mining and steel industries continues. For the steel industry, special dispensation has been granted by the European Commission for the Balance and Exit programme to continue until 2006. It has been agreed that the total value of support to the end of the programme should not exceed CZK 14.5 billion. The schedule to end the support programme in steel agreed with the Commission is welcome and further extension should not be sought. Direct support for the mining sector comprises of assistance in financial liquidation and environmental clean-up of three state-owned mining companies with an estimated cost of CZK 11.5 billion over the period 2004-2007.[14] The assistance is not classified as public support following a decision by the Office for the Protection of Economic Competition and conforms to EC regulation on state aid to the coal industry.

A new, and indirect, form of support for the mining and steel industries has recently been set up. The government passed legislation in 2003 allowing state payouts to firms to help cover the costs of redundancy and one-off sickness compensation payments to employees. In the 2004 budget, CZK 1.7 billion was set aside to cover these payouts in the mining industry and CZK 1.2 billion in the steel industry. The legislation is classified as temporary but no date has been set for its termination. The payments are not classified as public support; the Czech authorities claim the money paid covers arrears relating to social security. The payouts for redundancy and one-off sickness compensation to mining and steel firms should only serve towards helping firm closure and not be used as a means to help sustain unviable businesses.

Dominance prevails in network industries

The system of regulation and supervision of the network industries is similar to that in many other OECD countries; pricing and other technical issues are dealt with by industry-specific regulators while supervision and monitoring of competitiveness is carried out by the competition authority (the Office for the Protection of Economic Competition). Looking specifically at telecommunications and energy, entry and price deregulation is underway and in many areas there is commitment to a timetable of further reforms, notably in widening price deregulation in consumer markets for gas and electricity (details on these sectors, along with other network industries are shown in Annex 4.A4). In addition, a new Act on Electronic Communications has been approved by the government and is currently being voted on by Parliament, and legislation transposing new EU directives is in the pipeline for the energy sector.[15, 16]

However, while there has been commendable progress in many aspects of the legal and regulatory environment for network industries, progress in the level of competition in many telecommunications, gas and electricity markets is disappointing. This is largely because in many areas of each industry, the incumbent remains dominant, being successfully able to put off potential competitors from entering or able to make it difficult for them to compete effectively. To some extent this probably reflects reluctance by successive governments for a rapid development of competition because of concerns that this would reduce the revenues from selling off state shares in the incumbent. This is likely to remain an issue in telecommunications and electricity as buyers for the remaining state shares are being actively sought. In telecommunications, sale of the state's 51 per cent stake in Cesky Telecom is planned for 2005 while in electricity sale of the 68 per cent state in CEZ will not take place before 2007 (Chapter 2). This aspect of the privatisation process, does not of course mean that privatisation should not go ahead, as removal of state ownership in networks ultimately reduces the risk of undue protection of the incumbent.

Telecommunications

In telecommunications, the incumbent, Cesky Telecom, is successfully managing to retain market power in some key activities.[17] In fixed line communication, call-by-call carrier selection, carrier pre-selection and number portability were introduced in 2002. However the fixed-line market is still dominated by Cesky Telecom.[18] Legislation for unbundling the local loop came into force in

August 2003, but the incumbent has been successful in delaying implementation. In particular, the unbundling contract offered by Cesky Telecom was neither very attractive to other operators, nor entirely in line with the Telecommunications Act. Although two contracts on local loop unbundling were signed in February 2004, not much unbundling has so far taken place.

Though mobile phone networks are providing competition in vocal communication and have undoubtedly taken market share, this pressure has not as yet brought large reductions in the incumbent's prices for fixed-line calls.[19] For instance, Cesky Telecom's prices per minute have remained constant since 2001 in both local and long-distance calls, and the fixed monthly fee grew by 60 per cent (Table 4.1).[20] Furthermore, the prices are high. Cross country comparison of baskets of phone services for both household and businesses shows Czech prices remain significantly higher than the OECD average (Figure 4.2). Though retail prices have remained stuck at high levels, interconnection charges for the phone companies have fallen by more than 50 per cent since 2001.[21] Further increases in competitive pressure can be expected from simplification of market access, abolition of the fixed retail registration fee, and from mobile-number portability (measures which are intended to be part of new Act on Electronic Communications).

A key concern in telecommunications is that Internet costs are high and connection speeds often slow, dissuading households and workers from increasing computer literacy and restricting the development of on-line services. For example, comparison of 512Kbps broadband services using OECD data for 2003 (the latest available comparison) suggests prices to be relatively high in the Czech Republic, about the same level as in Hungary and Slovakia but very much higher than in Poland and the United States (Table 4.2). Measured relative to the cost of living, Internet services prices are more than twice those in other European

Table 4.1. **Prices charged by the incumbent for local and long-distance calls**[1]

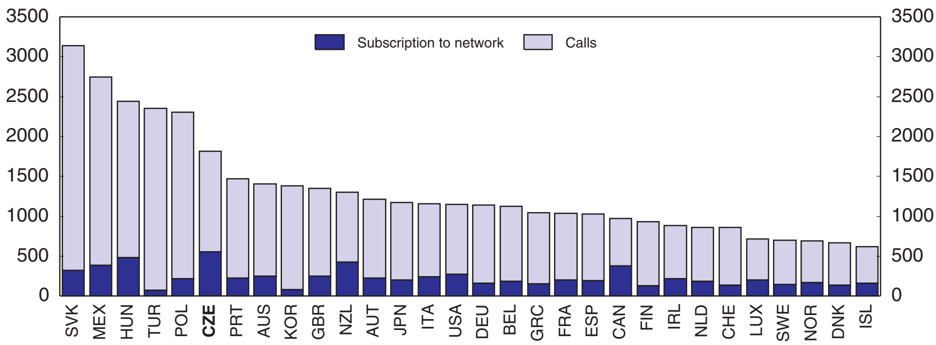
CZK/min, excluding VAT[2]

	Jan-01 through Jan. 02	Feb-02 through Aug. 03	Sep-03 through Dec. 03	Since Jan. 2004
Local, peak	1.38	1.33	1.33	1.33
Local, off peak	0.76	0.67	0.66	0.66
Long-distance, peak	3.52	3.48	3.47	3.47
Long-distance, off peak	1.62	1.62	1.61	1.61
Long-distance, night	0.95	0.95	0.95	0.95
Monthly fee (CZK)	166.67	284.77	284.77	284.76

1. Cesky Telecom's service plan Home Standard.
2. VAT rate 5 per cent until 1 January 2004; change from 5 to 22 per cent as of 1 January 2004, and from 22 to 19 per cent as of 1 May 2004.

Source: Czech Telecommunications Office.

Figure 4.2. **Annual cost of small business telephony, May 2004**[1]
USD PPP



1. VAT is excluded. Subscription to network includes connection charges and annual rental for domestic fixed line services. The cost of calls is based on domestic fixed line calls, international calls and calls from the fixed network to mobile networks. Estimates of domestic call costs assume 3600 calls per year and take into account time and day points, duration of call and distance.

Source: OECD, Directorate for Science, Technology and Industry (Information, Computer and Communications Policy Division) and Teligen.

Table 4.2. **Broadband prices: comparison of best offers in 2003 with download speed 512 Kbps**[1]

	Company	Access type	Monthly charge	
			USD	USD PPP
France	9Telecom	ADSL	26.03	24.40
Sweden	Tele2	Cable modem	30.06	25.86
Poland	Aster City	Cable modem	30.42	63.23
Ireland	Irish Broadband	Fixed Wireless	33.96	29.60
United States	N.E.T.	Fixed Wireless	34.95	34.95
Denmark	Redspot	Fixed Wireless	37.35	29.74
United Kingdom	PIPEX	ADSL	37.35	35.40
Portugal	Portugal Telecom	ADSL	39.60	52.03
Slovak Republic	UPC Chello	Cable modem	45.23	106.34
Norway	Telenor Avidi	Cable modem	46.78	38.21
Hungary	UPC Chello	Cable modem	46.88	93.25
Iceland	og Vodafone	ADSL	47.03	39.71
Czech Republic	Tiscali	ADSL	47.16	91.33
Australia	Telstra-Big Pond	ADSL	50.08	57.07
Luxembourg	Coditel	Cable modem	50.93	47.20

1. The latest available OECD international comparison as of autumn 2004.

countries. Although the industry regulator has pushed for open competition in the provision of flat-rate Internet access, a healthy level of competition has yet to emerge. For instance, the network operator had been apparently able to prevent other operators from making broadband offers via ADSL technology.[22] This seeming abuse of network control clearly needs to be dealt with.[23]

The technology used for high-speed Internet provision is up-to-date and the real problems in pricing lie in regulation. This might improve as the legal and operational powers of the Czech Telecommunication Office's will be strengthened by a new Act on Electronic Communications, which will also see the remuneration of managerial staff of the regulator increase.

To sum up, it is important for the regulator to be more committed to introducing and implementing regulations to create a more competitive environment in telecommunications markets. Local-loop unbundling has to become more widespread, especially as this is a key factor in high Internet prices.

Energy

Electricity

In the electricity industry the incumbent, CEZ, remains dominant in production, distribution and sales, despite that markets (except for transmission and distribution) are open to competition. In production, most power plants are owned by CEZ and these generate about 65 per cent of domestic production. Five of the eight distribution and sales companies are also controlled by CEZ and have a market share of about 60 per cent. The Office for the Protection of Economic Competition has criticised the continuing vertical integration and has ruled that CEZ can only own four distribution and sales companies, and that stakes in the transmission company and a regional distributor must be sold. CEZ is challenging this decision, though it has nevertheless recently sold its stake in the transmission company. Vigilance has to be maintained towards monopoly tendencies in the electricity industry, and the independence and legal powers of the regulators need to be sustained.

Several steps have been taken to free-up electricity prices. In 2003, the accounts of regional distribution companies were made more transparent by the elimination of the redistribution of financial resources among the companies. Also, large-scale users can now buy electricity on the open market. Choice-of-supplier for all users except households is scheduled for 2005 and full liberalisation is scheduled for 2006 (Table 4.3). To sum up, as of 2006, only the network and its access prices will remain regulated. Greater competition in the selection of the universal service provider will be introduced in the amendment to the Energy Act. This Act will also stipulate legal separation of distribution activities from production and/or trade by the end of 2006. Although there are signs that the increased

Table 4.3. **Opening of energy markets**

	Electricity	Gas
1 January 2002	Annual consumption over 40 GWh	
1 January 2003	Annual consumption over 9 GWh	
1 January 2004	Customers with continuous metering	
1 January 2005	All customers except households	Consumers with aggregated annual consumption over 15 million m^2, license holders of gas power plants and producers of gas-powered CHP.
1 January 2006	All end customers	All customers except households
1 January 2007		All customers

Note: The schedule for opening of the gas market is the result of a derogation on the fulfilment of the EC gas directive No. 98/30/EC.
Source: Energy Regulatory Office.

liberalisation has certainly reduced prices for the big users, it is not expected that the impact of price liberalisation for households will be as significant. Households may indeed have fewer incentives to engage in active search, particularly if liberalisation is hampered by a burdensome administration for changing the provider. Also, even with liberalisation, some argue that electricity prices are going to increase because the planned shift towards a greater use of renewable energy sources will increase costs.[24]

Gas

Almost all of the Czech Republic's gas is imported; close to three quarters comes from Russia and the rest from Norway.[25] In privatising the gas industry in 2001, the government sold the incumbent business entirely to the German energy company RWE and the industry has since remained dominated by this company.[26] Gradual liberalisation of the market will start in 2005, in accordance with the relevant EU treaty and the new gas Directive. One step towards opening the gas market was made in 2004 with the introduction of account unbundling that will increase the transparency of pricing. Amendment of the Energy Act, in the process of parliamentary approval in autumn 2004 (see above), will introduce several steps towards creating a better regulatory environment for competition. These include introducing regulated third-party access to the pipeline and gas storage, definition of last-resort suppliers (and their responsibilities) and obligation to legally separate transmission from other activities. The implementation of the amended Energy Act therefore looks set to bring welcome increase in market access. The Act's impact should nevertheless be monitored with a view to further steps if the level of competition continues to be weak.

Notes

1. For a recent in-depth account of the Czech bankruptcy system see World Bank (2004a).
2. See the World Bank's 2002 assessment of corporate governance for further detail on related party transactions (World Bank, 2002).
3. The number of criminal convictions for intentional misplacement or destruction of accounts has increased significantly in recent years, as well as criminal convictions for frustrating or seriously impeding the activity of the bankruptcy trustee. The Czech authorities view this as a positive development, reflecting improvements to legislation, increasing detection and success in prosecution, rather than increase in the level of criminal activity.
4. During a period of protection, no bankruptcy may be declared or reorganisation or composition permitted. The debtor cannot sell the business during the period of protection.
5. The World Bank's "Doing Business" database for 2003 shows the Czech Republic and Poland to have 10 procedures in starting a business, while there are 9 in the Slovak Republic and 6 in Hungary. At the same time, however the time taken to set up a business is longer in Hungary and Slovakia at 52 days compared with 31 in Poland and 40 in the Czech Republic. The OECD averages for these statistics are 6 procedures and 25 days.
6. Extremely protracted registration proceedings are typically limited to complex situations such as merger cases rather than the straightforward registration of new business. So criticism that new business registration takes too long should to some extent be diluted.
7. The World Bank's general indicator of corruption is a composite indicator based on several business surveys on corruption. These issues are discussed in Kaufmann *et al.* (2003).
8. The in-depth report on corruption by the World Bank, *Anti-Corruption in Transition* 2 is a follow-up to a 1999 study. The corruption statistics come from a survey of firms conducted in conjunction with the European Bank for Reconstruction and Development – the so-called BEEPs database. The first round of BEEPs was conducted in mid-1999 and was based on interviews with owners and senior managers in about 4 000 firms in 24 transition countries. The second round was conducted in mid-2002 and involved about 6 500 interviews in 26 countries. The report focuses on two measures of corruption, one which indicates the degree to which corruption is seen as an obstacle to business in the country and a bribe frequency index.
9. Corruption indicators are giving mixed signals on the trend in corruption. The widely published "corruption perception index" by Transparency International (a composite indicator based on several business surveys) is sometimes cited in the media and

other reports as indicating that corruption has been increasing in the Czech Republic. Indeed the index has deteriorated over time but what this actually means is unclear. A lower value of the index can arise because country coverage of the index has increased over time and it is possible that the index reflects a country being pushed further down the ranking and not that the measure has deteriorated in an absolute sense. In addition, the index reflects a *perception* of corruption and experts at Transparency International think that the trend for the Czech Republic might partly reflect rising expectations about acceptable levels of corruption. Furthermore, the recent World Bank report on corruption in transition countries (World Bank, 2004b) in fact contradicts the corruption perception index. Survey results for 1999 and 2002 indicate that fewer businesses now see corruption as a serious obstacle and that there has been a substantial reduction in the frequency of bribery.

10. The Ministry of Interior's assessment that the current anti-corruption measures are not effective enough is echoed in a recent study by Transparency International (Transparency International, 2004) which includes a survey of individuals' perceptions of the effectiveness of anti-corruption measures in the capital cities of the Visegrad countries. Prague is seen as having the weakest anti-corruption measures across respondents in the four capitals.

11. State authorities are already obliged under the criminal procedure code to report without delay to police or public prosecutors any indications that crime, including bribery, has been committed.

12. In autumn 2004 the Ministry of Justice was preparing a new act on conflict of interest which should also help in the fight against corruption. Legislation in Britain, France and Slovakia is being used as a guide to prepare the new act.

13. It should be noted that some calculations of the effective tax rate (for example those made by the accounting firm Ernst and Young) do not count tax holidays in the calculation of effective tax rates.

14. The three state mining companies receiving support for financial liquidation and environmental clean up are no longer producing coal and have skeleton staff: DIAMO, s.p. has 367 employees, P*alivový kombinát* Ú*stí*, s.p. 281 employees and V*ýchodo České uhelné doly*, s.p., 39 employees.

15. The Act on Electronic Communications is currently in the pipeline. It will transpose the EU directives on regulation, licensing and authorisation, access and interconnection and universal service. The law will significantly simplify market access and will grant the regulator the powers to issue rulings to assure effective competition on the market, universal service etc.

16. The amendment of the Energy Act has been passed by Parliament and is expected to come to force in December 2004. The main features of the amendment are: incorporation of EU directives stipulating the common rules of the internal markets with electricity and gas, changes regarding the opening of electricity and gas markets, the obligation of legal separation of the functions of transport, transmission and distribution from non-regulated activities, and precise definition of the competencies of the Ministry of Industry and Trade and the Energy Regulatory Office in the energy sector.

17. Until January 1, 2001, Cesky Telecom had the exclusive right to provide international and long-distance telecommunications fixed-line services while being responsible for the maintenance of the fixed network and the universal service.

18. Figures for 2003 show Cesky Telecom to have a market share of over 95 per cent in the ISDN services provided *via* the public fixed telephony network, and nearly 50 per cent market share in the services provided *via* the public telephony network overall.
19. Statistics on mobile phone penetration indicate that there are approximately 97 mobile telephone numbers per 100 inhabitants (2003 figures, note that one mobile telephone user may effectively have several numbers because of transfers between mobile companies).
20. In 2004, telecommunications services were moved from the 5 per cent VAT rate to the 22 per cent rate. This tax increase was transferred entirely onto customers through price increases.
21. Interconnection charges are regulated by the Czech Telecommunications Office on the basis of long-run average incremental cost.
22. Problems in competition in Internet provision are illustrated by a ruling by the competition authority that Cesky Telecom abused its position during much of 2002.
23. The use of the cable-TV network for the Internet is as yet limited because the cable network is not very large, however other transmission formats are coming onto the retail market, for example EDGE and WiFi.
24. Renewable energy resources are typically more expensive in terms of production and transmission. To avoid this being reflected in higher prices (the Ministry of Industry and Trade aims for 5 per cent of energy production to come from renewable resources in 2005 and 15 per cent by 2030) the retail price of renewable energy will be subsidised and funded by higher prices for the transmission of electricity from all sources.
25. Domestic gas production provides only about one per cent of supply.
26. The Czech gas market incumbent, Transgas, was privatised in the end of 2001, along with the state's share in eight gas distribution companies, to RWE Gas. A merger of Transgas with RWE Gas AG in 2002 was approved by the Czech Competition Office on the condition to divest its upstream interest in MND.

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Annex 4.A1

Registration of a company in the commercial register*

A company comes into existence by registering in the Commercial Register maintained by the competent Regional Court. Consequently, it may commence its business activities only after its registration. Prior to that, it may only perform activities related to the incorporation of the company (*e.g.* leasing premises for its registered office). The statutory body of the company must apply to the Commercial Register to register the company within 90 days from the date *i*) when the company was founded or *ii*) when the company's trade licenses were issued.

The following documents must be attached to the application:

- documents showing the valid incorporation of the founder and the power of its representatives to act on its behalf, not older than three months;
- incorporation documentation, *i.e.* founder's deed or memorandum of association;
- specimen signatures of directors;
- evidence that the company's basic capital was fully paid up (usually shown through a bank statement);
- residence permits of foreign directors;
- a statement of trustworthiness signed by each director and member of the supervisory board;
- extracts from the criminal registry for each proposed director and supervisory board member;
- company trade licenses;
- evidence of a title (ownership right or lease agreement) for the premises where the registered office of the company will be situated;
- powers of attorney for any person to be registered in the Commercial Register in relation to the incorporation of the company (*e.g.* executive officers).

* Reproduced from the CzechInvest website.

Table 4.A1.1. **Steps in commercial registry**

Foundation deed		Bank account basic capital		Trade certification	
• Name and seat • Partners specification • Business activity • Capital • Statutory body • Company bylaws (a.s.)	→	Minimum CZK 200 000 (s.r.o.) CZK 2 000 000 (a.s.)	→	Foreigners must obtain: • Residence permit • Proof of fluency in Czech language for responsible representative • Proof of impeachability of character	→
Notary office		Czech or foreign bank registered in the CR		Trade licensing office	
Commercial registration		Tax registration		Investment	
Identification number IC	→	• Required within 30 days of comm. registration • VAT depends on turnover	→	• Full repatriation of profits guaranteed	
Regional court		Financial authorities			

Source: CzechInvest.

Annex 4.A2

Targeted measures to attract FDI: lessons from international experience

A recent OECD assessment of policies and incentives for attracting foreign direct investment provides a useful checklist for assessing fiscal FDI incentives (OECD, 2003b). Broadly speaking, the assessment of practice across countries voices concerns that while targeted FDI measures such as fiscal derogations, grants, job training, infrastructure subsidies and R&D support can play a useful role in growth strategies, targeted FDI incentives can be an expensive policy choice. General measures to improve the regulatory environment for business can often be cheaper and have more sustainable impact. The assessment also finds that targeted FDI measures often get chosen over alternatives because of insufficient broad economic assessment of the policy options through cost benefit analysis and evaluation. Inadequate cost-benefit analysis is also cited as a problem among lower level choices about what specific areas and projects to target with FDI measures. The analysis suggests a number of measures to help tighten discipline in FDI policymaking and increase the use of economic criteria, such as the setting of output criteria, time limits for projects, and *ex post* assessment of policies.

Annex 4.A3

Credit registers of enterprises

Credit registers allow banks exchange information on the amount and quality of their clients' debts. Two credit registers were launched in the Czech Republic in 2002.

In 2002 the CNB launched the **Central Register of Credits**. The Register contains information on loans and other balance-sheet and off-balance-sheet obligations of corporations and non-incorporated entrepreneurs. All banks (including branches of foreign banks) as well as the Czech Consolidation Agency must provide data. The database is now widely used by the banking sector. Each entry includes information on the type, purpose as well as the value, maturity etc. of the loan; auxiliary information on the industry category of the business is also included. Each bank receives a monthly report on credit commitments of all its clients and on-line enquiries can be submitted for own and external clients. The register contains information on about 250 000 debtors. The Register's administrators are preparing indicators of debt by industry, sector and size of the company, to help creditors assess aggregate trends and assist in lending to businesses without a credit history.

The **Czech Banking Credit Bureau** is a company owned by five founding banks that runs a commercial register of the loans to households and non-incorporated entrepreneurs. The register functions since mid-2002. Currently, it contains entries from 12 banks and building societies, covering the financial situation of about 2.5 million individuals.

A non-banking register of client information is being developed also on a commercial basis, and will collect information from leasing companies, credit-card and consumer-credit providers, mobile-phone operators, etc. This registry will start operating in the first half 2005.

Annex 4.A4

Regulation of network industries

	Name of incumbent	State ownership of incumbent	Privatisation completed	Privatisation outlook	Restrictions on the number of competitors allowed to operate	Main competitors	Vertical/ horizontal separation (network ownership and control)	Pricing regulation	Regulator
Electricity									
Production	CEZ	67.6%	32.4% sold on capital markets	No privatisation planned before 2007	No	Energeticke centrum Kladno; Elektrarny Opatovice; Sokolovska uhelna	Vertical separation of the network (initially controlled by CEZ)	No	Energeticky regulacni urad
Transmission (high-voltage grid)	CEPS	100%	No		Yes	None	Separated from production	Transmission tariff set by the regulator	Energeticky regulacni urad
Distribution (low-voltage grid)	Regional distributors (5 out of 8 owned by CEZ)	0% (direct ownership)	Privatised	Not applicable	Yes	CEZ (owns 5 distribution companies; E-On (2), RWE(1)	Legally separated from production and transmission, 5 distribution companies out of 8 are under control of CEZ	Distribution tariff set by the regulator	Energeticky regulacni urad
Sales	Strictly speaking, there is no incumbent, but CEZ has a strong interest in the sector *via* ownership of some distribution companies	–	Not applicable	Not applicable	No			Price caps on households and customers connected to low-voltage network	
Gas									
Transmission and distribution	Transgas (RWE)	0%	Yes	Not applicable	No	None	No separation	Price caps	Energeticky regulacni urad
Heat	Local monopolies		Yes	Not applicable	No			Cost-based	Energeticky regulacni urad

Regulation of network industries (*cont.*)

	Name of incumbent	State ownership of incumbent	Privatisation completed	Privatisation outlook	Restrictions on the number of competitors allowed to operate	Main competitors	Vertical/ horizontal separation (network ownership and control)	Pricing regulation	Regulator
Telecommunications									
Fixed line	Cesky Telecom	51%	27% in 1994 to TelSource (a consortium of KPN and Swisscom) – this owner sold its stake in 2003	Privatise the state stake in 2004-2005	No	Allatel;Tele2; Contactel; GTS CZECH	Cesky Telecom owns local loops	Price caps on Cesky Telecom's charges to final users, cost-based pricing of interconnection to Cesky Telecom's fixed-line network	Cesky telekomunikacni urad
Mobile	Strictly speaking, there is no incumbent, but Cesky Telecom has a strong interest in the sector *via* control over one mobile-phone operator	–	Not applicable	Not applicable	Yes (3 licenses)	Eurotel (Cesky Telecom), T-Mobile, Cesky mobil		Cost-based pricing of interconnection	Cesky telekomunikacni urad
Data and Internet	Strictly speaking, there is no incumbent, but Cesky Telecom has a strong interest in the sector as an owner of the fixed-line network	–	Not applicable	Not applicable	No	Czech On Line; Contactel; Tiscali	Main infrastructure owned by Cesky Telecom,main competitors built their own infrastructure	Cost-based pricing of interconnection	Cesky telekomunikacni urad
Post	Ceska posta	State company	None	None	Yes monopoly in defined services	Messenger; DHL; UPS	None	Price caps	
Railways									
Infrastructure	Railway Infrastructure Administration	State organisation	No	No		None	Separated	Price-caps	Ministry of Finance
Services	Ceske drahy	100%	No		No	None		Cost-based	Ministry of Finance

Regulation of network industries (*cont.*)

	Name of incumbent	State ownership of incumbent	Privatisation completed	Privatisation outlook	Restrictions on the number of competitors allowed to operate	Main competitors	Vertical/ horizontal separation (network ownership and control)	Pricing regulation	Regulator
Air travel	CSA	56.4% + 34.6% in Czech Consolidation Agency	34.6% sold to Air France who sold it back to Czech Consolidation Agency		Yes			No	

Source: Czech Government.

5. Improving the reallocation of labour

As described in Chapter 1, problems in the functioning of the labour market are becoming increasingly apparent. Though the employment rate is about 65 per cent and still slightly above the OECD average, it has declined substantially from the very high rate characterising the communist regime, and could well decline further as economic restructuring proceeds. Real convergence of the economy could be speeded up through reversing this trend decline and further activation of labour reserves. The unemployment rate is roughly 8 per cent (twice this level in some regions) and half of the unemployed have been out of work for more than a year. In part, the unemployment reflects economic restructuring that is an inevitable part of the growth process. But, the unemployment also reflects problems in policies: the benefit system creates poverty traps for the unemployed; mobility is reduced by problems in the rental market for housing; the tax wedge on labour is high; employment protection legislation makes the labour market inflexible; state payouts encourage sick leave; and wage setting is affected by administrative extensions. Workforce skills are also less than ideal; although the share of the population with secondary-level education is high, the share of those with degree-level tertiary education is still very low in international comparison, and the education system reacts relatively slowly to changing labour market conditions. An even more serious issue at the other end of the skill distribution is the widespread exclusion of the Roma population from acquiring labour market relevant skills.

This chapter first focuses on labour supply issues, with an examination of the role of the welfare system, issues in labour mobility and an overview of active labour market policies. The chapter then examines the tax wedge, employment protection legislation, and wage setting. Finally, the main issues in skills and education levels are reviewed. The policy recommendations are summarised in Box 5.1.

Tackling inactivity traps and increasing mobility

Issues related to the Czech welfare system

Background

Czech welfare has three main systems of state help: social insurance, state social support and social assistance (Box 5.2, Table 5.1 and Annex 5.A1). The social

Box 5.1. Policy assessment and recommendations for the labour market and workforce skills

Addressing inactivity traps

- The plans to **strengthen financial incentives for job-search** and for stricter control are welcome and the authorities should not hesitate in implementing reforms. As a general strategy, the reform should also allow a widening of the gap between the family minimum subsistence amount and the average wage in order to reduce poverty traps. In addition a general strengthening in the application of rules and conditions across all benefits is needed.
- The intended introduction of an option of **joint income taxation** would increase the incentives to take up work in families that do not have any earned income. In designing the tax schedule for joint income taxation, the authorities should ensure that it does not create disincentives for second earners to take up work, in particular through interaction with the transfer system.
- In a welcome move, the amendment to pension-insurance act will **allow pensioners to receive work income** without losing pension income (except in the case of early retirement).
- Attention should be paid to definition and thorough implementation of the **access rules to disability pensions** to limit their use as a route out of the labour market.
- Developments in **youth unemployment** should be closely monitored to examine the impact of the change in eligibility for benefit, with a view to establishing whether this measure is sufficient.
- The government intends to increase the obligation on doctors to **make responsible decisions when granting sick leave** and to cut employers' social security contributions by 1-2 percentage points in exchange for the employer being responsible for payments the first two weeks of sickness benefits.

Reforming the rental market to increase mobility

- Steps need to be taken to gradually **free-up frozen rents** and establish a unified rental market, as this will help mobility in the Czech labour market. In the process of rent liberalisation, the government needs to ensure welfare concerns are addressed through adjustment of the benefit system. Public support to housing should be rebalanced from encouraging ownership towards supporting rental of low-income households.

Active labour market policies

- **ALMP programmes** need to be more systematically evaluated and a broad shift to greater use of activation schemes is desirable.
- The authorities should monitor the cost-effectiveness of the **First Opportunity scheme** and whether labour offices have the capacity to deliver these additional services.
- There is perhaps room for more radical change in ALMP; the authorities could consider the introduction of **private placement systems**, similar to those that have been developed in the Netherlands and Australia.

Box 5.1. Policy assessment and recommendations for the labour market and workforce skills (*cont.*)

Tax wedge

- Measures to further **level the tax treatment of income from dependent employment and self-employment** are needed in order to reduce the room for tax evasion.
- Tax expenditures that **cut the non-wage cost at the lower end** of the market would be more welcome than the proposal to cap social-security contributions.
- In addition, further measures to **enhance the efficiency of tax collection** (notably through labour controls) should be implemented.

Levelling employment protection legislation

- **Lighter rules on redundancy** for those on permanent contracts would help the labour market work more efficiently. The government's intention to introduce a major reform to the labour code to liberalize the market is therefore welcome.
- Abuse of **alternative work contracts** should be dissuaded by making standard contracts more lightly regulated and by appropriate action on the tax wedge. At the same time direct measures to prevent abuse of alternative work arrangements may be needed.

Wage setting

- Rather than planning to increase administrative extensions in wage setting, the authorities should instead be aiming to cut them back to **leave room for more flexible individual or enterprise-level wage bargaining**.

Improving skills

- In secondary and primary education there is very little by way of **output measurement and benchmarking** and this should be remedied.
- The quality of education should improve with the recent **adoption of standardized secondary-school leaving exam** (*maturita*). It will also help both employers assess qualifications and help the assessment of students applying for post-secondary education courses.
- In reforming the financing system of regions, the government should also ensure that the new system will not affect educational equity by reducing **accessibility and quality of education for disadvantaged groups**, such as Roma children.
- The **introduction of fees in higher education** that at least partially reflect the cost of tertiary courses would promote a more economic approach to higher education by students and universities. To ensure accessibility of tertiary education, the introduction of tuition fees should be accompanied by a system of student loans. In order to reduce the risk borne by individuals investing in their education, the repayment of such loans should be made income-contingent.

Box 5.1. **Policy assessment and recommendations for the labour market and workforce skills** (*cont.*)

Improving Roma integration

- Further **integration of the Roma population** is needed, not only to address social concerns but also to help mobilise labour resources.
- A new draft school act proposes to take a positive step by **eliminating the special schools** to which most Roma children are sent. However, the elimination of the special schools should be complemented by steps to increase access to early childhood education.
- The use of properly trained Roma **teaching assistants** and adaptation of curricula and teaching methods should be extended.
- The programme of **financial support to Roma students** has been reasonably successful in encouraging enrolment in secondary schools. The possibility of providing scholarships for socially disadvantaged students in tertiary education should also be considered.
- In a welcome move, the government is currently working at **designing an agency** that would implement projects to provide housing and jobs to combat social exclusion of the Roma population.
- Finding a solution to the problem of **lack of information about the Roma** would be a considerable help to policymakers. An anonymous mapping of Roma communities similar to that carried out in Slovakia providing information on basic demographic features, infrastructure and housing, socio-economic integration, and projects undertaken may be a good solution.

insurance system includes unemployment, sickness, disability and old-age benefits. The state social support system provides general financial assistance to both the employed and non-employed for housing, raising children and other forms of family support. The benefits are not dependent on labour market status, but some of them are income-tested. The social support and insurance systems are backed up by social assistance schemes that provide a safety net for individuals or households with insufficient income.[1] In general, the socially acceptable minimum income is defined by the *minimum subsistence amount* (MSA). The MSA varies according to household characteristics. Strictly speaking it is only a guide to welfare payout and there is therefore room for discretion in the amount paid.

The MSA (Table 5.2) is central to the state social support and social assistance benefit system, representing the minimum individual or family income that is considered necessary to fulfill basic needs. In addition, multiples of the MSA serve as limits for income tests throughout the welfare system. Households with

Box 5.2. The social protection system

Social insurance covers situations of unemployment, in-work sickness, disability and old age. Contributions are defined as a percentage of gross earnings and are divided between the employee and the employer. Benefits are paid in relation to previous net income, but the formulae for computation of the benefits entail significant redistribution.

State social support addresses the financial needs connected with family life. Most of the benefits are income-tested. Support covers child benefits, parental allowances for parents taking full-time care of their children, social family allowance for low-income families with children, housing allowance for low-income families and some other benefits (Table 5.1).

Social assistance provides safety net income. If the income of the concerned person or family, including all other state support benefits, pensions or sickness insurance benefits, does not reach a state-defined minimum (the MSA), and eligibility conditions are met (Table 5.1), the gap is typically matched by social assistance. However, in reality, the after-benefit income may be both above and bellow the MSA. The MSA (Table 5.2) is constructed from two components, one setting the amount for the basic personal needs of each member of the household (personal needs) and the other setting the amount for the needs of the household as a whole (household needs).

net income (including other relevant state support benefits) below the MSA can receive the social assistance benefit. Eligibility for social assistance requires prime-age adults to be registered with the public employment office and to be available for work. The means test implies that, in principle, all avenues to increase household income should be exhausted before social assistance is granted. Although the benefit is not automatically awarded and eligibility requirements apply, the size of the benefit, in practice, mostly at least equalizes the family income to the level of the MSA.[2] The value of the MSA is set by the Ministry of Labour and Social Affairs. It is worth noting that the amounts do not vary regionally as the costs of living are not assumed to differ substantially.

Unemployment insurance is not especially generous in international comparison (Annex 5.A2). While on unemployment insurance, individuals may also be eligible to benefits under the social support system and household incomes may also get topped up through the social assistance. Recent legislation (Box 5.3) focuses on unemployment benefits, making eligibility to benefits more stringent in general but also making targeted increases in generosity. For example, the new legislation weakens the incentives for older workers to look for work as the benefit period was extended.

Table 5.1. **Low-income assistance and family benefits**

Scheme	Key eligibility conditions	Maximum length of benefit	Main benefit amount	Funding arrangements
State social support				
Child allowance	Have a child fulfilling obligatory school attendance or a dependent child under 26 years old, and a family income not exceeding 3 times the family MSA in the last year.	No	A percentage of the child's personal needs depending on last years' family income. – 32 per cent if family income below 1.1 times the family MSA – 28 per cent if between 1.1 and 1.8 times the MSA – 14 per cent if between 1.8 and 3 times the MSA	State budget
Parental allowance	Until the child is 4 years old (7 years in the case of child's long-term incapacity); full-time and regular care. The limit imposed on income was abolished in 2004, but the entitlement is lost if the child attends a child-care institution for more than five days in a month.	No	1.54 times parent's personal MSA (about 50 per cent of the minimum wage)	State budget
Housing benefits	Accrues to the owner or tenant of a flat, who is permanent resident, if the family income does not exceed 1.6 times the family MSA.	No	A share of the defined household needs that decreases with the relevant family income including other state social support benefits.	State budget
Social family allowance	Taking care of at least one dependent child; family income including other state social support benefits does not exceed 1.6 times family MSA.	No	A share of the defined child's personal needs that decreases with the family income. Level of benefits depends on state of health, number of family members, children etc.	State budget

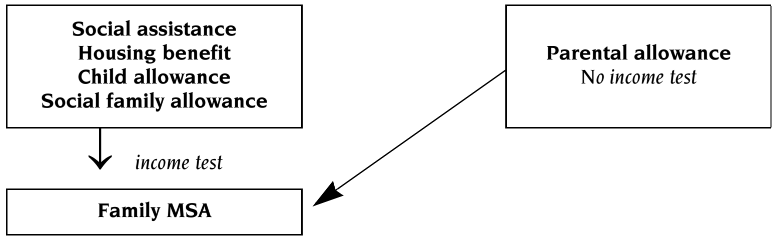
Table 5.1. **Low-income assistance and family benefits** (*cont.*)

Scheme	Key eligibility conditions	Maximum length of benefit	Main benefit amount	Funding arrangements
Unemployment insurance benefit	12 months of work in the last 3 years; 6 months of contribution; no income from work.	6 months; persons close to the retirement age are entitled to another 3 to 6 months of benefits	50 per cent in the first three months of the last earned income net of tax and social security contributions up to a maximum of 2.5 times the MSA. 45 per cent after the third month, 60 per cent of previous earning during retraining (up to a maximum of 2.8 times the MSA).	State budget
Social assistance benefits (in accordance with Social Need Act)	Insufficient income and inability to increase it. The prime-age unemployed have to be registered with the public employment service. They are required to take up an available work opportunity, to make use of own property, and to see to school attendance of their children.	No	Level of benefit depends primarily on fulfilling the eligibility conditions and the difference between MSA and family income; further determinants are expenditures on living, health status, own property, etc.	State budget

Source: Ministry of Labour and Social Affairs.

Table 5.2. **Definition of minimum subsistence amount (MSA) and income tests for low-income assistance**

Monthly, CZK



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Sum of personal requirements + household requirement

Amounts needed to insure sustenance		Amounts needed to assure household	
For dependent children		Household with	
To the age of 6 years	1 690	1 member	1 780
From 6 to 10 years	1 890	2 members	2 320
From 10 to 15 years	2 230	3 or 4 members	2 880
From 15 to 26 years	2 450	5 and more	3 230
For other persons	2 320		

Source: Ministry of Labour and Social Affairs.

When unemployment extends beyond six months, provided eligibility conditions are met, household income will almost always be at least at the MSA through a combination of state social support and social assistance. About 7 per cent of households are estimated to be receiving social assistance (2001 figures).[3] For unemployed families, state social support accounts for most income with social assistance playing a smaller role. For example an unemployed family with two children gets a majority of its income from state social support (Figure 5.1).

Poverty traps for families

Successive *Surveys* have emphasized that there are poverty traps in the welfare system, particularly for families. Due to the minimum income *de facto* guaranteed by MSA, taking up work often does not substantially change household income.[4] For instance, a worker with a non-employed spouse and two children, starting a job at two-thirds of the average-production wage will see family income increase by less than ten per cent (Table 5.3). Further down the earnings ladder, job offers at the minimum wage, and to a certain level above it, do not imply any increase in household income because of the income guaranteed by the MSA (Figure 5.2, lower left panel). In short, the tax-benefit system means there are high

Box 5.3. The new Employment Act

A new employment law has been in force since October 2004. It regulates the implementation of state employment policies, including rules for job placement and entitlement for unemployment benefits, employment of workers with disabilities and employment of foreigners. The new law also defines tools for active policies (Box 5.4) and assigns duties for labour inspection of both Czech and foreign workers.

The main changes introduced by this law are:

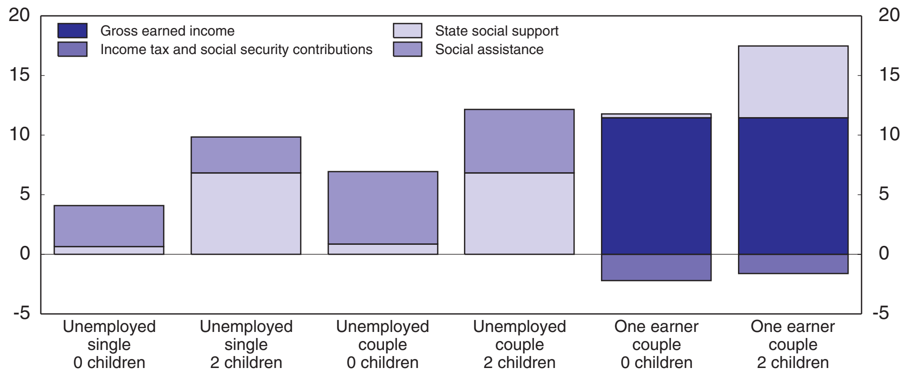
- Stricter registration and reporting requirements with labour offices and conditions for provision of unemployment benefits.
- The six-month standard duration of unemployment benefits has been prolonged to nine months for those older than 50 years and to twelve months for those above 55 years of age, conditional on 25 years of participation in pension insurance (30 years for the twelve-month extension).
- The amount of unemployment benefit is to remain the same for the first three months of unemployment (at 50 per cent of previous net earnings) but has been increased from 40 to 45 per cent thereafter, with the maximum amount remaining 2.5 times the personal minimum subsistence amount (Table 5.2).
- "Partial unemployment" has been introduced, in which the unemployed can earn up to a half of minimum wage (working maximum of a half of legislated fixed working time) and still get unemployment benefit.
- Principles and conditions of active labour market policies have been re-defined.
- With EU accession, all EU citizens and their families are granted the same legal status on the Czech labour market as Czech citizens. Employment of other foreigners is subject to a labour market test, and its control is assigned to labour offices (Chapter 6).

average effective tax rates facing families with children that often lock them into inactivity. The situation is similar, though the disincentives are somewhat weaker, for single parent families and also childless unemployed couples. Single persons and spouses of employed workers do not face such significant tax-benefit disincentives to take up jobs.

Although social assistance benefits are conditional on availability to work and sanctions can be imposed, checks and enforcement are not very strict. In addition, state social support is not conditional on active job search. As a result many beneficiaries do not look for work and remain for prolonged periods on benefits, often augmenting income by working in the grey economy. Indeed, Renooy *et*

Figure 5.1. **Sources of monthly income of families in long-term unemployment, 2004**[1]

Thousand CZK



1. Unemployed: no income from work, not eligible for unemployment benefits, eligible for social assistance. One-earner couple: employed spouse earns 67 per cent of average production worker wage. It is assumed that household income bellow MSA is topped up to the level of MSA by a social assistance benefit.

Source: OECD computation.

Table 5.3. **Average effective tax rates (AETR) for transitions from full-time unemployment to full-time employment**[1]

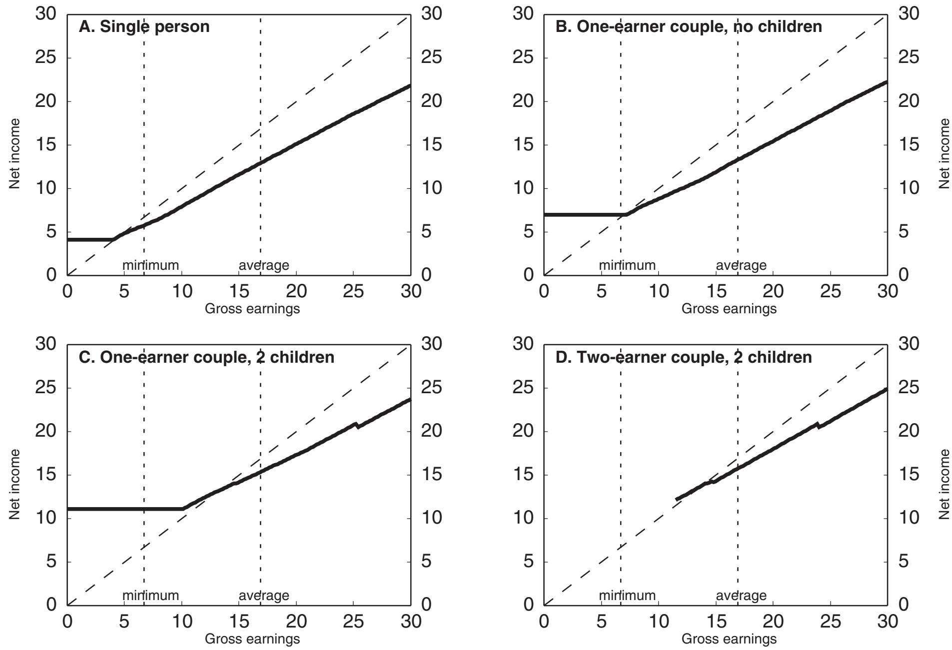
	Household type	Earnings as a share of average production wage in per cent				
		33	50	67	100	150
1	Single	80.6	67.8	57.1	47.5	41.9
2	Single parent 2 children	100.0	89.6	76.9	64.7	54.9
3	One earner married couple, no children					
	1st spouse = inactive, 2nd spouse…	100.0	88.3	76.3	62.1	51.4
4	One earner married couple, 2 children					
	1st spouse = inactive, 2nd spouse…	100.0	100.0	91.2	74.2	62.5
5	Married couple, no children					
	1st spouse = 67% APW, 2nd spouse…	28.8	27.7	27.2	27.5	28.5
6	Married couple, 2 children					
	1st spouse = 67% APW, 2nd spouse…	32.6	30.6	29.4	31.1	30.5

Note: AETR = 1 – (change in net income/change in gross income). AETRx% is that part of additional gross earnings that is "taxed away" when moving from unemployment (full-time with previous earnings of x% APW) to full-time employment (with current earnings of x% APW). AETRs are measure at the household level and take into account increasing taxes and contributions as well as reduced benefits. Weekly working hours are 0/40 for the out-of-work/in-work situations. For household types 3 and 4 the first spouse is inactive with 0 earnings. The "x%" therefore relate to the second spouse only. For household types 5 and 6 the first spouse's earnings are held fixed at 67% of APW. The "x%" therefore relate to the second spouse only.

1. Czech Republic 2002.

Source: OECD Tax-benefit database.

Figure 5.2. **Gross earnings and net income, monthly, 2003**[1]
Thousand CZK



1. Net income is gross earnings plus social benefits less tax. One-earner couple: a couple with one spouse not in the labour market. Two-earner couple: a couple with one spouse earning 67 per cent of the average production wage (CZK 11 500). Children are aged 4 and 6 years.

Source: OECD, Tax-Benefits Database.

al. (2004) list "people without proper employment (registered unemployed, housewives) receiving social benefits, social assistance or pensions" as one of four main groups of undeclared workers.[5]

Czech policymakers recognise that the system of minimum-income guarantee creates key problems for incentives to search and accept work. Indeed, there are plans for reforms. The main measures foresee a new act on "material need" and an amendment to the act on the minimum subsistence amount. While details are yet to be finalised, the measures look set to make a number of positive steps. One proposal is to strengthen job-search and income disclosure requirements for eligibility to the social assistance. Also it seems likely that a greater variation in benefits will be introduced. In addition it is intended to no longer have a 100 per cent withdrawal of social assistance for earned income,[6] thus reducing the high effective tax rates on shifting from unemployment into work. The plans to strengthen financial incentives for job-search and for stricter control are welcome and the authorities should not hesitate in implementing reforms. As a general strategy, the reform should also allow a widening of the gap between the family MSA and the average wage. In addition a general strengthening in the application of rules and conditions across all benefits is needed.

There are also plans, as part of the so-called second-round fiscal reforms (Chapter 2), to improve incentives through changes in family taxation. Three proposals are of note:

- An option of joint income taxation of spouses, conditional on the presence of children. This will increase incentives for the first job-taker in families that do not have any earned income, by reducing average and marginal effective tax rates. Two earner couples who find it more advantageous to remain under separate taxation will be able to do so. However, in designing the tax schedule for joint income taxation, the authorities should ensure that it does not create disincentives for second earners to take up work, in particular through interaction with the transfer system.
- A switch in child benefit from a tax allowance to a flat tax credit. The tax credit would compensate low-income households who cannot make full use of tax allowances. This move should help low-income households and should slightly increase participation incentives *via* decrease in the average effective tax when taking up work.
- A tax bonus for low-wage workers. The tax bonus, being available only for those in work, will reduce the tax burden at the lower end of the wage distribution.

Older workers' disincentives to continue working have been reduced

Older cohorts represent the biggest reserve of potential labour supply and tapping into this could increase the labour force participation rate by perhaps five percentage points (Chapter 1). Labour force participation rates are close to 90 per cent for 50-year-old men and women, but decline steeply towards retirement age. The good news is that employment rates of older-age workers have been increasing in recent years, reflecting earlier reforms. As of 2004, the routes to early retirement have been narrowed further, with the abolition of one scheme and a schedule implemented for phasing out another scheme by 2006. However the recent prolongation of unemployment benefit for those over 50 (Box 5.3) has somewhat diluted the thrust of policy, though the unemployment insurance duration period remains relatively short in comparison with other OECD countries. Also, the retirement age is set to increase to 63 by 2013, but this will still be rather low in international comparison and low from the point of view of the sustainability of the pension system (Chapter 7).[7]

The analysis in Chapter 7 recommends measures to remove remaining incentives to retire early. This includes further tightening access to the early retirement scheme and adjustment to the rate at which pensions are increased through working beyond the standard retirement age. Until recently, pensioners were not allowed to take up work during their first two years of pension. In a welcome move, the changes in the Pension Insurance Law have allowed pensioners to receive work income without losing pension income (except in the case of early retirement). This broadens the options for working beyond the standard retirement age and for this reason should help improve labour force participation.

Disability schemes are possible pathways for early labour-market withdrawal, if access is insufficiently controlled. Indeed, inactivity in the pre-retirement age because of illness or disability is very high in the Czech Republic compared to other OECD countries (OECD, 2004a), which points to a possible abuse of the schemes.[8] The incentives for abuse are particularly strong for low-income workers, as the benefits imply rather high replacement rates. While beneficiaries of partial disability benefits have their work income limited, those granted full disability are allowed to work without any limit on earned income (Table 5.4). Therefore, attention should be paid to definition and thorough imple-

Table 5.4. **Disability pension schemes**
Financed from social security contributions

Scheme	Key eligibility conditions	Main benefit amount
Full disability	Permanent reduction in the ability to work by at least 66 per cent and a minimum contribution period (depending on age, maximum 5 years)	Monthly: CZK 1 310 plus a percentage of previous monthly earnings (decreasing with their level) for each year of contribution (years remaining until retirement age are counted as years of contribution)
Partial disability	Permanent reduction in the ability to work by at least 33 per cent and, except in case of a work accident, a minimum contribution period (depending on age, maximum 5 years); earned income should not exceed 80 per cent of adjusted average previous earnings	Same calculation as full-disability pension with half of the variable amount if the beneficiary's income is less than 66 per cent of adjusted average previous earnings; a half of this sum if the beneficiary's income is between 66 and 80 per cent of adjusted average previous earnings.

Source: Ministry of Labour and Social Affairs.

mentation of the access rules to disability pensions to limit their use as a route out of the labour market.[9]

Transition from school to work should be closely monitored

Youth unemployment rates are high (Chapter 1). Though high unemployment rates among the young are typical, reflecting the difficulties of getting a first foot on the jobs ladder, in the Czech case the welfare system has provided additional incentives to register as unemployed. Until recently, school-leavers were exempt from the 12-month work condition for eligibility for unemployment benefits and could automatically get 6-month unemployment benefit immediately after finishing school. Thus, school-leavers were often not motivated to get a job on leaving school. The new Employment Act applies the standard work-history condition for young people to get unemployment benefit, though it will allow temporary jobs and in-job training as part of schooling to count in the assessment of work history. Developments in youth unemployment should be closely monitored to examine the impact of the change in eligibility for benefit, with a view to establishing whether this measure is sufficient.

In-work sickness benefits

Despite improving health of the population (as documented in the previous *Survey*), the productive time lost on sick leave was continually increasing until end 2003 when it accounted for almost 7 per cent of working time, owing mainly to the increasing duration of average sick leave. The Czech sickness insurance system is similar to those in other OECD countries: eligibility requires a medical certificate and the benefit amount varies according to the length of sick leave and previous income (Annex 5.A3). However, the system has problems. First, when a person takes sick leave, the state bears all the payments to the employee, thus giving little incentive for employers to monitor sick leave. Indeed it is thought that employers sometimes encourage sick leave as means of labour hoarding. Second, the employers have few tools to sanction abuse and the control from authorities seems insufficient. The motivation for shirking is highest for low income workers (the benefit being capped at 60 per cent of the average wage) or workers likely to be laid off (employment protection legislation precludes dismissal of workers on sick leave).

In 2004, steps have been taken to try to tackle part of the problems in sickness benefit. As part of fiscal consolidation measures, the government cut the amount of the benefits in the first two weeks of sickness. This measure brought about an overall fall in the sickness rate bellow 6 per cent by September 2004. This drop has contained a significant decrease in the number of sick leaves but also a further strong increase in their average length. This suggests that these steps have been insufficient. Indeed, the government plans to amend the Sickness Insurance Act and to increase the obligation on doctors to make responsible decisions, and to cut employers' social security contributions by 1-2 percentage points in exchange for the employer being responsible for the first two weeks of sickness benefits.

Labour mobility is low

As Chapter 1 describes, unemployment is strongly regionalised, in part reflecting weak labour mobility. One important factor hindering mobility is persistent friction in housing, particularly in the rental market. Indeed, a study by the Ministry of Finance estimates that friction in the housing market is responsible for at least 2 percentage points of the unemployment rate and represents a loss of about 2.4 per cent of GDP.[10]

The key problem in the rental market is that many rents remain *de facto* regulated and well below market rates. The *de facto* regulation applies to housing that was previously state- or municipality-owned and has since been sold off to private landlords, as well housing still owned by the municipalities.[11] Rents in these segments of the market were controlled by the government until March 2003, when rent regulation was ruled out by the Constitutional Court. Nevertheless, the rents have effectively stayed frozen because the existing regulation has not been replaced. These frozen rents are estimated to apply to about 95 per cent of rental apartments,[12] which accounts for more than one quarter of households. The incentives for tenants benefiting from these rents to stay put are large: rents on the open market are reckoned to be, on average, 3½ times the frozen rents and regulated rent is secure as long as the tenant maintains the lease.[13] For example, frozen-rent apartments will often be kept unoccupied with families aiming to keep them for when children want to leave home.[14] Steps need to be taken to gradually free-up the frozen rents and establish a unified rental market, as this will help mobility in the Czech labour market.

Government support for home ownership may also be restricting mobility. The government provides tax allowances on interest payments of mortgages and subsidising interest rates on deposits and credits of housing saving schemes.[15] Although this helps to relieve some of the tension in the rental market and thus ease mobility for some households, home ownership in itself tends to discourage mobility because of high transaction costs connected with the sale of property financed by mortgages.

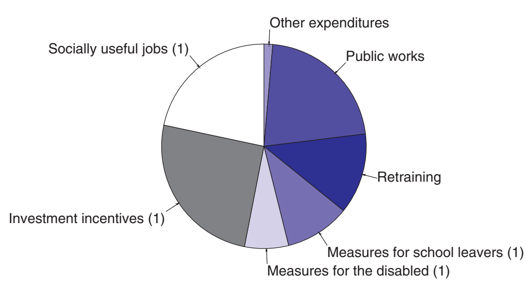
These problems have been recognised by the authorities but so far nothing has been implemented. In early 2004, members of Parliament failed to push through a proposal that would introduce 10 per-cent annual increases in regulated rents over the next three years. One reason for the unwillingness to reform is because rent deregulation would increase living costs for low-income households. However, many high-income households are also tenants of regulated-rent apartments and so the situation is an inefficient way of ensuring minimum standards of welfare anyway (Lux and Sunega, 2003). In the process of rent liberalisation the government needs to ensure welfare concerns are addressed through adjustment of the benefit system. Public support to housing should be rebalanced from encouraging ownership towards supporting rental of low-income households.

Active labour market policies should focus more on placement and in-house training

Active labour market policy (ALMP) remains rather too focused on the subsidisation of private-sector job creation and public works and should be more weighted towards activation schemes (Figure 5.3 and Box 5.4). Total spending on active labour market policies is equivalent to about 0.2 per cent of GDP, which is relatively low compared with other OECD countries. Spending on retraining occupies a relatively small share of expenditure, though the number of people going on retraining programmes is quite high. About 17 per cent of the unemployed were in ALMP schemes in 2003, and about half the schemes attended involved retraining. Enrolment is higher among the young where 30 per cent of those unemployed participated in either retraining or in-job training positions.[16]

A study commissioned by the Labour and Social Affair Ministry (Sirovátka *et al.*, 2003b) finds that ALMPs aiming at creating jobs have become better

Figure 5.3. **Distribution of expenditure on active labour market policies, 2003**
Total spending 3.2 billion CZK



1. Employer subsidies.
Source: Ministry of Labour and Social Affairs.

Box 5.4. Active labour market policies

Active labour market policies are specified in the new Employment Law. The schemes include:

Retraining in accredited institutions provided to unemployed with inadequate labour market skills. The cost of retraining is covered by the labour office. In the new law labour offices may also support the training of employees on the basis that this is necessary for the individual to keep their job.

Investment incentives to employers subsidising the creation of new jobs or retraining of new employees in districts where unemployment rate is at, or above the national average. Subsidy amounts are defined by government directives (Chapter 4).

Public works comprise temporary work, mostly in cleaning of public areas or public buildings or work for state institutions, for which a subsidy up to total labour cost can be granted.

Publicly beneficial work positions – subsidised jobs created by an employer after the agreement with a labour office for the unemployed that are classified by the labour office as difficult to place. The total amount of subsidy granted to the employer is limited to 4 to 8 times the monthly average wage per person per year, depending on the unemployment rate in the district and number of jobs created by the employer. This subsidy may also be granted to newly self-employed.

Subsidy for employment of clients in "special care" of the labour office (namely, persons with disabilities, young up to the age of 25, other school-leavers, pregnant women, persons taking care of a child under 15 years of age, persons above 50 years of age, persons unemployed for more than six months and persons with difficult social background). This new subsidy can be provided in the amount up to a half of the minimum wage during three months. Jobs created for in-job training of school leavers and youngsters can be fully or partially subsidised for up to one year.

Support to workers with disabilities. This includes job counselling and training, subsidies for job creation and subsidies to employers where workers with disabilities represent more than 50 per cent of employees. Employers with more than 25 employees are obliged to employ workers with disabilities. Workers with disabilities represent four per cent of employees. Such employers can compensate this duty by buying products or services from other employers who employ mostly workers with disabilities, or by paying to the state budget a 1.5 multiple of average monthly wage per year for each disabled person they do not employ. The subsidy for job creation can amount to 8 to 14 times of the monthly average wage, further recurring support can be provided for wage and operation cost. Funds for employing workers with disabilities are claimable and come under mandatory expenditures of the state budget.

Bridging subsidy for newly self-employed who have been registered as unemployed. This new subsidy can amount to a half of the individual minimum subsistence amount paid during three months.

Transport subsidy. Subsidy for employers who provide daily transport of their employees in the areas not served by public transport. This subsidy can be up to 50 per cent of the cost.

Subsidy for the maintenance of jobs during a change of business activity, when the employer is not able to provide work for employees in the legally stated extent. A subsidy can cover part of the wages (with a cap at half of the minimum wage) for a maximum period of six months.

targeted to the areas most affected by unemployment. In contrast, retraining programmes remain insufficiently targeted, the share of unemployed enrolled in such schemes being similar across labour offices. Retraining schemes also appear unsuited to long-term unemployed, persons over 50 and disabled, who rarely participate in such schemes and, when they do, do not seem to draw clear benefits from them. Reportedly, the scope and quality of ALMP implementation is often limited by insufficient staffing of labour offices; this is even more the case since the introduction of individual action plans (see below). To improve the effectiveness of ALMPs, more systematic evaluation of the various programmes is needed; this is especially relevant in the current context of fiscal consolidation. As yet, existing ALMP programmes are monitored with respect to resources spent, number of participants and number of successfully placed participants. For better evaluation, information on the participants' completion of programmes and subsequent labour market experience should be systematically collected, as already done by many labour offices, and centrally analysed.

New programmes to increase assistance in job search at the individual level are being developed. In 2003, individual action plans for young and old unemployed were tested in some labour offices, and in January 2004, a compulsory programme, F*irst* O*pportunity*, began for all those aged under 26 and unemployed for less than 6 months. For the first two months the programme provides information and advisory services, and after that an individual action plan setting out a time schedule and employment objectives is established. The authorities should monitor the cost-effectiveness of the First Opportunity scheme and whether labour offices have the capacity to deliver these additional services.

There is perhaps room for more radical change in ALMP policy; the authorities could consider the introduction of private placement systems, similar to those that have been developed in the Netherlands and Australia. Private placement could, for example, involve contracting out the placement of specified groups of unemployed (*e.g.* by sector and region) to private or community placement companies. One approach is for local government to be given the responsibility for contracting out placement services. For example in the Netherlands, the central government gives earmarked funds for placement to municipalities. Unused funds have to be repaid while savings on benefits can be kept. However it is important for central government to take a regulatory role, in particular in defining robust measures of performance of the private-placement agencies (Grubb, 2003).

The tax wedge is too high

Tax wedges on labour income are among the highest in the OECD and in particular much higher than in other countries with comparable levels of income thus damping both labour demand and supply. Across all types of household and income levels, a very large share of the wedge comprises social security contributions

(Table 5.5). The same social contribution rate applies to all levels of earnings and there is no cap on contributions. In addition, personal income tax is not very progressive, with rates of 15, 20, 25 and 32 per cent. This rate schedule is among the lowest in Europe and has been undercut only recently by the Slovak flat tax of 19 per cent. Taking into account social benefits as well as the social contributions and personal income tax suggests that more than 40 per cent of labour cost associated with employing a single person goes towards government revenues (Chapter 1).

The high tax wedge on labour also encourages tax evasion. Notably, the use of subcontracts with self employed workers has become widespread. Taxes and social contributions are much lower in self-employment than in dependent employment. As a result, in order to save on labour costs, employers, particularly in certain industries (notably in construction), often ask employees to obtain trade licences and then use subcontracting instead of standard employment contracts. In addition, self-employment is more prone to tax evasion than dependent employment, because of the substantial cost for self-employed of accurate accounting, high monitoring cost for tax authorities of individual record-keeping, and the lack of possibility of cross-checking with other sources which can be used for dependent employees (OECD, 2004b). As a part of its revenue-increasing measures, the government has recently increased the tax burden on the self-employed; social security contributions were raised and a minimum tax was introduced. Though these measures will probably raise revenues, they will narrow the gap between the tax rates of the self-employed and employees by only about two percentage points (*i.e.* about one eighth of the difference) at the level of average wage. Measures to further level the tax treatment of income from dependent employment and self-employment are needed in order to reduce the room for tax evasion and induce the move of those formally self-employed but *de facto* working as employees back to dependent employment.

Tax evasion is also a motivation for grey-sector activity. Grey-sector employment takes a number of forms, including under-declaration of earned

Table 5.5. **Social security and health insurance contribution schedule**

Per cent of gross wage

	Employee	Employer	Total
Health insurance	4.5	9.0	**13.5**
Sickness	1.1	3.3	**4.4**
Old age pension (PAYG)	6.5	21.5	**28.0**
Unemployment	0.4	1.2	**1.6**
Total contribution	**12.5**	**35.0**	**47.5**

Source: Ministry of Labour and Social Affairs.

income by formally employed people (dependent or self-employed), undeclared parallel jobs, or undeclared employment of unemployed persons drawing on social benefits. Such strategies to evade taxation increase the burden on non-evaders and contribute to weaken official labour demand and supply.

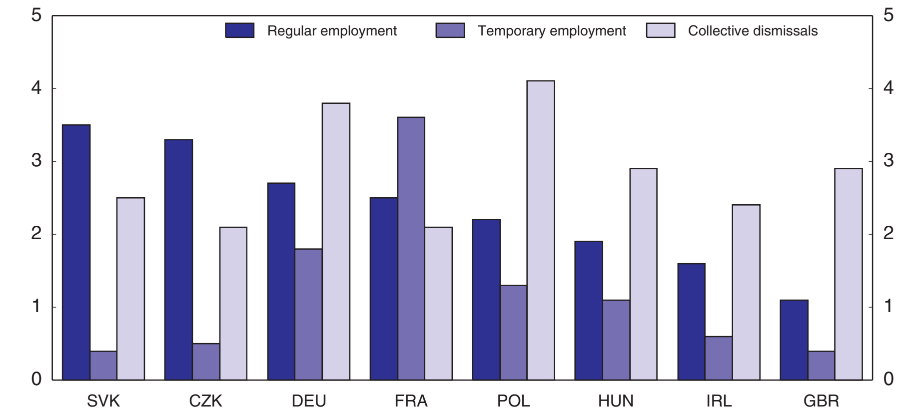
While there is a clear need to reduce the tax burden, the room for manoeuvre is constrained by the need to bring down the budget deficit. As mentioned in Chapter 2, the government intends to introduce a ceiling on social-security contributions at the level of five times the average wage. This move will have positive incentive effects at the very-high-income end of the labour market and establish more parity with the treatment of related benefits that are also capped. However, tax expenditures that cut the non-wage cost at the lower end of the market would be more welcome than those that cut the wedge for high income earners as these also help tackle the problem of unemployment. For example, decreasing social security contribution at the lower end of the market would reduce the cost of employing workers whose reservation wage are influenced by unemployment and welfare benefits. However, in terms of tackling tax evasion and grey-sector activity, further measures to enhance the efficiency of tax collection (notably through labour controls) should be implemented.[17]

Employment protection legislation is uneven

Recent OECD work on labour market indicators (OECD, 2004b) finds that the Czech Republic is among those countries that impose stringent employment protection legislation (EPL) on regular contracts (Figure 5.4). While the Czech Republic ranks rather low in regulation on *collective* dismissals, regulation on *individual* dismissals is highly restrictive, both in terms of the stringency of dismissal conditions and procedural difficulties (Annex 5.A4).[18] The law stipulates that employers have to apply one of six reasons for dismissal; four are based on organisational change (including redundancies) and health reasons, and two are based on poor work performance and discipline.

Dismissal due to poor performance is cumbersome for employers and not commonly used, even though it has the attraction of not requiring redundancy payments. Dismissal in this case requires a process of formal notification in which the worker has to be given time to improve performance after which management must be able to then show that performance has not improved. Instead, dismissal is often engineered by re-organisation, even in cases where the employer's real concern is poor performance. In this instance, severance pay must be paid (Figure 5.5). Workers with permanent contracts are entitled to a 3-month notice period and 2-month payout in cases of redundancy, independent of the length of service, otherwise to 2-month notice.[19] There is no variation of the period with the tenure of the job. This is unusual compared to other countries and implies relatively high employment costs for short and medium-length employment periods.

Figure 5.4. **Strictness of employment protection legislation, 2003**[1]

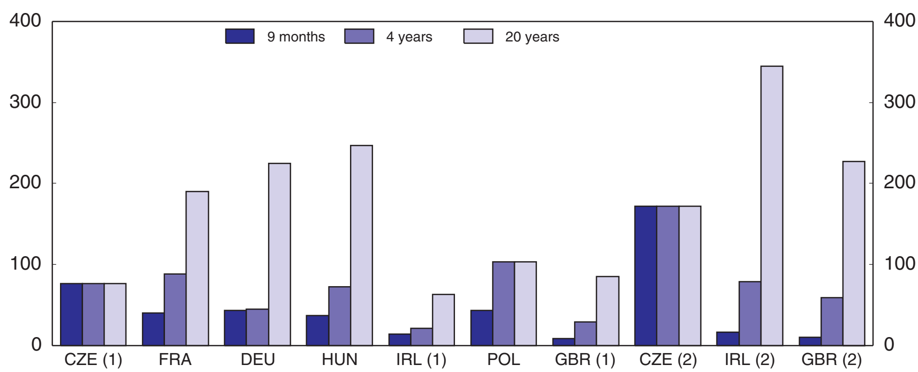


1. The summary indicators are normalised to range from 0 to 6 with the higher score representing stricter regulation. Data is ranked by the indicator for regular employment.

Source: *OECD Employment Outlook 2004*.

Figure 5.5. **Dismissal cost by job tenure, 2003**

Number of days wages paid by employer



1. Dismissal with no severance payment.
2. Redundancy dismissal with severance payment.

Source: OECD calculations based on the background material for *OECD Employment Outlook 2004*, Chapter 2.

Lighter rules on redundancy for those on permanent contracts would help the labour market work more efficiently. The government's intention to introduce a major reform to the labour code to liberalise the market is therefore welcome (Box 5.5).

Unlike some other labour markets, strict regulation on regular contracts has not resulted in widespread use of temporary contracts. Indeed, only about 10 per cent of workers are on temporary contracts, although the rules in this regard are not particularly restrictive. There have nevertheless been concerns that employers abuse temporary contracts, and steps have been taken in the new amendment to the Labour Code. The maximum duration of successive temporary contracts has been limited to 24 months. At the same time the restrictions on temporary contracts have been lifted for previously protected groups such as school-leavers and other young workers, leaving the protection to collective agreements.[20] In addition, rules governing temporary work agencies have also been introduced, offering better opportunities for employers to hire temporary workers.

Temporary contracts are not widely used because other alternatives to standard contracts are also attractive. As discussed above, subcontracting with workers with self-employment status is common. Other alternatives include one-off project contracts and various forms of business contracts. While alternative contracts are preferable to inactivity there should be careful monitoring whether

Box 5.5. Employment protection: legislative changes

Amendments to the Labour Code in 2003 and 2004 established:

- explicit principles of equal opportunities and treatment,
- a limit of two years on the maximum total duration of temporary contracts (exceptions will apply to working pensioners, substitutes for long term absent employees and operational or technological reasons on the side of the employer); the maximum cumulative duration of temporary contracts via temporary work agencies will remain unrestricted,
- the competitive clause with a maximum of one year restriction on post contract competitive activities of employees in exchange for pecuniary compensation,
- a collective dismissal clause that fully reflects EU directives.

The government plans a more thorough liberalisation of the EPL via a new Labour Code that would abandon the principle "what is not allowed is forbidden" and lessen the role of the Labour Code itself. This would strengthen the importance of contracts, collective agreements and firm specific rules. The draft law should be prepared in the beginning of 2005.

this partly signals some inappropriate specific restrictions of standard contracts. More generally, lighter rules on redundancy in permanent contracts as well as appropriate action on the tax wedge (see above) would also help cut back abuse of alternative contracts. At the same time direct measures to prevent abuse of alternative work arrangements may be needed.

Wage setting

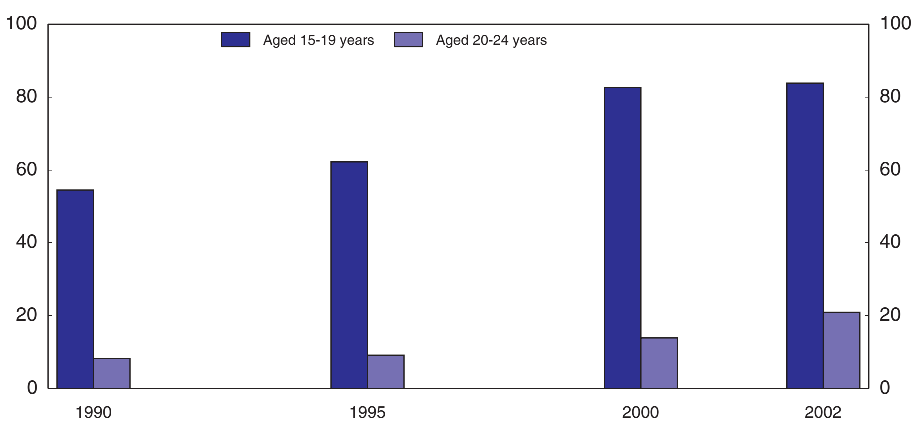
Wage increases are determined through a mix of individual wage negotiation, company collective agreements and higher-level collective agreements.[21] Around 30 per cent of workers are directly covered by collective bargaining. In addition, since 2000 government decrees have introduced indirect coverage through administrative extensions of wage agreements.[22] In 2003, for example, there were 19 extensions, affecting more than 900 000 workers (about 20 per cent of total employment) mainly in steel, engineering, construction and textiles. In June 2003, the Constitutional Court declared void the Act on Collective Bargaining which included provision for the Minister of Labour to unilaterally decree administrative extensions – the court ruling was made effective in March 2004. In response to the ruling, the government is preparing an amendment to the Act, but there is no intention to significantly alter the sections on administrative extension. Increasing the scope of administrative extensions would not be a good move given the rather sluggish labour market and also the need to maintain international competitiveness in labour costs. Rather than planning to increase administrative extensions in wage setting, the authorities should instead be aiming to cut them back to leave room for more flexible individual or enterprise-level wage bargaining.

The minimum wage is set by the government after negotiation with trade unions and employers. It is currently CZK 6 700 per month (approximately EUR 212), equivalent to about one third of the average production wage. Although the minimum wage has been increased by about 120 per cent in real terms since 1998, it does not appear to create important distortions in the labour market. Less than 1 per cent of employees earn the minimum wage, suggesting that it is not strongly influencing the labour market in general. Nevertheless, minimum wages are more influential in certain sectors of the labour market, particularly the young, and can stimulate increases higher up the wage scale.

Skills formation and education are not sufficiently responsive to changing labour market demand

The most obvious weakness in educational attainment is the very low share of the working-age population with tertiary education, although increasing enrolment rates mean the situation is improving gradually. While almost 90 per cent of population have at least secondary education, which is high in international comparison,[23] the country ranks at the very low end of the OECD distribution in tertiary education, with less than 15 per cent of the population with tertiary education.[24] The main reason for the low tertiary attainment is historic. At the beginning of transition to a market economy, post-secondary education was concentrated in vocational education provided by institutions without tertiary status. Economic transition has seen capacity problems in the tertiary sector, with the number of applicants far exceeding the number of available places. In response additional places have become available at state universities and in private tertiary schools. Although demand still exceeds supply,[25] the problem is now much reduced, and demographic developments are helping as the population in the 18-25 age group has been declining. The rapidly increasing number of Czech students in tertiary programmes abroad should also help. The strong demand for higher education has brought a sharp increase in student numbers and enrolment rates (Figure 5.6).[26] Nevertheless, because the ageing population means young cohorts are relatively small, the pace of change of educational attainment in the workforce as whole will be slow even with high enrolment rates.[27] Indeed, the increasing wage gap between workers with tertiary and complete secondary education (*i.e.* with *maturita*) points to the direction that there is still insufficient supply of workers with tertiary education.[28]

Figure 5.6. **Share of population in full-time study programmes**
Per cent of age-group



Source: Karpisek (2003).

Cross-country comparison of literacy and skills suggests that primary and secondary schooling is delivering reasonable levels of education. The 2001 PIRLS study on reading literacy of the 9-year-olds shows above-average results for the Czech Republic. And the overall literacy performance of pupils in the PISA study of 15-year-olds is close to the OECD average (OECD, 2003a). Nevertheless there are recognised general weaknesses in primary and secondary education. A 2001 strategic document on education (the National Programme for the Development of Education) outlined the need to abandon excessive emphasis on "passive" knowledge, and emphasise communication, active search and processing of information, opinion building, argumentation and teamwork. Some improvement is evident, but progress has been hindered by delayed changes in legislation.[29] Furthermore there are major problems regarding the education of the Roma (see below).

One important change in primary and secondary education systems brought about by the reform of public administration is the transfer of a significant part of decision making to the level of regions and municipalities. This will necessitate reassessment of the efficiency of the use of schooling facilities and, possibly, cuts in the number of facilities. It remains to be seen how decentralisation will affect the quality and effectiveness of education. At the moment, in secondary and primary education there is very little by way of output measurement and benchmarking and this should be remedied. There are some plans to introduce an assessment system, though there is reluctance to make the results of this exercise public as is done, for example, in the United Kingdom.[30] In addition, the introduction of a standardised secondary-school leaving exam (*maturita*) will in principle also present opportunities for outcome comparisons as well as helping both employers and tertiary education institutions assess school leavers' skills. In reforming the financing system for regions (Chapter 2), the government should also ensure that the new system will not affect educational equity by reducing accessibility and quality of education for disadvantaged groups, such as Roma (see below).

Language and computing skills are highly relevant for the Czech labour market and are recognised in education priorities. Indicators suggest progress,[31] but there is still room for improvement, particularly at primary and secondary level, and school graduates perceive these skills to be inadequately provided by the education system.[32] There was an attempt to improve computer literacy by increasing the use of computers in primary schools. Unfortunately, it appeared that a considerable amount of money has effectively been wasted in this project as the private company invited to make the installations exploited loopholes in the contract to delay delivery and to make cut backs in quality. In addition, the schools reportedly do not always make full use of available computing facilities.

In tertiary education, some measures have been taken to better respond to labour-market demands. For example, most long master-study programmes have been reorganised into two stages with bachelor and master degrees. Emerging cooperation between universities and enterprises (*e.g.* in the development of curricula) also needs to be strengthened. However, signals from the labour market on which skills are in demand are not all that strong in programme development, even though universities have the freedom to choose which courses to offer. In part, the lack of fees probably weakens the attention of students to the investments and returns in higher education when choosing courses, resulting in less economic decision making. Therefore, public universities get distorted signals from student demand on where programmes should be developing. The introduction of fees in higher education that at least partially reflect the cost of tertiary courses would promote a more economic approach to higher education by students and universities. To ensure accessibility of tertiary education, the introduction of tuition fees should be accompanied by a system of students' loans. Experience of some OECD countries (*e.g.* Australia, New Zealand and United Kingdom) suggests that the introduction (or increase) of fees does not have to lead to decreased access to tertiary education, if it is accompanied by expansion of students' access to loans to finance their education (Blöndal *et al.* 2002). In order to reduce the risk borne by individuals investing in their education, the repayment of such loans may be made income-contingent as is the case in the United Kingdom (OECD 2004b) where the speed of repayment depends on graduate income. Unfortunately, the prospects of introducing fees in the near future look weak. The new government has no consensus on tertiary fees and concrete policy proposals are very unlikely before the next general election.

Integrating the Roma should get higher priority

Policies to deal with Roma issues are under the responsibility of various ministries – notably the Ministries for Labour and Social Affairs, Education and Health – as well as regions and municipalities, the latter being responsible for social welfare. In 1998 the Government Council for Roma Affairs was set up and charged with acting as a consultative and co-ordinating body. The council includes government officials and representatives of the Roma community, and has powers to propose legislation to the government. In 2000, the government issued a document setting the main priorities for the integration of the Roma population. Overall, although a few important measures have been taken and a framework for integrated policy exists, full co-ordination of policy is still lacking in practice.

Further integration of the Roma population is needed, not only to address social concerns but also to help mobilise labour resources. Obviously, the Roma community would benefit from general measures aimed at increasing employment, such as efforts to reduce the tax wedge on low-skilled labour and making the tax-benefit system more employment friendly. However, this will almost certainly not be enough to overcome the very strong gaps between the Roma and mainstream Czech society. In this regard, more work is needed to develop an integrated set of targeted policies to tackle the various problems leading to poverty and social exclusion of Roma.

Access to proper education is insufficient

Poor access and quality in education are probably the most important factors holding back integration of the Roma population. Some evidence suggests that access has been weakening since 1990 in Central and Eastern Europe, and Roma children are increasingly not starting or finishing school (Ringold *et al.*, 2003). In the Czech Republic, as in other central and eastern European countries, Roma children are very often channelled into special schools. In the Czech case this either means a school for children suffering from health or behaviour problems or special schools for mentally or physically handicapped children. The share of Roma in special schools is indeed very high; an estimate from the late 1990s suggests nearly 65 per cent of Roma children were in special schools, compared with 4 per cent for the total population. These schools provide a relatively low level of education. Children receive fewer Czech language lessons, and are not expected to read for comprehension until the third grade (against the first grade for students in mainstream schools). In addition, the choices following completion of special-school education are limited, as pupils of the special schools most often enter technical secondary schools or even training centres, which offer limited training in narrowly defined fields and are not very highly valued by employers (Ringold *et al.*, 2003).

Some steps to counter these problems have been taken by successive Czech governments over the 1990s. About 300 Roma assistants to teacher's positions have been created in pre-school, primary and secondary schooling and preparatory schools. A new draft school act proposes to take a positive step by eliminating the special schools, however this should be complemented by steps to increase access to early childhood education.[33] Roma children should be better prepared entering primary school, notably in language skills. Preschool education, for children aged 3 to 6, is not compulsory and few Roma children attend while attendance is 89 per cent among all children. Making attendance compulsory for all at least in the year preceding entry to primary school, as currently envisaged by the government, would be a positive step. Roma children would also benefit from better access to kindergarten for younger children. Access to kindergarten is fairly limited in general, and particularly so for the Roma. In part this may be because Roma feel that the environment is hostile to their children, and prefer to keep them in the community. The loss of parental allowance (which amounted in 2004 to about 50 per cent of the minimum wage) when a child is put in kindergarten is likely a significant disincentive.[34] In addition, early childhood education needs to be more inclusive for Roma children and the use of properly trained

Roma teaching assistants and adaptation of curricula and teaching methods should be extended. Experience in a number of schools shows that using properly trained Roma teaching assistants and adapting the teaching contents and methods to the Roma population can pay off (McDonalds, 2004).[35]

Economic constraints are an important factor dissuading school participation of the Roma in secondary and tertiary education. In an effort to tackle the problem in secondary schools, a financial support scheme has been running since 2000 (in 2003 the scheme provided about 1 400 Roma students with support averaging about CZK 7 000 per student) and is judged as having been reasonably successful in encouraging enrolment. No equivalent scheme is as yet run in tertiary education and scholarship schemes for socially disadvantaged students are rare and the possibility of providing scholarships for socially disadvantaged students in tertiary education should be considered. There have been welcome signs of action on this issue with a governmental decree to the Ministry of Education to plan a tertiary scholarship system. In finalising the financing system for regions, it is important that the central government has sufficient leverage in policy to promote better education for the Roma, through for example the earmarking of funds. Otherwise, strong pressure for spending cuts may excessively squeeze expenditures on Roma education.

Efforts to improve labour force participation and housing access are welcome

Unemployment rates among Roma are estimated to be above 50 per cent, and significantly higher in some localities. Because Roma were among the first laid-off in the early 1990s, very long-term unemployment is common. However, this is only part of the picture as informal sector activity (from profitable to more marginal subsistence activities) is also a source of income. Roma have, in principle, access to general ALMPs, and a number of targeted projects have also been conducted, although often without much follow up. Generally organised by labour offices in collaboration with Roma NGOs and the municipalities, the targeted schemes mainly create jobs for community services, for example in the cleaning and maintenance of housing in Roma communities, or in teaching assistance. The government is also developing programmes to prepare Roma to work in the police, and is planning to do the same for work in prisons. Enterprises owned by Roma have also sometimes been given favourable treatment in public procurement procedures; the efficiency of such measures in terms of employment has been questioned however, since support was not conditioned on employing Roma. At another level, anti-discrimination legislation relating to the workplace has been adopted as part of the *acquis communautaire*, which may in the long run help to reduce apparently common discriminatory practices by employers.

Policies are needed to help improve housing conditions for Roma. The Roma are less concentrated in specific location or neighbourhoods in the Czech

Republic than in other Central and Eastern European countries. In part this is because the Roma population is mainly urban and not rural, as for example in the Slovak Republic. However, concentration in peripheral, poorly equipped and decaying areas has been increasing in recent years. The privatisation of housing has increased the incentives to push socially disadvantaged groups, and in particular Roma families, out from the scattered poor quarters in city centres. And new neighbourhoods have grown up in suburban areas that are arguably more problematic in terms of social exclusion.[36] Deregulation of the rental market, though broadly desirable, is likely to result in even more Roma being pushed into the suburban areas. This underscores the need, as mentioned above, for the government to ensure that welfare concerns from rent deregulation are addressed.

Well designed community oriented jobs can also help the Roma integrate. Indeed there has been a programme to create such jobs for several years. In a welcome move, the government is currently designing a new agency that would implement projects to provide housing and jobs to combat social exclusion. The status and scope of the agency is not yet decided. It might be modelled after a Spanish institution, which assists municipalities in designing the projects and accessing the EU social cohesion funds. The idea would be to allow Roma to live in the centre of the cities, and not only the outskirts, in a way that avoids the creation of ghettos, and to provide them with some community service jobs at the same time. Following the reform of the public administration which has significantly reduced the possibility for the central government to initiate such measures, the agency could promote some strategic actions in this area.[37] The structure of the agency project provides a useful blueprint for co-ordinated policy between national strategy and regional and local implementation. Initiatives like this are important as leaving most of the responsibility for Roma support to local and regional governments, as is currently the case in housing for example, is likely to result in insufficient investment in Roma integration, because generally at the local level the Roma have weak influence on policy, and local government has incentives to pass on social problems elsewhere.

Better data is needed to improve policy towards Roma integration

An important problem for policymakers in looking at the various problems of integration of the Roma community and in designing and evaluating policies is the absence of data. In the population census, the declaration of ethnic origin is voluntary and, as mentioned above, for a number of reasons including fear of discrimination and stigmatization most Roma do not declare their origin and the Roma community is strongly opposed to any compulsory declaration of ethnic origin. Implementing compulsory declaration would thus hardly be consistent with positive integration objectives.[38] Other ways could be sought however. One possibility would be to conduct anonymous surveys at the community level. In Slovakia a survey of Roma communities using this approach has recently been conducted with the help of Roma NGOs. The survey focuses on monitoring: *i*) basic demographic information (number of men, women, children, and children born last year); *ii*) infrastructure (accessibility of water resources, electricity, type of housing etc.); *iii*) the degree of integration or segregation of the community; *iv*) the socio-economic situation and potential of the community (age structure, unemployment, school attendance, accessibility of services etc.); and *v*) projects to help the Roma (Haviarová, 2004). Some of the data will be made publicly available while some will remain confidential to government institutions.

Finding a solution to the problem of lack of information about the Roma would be a considerable help to policymakers. A mapping of Roma communities similar to that carried out in Slovakia may be a good solution, providing sufficient information for policy planning while at the same time respecting the reluctance of the Roma community to provide individual information on their ethnic origin to the authorities.

Notes

1. Social assistance benefits include the social assistance benefits provided due to low income, as stipulated by the Social Need Act, and other benefits, *e.g.* allowance when taking care of close relatives, benefits provided to senior or severely handicapped citizens, and benefits for citizens in extremely difficult circumstances.
2. In theory, the after-benefit income can be both below and above the MSA. However, according to the Ministry of Labour and Social Affairs, citizens whose after-benefit income is still below MSA include mainly those who do not take up the benefit at all (mostly homeless people) and a very small percentage of households who claim the social assistance benefit. It is more often that after-benefit income of households receiving social assistance benefits is higher than MSA.
3. The definition of MSA is narrower than comparative international definitions of poverty. In 2001, 7.1 per cent of Czech households had income below 60 per cent of the median net income generally used as the poverty measure in international studies (Sirovátka *et al.*, 2003a).
4. For the following analysis, it is assumed that households whose income from work and including benefits from the state social support scheme does not reach MSA receive a social assistance benefit that brings their income to the level of MSA.
5. According to Hanousek and Palda (2003) the share of people engaged in undeclared work has probably been growing. The study reports that workers who admitted engagement in the grey economy declared that they spent on average about 3 hours per week in undeclared activities, but this is likely to be an understatement.
6. The system will work through means-testing that allows exemption of part of earned income.
7. The retirement age for women is currently lower than for men and depends on the number of children they have had. In 2013, the retirement age of 63 will apply to men and women without children, women with children will still be able to retire earlier.
8. Probable exploitation of the system is indicated by the fact that almost 11 per cent of labour force was receiving full- or partial-disability benefits in 2003. This is above the average recipiency rate in 16 OECD countries found in OECD (2003b).
9. While the system of medicalscreening for disability seems to be rather tight, the definitions of some types of disability may be out of date as they were written 10 years ago.
10. Additional cost for the public budgets stem from higher expenditures on subsidies for housing acquisition and foregone rent on municipal flats.
11. Exempted from rent regulation are apartments that have been freed by the occupant (except for the cases of exchange, inheritance and similar), newly-built privately-

financed apartments, and apartments occupied by foreign corporations or foreigners without a permanent residence permit.

12. Lux and Sunega (2003); the estimate is for year 1999, but experts do not estimate a significant decrease since.
13. According to the Ministry of Finance, the average regulated rent (defined as the maximum price) was EUR 0.5 per square metre while the average market rent reached EUR 1.8 per square metre. The ratio between average market rent and regulated rent is close to 5 in Prague.
14. 450 000 apartments were unused according to the 2001 Census. However, such apartments are often sub-rented on the black market for market rent. The size of the black rental market is estimated to be close to the size of the official free market (Lux and Sunega, 2003).
15. Construction activity was also recently encouraged by the postponing the shift of residential construction from the lower VAT bracket (5 per cent) to the upper one (19 per cent) until 2008.
16. European Employment Observatory, Quarterly Update: April 2004.
17. In its 2003 report on the adoption of the Community *acquis* in the area of taxation, the European Commission notes that the Czech Republic has already taken effective steps to strengthen the administrative capacity of tax authorities (European Commission, 2003).
18. By law it is possible to strengthen EPL by collective agreement but this is rarely done.
19. The notice period always starts on the first day of the month following the notice being given.
20. Only two such collective agreements were in force, according to the Ministry of Labour, protecting workers in pre-pension age.
21. The Law on Collective Negotiation defines a higher-level collective agreement as an agreement between a higher-level trade union body and organisation(s) of employers. The notion of branch- or industry-level agreements does not exist in the law.
22. The annex to such a decree would contain the list of employers to which the agreement is extended.
23. Secondary education comprises of secondary general, technical and vocational schools; some technical and vocational secondary schools are not ended by the *maturita* exam.
24. The Czech Republic is also one of the countries where the education attainment is biased in favour of men, with the share of women with secondary and tertiary education in the population by 5 and 2 percentage points lower than that of men.
25. According to Ministry of Education, 30 per cent of applicants who took part in entrance tests were not admitted.
26. Also changes in the specialisation of secondary students have gradually taken place with the share of vocational programmes prevailing before 1990 reducing to one third of all secondary students, and the shares of general (academic) and technical secondary education increasing.
27. It is estimated that in a given year 3 per cent of the working-age population is renewed.
28. Jurajda (2004) evaluates the wage gap between workers with tertiary and complete secondary education in 2002 to 43-53 per cent according to gender and age; this study finds also some evidence that the gap has increased between 1998-2002.

29. The previous *Survey* has already described plans to reform the School Act. It was only in June 2004 when new reformed School Act was voted.
30. See the latest *Survey* for the United Kingdom (OECD, 2004b) for a review of UK health and education provision.
31. The intended instruction time devoted to modern languages was in 2001 above the OECD average for children 9-11 years, but just at the average for children of 12-14 years (OECD 2001).
32. Vojtech *et al.*, 2003.
33. Otherwise, it may result in the creation of special classes in the school concentrating the Roma children, as is already sometimes the case.
34. Some countries, such as Hungary have found that offering free meals in kindergartens can help attendance (as well as improve the health conditions of Roma children). A scheme has been tried in the Czech Republic but reportedly was ineffective.
35. Roma teaching assistants can play an important role in liaising with the parents, helping teachers to incorporate Roma culture and language in the classroom, serving as a language bridge for younger children who still not have mastered the Czech language, and mentoring children.
36. For an overview of housing problems faced by the Roma, see Socioklub and UNHCR (2003).
37. One example of negative consequence of decentralisation is the dismantling of the network of Roma advisors. Roma advisors were working at linking the state administration (notably social services) with Roma communities. They existed in 80 districts, and 50 per cent of them were Roma; very few remain.
38. This would actually also violate the EU human rights principles.

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Annex 5.A1

Welfare benefit expenditures

Table 5.A1.1. **Welfare-benefit expenditures, 2003**

	CZK bn
State social support – total	**32.2**
Child benefits	12.5
Parental allowance	8.0
Social allowance	5.8
Housing allowance	2.8
Transport allowance[1]	1.3
Other benefits	1.8
Social assistance – total	**14.1**
Social need	10.2
Out of which: Families with children	4.3
Individuals	5.9
Old and disabled	3.9
Passive LMP expenditures	**6.2**

1. Phased out in 2003.
Source: Czech Statistical Office, Ministry of Labour and Social Affairs, OECD.

Annex 5.A2

Replacement rates in unemployment

Table 5.A2.1. **Net replacement rates for a single person in the initial period of unemployment**[1]

	Previous earnings as a share of average production wage	
	67%	100%
Australia	46	32
Austria	55	55
Belgium	87	66
Canada	63	64
Czech Republic	50	50
Denmark	84	59
Finland	78	64
France	80	71
Germany	63	61
Greece	64	46
Hungary	61	44
Iceland	66	49
Ireland	40	29
Italy	50	52
Japan	73	63
Korea	53	54
Luxembourg	84	85
Netherlands	79	71
New Zealand	54	37
Norway	66	66
Poland	65	44
Portugal	85	78
Slovak Republic	69	62
Spain	76	70
Sweden	82	81
Switzerland	79	72
United Kingdom	63	45
United States	62	56

1. Initial phase of unemployment but following any waiting period. No social assistance "top-ups" are assumed to be available in either the in-work or out-of-work situation. Any income taxes payable on unemployment benefits are determined in relation to annualized benefit values (*i.e.* monthly values multiplied by 12) even if the maximum benefit duration is shorter than 12 months.

Source: OECD *Benefits and Wages* (2004).

Table 5.A2.2. **Net replacement rates for lower income recipients**[1]

After tax and including family and housing benefits for long-term benefit recipients

	Single person	Married couple	Couple 2 children	Lone parent 2 children
Australia	46	40	79	61
Austria	64	84	100	82
Belgium	72	77	77	82
Canada	31	50	68	63
Czech Republic	45	72	91	77
Denmark	71	88	82	85
Finland	69	88	94	77
France	56	77	83	81
Germany	82	86	84	92
Greece	0	0	4	4
Hungary	33	33	39	41
Iceland	66	86	90	80
Ireland	71	90	90	66
Italy	0	0	0	0
Japan	50	71	87	92
Korea	25	42	72	58
Luxembourg	70	99	107	84
Netherlands	79	89	87	78
New Zealand	54	79	82	77
Norway	60	70	86	79
Poland	45	66	85	75
Portugal	34	57	69	61
Slovak Republic	62	100	100	91
Spain	37	44	59	54
Sweden	74	97	100	66
Switzerland	73	90	99	91
United Kingdom	63	78	78	66
United States	10	16	50	44

1. After tax and including unemployment benefits, social assistance, family and housing benefits in the 60th month of benefit receipt. For married couples the per cent of APW relates to one spouse only; the second spouse is assumed to be "inactive" with no earnings. Children are aged 4 and 6 and neither childcare benefits nor childcare costs are considered.

Source: OECD *Benefits and Wages* (2004).

Annex 5.A3

The calculation of sickness benefits

Table 5.A3.1. **The calculation of sickness benefits**

Days of entitlement	Reduction limits of the daily assessment base and reduction rates (share of average daily income used for computation sickness benefits) Per cent			Sickness pay paid from the daily assessment base Per cent	Total maximum CZK per day
	Up to CZK 480	Above CZK 480 and up to CZK 690	Above CZK 690		
1-3	90	60	0	25	139.5
4-14	90	60	0	69	385.02
14+	100	60	0	69	418.14

Source: Ministry of Labour and Social Affairs.

Annex 5.A4

Administrative procedures for individual notice and dismissal

Table 5.A4.1. **Administrative procedures for individual notice and dismissal**

	Legal provisions	Delay before notice can start (days)
Czech Republic	**Personal reasons:** Notification of employee, after previous warning. Letter sent by mail or handed out directly. The notice period starts to run from the first day of the calendar month following receipt of the letter.	16
	Redundancy: Notification of employee. Advance consultation, with offer of another job or re-training if feasible; then letter sent by mail or handed directly to employee. The notice period starts to run from the first day of the calendar month following receipt of the letter.	22
France	**Personal reasons:** Letter; interview: statement of reasons to employee; a second letter: notification by registered letter with recorded delivery. Minimum delay required between the first letter and the interview: 5 working days; 1 additional day is then required after the interview for the second letter to be sent.	10
	Economic reasons: Letter; interview (statement of reasons to employee); a second letter: notification by registered letter with recorded delivery. Notification to Labour Inspectorate. Minimum delay required between the first letter and the interview: 5 working days; 5 to 15 additional days are required after the interview for the second letter to be sent.	17
Germany	Notification to employee must be in writing (required in many collective agreements), after oral or written warnings to employee in case of dismissal for lack of performance. Previous notification of planned dismissal, including reasons for termination, to works council (if one exists). In case of notice given despite works council objection and subsequent law suit, dismissal has to wait for decision by Labour Court. After notification, maximum 7 days for Works Council to object to dismissal. Notice can then be served, specifying the 1st or 15th of the month.	15

Table 5.A4.1. **Administrative procedures for individual notice and dismissal** (*cont.*)

	Legal provisions	Delay before notice can start (days)
Hungary	Written notice to employee, including reasons for termination. The employer must justify his notice. Employee must be given an opportunity for defence against the objections raised against him. Letter sent by mail or handed directly to employee.	7
Ireland	**Individual termination:** No prescribed procedure. Notice may be oral or in writing but must be certain. There is no specific procedure outlined in the Minimum Notice and Terms of Employment Act 1973, but there is a Code of Practice on Grievance and Disciplinary Procedure, which sets out best practice in terms of procedures to be followed. Advisable to serve notice in writing after warnings specifying what aspect of behaviour is substandard.	
	Redundancy: Copy of official redundancy form to be sent to Department of Employment. Notice may be oral or written as long as it is certain.	7
Poland	Notification to representative trade union of intention to terminate, including reasons for dismissal. In case the employee takes the case to the labour court, the court may require evidence of a warning procedure and of a fair account of trade union opinions. After previous warning to the employee, 5 days for consultation with local trade union on justification for dismissal. Notice can then be served, usually by mail.	13
United Kingdom	**Individual termination:** Written or oral notification. Employees with 1 years' continuous service have the right to receive from their employers, on request, a written statement of the reasons for their dismissal.	1
	Redundancy: Consultation with recognised trade union recommended, but not legally required when few workers are affected. "Reasonable notice" that redundancy is being considered.	3
United States	No prescribed procedures. Written or oral notification. Only a few States prescribe a "service letter" a certain period after dismissal, noting the reasons for termination.	1

Source: Background material for OECD *Employment Outlook* 2004, Chapter 2.

6. Immigration policy: addressing the needs of an ageing labour force

Since 1989 the Czech Republic has been increasingly exposed to international migration. With one of the highest incomes per capita in Central and Eastern Europe, the Czech Republic has received more immigration flows than the other countries in the region. Indeed, immigration has typically exceeded emigration, making the country one of net immigration. Nevertheless foreigners are still only a relatively small share of the population and integration issues are just beginning to surface, and fears of swelling migration flows in both directions after EU accession appear unfounded. Also, migration arising from the joint labour market agreement with Slovakia is helping to overcome imbalances in the labour market. Policy is only beginning to address immigration issues actively and various inconsistencies among different policy areas remain. Looking further ahead, the ageing of the Czech population is relatively further advanced and faster than in most other OECD countries. Preparing for these demographic changes and mitigating their impact on economic growth and living standards is therefore a key policy priority, which is also relevant for shaping migration policy towards the needs of the Czech labour market.

This Chapter first looks at historical developments and recent trends in migration. This is followed by sections examining immigration policy, the economic impact of immigration and the likely future trends in emigration. A final section presents some concluding comments. A policy assessment is contained in Box 6.1.

Migration history: towards free movement of labour[1]

Historically, Czechoslovakia was a country of emigration rather than immigration. In the first half of the 20th century, emigrants, motivated mainly by economic reasons, moved to western Europe and to the "New World" in the United States and Canada. The Second World War generated sizeable migration flows and, after the end of the conflict, massive net emigration took place due mainly to the expulsion of 2.5 million Germans from the border regions of the Czech Republic, only very partly compensated by return flows from abroad.

Between 1948, when the communists came to power, and 1989, the movement of persons was constrained. Emigration waves following the change in

Box 6.1. Policy assessment on the economic effects of migration

To avoid an increasing level of illegal flows and to maximise the benefits from immigration, the authorities could consider **taking a longer-run approach to immigration**, for example by widening the avenues to permanent residence and citizenship so as to increase integration. Such a policy would be especially desirable as it could partially help as a means of in slowing down the decline in the Czech population. To this end:

- In further developing the **pilot project for points-based immigration**, it may pay for policy designers to have another look at similar schemes operating in some other countries, notably Australia, Canada and New Zealand.
- A less restrictive **work permit policy** would be beneficial in fiscal terms, as more activity would be declared. It would also allow a better integration of the foreigners, as would the introduction of less strictly defined work permits (which currently put them in a very weak position *vis-à-vis* their employer) and the possibility for foreigners who have already been staying on the Czech territory to get work and residence permits of a duration of more than one year. Integration policy measures should also be implemented for "economic" migrants, in particular to facilitate access to Czech language courses. Greater co-ordination on policy on work permits and trade licences is needed.
- Efforts to include more **information about foreigners** in the labour force survey should be continued. Data on nationality should also be collected in registration at unemployment offices. A number of variables already available should be made public, notably the length of stay of foreigners. Finally, the publication of some policy variables, such as the number of applications for residence and work permits received, granted and refused would increase transparency in this area.

regime in 1948 and the end of the "Prague Spring" in 1968 accounted for most of the flows.[2] Permanent immigration consisted mainly of immigration for family reunification.[3] Also, temporary labour immigration from other communist countries based mostly on bilateral governmental agreements was established, notably with Poland and Vietnam. For instance, Polish workers were typically employed in the mining and metallurgy industries and the Vietnamese in the machinery and textile industries.[4] Figures for the 1980s suggest that up to 60 000 foreigners were resident through these agreements at any one time (Boušková, 1998). The workers were often confined to employment within specified plants or localities and were relatively segregated from the local population. The agreements were terminated after the Velvet Revolution in 1989 and most of these immigrants returned to their home country.

As in the other central and eastern European countries, international migration trends have changed fundamentally since 1990. The opening of the borders has resulted in an increase in migratory movements not only from east to west, but also with other countries of the region. The Czech Republic has gradually become an immigration country, both as a transit to the west and as a destination in its own right (often temporary, as part of circular migration in the region). Political stability, a relatively smooth economic transition, and its geographic position combined with strict migration policies in western countries have led the Czech Republic to become a part of a migratory "buffer zone" along with Hungary, Poland and the Slovak Republic (Drbohlav, 2003). Data suggest that the Czech Republic has been receiving the highest legal immigration in this zone. Since 2002, net migration flows offset the natural decline of population associated with ageing, bringing total population growth back to positive figures.

While relatively important Czech emigration took place in the years following the Velvet Revolution, emigration flows have significantly decreased since then and seem to have become increasingly of a temporary nature. Migration flows statistics have to be treated with caution (Box 6.2), and emigra-

Box 6.2. Statistics on migration flows

The Czech Statistical Office produces time series of emigration and immigration flows. For a number of reasons, however, these statistics should be used with caution.

Until 2000, only permanent flows (that is people changing residence) were registered, providing therefore a very incomplete picture of migration. While permanent immigration is probably relatively well traced, permanent emigration of Czech citizens is much less so. Only Czech citizens signalling their change of residence to their municipality are recorded, and while they are in principle required to do so, there is no control and they probably very often do not report it.

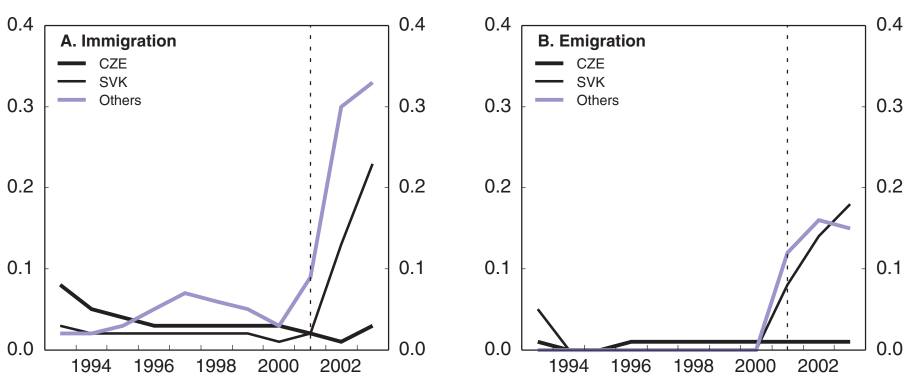
In 2001, the methodology was changed to include temporary migration flows, in conformity with international standards. In practice, however, the situation remains the same for Czech citizens, implying that none of their temporary moves abroad are recorded.

As a result, official data only provide lower-bound estimates of the emigration of Czech citizens.

In the case of foreigners, data are reported by the border police and the Interior Ministry, and should be more accurate. Since 2001, foreigners with a temporary visa are included. This change in the methodology prevents a continuous analysis of flow over time. Data on the stock of foreign residents in the Czech Republic is more consistent over time, although not completely as there was a change in the type of temporary visa in 2001 (see below).

tion has likely been higher than registered in the early 1990s, especially between 1990 and 1993. The main destinations were high income neighbouring countries and the traditional overseas countries. Part of it was permanent, but temporary labour emigration and cross-border commuting also developed strongly. In 1992 and 1993, between 0.4 to 0.8 per cent of the Czech labour force (27 000 to 49 000 people) found seasonal or commuting jobs in Germany (Horáková, 2000). Temporary labour migration to Austria was smaller in scale. Since 1993, registered permanent emigration flows of Czech citizens have been quite low (Figure 6.1). While they may be underestimated, statistics collected in host countries also show a rather low number of Czech citizens residing abroad in the early 2000s (Table 6.1). Based on such stock data, Czech emigration in EU countries seems to have been among the lowest in the 10 CEECs (Figure 6.2). There are no consistent time series on total temporary work emigration and cross-border commuting, but available evidence suggests that: *i*) it has been decreasing over the years (*e.g.* the number of Czechs working in Germany *via* the three bilateral labour agreements has decreased from more than 12 000 in 1993 to about 3 000 in 2003) and *ii*) it has nevertheless taken the lead over permanent emigration, following a trend observable in other CEEC countries too.

Figure 6.1. **Migration flows of Czechs, Slovaks and other citizens**[1]
Per cent of population in Czech Republic



1. Change in methodology in 2001. Before 2001, migration flows include only persons declaring a change in their permanent residence. From 2001 onwards, temporary migration flows should in principle be included.

Source: Czech Statistical Office.

Table 6.1. **Czech residents in selected OECD countries, early 2000s**

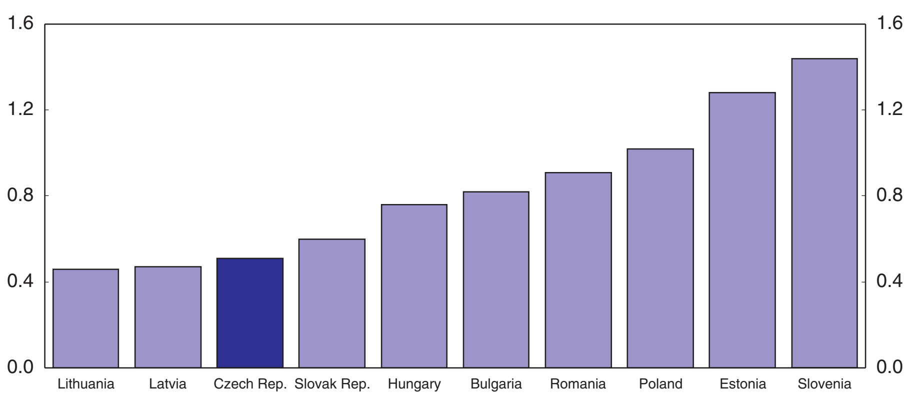
Czech citizens		Born in Czech Republic	
Austria	7 313	Canada[1]	47 977
Denmark	412	United Kingdom	12 225
Finland	125	United States	43 663
France[1]	7 613		
Germany	38 504		
Italy	3 468		
Luxembourg	173		
Spain	1 615		
Sweden	471		
Total	59 694	Total	163 558
as a share of Czech population	0.6	as a share of Czech population	1.6

Note: 1999 for France, 2001 for Austria, Finland, Germany, Sweden and the United Kingdom, 2002 for Italy and Spain, 2003 for Denmark and Luxembourg.

1. Census provides figures for people Czechs, Czechoslovaks and Slovaks; it is assumed that two thirds of the Czechoslovaks are from Czech regions.

Source: Alvarez-Plata, Brücker and Siliverstovs (2003), (2003); Delegación del Gobierno par la Extranjéría y la Inmigración (2003); and census for Canada, France, UK and US.

Figure 6.2. **Central and eastern European residents in western EU countries**
Percentage of population residing in 8 EU countries, early 2000s[1]

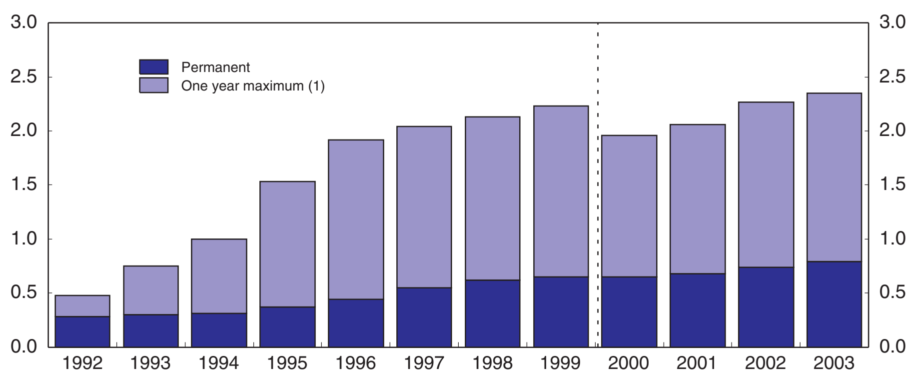


1. 2001 for Austria, Finland, Germany and Sweden, 2002 for Italy and Spain, 2003 for Denmark and Luxembourg.

Source: Alvarez-Plata, Brücker and Siliverstovs (2003) and Delegación del Gobierno par la Extranjéría y la Inmigración (2003); OECD.

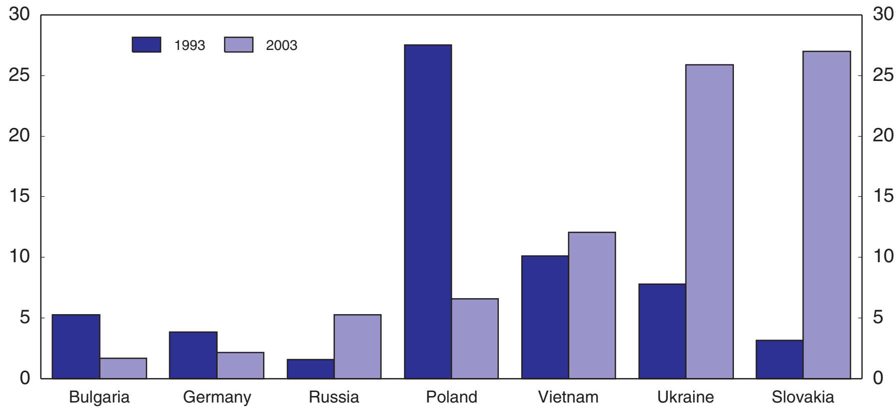
Immigration, on the other hand, has increased significantly since 1990. Initially, the liberalisation of entry and the changes in the law allowing the granting of citizenship to foreigners of Czech origin prompted significant return flows.[5] These flows waned after the early years of transition, but the number of foreign residents increased continuously until 1999, dropped off in 2000 when immigration laws were significantly tightened and then rose again (see below) (Figure 6.3). Since the division of the Czechoslovak Federal Republic in 1993 into the Czech and Slovak Republics, an agreement on free movement of people has been in place. The Czech Republic has in most years been the net recipient of migration between the two countries. A large number of Slovaks have taken Czech nationality (almost 420 000) and Slovak citizens represent close to 30 per cent of foreign passport holders (2003 figures) (Figure 6.4). Other eastern European countries with less stable political environments and poor economic conditions have also become important source countries, in particular the Ukraine. The increasing presence of foreign companies has brought inflows of highly-skilled workers from other OECD countries, particularly Germany, though numbers are relatively small (foreigners from non-eastern European OECD countries represented 8 per cent of the foreign residents in 2003). As with emigration, temporary flows have become the most important.

Figure 6.3. **Foreign residents by type of visa, 1992-2003**
Per cent of population



1. Break in the series of temporary visas in 2000. Before 2000, includes foreigners with a "long-term" residence permit (*de facto* a visa of 180 days up to one year); from 2000 onwards, includes foreigners with a visa of "90 days up" (a renewable visa covering stays of 90 days up to one year).
Source: Ministry of Interior.

Figure 6.4. **Main countries of origin of foreign residents**
Percentage of total foreign population in a given year



Source: Ministry of Interior.

As in many other OECD countries, the number of foreigners actually staying on Czech territory is very likely much higher than the official figures show. First, one of the attractions of the Czech Republic is that (along with several other east European countries) it shares a border with members of the Schengen group (Germany and Austria in the case of the Czech Republic); the Czech Republic thus has a significant share of transit migration to western Europe (OECD, 2001). Most of these migrants enter the country as tourists, businessmen or students. Only a small fraction of transit migration is successful and many either remain in the Czech Republic or return home (Drbohlav, 2003). Transit migrants come from China, India, as well as closer countries such as Turkey, Albania and former Yugoslavia. The migrants are generally detected when attempting to leave the country at the German border. A second poorly measured immigrant group are foreigners targeting the Czech Republic as a host country but residing without visas, often working in the grey sector. Drbohlav (2003) estimates that there are about 300 000 undocumented migrants, around 1.5 times the number of officially registered foreigners. About one third of these migrants are estimated to be some form of transit migration. Ukrainians represent a significant share of the undocumented immigrants, but there are also a non negligible number of western Europeans and north Americans (most likely due to the lengthiness of the visa process).[6]

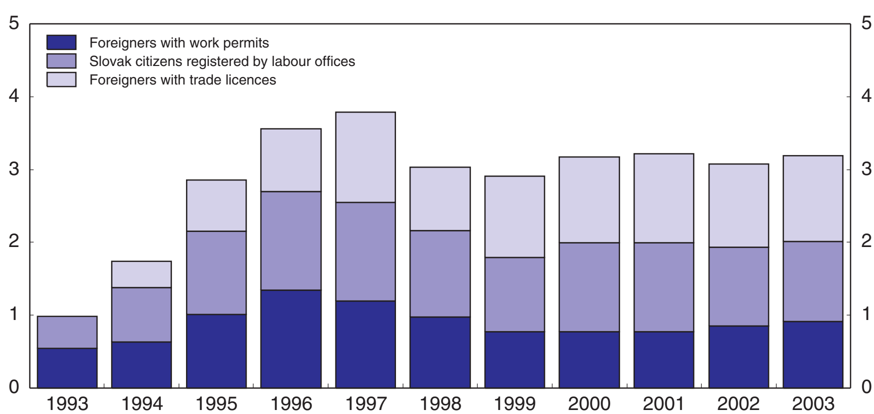
Immigration policy: still in the making

A *relatively restrictive visa policy with some inconsistency*

The Czech Republic traditionally being an emigration country, migration policy has been rather passive and *ad hoc* until the end of the 1990s. Recently, the prospect of EU accession and the increasing number of immigrants, including undocumented ones, has led to a more active stance on migration control and some more pro-active measures.

Immigration policy was quite liberal until 1996; between 1993 and 1996 residence permits increased four-fold and work permits more than doubled. However, weakening economic conditions, including rising unemployment, in the second half of the 1990s led to a significant tightening in the granting of work permits, and a deceleration in the growth of residence permits after 1996 (Figures 6.3 and 6.5). Subsequently, to address concerns about rising illegal immigration and align legislation with the *acquis communautaire*, a new Immigration Act came into force in 2000 (Box 6.3). The Act has tightened eligibility conditions for residence permits, and resulted in a fall in the number of resident-permit holders in 2000. Since 2001 permit numbers have started to grow again, but at a much slower pace

Figure 6.5. **Foreigners working in the Czech Republic by type of permit**
Per cent labour force



Source: Czech government authorities.

Box 6.3. Immigration legislation and process

Residence visas:

The 2000 Immigration Act brought several significant changes to the visa system. In particular, application for a residence visa can now usually only be made from abroad, including the renewal of visas for the temporary residents if there is a change in the purpose of residence (*e.g.* the job for which the foreigner came is terminated). In addition, the duration of temporary visas was altered. The so-called long-term residence permit (*de facto* over 180 days up to one year) was changed for the visa of 90 days up (a renewable visa for stays of 90 days to one year). As in the previous legislation, permanent visas can be obtained after 10 years of continuous residence.

The processing of residence permits is relatively long. Reportedly, it can be time consuming to assemble the required documents and in addition legislation states that the authorities have 120 days to decide on whether residence permit will be granted. The long processing time for residence permits means that foreigners (particularly those working for foreign companies) often arrive without the required documents and regularise their situation once in the country. As part of the action plan against illegal migration adopted by the government in early 2004, the authorities envisage streamlining the administrative process, in particular through a one-stop shop.

Work permits:

Work permits are granted by local labour offices and eligibility includes a labour market test to verify that no Czech citizen registered by the local labour office is in a position to do the job concerned (this now also extends to EU citizens). The permits are provided in two steps, a permit for hiring foreigners for the employer and an individual work permit for the foreigner. Since the work permit has to be obtained before applying for the residence permit, the employer is *de facto* often in charge of the process, which is generally completed within two to three weeks. The permits are very restrictive, being valid only for a specific job, employer and area. If one of these parameters is changed (*e.g.* the employer wants the foreigner to work in another place), re-application is required.

Trade licenses:

Eligibility conditions for a trade licence are the same for foreigners as for Czechs and are not onerous (being at least 18 years of age, having full legal capacity, no criminal records, and owing no tax arrears to the local tax authority). It is not necessary to be a resident to get a trade license. Once the trade license is granted to a foreigner, he can apply for a residence permit. While the Ministry of Interior has some discretionary power, in practice, the permit is almost always automatically granted.

Family reunification:

Close family members of a foreigner who has been residing continuously in Czech Republic for at least 8 years, can apply for a permanent permit. Family reunification is also possible on a temporary visa (it is even one of the few cases

Box 6.3. Immigration legislation and process (*cont.*)

in which the residence application can be made from the Czech territory), but there are no established eligibility criteria, and no right to work with this type of visa. Most family reunification visas seem to be granted to family members of Czech citizens (*e.g.* Slovaks marrying Czechs) and not to the relatives of migrants. This will change in the coming years as the EU directive on family reunification adopted in September 2003 – which provides a right to a long-term residence permit for family members at the maximum after 5 years of residence of the foreigner – will soon have to be translated into Czech legislation.

Special treatment:

Slovak citizens have benefited from special treatment since the division of Czechoslovakia to EU entry. The agreement on the mutual employment of citizens, signed by the Czech Republic and the Slovak Republic in October 1992 established quasi free movement between the two countries. Slovaks were entitled to a temporary residence certificate of up to one year, they did not need a work permit and just had to register at the local labour office. Since May 2004, they are treated as other EU citizens.

EU *citizens*, as of May 2004, no longer need work and residence permits, and only have to register their presence. Although the Czech authorities contemplated the possibility to restrict EU workers' mobility in retaliation to the Czech workers' treatment in most EU 15 countries (see below), it was finally decided not to do so. Citizens from other new member countries, in particular Poland, will be treated in the same way, although the Czech Republic reserves its right to change this if they observe a significant negative impact of associated migration flows on the Czech labour market.

Note: Generally speaking, in statistics and analysis of international migration, a long-term visa is one which has a duration of at least a year and so the Czech "long-term" residence permit is classified as temporary.

than in the early 1990s. In 2003, the number of foreigners with work permits and Slovak citizens registered by labour offices was still 25 per cent lower than in 1996.

There are bilateral agreements on employment with a number of former communist countries, notably the Ukraine, Russia, Poland, and Vietnam, but they have not been very influential. The agreements are mostly simply setting administrative procedures for employment. The yearly quotas on workers from Ukraine and Vietnam, have generally not been binding, and when that on Ukrainian worker was exceeded in 1997, it was quickly adjusted upwards (Meduna, 2003). Indeed, the termination of the Ukraine agreement in February 2002 seems to have had no influence on labour flows. The authorities are currently considering to negotiate different types of agreements.

Their aim would be to facilitate access to information on staying and being employed in the Czech Republic to potential migrants abroad, so as to reduce the probability of abuse by groups organising illegal migration and also to reduce incentives to use illegal methods of immigration. This also forms part of the action plan against illegal immigration and would be tied to the signing of re-admission agreements.

All in all, immigration policy is tilted towards short-term immigration. First, in contrast with many other OECD countries, a long-term residence permit does not exist.[7] Also, temporary residence permits can be terminated relatively easily given the very strict definition of a work permit, and there is no consideration of the number of years already spent in the Czech Republic. Second, eligibility conditions for a permanent residence permit (which allows an automatic right to work), are also strict as 10 years of continuous residence is required (most European countries require around 5 years). Thirdly, conditions for family reunification are also restrictive, although this will change in the future due to EU membership.

A recent pilot scheme to facilitate the granting of permanent residence permits to highly-skilled workers marks the first real attempt to develop a policy for long-term immigration (Box 6.4) Implemented for the first time in 2003, the scheme aims to alleviate the fiscal problems associated with population ageing and to contribute to satisfying the need for highly qualified labour. The scheme is inspired by the "point systems" of countries such as Australia, Canada and New Zealand, though with some important differences: foreigners have to have a job offer and a work permit to come in, and there is a 2½ year trial period. The current design of the scheme has some weaknesses. First the administration costs, notably those associated with the "social checks", are likely to become quite high if the scheme becomes fully operational. Second, these "social checks" and the risk of not being provided with a permanent permit are likely to reduce the attractiveness of the programme for foreigners coming from abroad with their family – this may partly explain the low number of applications the pilot scheme has received from abroad (Box 6.4). Requiring the foreigner to already have a job offer and a work permit is not helpful either. Indeed, rather than drawing in new immigrants, the scheme might end up serving as means to accelerate the acquisition of permanent residence permits among those who are already working and settled in the Czech Republic. The scheme's features are not in line with developments in points systems elsewhere which have been progressively reformed to reflect the growing evidence that an immigrant's adaptability and general skills, rather than specific skills in areas of immediate short supply, is the key to successful integration.[8] While New Zealand has put more focus on employability of some of the highly skilled, the latter are given the possibility to find a job once in the country.[9]

The government is also currently considering making work permits less strictly defined for workers who have been in the Czech Republic for some time, allowing them geographical and professional mobility.

Box 6.4. The pilot project for active selection of qualified foreign workers

The project started in July 2003 and is due to run for 5 years. Annual quotas of highly skilled workers who can enter the trial phase of the project are set, one for those who apply from abroad and another for applications made in the Czech Republic. Eligibility for the trial phase is based on: *i*) possession of a temporary work permit (*i.e.* a job offer and having passed the labour market test, a temporary residence permit) and at least secondary vocational education, and *ii*) evaluation through a points system. Key aspects of the points system are:

- age (a maximum number of points is received when aged between 23 and 35) and family (the spouse evaluated through the same point system and the number of children adds to the score)
- education and work experience
- language and previous experience in the Czech Republic (working and/or living)

Previous work and living experience in the Czech Republic receives a high score in the point system. If selected, after 2½ years the foreign worker and his family move onto the next stage in the process which includes a "social check". The check will be conducted through contact with employers and local authorities to verify that the participant and his/her family are well integrated. If this test is passed, the family will be recommended for permanent residence. In the case of a job-loss during the trial period, those in the scheme are not obliged to leave the Czech Republic (as is normally the case), but would have to find another employment within one month.

Only three origin countries were initially selected for the pilot scheme Bulgaria, Croatia and Kazakhstan; since October 2004, Belarus and Moldova and foreign graduates newly graduated in the Czech Republic at least at the bachelor level are also part of the scheme and the authorities plan to progressively increase the number of source countries. From July 2003 to April 2004, 185 persons have been selected in the programme: 182 already living in the Czech Republic (the initial quota was 300), but only 3 candidates living abroad had so far been selected (the initial quota was also 300).

While the labour market test has become increasingly binding in the work permit system, the trade license regime is much more liberal, pointing at some inconsistency in the overall immigration policy framework. As noted above (Box 6.3), holding a trade license quasi-automatically enables a foreigner to get a residence visa, and conditions to get a trade license are liberal. Unlike many countries, notably the EU 15 members, no business plan is required, there is no test of the positive economic implication of the activity (which would normally parallel the labour market test for work permits), and no proof of sufficient financial resources is required.

Furthermore, in the application for a trade licence, "business activity" is only loosely defined, and notably does not draw a clear line between employees and self-employed, a loophole which is often used to bypass the work permit process.[10] Indeed the Czech Republic is unique in having such a large share of immigration through trade licenses (Figure 6.5). Although the trade-licence system's weaknesses and inconsistency with the work permit system has been apparent to the authorities for quite some time, no steps have yet been taken. One difficulty is that systems operate under different ministerial bodies, the Ministry of Labour and Social Affairs and the Ministry of Trade and Industry, complicating co-ordination of policy.

Integration policies are not targeting economic migrants

Integration policies are still in their infancy, except in the case of refugees and asylum seekers. In 2000, an inter-ministerial committee laid down some principles for policy on a number of issues, including language, education and housing. However, apart for refugees and asylum seekers, few concrete steps have been taken, reflecting the stress on short-term migration in policy. For example, public provision or financial support for language courses is not available. While this is not a problem for Slovaks, it is for other immigrant communities, notably the Ukrainian immigrants who often have a weak grasp of Czech (Drbohlav and Janska, 2004). Integration policies are more developed for the small number of refugees (1 465 at end 2002), who are provided with free language courses, housing assistance, and assistance in finding work through a special programme run by the Interior Ministry. Asylum seekers (about 8 500 in 2002) also have access to language courses and some judicial and counselling assistance from some state-supported NGOs. The budget allocation for integration measures was CZK 22 million in 2002, about 0.003 per cent of the total state budget.

Access to Czech citizenship is also very restricted. As was the case in Germany until recently, *jus sangui* prevails, implying notably that foreigners' children born in the Czech Republic have no right to Czech citizenship. To apply for Czech citizenship, foreigners are required to have been in possession of a permanent residence permit for 5 years, implying usually a 15 year stay on the territory. In 2002, about 1 150 persons were granted Czech citizenship, among whom 200 were Ukrainians of Czech origin living in the Chernobyl region, and about 300 were Poles who had been living in the Czech Republic for more than 20 years.

Economic impacts of immigration are most likely positive but difficult to quantify

Analysis of the impact of immigration on the labour market and other aspects of the economy, such as the fiscal impact of immigration, is limited in the Czech Republic by a scarcity of data. Most importantly, data on foreigners in the labour force survey is not useable because the samples are too small, which prevents comparative analysis of participation rates, unemployment and occupation of foreigners with the Czech population. Registered unemployment data does not identify foreigners, nor is there data on migrants' remittances. As a result, there is no econometric or quantitative analysis on the effects of migration similar to that produced in many other OECD countries. What follows thus relies largely on qualitative assessments and information collected from special surveys. In any case, given that the increase in immigration flows is recent and the immigration level still relatively low, the effects on the Czech economy are as yet likely to be quite limited.

Labour market effects come from reducing skill shortages

Foreign workers with temporary residence permits represent around 3 per cent of the Czech labour force, and about 40 per cent are Slovaks (2003 figures). In addition, although they are not traced, some foreigners with permanent residence permits also work. Assuming the employment rate in the latter group is equal to that of the Czech population, then the total foreign labour force is equivalent to nearly 4 per cent of the Czech labour force, and about 2.5 per cent if Slovak citizens are excluded. Of course, the presence of undocumented foreigners suggests the true size of the immigrant workforce may be much higher than this.

This increase in the labour force can be expected to have some impact on wages, unemployment and working conditions of natives. The size and direction of impact would depend on the extent to which immigrants complement or substitute nationals on the labour market; other factors may also play a role, such as capital flows associated with immigration. As in many OECD countries, immigrants are strongly represented in sectors such as construction, manufacturing, and mining, and, in terms of skills, among qualified blue collar workers and unqualified workers (Table 6.2); less commonly, they are also strongly represented in real estate and business activities. These data should be treated with caution however, as it puts together heterogeneous groups of immigrants, in particular Slovaks and others. As is often the case, different immigrant communities with distinct characteristics play a different role on the labour market. Immigrant workers can be roughly divided into four groups based on nationality: Slovaks, Central and Eastern Europeans, Vietnamese and "westerners".

Slovaks

Slovaks are by far the most important group of foreign workers, and similarities with the Czechs as well the special free movement agreement, mean they are an integral, and often indistinguishable part of the Czech labour force. In the days of Czechoslovakia, Slovak migration to the Czech regions was common with workers attracted to the then prosperous regions of Bohemia and Moravia (Horáková, 2004). This process has continued following the split-up of the Federation, driven notably by high unemployment in Slovakia and higher wages in the

Table 6.2. **Distribution of employment, 2003**

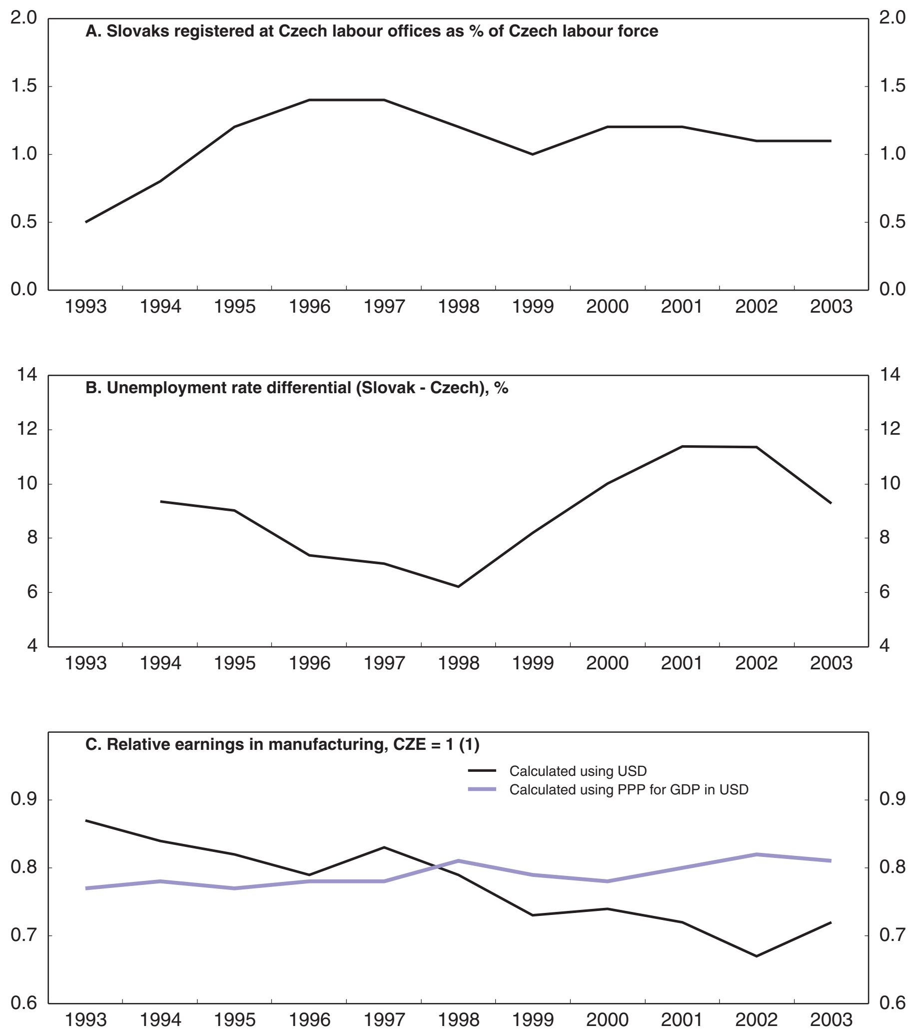
Per cent

By sector	Total employed	Foreigners with a work permit
Agriculture, hunting and related service activities	3.6	5.8
Forestry, fishing and related service activities	0.9	0.7
Mining and quarrying	1.1	5.4
Manufacturing	27.3	33.2
Electricity, gas and water supply	1.6	0.1
Construction	9.3	25.6
Trade, repair of motor vehicles, personal and household goods	13.3	8.4
Hotels and restaurants	3.6	1.7
Transport, storage and communication	7.6	1.2
Financial intermediation	2.0	0.8
Real estate, renting and business activities	6.0	8.7
Public administration and defence, social security	7.0	0.1
Education	6.1	3.4
Health and social work	6.5	0.8
Other community, social and personal services	3.9	3.7
Activities of households	0.1	0.0
Extra-territorial organisations and bodies	0.0	0.4
Total	100.0	100.0
Total, thousands	4 733	48.0
By occupation	**Total employed**	**Foreigners with a work permit**
Legislators, managers	6.0	6.2
Researchers, professionals, intellectuals	10.2	10.0
Technicians, health service, pedagogues and related services	20.1	6.3
Lower administration (clerks)	8.0	0.8
Workers in operation, services and business	12.5	2.5
Qualified workers in agriculture, forestry and related branches (excluding machine and equipment operators)	1.9	3.4
Craftsmen and qualified manufacturers, processors, repairmen (excluding attendants of machines and equipment)	19.6	38.9
Attendants of machines and equipment	13.2	9.2
Unqualified workers	7.6	22.8
Other	0.8	0.0
Total	100.0	100.0
Total, thousands	4 733	48.0

Source: Czech Statistical Office.

Czech Republic (Figure 6.6). Migration from the Slovak Republic is also encouraged by linguistic and cultural proximity, and by family and social ties. Ties through education are also strong. The education system is quite similar in both countries and there is some specialisation of universities between the Czech and Slovak Republics. Many Slovak students study in the Czech Republic and often stay on after graduation (7 per cent of Slovak full-time students were studying in the Czech Republic in 2003).

Figure 6.6. **Migration and incentives to migrate to the Czech Republic from Slovakia**



1. Average gross monthly earnings. Size of enterprise in sample varies.

Source: Czech Statistical Office; OECD, Main Economic Indicators.

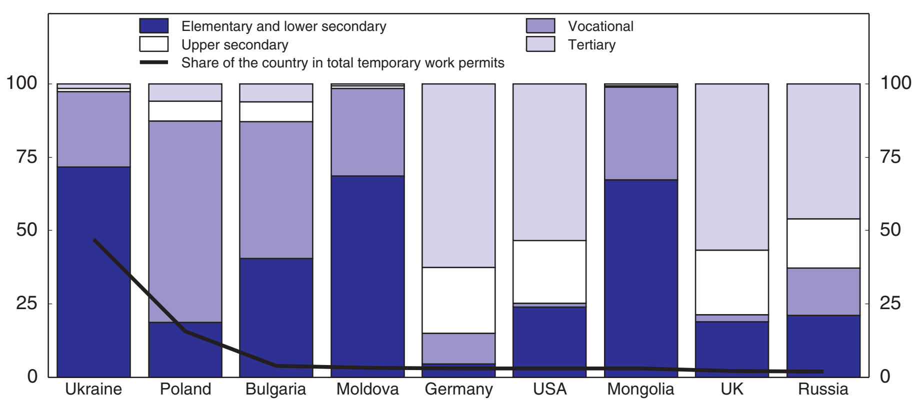
Some Slovaks have settled permanently in the Czech Republic, others migrate under temporary residence permits, and some commute (about one third of those registered at Czech labour offices were working in the border regions according to 2003 data). Slovaks have access to permanent jobs (unlike other foreigners with temporary residence permits) and appear to fill holes in the Czech labour market, both in skilled work (such as doctors and nurses) and unskilled work (such as in metallurgy and coal mining in the Ostrava region where Polish workers are also working). Given the shortage of highly skilled workers (Chapter 5), highly skilled Slovaks are unlikely to undermine the employment prospects of highly skilled Czechs. But, in the market for low-skilled workers, where unemployment is high, competition from Slovaks may keep some Czechs out of work and exert some downward pressure on wages.

Central and eastern Europeans

Central and eastern Europeans account for the bulk of "real" (*i.e.* non-Slovak) immigrant labour, and are concentrated in manual, low-skilled and low paid jobs under short-term contracts (Figure 6.7). The largest groups are Ukrainians and Poles.

Figure 6.7. **Skill mix of jobs held by temporary permit holders by main source country, 2003**

Per cent



Source: Czech government authorities.

Ukrainian immigrants are mostly young males, driven by poor economic conditions at home to go to the Czech Republic periodically for temporary work without their family with the aim of returning with savings. Typically they work as auxiliary workers in the construction, manufacturing and some service sectors (particularly hotels and restaurants) in the larger cities. Polish migration traditionally comprises more females, typically working in the textile industry (IOM, 2004). Polish men work mostly in metallurgy and mining, as during the communist period, as well as in construction, but often have more highly skilled jobs compared with the Ukrainians (Figure 6.7). Polish worker immigration is reportedly often organised *via* contracts between Polish and Czech firms, instead of under individual contracts (Horáková, 2000) and is concentrated in Prague and regions bordering Poland. A majority of the Poles living in the Czech Republic have a permanent residence permit, and have a less precarious position than the Ukrainians. This is even more the case since EU membership, as Poles are now in a comparable situation to the Slovaks, apart from the reservation of the Czech Republic to limit access for Polish workers in case of a threat to the labour market .

The only information on wages is that provided in a survey of Central and Eastern Europeans who hold work permits and have been in the Czech Republic for more than one year carried out by the Research Institute for Labour and Social Affairs (RILSA). In 2001, their wages were slightly inferior to the average wage. An accurate comparison is not possible however, since data on hours worked (probably longer than the Czech average) is not available.[11] In the survey, Poles are found to earn about 20 per cent more than the average respondent, while Ukrainians earned 10 per cent less. These workers have weak tenure and poor mobility in the labour market as work permits are tied to a given employer and, in theory at least, workers have to leave the Czech Republic immediately if they are dismissed. Indeed, according to the RILSA survey, these workers rarely move up the earnings ladder. The immigrants' skills are also apparently under-utilised, around 35 per cent have a job requiring fewer skills than they have (Table 6.3).

Typically in positions that Czech workers would not occupy at the same wage and working conditions, central and eastern European foreigners would seem to be complementary in the short run to the Czech labour force, although competition

Table 6.3. **Education level of central and eastern European workers**

	Accomplished	Required in the job
Elementary education	16	35
Vocational training	46	53
Secondary	26	6
Tertiary	12	5

Source: RILSA, 2001 Survey of Central and Eastern European Workers.

among them may be important. By and large, they respond to a different set of incentives than natives as they are in a much weaker position – being excluded from the social benefit system – and often have not much choice but to work at the conditions proposed by the employer. Yet, while they push up output and very likely profitability, they also exert a downward pressure on wages and conditions in the sectors and jobs in which they are working. Second-round effects likely mean immigrant labour influences unemployment in the longer run by preventing wages and working conditions in those sectors and positions becoming more attractive for Czech job seekers.

Vietnamese

The Vietnamese workforce is the most specialised of the immigrant communities, concentrating almost exclusively in trade, especially buying and selling clothes and electronics, often – although less and less so – through street trading. They work in Prague and other large cities, as well as in the regions bordering Germany and Austria, taking advantage of the main transport corridors connecting Prague with western Europe. Reportedly, these small business operations often operate without a trade license, and tax evasion is high (IOM, 2004). A large share of the community has been resident for several years and is forming a quasi-middle class (Drbohlav, 2003) whose children face no significant integration problems.

"Westerners"

Immigrant workers from "western" countries, or more precisely from non-CEEC OECD countries, also form an identifiable group among immigrant workers. Most work in foreign-owned firms, and numbers are relatively small (those with work permits represent only about 0.2 per cent of the Czech labour force) compared with the importance of these firms in the Czech economy (at least 13 per cent of the employed population works in foreign-owned firms[12]). They typically have high education levels and occupy corresponding posts (Figure 6.7), working often as professionals or managers in key positions, or sometimes in specialised blue-collar jobs for training Czech workers. Located typically in Prague and the surrounding region, the western immigrants usually immigrate temporarily, typically on spans of a couple of years, often with their family. Services for these immigrants, such as international schools, are generally well provided for. Compared to other immigrant workers, the westerners provide relatively little direct competition to Czech employees as they have typically been hired to bring specialised knowledge and skills to run businesses and are an integral part of the process of foreign direct investment.

Illegal work

Illegal work by foreigners takes various forms: some employees have neither authorisation to stay nor work in the country, others have the authorisation to stay but not to work; others have the authorisation to stay and work, but work undeclared; and others have the authorisation to work as self-employed, but do not declare their activity. More at the margins of legality, some work under a self-employed status but effectively perform dependent jobs. Undeclared work is of course not specific to immigrants and is estimated to be quite prevalent in the Czech Republic. For example, Horáková and Kux (2003) estimate that informal activity represents at least 10 per cent of GDP.[13] Undeclared activity is common in some of the main "immigrant" sectors such as construction and textiles, as well as in hotels and restaurants and trade and other services.

The use of subcontracting arrangements with "self-employed" workers instead of a regular employee work contract is a particularly common form of illegal (or quasi-illegal) work in the Czech Republic and reportedly occurs across many sectors (Chapter 5). Exploitation of this type of employment is facilitated by the relatively easy conditions for getting a trade license. Again foreigners are strongly represented in this form of work, as it also bypasses the need to pass the labour market test (see above). This explains why over one third of foreign workers are self employed, compared with only about 15 per cent of total Czech employment (2003 data). A typical example is that of Ukrainian workers, who often operate through an intermediary who sets up jobs and organises contracts with Czech employers. The intermediary is often in a powerful position over the workers and reports of exploitation are widespread.

There are a number of other factors contributing to undeclared activity. The large tax wedge in the Czech Republic provides strong incentives to remain invisible to the tax authorities (Chapter 5). A relatively low probability of being caught also plays a role. There are only about 300 labour inspectors charged to control undeclared work activities, which amounts to about one inspector for every 13 000 employees. Also, if caught, the sanctions imposed are low.[14] The fact that labour inspectors are employees of the labour offices is likely to be problematic in this respect, as labour offices' duty to place workers is potentially conflicting with that of fining the employer for breaching the law, as it may put his activity at risk. Information systems also seem to be insufficiently integrated (Horáková and Kux, 2003). This may compromise the effectiveness of the introduction of a stricter definition of self-employment in the new labour law, if adopted without changes. In the case of foreigners, the rigidity of the work permit system and the length of the administrative procedures for residence permits also provide a strong incentive.

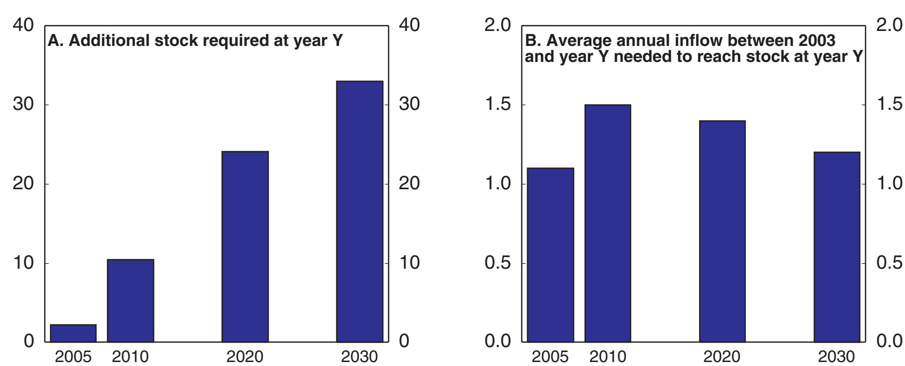
Fiscal impacts are most likely positive but offsetting ageing with migration can only be partial

International evidence shows that the fiscal impact of migration is strongly linked to labour-force participation and unemployment in the immigrant population. Employment being the main motive to migrate, participation rates are obviously high among the foreigners in the Czech Republic.[15] Entitlement to welfare varies according to circumstance. Those with permanent residence are entitled to the same social support as Czech citizens. And, importantly, Slovaks with temporary residence permits have access to unemployment benefits, and can even receive Czech benefits in Slovakia. The tightening of entitlement rules for unemployment benefits in January 2001 has removed concerns about abuse of the system. By contrast, although non-Slovaks with temporary residence permits pay social contributions, *de facto* they cannot receive unemployment benefits since their residence permit ends when they lose their job. This situation, while reducing social transfers to this group of foreigners, is also likely to provide them with strong incentives to work in the informal sector. For access to health services, foreigners coming under temporary permits under another motive than work are required to have personal health insurance. Finally, at least one year of residence is required for access to social assistance, which also excludes foreigners on temporary permits, with the exception of Slovak citizens. Putting these various considerations together, it is very likely that the fiscal contribution of foreigners is positive.

Demographic ageing is expected to occur more strongly and rapidly in the Czech Republic than in most other OECD countries. Parameters of the pension system have been recently modified, and the system is currently financially balanced, but it will not remain so in the longer run (Chapter 2). Immigration, by increasing the working age population, can help to alleviate the fiscal problem

Figure 6.8. **Additional employment required to stabilise the ratio of old-age population to employees**[1]

Per cent population



1. It is assumed that [population aged 60 and over]/[employed aged 15-59] and [employed aged 15-59]/[population aged 15-59] remain at their 2003 values. The required additional employed is the difference in the two estimates of employment, using population projections by the UN (medium variant).

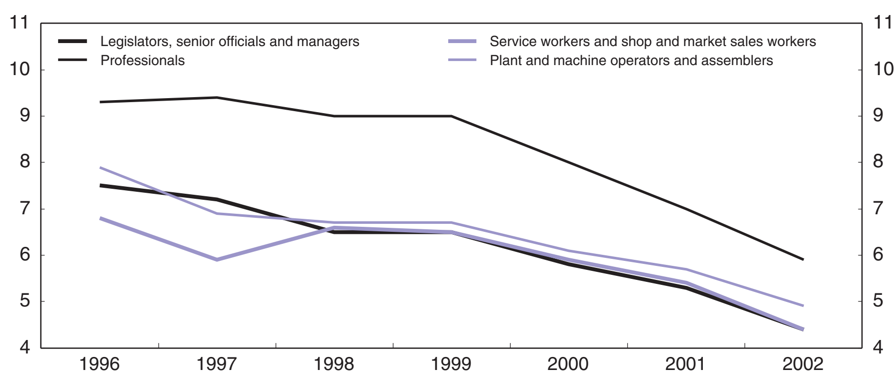
associated with ageing. However, a simple scenario illustrates that it is unrealistic to imagine that labour immigration can "solve" the problem on its own. Assuming that the employment ratio remains at its current level in the future, the additional employees needed to keep the ratio of people over 60 to employees constant is very high, amounting every year to more than 1 per cent of the projected population (Figure 6.8).[16] In terms of stock, these additional employees would represent more than 30 per cent of the projected population by 2030.

Emigration is likely to remain low

In broad terms, the economic incentives to emigrate have been diminishing and are likely to continue to do so in the future. The low mobility of the Czech labour force (Chapter 5) is an important factor limiting the likelihood of emigration. Beyond sociological and linguistic reasons,[17] the relatively high and growing standard of living further diminishes the pressure to migrate for economic reasons. As Chapter 1 points out, GDP per capital in the Czech Republic is close to 70 per cent of the average of the EU 25 countries and is high relative to the new mainland EU countries. Wage incentives to emigrate have also decreased significantly since the mid-1990s, both for skilled and unskilled workers (Figure 6.9). In

Figure 6.9. **Average annual gross earnings in Germany relative to the Czech Republic**[1]

CZE = 1



1. Data for Germany is for full-time workers only whereas that for the Czech Republic is for full-time and part-time workers. In the Czech Republic, part-time work is about 5 per cent of total employment. For the Czech Republic, change in methodology 2001/2002. Data used for calculations is in current USD.

Source: Czech Statistical Office; Eurostat.

the future, further catch up with EU15 and other rich OECD countries will further reduce these incentives.

However, counter to most incentives to emigrate, EU-membership, with its concomitant "free movement of labour" raises the question as to whether the Czech Republic will experience new waves of emigration. Most EU countries have chosen to make use of the seven-year transition period included in the accession treaty before opening their labour markets (Box 6.5). In the medium run, this is likely to induce mobile Czech workers to emigrate into the other EU countries and

Box 6.5. The treatment of Czech workers in EU15 during the transition period

In 11 of the EU 15 countries, and for the first two years of EU-membership, the treatment of Czech workers will be comparable to that before accession. Citizens from the new member countries will still need a permit to work – and some countries have introduced quotas for new member states workers, and some very specific exemptions (Table 6.4). These restrictions could be extended for up to 5 additional years until May 2011. At the same time a "preference rule" is stated, which should give new member workers priority over people from third countries. The accession treaty also provides for possible restrictions on the free delivery of cross-border services. Austria and Germany have passed legislation restricting the movement of workers from new member countries in a number of sectors, notably construction and industrial cleaning (Table 6.4). The situation of workers from the new member states already working in one of the EU15 countries before May 2004 with a work permit of at least 12 months has improved however, since they are automatically granted the possibility to work in the host country without renewing their permit. The same rule applies to those who obtain a work permit for one year or more. The situation of the self-employed is also unchanged, as they have been free to establish in the EU15 since the Europe agreement came into force in 1995.

Czech workers will nevertheless have access to some EU countries. While a work permit is still required in Denmark for citizens of new member countries, eligibility is very easy to fulfil compared with third country nationals (although Denmark has kept the right to revise these conditions after two years). Ireland, Sweden and the United Kingdom have fully opened their labour market. At the same time, fearing an increase in claims to social assistance, Ireland and the United Kingdom have restricted access to their welfare systems by conditioning it to a residence test. The restriction applies to social assistance schemes, such as unemployment assistance, disability allowance, housing allowance, child benefits, etc. While the test applies to citizens of all nationalities, the European Commission is still examining the legislation as it is concerned that the residence test *de facto* constitutes an indirect discrimination among EU citizens, infringing the clause of equal treatment for access to social assistance and insurance.

Table 6.4. **Treatment of Czech workers in the EU15 countries during the first two years of the transition period**

Destination countries	Restrictions on labour movement (Yes: standard work permit process apply)	Sectoral exemptions and other exceptions/softening of restrictions	Restrictions on access to social welfare	Restrictions on posted workers/ service exchanges
Austria	Yes			Yes in: agriculture, construction, industrial cleaning, security activities, home nursing, social work without accommodation, stone work, manufacture of metal structure.
Belgium, Finland, Greece, Luxembourg, Portugal, Spain	Yes			No
Denmark	Work permit required but provided if offer for ordinary full-time employment on terms that abide by relevant collective agreements or usual conditions on the Danish labour market.		No	
France	Yes	Free movement for researchers		
Germany	Yes. Bilateral agreements remain in place			Yes in: construction, industrial cleaning, interior decoration (*check*)
Ireland	No		Access to social assistance only after two years of residence (applies to all nationalities including Irish). Social insurance benefits will be accessible under usual requirements.	
Italy	Yes	Quotas for workers from new member states are established (20 000 in 2004)		No

Table 6.4. **Treatment of Czech workers in the EU15 countries during the first two years of the transition period** (*cont.*)

Destination countries	Restrictions on labour movement (Yes: standard work permit process apply)	Sectoral exemptions and other exceptions/softening of restrictions	Restrictions on access to social welfare	Restrictions on posted workers/ service exchanges
Netherlands	Yes	Quota of 22 000 for workers from new member countries without labour market test. No work permit requirement for workers from new member countries for a list of specific professions in some sectors (international transport, inland navigation, health care, slaughterhouses /meet industries). List to be renewed every three months.		
Sweden	No		No	
United Kingdom	No. Registration obligation only.		Access to social assistance after one year of work (applies to all nationalities including British). Eligibility to in-work benefits and other current social benefits as of the first day of work.	

Source: OECD Secretariat based on EURES and national sources.

overseas. What about the long run? In general studies find that migration flows will increase in a free movement environment, but not massively. A study by Alvarez-Plata *et al.* (2003) for the European Commission estimates the long-run migration potential stock of the recent 10 EU members to be between 3.2 and 4.5 million persons in 2030, corresponding to 3.2 – 4.5 per cent of their population. Various studies with country-specific results have also been conducted (Table 6.5). These studies probably overestimate the migration potential as they measure the propensity of workers to migrate, not the capacity of host-country labour markets to absorb additional workers, and the gap between propensity, serious intention and action is difficult to capture. This aside, the results of Table 6.5, interestingly suggest that Czechs are among the least inclined to migrate.

Recent surveys on migration intentions and experiences also confirm a relatively low propensity among Czechs to migrate (Table 6.6), and in about 90 per cent of cases the propensity is for temporary migration. Germany is by far the favourite destination, followed by the United Kingdom, Canada and the United States, and Austria. Migrants' profiles can be classified in three main groups (Vavreková, 2002). One group is young, well educated and with good language skills for whom migration is often a way to bridge the gap between school and higher education, or higher education and their first job. Typically members of this group return to the Czech Republic after one or two years of work. A second group comprises commuters, with varying levels of education and professional experience, reacting to labour demands in the German and Austrian border areas. A number of factors limit the scale of this type of migration, in particular the low population density and low economic dynamism of most of the bordering German and Austrian regions. A third group of migrants is made up of Czech citizens reacting to demand by host states, like the ICT specialists in Germany, doctors and nurses. It is quite obvious that if wages and working conditions incentives are high enough, highly skilled Czechs working in professions which are in shortage in the western countries will face an incentive to emigrate. The policy challenge in this area is to ensure there are no barriers to return migration and to avoid locking in

Table 6.5. **Migration intentions in the EU acceding candidate countries in April 2002**

	General inclination	Basic intention	Firm intention
Turkey	6.2	0.8	0.3
Bulgaria, Romania	5.0	3.2	2.0
Poland	3.7	1.6	1.0
Estonia, Latvia, Lithuania	3.5	2.0	0.8
Hungary, Czech Republic, Slovakia	2.4	0.8	0.6
Cyprus, Malta, Slovenia	2.1	0.8	0.7

Source: European Foundation for the Improvement of Living and Working Conditions (2004).

Table 6.6. **Migration intention in the Czech Republic (per cent of the population aged 18-59)**

	Migration not excluded	Migration considered	Migration very likely
Czech Republic	14.3	5.3	0.5
German border districts	17.4	5.1	1.5
Austrian border districts	18.4	6.8	1.3

Source: Vavrečková (2002).

migration decisions because of incompatibilities of social security systems. For example, pension rights are portable among EU countries, but conditions to receive pension payments (notably the number of years to be worked) are not unified.[18] With the United States, a bilateral agreement exists on the payment of pension benefits, but not yet on the portability of the pension rights. Removing obstacles to emigration would be important, as temporary migration could become a powerful instrument to enhance a rapid human capital accumulation, especially in those areas of the Czech labour market which suffer from important bottlenecks and shortage of qualified workers.

Conclusions and recommendations for a better targeted immigration policy

Immigration in the Czech Republic is quite a recent phenomenon compared with most other OECD countries. In part, this explains the paucity of data on the number of immigrants and their economic and social impact. Additional efforts should be made on this front. First, and perhaps foremost, efforts to include more information about foreigners in the labour force survey should be continued. Data on nationality should also be collected in registration at unemployment offices. A number of variables already available should be made public, notably the length of stay of foreigners. Finally, the publication of some policy variables, such as the number of applications for residence and work permits received, granted and refused would increase transparency in this area.

Czech emigration is quite low and is likely to remain so even when the constraints on the mobility of Czech workers to labour markets of the EU15 countries are fully relaxed. Nevertheless, the emigration of highly skilled people very much in demand in other countries is likely to increase in an EU-wide labour market. The Czech government has an open approach on this issue and does not intend to erect disincentives to emigrate. The policy challenge for emigration is to ensure favourable conditions for potential return, not least by making social security systems compatible. When not in place, an agreement on the portability of pension rights should be sought with countries to which Czechs emigrate, for example the United States. Working at unifying the conditions for pension payment among EU countries would also be important.

Given the still relatively small level of immigration, the economic and social consequences on the Czech economy are probably limited. A key aspect of the immigrant "stock" is that about 40 per cent of the foreign workers are Slovaks, who – with very similar language and culture – are not really considered as "foreigners" by Czech citizens. Net labour flows from the Slovak regions were already taking place when the two countries were combined as Czechoslovakia. Since then the quasi free movement of labour has kept the labour markets of the two countries quite unified. Skilled Slovaks, frequently educated in the Czech Republic, are often making up shortages in the high-end of the Czech labour market. At lower skill levels, Slovaks are more likely to be competing directly with Czechs for jobs. This is much less the case among other immigrant workers, notably those coming from other Central and Eastern European countries. These employees generally occupy jobs that Czech workers do not want and can afford not to take at the conditions offered, partly because the jobs offer little additional income above unemployment benefits and other welfare payments. This is nevertheless certainly exerting downward pressure on wages in these types of jobs and may thus be having some second round effects on unemployment in the long run. The easy availability of foreign workers willing to work for low wages should not discourage the necessary reforms (Chapter 5) aimed at mobilising Czech benefit recipients.

Overall, the fiscal impact of immigration is probably positive. Immigrants' reliance on welfare is low, notably because foreigners with temporary residence and work permits are *de facto* often cut off from access to unemployment benefits and social assistance. However, this situation may also strengthen incentives to go into the informal sector and thus reduce tax revenues. In the long run, immigration may help to somewhat mitigate the fiscal impacts of ageing, but cannot realistically be expected to solve it. The minimum annual immigration intake required to stabilise the ratio of old-age population over employed population would have to be over 1 per cent – an extremely high level of immigration even judged in terms of "immigration countries" such as Canada and Australia. Therefore, immigration is no substitute for pension reform.

Immigration policy has been rather restrictive since 1996, and is focused on meeting the short-term labour-market needs. Despite this, inflows are continuing, and they are very likely to increase in the future, especially if Czech living standards grow quickly, but also because of the likelihood of narrowing labour supply, particularly of young workers, due to ageing. To avoid an increasing level of illegal flows and to maximise the benefits from immigration, a more open approach to immigration may help. As part of this the authorities could also consider taking a longer-run approach to immigration, for example by widening the avenues to permanent residence and citizenship so as to increase integration. Such a policy would be especially desirable as it could partially help in slowing down the decline in the Czech population.

The pilot project for the active selection of highly skilled workers, which is the first scheme of this type in the EU, is a step in that direction. However, there are some weaknesses in its present form that need to be addressed if a full-scale programme is to be launched. First, the number of steps required to provide a permanent permit risks making the scheme expensive to administer. In addition there are some ambiguities in the objectives. Although conceived in principle as a tool to actively select permanent immigrants, the scheme is partly based on the short-term tools of the current work-permit system (temporary permits; requirement to have already a job offer and a work permit). The scheme also has perhaps overly stringent eligibility conditions in some areas, including a "social check", which may discourage potential candidates (notably those not already residing in the Czech Republic). In further developing the pilot project for points-based immigration it may pay for policy designers to have another look at similar schemes operating in some other countries, notably Australia, Canada and New Zealand.

The Czech Republic would also gain from taking a more long-term approach to immigration of low-skilled workers, who make up for the bulk of immigration. The use of narrowly defined job-specific work permits is probably quite costly in terms of administration, both for the public sector and in terms of the incentives it provides employers and/or employees to switch to illegality when one characteristic is modified. Moreover, there are limits to the restrictive work permit policy. First, foreign workers can use trade licenses as an alternative way to enter the labour market, and second they are able to find undeclared work quite easily. Greater co-ordination of policy on work permits and trade licences is needed. In addition, more effort could also be put in labour controls. Labour inspection would be made more effective if were not part of the responsibility of labour offices. However, there are probably limits to what controls can (cost-efficiently) achieve. A less restrictive work permit policy would be beneficial in fiscal terms, as more activity would be declared. It would also allow a better integration of foreigners, as would the introduction of less strictly defined work permits (which currently put them in a very weak position *vis-à-vis* their employer) and the possibility for foreigners who have already been staying on the Czech territory to get work and residence permits of a duration of more than one year. Integration policy measures should also be implemented for "economic" migrants, in particular to facilitate access to Czech language courses.

The work permit process is relatively rapid and does not seem to be a barrier for the highly skilled, and thus possibly for FDI. However, the relatively long delay required to obtain a residence permit has been leading to quasi illegality for a number of high skilled workers. This is no longer the case for EU citizens, but the plan to group all formalities in a one – stop shop is welcome for non-EU citizens.

Notes

1. The historical part of this section draws largely on Drbohlav (2003), Horáková (2000) and IOM (2004).
2. Overall in that period, about half a million people emigrated illegally from Czechoslovakia and 65 000 legally, out of which three quarters from the Czech regions/lands (Kuera, 1994 quoted in IOM, 2004).
3. These immigrants were often of Czech or Slovak origin, coming principally from countries of Central and Eastern Europe with some also from Greece and France. Apart from that, the settlement of Bulgarians agricultural workers in the "emptied" border region just after the war, and the admission of Greeks fleeing the civil war in the second half of the 1940s made for the main permanent immigration waves.
4. The number of Vietnamese in Czechoslovakia was most important in the early 1980s, reaching 23 000 in 1983.
5. Not all of them actually resettled in Czech Republic, however. Some registered for permanent residence so as to be able to claim property restitution and others used this as a way to regularise their previous emigration (Horáková, 2000).
6. This may explain part of the discrepancy observed between data from some source countries and from the Czech Republic. For example, only 3 801 US citizens had a residence visa in 1999, while the US State Department reported that about 10 000 US citizens were residing in the Czech Republic in that same year.
7. Generally speaking, in the statistics and analysis of international migration, a long term visa is one which has a duration of at least a year and so the Czech "long-term" residence permit is classified as temporary.
8. For example, in 1986 already, Canada had stopped adjusting its annual permanent immigration targets in light of the current labour market conditions and started to set them according to longer-term demographic and economic considerations (OECD, 2003).
9. In New Zealand, some immigrants are now admitted in the skilled migrant programme for a two-year period during which their temporary status may be converted to permanent if they find a stable employment commensurate with their skills.
10. This is the case notably for a number of Ukrainian workers, who were provided with trade licenses but whose working regime in reality resembles that of standard employees (IOM, 2004).
11. The average net monthly income amounted to about CZK 9 600, that is about 2.7 times the net minimum wage. Data on net average wage in the Czech economy is not available, but to provide a basis for comparison, the average monthly gross earnings amounted to 3.3 times the gross minimum wage in 2001.

12. 26 per cent of people employed in medium and large enterprises (20 employees and over) were in foreign-owned firms in 2003. Medium and large size enterprises represent almost 50 per cent of total employment.
13. Informal activity estimated here includes tax evasion, profits from unauthorised business, untaxed income from parallel jobs of employees, irregular employment of unemployed or "inactive" persons, and employment of undocumented foreigners.
14. See Kroupa *et al.* (1997).
15. For example, in 1996, 96 per cent of the Ukrainians being granted temporary permits came to work, and 77 per cent of the citizens from the United States (Drbohlav, 2003).
16. This is a lower bound since it is assumed that all the immigrants coming would be working.
17. A proper apprehension of the Czech language including the mastering all Czech-specific sibilants (*deakritika*) is only possible at young age in a Czech language schooling environment. Young families therefore tend to return to the Czech Republic once their children are growing into this age.
18. For example, if a Czech works for 5 years in France, he will be entitled to the *pro-rata* old age pension when he meets the French conditions (retirement age and period of insurance), which differ from the Czech ones and also from those of other EU countries where the Czech national has also possibly worked.

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7. Environmental issues for sustainable development

There is growing concern that long-run sustainable development may be compromised unless measures are taken to achieve balance between economic, environmental and social outcomes. This chapter looks at two environmental issues relevant for sustainable development: climate change and air pollution. In each case, indicators are presented to measure progress and the evolution of potential problems, and an assessment is made of government policies in that area. An assessment of whether institutional arrangements are in place to integrate policy-making across the different elements of sustainable development is made in Box 7.1. Discussion on the important sustainable-development topic of pensions can be found in Chapter 2.

Climate change

Main issues

Even though its greenhouse gas (GHG) emissions in ten years time look set to be well below the Kyoto target, the Czech Republic might gain from further abatement, provided that projects can be found yielding emission reductions that cost less than the price of allowances on international markets. The country's excess allowances could then be sold abroad for a profit, or, more speculatively, could be saved to count against any future commitments for further emission reductions, when prices might be higher. The economy's low energy efficiency likely implies low-cost emission reduction opportunities. The main issues are to concentrate climate policy on abating emissions where costs are lower than international carbon price and to achieve those reductions in a cost-effective fashion.

Performance

Notwithstanding a comparatively strong decline in the course of the 1990s, the GHG emission intensity of the Czech economy is one of the highest in the OECD area (Table 7.1). High emissions per unit of output are pervasive throughout the economy. In electricity generation, where emissions per kWh even

Box 7.1. The integration of policies across sustainable development areas

Until the national sustainable development strategy (due to be approved by the government at the end of this year) the principal framework for the integration of environmental policies with other policies and promotion of sustainable development was contained in the *State Environmental Policy*. First issued in 1995, this government resolution has been regularly updated (in 1999, 2001 and 2004). One of the main goals of the 2004 revision is to make environmental management better articulated with the country's economic policies and to strengthen co-ordination between the Ministry of the Environment and other government departments.

A governmental council on sustainable development was established in August 2003. It has led the preparation of the national sustainable development strategy and reinforced policy coherence and integration. The council is currently chaired by the Deputy Prime Minister for Economy. Other government departments and the Parliament are also represented in the council and the council is served by working groups which provide additional platforms for co-ordination. One of the main challenges faced by the council has been to improve co-ordination amongst the large number of institutions dealing with issues in sustainable development, especially as the new three-tier administrative structure in the public sector might otherwise result in blurring the allocation of competencies across government levels.

In practice, integration remains limited as regulatory impact analysis of sustainable development policies is not systematically undertaken. The authorities have not used cost-benefit analysis as a regular policy integration tool in the past. Such analysis is required for neither policy programmes nor projects, and has only been applied to projects funded by the European Union.

On the other hand, environmental impact assessments (EIA) have been extensively applied to economic development projects since they became mandatory in 1992. Projects have sometimes had to be amended or abandoned as a result of EIAs because the environmental damage was judged to be excessive. The accession to the European Union requires the Czech Republic to subject plans and programmes to strategic environmental assessments (SEA).

rose in the latter part of the 1990s (Table 7.2), the high intensity is due to the high share of carbon-rich domestically-mined lignite and coal and brown coal in primary fuel consumption. In the industrial and residential sectors, where emissions per unit of output and private consumption declined at very fast rates in the 1990s compared with most other OECD countries, the still high intensity is linked to inefficient industrial processes and weak heating insulation (OECD, 1999). The drop in the economy-wide emission intensity was accentuated as output fell in the initial phase of the transition to a market economy and has subsequently been sufficient

Table 7.1. **Main indicators: climate change**

Indicators of greenhouse gas (GHG) emission intensity, grams of CO_2 equivalent per $PPP of GDP, in 1995 prices

	Total GHG emissions	CO_2 emissions, electricity	CO_2 emissions, transport	Other GHG emissions	Total GHG emissions	CO_2 emissions, electricity	CO_2 emissions, transport	Other GHG emissions
	Level, 2000				Average annual percentage change 1990-2000			
Australia	1 061	360	159	542	–1.82	–0.46	–1.52	–2.70
Austria	403	66	96	241	–2.05	–3.20	–0.02	–2.42
Belgium	600	105	97	398	–1.47	–1.27	–0.19	–1.81
Canada	888	156	183	549	–0.94	0.24	–0.85	–1.28
Czech Republic	**1 082**	**468**	**100**	**514**	**–2.77**	**2.54**	**6.33**	**–6.58**
Denmark	501	171	88	242	–2.38	–2.73	–0.84	–2.64
Finland	597	178	99	321	–2.56	–0.17	–1.83	–3.84
France	402	30	102	271	–2.00	–2.60	–0.02	–2.57
Germany	519	168	91	260	–3.92	–3.57	–1.05	–4.95
Greece	819	275	122	422	–0.16	0.07	–0.02	–0.34
Hungary	747	192	79	476	–2.60	–1.30	–0.24	–3.40
Iceland	398	0	84	314	–1.82	. .	–2.47	. .
Ireland	643	152	98	392	–4.63	–2.97	0.23	–6.03
Italy	432	108	89	235	–1.06	–0.43	0.01	–1.70
Japan	441	132	81	229	–0.34	0.13	0.89	–0.99
Luxembourg	314	6	249	59	–12.47	–27.09	0.62	–23.13
Netherlands	553	138	80	335	–2.49	–0.95	–1.09	–3.34
New Zealand	1 078	82	179	817	–2.21	2.87	0.80	–3.12
Norway	454	3	97	354	–2.91	–1.57	–2.86	–2.93
Poland	1 109	458	74	576	–7.12	–6.48	–1.39	–8.08
Portugal	516	129	111	276	–0.06	0.85	3.47	–1.51
Slovakia	846	249	70	526	–5.21	0.98	1.98	–7.60
Spain	536	130	127	278	0.35	1.21	0.97	–0.28
Sweden	340	35	110	195	–1.91	–1.52	–0.77	–2.56
Switzerland	267	2	78	187	–0.94	–3.82	–0.40	–1.11
United Kingdom	512	137	106	268	–3.58	–4.30	–1.41	–3.94
United States	779	273	192	315	–1.86	–0.73	–1.30	–3.04
OECD total	639	201	137	307	–1.88	–0.79	–0.58	–2.90
EU	491	120	100	272	–2.43	–2.36	–0.40	–3.10

Source: Greenhouse gas emissions: national submissions to the UNFCCC and national publications. Carbon dioxide emissions for electricity and transport: IEA (2001). GDP: OECD, SNA database.

Table 7.2. **GHG emissions and sectoral indicators**

	Total GHG emissions		CO_2 emissions per Kwh electricity	Manufacturing CO_2 emissions per unit of output	Residential CO_2 emissions per unit of private consumption	Road transport CO_2 emissions per vehicle-kilometre	Electricity use per unit of GDP	Manufacturing output per unit of GDP
	Level million tonnes CO_2 equivalent 2000	Annual average percentage change						
		1990-2000	1990-2000	1990-2000[1]	1990-2000[2]	1990-1999	1990-2000	1990-2000[1]
Australia	502	1.7	0.1	–0.7	–1.1	–0.8	–0.6	–1.6
Austria	80	0.3	–3.3	–1.7	–2.4	–1.8	0.1	0.3
Belgium	152	0.7	–1.1	–0.2	–1.1	–0.8	–0.2	–0.5
Canada	726	1.8	0.7	–2.6	–2.0	–0.4	–0.5	1.0
Czech Republic	**147**	**–2.7**	**–0.2**	**–7.7**	**–15.4**	**4.1**	**2.8**	**0.2**
Denmark	69	–0.1	–3.4	–1.7	–4.0	–0.2	0.7	–0.6
Finland	74	–0.4	–0.9	–7.2	–7.0	–1.4	0.7	3.2
France	550	–0.2	–3.2	–2.4	–1.7	–0.5	0.6	0.3
Germany	991	–2.1	–1.5	–1.1	–4.0	0.7	–2.1	–1.8
Greece	130	2.2	–2.0	–0.4	2.6	–4.4	2.1	–1.7
Hungary	84	–1.8	–1.5	–12.7	–5.4	–3.3	0.2	5.3
Iceland	3	0.7	–4.9	. .	–7.7	0.3	2.6	. .
Ireland	67	2.2	–1.1	. .	–6.2	4.8	–1.8	. .
Italy	547	0.5	–1.2	–2.0	–1.4	–1.1	0.8	–0.2
Japan	1 386	1.1	–0.9	–0.8	0.1	0.3	1.0	–0.2
Luxembourg	6	–7.8	–24.6	–13.0	–2.3	3.8	–3.4	–2.2
Netherlands	218	0.4	–2.7	–1.8	–2.9	–0.1	1.8	–0.6
New Zealand	77	0.5	3.7	. .	–3.2	–2.1	–0.8	. .
Norway	55	0.6	0.5	0.8	–8.8	0.5	–1.9	–2.7
Poland	386	–3.7	0.5	–5.8	–6.7	–6.4	–6.9	4.4
Portugal	85	2.7	–0.9	0.7	–1.0	–0.4	1.8	–0.6
Slovakia	49	–4.0	0.8	–4.7	–7.4	2.3	0.2	2.4
Spain	386	3.0	0.0	–0.6	0.4	–0.3	1.2	–0.1
Sweden	69	–0.2	1.0	–4.7	–4.1	–1.4	–0.5	2.5
Switzerland	53	–0.1	–4.7	. .	–1.7	–0.3	1.1	. .
United Kingdom	649	–1.3	–3.6	–2.1	–1.9	–0.5	–0.7	–1.6
United States	7 001	1.3	–0.3	–4.0	–1.9	–0.2	–0.4	0.4
Total of above OECD Countries	14 543	0.6	–0.8	–2.2	–1.8	–0.3	–0.2	0.0
OECD excluding US	**7 542**	**–0.1**	**–1.2**	**–1.5**	**–1.7**	**–0.4**	**0.0**	**–0.3**
EU countries	4 073	–0.3	–2.0	–1.8	–2.4	–0.4	–0.2	–0.7

1. 1991-2000 for Germany and Hungary; 1992-2000 for Poland; 1993-2000 for Slovakia; 1990-1999 for Portugal; no data for Iceland, Ireland, New Zealand and Switzerland.
2. 1991-2000 for Czech Republic; 1993-2000 for Slovakia.

Source: GHG National submissions to UNFCCC, national sources and UNFCCC; carbon dioxide data, IEA; manufacturing output, private consumption, OECD.

Table 7.3. **GHG emission projections for reference and high scenarios**

	1990	1995	2000	2005	2010	2015	2020
Reference scenario (million tonnes CO_2 equivalent)	187.5	142.7	141.8	126.4	128.3	123.8	121.2
High growth scenario (million tonnes CO_2 equivalent)	187.5	142.7	141.8	141.5	141.7	146.6	145.9

Note: Projections have been constructed on the basis of the original value of the total emission balance for 1990.
Source: Ministry of the Environment.

to prevent a marked rebound as the economy recovered. Emission levels were 18 per cent below the Kyoto target in 2000. Official estimates suggest that, even in a fast economic growth scenario with unchanged policies, emission levels by 2010 are likely to be well below the Kyoto target (Table 7.3).

Policy

While not having any GHG emission abatement target apart from the Kyoto one, the authorities are pursuing policies to reduce emissions in coming years in order to sell or bank permits. The key objective is to reduce the overall energy intensity of the economy, with an explicit target of an 11 per cent reduction in energy use, measured in tonnes of oil equivalents, per unit of GDP by 2005 compared with the 1999 level (Ministry of Environment and Czech Hydrometeorological Institute, 2001). Such an objective would result in only a slightly faster fall in energy intensity than occurred in the whole of the OECD area in the second half of the 1990s. GHG emissions trends will benefit from the commissioning of the first two units of a new nuclear reactor in Temelin that first operated at full capacity in mid-2003. When trials have been successfully completed by the end of 2004, these units will supply about a quarter of all electricity generated in the country if they operate at 80 per cent capacity and could reduce total GHG emissions by 8 per cent. The electricity company may announce in 2004 whether it would consider the construction of third and fourth units at this site as from 2009.

Although increased energy efficiency in the past is likely to have reduced GHG emissions at little or no cost, additional improvements may be expensive if the authorities pursue them by regulating and subsidising instead of further adjusting prices. A history of pricing energy below costs has contributed significantly to the country's very high energy intensity boosting GHG emissions. The regulators have gradually raised energy prices since the early 1990s, which has improved energy efficiency in most sectors of the economy. This has not only reduced GHG emissions but also lifted the output potential of the economy by releasing resources from the energy sectors to be employed more productively elsewhere. In particular, the regulator ended cross-subsidies to the households from industrial consumers in 2002. As a result, domestic electricity prices jumped some 15 per cent, bringing them closer in to line with costs than before. Natural gas prices to households have also risen significantly between 2000 and 2003. Further price hikes might entail negative social consequences, which can be addressed through the general social safety net. Alternative polices to raise energy efficiency (such as energy audits, fiscal subsidies and voluntary agreements) are unlikely to represent an efficient means for reducing greenhouse gas emissions, given the experience of other OECD countries in this area, and building code regulations, while useful, only affect new construction.

The government aims to increase the share of renewable energy in total primary energy supply to 5-6 per cent by 2010 and to 8-10 per cent in 2020. Such a programme is at the limits of what is technically feasible given the possibilities for renewable energy sources, notably biomass (World Bank, 1999); as a result it could be costly in relation to alternative methods of reducing greenhouse gas emissions. Indeed, the government gives substantial fiscal subsidies to producers and users of renewable energy, including tax exemptions and direct investment subsidies (the latter amounting on average to 17 per cent of total investment costs). It also mandates distribution companies to buy electricity from renewable plants at guaranteed feed-in tariffs. As is the case in most OECD countries, the associated abatement costs have been very high, at around EUR 235 per tonne of saved carbon in the case of biomass and up to EUR 560 in the case of photovoltaic power.[1] Moreover, producing electricity from renewable sources also avoids emissions of local air pollutants. When those additional benefits are factored in the analysis, the estimated abatement costs are lowered to EUR 222 per tonne of saved carbon in the case of biomass and EUR 547 per tonne of saved carbon in the case of photovoltaic power. These estimates are far above the permit price on the EU emissions market, which is forecast to lie in the range of EUR 15 to EUR 73 per tonne of carbon (IEA, 2002 and Criqui and Kitous, 2003). This discrepancy suggests that promoting renewable energy is a costly way to reduce greenhouse gas emissions, needing subsidies from the government and cross-subsidies within the electricity industry to be economic, even allowing for the value of the saved local air pollutant emissions.

Climate change policies have so far not aimed at reducing the very high GHG emission intensity of electricity production. Thus, the fuel mix in electricity generation is based on commercial criteria without any official directives or taxes that would encourage the use of cleaner fuels. In this environment, it has been the most profitable for producers to use carbon-rich domestic brown coal for electricity generation. Thanks to very low extraction costs, this fuel has remained competitive even *vis-à-vis* natural gas without any production subsidies. The reluctance to impose a tax that would reduce the demand for coal is partly due to concerns about the social implications in mining communities in Northern Bohemia where rationalisation of the coal industry has already resulted in high unemployment rates. Motivated by similar concerns and the goal of preserving energy independence, the state energy policy released in March 2004 even foresees the construction of new brown coal power plants and a relaxation of environmental regulation for brown coal mining.[2]

However, such choices will be increasingly costly. Pressures on carbon intensive activities will be intensified in coming years as international trading with emissions will raise the cost of coal as a fuel, providing an impetus for carbon abatement by large users in industry and power generation. The possibility to sell allowances on the world and EU markets will create incentives for carbon abatement measures. At the moment, the most pressing issue is to implement the EU emissions trading directive by putting in place the necessary infrastructure and by establishing a national allocation plan. In this respect, the EU directive requires that a minimum proportion of the permits should be issued free of charge: 95 per cent for the first trading period (2005-2007) and 90 per cent for the second period. The Czech authorities will allocate all of the first period permits without charge and plan to do so for second period permits as well. Such grandfathering amounts to transferring the scarcity rent created by the carbon constraint to past polluters. The extent of the transfer is significant as the EU emissions trading scheme will cover more than three quarters of emissions in the Czech Republic. Outside of the EU trading scheme international carbon commerce will also create economic incentives for reducing emissions because of the possibility to sell project-based carbon credits. The legal framework for the market in project-based credits remains to be finalised at the EU and international levels and is contingent upon the entry into force of the Kyoto protocol. Nevertheless, when the price at which the Czech authorities can sell carbon permits becomes clearer, it should be used as a cap on the level of marginal costs in domestic abatement programmes since more costly actions would entail a net welfare loss for the Czech Republic.

Conclusions

Although the Kyoto target is set to be attained comfortably and a programme for energy saving and use of alternative fuels in transport is in place, the very high level of emission intensity in the Czech Republic indicates unfinished business in this area. International emission trading will provide a targeted and cost-effective instrument to reduce greenhouse gas emissions. A rising price of carbon emissions will make coal use increasingly costly, which casts doubt on the consistency of pro-coal policies with long term climate change targets. One problem with the implementation of the EU emission trading scheme relates to the allocation rule that requires 95 and then 90 per cent grandfathering. The Czech authorities intend to go beyond this requirement and plan to allocate the totality of the permits free of charge in both periods. Such grandfathering involves a transfer of resources to the industry which ought to be limited to the minimum mandated by EU law. Besides, when it can be ascertained, the price at which the Czech authorities will be able to sell permits internationally should serve as a benchmark for acceptable abatement costs in domestic programmes. The policy of raising energy prices closer to economic costs has proved effective in reducing emissions without causing the economy any adverse effect, and this process should be completed to stimulate energy saving. Concurrently, an excise duty on coal and other fossil fuels should be introduced in the sectors that are not covered by the trading system to avoid inducing any switch from electricity or gas to coal. Conversely, programmes to promote renewable sources ought to be scaled down until the extra costs of the programme (relative to investment in new less-polluting power stations) is in line with value of lower air pollution externalities and reduced greenhouse gas emissions. One very cost-effective way to achieve this result is to allocate renewable energy production subsidies by a competitive reverse auction. In this case, the government sets a maximum price that it is prepared to pay and invites bids from suppliers at lower prices.

Air pollution

Main issues

Air pollution is a threat to health and quality of life, and damages ecosystems and structures. The corresponding economic costs, which are often indirect and appear with a long lag, are estimated to be substantial.[3] The air quality in the Czech Republic was poor at the start of the transition to a market economy in the early 1990s, but significant improvements have taken place since then. Continued improvements in the future are necessary. However, future improvements are likely to become more expensive and might lack the same public support as in the 1990s when the change in air quality was clearly visible, the main issue now is to achieve abatement at a low cost so as to limit the adverse impact in the economic dimension of sustainable development.

Performance

Notwithstanding the very significant reductions in emissions of traditional air pollutants relative to GDP in the 1990s, the economy-wide emission intensity is still relatively high (Table 7.4). Sulphur dioxide emissions per unit of GDP fell by 85 per cent in the course of the 1990s, but their level was still more than twice that of the EU average at the end of the decade, although lower than Hungary, Poland and the Slovak Republic (Figure 7.1). The high level of emissions per unit of GDP is principally due to the intensive use of sulphur-rich brown coal in electricity generation. The fall in nitrogen dioxide emissions relative to GDP during the 1990s was less striking, as a strong reduction in the emission intensity from stationary sources was partly offset by sharp increases in traffic-related emissions. In 2000,

Table 7.4. **Main indicators: air pollution**

	Change in emissions per unit of GDP, 1990-99[1]			Level of emissions , 1999[2]			Improvement in productive efficiency, 1990-1999	
	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide per unit of electricity output	Nitrogen dioxide per vehicle
	Per cent per year			Grams per dollar of GDP				
Australia	3.1	–1.9	–2.9	3.9	5.5	4.1	n.a.	n.a.
Austria	–10.2	–3.5	–6.5	0.2	0.9	1.2	–77.2	–32.5
Belgium	–9.2	–3.6	–4.8	0.8	1.2	1.1	–64.4	–22.6
Canada	–5.3	–2.8	–2.9	3.2	2.6	3.5	n.a.	n.a.
Czech Republic	**–19.1**	**–6.6**	**–5.7**	**2.1**	**3.0**	**1.9**	**n.a.**	**n.a.**
Denmark	–14.2	–4.9	–5.2	0.4	1.6	1.0	–79.8	–38.9
Finland	–13.0	–3.8	–4.1	0.7	2.1	1.4	–65.3	–28.7
France	–8.3	–3.8	–5.1	0.5	1.2	1.4	–52.0	–37.8
Germany	–20.1	–7.1	–8.8	0.4	0.9	0.9	–85.2	–43.7
Greece	–1.4	–0.3	–0.2	3.6	2.5	2.6	–4.6	–22.3
Hungary	–6.1	–1.1	–3.8	5.5	2.1	1.4	n.a.	n.a.
Iceland	–1.1	–1.7	–4.9	3.7	3.9	1.4	n.a.	n.a.
Ireland	–8.1	–6.3	–7.9	1.7	1.3	1.0	–35.8	–19.0
Italy	–7.6	–4.3	–4.4	0.8	1.2	1.4	–52.8	–31.3
Japan	–1.7	–1.3	–2.4	0.3	0.5	0.6	n.a.	n.a.
Korea	–8.9	–3.3	–9.7	1.6	1.9	0.2	n.a.	n.a.
Luxembourg	–18.7	–9.1	–7.9	0.2	0.9	0.9	n.a.	n.a.
Mexico	–0.4	–0.9	–9.3	1.6	1.6	1.4	n.a.	n.a.
Netherlands	–10.1	–6.5	–8.8	0.3	1.1	0.7	–50.2	
New Zealand	–0.4	–0.5	–1.6	0.7	3.0	2.6	n.a.	n.a.
Norway	–9.7	–2.8	–1.8	0.2	2.0	3.0	n.a.	n.a.
Poland	–10.0	–6.6	–4.8	5.1	2.8	2.2	n.a.	n.a.
Portugal	–2.1	–0.9	0.1	2.4	2.3	3.1	–17.7	–18.3[3]
Slovakia	–13.7	–7.4	–5.6	3.3	2.4	2.0	n.a.	n.a.
Spain	–5.8	–2.1	–3.5	2.2	1.7	3.6	–39.4	–14.4
Sweden	–8.3	–4.3	–3.9	0.3	1.3	2.1	–26.0	
Switzerland	–6.0	–5.4	–6.3	0.1	0.5	0.9	n.a.	n.a.
Turkey	3.2	1.0	0.0	3.4	2.3	1.6	n.a.	n.a.
United Kingdom	–13.9	–7.9	–6.6	1.0	1.3	1.4	–72.8	–51.0

Table 7.4. **Main indicators: air pollution** (*cont.*)

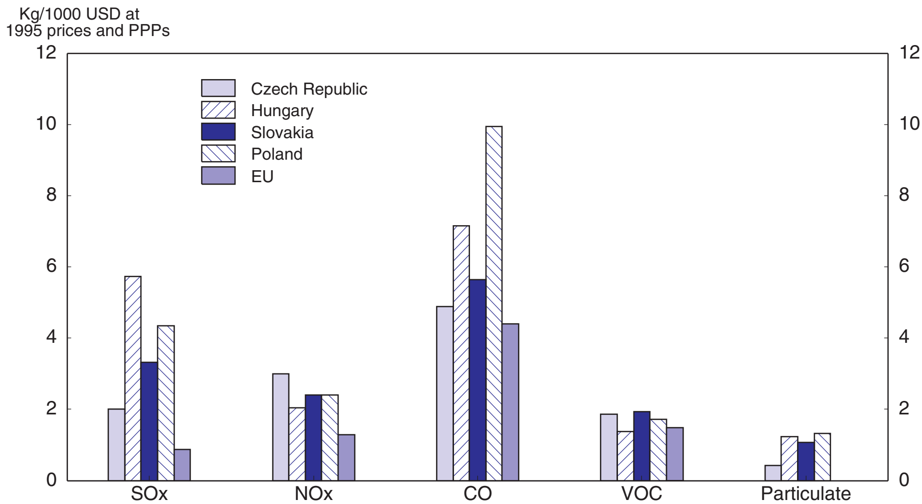
	Change in emissions per unit of GDP, 1990-99[1]			Level of emissions , 1999[2]			Improvement in productive efficiency, 1990-1999	
	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide	Nitrogen dioxide	VOCs	Sulphur dioxide per unit of electricity output	Nitrogen dioxide per vehicle
	Per cent per year			Grams per dollar of GDP				
United States	–5.5	–2.5	–4.7	2.0	2.7	1.9	n.a.	n.a.
European Union	–11.1	–5.0	–5.3	0.8	1.2	1.5		
OECD Europe	–10.1	–4.8	–5.0	1.2	1.4	1.5		
OECD	–6.7	–2.9	–4.4	1.5	1.9	1.6		

Note: For the OECD average data for countries with missing data for either 1990 or 1999, data for the latest year has been substituted. Estimated data for 1999 represents about 5 per cent of the area total. GDP is measured in 1995 prices. Cross-country aggregations use 1995 purchasing power parity exchange rates.

1. Australia: 1995-99 for sulphur dioxide; New Zealand: 1990-98; Mexico: 1994-98 for sulphur dioxide and VOCs and 1990-98 for nitrogen dioxide; Slovakia: 1990-98 for sulphur dioxide and nitrogen dioxide and 1990-97 for VOCs.
2. 2000 for the Czech Republic. 1998 for Mexico, New Zealand and sulphur dioxide and nitrogen dioxide in Slovakia; 1997 for VOCs in Slovakia.
3. Between 1990 and 1997 for Portugal.

Source: Cooperative Programme for Monitoring and Evaluating of Long-Range Transmission of Air Pollutants in Europe (EMEP); World Health Organisation; OECD (2002a).

Figure 7.1. **Emission intensities of traditional air pollutants in late 1990s**



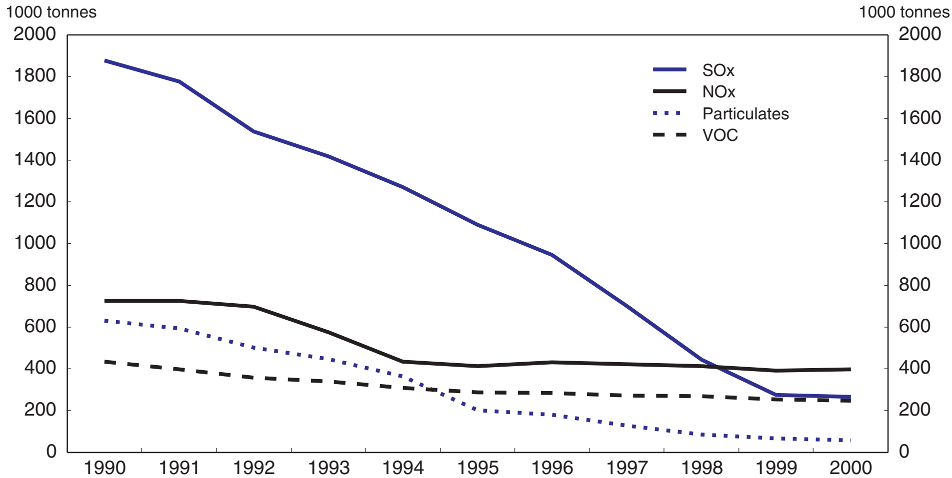
Source: OECD Environmental Directorate Statistics.

the ratio of nitrogen dioxide emissions to GDP was still double that in the EU area. On the other hand, emission intensities of volatile organic compounds (VOCs) per unit of GDP were close to the EU average even in 1990 and have generally evolved much in line with trends in the EU over the decade (Figure 7.2). The reduction in domestic emissions combined with a sharp fall in inflows of air pollutants from western Europe has reduced concentrations of sulphur and nitrogen dioxide markedly over the 1990s. As a consequence, problems related to soil acidification, smog and ozone have diminished but remain very serious in some regions of the Czech Republic.

Policy

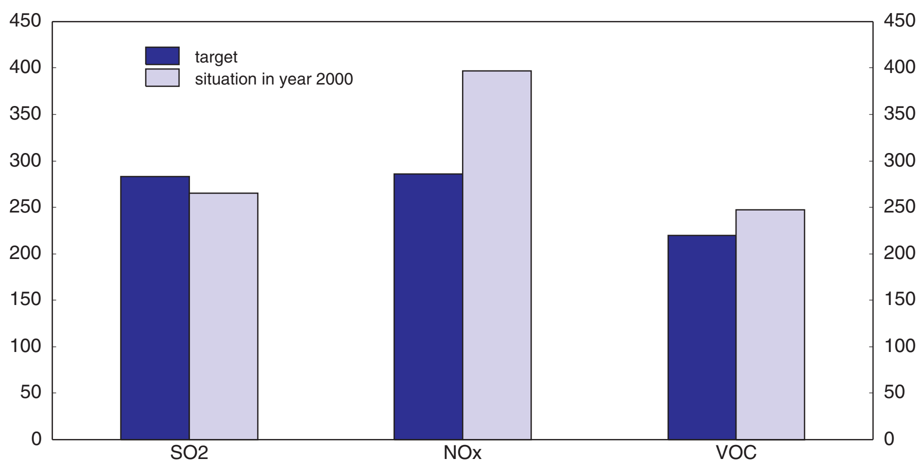
The Czech Republic is committed to reducing the emission of selected air pollutants in the UNECE Convention on Long-Range Transboundary Air Pollution[4] (CLRTAP) (Figure 7.3). The targets established in the 1999 CLRTAP agreement imply a significant additional abatement for nitrogen dioxides and (non-methane) VOCs by 2010. By contrast, the sulphur dioxide emission target for 2010 had already been met in 1999. The 2002 Clean Air Act[5] transposes EU directives on air pollution and protection of the ozone layer into Czech law (Commission of the European Communities, 2002). All secondary legislation in these fields has

Figure 7.2. **Air pollution emissions in 1990-2000**



Source: OECD environmental data, Compendium (2002).

Figure 7.3. **Target in the UNECE Convention on Long-Range Transboundary Air Pollution and the situation in year 2000**



Source: Ministry of Environment (2001) and OECD environmental data.

already been adopted, but limit values and emission ceilings have yet to be established.

Continued use of regulations to reduce the emission of air pollutants is likely to become increasingly expensive in coming years. The principal method so far, emission limits on new and old stationary sources based on best available technology, has resulted in significant falls in emissions. It has, however, entailed very high investment in abatement technology, exceeding one per cent of GDP in the 1990s on average. By imposing emission limits that are unrelated to their abatement costs, this approach is unlikely to deliver the lowest abatement cost for the economy as a whole. Nonetheless, studies from other countries indicate that the benefits of this policy have exceeded the costs. However, as a future member of the European Union, the Czech Republic is committed to applying emission limits to all large plants irrespective of their ages. Upgrading all large plants has been effective in reducing sulphur emissions and by 2000, the main electricity producer had retrofitted all of its coal plants with desulphurisation units to conform to current Czech legislation,[6] significantly reducing their emissions. However, compliance with the Large Plant Combustion Directive will require a further 60 per cent reduction in emissions for the largest generating plants and more than 80 per reduction for smaller plants.[7] The retrofitting of the old capital stock to further reduce emissions will be expensive and costs are likely to vary from plant to plant.

Economy-wide abatement costs could be lowered by a greater use of economic instruments. Emission charges are applied to various air pollutants, but they are generally set at too low a level to have a significant impact. For example, the emission charge for sulphur dioxide is only EUR 30 per tonne, compared with EUR 48 and EUR 3 300 per tonne in Slovakia and Sweden, respectively. Tradable emission permits for air pollutants are not used at all in the Czech Republic and might be difficult to implement as the bulk of the fossil fuel power stations are owned by one company though there are a larger number of smaller plants that are independently owned. Under these circumstances emission charges might be a more effective route but in that case taxes would have to be seen as an alternative to regulation by emission limits. Economic instruments have been employed with greater determination to discourage air pollution from diffuse sources. The road tax on commercial vehicles (levied on a per car basis) is differentiated according to the emission characteristic of the vehicle, a surcharge of 15 per cent being levied on cars from before 1990 and a discount of 50 per cent being given to vehicles that conform to the EURO 3 standard. Motor fuels are also differentiated according to their pollution content and road pricing is being considered by the government.

Conclusions

The Czech Republic has improved air quality primarily by raising energy prices and by using regulations. Accession to the EU has led to a renewed emphasis on regulatory measures to reduce air pollution. However, further cuts in emissions should be mainly achieved through more cost-efficient economic instruments. Raising emission charges would be a cost effective way to concentrate abatement where it can be achieved at the lowest cost. For diffuse sources of air pollution, the differentiation of the car tax according to the emission characteristic of the vehicle is a useful device to speed up the renewal of the car fleet with more environmentally friendly vehicles. However, at present it is only levied on commercial vehicles and consideration should be given to extend its coverage. Moreover, specifying the tax in terms of kilometres driven rather than on a per car basis would make it more targeted. The introduction of road pricing would also help to reduce diffuse emissions in cities very efficiently. The annual mileage tax and road pricing could be implemented for trucks at low cost since most of them will in any case be fitted with the corresponding technical devices in order to travel on Austrian and German motorways.

Notes

1. The abatement cost estimate is the quotient of the costs by the amount of GHG emissions avoided. For each renewable source, the costs considered comprise expenditure on subsidies and the difference between the feed-in tariff and the wholesale electricity price (multiplied by the corresponding volume). Additional savings come from reduced air pollution. However, in any cost-benefit study pollution savings should be evaluated against an alternative investment, an obvious candidate being the construction of a gas-fired power plant.
2. It is envisaged to transfer the responsibility for environmental regulation of brown coal mining to regions.
3. For example, the cost of air pollution in Austria, France and Switzerland was estimated to be as high as 3 per cent of GDP in 1996 (WHO, 1999).
4. This treaty addressed some environmental problems of the UNECE region and has been extended by eight protocols which identify specific obligations or measures to be taken by Parties and so lays down the general principles of international cooperation for air pollution abatement.
5. Adopted in February 2002 and entering into force on 1 June 2002.
6. The limits under the 1997 Air Act required emissions less than 500 mg of sulphur per cubic metre of exhaust gas. The Large Combustion Plant directive requires an upper limit of 200 mg per cubic metre.
7. The 1997 law sets a limit of 1 700 mg per cubic metre against an EU limit of 300 mg per cubic metre (Regional Environmental Centre, 1998).

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Glossary of acronyms

AETR	Average Effective Tax Rates
ALMP	Active labour market policy
ARP	Agency for Business Development
a.s	Joint stock company
CEEC	Central and eastern European countries
CEZ	Czech Power Company
CKA	Czech Consolidation Agency
CLRTAP	Convention on Long-Range Transboundary Air Pollution
CNB	Czech National Bank
CPI	Consumer Price Index
CSSD	Czech Social Democratic Party
CzechIndustry	Agency for Development of Industry
CzechInvest	Agency for Foreign Investment
CZSO	Czech Statistical Office
ECB	European Central Bank
EIA	Environmental impact assessments
EMS	European Monetary System
EPL	Employment Protection Legislation
ERM II	Exchange Rate Mechanism II
ESA95	European Standard Accounting
EURES	European Employment Services
FDI	Foreign Direct Investment
FNM	National Property Fund
GFS	Government Finance Statistics
GHG	Greenhouse gas
ICT	Information and communication technology
IT	Information technology
KDU-CSL	Christian Democratic Party
KOB	Consolidation Bank
MLA	Adult minimum subsistence allowance
MLS	Minimum Living Standard
MTEF	Medium-term expenditure framework
NDC	National Defined Contribution pension scheme
NGO	Non-governmental Organisation
PIRLS	Progress in Reading Literacy Study
PISA	Programme for International Student Assessment
PPP	Purchasing power parities
R&D	Research and Development
RILSA	Research Institute for Labour and Social Affairs

Roma NGOs	Roma non-governmental organisations
SDVR	The proposed new medium-term budgeting framework
SEA	Strategic environmental assessments
SMEs	Small and medium enterprises
SNA	System of National Accounts
SZDC	Railway Infrastructure Administration
VAT	Value-added tax
VOCs	Volatile organic compounds

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