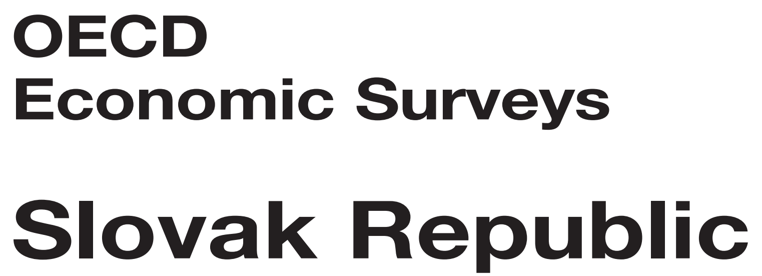

OECD Economic Surveys

Slovak Republic

OECD

OECDPUBLISHING

Volume 2005/16 – September 2005

OECD Economic Surveys

Slovak Republic

2005

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Publié également en français

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Table of contents

Executive summary . . . 8

Assessment and recommendations . . . 11

Chapter 1. **Key economic challenges facing Slovakia** . . . 19
- Slovakia has successfully accelerated its catching-up process . . . 20
- Four challenges in fostering broader based growth and higher employment . . . 40
- Notes . . . 42
- *Annex 1.A1.* The 2004 Tax reform . . . 43

Chapter 2. **Policies to smooth the path to euro area accession** . . . 49
- Price stability looks to be within reach but risks remain . . . 51
- Exchange rate stability may be the most challenging criterion . . . 55
- The cost of pension reform creates risks for meeting the government deficit criterion . . . 60
- Interest rates have already converged to euro area levels . . . 63
- Conclusion . . . 63
- Notes . . . 64
- Bibliography . . . 66
- *Annex 2.A1.* Estimating Slovakia's equilibrium exchange rate . . . 68

Chapter 3. **Policies to boost job creation and improve labour mobility** . . . 73
- Incentives to work have been strengthened . . . 74
- Job creation: promoted by flexible labour markets but inhibited by high payroll taxes . . . 76
- A new housing policy is required to improve inter-regional labour mobility . . . 82
- Notes . . . 87
- Bibliography . . . 88

Chapter 4. **Improving conditions for innovation and growth** . . . 89
- A development strategy for diversification beyond FDI . . . 90
- Improving human capital and education . . . 91
- Improving conditions for innovation in the business sector . . . 98
- Developing an information society . . . 104
- Improving the general business environment . . . 107
- Notes . . . 117
- Bibliography . . . 118

Chapter 5. **Building a modern public sector** . . . 121
- Fiscal balances have considerably improved and fiscal institutions have been strengthened . . . 122
- A far-reaching administrative decentralisation was launched . . . 122

The medium-term fiscal framework is ambitious but more priority-setting is needed 128
New reforms aim at enhancing the quality of public governance and services . . 132
Notes 143
Bibliography 145
Annex 5.A1. Fiscal decentralisation in Slovakia 148
Annex A. The implementation of previous OECD recommendations 153

Boxes

1.1. The fundamental tax reform 24
1.2. Foreign direct investment incentives 25
1.3. The role of FDI 29
1.4. The OECD's short-term projections for Slovakia 32
1.5. Productivity spill-overs 33
2.1. The Balassa-Samuelson effect and the boxer effect 53
2.2. The (in)effectiveness of foreign exchange intervention 57
2.3. Recent changes to the Stability and Growth Pact 62
3.1. Measuring unemployment 78
3.2. The case for cutting payroll taxes for low skilled workers 81
3.3. Summary of recommendations 86
4.1. Policies to mitigate the impact of socio-economic background on educational performance 94
4.2. Policies to encourage innovation in the business sector 101
4.3. ICT lessons from other OECD countries 106
4.4. Recommendations to improve conditions for innovation and growth 116
5.1. Stronger budget institutions and areas for further convergence 126
5.2. Education spending: will Slovakia remain an outlier? 131
5.3. Policies in support of the Roma minority 138
5.4. Market mechanisms in sustainable development policies 141
5.5. Summary of recommendations 142

Tables

1.1. Demand, output and prices 32
1.2. Sectoral composition of employment, 2000-2004 35
1.3. More room for internal migration 39
1.A1.1. Effective Average Tax Rates (EATR) at corporate level 45
1.A1.2. Effective Marginal Tax Rates (EMTR) at corporate level 45
2.1. The boxer effect in selected euro area members 53
2.2. Different measures of net government borrowing (as per cent of GDP) 60
2.A1.1. BEER estimates of exchange rate misalignments of the Slovak koruna 70
3.1. Compulsory social security contributions 79
3.2. Tenure of housing 84
4.1. Key science and technology indicators 99
4.2. Perceptions of the Slovak business environment, 2004 112

5.1. Duties of central, regional and municipal governments 127
5.2. The medium-term fiscal framework, 2006-2008 129
5.3. Public private partnerships 135
5.4. General government employment and wages in the budget, 2001-2005 136
5.5. Composition of general government employment in the budget, 2004-2005 . 136
A1. The implementation of previous OECD recommendations 154

Figures

1.1. GDP and export growth 20
1.2. Successful disinflation 21
1.3. A unique path of fiscal consolidation 22
1.4. A competitive business environment 26
1.5. Enhancing international credibility 27
1.6. The growing role of FDI 28
1.7. Flow of FDI by sector 29
1.8. The sources of growth 30
1.9. Productivity growth in FDI-dominated *vs* domestic-owned sectors 33
1.10. Paths of productivity and employment convergence 36
1.11. Remaining sources of international GDP per cap. difference 37
1.12. The remaining employment potential 38
1.13. Pending growth potential 39
1.A1.1. Effective average tax burden on companies in Europe 45
2.1. Convergence of inflation and interest rates to euro area levels 52
2.2. Inflation of tradeable goods and market services continue to diverge 55
2.3. Nominal and real exchange rate trends 58
2.4. Recent developments in the Koruna and NBS actions 59
2.5. The impact of pension reform costs on the fiscal deficit 61
2.6. Real interest rates in Slovakia and the euro area 63
3.1. Effective tax rates for jobless people moving into work 75
3.2. Net replacement rates for two child families in long-term unemployment, 2002 76
3.3. The widening gap between the two measures of unemployment 78
3.4. The cost of labour 79
3.5. Tax wedges on labour, international comparison 80
3.6. Employment development by sector 83
3.7. Geographical mobility and unemployment rates in selected OECD countries 83
4.1. Educational attainments of the population 92
4.2. Labour market status by educational attainment 93
4.3. PISA scores relative to OECD average scores 93
4.4. The impact of socio-economic background on mathematics performance . . 95
4.5. Expenditure on educational institutions per student
at various levels of education, 2001 97
4.6. Teachers' salaries in lower secondary education, 2002 98
4.7. R&D spending and income levels 99
4.8. Venture capital investments 103
4.9. Broadband subscribers per 100 inhabitants in OECD countries 104
4.10. Business usage of ICTs 105
4.11. Regulation of professional services, 2003 108
4.12. The relationship between the level of overall regulation
and policy consistency in OECD countries 109

4.13. A better business registry 109
4.14. Telecommunication tariffs 111
4.15. Perceived influence of legislative and regulatory framework on business . . . 113
4.16. Bankruptcy processing still very slow but expected to improve 114
4.17. Corruption perceptions index (CPI), 2004 114
5.1a. Adjustment of government revenues and expenditures 123
5.1b. Structure of expenditures 124
5.2. Income level and adjustment of government size 125
5.3. The breakdown of the general government accounts 128
5.4. Expenditure on educational institutions 131
5.5. Room for improved governance 133
5.6. Public management reforms. 134

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BASIC STATISTICS OF THE SLOVAK REPUBLIC (2004)

THE LAND

Area (km²)	49 035	Inhabitants in major cities (end-2001):	
Agricultural area (km²)	24 440	Bratislava	428 094
		Kosice	236 036
		Presov	92 720
		Nitra	87 308

THE PEOPLE

Population (thousands)	5 385
Inhabitants per km²	110
Average annual population growth (1990-2004, per cent)	0.1
Infant mortality (per thousand live-births, 2002)	7.6
Life expectancy (2002): Males	69.2
Females	77.8
Registered unemployment, per cent of the labour force	14.3
LFS unemployment, per cent of the labour force	18.1
Employees (thousands, *Labour Force Survey*)	2 170

PRODUCTION

GDP (billion SKK)	1 325.5
GDP per capita (in US$, market exchange rate)	7 637
Gross domestic investment (per cent of GDP)	24.7

THE GOVERNMENT

Per cent of GDP		Composition of the National Council of the Slovak Republic (elections of September 2002):	
General government revenue	36.6	Movement for a Democratic Slovakia (HZDS)	26
Generakl government expenditure	39.9	Slovak Democratic and Christian Union (SOKU)	22
Gross public debt	43.6	SMER	25
Official foreign debt of the government and the National Bank of Slovakia	16.7	Hungarian Coalition Party (SMK)	20
		Christian Democrat movement (KDH)	15
		Alliance of New Citizen (ANO)	12
		Communist Party of Slovakia (KSS)	9
		Other	21

FOREIGN TRADE

Exports of goods and services, % of GDP	76.8	Imports of goods and services, % of GDP	79.5
Main exports of goods (% of total):		Main imports of goods (% of total):	
Machinery and transport equipment	45.9	Machinery and transport equipment	39.6
Manufactured products	36.0	Manufactured products	29.5
Chemical products	5.4	Chemicals products	9.8
Others	12.6	Others	21.1

THE CURRENCY

Monetary unit: Slovak Koruna	
Currency units per US dollar (period average):	
Year 2004	32.2
June 2005	31.6

Executive summary

Sound macroeconomic policy, assertive product, capital and labour market liberalisation, and fundamental tax and welfare reform have transformed the Slovak business environment in recent years. Foreign direct investment (FDI) has responded particularly well, becoming the prime engine of capacity and productivity growth, and helping to put the economy on a strong and well-balanced growth path.

However, unemployment remains very high and many economic activities in the non-tradable sector are under-developed and less productive than those in the FDI sector. To broaden the basis of growth, four main challenges must be addressed:

Ensuring a smooth path to euro area accession

Recent fiscal and inflation outcomes have been good, making the government's goal of meeting all Maastricht convergence criteria by 2007 credible. However, if an excessive pace of exchange rate appreciation were to resume, monetary policy may again face a dilemma between inflation and competitiveness objectives. Hence, it may be desirable to move towards an exchange rate anchor early, making sure that exchange rate stability is underpinned by a consistent macroeconomic policy mix. To ensure that the overall convergence strategy remains credible, close adherence to planned expenditure cuts will be essential, together with continued structural reforms. Moreover, further consolidation will be required if additional fiscal risks materialise.

Boosting job creation and improving labour mobility

Major reforms have enhanced the flexibility of the labour market and have improved incentives for the unemployed to seek work. Yet, although recent employment growth has been positive, long-term structural unemployment remains high. In order to stimulate the creation of jobs that require low skill levels, the cost of low paid labour should be significantly reduced, either by cutting employers' social security contributions for low-wage workers, or by reducing the minimum wage. Housing market rigidities also contribute to high unemployment by repressing labour mobility. New policies should facilitate a larger role for the private sector – particularly in the rental housing market – and public support for housing should be reformed.

Improving conditions for innovation and growth

Thanks to high FDI inflows, modern manufacturing and business processes have diffused rapidly throughout many sectors of the economy. However, to encourage more widespread spill-overs of productivity, innovation policies should focus on continuing to foster an efficient business environment for dynamic enterprise creation and competition. The major deficiencies relate to accountability problems in the legal system, still wide-spread corruption, and some remaining regulatory issues. In addition, the education system is not sufficiently preparing Slovakia's youth, and low-qualification adults, for the modern business environment and substantial reforms are needed in the primary, secondary, tertiary, and life-long education systems.

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Building a modern public sector

The public sector has a critical role to play in providing the economy with a reliable legal and regulatory framework, and adequate core services. To do this better in the context of pressures for expenditure restraint, the government should make increased use of strategic priority setting and results-oriented budgeting. It should also accelerate the introduction of performance-based personnel management and the use of market mechanisms in the provision of services. Decentralisation can be an important vehicle in modernising the public sector if risks of excessive fragmentation of service supply and of overspending and corruption are minimised.

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

The economic situation and policies of the Slovak Republic were reviewed by the Committee on 11 July 2005. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 28 July 2005.

The Secretariat's draft report was prepared for the Committee by Rauf Gönenç and Anne-Marie Brook under the supervision of Willi Leibfritz.

The previous Survey of the Slovak Republic was issued in March 2004.

This Economic Survey may not include an examination of certain policies that are relevant to the country but fall within the competence of the European Community. While some of these policies may be examined in the Survey of the Euro Area, other policies may not be examined by the EDRC, as the European Commission currently maintains that the Economic Surveys should be limited in their coverage. No limits apply to the policies that can be covered in the Economic Surveys of other OECD countries.

The Commission and the member States of the European Union are working actively on ways of reviewing EC and EU wide policies within the context of the EDRC.

ISBN 92-64-01267-2
OECD Economic Surveys: Slovak Republic
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Assessment and recommendations

Slovakia's impressive reform programme has accelerated the catching-up process and brought euro area accession within reach

Slovakia's combination of sound macroeconomic policies, comprehensive tax and social welfare reform, and new regulations for the product, capital and labour markets, has resulted in an acceleration of growth over the past five years and has increased the pace with which Slovakia is catching up to the living standards of wealthier nations. The coherence and consistency of the reforms, together with EU membership, has helped to convince large multi-national corporations that the Slovak economy is an attractive investment destination. The penetration of foreign direct investment (FDI) has been high, with business investment – particularly in the export-oriented manufacturing sector – becoming the prime engine of capacity and output growth. FDI has brought with it new technology and better business practices, many of which have now trickled down to domestic firms who have been forced to compete in the more dynamic business environment. Indeed, productivity gains have been most notable in those sectors that have seen significant FDI inflows and in those where competition is strongest. At the same time, interest rates, inflation, and the public deficit have been converging to European Union benchmarks, further enhancing the credibility of the reform agenda and increasingly facilitating the access of smaller firms to credit. Thanks to a robust increase in potential output, strong export and domestic demand over the past two years have faced no major supply constraints and the economy has remained on a balanced growth path of around 5% per year. Looking ahead, however, the extent of excess capacity in the economy is diminishing, suggesting possible risks for inflation.

Yet the reform process remains incomplete, and there remain a number of serious challenges to continued economic success

Despite these impressive gains, it is clear that Slovakia is only part way through building a modern, flexible and diversified economy which provides entrepreneurial and employment opportunities to the entire population. Some policy areas – such as education and judicial reform – now stand out as the most significant elements of unfinished business. In order to consolidate the progress that has already been made, and to ensure the social and political sustainability of the reforms, a number of challenges must be addressed:

- The Maastricht criteria imply that Slovakia has a tightrope to walk in order to successfully adopt the euro in January 2009 as planned. The impact of speculative capital flows is a potentially significant risk.

- Despite recent employment growth the employment rate is low and unemployment remains very high, particularly in the eastern regions and among those with low skill levels.
- The basis of growth remains relatively narrow. While multi-national firms receive significant government support, both in terms of financial incentives and assistance to fast-track administrative hurdles, small and medium-sized domestic firms are more reliant on local market conditions and on the local institutional framework and are therefore more vulnerable to shortcomings in the domestic business environment. As a result of these shortcomings, the innovative capacity of the economy seems weak outside the FDI-dominated sectors.
- The recent fiscal decentralisation adds to the already considerable challenge of delivering high quality public services at low cost. Inadequate spending management has led to inefficiencies and corruption, and to an insufficient use of market mechanisms in the provision of services.

Progress towards fulfilling the Maastricht criteria has been good, but risks remain

A primary objective of the government is adoption of the euro in 2009. This will involve achieving the Maastricht criteria for fiscal consolidation, low inflation, and exchange rate stability in the face of potential tensions between the inflation and competitiveness objectives. In recent months a number of positive economic outcomes have alleviated concerns about the challenges inherent in meeting these criteria: inflation outcomes for the first few months of the year have been significantly lower than expected, easing concerns about inflation spill-over from much higher inflation rates last year; the fiscal deficit for 2004 was lower than projected; and the upward pressure on the koruna exchange rate eased. These outcomes make the government's goal of meeting all convergence criteria by 2007, followed by euro adoption in January 2009, increasingly credible. However, if the previously excessive pace of exchange rate appreciation returns, particularly at the same time as an over-heating of the economy, monetary policy would again face a dilemma between cutting interest rates to dampen excessive appreciation, and raising interest rates to slow the economy.

Exchange rate management will be challenging before and after ERM-II entry

Given the strong role of the exchange rate transmission channel for inflation, some appreciation of the nominal exchange rate would help to keep inflation low in the context of a strong domestic economy, and this would also be consistent with fundamental factors that are likely to warrant a gradual real appreciation of Slovakia's exchange rate. However, both in the lead-up to entering ERM-II, scheduled to take place sometime before mid-2006, and after ERM entry, policies should be oriented towards ensuring that the real exchange rate does remain in line with the economic fundamentals. In the context of strong capital flows this could be challenging. Since the current level of the exchange rate is seen as broadly sustainable, *it may be desirable for Slovakia to seek early ERM-II entry* in order to lock in these favourable conditions. However, continued credibility of the government's broader euro-entry strategy (including fiscal consolidation) would be crucial.

Expenditure constraint in the run-up to the 2006 election and continued achievement of fiscal targets will be vital for maintaining convergence credibility

Slovakia has achieved significant expenditure consolidation over the past few years. As a result, the general government deficit of 3.3% of GDP for 2004 brings the Maastricht deficit ceiling of 3% within reach. However, there are a number of risks. One is an upward revision to the cost of pension reform after a greater number of people transferred to the second pillar pension scheme than was predicted. This concern has only in part been alleviated by recent changes to the Stability and Growth Pact, which considers taking into account, to some extent and for a limited period, the costs of pension reform. Other risks may stem from higher than projected health care costs, and from the political environment ahead of the 2006 election. *If some of these risks materialise further fiscal consolidation will be required.* Any pro-cyclical loosening of fiscal policy at a time when the spare capacity of the economy is diminished would shift additional stabilisation burden onto monetary policy and raise the risk of a conversion to the euro at an over-valued exchange rate. *Moreover, if any signs of over-heating in the economy emerge, further fiscal consolidation would help to reduce demand pressure and improve sustainability.*

Essential labour market reforms have improved work incentives and facilitated conditions for job creation

The Slovak government deserves significant credit for a range of reforms which have clearly enhanced the flexibility of the labour market and improved incentives for the unemployed to seek work. The labour code has made working conditions more flexible and has eased the conditions under which workers can be laid off, thus providing a favourable background for job creation and job reallocation. As regards work incentives, tax and welfare reforms have significantly increased incentives for the unemployed to seek work. It is encouraging that in the past four years net employment creation has picked up, as the balance between job creation in growing activities and job losses in declining sectors has turned positive. More particularly, net employment creation in the private sector has accelerated in the past two years and dominated employment losses in declining and adjusting sectors. The unemployment rate remains nevertheless very high for the low-skilled and in the less advanced regions. Additional efforts will be needed to bring about a significant fall in unemployment.

But unemployment remains unacceptably high and additional reforms should focus on improving incentives for job creation…

Although the reforms to social security have increased the incentives for people to seek jobs, more needs to be done to increase the availability of jobs for those seeking them. To do this, *Slovakia should significantly reduce the costs of low-skilled labour. This could be achieved by reducing either the minimum wage or employers' social security contributions for low paid labour.* If the minimum wage is cut, the impact on net incomes could be mitigated by the

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government's proposal to introduce an earned income tax credit. Either of these proposals would help to boost job creation for low-skilled workers, who are the most abundant among the unemployed. *The fiscal cost of this should be funded through expenditure restraint in less urgent areas such as industrial and agricultural subsidies.*

… and for better inter-regional labour mobility

Given very large regional differences in unemployment rates, current housing market conditions seem to pose a major obstacle to workforce mobility and, consequently, to the efficient functioning of the labour market. Although some steps have been taken to improve labour mobility, it remains almost impossible for an unemployed person to relocate and find affordable housing in a city where jobs are more plentiful. There is an urgent need for new policies that facilitate the role of the private sector in the housing market. In particular, *the civil code on tenant protection should be reviewed to improve the incentives for private sector supply on the rental market. The effective management of privatised multi-family housing should also be facilitated. Finally, the current system of subsidies for housing should be wound back, including bonuses for savings schemes, in order to increase housing allowances in the highest-cost regions to facilitate labour mobility.*

Education reform is urgently required to further up-skill the population

Over the medium to long run, education and human capital accumulation have the potential not only to improve people's employment prospects, but also to contribute to higher productivity growth and to innovation. Yet there is evidence that the current education system is not sufficiently preparing Slovakia's youth for the modern business environment. *At the primary and secondary school level, there is an urgent need for a new curriculum, improved teaching methods, and policies to improve the learning outcomes of students from low socio-economic backgrounds.* The critical importance of better equipping all school pupils for their working life suggests that there may also be a case for allocating a greater proportion of total education expenditure towards primary and secondary schools. At the tertiary level, reform has recently been set back by tensions within the governing coalition, which led to the rejection of the Tertiary Education Funding Bill that would have introduced partial tuition fees. With this channel for motivating improvements in the quality of the universities closed (for the present) it becomes even more important that *quality improvements in tertiary institutions be promoted through competition between existing universities, as well as entry by new high-quality universities, especially from abroad. Public funding mechanisms for universities should also support competition by replacing pre-determined budgetary allocations to universities with more contestable results-based funding, and by competitive research grants.* Finally, the need to update and upgrade the skills and competences of low skill adults is receiving insufficient attention, and *it is important that the responsibilities of the Ministry of Education and the Ministry of Labour and Social Affairs for addressing the learning needs of adults be strengthened.*

The growth base should be broadened through better use of innovation policy…

Productivity growth and the innovative capacity of the Slovak economy have been greatly aided by macroeconomic stability, the opening of the economy and market liberalisation. Foreign direct investment (FDI) has played a particularly important role. Many sectors of the economy have now introduced manufacturing processes and business practices that make full use of the pre-existing stock of knowledge in the more industrialised economies. But other sectors continue to lag significantly behind the state of existing knowledge. *Innovation policies should facilitate the dissemination of global knowledge in a wider range of manufacturing and service sectors, rather than focusing primarily on extending the innovation frontier in a few selected fields. In addition, business innovation in domestically-owned firms and start-ups should be promoted by improved tax treatment of capital gains and by relaxing current restrictions that prevent pension funds from investing in venture capital and private equity funds.*

… and by further improving the business environment, particularly the judicial system

The Slovak government has made very significant progress in recent years to reduce unnecessary administrative burdens on businesses and to enhance competition in product markets. In addition, the comprehensive 2004 tax reform has significantly improved investment incentives. A deficit of reforms remains in the areas relating to the legal system, corruption, liberalisation of professional services and enforcement of the competition and regulatory policies. To address these concerns *the government should implement measures to improve the management capacity and lines of accountability for judicial sector outcomes, implement the already adopted measures to reduce corruption in the judicial system, and introduce additional changes to reduce corruption in the political system and in public procurement. The government should also ensure that the regulatory and competition authorities are vested with sufficient resources, and be as comprehensive as possible in further simplifying the relationship between the public administration and firms.* With respect to corruption, some good policies have been introduced, but politicians (at both the central and sub-central levels) should show more moral leadership and willingness to accept anti-corruption laws that are relevant to their own positions. *The parliament should adopt the proposed new Constitution Law that would reduce the immunity of members of Parliament and extend the authority of the Supreme Audit Office to regional and municipal governments. The Parliament has passed a law allowing the forfeiture of illegally acquired assets but further improvements are needed.*

The public sector is being modernised but additional reforms are needed

The public sector has a critical role to play in supporting the economy through the provision of key public services, and by setting an effective and reliable legal and regulatory framework. However, to carry out these tasks well, additional modernisation of the public sector is required. To comply with the fiscal consolidation constraint, *public sector reform should rely on "strategic priority setting and results-oriented budgeting"*. This would help the government to allocate more resources to the key areas where they are currently insufficient, such as education, and make sure that resources are utilised in the service of

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clear policy objectives. Also, *the internal and external audit infrastructure should be reinforced* in order to better ensure the integrity of expenditure management and public procurement and reduce the risks of fraud and corruption.

Fiscal decentralisation presents risks for fiscal balances and the quality of public services

An ambitious decentralisation has been launched, driven more by political objectives than economic efficiency considerations. It nevertheless offers opportunities for introducing service innovations, enhancing their responsiveness to needs, and reducing costs. To build on this potential, however, authorities will need to overcome two structural shortcomings: the municipal structures are too fragmented to provide services at an adequate scale and quality, and sub-central fiscal institutions are not sufficiently well developed and integrated with the national fiscal management framework. Although it is too early to judge the effects of decentralisation, there are risks that it may hinder the integrity of the national fiscal consolidation strategy, and weaken the quality and cost-efficiency of public services. To avoid these outcomes, *small municipalities should be further amalgamated, joint provision of services should be encouraged, and additional fiscal rules should be introduced to ensure better coherence between central and sub-central fiscal policies*. In addition, as corruption risks in regional and municipal governments are particularly high, it is critical that *the auditing apparatus at the sub-central level be reinforced*.

Further public management reforms would improve effectiveness and efficiency in the public sector

The Slovak authorities have begun to introduce public management reforms which have the potential to accelerate resource reallocation and improve performance across the entire public sector. Performance-based personnel management and market mechanisms in the provision of services, which have just started to be introduced, could contribute to better outcomes in important service areas such as education, active labour market policies and health and social services. However, their introduction faces a number of professional and technical shortcomings and may imply employment adjustments. Given the very compressed wage structure in many parts of the public sector, the introduction of skill-and performance-based pay is particularly important but it is constrained by the budgetary burden of overstaffing. *Efforts to promote public management reforms should continue, and decentralisation should be used as a vehicle in their further implementation. Benefits from the introduction of these innovations should be widely publicised to help build stronger public and political support for their application.*

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Chapter 1

Key economic challenges facing Slovakia

This chapter discusses the key challenges facing the Slovak economy. The far-reaching economic reforms have made Slovakia a reference country in sustained macroeconomic stabilisation and structural reform, and triggered strong foreign direct investment inflows which have accelerated growth and catching-up. There are a number of remaining tasks to consolidate the reforms, to broaden growth, to make it sustainable and more job-rich, and to accede smoothly to the Economic and Monetary Union (EMU). Four challenges are addressed in this chapter: i) preserving macroeconomic stability and preventing pitfalls on the road to EMU; ii) stimulating labour demand for low-skilled workers; iii) improving conditions for innovation and growth; and iv) modernising the public sector without increasing the fiscal costs.

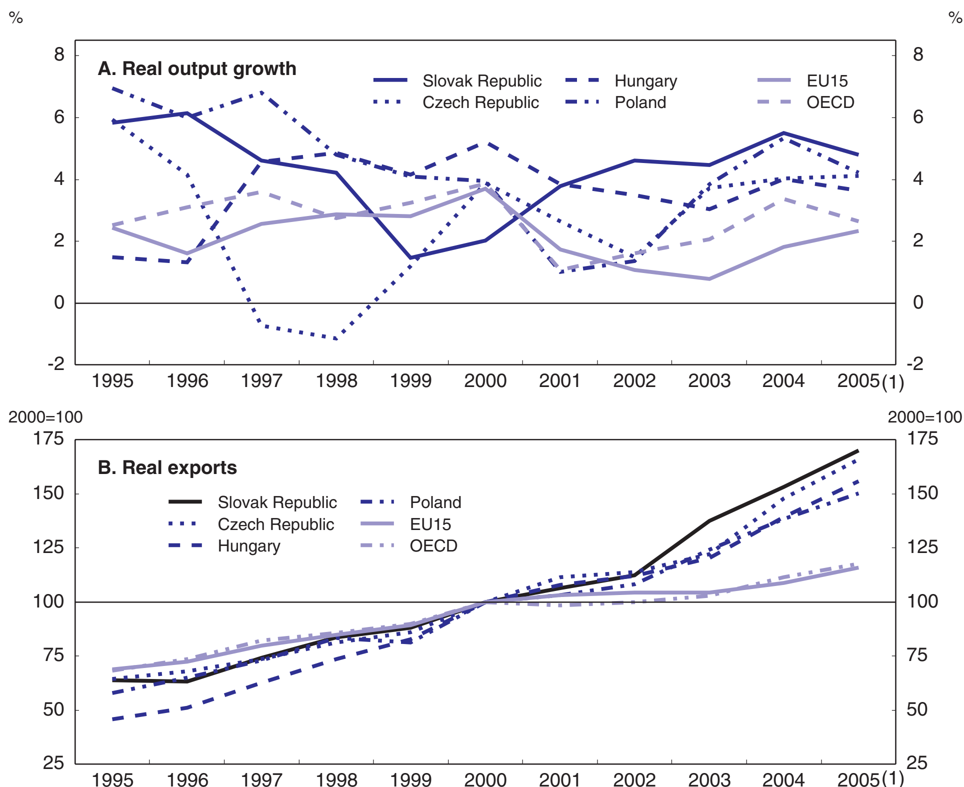
Slovakia has successfully accelerated its catching-up process

In the last five years Slovakia has introduced far-reaching macroeconomic and structural reforms and has become one of the fastest growing OECD economies (Figure 1.1). It is now increasingly recognised as a model case of how macroeconomic stabilisation, together with product, capital and labour market liberalisation, can help a country accelerate its catching-up process. The credibility of the new policies was supported by Slovakia's accession to the European Union in May 2004. In this context growth responded rapidly to the reforms, with a substantial contribution coming from the EU in the form of growing FDI and trade flows.

Credible macroeconomic stabilisation...

Sound monetary and fiscal policies since the late 1990s have provided a sounder macroeconomic framework for growth than the unstable conditions of the early post-transition years. Monetary policy has succeeded with ambitious disinflation objectives

Figure 1.1. **GDP and export growth**

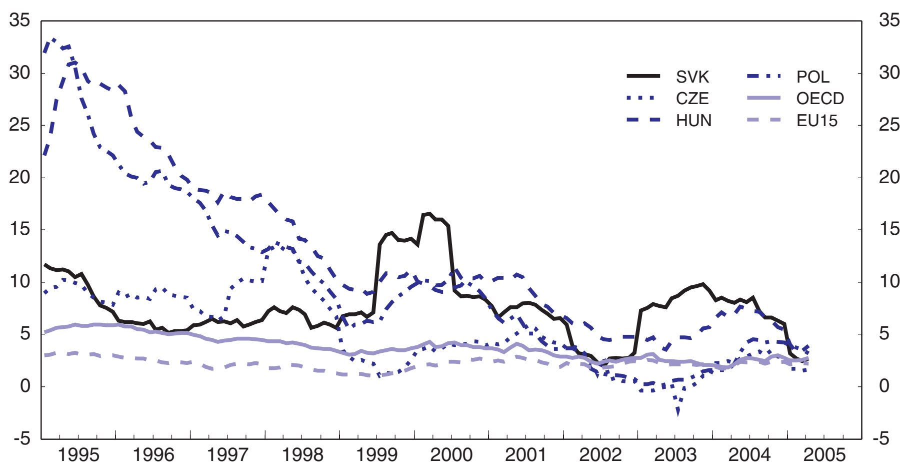


1. Projections.

Source: OECD, *Economic Outlook* No. 77.

Figure 1.2. **Successful disinflation**

Year-on-year percentage changes in the consumer price index



Source: OECD, *Main Economic Indicators.*

despite wage and inflation inertia in the past and a legacy of highly distorted prices which continued to impose large price adjustments until very recently (Figure 1.2). The strengthening of the exchange rate has also assisted with the lowering of inflation. While overall monetary conditions have generally been tight, growth has nonetheless been robust, thanks largely to strong inflows of foreign direct investment.

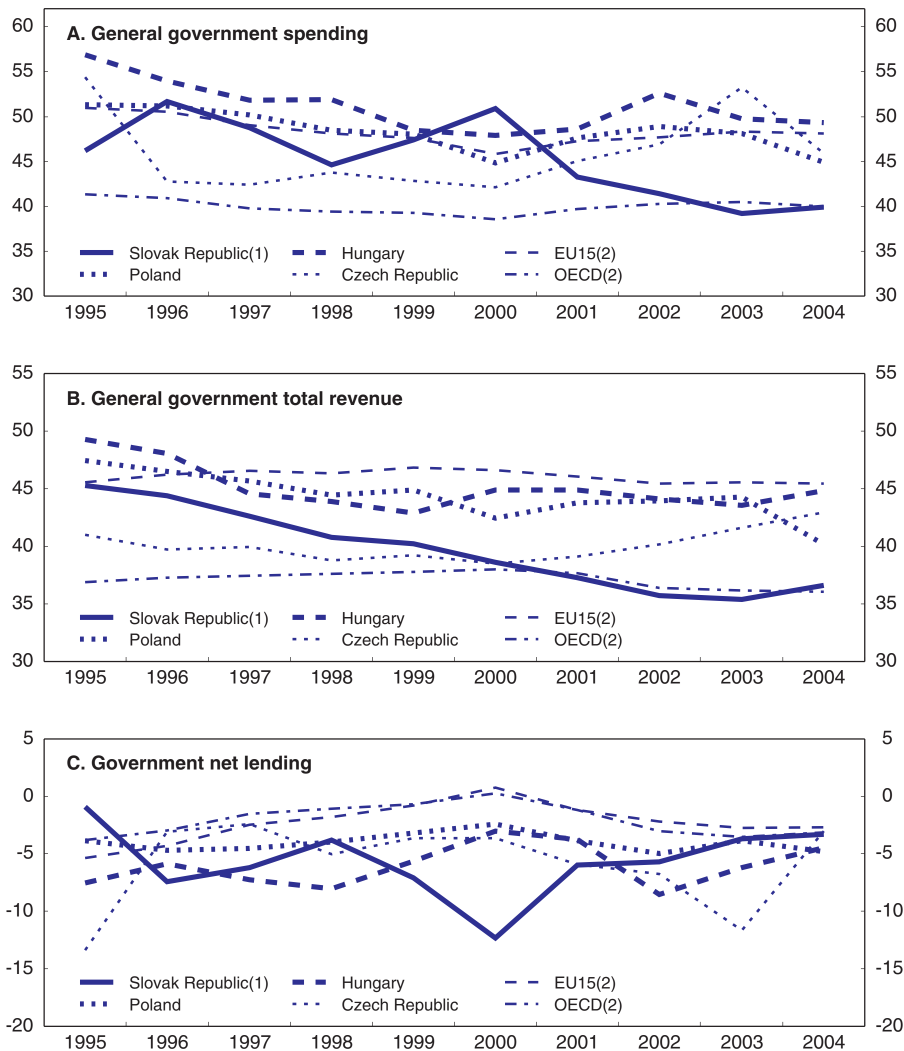
Improving fiscal conditions have supported macroeconomic stabilisation and helped limit the need for monetary tightening. A severe fiscal drift in the 1990s, which was more serious than in other post-transition countries, was followed by a firm consolidation in the 2000s, and Slovakia has become the most successful fiscal consolidator in Central Europe in recent years (Figure 1.3). Firm fiscal consolidation was a stated objective of the government which came to power in 1998 but could only be implemented after 2000, and more particularly after the 2002 elections. The main features of the new fiscal policy which permitted the successful consolidation are:[1]

- Large and durable cuts in expenditure, notably in transfers to households and enterprises.
- Successive simplifications in the tax system which – though resulting in an initial increase in the deficit – delivered solid revenues at lower tax rates.
- A thorough reform of the social security system, which is at the core of the consolidation strategy. The government has kept the public health expenditures confined to basic needs and reduced the universal benefit package. The statutory pension age was raised from 58 to 62 years for men and from 52-55 years to 62 for women while a second capitalised pillar was introduced.

Major progress was achieved in strengthening the institutional framework for fiscal management. The Ministry of Finance has acquired a central role in budget preparation and planning. The medium-term macroeconomic programmes submitted to the European Union began to set out the fiscal stance more accurately, and to expose the fiscal risks more

Figure 1.3. **A unique path of fiscal consolidation**

As per cent of GDP



1. Consolidated general government accounts on a national accounts basis are not regularly published. Figures shown are OECD estimates, on the basis of the 2003 consolidated accounts and non-consolidated accounts for the other years.
2. Weighted averages.

Source: OECD *Economic Outlook* No. 77.

precisely, contributing to the adoption of a conservative fiscal stance. In 2005, for the first time, a three-year budget outlook with further consolidation objectives has been attached to the annual budget.

The successful implementation of this policy mix allows Slovakia to set its sights on an early date of compliance with the Maastricht public finance and monetary stability objectives, and to accede to the Economic and Monetary Union in the near future. The government is committed to meeting the fiscal balance, public debt, inflation, interest rate and exchange rate stability criteria by 2007 and a supportive decision by the European

authorities is being sought for 2008, with a view to full accession in the following year. This is widely seen as an achievable target and contributes to the stability and predictability of the macroeconomic framework.

... and assertive structural reforms...

In addition to sound macroeconomic management, Slovakia has implemented an assertive structural reform agenda in the past five years. Together with mainstream liberalisation measures in product, capital and labour markets common to all EU accession countries in the region, Slovakia offers some additional framework conditions which have increased the profitability of business and reduced investment risks, and which make the Slovak business environment particularly competitive (Figure 1.4):

- *A simple and low-rate tax system*. After successive steps alleviating corporate and personal taxes after 2000, the simplification of the tax regime culminated with the adoption of a flat, uniform and largely consolidated personal and corporate income tax regime. The new system excludes the double taxation of dividends (although double taxation of capital gains on realisation still exists) and applies a standard rate of 19% on all types of income. All exemptions and allowances have been eliminated.[2] The new system has been in force since January 2004 (Box 1.1).
- *Competitive wages and wage-setting arrangements*. Slovakia entered transition with lower wages than other EU accession neighbours but a labour force of comparable quality, at least in the higher skill segments. It has since preserved this advantage by keeping wage growth more or less in line with productivity gains. Since the early 2000s policymakers have refrained from encouraging wage spill-overs from the most productive activities (a common pressure in post-transition economies), partially reformed a rigid cascade of minimum wage “tariffs”, eliminated the practice of administratively extending collective agreements, encouraged decentralised wage bargaining and facilitated wage differentiation across firms and regions. Only the standard minimum wage remains centrally fixed, at a relatively high 41% of the average wage.
- *A flexible labour code*. Slovakia had initially adopted an employment relations system similar to many other countries in Europe, protecting the job positions of the incumbent workers in large firms and limiting the room available for flexible employment. The Labour Code was thoroughly reformed in 2003, making hiring and firing easier. The Labour Code now also facilitates temporary and part-time employment.
- *A welfare system enhancing work incentives.* An overhaul of the welfare system eliminated most of the earlier perverse incentives for welfare beneficiaries to stay out of employment. The new regime implemented in 2003 provides lower flat welfare benefits, but significant refundable tax credits for earned incomes, and other in-work benefits. Reforms have reduced the reservation wages of employees and given enterprises wider access to the large available pool of low wage labour.
- *A particularly supportive political setting for business investment*. Authorities have made the encouragement of investors, notably large and internationally mobile industrial investors, a key instrument of economic policy. They have so far matched all investment incentives offered by competing countries to the international projects that they were interested in drawing to Slovakia, through a wide set of measures (Box 1.2). Nonetheless, the business environment needs important additional improvements, as discussed in

Box 1.1. **The fundamental tax reform**

In 2004 the government implemented a radical tax reform by setting the tax rates of the personal income tax (PIT), the corporate income tax (CIT) and the value added tax (VAT) all equal to 19%. Together with these changes in tax rates many exceptions, exemptions and special regimes were eliminated, although the favourable tax treatment of foreign direct investment (FDI) continues to exist to some degree. With this reform Slovakia became the first OECD country with a flat personal income tax although other countries in Central and Eastern Europe had introduced such a tax before. This reform has made the tax system much simpler and more transparent. It can be expected that its effect on the economy will be clearly positive. Average and marginal personal tax rates declined for many workers (although average tax rates did not decline for singles earning the average wage and marginal rates did not decline for workers with a marginal income tax of 10% before the reform). The replacement of the income dependent child allowance with a universal child benefit also reduced marginal tax rates for workers with children. Furthermore, the reduction of the personal income tax makes it easier to comply with the tax code, and also reduces the incentive to participate in the shadow economy, so that employment could shift from the informal to the formal sector. However, the total tax wedge on labour remains high because of high social security contributions. While incentives for seeking work have been noticeably strengthened by the reduction in social assistance levels, this high tax wedge, coupled with a minimum wage that is fairly high in relation to average wages, means that demand for labour is constrained, particularly at the lower end of the labour market.

The changes in the corporate tax system (which not only reduced the statutory rate from 25% to 19% but also increased depreciation allowances for industrial buildings) reduced the effective average and the effective marginal tax rate on investment to internationally low levels (see Tables 1.A1.1, 1.A1.2 and Figure 1.A1.1 in the Annex 1.A1). This should strengthen incentives for investment and for entrepreneurial activity in general. The cut in the statutory corporate tax rate has also delivered a positive signal to international investors in particular. It can be shown that the reform made the tax system more neutral with respect to the various sources of investment financing, in particular between debt-financing and new equity financing (see Annex 1.A1). The reform therefore improved conditions for start-ups and for the growth of firms which rely more on these sources of financing. Nonetheless, the effective tax rate on the return of an investment which is financed by retained profits is higher as it is taxed both at the corporate level (by the corporate tax of 19%) and the household level (by the capital gains tax of 19%) on realized capital gains (*i.e.* the increase in share prices) arising from these re-invested profits. So domestic firms which have to rely on retained earnings for their marginal investment suffer a disadvantage that would be removed if there were no capital gains tax, as is the case in a number of other OECD countries. Another possibility would be to exempt the capital gains which arise from re-invested profits but maintain the tax on windfall capital gains. Such a system has been implemented in Norway and would make the tax system in Slovakia neutral with respect to all sources of investment financing while at the same time consider equity concerns with respect to windfall gains.

Concerning equity or fairness, there are various elements of the Slovak tax reform which tend to change income distribution in favour of the more affluent households (see Annex 1.A1). However, the issue of fairness in taxation cannot be separated from the issue of efficiency. If, as suggested above, the tax reform increases the capital stock and improves its allocation, labour productivity increases; this will raise real wages so that workers, including the low-skilled, will over the longer-term also benefit from lower taxes on capital. But those persons who do not participate in the labour market will remain worse-off as they are affected by the higher VAT and the lower social assistance.

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Box 1.2. **Foreign direct investment incentives**

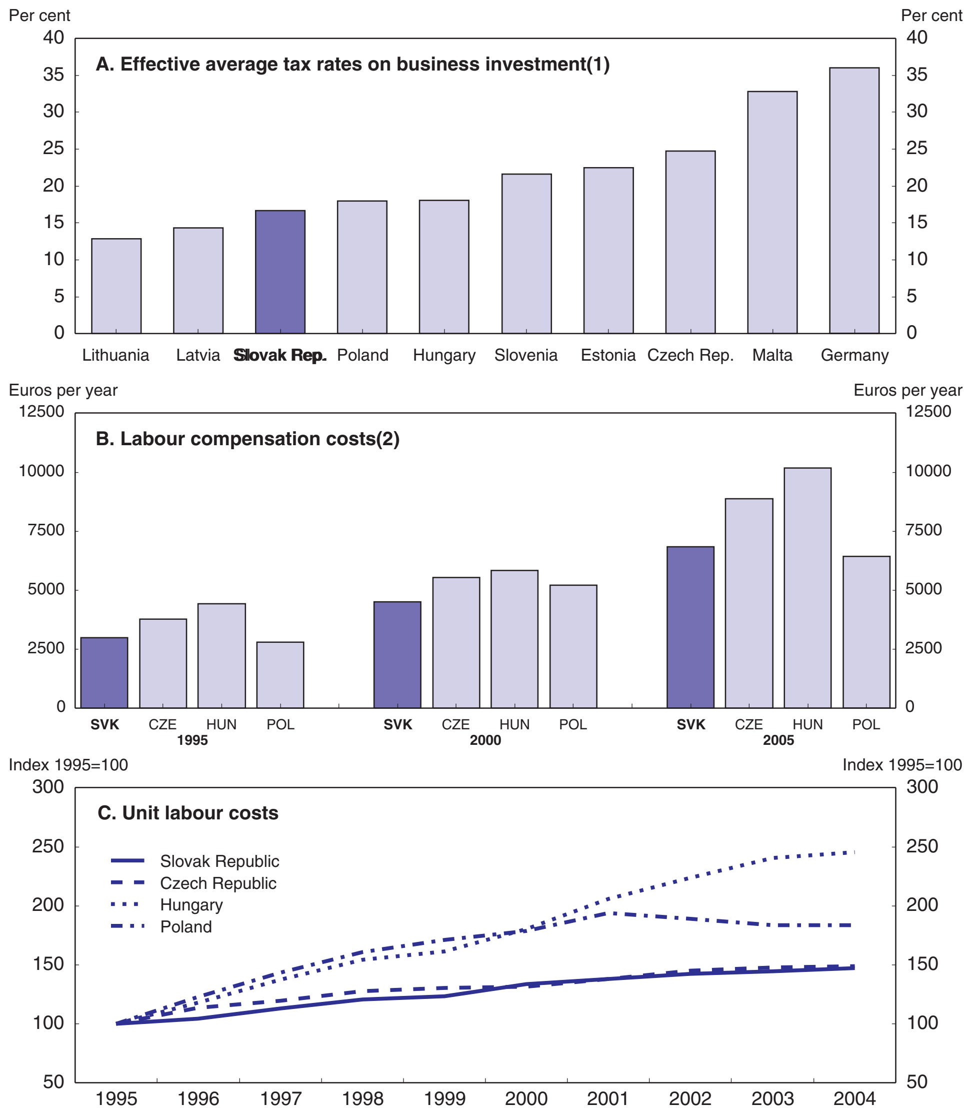
Financial incentives have been granted since 2001 to large-size foreign direct investment projects in Slovakia. They have taken five main forms:

1. Foreign investments larger than EUR 4.5 million of "paid-in capital" are granted a 100% tax holiday for five years, starting with the first year of generation of a taxable profit. An additional 50% of tax credits are granted for the following five years if the investor increases it's paid in capital by at least another EUR 4.5 million. The minimum investment threshold is reduced to EUR 3 million for investment in special sectors such as tourism or software, and to EUR 2 million for investment in regions with a labour force survey (LFS) unemployment rate above 10%. The 2001 amendment to the Act on Corporate Income Tax, which authorised the tax holidays granted to large foreign investors, will expire by the end of 2006. However, as a replacement, the government has prepared a draft "Act on Investment Incentives" which extends the same set of measures to projects of similar sizes, and offers similar support packages to investments which will be realised after 2006. The draft Act is currently under discussion in the Parliament. It will also cover the other investment incentives as discussed below.
2. Direct investment subsidies can also be provided on a project basis, as contributions toward the financing of machinery and equipment purchases and the creation of new jobs. The cumulative amount of these subsidies together with the estimated value of the tax holidays mentioned above (the combination of both cash grants and tax holidays) cannot exceed 15% of the total cost of investments in the automobile industry and 50% in other industries (under the European Union's state aid rules applicable to Slovakia).
3. Since 2004, additional training subsidies have been available for the training of newly hired workers. These subsidies are directly negotiated with the government, and are not included in the state aid ceiling.
4. "Industrial parks" can be created for FDI investors, with ready-to-use utilities and transport infrastructure. They can be designed according to the needs and for the purposes of a single investment project. Construction costs are shared between the central government (90%) and local municipalities (10%).
5. A set of laws adopted between 1999 and 2001 authorises the government to assist large size ("significant") foreign investors in their various regulatory, administrative and judiciary dealings. Procedures can be accelerated to facilitate the acquisition of land assets, the issuance of building permits, and trading licenses.

Chapter 4, and the government has started a number of adjustments in the legal, regulatory and judiciary environment.

By implementing all these reforms, Slovakia has not only improved the fundamentals of its economy but has also achieved a major improvement in its international reputation. First perceived as an introverted and highly unpredictable and risky economy, it has succeeded in entirely reversing this image after the most recent policy changes. Now, it is widely recognised as one of the most open, business-friendly and macroeconomically stable economies in Europe. This improved reputation has brought major benefits such as enhanced international credit ratings, reduced risk premia and diminished capital costs (Figure 1.5).

Figure 1.4. **A competitive business environment**



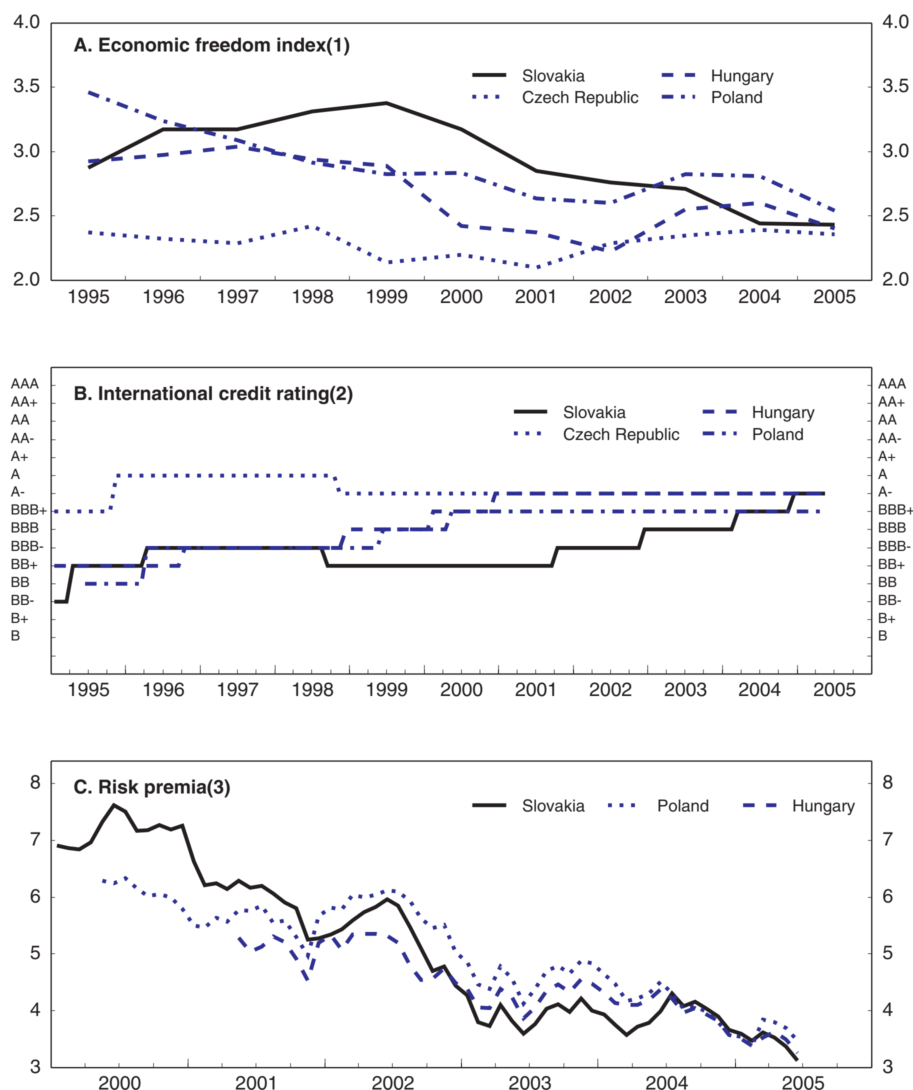
1. The EATR is calculated on the basis of equally weighted assets and sources of finance. Taxes borne by the parent company are set to zero. The effective tax burden borne at the level of a subsidiary is therefore considered to be the same as for a domestic investment.
2. Wages and social security contributions per employee.

Source: Ernst and Young and Zew – *Company Taxation in the New EU member States* 2004, and OECD.

… attracted massive foreign direct investment

The strong pick up in foreign direct investment (FDI) is the most significant and economically rewarding outcome of favourable international perceptions. From a very low level of FDI in the early period of transition, mounting inflows have made Slovakia an important destination for FDI (Figure 1.6). Some inflows have been concentrated in privatised enterprises sold to strategic investors, but others have been greenfield investments in a range of manufacturing and service activities (Figure 1.7). The borderline

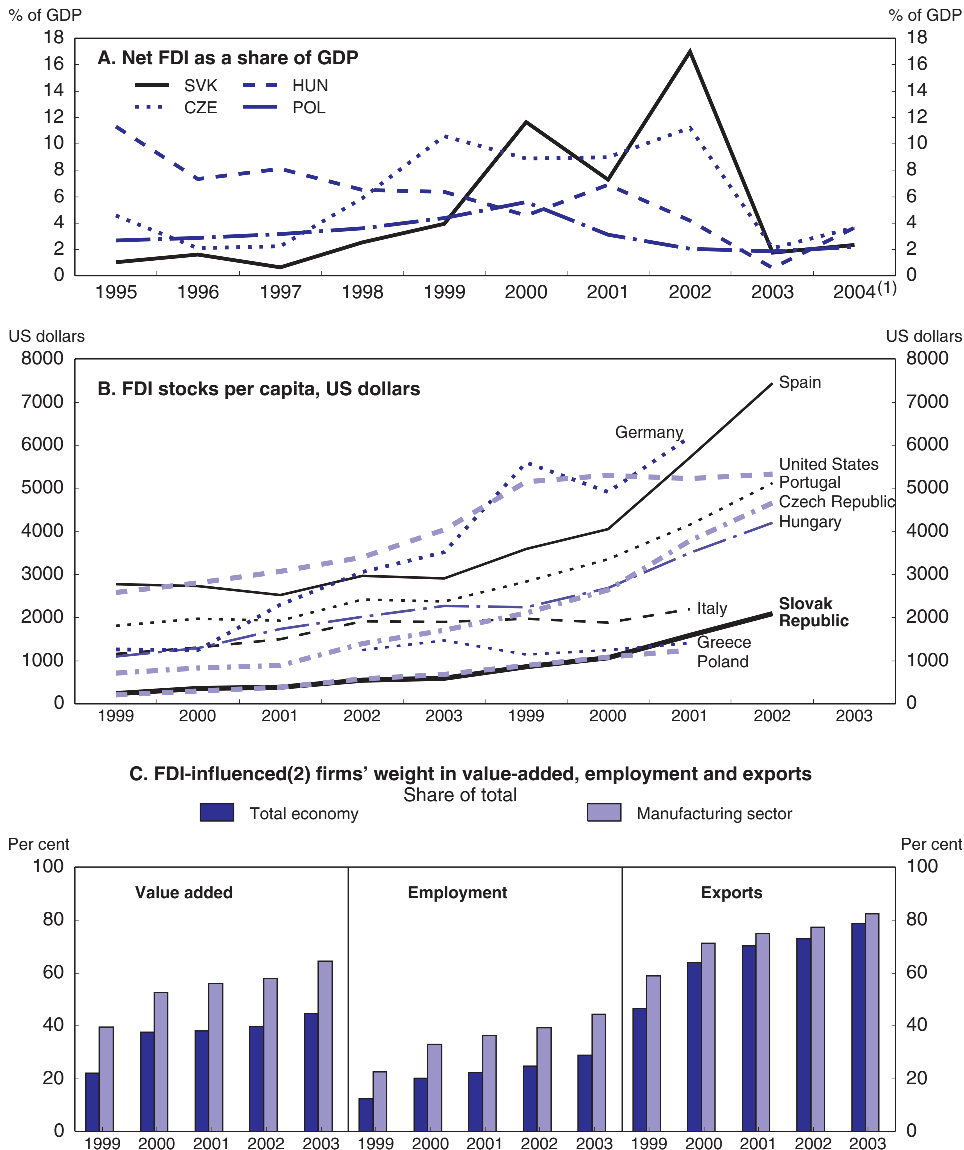
Figure 1.5. **Enhancing international credibility**



1. The 2005 Index of Economic Freedom measures 161 countries against a list of 50 independent variables divided into 10 broad factors of quality of their economic institutions. These 10 factors are: trade policy; fiscal burden of government; government intervention in the economy; monetary policy; capital flows and foreign investment; banking and finance; wages and prices; property rights; regulation; and informal market activity. Low index scores designate higher quality economic institutions.
2. Standard and Poors Foreign Currency Credit Rating (long-term).
3. "Redemption yields" on foreign currency long-term government bonds (= discounted value of future interest and capital income minus the bond price as % of the bond price) are used as a proxy for risk premia.

Source: Standard and Poors, *Heritage Foundation* and Datastream.

Figure 1.6. **The growing role of FDI**



1. Preliminary data. A strong increase in outward FDI of 0.4% of GDP in 2003 contributed to the reduction of the net inflow ratio. Data does not include the announced FDI commitments but only the transfers recorded in the balance of payments.
2. Firms with foreign direct investors owning 10% or more of equity capital.

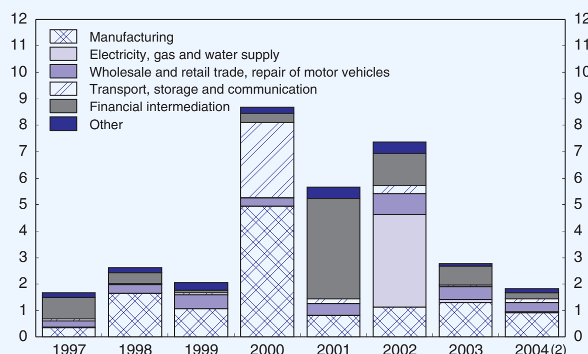
Source: Statistical Office of the Slovak Republic and OECD International Investment database.

between privatisation and greenfield investments has disappeared in many privatisation operations when good profitability attracted additional investments. The penetration rate of FDI is now very high and it has become the prime engine of capacity and output growth (Box 1.3).

Box 1.3. **The role of FDI**

The most rapidly changing part of the Slovak economy is the FDI sector. At the end of the third quarter of 2004 the total value of FDI equity capital plus reinvested earnings was SKK 373 billion, equivalent to around 25% of GDP. Figure 1.7 illustrates large privatisation receipts in telecommunications (2000) and the electricity network (2002). But most FDI inflows have been directed into the manufacturing sector and, to a lesser extent, into the financial sector where most banks are now foreign-owned.

Figure 1.7. **Flow of FDI by sector**[1]



1. New equity plus reinvested earnings.
2. First three quarters.

Source: Slovak Investment and Trade Development Agency (SARIO).

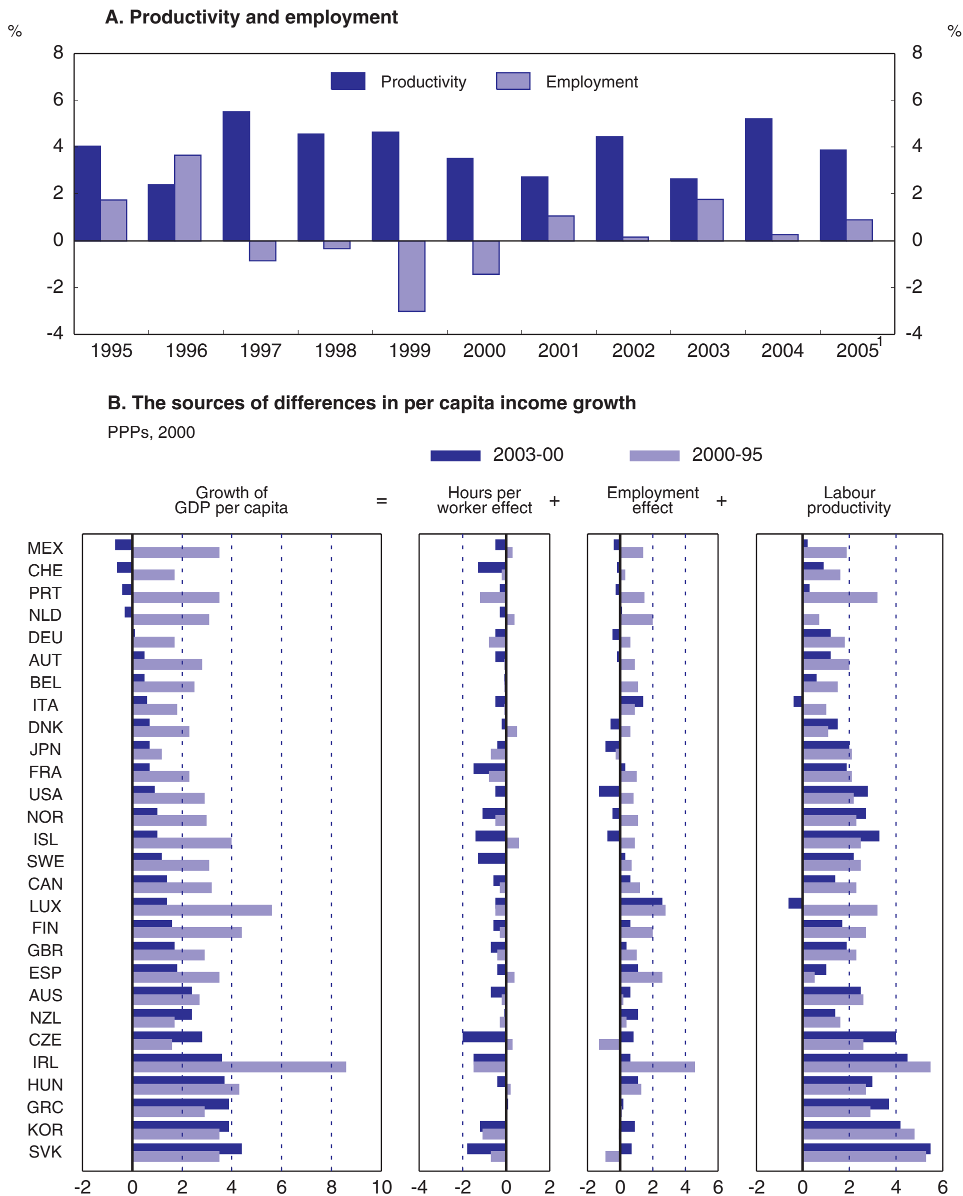
Looking ahead, further FDI inflows are expected. The Slovak Investment and Trade Development Agency (SARIO) has already listed a further SKK 66 billion committed investments in manufacturing (around 4% of GDP). In addition to FDI in the manufacture of basic metals and fabricated metal products, Slovakia is now developing a large group of international firms in the automotive industry.

Car manufacturers and their suppliers have indeed started to form a cluster of international size and importance. After Volkswagen which began production in 2001 and which accounted for 25% of the total manufacturing turnover and 32% of total industrial exports of the country in 2003, PSA Peugeot-Citroen started to build a large plant in 2004 which will begin production in 2006. KIA-Hyundai is also developing a plant which will begin production in 2007. These two projects have required investments of EUR 1.5 billion (5% of GDP) and their output will reach over 500 000 units annually. Ten thousand new workers will be hired. As a result, Slovakia is expected to become in 2007 the world's "top" car manufacturer in terms of the number of vehicles produced per inhabitant. Car exports are expected to rise from nearly SKK 80 billion in 2004 to SKK 120 billion in 2007 and SKK 140 billion in 2008, and the car industry is expected to contribute one percentage point to GDP growth in 2007 and an additional 0.3% in 2008.*

Several automobile component producers have followed suit by creating local plants, and car component manufacturing is projected to grow even more rapidly than car assembly over the remainder of the decade. While some manufacturers in the car cluster have already implemented their home country technologies in order to achieve a fast convergence to mother company productivity levels, others are aiming at a more gradual convergence based on more labour-intensive input mixes reflecting the lower cost of local labour.

* Projections by the Slovak authorities.

Figure 1.8. **The sources of growth**



1. OECD projection.

Source: OECD, *Economic Outlook No. 77*, Productivity Database.

Growth has accelerated

Driven by these favourable factors, growth accelerated after 2000. While the early transition years were characterised by macroeconomic instability, decelerating productivity and weakening employment, the last five years have featured a smoother macroeconomic cycle, a pick-up in productivity and an improving employment performance (Figures 1.8 and 1.10 and Table 1.2). The increase in productivity is particularly noteworthy and, if sustained, may be the early signs of an upward shift in the long-term growth rate. Such a

structural break in potential growth underlies the OECD's medium-term macroeconomic projections for Slovakia. According to these – which are estimates based on still short data series and convergence assumptions – trend growth may be accelerating from slightly above 4% per year up to the early 2000s, toward above 5 % in the second half of the 2000s.[3]

The recent acceleration of Slovakia's growth potential has been accompanied on the demand side by strong exports, mainly by FDI firms, and more recently by stronger domestic demand. Contrasting with decelerating government consumption, both private consumption and investment have picked up on the back of improving domestic confidence. No major supply constraints have been faced so far, however, non-regulated prices and wages have remained moderate, and the economy is currently on a balanced path. Nonetheless, with expected strong continued demand growth, any excess capacity still available may rapidly diminish and risks may arise for wage and price stability. The current account balance may also deteriorate, even if its financing should remain easy with strong foreign direct investment and other capital inflows (Box 1.4).

Productivity gains are strong and there is scope for further spill-overs...

Strong productivity growth has been generated mainly by foreign direct investment, directly and indirectly. A 2003 study showed that FDI firms were transferring massive international knowledge to Slovakia in the areas of product and service design, process engineering, work organisation, marketing, and human resource management.[4] These firms generally achieve a higher level of productivity than domestic firms. The know-how they import also tends to diffuse to the rest of the economy through staff turnover and other means, although spill-overs are uneven. At the same time, FDI firms use domestic research-and-development resources only to a limited extent, and have a lower degree of vertical integration.[5] This higher degree of "external dependence" does not hinder their contributions to domestic productivity growth – it permits them to bridge with the global know-how and technological input pools.

The spill-over of productivity to the rest of the economy appears to depend on domestic firms' incentives to converge with best practices, and their managerial capability to do so (Box 1.4). According to available evidence, neither is to be taken for granted. The Survey quoted by the National Bank of Slovakia[6] reveals that the main obstacles to productivity gains by local firms are their excess staffing, partly obsolete fixed capital, lower quality work organisation, and lower quality product portfolios. International research shows that productivity gains tend to spill over at different paces in different market conditions, according to the pressures and opportunities of competition. Policymakers aiming to accelerate productivity gains in the domestic sector should pay special attention to this important framework condition and seek to enhance competition (Box 1.5).

... but employment growth is still insufficient

The trend increase in employment in the past four years, which accelerated further after the second half of 2004 after a negative contribution to growth before the reforms is a promising improvement (Figure 1.10 and Table 1.2). In fact, job creation in newly developing sectors and self-employment was already in the previous period more dynamic than reflected in aggregate employment, but job losses in declining activities, notably in the public sector, had eclipsed this development.[7] The balance has now turned positive and the recent acceleration of growth accentuates this shift. Indeed, leading private sector activities (manufacturing, construction, financial and business services) have created a large number

Box 1.4. **The OECD's short-term projections for Slovakia**

GDP growth is expected to reach nearly 5% in 2005 and accelerate to around 5¾ per cent in 2006. Exports are expected to grow strongly at above 11% per year and imports are projected to follow at a similar pace – because of large machinery and equipment imports by FDI firms. The current account deficit may widen temporarily to 5¾ per cent of GDP in 2005, before narrowing slightly in 2006.

Job creation should strengthen, but growth is expected to remain relatively capital-intensive and job shallow. Although inflation is not expected to rebound, there are upside risks. In particular, there is a risk of strong wage growth in the highly productive manufacturing sector spilling over into higher prices in less productive market services. On the other hand, if further exchange-rate appreciation occurs, inflation would be lower but additional pressure may bear on competitiveness.

Table 1.1. **Demand, output and prices**

	2004	2002	2003	2004	2005	2006
	Current prices Billion SKK	Percentage changes, volume (1995 prices)				
Private consumption	750.6	5.5	–0.6	3.5	4.6	5.3
Government consumption	257.4	4.9	2.7	1.2	3.2	3.0
Gross fixed capital formation	327.2	–0.6	–1.5	2.5	10.0	7.8
Final domestic demand	1 335.2	3.7	–0.2	2.8	5.7	5.5
Stockbuilding[1]	25.9	0.9	–1.9	3.6	0.0	0.0
Total domestic demand	1 361.1	4.6	–2.0	6.5	5.5	5.3
Exports of goods and services	1 018.0	5.6	22.5	11.4	11.0	11.8
Imports of goods and services	1 053.6	5.5	13.6	12.7	11.9	11.5
Net exports[1]	–35.6	0.1	6.5	–0.8	–0.6	0.4
GDP at market prices	1 325.5	4.6	4.5	5.5	4.8	5.7
GDP deflator	–	4.0	4.7	4.6	2.4	2.7
Memorandum items						
Consumer price index	–	3.1	8.6	7.5	2.8	2.7
Private consumption deflator	–	2.5	7.7	6.9	2.7	2.8
Unemployment rate	–	18.6	17.5	18.1	17.9	17.5
General government financial balance[2, 3]	–	–5.7	–3.7	–3.3	–3.4	–3.2
Current account balance[2]	–	–8.0	–0.9	–3.6	–5.7	–5.3

1. Contributions to changes in real GDP (percentage of real GDP in previous year), actual amount in the first column.
2. As a percentage of GDP.
3. Excludes 100% cost of transferring contributions to the second pillar of the pension system in 2005 and 80% in 2006.

Source: OECD Economic Outlook No. 77.

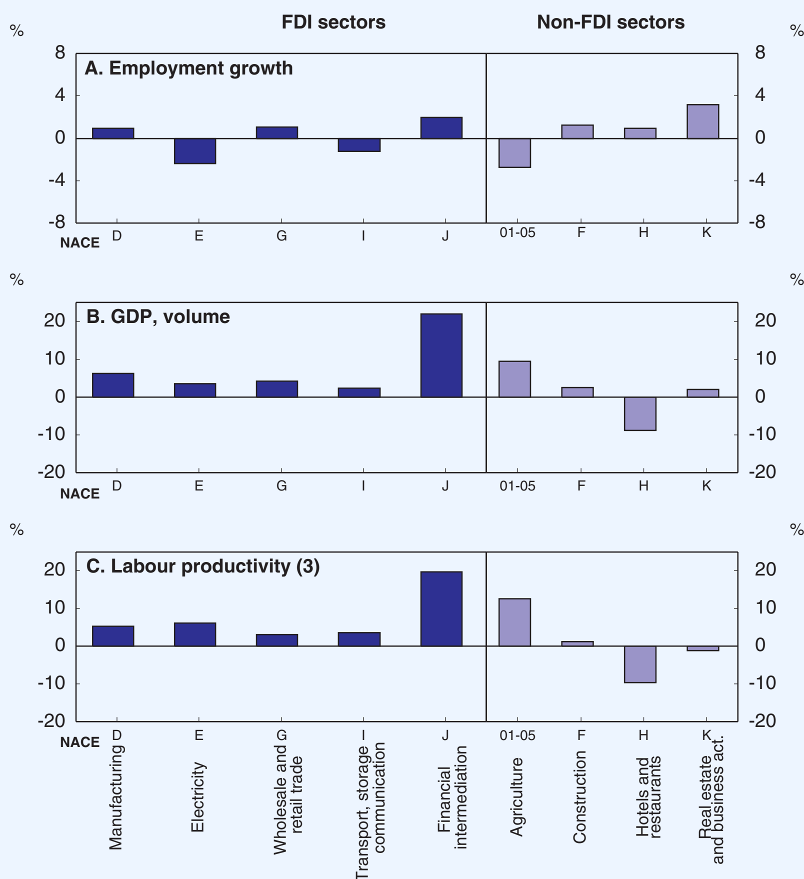
of jobs, while public and ex-public sectors (utilities, transport and recently privatised services), and other declining private activities (agriculture, mining) have continued to shed employment. The first group has recently begun to dominate the second.

Box 1.5. **Productivity spill-overs**

For a catching up economy like Slovakia, FDI investment plays an important roll in bringing "know-how" in the form of cutting-edge business practices as well as high-tech physical capital and increased training for workers. Productivity growth can be expected to accelerate in the sectors that have received significant levels of FDI. Indeed, there is already some tentative evidence for this (Figure 1.9).

Figure 1.9. **Productivity growth in FDI-dominated *vs* domestic-owned sectors**[1]

2000-2004[2]



1. The FDI sectors are defined as those in which the stock of FDI is at least 25 per cent of total value added.
2. Estimate based on the three first quarters of 2004.
3. Labour productivity is defined as real GDP per employee.

Source: Statistical Office of the Slovak Republic.

Box 1.5. **Productivity spill-overs** *(cont.)*

In the sectors that are dominated by FDI, anecdotal evidence suggests that there is already a clear delineation between those domestic firms that have learned from their interactions with the large foreign-owned firms and lifted their productivity sufficiently, and those that have already failed and have exited. In this sense, there seems to be little evidence of a dual economy within individual sectors.

By contrast, there are differences between sectors according to their degree of exposure to foreign direct investment and the resulting spill-over of productivity gains. In this regard, the difference between the wholesale and retail trade (WRT) and hotels and restaurants (HR) is illustrative.

Both areas were initially low productivity sectors that have attracted FDI investment in recent years, albeit at quite different rates. The WRT sector has received a significantly greater share of FDI investment than HR and the introduction of foreign competition has already forced a transformation of the business practices of incumbents. In HR, where foreign competition is much less extensive, there is less evidence of change.

In WRT the market entry of large multi-national retail outlets such as Tesco (UK), Metro and C&A (Germany) and Billa (Austria) has prompted a radical transformation of the sector, resulting in an important increase in productivity. Survey results indicate that the proportion of people purchasing their groceries in hypermarkets has strongly increased, while the share using supermarkets and small retailers fell significantly, particularly that of small retailers.* These trends are reflected in growing retail turnover of the multinational chains, while the sales of Slovak companies have remained flat. The largest 6 retailers in Slovakia are now multinational chains making up almost 20% of total turnover. Although the multinationals are continuing to open new stores, it is likely that the full capacity of hypermarkets will soon be reached; in 2004 the number of hypermarkets per million inhabitants reached 18.5, a ratio comparable with that in other Central European countries.

For the Slovak firms in the WRT sector, the results are more mixed. In response to the increased competition, the most dynamic of the Slovak firms have survived by adopting similar management techniques to those of their foreign competitors, and by forming retail alliances with other Slovak firms. Even so, they are losing market share. Smaller retailers, particularly those operating in food markets are faring less well, and it is likely that the negative fall-out for small retailers is not yet complete. For Slovakia as a whole, however, the macroeconomic impact has been very positive, not only in terms of strong growth of productivity and wages in the sector, but also in terms of the strong downward impact on retail prices. This has significantly increased living standards and helped to contain inflationary pressures.

In contrast, the impact of FDI in the hotel and restaurant (HR) sector is much less pervasive. As a share of value-added, FDI in the HR sector is around 15%. Compared with the Czech Republic, Poland and Hungary, which all have experienced significant investment by the major hotel networks, foreign ownership in the HR sector has so far been restricted to a few mid-range hotel chains Within the sector, new investment has been very limited and directed to improving hygiene standards for food preparation in accordance with EU regulations rather than to developing new modern facilities to attract foreign tourists (who, in 2003 accounted for around 40% of accommodation nights and 60% of total sales). As a result, overall productivity growth has not been as strong as productivity growth in the WRT sector. In some areas – such as in the National Parks – this stagnation may reflect restrictions on building consents. But there also seems to be a deficit of capital and know-how – both of which may yet increase with a broader spectrum of FDI in this sector, or from a more general improvement in the business environment for small and medium-sized entrepreneurs.

* See Gfk Slovakia “Shopping Monitor Slovakia; 2004-2005”.

Table 1.2. **Sectoral composition of employment, 2000-2004**

Average number of employees by NACE

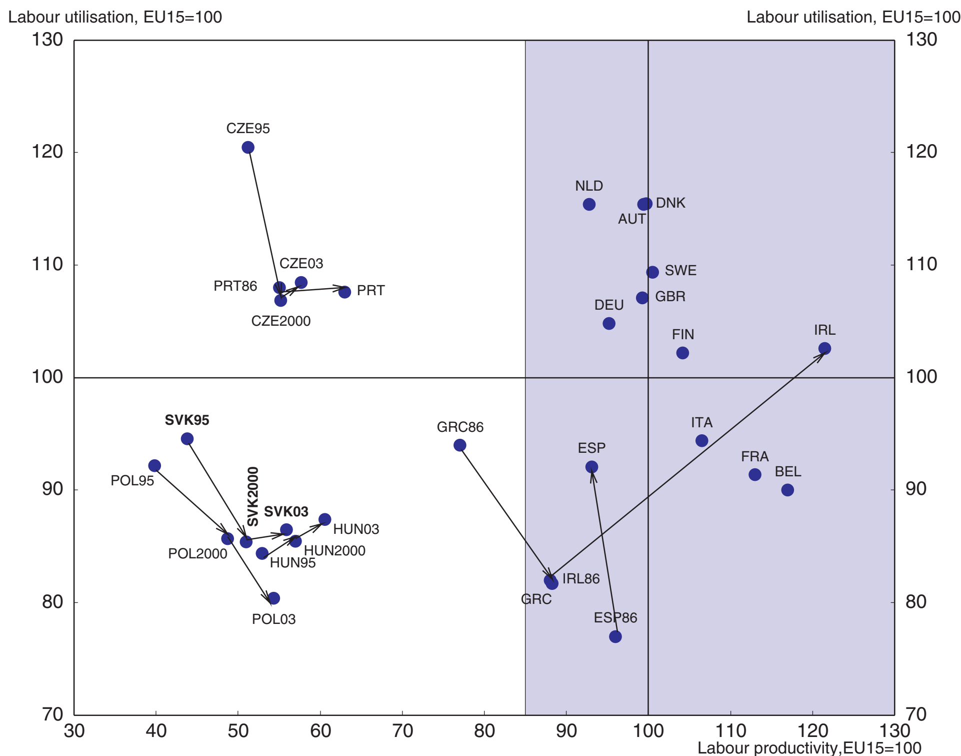
	2000	2002	2004	2005 Q1[1]	2000	2002	2004	Percentage change	
	Persons				Index			(2000-2004)	(2004 Q1-2005 Q1)
Total economy	1 976 952	2 008 851	2 030 348	2 049 473	100	100.6	102.7	2.70	2.65
Agriculture, hunting and forestry; fishing	141 708	141 095	123 587	111 917	100	99.6	87.21	–12.79	–4.70
Industry	548 921	555 379	560 691	564 293	100	101.2	102.14	2.14	3.39
Mining and quarrying	15 637	12 186	10 084	9 691	100	77.9	64.49	–35.51	–5.19
Manufacturing	485 846	496 404	507 766	514 212	100	102.2	104.51	4.51	4.51
Food products	55 763	52 778	48 386	44 788	100	94.6	86.77	–13.23	–8.28
Chemical, rubber and plastic	41 608	40 497	37 907	37 345	100	97.3	91.11	–8.89	–1.45
Basic metals and met. products	74 201	83 960	91 755	98 506	100	113.2	123.66	23.66	14.09
Machinery and equipment	139 229	139 624	152 114	153 815	100	100.3	109.25	9.25	4.82
Transport equipment	24 746	27 169	308 69	30 324	100	109.8	124.74	24.74	–3.24
Electricity, gas and water supply	47 438	46 789	42 841	40 391	100	98.6	90.31	–9.69	–7.20
Construction	125 808	124 882	133 365	134 673	100	99.3	106.01	6.01	6.44
Wholesale, retail trade and repairs	303 116	315 200	318 313	329 277	100	104	105.01	5.01	4.65
Hotels and restaurants	42 534	42 425	44 358	45 260	100	99.7	104.29	4.29	3.15
Transport, storage, communication	150 048	147 095	143 185	140 221	100	98	95.43	–4.57	–1.15
Financial intermediation	36 431	37 090	39 736	39 128	100	101.8	109.07	9.07	1.31
Real estate, renting and business activities	143 852	153 259	163 451	173 430	100	106.5	113.62	13.62	7.67
Public administration and defence; compulsory social security	80 195	82 834	93 382	95 310	100	103.3	116.44	16.44	3.25
Education	179 782	177 492	173 187	175 951	100	98.7	96.33	–3.67	–1.31
Health and social work	139 047	139 903	142 075	141 201	100	100.6	102.18	2.18	–2.41
Other community, social and personal services	85 510	92 197	95 018	98 749	100	107.8	111.12	11.12	7.97

1. 1st quarter 2005.

Source: State Statistical Office.

Figure 1.10. **Paths of productivity and employment convergence**[1]

EU accession countries



1. Year 2003 if no date is displayed following the country code.

Source: OECD, Productivity database.

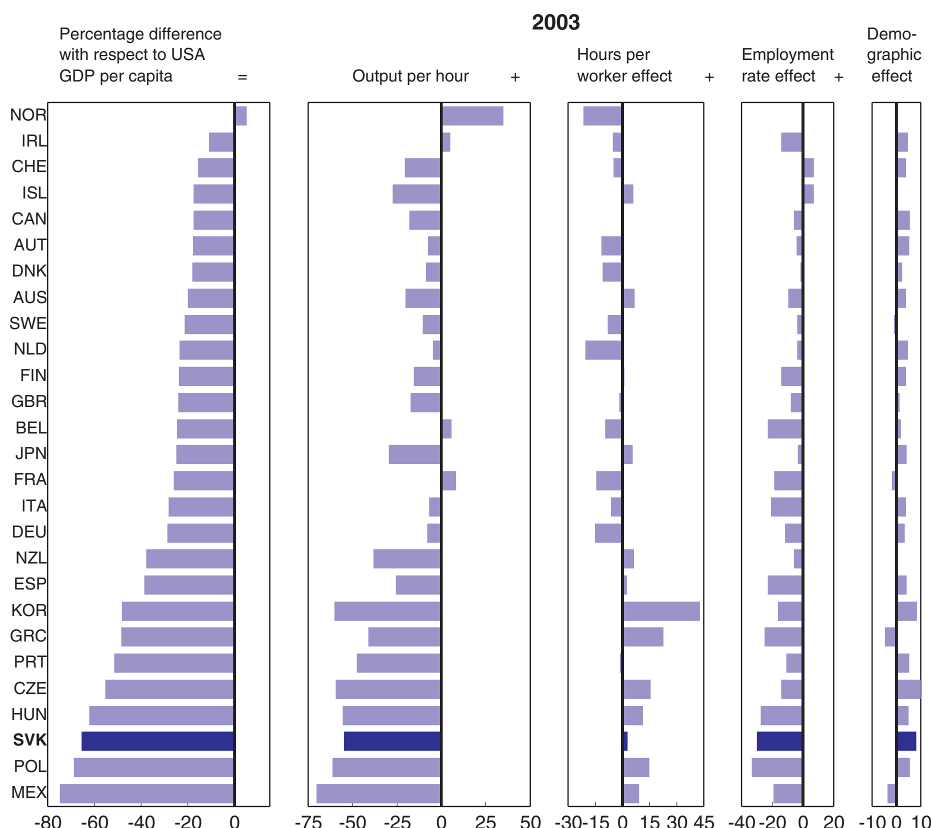
Labour utilisation remains low

Despite this important improvement in aggregate job creation, the employment rate of the potential labour force remains low. In 2004 Slovakia ranked 28th among 30 OECD countries in the employment rate of its working age population. The low employment rate is marginally offset by the favourable age structure of the population which is keeping the ratio of the working-age population in total population high and the tendency of the labour force to work relatively long hours. Nonetheless the low rate of employment accounts for a substantial part of Slovakia's *GDP per capita* gap with OECD benchmarks (Figure 1.11). In these conditions, in addition to the necessary efforts to accelerate productivity spill-overs, increasing the employment rate of the working age population needs to be a central task of economic policy.

The remaining employment potential is not easy to mobilise

Will growth in the future stimulate sufficient job creation to activate the remaining employment potential? A closer look at the characteristics of the presently unemployed population shows that growth may soon hit a "structural" unemployment threshold (Figure 1.12). It is important to assess whether the unused labour force is truly available to the labour market. This depends on the flexibility of the wage structure to respond to the lower productivity of the unemployed, on the flexibility of people to adjust their skills to

Figure 1.11. **Remaining sources of international GDP per cap. difference**



Source: OECD, Productivity database.

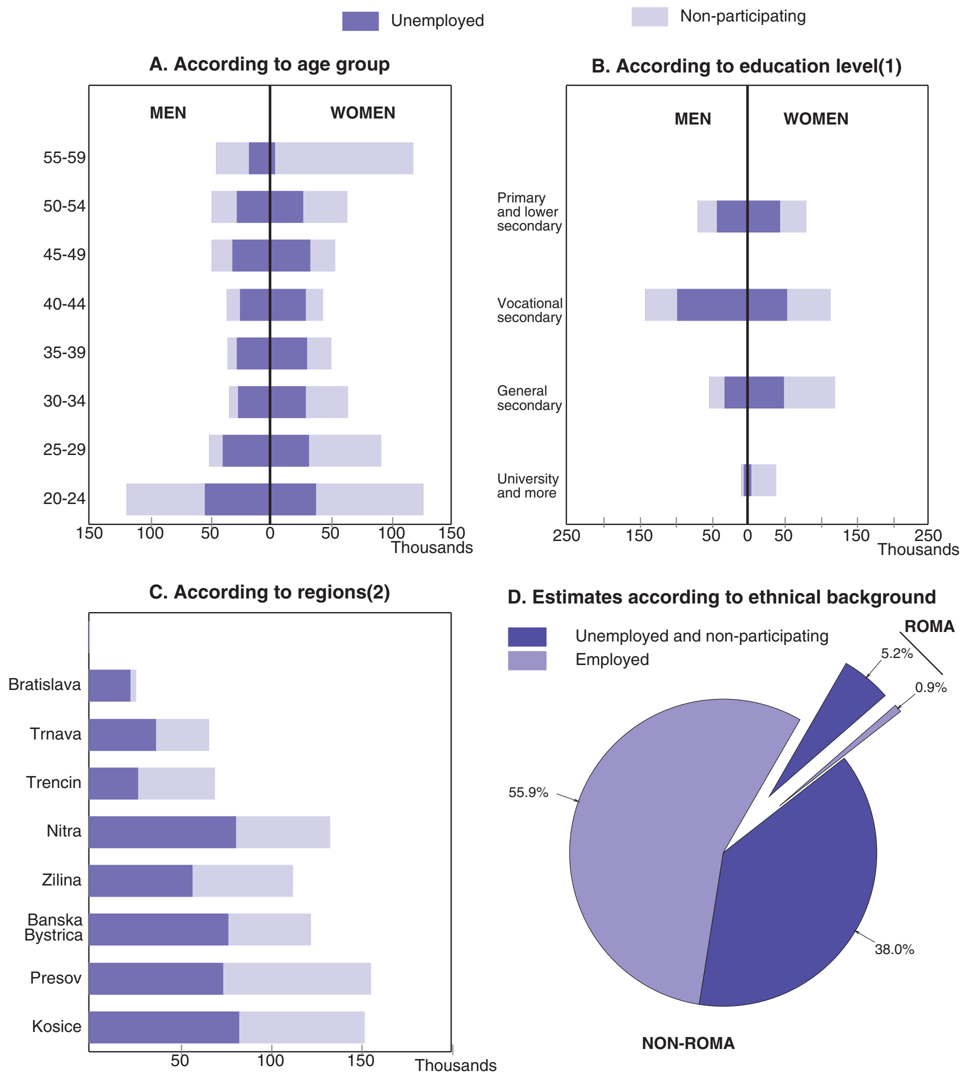
the needs of the labour market, and also on their ability to move to the regions where there is more demand for labour. While the welfare system does not seem to generate any significant inactivity traps, some factors raise concerns that the unemployed will not be easily integrated in the labour market with future growth:

- The employment costs of the unemployed workers may be too high. The level of the minimum wage, notably in low productivity regions, and high labour taxes may raise these costs above the potential productivity of many workers.
- There is an apparent skill deficit in the unemployed population (Figure 1.12, Panel B). This concerns in particular the large Roma minority which is unemployed at a rate of around 80%, and represents approximately 30% of total unemployment.[8]
- There are also other inadequately trained groups, including among the young.

There is a mismatch between where potential workers live and where jobs are being created. The mobility of the population between regions is particularly low (Table 1.3). Compared to other OECD economies, including other catch-up countries, such limited mobility may be hindering the reduction of unemployment. The recent evolution of the exit rates from unemployment, and of the rates of long-term stay in unemployment[9] bear out concerns about a possible entrenchment of the high "structural" unemployment rate. Exit rates from unemployment declined in seven of the eight regions in the past four years,

Figure 1.12. **The remaining employment potential**

Labour market status of working age population, 2003



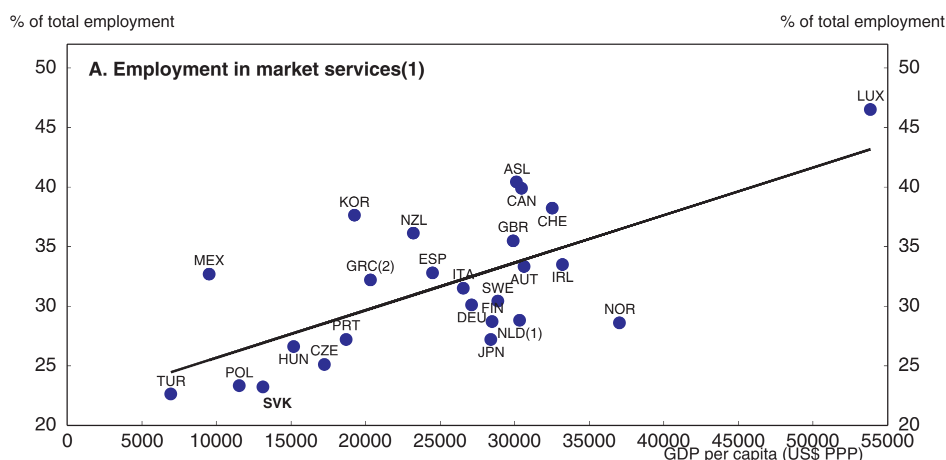
1. Male age group = 25-59, female age group = 25-54.
2. Using the national share of males (20-59) and females (20-54) in the population.

Source: Statistical Office of the Slovak Republic; estimates by the OECD Secretariat.

and the long-term unemployment rate was the highest of OECD in 2003 at 60%. These signs, which have persisted despite a period of strong growth, are a warning that *under the present framework conditions* the spontaneous activation of the remaining employment potential cannot be taken for granted (Figure 1.12).

Figure 1.13. **Pending growth potential**

2003



1. Wholesale and retail trade, hotels and restaurants, financial intermediation, and real estate and business activities.

Source: OECD, *Labour Market Statistics*.

Table 1.3. **More room for internal migration**[1]

Gross internal migration rates, percentage[2]

	1999	2000	2001	2002	2003
Austria[2]	1.89	1.92	1.96	1.96	2.01
Czech Republic				0.57	0.77
France	2.03	2.34	2.19	2.11	
Germany	1.12	1.53	1.24	1.18	1.36
Greece	0.24	0.22	0.21	0.18	0.15
Hungary	0.37	0.45	0.37	0.31	0.40
Italy[2]	0.58	0.62	0.55	0.58	
Japan[2]	2.25	2.22	2.21		
Poland			0.32		
Portugal	0.27	0.75	1.99	2.49	2.67
Slovak Republic					**0.14**
Spain	0.12	0.14	0.15	0.16	0.20
United Kingdom	2.60		2.54	2.26	2.28
United States	3.13	3.45			3.05

1. Number of persons aged 15-64 years old having changed region of residence as a share of total population aged 15-64 (between NUTS 2 regions for the EU countries and regions of closest size in other countries).
2. Gross migration rate of the total population.

Source: *OECD Employment Outlook* 2005, forthcoming.

Broadening growth and making it more sustainable

Growth has so far been driven mainly by FDI firms and has been concentrated in the manufacturing sector. Concurrently, the size of the market services sector has remained lower than in other OECD countries with similar income levels, especially when the low share of agricultural employment is taken into consideration (Figure 1.13). This relative sluggishness of the economy to develop market services could be *revealing* some lag in the development of a business environment that is supportive of entrepreneurial activities in

domestic small-and-medium-sized enterprises. The development of services may also have been hindered by the low regional mobility of workers to move to urban areas where there is more demand for services.

It is therefore important to improve framework conditions which foster the development of a fuller range of markets and business activities. Not only large FDI and domestic firms, but also start-ups and small-and-medium-sized enterprises should be involved in this process. This new phase of growth requires policies which should not only preserve the stable macroeconomic conditions and the open product, capital and labour markets, but which must also strengthen the market institutions needed to further increase the mobility and the reallocation of resources in the whole economy. Higher employment and growth would be facilitated by: a modernisation of the legal and judicial system to support small-and-medium-sized businesses start-ups; the expansion of the private equity and venture capital supply; more open regulatory frameworks for all professions; more competitive information and telecommunication infrastructures; and more responsive transport and housing markets.

The implementation of such a broader economic strategy requires a more efficient public sector. The needed reforms involve legislative, regulatory and other policy initiatives in a wide set of governance and service areas at central and sub-central levels. This will require improved technical expertise and continuing modernisation of the public sector, while the fiscal disciplines of low taxation and low spending must be preserved.

Four challenges in fostering broader based growth and higher employment

The Slovak economy has responded very well to the macroeconomic and microeconomic reforms introduced in the past five years. Yet economic development now reaches a phase where its base should be broadened further by improving the framework conditions for the expansion of a more dynamic and innovative business sector and by enhancing the employability of the unemployed. Public policies in this new phase must continue to comply with a demanding fiscal consolidation strategy. Four specific challenges will need to be faced:

Policies to smooth the path to euro area accession (Chapter 2)

Fast track accession to the Economic and Monetary Union in 2009 on basis of compliance with standard public finance and monetary stability criteria in 2007 is at the core of macroeconomic policy. There are two key conditions for successful implementation: *i)* the fiscal and inflation targets for 2007 must be attained irrespective of macroeconomic conditions and any fiscal and exchange rate contingencies in the next two years; and *ii)* the exchange rate should stay on a smooth path during its participation in ERM-II and accede to EMU at an appropriate convergence rate; any excess appreciation and/or sharp depreciation during this period should be avoided.

Both objectives will be challenging to attain. The ongoing fiscal consolidation may come under political pressure in the context of the general elections in 2006. Macroeconomic stability may be affected by any large speculative capital movements prior to EMU accession. Such developments risk undermining price and exchange rate stability. A cautious fiscal and monetary stance will be necessary during this period and the national authorities will need to make the best use of the relatively limited set of policy instruments

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at their disposal. The flexibility of the economy, notably in the areas of wage and price flexibility, is an asset in this task and should be fully preserved (Chapter 2).

Boosting job creation and labour market mobility (Chapter 3)

Given the potential entrenchment of high unemployment among the low-skilled, new policy measures are needed to facilitate better market clearing at that end of the labour market. Three hindrances to job creation must be taken into consideration: *i)* labour taxes are among the highest in the OECD and carve too wide a wedge between workers' incomes and their employment costs; *ii)* the minimum wage could also be too high, at least in the low productivity and high unemployment regions; and *iii)* obstacles to labour mobility between regions should be overcome in order to permit potential workers to take jobs where they are being created.

The authorities are aware of the need to act on these issues but face political, fiscal and technical challenges. As reducing or regionally differentiating the minimum wage is politically difficult, its rate of growth must be slowed down and emphasis can be put on reducing social security contribution rates while minimising the fiscal cost of these reductions. The geographical mobility of workers must also be facilitated, notably by reforming the housing market (Chapter 3).

Improving conditions for innovation and growth (Chapter 4)

Local affiliates of FDI firms have performed well in part because they are able to draw on the superior managerial, technical and financial resources of their parent companies. Domestic businesses and start-ups are more reliant on local market conditions and on the local institutional framework. They are therefore more vulnerable to shortcomings in the domestic business environment. Policies to broaden the basis of growth should help enhance the profitability of the start-ups and domestic firms by reducing the costs of firm creation, market entry and competition, and should contribute to the up-skilling of their managers and workers.

The authorities have stated their willingness to address these issues, in particular with a new "Lisbon Strategy for Slovakia" which aims to improve human capital and education, facilitate innovative firms' access to equity finance, develop information technology infrastructures, and improve the general business environment (Chapter 4). The required legislative and regulatory reforms and their actual implementation is demanding, however, when the public sector needs to be further equipped for these tasks.

Building a modern public sector (Chapter 5)

The regulatory, service and implementation capabilities of the government must be enhanced but in a way that does not increase total fiscal costs. As in other OECD countries, in order to enhance the effectiveness and the cost-efficiency of government, the authorities should aim to build on: *i)* results-oriented budgeting; *ii)* public employment reforms; and *iii)* the wider utilisation of market mechanisms in the provision of public services. Improvements are particularly necessary in the most important *growth-enhancing* service areas such as education, training, active labour market support and sustainable development policies. Stronger enforcement of competition rules is also very important.

Difficulties have been encountered in implementing these public management reforms. Results-oriented budgeting must be adopted and supported by the line Ministries

and Agencies themselves and will involve important changes in management, work organisation, personnel and pay systems. At the same time, however, a far-reaching administrative decentralisation has been launched with highly fragmented sub-central government structures, which may make qualitative changes more difficult. An important remaining challenge, therefore, is to promote more effective scales of operation and more transparent management practices in the already "self-governing" sub-central government bodies (Chapter 5).

Notes

1. A more detailed description of fiscal consolidation is provided in Chapter 5.
2. Only a personal income tax allowance has been granted (see Box 1.1).
3. See medium-term baseline projections, OECD *Economic Outlook* No. 77, June 2005.
4. "Foreign Direct Investment in the Slovak Economy and its Influence on the Business Sector", Research Bulletin of the National Bank of Slovakia, 1, 2003.
5. Their value-added rate is around 20% while it is around 40-50% for domestic firms.
6. See note 4.
7. The reported growth of self-employment is spectacular but this also reflects changes in the legal status of many workers who are re-employed as independent contract workers, in order to minimize their social security contributions and taxes.
8. Box 5.3 in Chapter 5 discusses the employment challenges of the Roma minority.
9. The share of those unemployed for more than one year in the total number of unemployed.

ANNEX 1.A1

The 2004 Tax reform

In 2004 the government changed the rate structure of its tax system in a radical way by setting the tax rates of the personal income tax (PIT), the corporate income tax (CIT) and the value added tax (VAT) all equal to 19%. Before the reform the PIT had a progressive rate structure with – after the basic exemption – five income brackets with marginal tax rates of 10%, 20%, 28%, 35% and 38%. The corporate tax rate was 25% (in 2003/2004, after 29% in 2000/2001 and 40% before) and the VAT had a standard rate of 20% and a reduced rate of 14%. Together with these changes in tax rates, many exceptions, exemptions and special regimes were eliminated. However in the PIT a basic exemption was preserved and has been more than doubled and is now above the minimum wage and above 40% of the average wage. As a result of the basic exemption, the average tax rate increases with higher income although the marginal tax rate remains constant.

The reform also changed the tax base for property taxation from size to value assessments, eliminated inheritance taxes and the income tax on dividends, and increased excise taxes on tobacco; with the last measure excise taxes became fully harmonized with EU regulations and earlier than required by Slovakia's accession treaty with the EU.

The objective of this fundamental tax reform was to reduce economic distortions, make the system simpler and more transparent and – by taxing all types and amounts of income equally – achieve a high degree of tax fairness.[1] At the same time, the tax reform was designed to be revenue-neutral with the tax reductions in the personal income tax (PIT) and the corporate income tax (CIT) being (broadly) compensated by increases in the VAT thus leading to a shift in the tax burden from income to consumption.

With this reform Slovakia became the first OECD country to have a flat personal income tax, although other countries in Central and Eastern Europe had introduced such a tax before; the first countries were Estonia and Lithuania in 1994 and currently not less than nine countries in Central and Eastern Europe (the three Baltic States, Slovakia, Russia, Ukraine, Georgia, Serbia and Romania) have a flat rate personal income tax.

While it is too early for an overall assessment of this reform as most of its effects will only become visible over time, some preliminary observations are possible. Overall it appears that this reform has made the tax system much simpler and it can be expected that its effect on the economy will clearly be positive.

This annex briefly examines the effects of the tax reform on its three objectives: revenue neutrality, simplicity, and economic efficiency. Equity issues are also discussed.

The objective of *revenue neutrality* was broadly met in 2004 as the sum of revenues from the PIT, the CIT and the VAT (12.7% of GDP) was similar as in 2003 (12.8%), as higher then expected revenues from PIT and CIT compensated the lower than expected revenues from VAT. Nonetheless, there was an unexpected decline in total government revenues in 2004 (of almost 1 percentage point of GDP) due to a shortfall in social security contributions. The government expects, however, that the revenue shortfall was only temporary and that in 2005 the government revenue to GDP ratio will again increase to above the 2003 level.

With respect to *simplicity,* the new Income Tax Act radically simplified the taxation of both personal and corporate income and the introduction of a unified VAT rate was a further simplification. The reform not only simplified tax rates but also eliminated most tax expenditures. As a result, the tax system is now much simpler and more transparent and administrative costs are lower for both the tax administration and tax payers.

The introduction of a uniform tax rate between labour and capital income also increased simplicity and avoids the problem of tax evasion where people declare labour income as capital income (for example owners of firms who are working in the firm or managers). This problem arises only in dual income tax systems where capital income is taxed at a flat (and relatively low rate) while other income remains taxed at progressive rates.

Concerning the effects of the tax reform on *economic efficiency,* reducing taxes on income and shifting the tax burden onto consumption could increase employment and saving and thus raise the growth potential of the economy. However, the effects depend on the responsiveness of economic agents to changes in taxation.

The effects on *labour supply* depend on the change in the tax wedge and on the elasticity of labour supply.[2] Average and marginal personal tax rates declined for many workers (although average tax rates did not decline for singles earning the average wage and marginal rates did not decline for those with a marginal income tax of 10% before the reform). The replacement of the income-dependent child allowance into a universal child benefit also reduced marginal tax rates for workers with children. Furthermore, for those working in the shadow economy the reduction of the personal income tax makes it easier to comply with the tax code so that employment could shift from the informal to the formal sector. However, as the total tax wedge on labour declined only moderately and remains still high because of high social security contributions, the effects of tax cuts alone on labour supply are probably small. However, once the effect of cuts in social assistance is also taken into account, the overall effect of the change in the fiscal system on labour supply is much larger.

Replacing the progressive income tax by a flat rate tax also tends to stimulate *human capital formation* as the return on this investment is not taxed at higher rates.

When examining the effects on *saving and investment* one has to distinguish between the effects on the size of capital formation and on the allocation of capital which affects capital productivity. According to calculations by the German research institute ZEW, the corporate tax reform in Slovakia (which not only reduced the statutory rate but also increased depreciation allowances for industrial buildings) also reduced the effective average and the effective marginal tax rates on investment to internationally low levels (see Tables 1.A1.1, 1.A1.2 and Figure 1.A1.1). This should provide further incentives for investment, including FDI, and to entrepreneurial activity in general in addition to the positive signalling effect from the cut in the statutory corporate tax rate.

Table 1.A1.1. **Effective Average Tax Rates (EATR) at corporate level**

%

Slovak Republic	2003	2004
Overall average (EATR)	**22.1**	**16.7**
Average for each source of finance		
Retained earnings	25.0	18.9
New equity	25.0	18.9
Debt	16.3	12.3
Average for each asset		
Buildings	21.3	15.5
Intangibles	20.5	15.6
Machinery	20.9	15.9
Financial assets	24.6	18.7
Inventories	23.3	17.7

Source: Jacobs, O.H., H. Spengel, M. Finkenzeller and M. Roche (2003, 2004): *Company Taxation in the New EU Member States*, First and Second Edition, Ernst and Young and ZEW, Mannheim/Frankfurt.

Table 1.A1.2. **Effective Marginal Tax Rates (EMTR) at corporate level**

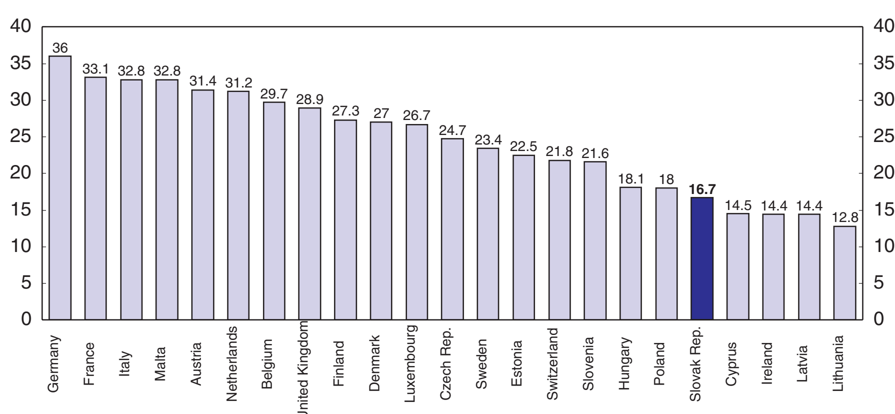
%

Slovak Republic	2003	2004
Overall average (EMTR)	15.2	10.7

Source: Ernst and Young and ZEW.

Figure 1.A1.1. **Effective average tax burden on companies in Europe**[1]

Per cent



1. 2004 data for Slovak Republic, Germany, Malta, Czech Republic, Estonia, Slovenia, Hungary, Poland, Cyprus, Latvia and Lithuania; 2003 for other countries.

Source: *ZEW Economic Studies*, Vol. 28.

The changes in capital income taxation will also improve the *allocation of capital* as the system became more neutral. Considering capital income taxes at both the level of the firm and the level of households it can be shown that the system is now neutral between investment financing by debt and by issuing new shares. The reform eliminated double

taxation of corporate income, with distributed profits being fully taxed at the corporate level, while dividend income is not taxed at the household level. As a result, the return of an investment which has been financed by new equity (and which is distributed as dividends) bears a similar marginal tax rate (19%)[3] as the return from a debt-financed investment (where interest payments are deducted at the corporate level while interest income is taxed at the household level). The reform thus reduced capital costs for investment financed by new equity and therefore improves financing conditions also for smaller innovative firms which may wish to rely more on new equity financing than older firms.[4] By contrast, the effective tax rate on the return of an investment which is financed by retained profits – while it was also reduced by the reform – remains higher than the effective tax rate on the return on a debt-financed or new equity-financed investment as the return of a retained earnings-financed investment is taxed both at the corporate level (by the corporate tax of 19%) and at the household level (by the capital gains tax of 19% on the increase in the share prices arising from these re-invested profits); since capital gains are not taxed when they accrue but only on realization, the effective capital gains tax is somewhat lower then the statutory tax rate of 19% but the tax distortion between the debt- and new equity-financed investment and the investment financed by retained profits remains. While in theory firms could finance the marginal investment by debt or new equity, in practice there may be limits to the extent they can do this and firms may have to fund marginal investment through retained earnings. Moreover, very small firms may have no access to equity and debt markets at all. So, they suffer a disadvantage that would be removed if there were no capital gains tax, as is the case in a number of other OECD countries. Another possibility would be to exempt the capital gains which arise from re-invested profits but maintain the tax on windfall capital gains. Such a system has been implemented in Norway and would make the tax system in Slovakia neutral with respect to all sources of investment financing while at the same time consider equity concerns with respect to windfall gains.

Concerning *equity or fairness* it is clear that any tax reform which is revenue-neutral means that some groups will gain while others will lose. Indeed there are various elements of the Slovak tax reform which tend to change income distribution in favour of the more affluent households. First, the introduction of a single marginal tax rate on personal income which replaced the previous progressive rate structure particularly benefited households with higher incomes. In the international discussion about the pros and cons of a flat rate income tax this adverse effect on equity has generally been seen as the Achilles heel of such reform. However, in the case of Slovakia (and the other countries which introduced single rate income tax systems) as mentioned above, some progressivity in the average tax rate is retained by the basic tax exempt income threshold which is relatively high. Second, the reduction of the effective tax on dividend income benefits higher income households who are more likely to be recipients of dividend income than poorer households. Third, the shifting of the tax burden from income onto consumption (and abolishing the reduced VAT rate for basic foodstuff) also shifts the burden away from high income earners, who tend to consume less basic foodstuff as a per cent of their income. The overall effect of the tax reform is therefore to increase income inequality as compared to the previous system as the redistributive effect of the tax system is now smaller. However, so far no empirical studies are available which quantify these effects on income distribution.

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While the assessment of the fairness of a tax system depends on value judgment, it is clear that any change in income distribution could lead to dis-satisfaction of those who have to pay more, in particular, if they are relatively poor. It is therefore not surprising that the population is divided between those who strongly support this reform and those who strongly disagree.

The issue of fairness in taxation cannot, however, be separated from the issue of efficiency. If, as suggested above, the tax reform increases the capital stock and also its allocation, labour productivity increases and raises real wages so that workers, including the low-skilled, will over the longer-term also benefit from lower taxes on capital. But those persons who do not participate in the labour market will remain worse-off as they have to pay the higher VAT while social benefits have been reduced.

Notes

1. See *www.edia.sk/tax_reform.htm*.
2. A reduction in the income tax increases labour supply if the substitution effect dominates the income effect: the tax reduction increases the price of leisure relative to work and thus encourages work effort (substitution effect); at the same time if consumers have a targeted flow of consumption, the lower income tax increases the disposable income of workers so that less work efforts are needed to achieve the same income (income effect). The substitution effect depends on the marginal tax rate, the amount of the last unit of income earned, while the income effect depends on the average tax rate, the total amount of tax taken out of income so that nature of the tax reform also affects labour supply. In the empirical literature it has been found that for married women and lone mothers the substitution effect is generally larger than the income effect *(i.e.*, labour supply elasticity with respect to the net wage has a positive sign) while men's labour supply elasticity is small or slightly negative (*i.e.*, in the latter case the income effect dominates) (OECD,1997).
3. This is true under the simplified assumptions that depreciation allowances are equal to the true economic depreciation and that inflation is zero.
4. Before the reform, in 2003, there was a 15% final withholding tax on dividend income and a 25% corporate tax, producing an overall tax rate on dividend income of 36.3% of pre-tax distributed profits. Prior to that, in 2000, the corporate income tax was 29% and the dividend withholding tax 15%, producing an overall tax rate of 39.7% – more than double the current overall tax rate of 19%.

ISBN 92-64-01267-2
OECD Economic Surveys: Slovak Republic
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Chapter 2

Policies to smooth the path to euro area accession

Although Slovakia is making good progress towards fulfilling the Maastricht criteria for accession to the euro area, the challenges posed by the "impossible trinity" suggest that risks still remain. Recent fiscal and inflation outcomes have been good and the strong appreciation pressures on the koruna have recently abated. However, the risk of excessive exchange rate appreciation combined with a rebound in inflation cannot be eliminated, along with the risk of insufficient fiscal consolidation. A number of policy guidelines are proposed to minimise these risks and to underscore the credibility of Slovakia's commitment to structural reform and prudent macroeconomic management.

Article 121 of the EC Treaty sets out the four convergence criteria which a member state must satisfy in order to participate in the euro area: low inflation; a stable exchange rate; a sustainable budget position without an excessive deficit; and low long-term interest rates.[1] The government's timetable foresees euro adoption in January 2009, implying ERM-II entry by mid-2006 at the latest, and a need to fulfil the fiscal and inflation criteria by 2007. The examination of the Slovak Republic would take place in mid-2008.[2]

The process of fulfilling the four convergence criteria is by no means simple, and the "impossible trinity" sets a challenging backdrop. This refers to the situation where policy-makers would like to simultaneously achieve three contradictory objectives: to fix the exchange rate; to have free capital mobility; and to operate an independent monetary policy. The fact that only two out of the three policies can be mutually consistent leaves policy-makers having to decide which one to give up: this is what Obstfeld and Taylor (1998) termed the *trilemma*. Countries in a monetary union have chosen to give up an independent monetary policy (and the intra-union exchange rate). Many other countries give up control over the exchange rate by choosing a free float. Much less common is the imposition of capital controls.

However, despite evidence in support of the trilemma[3] there are also a large number of policy-makers – such as the Slovak authorities at present – who tread a middle path without directly confronting the implications of the trilemma. Essentially, Slovakia has no choice; capital controls are not permitted by the European Union[4] and the criteria for joining the euro area include both stabilising the exchange rate and controlling inflation. Besides, since Slovakia has the ultimate exit strategy (conversion to the euro), ERM-II is less subject to the weaknesses usually attributed to intermediate regimes.

In early 2005 the impossible trinity appeared to be presenting problems: Slovakia's impressive reform process had encouraged high levels of FDI investment; portfolio flows had also been considerable; and the central bank was struggling to limit the exchange rate appreciation. At that time, there was a growing risk that the central parity for the koruna entry into ERM-II would be too high, resulting in a significant loss of economic competitiveness. The central bank had found it increasingly difficult to maintain local short-term interest rates at levels that diverged significantly from the "euro area" interest rate without encouraging upward pressures on the koruna.

Fortunately, the pressures of the trilemma have eased in two respects. First, inflation outcomes for the first few months of the year were significantly lower than expected, signalling that the extent of spill-over from high headline inflation rates in 2004 was minimal. Second, the upward pressure on the koruna eased. If this situation of benign inflation and limited exchange rate appreciation persists, and sufficient progress with further fiscal consolidation is achieved, then Slovakia's prospects for smooth entry to the euro zone in 2009 look good. But there are risks to this outlook. One risk is that the cost of pension reform may impede the Government's chances of meeting the fiscal criterion. Another risk is that a resumption of exchange rate appreciation could result in either a

significant loss of economic competitiveness or excessive inflation volatility. This situation would be exacerbated if an over-heating of the economy were to put upward pressure on inflation.

The remainder of this chapter summarises the progress that Slovakia has already made towards satisfying each of the four convergence criteria, and discusses the possible challenges that could arise over the next few years, in the context of the boundaries set by the *acquis communautaire* and the Maastricht criteria. Since the institutional framework is taken as given, it is assumed that the euro will eventually be introduced (with no opt-out clauses) and the costs and benefits of euro adoption are not explored.

Price stability looks to be within reach but risks remain

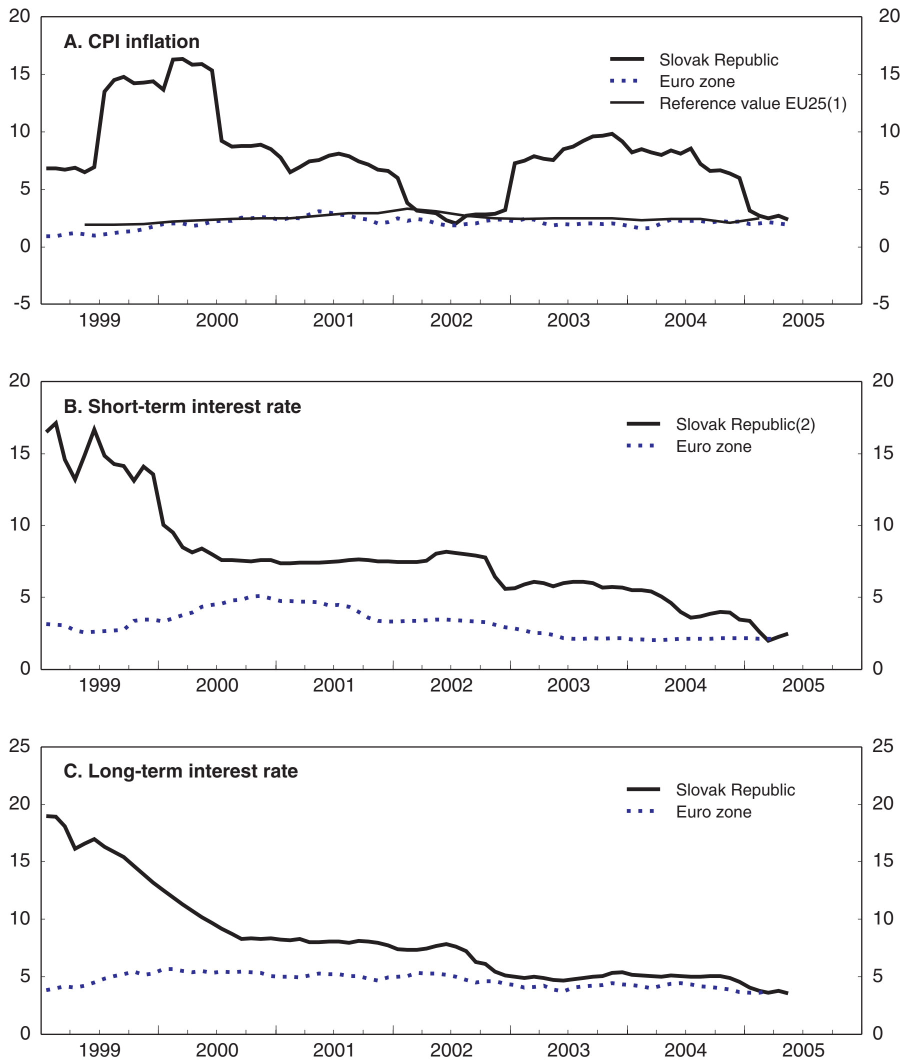
As the impact of the increase in the value added tax (VAT) rate dropped out of the year on year rates of change, HICP inflation fell sharply from 5.8% in December 2004 to 3.1% in January 2005 and subsequently to 2.3% by May. These outcomes were much better than expected, suggesting little second-round effect on core inflation and easing the challenges of the trilemma, as discussed above.

The criteria for price stability will be fulfilled if Slovakia's inflation rate is no more than 1½ percentage points higher than the average inflation rate of the three "best-performing" Member States in terms of price stability. This definition of the reference value makes compliance challenging for three reasons. First, it creates uncertainty about the definition of "best performing" in the context of price stability. Initially the "three best-performers" were simply identified as the three countries with the lowest inflation rates. In 2004, however, the Commission decided to exclude Lithuania on the basis that "countries with negative inflation are not considered to be best performers in terms of price stability".[5] This leaves open the question of whether countries with positive, but very low, inflation rates would be considered best performers.[6] Second, this definition provides a moving target for compliance with the criteria, since the composition of countries that meet the "best-performing" criteria will change over time, and their inflation rates cannot be predicted with certainty. Figure 2.1 (panel A) indicates that the reference value has tended to fluctuate around the average euro area inflation rate or slightly higher. However, the variance has been relatively large, with the reference value ranging between a low of 1.9% in 1999 Q2 and a high of 3.3% in 2002 Q1. Moreover, the decision to exclude negative rates can lead to discrete jumps in the reference value when a country moves between positive and negative territory. For example, Finland lost best performer status when its inflation rate moved from 0% in 2004 Q4 to –0.1% in 2005 Q1, causing the reference value to jump from 2.1% at the end of 2004 to 2.5% in 2005 Q1. Third, to the extent that the Balassa-Samuelson effect is significant, it may create a more challenging goal post for "catching-up" economies than it did for the core euro area economies, resulting in the boxer effect (Box 2.1).

The NBS has assumed a target value for meeting the Maastricht criterion of approximately 2%.[7] With this goal in mind the NBS announced inflation targets of between 3.0 and 4.0% for the year ended December 2005, of below 2.5% for December 2006, and below 2% for December 2007 and December 2008. However, with HICP inflation having now fallen to 2.3% in May, the NBS has stated that inflation may come in below 3.0% for 2005.

Compared with more industrial countries, the inflation transmission mechanism in Slovakia is dominated by the exchange rate channel, although the interest rate channel has been growing in importance.[8] Indeed, Figure 2.2 indicates the extent to which disinflation

Figure 2.1. **Convergence of inflation and interest rates to euro area levels**
Year-on-year percentage changes



1. Average of the three lowest inflation rates (excluding negative inflation rates) plus 1.5 percentage points.
2. An inverted yield curve at the short-end, associated with NBS rejection of repo tender bids, temporarily pushed the short-term inter-bank lending rate in Slovakia below the euro area interest rate in early 2005. However, the policy interest rate in Slovakia remains 100 bps higher than the euro area policy rate of 2%.

Source: OECD, *Main Economic Indicators.*

in tradable goods (as well as reduced inflation of regulated prices) has dominated the recent disinflation process. Whereas strong retail sector competition, together with exchange rate appreciation, pushed the inflation rate of tradable goods into negative territory in late 2004, the inflation rate of non-tradable market services has remained around 7%. Presumably, tradable goods inflation could be maintained at very low levels if the nominal exchange rate continues to appreciate – and for this reason it may be desirable for the Slovak authorities to allow some nominal exchange rate appreciation within ERM-II, as discussed below. However, as also discussed below, nominal exchange rate appreciation

Box 2.1. **The Balassa-Samuelson effect and the boxer effect**

The Balassa-Samuelson (BS) effect stems from the fact that "catching up" countries will typically experience significantly faster productivity growth in the tradable goods sector than in the non-tradable goods sector. Higher productivity in the tradable sector allows wages to be bid up in that sector without increasing the price of the tradable goods being produced. If labour is mobile, the non-tradable sector must also raise wages in response, but since productivity is lower, firms in this sector must fund the higher wages by raising the price of non-tradable goods. This will result in real exchange rate appreciation through a higher overall inflation rate in the economy (if the nominal exchange rate is fixed), or through some combination of nominal appreciation and CPI inflation (if the exchange rate is flexible).

The BS effect is relevant to the topic of euro area accession, since it implies that the catching up economies have higher *steady state* inflation rates than do the wealthier economies of the euro area.[1] Because of this, it has been argued that the Maastricht criterion on inflation may be inconsistent with the catching-up process. One concern is that accession countries may be forced to achieve the required inflation reduction by allowing greater nominal exchange rate appreciation, which (all else equal) could lead to a loss of competitiveness and risk attracting speculative capital flows. Another concern would be that an accession country may be forced to deliberately slow the economy below its potential growth rate, leading to a loss of welfare. Of course, some countries may avoid these costs by using more devious techniques, such as the freezing of administered prices, the limiting of public sector wage increases, or the lowering of consumption taxes during the reference period for accession.

Perhaps the most famous proponent of the inconsistency view was György Szapáry, advisor to the President of the National Bank of Hungary, who argued that the inconsistency between the Maastricht criterion on inflation and the BS effect would encourage a "weighing-in" syndrome: like the boxer who refrains from eating for hours prior to the weigh-in only to consume a big meal once the weigh-in is over, the candidate country will do whatever is required to squeeze down inflation prior to accession, only for repressed pricing pressures to re-emerge once it has joined the EMU.[2] Consequently, this phenomenon has come to be known as the boxer effect.

The recent batch of EU accession countries are not the first to have faced this challenge. Ten to fifteen years ago, the countries of the current euro area with the lowest levels of GDP per capita were Greece, Ireland, Spain and Portugal. These countries have all recently run inflation rates at least one percentage point higher than the inflation rate they achieved in the year that they were required to meet the inflation criterion, and significantly higher than the average inflation rate for the Euro area as a whole (Table 2.1). This is consistent with the idea that the steady state inflation rates of these countries were higher than the reference rate.

Table 2.1. **The boxer effect in selected euro area members**

	Greece	Ireland	Spain	Portugal	Euro area
Weigh-in year (date for meeting the Maastricht inflation criterion)	1999	1997	1997	1997	1997
Average inflation rate over the 5 years prior to weigh-in	7.5	2.3	5.3	4.7	3.0
Inflation rate at weigh-in	2.1	1.2	1.9	1.9	1.7
Average inflation rate since weigh-in	3.4	3.6	3.0	2.9	1.8

Box 2.1. **The Balassa-Samuelson effect and the boxer effect** *(cont.)*

The importance of Szapáry's argument obviously depends on the size of the BS effect, as well as the expected inflation reference rate. Much of the most recent BS literature has undermined the empirical foundations of earlier studies and concluded that the BS effect is relatively small. Instead of attributing most of the inflation differentials in the Central European countries *vis-à-vis* the euro area to productivity differentials, this literature has instead attributed them to other factors such as demand-side pressures, increases in administered non-tradable prices as part of price liberalisation, and the dominance of backward looking inflation expectations. For example, compared with some initial estimates of up to 3 or 4%, one of the more recent comprehensive studies concluded that the productivity differentials in six central European economies contributed on average only between 0.2 and 2.0 percentage points to annual inflation differentials with respect the euro area between the early-to-mid 1990s (depending on country data availability) and 2001 Q3.[3] The estimate for Slovakia was at the low end of this range (0.2 percentage points). However, a higher estimate for Slovakia could perhaps be expected for a later time period that captured the productivity acceleration brought about by the recent reforms. Indeed, Kovács (2002) has suggested that strong FDI investment can push the magnitude of the BS effect up significantly, and the NBS has estimated that the BS effect for Slovakia has recently picked up to around 1 percentage point, after averaging closer to 0.5 percentage points since the mid-1990s.[4]

Since the upper edge of this range is not as large as suggested by some earlier estimates, some economists have concluded that the impact of the BS effect is unlikely to be a major determining factor in the ability of the Central European countries to satisfy the Maastricht inflation criterion.[5] Strictly speaking this may be true, but not without a boxer effect. For example, if the size of the BS effect is around 1%, then the steady state inflation rates of these countries should be around 1 percentage point higher than steady-state inflation in the wealthier euro area members. If the BS effect is larger, the additional efforts that the economy must make to meet the Maastricht criterion will be multiplied accordingly.

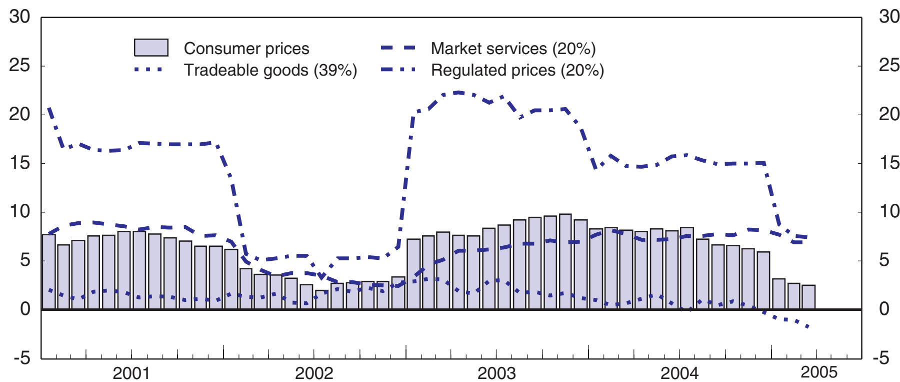
1. *i.e.,* if the output gap was closed and both interest rates and the exchange rate were at their equilibrium levels, average inflation would be expected to be higher in the accession countries than in the rest of the euro area.
2. Szapáry (2001).
3. Mihaljek and Klau (2004). Similar results have been obtained by other researchers [*e.g.*, Kovács (2002) and Égert (2002)] although some of these studies have found a higher lower bound, concluding that the magnitude of the BS effect probably averages around 1-2 percentage points per annum in the transition countries.
4. National Bank of Slovakia (2004).
5. *E.g.,* Mihaljek and Klau (2004).

is not a panacea for all inflation woes, since it has an important cost for competitiveness unless matched by strong productivity growth.

In the absence of nominal exchange rate appreciation, the only way to meet the Maastricht inflation criterion would be to damp the inflation rate more generally through further structural reforms or by slowing aggregate demand.[9] Without an acceleration of productivity growth in the non-tradable sectors, or a slow-down in demand it may be difficult to achieve a significant drop in the inflation rate of market services, which are affected by the Balassa-Samuelson effect through wage inflation spill-over from the more productive tradable sector (as discussed in Box 2.1). To the extent that the negative output gap is now closing, demand-pull pressures on the non-tradable sector may also be

Figure 2.2. **Inflation of tradeable goods and market services continue to diverge**[1]

Year-on-year percentage changes



1. Numbers in parentheses represent the component's average weight in the consumer price basket over the period. The components do not sum to total CPI inflation since inflation of food and the effect of changes in indirect taxes are not shown.

Source: National Bank of Slovakia and OECD, *National Accounts*.

accentuated. This risk of high wage growth emphasises the critical importance of maintaining flexible labour markets and improving the competitiveness of the non-tradable sector (as discussed in Chapter 4). In terms of the inflation of regulated prices, the NBS does not anticipate any problems, given that most distortions to these prices have now been eliminated.

Concerns about the best way to run monetary policy are mitigated to some extent by the fact that the interest rate/aggregate demand channel of monetary policy is estimated to be relatively weak.[10] Still, it is likely that this channel is becoming stronger over time (given higher debt stocks and a significant increase in access to credit for both households and businesses), suggesting that low interest rates may increasingly stimulate domestic demand. Structural change has made the output gap particularly difficult to estimate for Slovakia, although most analysis suggests that the extent of excess capacity in the economy is low and diminishing.[11] Thus, any sign of inflationary pressure, particularly at a time of renewed exchange rate appreciation, would thrust monetary policy back into the dilemma of whether to raise interest rates to dampen aggregate demand (to the extent that the interest rate channel of monetary policy is important) or cut interest rates to discourage portfolio capital inflows that may put further upward pressure on the exchange rate., If such a scenario emerges tighter fiscal policy may help to dampen aggregate demand. In the meantime, an emphasis on flexible wages and further structural reform to facilitate productivity growth, particularly in the non-tradable sector, would permit low inflation outcomes without any loss of competitiveness.

Exchange rate stability may be the most challenging criterion

The Maastricht exchange rate criterion requires at least two years of successful membership in the exchange rate mechanism (ERM-II). Ideally, this should involve the exchange rate remaining relatively close to the *central rate*, which is determined prior to entry by mutual agreement of the ministers of the euro-area member States, the ECB, and the ministers and central bank governors of the non-euro area member States

participating in the new mechanism. The procedure to be followed in reaching this decision also involves the European Commission and requires consultation of the Economic and Financial Committee. During the course of ERM-II participation, some deviations from the central rate could be accepted. Based on the experiences of other countries, and as confirmed in the ECB Position Paper,[12] factors that may have led to an appreciation would be taken into account. Although there is no official reference defining concrete exchange rate bands, some economists have concluded that the degree of fluctuation around the central rate that could be deemed as compatible with the Maastricht criterion is asymmetric:[13] depreciations should be no greater than 2.25%, although in the ECB convergence report this edge was made softer by the 10 day moving average rule;[14] appreciations may be permitted up to a magnitude of 15%.

This framework presents the national authorities with a number of challenges. First, although the central rate should ideally be set as close as possible to the estimated *equilibrium* level of the koruna, there is considerable uncertainty about where the equilibrium level of the koruna is (see Annex 2.A1). Second, as discussed above, some appreciation of the nominal exchange rate within ERM-II may be necessary, in order to achieve some real appreciation of the koruna-euro exchange rate without sacrificing the inflation criterion.[15] Finally, there is a risk that speculative capital flows could push the exchange rate to an uncompetitive level. It is well documented that fully floating currencies often deviate very substantially from their fundamental values[16] and even monetary authorities such as the NBS, who run a *managed* float, have only limited tools for controlling the exchange rate if it deviates significantly from its fundamentals (Box 2.2).

As stated by ECB (2003), there should be no presumption that the initial central rate, at which the koruna will enter ERM-II, will be the ultimate conversion rate for euro adoption. Indeed, it is likely, given Slovakia's productivity growth differential with respect to the rest of the euro area, that some appreciation of the real equilibrium exchange rate will occur over this time period and, given the inflation objective, this may require some nominal exchange rate appreciation. However, ERM rules do not permit an economy to participate in ERM-II with a "crawling" central rate. Instead, "catching up" countries have the scope to achieve nominal exchange rate appreciation within ERM-II by re-valuing their central rates (as was the case for Ireland and Greece).[17] Nevertheless, if the magnitude of re-valuation is not known in advance, financial market expectations may be poorly anchored, leading to excessive volatility in the exchange rate. In light of the particularly strong exchange rate channel for inflation in Slovakia, large exchange rate fluctuations in ERM-II would also inject volatility into the inflation rate, potentially putting the price stability objective at risk.

In order to better anchor financial market expectations, good communication will be essential, underpinned by a consistent macroeconomic policy mix and consistent exchange rate intervention policy. While financial market expectations could perhaps be better anchored if the NBS were to indicate the magnitude of real exchange rate appreciation that would be consistent with productivity differentials, any unilateral announcements by the NBS would not prejudice the final choice of the conversion rate.[18]

Recent exchange rate trends and tensions

Since the start of the economic reform process in the late 1990s the real exchange rate has been on a general appreciation trend, except for a short-lived reversal in 2000 and again in the first half of 2002 when pre-election uncertainties and economic imbalances re-emerged.[19] This real appreciation has been much more significant in terms of relative CPI

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Box 2.2. **The (in)effectiveness of foreign exchange intervention**

Intervention in the foreign exchange markets may be either unsterilised or sterilised. Unsterilised intervention is viewed as an instrument for implementing monetary policy changes, and results in changes to the domestic monetary base.[1] In contrast, sterilised intervention directly targets the foreign exchange markets (either the level or volatility of the currency) and involves adjusting the domestic monetary base to offset the change in foreign currency reserves. Following the focus of the economic literature, as well as NBS behaviour, this box focuses only on the role of sterilised intervention.

Unfortunately, data limitations and the endogeneity of changes in the exchange rate and intervention make it very difficult to measure the effectiveness of foreign exchange intervention. Nevertheless, most recent studies have reached similar conclusions: that the level and volatility of the exchange rate can be influenced in the short-term, but that most of the impact occurs on the day of the intervention, with only a smaller impact on subsequent days. There is no evidence of a statistically significant longer-term impact on the level of the exchange rate.[2] There is also some evidence that foreign exchange intervention may increase volatility. Nevertheless, these results have led many (especially in central banks) to conclude cautiously that official intervention can be effective, especially if the intervention is publicly announced and concerted and provided that it is consistent with the fundamental stance of monetary and fiscal policy. Some countries in emerging Asia present evidence of this – but only through very significant and repeated intervention efforts.

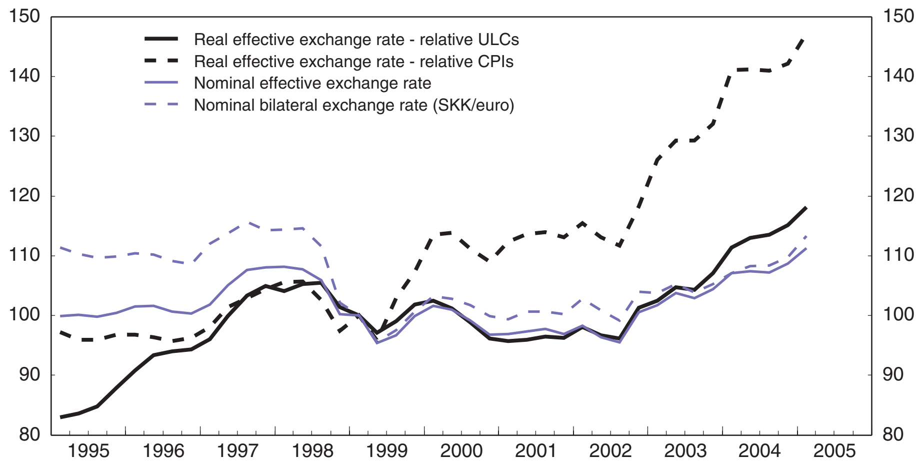
Some economists have argued that foreign exchange market intervention may be more effective in emerging market countries.[3] They give three possible reasons for this: lower market turnover; the existence of capital controls in some countries; and the possible informational advantage that a central bank may have over a less sophisticated domestic market. In such a setting, smart timing of interventions may increase their effectiveness. Again, however, most studies of intervention in emerging markets have concluded that when effective, the impact is very short-lasting, and there is no evidence to suggest that central banks can use intervention to have a lasting impact on exchange rates, independently of monetary conditions. However, the results with respect to volatility are more positive (reduced volatility in some cases). Similar results were found in a study of the effectiveness of Koruna-euro foreign exchange interventions in the Czech Republic between September 2001 and October 2002.[4] Like the NBS recently, the Czech National Bank (CNB) has followed an explicit inflation targeting regime and during this period, interventions in the foreign exchange market were relatively frequent. Also, like the NBS, the CNB tended to intervene to counter upward pressure on the exchange rate. While the results suggested that intervention did have some statistically significant impact on the spot rate, the size of the impact was very small.

In light of the fact that monetary authorities continue to conduct foreign exchange interventions, despite their long-term ineffectiveness, some researchers[5] have focused on identifying which strategies may increase the short-term effectiveness, given that the decision to intervene is taken.

1. In general, a strong consensus exists that unsterilised intervention can influence the exchange rate in the same way that monetary policy influences it.
2. *E.g.,* see Sarno and Taylor (2001), Kearns and Rigobon (2005).
3. *E.g.,* Disyatat and Galati (2005).
4. Disyatat and Galati (2005).
5. Such as King (2003).

Figure 2.3. **Nominal and real exchange rate trends**

Index 1999 Q1 = 100



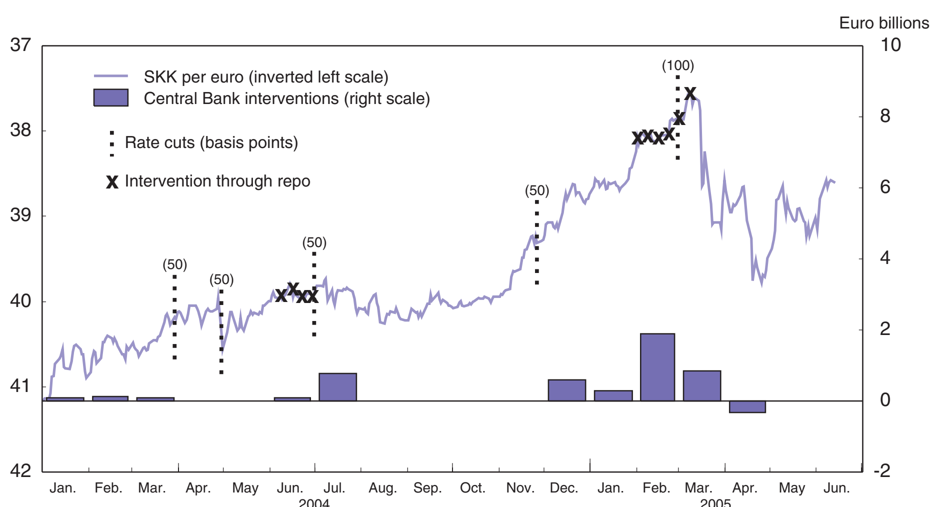
Source: OECD, *Economic Outlook* No. 77.

inflation than in terms of relative unit labour costs (Figure 2.3) – a consequence of the fact that real wage inflation has been relatively moderate, in relation to productivity growth, whereas CPI inflation has been pushed up by higher indirect taxes and by the adjustment of many administered prices to market levels. However, the appreciation of both measures has accelerated since late 2002. This does not automatically imply a significant loss of competitiveness, since the *equilibrium* real exchange rate has undoubtedly also appreciated over this time (partly as a result of the BS effect).[20] Still, since the extent of real appreciation has exceeded most estimates of equilibrium real appreciation, it is reasonable to conclude that Slovakia did indeed lose competitiveness over this period.[21] Importantly, however, the competitiveness loss is not distributed evenly; the heaviest burden will have fallen on the most traditional manufacturing firms who have experienced the lowest rates of productivity growth in recent years, while the most productive firms may even have gained competitiveness.

Concerns that Slovakia might be forced to enter ERM-II with an over-valued exchange rate picked up in 2004, around the time that more studies of the equilibrium exchange rates suggested that it may be becoming overvalued (see Annex 2.A1). In response, the NBS used a number of strategies to slow the pace of appreciation. These included: policy interest rate cuts; sterilised foreign exchange interventions; the practice of rejecting all bids in the regular repo tenders in order to leave excess liquidity in the banking system and push inter-bank interest rates lower; and public announcements designed to affect exchange rate expectations (see Figure 2.4).[22]

While these actions undoubtedly had some (at least short-term) influence, the central bank itself admitted that they had not been as effective as desired.[23] It is likely that the subsequent depreciation over March and April was due primarily to a change in investor sentiment towards the region and a closing out of short-term capital positions (*e.g.*, of hedge funds), rather than to NBS actions; the Polish, Hungarian and Czech currencies all fell during the same period. Regarding the effectiveness of intervention, the consensus in

Figure 2.4. **Recent developments in the Koruna and NBS actions**



Source: Datastream and ING Slovakia.

the economics literature is that it typically has only a minor *short-term* impact (see Box 2.1). In order to have an impact on the exchange rate for longer periods, very significant and repeated intervention efforts (as in emerging Asia) would be required. Even then, success is not guaranteed. However, assuming that the NBS continues to intervene, their challenge is to choose their intervention moments carefully. In particular, it is important that intervention attempts not be inconsistent with other fundamental policies, such as the stance of monetary policy. For example, an attempt to slow exchange rate appreciation would not be consistent with a desire to tighten monetary policy, in the event of a rebound in inflationary pressures.

Foreign exchange intervention has also had a significant sterilisation cost for the NBS,[24] particularly prior to the significant rate cut which took place at the end of February 2005 (and was effective from 1 March). Both this, and exchange rate valuation losses, contribute to the total cost of foreign exchange rate interventions.[25] With the spread between Slovak and euro area interest rates having now almost been eliminated, the cost of future sterilisation will be reduced, although losses (or gains) from net open intervention positions will continue to accrue.

Looking ahead, the risk of significant further appreciation cannot be dismissed, despite recent exchange rate weakness, particularly if the economy continues to perform well, attracting continued high levels of FDI investment, and also once export growth picks up further as the production capacity of new manufacturing plants comes on line. In the event of renewed sharp appreciation, the NBS has room to cut policy interest rates slightly further, providing inflationary pressures remain relatively muted, but this would be only a weak tool in the face of speculative capital flows.

Given these considerations, it may be desirable for the monetary authorities to seek to enter ERM-II early, in order to lock in a level of the exchange rate that is perceived to be more or less fairly valued, rather than take the risk of excessive appreciation over the next year. Otherwise, if excessive appreciation has occured prior to ERM-II entry, it would seem

reasonable to negotiate a central rate that is significantly weaker than the market rate at the time. The central rate should, in principle correctly reflect the equilibrium exchange rate. However, if the exchange rate becomes over-valued, then the depreciation required to return it to a fairly valued central rate may put the inflation criterion at risk. Thus, short-term exchange rate misalignments should be avoided wherever possible.

The cost of pension reform creates risks for meeting the government deficit criterion

With a general government deficit of 3.3% of GDP at the end of 2004, Slovakia has not yet fulfilled the criterion on government finances, although admirable progress with fiscal consolidation has now brought the target (a deficit at or below 3% of GDP) within reach.[26] However, there remains significant uncertainty about how easily this criterion will be fulfilled, given the cost of the pension reform and risks to the fiscal projections. The biggest uncertainty relates to the cost of pension reform. The creation of a funded second pillar, operational since January 2005, has reduced the size of social security contributions to the first pay-as-you-go (PAYG) pillar, creating an additional fiscal cost of funding current pension liabilities in the old PAYG scheme. Initially, this fiscal cost was estimated to be relatively moderate (0.4% of GDP in 2005, 1.0% in 2006 and 1.1% in 2007). But since a larger number of people have already transferred to the second pillar than was envisaged, the Ministry of Finance has revised the estimated costs up to 0.8% of GDP in 2005, 1.3% in 2006 and 1.4% in 2007.[27]

Projections of the fiscal deficit are illustrated in Table 2.2 and Figure 2.5. The largest deficit, net lending including 100% of the second pillar costs, is the headline System of National Accounts (SNA) measure. The smallest, net lending excluding 100% of the pension reform costs, is the measure that reflects what the fiscal deficit would have been in the absence of pension reform. Somewhere in the middle is a measure of net lending which partially adjusts for pension costs on the basis provided for by recent changes to the Stability and Growth Pact (SGP). These changes permit consideration of 100% of the pension reform costs in the first year (2005), 80% in the second year (2006), 60% in 2007, and so forth, under certain conditions (see Box 2.3).

Table 2.2. **Different measures of net government borrowing (as per cent of GDP)**

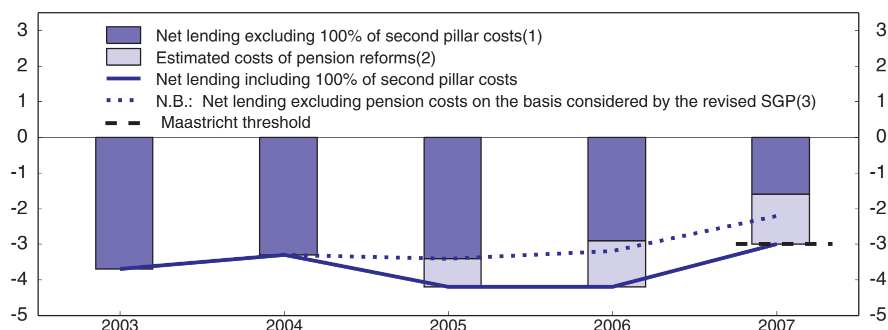
	2003	2004	2005[1]	2006[1]	2007[1]
Fiscal balance excluding 100% of 2nd pillar costs[2]	–3.7	–3.3	–3.4	–2.9	–1.6
Estimated cost of launching pension reforms[3]	0.0	0.0	0.8	1.3	1.4
Fiscal balance including 100% of 2nd pillar costs (headline National Accounts measure)[2, 3]	–3.7	–3.3	–4.2	–4.2	–3.0
N.B.: Fiscal balance excluding 2nd pillar costs as calculated on the linear degressive basis laid down in the revised SGP[4]	–3.7	–3.3	–3.4	–3.2	–2.2

1. Forecasts.
2. Ministry of Finance budget proposal for 2006-2008.
3. Ministry of Finance estimates.
4. Excludes 100%, 80% and 60% of the second pillar pension costs in 2005, 2006 and 2007 respectively.

The Government's most recent projections target a 3.0% deficit in 2007, including 100% of the costs of pension reform (third line in Table 2.2), and government officials have stated

Figure 2.5. **The impact of pension reform costs on the fiscal deficit**

As per cent of GDP



1. Ministry of Finance budget proposal for 2006-2008.
2. Ministry of Finance estimates.
3. Excludes 100%, 80% and 60% of the second pillar pension costs in 2005, 2006 and 2007 respectively.

Source: Ministry of Finance.

that this will remain their target regardless of the cost of the pension reform. Thus, if the cost of the pension reform is revised up further, then a more ambitious target for the deficit excluding the pension costs (top line in Table 2.2) will be required. This line in Table 2.2 indicates that the Government's current budget deficit target excluding the pension costs is at 1.6% of GDP for 2007, revised down from 1.9% in the updated 2004 Convergence Programme as a result of the upward revision to the pension costs. Thus, the Government's most recent set of fiscal projections have already increased the intended degree of fiscal consolidation in 2007.

If the headline government deficit target of 3.0% for 2007 is reached, then the Masstricht fiscal criterion will be met. If it exceeds, but is close to 3.0%, then the examining committee must decide whether or not to take consideration of the cost of the pension reform, and this decision will largely depend on whether the headline deficit is judged to be *continuously declining* (see Box 2.3). If the cost of pension reform is taken into account then it is likely that the adjusted deficit would be less than 3% of GDP and therefore fulfil the convergence criterion for government finances. For example, a headline deficit of 3.0% in 2007, less 60% of the cost of pension reform in that year would produce an adjusted deficit of 2.2% of GDP (see the bottom line of Table 2.2), leaving the authorities with significant safety margin for meeting the Maastricht criterion. However, on the basis of the latest Ministry of Finance projections, the headline deficit will not be continuously declining, suggesting that the government should not necessarily assume that a favourable decision on the abrogation of an excessive deficit would be granted.

Thus, in order to provide a greater safety margin, the government may wish to consider additional fiscal consolidation, with a view to the risks to the 3.0% headline fiscal target. These risks are not negligible. In addition to the pension reform cost, the government's projections will also require a continuation of strong economic growth, strict spending restraint, and rigorous containment of social security costs (see Chapter 5 for more details). The government may find the budgeted expenditure cuts increasingly difficult to achieve in the run-up to the 2006 election, although the majority of the cuts are

Box 2.3. **Recent changes to the Stability and Growth Pact**

At the Meeting of the Finance Ministers of the European Council on 22-23 March 2005 it was recognised that although the implementation of fully-funded pension pillars "leads to a short-term deterioration of the budgetary position, the long-term sustainability of public finances clearly improves". As a result, it was agreed that for the decision on the abrogation of an excessive deficit decision, consideration should be given to the costs of such pension reforms in cases where the deficit exceeds, but is close to, the reference value of 3%.[1] More specifically it was agreed that consideration would be given to the net cost of the reform for the initial five years after a member State has introduced a mandatory fully-funded system, or five years after 2004 for member States that have already introduced such a system. Furthermore, it will also be regressive, *i.e.* during a period of five years, consideration will be given to 100, 80, 60, 40 and 20 per cent of the cost of the reform to the publicly managed pillar.

More recently, the legal text specifying this amendment has been published,[2] confirming that "consideration should be given in all budgetary assessments [...] to an excess close to the reference value which reflects the implementation of pension reforms introducing a multi-pillar system that includes a mandatory, fully-funded pillar". It also says that this cost (assessed on the linear degressive basis described above) should be taken into account "*if the deficit has declined substantially and continuously* and has reached a level that comes close to the reference value".

In the Slovak case, the cost of the pension reform causes the headline National Accounts deficit to increase from 3.3% of GDP in 2004 to 4.2% in 2005 and 2006, before falling back to 3.0% in 2007. If these projections are realised, then the reference value would be reached in 2007 and the fiscal criterion would be fulfilled. However, if the deficit does not reach 3.0% in 2007, but only comes close to it, then it would be difficult to interpret the projected fiscal path as a continuous decline. Indeed, the cost of the pension reform makes this latter requirement extremely difficult for the Slovaks to achieve, suggesting that, if these rules are interpreted literally by the examining committee, the SGP amendments would effectively not provide Slovakia with any consideration of the costs of their pension reform during this period.

1. ECOFIN (2005).
2. European Union (2005).

scheduled for the post-election period. Moreover, recent tension within the governing coalition suggests that the political environment may also pose a risk to the successful implementation of planned expenditure cuts.

A second risk is that, even if the fiscal targets are met, still tighter fiscal policy may be required during the short period of run-up to meeting the Maastricht convergence criteria, in order to assist with the fulfilment of the other convergence criteria. The worst case scenario would be the combination of more rapid koruna appreciation (thus risking EMU-entry with an overvalued exchange rate) combined with signs of over-heating in the domestic economy (risking excessive inflation). Monetary policy would then be torn between cutting interest rates to prevent excessive exchange rate appreciation and raising interest rates to dampen inflationary pressures. In this case, further fiscal consolidation would help to reduce demand pressure and improve sustainability.

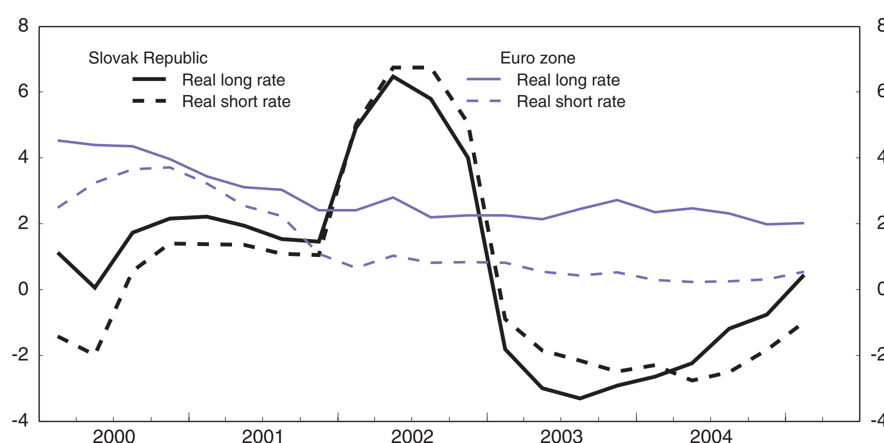
Interest rates have already converged to euro area levels

With Slovak long-term interest rates averaging around 5% in 2004, well below the reference value, the interest rate criteria has already been fulfilled, and there is little risk that this situation will change in the next few years.[28] Indeed, the spread between Slovak and euro-area bond rates has narrowed further in the first part of 2005 and is now (May 2005) only around 30 basis points (Figure 2.1, panel C).

Interest rate convergence does, however, pose certain other risks for the economy. Slovakia's higher growth rates imply higher inflation rates than in the core euro area countries (through the Balassa-Samuelson effect – see Box 2.1) and very low real interest rates (Figure 2.6). In combination with a high marginal return on capital, these low interest

Figure 2.6. **Real interest rates in Slovakia and the euro area**[1]

As per cent



1. Nominal rates less core inflation.

Source: OECD, *Main Economic Indicators.*

rates could fuel a credit boom that, owing to supply-side constraints, could give rise to asset bubbles or a boom-bust cycle. While the Slovak housing market is in need of liberalisation to facilitate labour mobility (as discussed in Chapter 3), housing market liberalisation at the same time as an expansion in credit is a combination to watch very carefully. Inappropriately low interest rates may also result in an excessive expansion of domestic credit, excessive aggregate demand, and excessive inflationary pressures, which would not only put fulfilment of the inflation rate criterion at risk but also, if not matched by productivity growth, would result in a loss of export competitiveness. Moreover, the foreign liabilities in the Slovak banking system grew very rapidly (around 60% per annum on average) over the 2002-2004 period, raising potential concerns about the (unhedged) foreign exchange exposure of firms and banks. Sound prudential regulation and supervision of the banking system is clearly of crucial importance.

Conclusion

Although Slovakia is making good progress towards fulfilling the Maastricht criteria for accession to the euro area, fiscal challenges and the challenges posed by the impossible trinity suggest that Slovakia still has a tightrope to walk; not only are capital flows free to

flow in and out of Slovakia, but the paths for inflation and the nominal exchange rate are quite tightly prescribed. While the risks of an excessive fiscal deficit or a worst-case *trilemma* scenario (excessive exchange rate appreciation combined with real economy over-heating) cannot be eliminated completely, tight adherence to the following policy guidelines would help to minimise the risks, and also to underscore the credibility of Slovakia's commitment to structural reform and prudent macroeconomic management.[29]

- ***Exchange rate policies*** should continue to smooth the development of the Koruna and act to prevent excessive deviation of the exchange rate from its perceived fundamental level, while recognising that some appreciation may be required. It may also be desirable to seek to enter ERM II at an early stage.
- ***Labour market and housing policies*** should be focussed on preserving wage flexibility and promoting greater labour mobility (discussed further in Chapter 3). Such policies will help to ensure that real wages do not grow faster than productivity, thus preventing a loss of competitiveness and facilitating adjustments in competitiveness in response to any shocks.
- The recent pace of reform to ***structural policies*** should be maintained to promote productivity growth and competition in the non-tradable sector in order to keep inflation low (see Chapter 4 for specific policy recommendations).
- Additional tightening of ***fiscal policy*** might be required to offset the higher estimates of the cost of pension reform. Greater fiscal consolidation may also help to reduce excess demand in case of over-heating in the domestic economy, particularly if it is accompanied by renewed exchange rate appreciation. With tighter fiscal policy, the NBS could focus primarily on a further reduction in interest rates in response to the exchange rate pressures.
- ***Prudential regulation and supervision*** should be vigilant to ensure that excessive credit expansion does not lead to the development of bubbles in the domestic market (*e.g.*, property prices) which could put upward pressure on inflation. This may be a particularly relevant risk in the context of housing market reforms.

Wage and product market flexibility will also be very important *following* euro area entry, in order to ensure robustness to shocks and to minimise competitiveness losses, given the loss of monetary policy instruments.

Notes

1. For more details on the convergence criteria see the European Union Web site, 25 February 2005: *http://europa.eu.int/scadplus/leg/en/lvb/l25014.htm*.
2. The examination is conducted by European Commission and European Central Bank reports to the Council of Finance Ministers. On the basis of a proposal from the Commission, the Council decides, after a discussion by Heads of State or Government, whether the member state has fulfilled the necessary conditions for adopting the euro. If it is agreed that the conditions have been met, the date and rate at which conversion will take place is fixed at the same time.
3. *E.g.*, Obstfeld, Shambaugh and Taylor (2003).
4. Council Directive 88/361/EEC enshrined the principle of full liberalisation of capital movements between member States with effect from 1 July 1990, although some countries (Spain, Greece, Ireland and Portugal) were given transitional arrangements for some time. The directive does, nonetheless, make provision for a "safeguard clause". Under this clause, protective measures can be taken for up to six months, if capital movements are judged to impose a very severe strain on foreign exchange markets, leading to serious disturbances in the conduct of a member State's monetary and exchange rate policies.

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5. European Commission (2004), page 3.
6. Most economists agree that an optimal inflation rate is higher than zero, given considerations such as measurement bias, downward nominal price rigidities, and the potential negative consequences of deflation.
7. December 2004 Monetary Programme of the NBS, covering the period until 2008.
8. Kuijs (2002).
9. We assume that the authorities would avoid more under-hand techniques such as freezing administered prices or lowering consumption taxes.
10. The weakness of this transmission channel stems from low levels of household debt, increasing access of firms to European credit markets, and the role of FDI as a substitute for business sector credit.
11. See IMF (2005) for a comparison of estimates.
12. ECB (2003).
13. *E.g.* Egert, Gruber and Reininger (2003).
14. *E.g.*, see Égert and Kierzenkowski (2003). Note also that additional flexibility may be permitted in certain circumstances, since a depreciation of more than 2.25% is not *automatically* viewed as a non-fulfilment of the criterion on exchange rate stability.
15. As discussed in the Annex, the real equilibrium exchange rate is expected to gradually appreciate in "catching up" countries such as Slovakia. Prior to EMU entry, therefore, this must be achieved mainly by nominal appreciation, since inflation must remain low in order to meet the Maastricht inflation criterion. In contrast, real exchange rate appreciation after EMU entry must be driven by higher inflation rates.
16. Floating exchange rate cycles often exhibit very substantial amplitudes. For example, the yen, the euro and the US, Canadian, Australian and New Zealand dollars have all experienced fluctuations of at least 20% in their effective exchange rates in recent years. Some exchange rate cycles are much larger still.
17. See De Grauwe and Schnabl (2004) for further discussion of the Irish and Greek cases. Note that revaluation may also be desirable in the event of country-specific shocks or if it becomes clear that the original central rate was poorly chosen.
18. ECB (2003) states that "Unilateral announcements about the intended central rates are not in line with the multilateral nature of the arrangement and should be avoided. In any case, they would in no way prejudice the ultimate choice of the central rate".
19. During most of the 1990s the koruna was managed under a fixed peg system, resulting in only limited exchange rate fluctuations. Subsequently, following progressive current and capital account liberalisation the peg was abandoned in October 1998 resulting in a substantial depreciation of the currency.
20. To the extent that the BS effect is responsible, real exchange rate appreciation need not necessarily be detrimental for competitiveness. The BS effect stems from higher relative productivity growth (than that in trading partner countries), which pushes up total CPI inflation, or total unit labour costs (in the model unit labour costs rise in the non-tradable sector but not the tradable sector) relative to that in trading partners. Nevertheless, the competitiveness of the tradable sector is not directly affected.
21. Oomes (2005) concludes that equilibrium real exchange rate appreciation has been proportional to the *relative productivity differential* (around 3% per annum), whereas the actual (ULC) real exchange rate appreciated by around 6-7% per annum since late 2002. Note that a 3% relative productivity differential means that productivity growth in the tradable sector has exceeded productivity growth in the non-tradeable sector by 3% more than in the euro area.
22. In addition, the NBS has taken actions to offset the impact of large investment inflows to State owned enterprises and has negotiated agreement from the Ministry of Finance to not borrow abroad this year.
23. For example, in early March the NBS governor noted that although he believed the bank's interventions on the foreign exchange market did have an impact on the exchange rate, they were less and less effective, leaving him dissatisfied with their overall impact (ISI Emerging Markets, 2005).

24. Borrowing Slovak koruna to invest in foreign assets is costly when Slovak interest rates (at which the NBS can borrow) are higher than the return on foreign assets. This *carrying cost* of holding foreign reserves is known as the sterilisation cost of foreign exchange intervention.
25. The NBS reported a total loss of SKK 39.3 billion in 2004, and a further loss of SKK 7.9 billion in the first 2 months of 2005. The more recent depreciation, however, allowed the NBS to post large profits over March and April, leading to a cumulative profit of SKK 12.6 billion for the first five months of 2005.
26. Since Slovakia's gross public debt was 43.6% of GDP in 2004, well below the 60% ceiling imposed by the EC Treaty, this is not expected to pose any problem to meeting the criterion for government finances.
27. Significant uncertainty continues to surround these estimates, since it is unclear whether people have simply transferred *earlier* than expected, or whether the total number of people transferring will also be higher than expected. Nevertheless, the importance of fulfilling the government deficit criterion by 2007 argues strongly in favour of using prudent estimates.
28. The interest rate criterion requires that the average nominal long-term interest rate be no more than 2 percentage points above the average nominal long-term interest rate of the three best-performing member States in terms of price stability.
29. Such credibility could play a vital role in influencing the judgements of the examining committee.

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ANNEX 2.A1

Estimating Slovakia's equilibrium exchange rate

In recent years, considerable research effort has been directed towards estimating the equilibrium real exchange rates for the EU accession countries, in order to determine the parity rates at which each new member state should join ERM-II and subsequently the euro area. This is not an easy task – particularly for Slovakia. As summarised by Toth and Chudik (2004) some of the difficulties of estimating an equilibrium exchange rate for Slovakia include: the sample is very short and the quality of data is questionable; it is likely that the real exchange rate was undervalued for a longish period in the first phase of transition – leading to biased estimates of equilibrium; and there is a high likelihood of structural breaks in the data given the very significant reforms that have been introduced. Not surprisingly, a number of researchers have been unable to identify a stable model specification for Slovakia, even when the same technique has worked for neighbouring countries.[1]

In addition, the different approaches and techniques for estimating the equilibrium exchange rate tend to result in systematically different results, for all economies.[2] For example, according to the ECB (2002), estimates of the USD/EUR bilateral equilibrium rate vary within a range of 1.03 to 1.45. All of these factors make the decision of the exchange rate at which the Slovak koruna should enter ERM-II and subsequently for the irrevocable conversion rate, very difficult. Yet since a decision must be made, it should take into consideration a wide range of approaches.

One approach, purchasing power parity (PPP), identifies the level of the equilibrium exchange rate in the *long term* and is often used as a first approximation of competitiveness analysis. However, there are a number of reasons why pure PPP tends not to be a very helpful yardstick for assessing the currently-applicable equilibrium real exchange rate. Most importantly, since the law of one price does not hold for non-tradable goods, pure PPP does not account for the fact that productivity gaps create significant equilibrium price gaps between emerging and developed countries. Thus the PPP relationship is typically enhanced with some kind of term designed to capture the Balassa-Samuelson (BS) effect.

Most BS-modified PPP approaches ask whether the average price level in Slovakia is appropriate, given the level of GDP per capita (which serves as a proxy for relative productivity differentials). To answer this question, cross-country analysis is typically used to estimate the relationship between the average price level of countries and their relative wealth. On the basis of such analysis, both Oomes (2005) and Toth and Chudik (2004) conclude that Slovak prices were lower than would be explained by Slovakia's relative wealth in the early years of the transition, but that they have experienced relatively fast convergence to the equilibrium level in recent years. Oomes (2005), who provides the most

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comprehensive study of this type, concludes that the Slovak koruna was around 30-40% undervalued in 1993-1994, but that real exchange rate appreciation since then, particularly since late 2002, has resulted in the undervaluation gap completely closing, so that by 2005 it was fairly valued.

Another approach, and the most population in the literature to date, is the estimation of so-called Behavioural Equilibrium Exchange Rate (BEER) models. While the original development of the BEER approach was based on the uncovered interest rate parity relationship, as in Clark and MacDonald (1998), the term is now used to describe all statistical approaches to estimating equilibrium exchange rates – *i.e.* single equation-type relationships that model the relationship between the real exchange rate and the fundamentals. Thus, many BEER models no longer have clear micro-foundations and they do not all include interest rate differentials.

Structural change in the economy, and short time-series, present a significant barrier to estimating a robust BEER model for Slovakia. Partly because of this, many economists have resorted to panel estimates, often with a relatively small and homogeneous set of countries (in which case the number of data observations is still often too small to clearly identify parameters), but sometimes with a very large number of economies, many of which have little in common with the Slovak economy. It then becomes very difficult to interpret a common coefficient. Moreover, questions are also raised about the extent to which missing country-specific variables may substantially change the derived real misalignment. Nevertheless, Table 2.A1.1 summarises the results from a number of recent BEER models that include Slovakia.

A number of these studies conclude that the koruna was around its equilibrium level in the early 2000s. These studies would imply that the real exchange rate is now significantly overvalued. However, as noted by Halpern and Wyplosz (1997), as well as by the PPP studies above, it seems likely that real exchange rates in the transition countries were all well beneath their long-run equilibrium values during the early years of transition. Thus, since some of the results summarised in Table 2.A1.1 do not indicate such an undervaluation (*e.g.* Zeman, 2004), they may be biased towards incorrectly concluding that current rates are over-valued. Instead, if the koruna exchange rate was persistently undervalued for the first few years of transition, it may have only more recently reached its long-run sustainable equilibrium and not yet be significantly overvalued at all. Those studies which more explicitly take these considerations into account have been more likely to conclude that the koruna reached it's equilibrium level around 2004.

The third main theoretical approach is to use the Fundamental Equilibrium Exchange Rate (FEER) model, which takes both internal and external equilibrium into account. However, there seem to have been no FEER models constructed for Slovakia to date, although Égert and Lahrèche (2003) did incorporate some elements of a FEER model into their study (summarised in Table 2.A1.1).

Most economists agree that the real equilibrium exchange rate itself is expected to appreciate over time. If the exchange is more or less at its estimated equilibrium level at the time it enters ERM-II then estimates of equilibrium appreciation could be used to identify the extent to which the central rate may need to be revalued prior to the eventual conversion to the euro. Égert (2004) provides a comprehensive summary of the factors that may contribute to such trend equilibrium appreciation. These include: *i)* the Balassa-Samuelson effect and *ii)* the impact of increases in regulated prices, both of which lead to

Table 2.A1.1. **BEER estimates of exchange rate misalignments of the Slovak koruna**

Authors	Exchange rate model	Real exchange rate definition	Other variables	Period	Comments	Pace of real equilibrium appreciation	Magnitude of real misalignment
Oomes (2005)	BEER model, Slovakia only.	Net CPI, ULC and PPI based bilateral rers (relative to the euro).	$a - a^*$ (Slovakia *vs* euro area); G.	1996 Q1-2004 Q2	Coefficient close to 1.0 on the productivity differential.	3% p.a. (or 1-2% p.a. if fiscal consolidation continues).	Approximately 0% in 2004.
Crespo Cuaresma *et al.* (2005)	Monetary style BEER model, panel (six transition countries).	*Nominal* bilateral (*vs* euro) exchange rate.	M2, IP, deposit interest rates, CPI/PPI.	1994 M9-2002 M3			Approximately 0% in early 2004.
Zeman (2004)	BEER model.	PPI-based real effective (Germany and Czech Republic) exchange rate.	$(a^T - a^{NT}) - (a^{T*} - a^{NT*})$, $a - a^*$, G, NFA, $r - r^*$.	1993 Q1-2003 Q3		Around 2% per annum.	Approx 0% in 2000/2002. Approx +10% at end of 2003.
Toth and Chudik (2004)	BEER model, single country model and panel (4 Visegrad countries).	Manufacturing-PPI-based real bilateral (*vs* euro) exchange rate.	$(a^T - a^{NT}) - (a^{T*} - a^{NT*})$, TOT, real interest rate diff, FDI, country risk proxies, NFA.	1993 M1-2004 M3	BEER results sensitive to model specification.	Up to 2-3% per annum.	Approx fairly valued at end 2003.
Égert and Lommatzsch (2004)	BEER model, panel estimates.	CPI-based real bilateral exchange rate (*vs* Germany).	$a - a^*$, regp regp*, $r - r^*$, Govt Debt/GDP, Openness, TOT.	1993 Q1-2002 Q4	Very difficult to find a reasonable relationship.		+20-30% (overvalued) in 2002 Q4.
Égert and Lahrèche-Révil (2003)	BEER + FEER combination VAR model.	CPI-based effective exchange rate.	$a^T - a^{NT}$, $a - a^*$, domestic demand, TOT, current account, openness.	1993 Q1-2001 Q2	Reference year of 1994 assumed in FEER analysis.		+10-15% (overvalued) in 2001 Q2
Kim and Korhonen (2002)	BEER model, panel estimates (29 countries).	CPI-based bilateral (USD) and effective.	GDP/capita, investment/ GDP, G, Openness	1990-1999	Coefficients from cross sectional sample applied to Slovakia.		0% USD bilateral rate, +8-20% effective rate in 1999.

Note: Key to variables: $(a^T - a^{NT}) - (a^{T*} - a^{NT*})$ = relative labour productivity differential; $a - a^*$ = total labour productivity differential; G = Government expenditure as % GDP; regp = regulated prices (proxied by rents); $r - r^*$ = real interest rate differential; TOT = terms of trade; NFA = net foreign assets; IP = Industrial Production.

positive inflation differentials, as well as *iii)* the potential role of expected productivity gains on pushing up the nominal exchange rate. The pace of real equilibrium appreciation, as identified by some of the BEER studies, is indicated in Table 2.A1.1. Most of these conclude that the pace of equilibrium appreciation over the next few years would be around 2-3% per annum.

Notes

1. *E.g.* Dufrenot and Égert (2005), Égert and Lommatzsch (2004).
2. See Égert (2004) for a survey of the different approaches for estimating equilibrium exchange rates and a comprehensive literature review of the studies that have been undertaken for the transition economies.

ISBN 92-64-01267-2
OECD Economic Surveys: Slovak Republic
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Chapter 3

Policies to boost job creation and improve labour mobility

Slovakia's relatively low employment rate is one of the factors contributing to lower levels of GDP per capita than in other OECD countries. However, recent reforms have already made significant progress towards raising the employment rate and further employment growth is expected.

There are a number of additional policies that could promote faster employment growth. With respect to labour demand for low-skilled workers, who are the most abundant among the unemployed, this chapter argues that the cost of low paid labour should be significantly reduced, either by significantly cutting employers' social security contribution rates for low-wage workers or by reducing the minimum wage. With respect to labour supply, the housing market is identified as a major obstacle to regional mobility of labour supply, and significant policy changes for this sector are recommended.

Incentives to work have been strengthened

Following the government's recent tax and social security reforms,[1] most long-term unemployed people in Slovakia now have significant incentives to work. This has been achieved partly through lowering income tax rates, but more importantly by cutting social assistance benefits. The introduction of universal child allowances (previously means tested) and a range of pro-work initiatives have also helped to "make work pay".

The impact of these reforms can be summarised by measuring the part of in-work earnings that is, upon entering employment, "taxed away". *For a jobless person entering work*, this "tax on re-employment", or average effective tax rate (AETR)[2] has now been significantly reduced, although more so for some groups than others (Figure 3.1). Not surprisingly, the highest AETRs in Slovakia are for people who have only recently become unemployed and who are eligible for unemployment insurance (Figure 3.1 – panel A). Yet all three cases shown in the figure indicate that "work pays" whereas previously the AETRs were higher than 100% for some people.

Once unemployment insurance runs out, or for individuals who are not eligible in the first place, AETRs are now significantly lower. The cuts in AETRs have been particularly dramatic for one-earner couples (as illustrated in Figure 3.1 – panel B) as well as for single people and lone parents (not illustrated). As in other OECD countries, AETRs are even lower for second income earners who are returning to work (Figure 3.1 – panel C). Similarly, marginal effective tax rates (METRs) – or effective tax rates for *employed workers increasing their working hours or moving to higher paying jobs* – have also been significantly reduced.

The stronger incentives to work stem in large part from the relatively low level of social assistance that is now offered. Indeed, Figure 3.2 indicates that net replacement rates for the long-term unemployed have fallen very substantially. Evidence that work incentives are now significant is also provided by the fact that, in regions of high long-term unemployment, the supply of workers seeking low-skilled volunteer jobs (which entitles workers to the activation allowance of SKK 1 500 per month – equivalent to just under ¼ of the minimum wage) has outstripped the ability of municipalities to provide such jobs.[3] Anecdotal evidence suggests that for many municipal volunteers, this is the first work they have ever done. Thus for these people there is much pressure to take up any available job in order to survive.

Incentives to work have also improved significantly for older workers. The retirement age is being progressively increased and will reach the target age of 62 by 2006 for most men and by 2014 for all women.[4] In addition, the implicit tax on continued work for those past the retirement age has been reduced, thanks to the pension reform. One concern with the new pension rules, however, is that they may be too generous in their provision for early retirement for upper-income workers. At present there is no minimum age for pension eligibility provided the person has contributed sufficient funds to the system (over a period of at least 10 years) for them to qualify for a pension of at least 1.2 times the adult subsistence income level (*i.e.*, around the minimum wage). Since only upper-income

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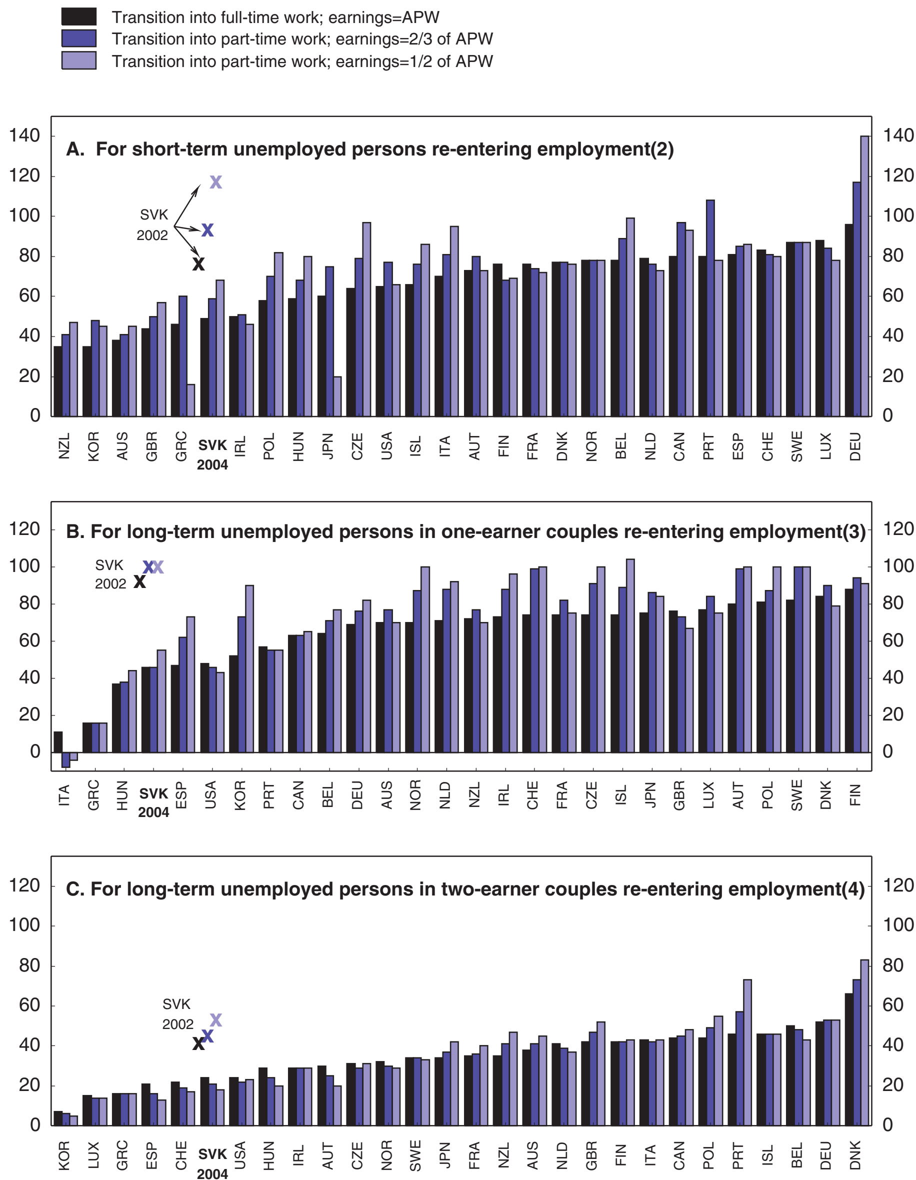
Figure 3.1. **Effective tax rates for jobless people moving into work**

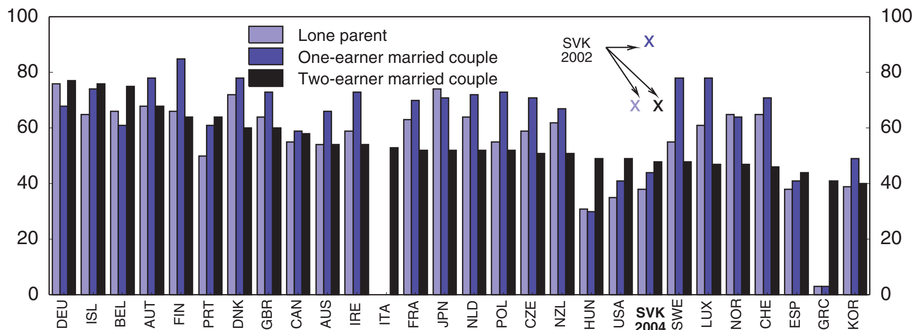
2002, different working hours, in per cent[1]



1. 2002 data refer to the situation as of 1 July 2002 for all countries. 2004 data for Slovakia refer to 1 September 2004.
2. The jobless person is assumed to have earned an average wage in the previous job and to receive initial rates of unemployment benefits (following any waiting period). The spouse is employed full-time in a low-paid job earning 2/3 of the average wage. There are two children aged 4 and 6.
3. The jobless person receives no unemployment insurance benefits but is entitled to social assistance. Wages following the transition into work correspond to the APW level so a half-time job would pay 50% of the APW. In-work or activation allowances are also available. The spouse is assumed to be inactive with no earnings. There are two children aged 4 and 6.
4. Same as Panel B except that the spouse is assumed to have full-time earnings equal to 67% of APW.

Source: OECD, *Benefits and Wages*, 2004.

Figure 3.2. **Net replacement rates for two child families in long-term unemployment, 2002[1]**



1. Data refer to 1 July 2002 for all countries. 2004 data, for Slovakia, refer to 1 September 2004. Results are after tax incomes as a percentage of the APW level. Includes unemployment benefits, social assistance, family and housing benefits in the 60th month of benefit receipt. For couples the per cent of APW relates to the primary income earner only; the second spouse is assumed to have no earnings in a one-earner couple or to have full-time earnings equal to 67% of APW in two-earner couples. Children are aged 4 and 6.

Source: OECD, *Benefits and Wages: OECD indicators*.

workers would be able to qualify early, this raises questions about the fairness of the system. In addition, Slovakia's demographic profile and concerns about fiscal sustainability (see Chapter 5) suggest that either the retirement age should be further raised or other parametric changes should be made to the pension system.[5]

Although the government's "make work pay" initiative has successfully increased incentives to work, its consequences highlight two other challenges. First, the cuts in social assistance benefits suggest a significant increase in the number of people living in poverty, particularly among the Roma population (who make up a large proportion of the long-term unemployed). For example, a long-term unemployed couple with four children saw their total net income roughly halve from SKK 15 781 per month in 2002 (around EUR 400) to SKK 7 550 per month in 2004 (around EUR 200).[6] For these people, the provision of public health services, education and job-creation services (among others) become even more important, while at the same time good health and employment outcomes become more difficult to achieve.[7] This places a considerably greater burden on the regional authorities who, under fiscal decentralisation, are now responsible for the provision of all social services. This topic is covered in more detail in Chapter 5.

The second challenge – as covered in the remainder of this chapter – is to promote policies that encourage higher demand for labour, and an infrastructure that allows people to acquire new skills and to improve their labour mobility.

Job creation: promoted by flexible labour markets but inhibited by high payroll taxes

The government took a very important step towards motivating job creation and job reallocation with the introduction of a *new Labour Code* in 2003. Changes included: an increase in the working week to up to 48 hours (including overtime); flexible setting of working hours and rest times; flexible part-time arrangements; an allowance for indefinite repetition of fixed term contracts; a cut in severance pay; and a considerable easing of the conditions under which workers can be dismissed. As a result, Slovakia is now ranked as

having a relatively flexible labour market according to the OECD's indicator of Employment Protection Legislation, particularly for temporary workers. The new labour code also weakened the powers of the trade unions and worker councils. Whereas under the 2001 rules they had an effective veto power over organisational changes and worker dismissals, under the 2003 law unions need only be notified in advance. However, although employment growth has picked up, job creation has been insufficient to significantly reduce the unemployment rate, which has fallen only slightly to around 17½% (see Box 3.1).

In the prime age cohorts, the biggest deficit of available jobs is for people with low skill levels and those who live in the central and eastern regions (see Figure 1.12 in Chapter 1). In part this reflects the fact that the most dynamic part of the business sector has been the FDI-driven manufacturing sector, where most new jobs are for relatively skilled workers. Policies to promote job creation within a broader range of firms within the business sector are discussed in Chapter 4. However, there is also some evidence that the combination of the minimum wage and the high tax on labour may be suppressing demand for very low-skilled labour in the high unemployment regions of Slovakia.

For Slovakia as a whole, average wages are still relatively low compared to those in the other Visegrad countries (Figure 3.4 – top panel), and to a large extent this can be explained by Slovakia's lower productivity levels. Within Slovakia, wage distribution data illustrate that there is a strong relationship between sectoral productivity levels and wages, with the highest wages (and productivity) in financial intermediation and the lowest in hotels and restaurants, education, health and social work, and other community, social and personal services.[8] This suggests that even if the minimum wage is appropriate in Bratislava, and other western regions, where productivity levels are generally higher, it may be too high in the Eastern regions, where both living costs and average productivity levels are much lower.

The minimum wage in Slovakia is also the lowest of the four Visegrad countries, although only in absolute terms.[9]As a percentage of the average wage the total minimum cost of labour (including employers' social security contributions) ranks around the middle of the OECD (Figure 3.4 – bottom panel) and is higher than that in Poland and the Czech Republic. Slovak firms highlight high social security contribution rates as one of the top three factors impeding business development.[10] Although the tax and pension reform already cut the social contribution rate slightly (by 3.25 percentage points), employer social security contributions still add around 35% to the average wage (see Table 3.1). As a result, Slovakia's taxes on labour remain higher than the OECD average (Figure 3.5).

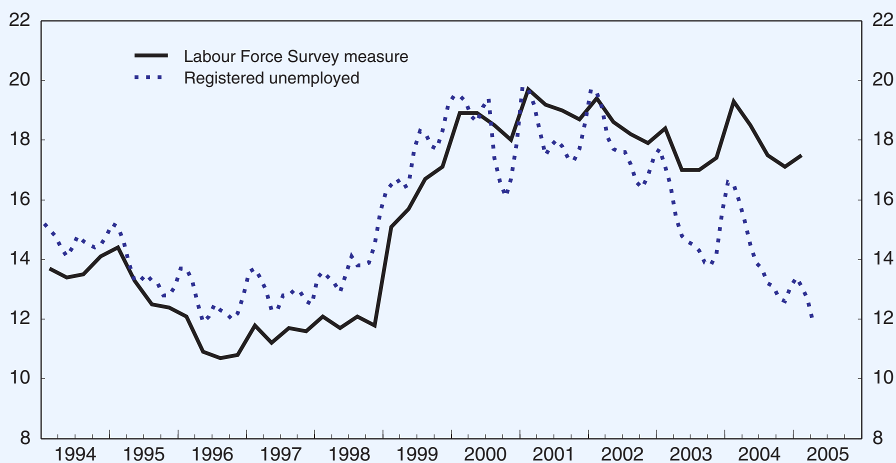
The level of total payroll taxes is likely to be the greatest hindrance to employment growth in smaller less productive firms (*e.g.* in the services sector), and particularly in the Eastern regions of Slovakia where productivity is lower and where workers' reservation wages are likely to be the lowest. It is likely that the high tax wedge also contributes to informal employment, thus helping to explain why the improved business environment has not delivered more significant gains to total employment of low-skilled workers.[11] In addition, given the shift in the tax burden from capital to labour that occurred as part of the recent tax reforms (see Box 1.1), it is not surprising that the new FDI firms are engaging primarily in capital-intensive activity rather than the creation of low-skilled jobs. Indeed, some researchers have found evidence of significant capital-labour substitution in economies with high tax wedges.[12]

Box 3.1. **Measuring unemployment**

The registered unemployment rate, the most commonly referred to measure of unemployment in Slovakia, averaged 13.1% in the first quarter of 2005, significantly lower than the 17.5% rate measured by the household labour force survey (LFS). However, the diverging gap between these two measures is primarily due to the gradually stricter conditions that have been applied to eligibility for registering as unemployed. Frequent visits to the labour office are now required, so that the registered unemployment measure captures fewer people who are already engaged in grey-market work, or working abroad.[1]

Figure 3.3. **The widening gap between the two measures of unemployment**

As per cent of labour force



Source: OECD, *Main Economic Indicators.*

Although the registered unemployment measure may now be more accurate, there are several reasons to prefer the LFS measure of unemployment. First, it is not affected by changes in registration conditions, so it provides a more accurate picture of how unemployment has changed over time. Second, since the LFS identifies unemployed persons through an interview process, it is more likely to capture unemployed people, such as second income earners, who are not eligible for unemployment assistance, and who therefore do not choose to register as unemployed. Third, the LFS measure is based on ILO definitions, which makes it internationally comparable.[2]

1. Note that since this measure uses labour force participation from the previous year, to calculate the denominator (workforce) of the unemployment rate, it tends to overstate the registered unemployment rate at times when labour force participation is increasing, and *vice versa*.
2. Nevertheless, the LFS is subject to sample-related measurement error, and, as in other OECD countries, it may capture some grey-sector workers. There is no evidence on the relative importance of grey-sector workers in the LFS measure *versus* the measure of registered unemployment.

The link between high tax wedges and low employment is also well documented,[13] and there is evidence that this negative relationship is the most severe for low-skilled workers (see Box 3.2). Thus, to boost the creation of jobs that require low skill levels, the government should prioritise reductions in the costs of low paid labour. One way to do this

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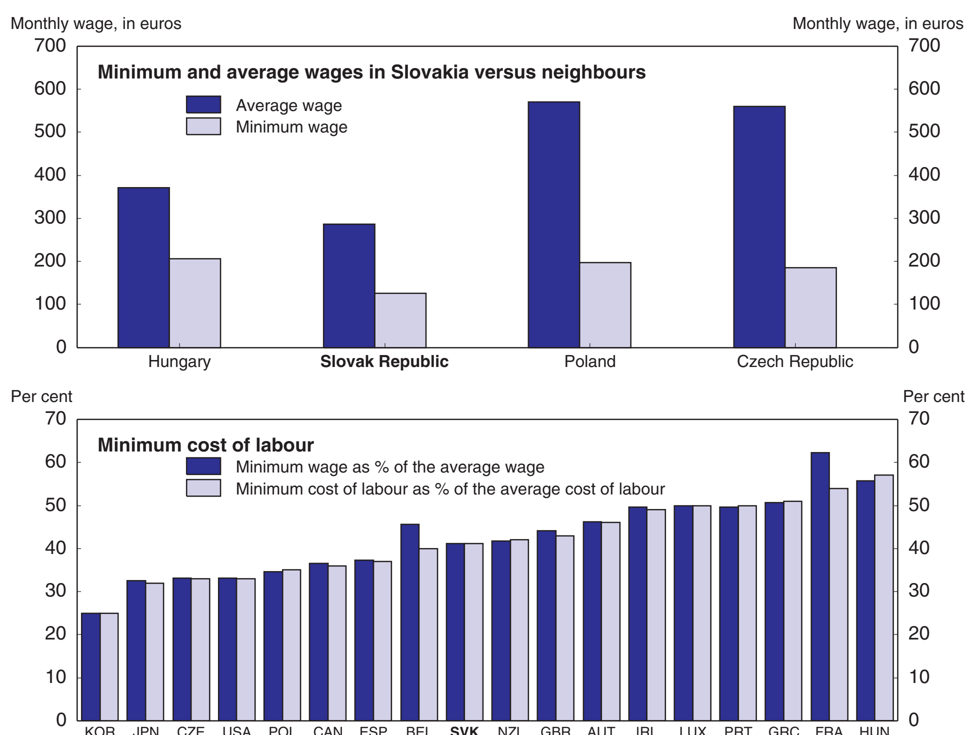
Figure 3.4. **The cost of labour**

2002[1]



1. Slovak Republic data are for 2004. All other countries are 2002.

Source: OECD, *Benefits and Wages* 2004.

Table 3.1. **Compulsory social security contributions**

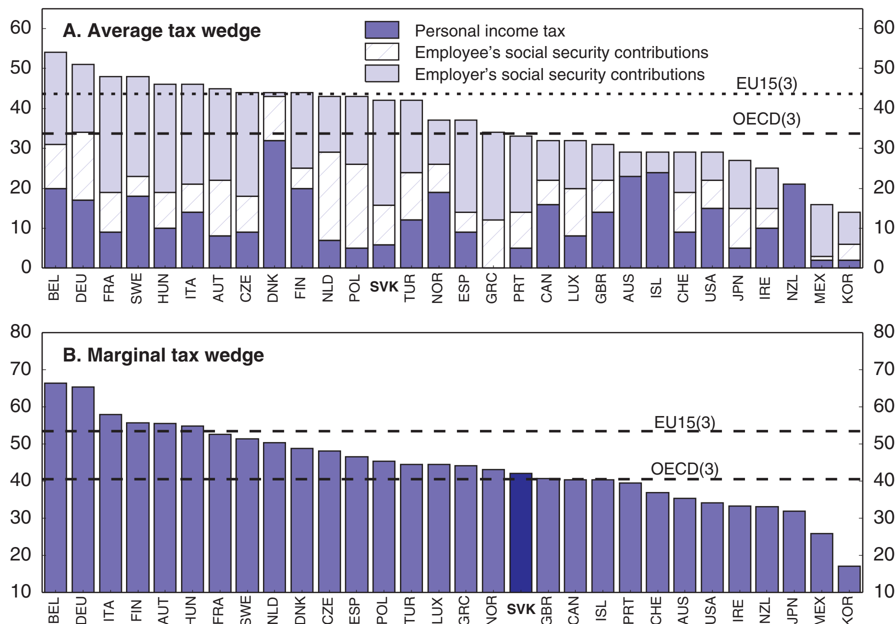
	Employee	Employer	Self-employed
Health Insurance	**4.0**	**10.00**	**14.00**
Social insurance, *of which:*			
Sickness	1.4	1.40	4.40
Retirement	4.0	14.00	18.00
Disability	3.0	3.00	6.00
Unemployment	1.0	1.00	
Accident[1]		0.80	
Employers' guarantee[2]		0.25	
Reserve Fund of the SP[3]		4.75	4.75
Total	**13.4**	**35.20**	**47.15**

1. After a transitionary period, the accident insurance rate will depend on the category of risk associated with the employer's activities.
2. This is insurance against the employers' insolvency so that employees' claims can be satisfied.
3. This funds the PAYG pillar of the pension insurance.

Source: Ministry of Labour, Social Affairs and Family of the Slovak Republic.

Figure 3.5. **Tax wedges on labour, international comparison**[1]

As per cent of gross labour costs, 2003[2]



1. For a single individual without children at the income level of the average production worker, or estimated wage levels of the average production worker.
2. 2004 data for the Slovak Republic. All other countries are 2003.
3. Weighted average using 2000 GDP (PPP-adjusted).

Source: OECD, *Taxing Wages*, 2003.

would be to reduce the minimum wage. If the minimum wage is cut, then the net incomes of low-paid workers could be maintained, or even increased, by the introduction of an earned income tax credit for individuals.[14] However, given the political difficulties of cutting the minimum wage, it may be more feasible to instead reduce the cost of low paid labour *via* substantial reductions in employers' social security contributions for low-income earners. Since the objective of these cuts is to raise formal sector employment among those with low skills, the cuts should be made to *employers'* social security contributions, rather than employees' contributions. This would ensure that cuts reduce the labour cost of workers who earn around the minimum wage, thus expanding demand for this category of employee. However, employers' pension contributions should be retained, since these contributions directly affect the employee's future benefit entitlements. Instead, the health insurance contribution of 10% could be cut, together with other items (sickness, disability, unemployment, Reserve Fund of the SP) where there is no link between individual contributions and subsequent entitlement. Careful targeting should limit the cost of these cuts significantly and the remaining cost should be funded by expenditure restraint in less urgent areas such as industrial and agricultural subsidies (see Chapter 5).

Box 3.2. **The case for cutting payroll taxes for low skilled workers**

Not only is the tax wedge higher in Slovakia than in many other OECD countries, but there is also a relative abundance of low-skilled workers. Although the Slovak minimum wage is not high in absolute terms (Figure 3.4), it is now more than four times higher than the basic level of social assistance,[1] suggesting that the minimum wage may be more binding in Slovakia than in other countries where replacement rates are higher. These factors suggest that the tax wedge might be more harmful to employment in Slovakia than in Western Europe.

Some support for this idea has been provided by a recent World Bank study.[2] Using a pool of annual data for eight of the new EU entrants[3] for the period 1996-2003, the World Bank estimated that for a given GDP growth rate, each percentage point increase in the tax wedge is associated with a decrease in employment growth by 0.5 to 0.8 percentage points. While the data limitations suggest that this result should be interpreted carefully,[4] it does suggest a strong and significant negative relationship between the tax wedge and employment in the EU-8 countries.[5]

The Slovak authorities also acknowledge the need to cut social security contributions, although they argue that fiscal constraints mean that this must be delayed until 2007 at the earliest. However, most proposals have involved cuts to payroll taxes across the board. If instead, the cuts are targeted specifically to low-income workers, the employment benefits could be maximised at a much lower fiscal cost. This is because (formal sector) labour supply is more elastic in the vicinity of the minimum wage than at higher wages. Thus, the upward shift in labour demand, in response to a cut in payroll taxes, results in a proportionately greater impact on employment of employees who are paid around the minimum wage than for other employees.[6]

The unavoidable downside to implementing such targeted reductions in the labour tax wedge is the incentive effect of targeting – since it results in higher marginal effective tax rates (METRs) in the income range over which the measures are withdrawn. However, while higher METRs may reduce the overall increase in the number of hours worked, notably for part-time workers, this is a much less serious problem in Slovakia than the current prevalence of unemployment traps, particularly in the high unemployment regions where the gap between labour demand and supply is very wide. Besides, the distribution of earners in Slovakia is relatively wide, suggesting that careful targeting design could ensure that the targeted measures be withdrawn by income levels still well below the APW, ensuring that incentives for skill acquisition would remain.

To illustrate the affordability of targeted labour tax cuts, consider the fact that only around 7% of workers earned less than SKK 9 000 per month in 2003. If the average employer social security contribution for this group was reduced from 35% to 18%, the direct reduction in social security revenues would be only around 0.7% of GDP.[7] However, there are a number of potential positive impacts that may mitigate this cost further. First, the lower tax wedge should partly finance itself through higher output and higher employment (including higher tax and social security revenues). Second, to the extent that formal employment would grow in the personal services sector, then VAT revenues may also increase. Third, even if some of the new employment is simply a shift from the informal to the formal market, this would have *indirect* benefits, including better training opportunities for low-skilled workers in the formal economy and better legal protection of these workers.

Substantial targeting of cuts in labour taxes for low-income earners has been successfully used in other OECD economies. For example, France introduced rebates on social security contribution rates for wages close to the minimum wage in 1993, and has

Box 3.2. **The case for cutting payroll taxes for low skilled workers** *(cont.)*

subsequently extended both the range of wages concerned by these rebates and the size of the rebates. Although it is difficult to estimate precisely the number of jobs created by this policy, employment of low-skilled workers has strongly improved and total net job creation has also been strong.[8] Belgium also introduced sizeable targeted cuts in employers' social security contributions after 1999 and the impact on employment was estimated to be significant.[9] As a result, these two countries have managed to reduce the minimum cost of labour without cutting the minimum wage (see Figure 3.4 – bottom panel). A targeted system of earned income tax credits in the UK has produced similarly positive results for employment rates of low skilled workers, although this has worked mainly through increasing incentives to work (which are already strong in Slovakia) rather than by increasing demand for low skilled workers.

1. In early 2005 the minimum wage was SKK 6 500 compared with social assistance for a single person of SKK 1 530. However, this can be raised to around SKK 3 000 by qualifying for the activation allowance associated with undertaking volunteer work in municipalities.
2. World Bank (2005).
3. The four Visegrad countries (Czech Republic, Hungary, Poland and Slovakia) plus the three Baltic states (Estonia, Latvia and Lithuania) and Slovenia.
4. The authors acknowledge that the small sample size and the small number of variables and related possibility of omitted variables could have biased the results.
5. The range of estimates using data for the wider OECD group of countries is usually slightly lower, ranging from 0.11 to 0.55 [*e.g.*, see De Haan *et al*. (2003) and Nickell (2003) for literature reviews].
6. Carey (2003).
7. These calculations are back-of-the-envelope estimates based on the 2003 distribution of wages. The 18% contribution rate after the cuts retains only the employers' pension contribution, the employers' guarantee, and the accident contribution (see Table 3.1). With an unchanged minimum wage, a reduction in employer social security contributions to around 18% would reduce the minimum cost of labour from 41% of the average wage to around 31%.
8. OECD (2005).
9. Carey (2003).

A new housing policy is required to improve inter-regional labour mobility

Like many other OECD economies, Slovakia has had problems in adjusting to structural changes in the economy. Services now play an increasingly important role (Figure 3.6) and although many new manufacturing jobs have been created in recent years, these have not been sufficient to compensate for the loss of jobs in declining manufacturing industries. Moreover, the new industries (such as car manufacturing plants) tend to require a very high level of skills compared with those required in many of the old industries. As a result, most individuals who were laid off during the 1990s have found the transition period painful, and many of the lowest skilled workers have never succeeded in finding a new job.

The experiences of other OECD countries tell us that the adjustment costs of structural change can be reduced by ensuring strong adjustment mechanisms, such as wage flexibility and high labour mobility. As a result, economies with high labour mobility tend to experience significantly lower unemployment than those where people are unwilling or unable to accept a job in another region of the economy (see Figure 3.7).[15] In turn, a mobile labour force results in a more efficient allocation of labour resources, boosting overall productivity growth.

In Slovakia, low rates of workforce mobility seem to be inhibiting the efficient functioning of the labour market, although this may also be linked to significant regional differences in the quality of the workforce. In the Bratislava and Trnava regions, commuting to work is widespread, thanks to a higher average wage and a more developed

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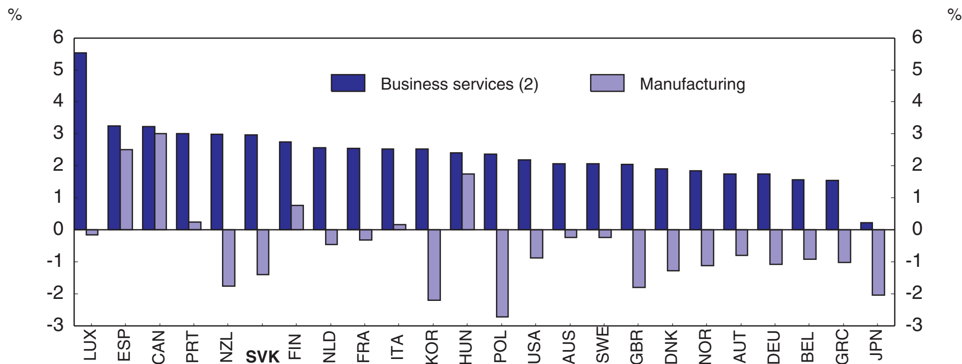
Figure 3.6. **Employment development by sector**

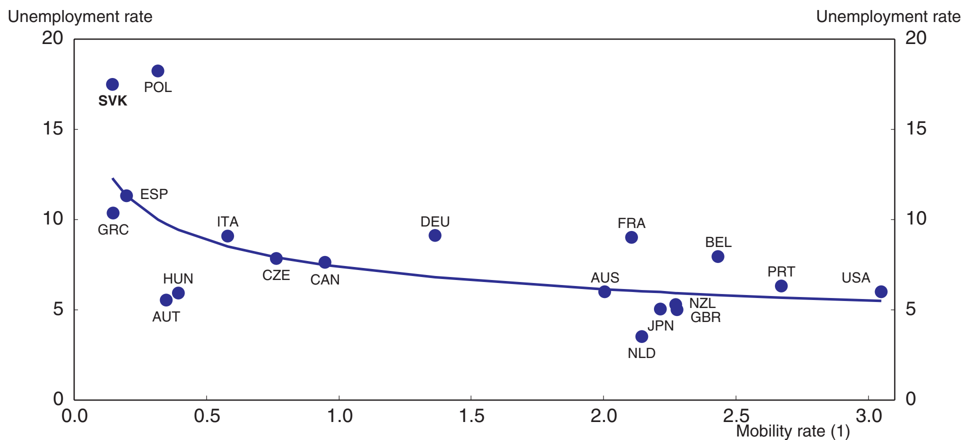
Employed persons, average annual percentage change from 1995 to 2002[1]



1. 2003 for Finland, Germany, Italy, Luxembourg, Netherlands, Norway and the Slovak Republic; 2001 for Australia, Japan, Korea and USA; 2000 for Canada; 1998 for New Zealand.
2. Business services comprise: wholesale and retail trade; restaurants and hotels; transport and storage; and communications, insurance, real estate and business services.

Source: OECD, STAN Database.

Figure 3.7. **Geographical mobility and unemployment rates in selected OECD countries**



1. Proportion of the population aged 15-64 who changed region of residence in the last year. For Australia, Italy and Japan data is for the total number of persons who changed region of residence. Data is for 2003 for all countries except for Italy and France (2002), Japan, New Zealand and Poland (2001) and the Netherlands (1999).

Source: OECD, *Employment Outlook*, 2005 and *Economic Outlook* No. 77.

transportation infrastructure. But in other regions the cost of transport and a very poorly developed market for rental accommodation serve as significant barriers. Impediments to migration may also be hindering the growth of self-employment and employment in domestic services as such activities develop primarily in large urban areas.

Some steps have already been taken to improve labour mobility. Importantly, the transaction tax on house sales was simplified to a flat rate of 3% from January 2004 and eliminated completely as of January 2005.[16] Also a new lump benefit of up to SKK 10 000 was introduced, to assist in meeting fixed costs for those moving at least 30 kilometres to acquire a job.

Table 3.2. **Tenure of housing**

2002[1]

	Per cent of the stock of main residence			
	Rented	*Of which:* Social	Owner occupied	Other
Australia	30		70	
Austria	40		57	3
Belgium	31	7	68	2
Canada	37		63	
Denmark	45	19	51	4
Finland	32	17	64	4
France	38	17	56	6
Germany	55		45	
Greece	26		74	
Ireland	16	9	78	6
Italy	22	6	78	
Japan	40		60	
Netherlands	46	35	54	0
New Zealand	32		68	
Norway	23		77	
Portugal	21		75	4
Slovakia[2]	**4**	**4**	**82**	**14**
Spain	11		81	8
Sweden	39	18	46	15
United Kingdom	31	21	69	
United States	32		68	
Average of above countries	31	15	66	
Euro area average	31		66	

1. 1998 for Japan; 1999 for Australia and Italy; 2000 for Canada and Ireland; 2001 for Greece, New Zealand, Norway, Portugal, Slovakia and the United States.
2. In Slovakia, privately rented housing is available only on the grey market which is not captured in the official statistics. Social housing is provided by municipal authorities. For Slovakia "other" refers mainly to Cooperative housing.

Source: Trilla (2001); *Housing Statistics in the European Union* (2003); Australian Bureau of Statistics; Statistics Canada; Statistics Greece; Statistics Bureau of Japan; Statistics New Zealand; Statistics Norway; Slovak Ministry of Construction and Regional Development; US Census Bureau.

However, significant barriers remain, most of which are related to housing market policies. Although changing accommodation should have much lower transaction costs for tenants than for owner-occupiers, this is not always the case in Slovakia, where there are long waiting lists for affordable locally-provided social housing. Tenants on such rental contracts, with housing costs far below the market price, have few incentives to move even if work possibilities are considerably better in other regions. If they do move, they find that municipal housing is not available to those from "out of town". The official private rental market is virtually non-existent (see Table 3.2) and in the grey-sector market (which exists mainly in the bigger towns), rents are approximately three times higher than rents in the municipal rental sector.[17]

Current housing market policy in Slovakia is unlikely to facilitate greater labour mobility. The objective of current policy is to provide appropriately differentiated State support for construction intended for the various income groups within the population. For low income households State funds are used to facilitate the construction of rental apartments in the public rental housing sector. However, in practice, the number of new

apartments is insufficient to meet needs, and the existing stock is often tenanted by middle-income households or passed on to relatives, contributing to very low "turnover' in public housing. For middle-income households the State provides a premium on the market deposit rate to encourage saving[18] and facilitates the provision of loans to enable the purchase of an apartment or house. For the highest income group the State aims to create the conditions necessary to enable them to acquire housing from their own resources and using financial market funds.[19] In other words, the focus remains on facilitating home ownership (which is already high by international standards) rather than on facilitating labour mobility through the development of a more affordable and fair rental market.

To improve labour mobility, there is an urgent need for a new housing policy that recognises the role of the private sector in providing housing at all income levels and facilitates the development of a private sector infrastructure to increase liquidity in the market. Local authority infrastructure planning will need to actively support this goal. Rental prices should be allowed to be determined by the market.

One of the biggest regulatory priorities should be the development of a regulatory framework for the rental market that provides low-cost, efficient protection of both owners and tenants. Current law provides excessive protection of tenants, making investments in this sector unattractive and hindering the management of existing rental housing.[20] As a result, the private rental market, to the extent that it exists, is forced into the grey sector with a number of adverse consequences. Not only is liquidity of the rental market repressed but grey-market tenants have little legal protection if treated unfairly or discriminated against. In addition, owners in the grey sector do not declare their rental income. An efficient regulatory framework could be expected to increase the liquidity of the market (*e.g.*, by improving incentives to construct rental dwellings and by giving owner-occupiers the confidence to rent their own house while accepting temporary work in another region) and reduce rents (due to higher supply, as well as a fall in the risk premium associated with better legal protection of owners against poor tenants).

Social objectives could be achieved in a different way. Instead of providing housing-related subsidies (which are poorly targeted to those in greatest need), a new system of housing allowances should be developed. These allowances should be available to those in material need and on low incomes and, since housing costs are so much higher in the western regions, the value of the allowance should be linked to a region-specific measure of rental costs. The expansion of the private rental market together with a housing-specific allowance directly addresses the negative externalities associated with low labour mobility. However, the introduction of housing allowances should ideally take place *after* the supply-side of the housing market is made more flexible. Otherwise, if the supply of rental properties is very inelastic (as at present), housing allowances may simply have the effect of increasing rents and thus benefit owners rather than tenants. An efficient supply-side will also be important to ensure that housing market liberalisation is not destabilising for the macro-economy.[21]

The quality of most of the Slovak dwelling stock is very low, particularly multi-family housing. Although much of the municipal and state owned housing stock was privatised in the early 1990s, efficient market performance in this sector is impeded by insufficient legal protection of private interests and a lack of comprehensiveness and consistency of legal regulations. The buildings and condominium legislation needs to be revised to clarify title to land as well as obligations and procedures to finance maintenance of communal areas

and energy retrofits.[22] Renters in municipal housing still have the option of purchasing their dwelling (at relatively attractive prices) and this window should now be closed.

Finally, there is evidence that the construction sector is not competitive, as indicated by the fact that building costs are quite high in Slovakia compared with other European countries.[23] Intervention by the competition authority may be required to uproot anti-competitive behaviour in the construction sector, which may be raising costs and discouraging entrants (including foreign investors). Other reported problems include: indeterminate ownership status of land; limited availability of land in high-demand areas that is adequately serviced by public utilities; and a slow and bureaucratic process for obtaining building permits. Although the urban planning process is the responsibility of municipal governments, central government initiatives (including changes to the appropriate laws) may be able to speed up the building permit process and facilitate improved urban planning.

Box 3.3. **Summary of recommendations**

- Further reduce the implicit tax on continued work for those past the retirement age, and further improve fiscal sustainability by raising the retirement age or making other parametric changes to the pension system.
- Reduce the labour tax wedge for low income workers either by implementing substantial (15 to 20 percentage point) cuts in employers' social security contributions or by reducing the minimum wage. The fiscal cost of any payroll tax cuts should be limited by careful targeting and funded through expenditure restraint in less urgent areas such as industrial and agricultural subsidies. If the minimum wage is not cut then further increases should be resisted.
- The civil code regulation on tenant protection should be urgently reviewed. The requirement for owners to provide replacement housing in the event of eviction should be abolished. More generally, a new regulatory framework should be developed to provide low-cost, efficient protection of the rights of tenants and the rights of owners when tenants are in clear breach of general legal requirements.
- An efficient, and regionally-differentiated, housing allowance system should be introduced to provide support to those on low incomes. This should be funded by winding back the current system of housing subsidies and bonuses granted to savers.
- The Condominium Law should be revised to ensure the effective management of privatised multi-family housing, *via* the clarification of legal title and obligations for maintenance of communal areas. Separate ownership of a building and ownership/lease of the land it occupies should be made legally impossible.
- The competition authorities should consider reviewing the degree of competition in the construction sector, to guard against anti-competitive behaviour.

Notes

1. See IMF (2005) for a more comprehensive summary than is provided here.
2. AETRs are determined by the amount of unemployment and other social benefits that are lost as well as the tax burden on in-work earnings.
3. Note that the marginal effective tax rates discussed above already incorporate the impact of this "activation allowance", so incentives to take on "proper" work remain.
4. Prior to the recent reform the normal retirement age was 60 for most men (but as low as 55-58 for men in hazardous or arduous work) and 53-57 for women (depending on the number of children they had raised).
5. For example, retirees could be required to pay tax on (all or part of) their pension income, as in other OECD countries. Closing off the early-retirement option would also produce long-term savings.
6. These calculations are for a family with four children aged 13, 10, 7 and 4. If one of the children is under the age of 3, eligibility for the parental allowance means that total net income is slightly higher (SKK 8 448 per month in 2004) but still more than 50% lower than in 2002 (SKK 18 564 per month). These calculations include all housing and other benefits. Due to these cuts, net replacement rates for these families have fallen from around 112% of the APW in 2002 to around 40 to 45% in 2004 (depending on the children's age).
7. Unemployed people living in poverty have fewer resources to improve their employability prospects. There are also well-established links between poverty and health and education outcomes.
8. Based on data for the 21 NACE sectors, the correlation in 2003 between average sectoral GDP per person and the average wage in that sector was 0.88, up from 0.78 in 2000.
9. In practice the minimum wage in Slovakia varies along a 5-level scale according to the skill-level required for the position. Thus, since the minimum wage shown is the lowest rung, the true minimum wage may be significantly higher. Unfortunately, however, no data is available on the proportion of workers for whom the 5-level scale is binding.
10. The other two are inadequate law enforcement and corrupt administrative practices (WEF, 2004).
11. A new law that penalises informal employment came into force on 1 April 2005 and preliminary evidence suggests that this resulted in a significant number of new job contracts being reported.
12. *E.g.*, Daveri and Tabellini (2000).
13. *E.g.*, OECD (2003), Carey (2003), World Bank (2005).
14. Indeed, the government has already proposed the introduction of such an earned income tax credit. If introduced, it will increase the net incomes of low income workers. The fall in the tax wedge for low income workers would further increase the motivation to seek work in the formal sector. However, unless the minimum wage was cut at the same time, the cost paid by employers of low-income workers would be unchanged.
15. Kongsrud and Wanner (2005) found that the correlation coefficient between internal migration rates and exit rates from unemployment was 0.76 for a sample of OECD countries, and the correlation between internal migration and long-term unemployment was –0.70.
16. Prior to January 2004 the tax rate ranged between 0.5% and 6% depending on the value of the property and whether or not the transfer was between relatives.
17. Ministry of Construction and Regional Development of the Slovak Republic.
18. Although in practice savers are entitled to the premium even if the savings are not subsequently used to purchase accommodation.
19. Norris and Shiels (2004).
20. For example, complicated rules regulate eviction, such as the need to provide "substitute housing".
21. Since housing costs are not captured in the Harmonised Index of Consumer Prices (HICP), there is relatively little risk of a housing boom directly impacting on the inflation measure that will be used to assess Maastricht compliance. However, the indirect effects of a poorly sequenced housing liberalisation could be more important.
22. Lowe and Tsenkova (2003).
23. Norris and Shiels (2004) summarise housing construction costs across various European countries. Their comparison reveals a very large range in costs, with some countries reporting costs of well

over 1 000 €/m^2. At 500 €/m^2 for municipal housing and up to 1 000 €/m^2 for private housing, Slovak costs were not in the highest category although still quite high compared with the lowest cost countries (Italy: 214 €/m^2; the Netherlands: 150-220 €/m^2; Portugal: 150-220 €/m^2).

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ISBN 92-64-01267-2
OECD Economic Surveys: Slovak Republic
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Chapter 4

Improving conditions for innovation and growth

This chapter discusses policy reforms in a wide range of structural policy areas that may help to raise productivity and the level of human capital in the economy and prompt additional job creation. It highlights the fact that Slovakia is only part-way through a major transformation of the economy. In some policy areas, such as labour and product market regulation, Slovakia now boasts economic policies that rank around the middle or top half of the OECD. At the same time, other building blocks of the economy, most notably the legal system and the education infrastructure, are unable to keep up with the demands placed on them by the modern business sector. The chapter recommends taking a broad interpretation of innovation, and emphasises the importance of reforms to promote the up-skilling of the wider population, in order to broaden the potential for the creation and diffusion of the global stock of knowledge. Similarly, further improvements to the business environment, particularly in the legal and judicial system, are necessary to foster a competitive and efficient environment and create conditions conducive to dynamic enterprise creation and small and medium-sized business success.

A development strategy for diversification beyond FDI

As discussed in Chapter 1, the high GDP growth rates recorded recently have primarily reflected high labour productivity growth, with FDI inflows playing a crucial role. The reforms undertaken to date, together with the low cost of labour, have made Slovakia an attractive investment destination, and FDI is bringing with it not only physical capital, but also significant "know how", which is boosting productivity growth rates and spilling over to other parts of the economy. Although the FDI has also led to new jobs, the number of new positions created has not been sufficient to result in strong overall employment growth, given continued rationalisation of jobs in other sectors. Furthermore, most of the new FDI-driven jobs have been for relatively high-skilled labour.

In order to maintain recent high growth rates, and to facilitate the spill-over of more advanced "know-how" to a broader range of sectors, the challenge now is to emphasise a broader development strategy, particularly for small and medium-sized enterprises (SMEs). There are two strands to this challenge. *First*, up-skilling the population is crucial to ensure that increasing wages in Slovakia can be fully met by rising productivity levels, keeping unit labour costs low.[1] At present, many sectors of the economy remain stagnant, with very low productivity levels and little new employment creation. In other words, the relatively low skill levels of the population in many sectors seem to be impeding the innovation capacity of the economy. However, it is acknowledged that it will take some time to achieve a significant improvement in human capital levels.

Second, a high value should be placed on creating a more transparent and efficient regulatory environment for business, especially for smaller domestic firms. Compared with the large FDI-financed firms, small domestic firms have much less access to the global stock of knowledge and are more dependent on domestic finance and services (*e.g.*, information technology). Compared with large foreign firms they are also given less direct government assistance to fast-track regulatory hurdles, which may result in longer waiting times for connection to utilities, etc. Whereas growth in large FDI-financed firms has been relatively capital intensive and job shallow, there may be much greater potential for productivity growth and job creation in small domestic firms in the tradable sector as well as those in service industries such as tourism and hotels and restaurants, where investment tends to be much smaller in scale.

The government's competitiveness strategy also stresses the importance of strengthening the competitiveness and innovation-capacity of the economy through emphasising education and the building of a knowledge-based economy. Their strategy – known as the "Lisbon Strategy for Slovakia" – outlines the necessary steps to achieving this goal. In addition to emphasising the importance of underlying macroeconomic stability, the document focuses on the development of four main areas: human capital and education; innovation (science and R&D); information society; and the business environment. This document thus produces an impressive set of goals that, if achieved, will indeed facilitate Slovakia's catching-up path. However, this survey suggests that a broader interpretation of

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innovation may be warranted for Slovakia, with relatively greater attention paid to policies that raise the capacity of all sectors of the economy to absorb the existing stock of knowledge, to boost productivity and at the same time increase the probability of employment rich growth. The remainder of this chapter assesses Slovakia's current development in each of the areas covered by the government's Lisbon strategy and draws on cross-country OECD analysis to suggest policy priorities for development in each area.

Improving human capital and education

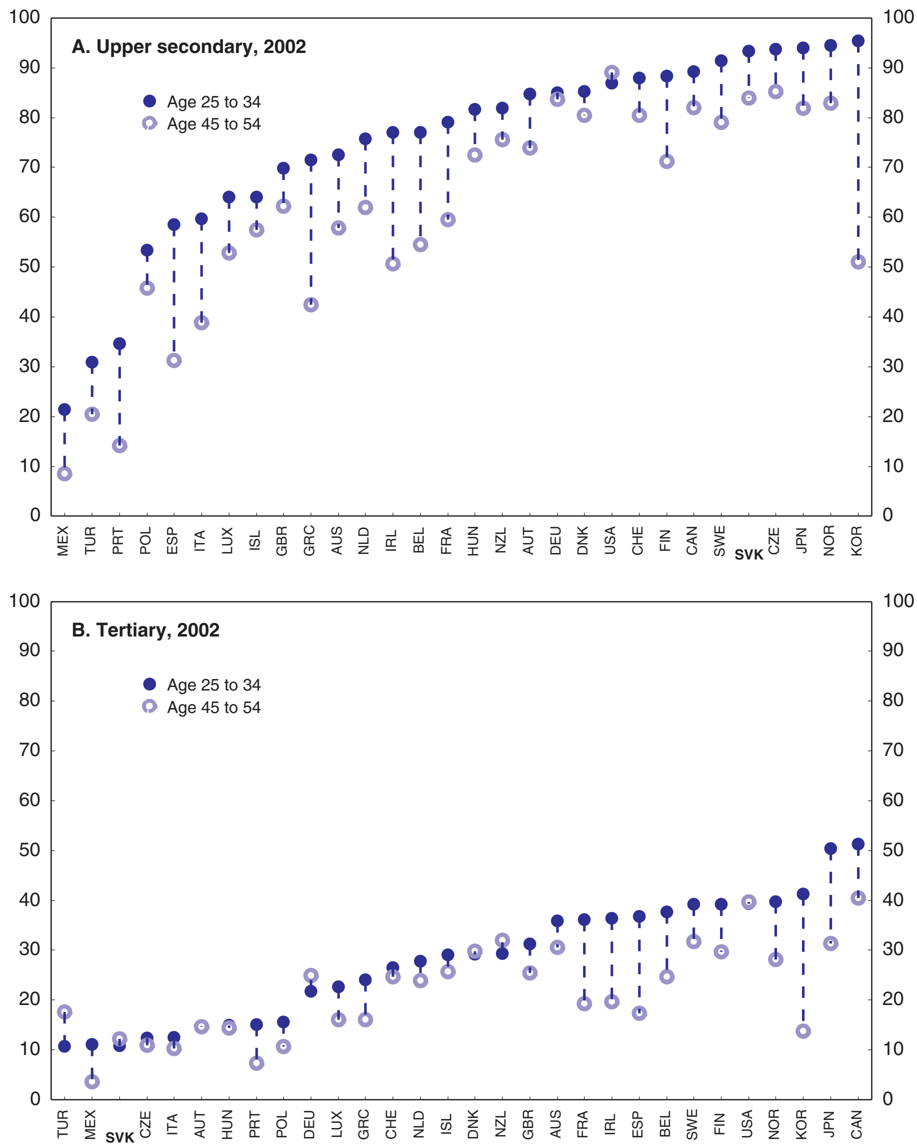
Education and human capital accumulation are critical inputs to the growth process. Not only will an up-skilling of the population improve total factor productivity growth, but a larger proportion of skilled workers in the population will imply greater potential for the creation and diffusion of innovation.

In Slovakia, the level of human capital accumulation seems to be relatively low. Although policy-makers have traditionally taken comfort from very high completion rates of secondary education (see Figure 4.1, top panel), this statistic seems to be a misleading indicator of human capital accumulation in three respects. First, it does not capture the fact that the different types of secondary school have vastly different success records at preparing students for the workforce. While grammar schools appear to be doing a good job at preparing students for tertiary education and employment (89% of 2003 grammar school graduates went on to enrol in higher educational institutions), relatively few students attend these schools, although the numbers are rising.[2] Other students attend vocational or specialised schools, and unemployment rates among graduates from these schools are much higher. Second, a significant number of students at vocational schools do not complete the maturity exam, although historically they have still been recorded as having finished secondary school, and for these students the unemployment rate is higher still (Figure 4.2). However, the proportion of students completing the maturity exam has increased very dramatically in recent cohorts.

Finally, school completion rates do not take account of weaknesses in the school curriculum and teaching methods. This is reflected more in internationally comparable tests of achievement. For example, the 2003 OECD Programme for International Student Assessment (PISA) indicated relatively disappointing results for Slovakian 15 year-old students (Figure 4.3). Although Slovak students performed around average on the mathematics and science scales (OECD rank 16-21 for mathematics and 15-21 for science out of 30 OECD countries), overall performance was dragged down by very poor results on the reading scale (OECD rank 25-27).[3]

One lesson that can be drawn from cross-country PISA analysis relates to the causes of variation in student performance within countries. For example, cross-country information on the interaction between students' socio-economic background and performance suggests that the Slovak education system is not doing a good job of moderating the relationship between socio-economic background and educational performance. In turn this may mean that human capital is being wasted and that intergenerational mobility from lower to higher socio-economic status is limited. To achieve a more equitable distribution of learning outcomes policy makers should consider reducing the extent of socio-economic segregation across schools and directing additional resources to socio-economically disadvantaged schools (see Box 4.1).

Figure 4.1. **Educational attainments of the population**[1]

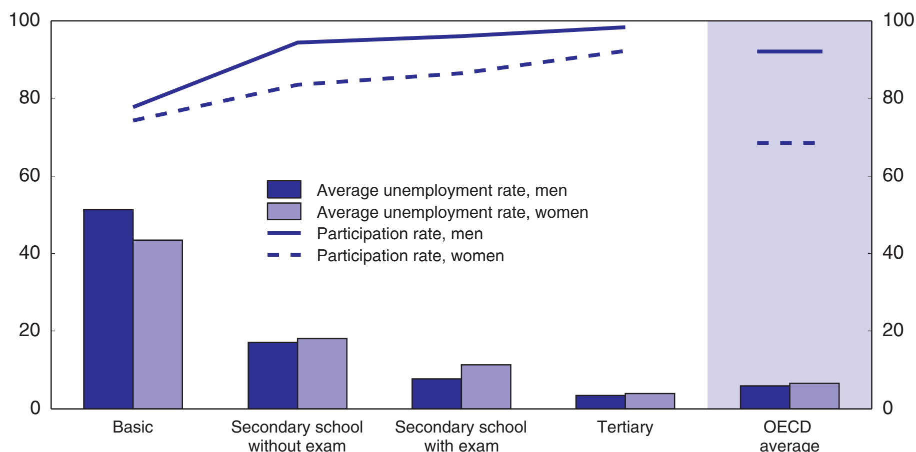


1. Share of population of age 25 to 34 and 45 to 54 with at least upper secondary or tertiary education.
Source: OECD, Education database.

Since 2003 a significant number of central government powers relating to the administration of primary and secondary schools have been transferred to local and regional authorities. Chapter 5 discusses in more detail the challenges that the local authorities now face in improving education outcomes. However, significant responsibilities continue to rest with the central government including the overall structure of the education system, setting of the core curriculum (which makes up around two thirds of the total curriculum), funding, and supervision of the quality of the educational process. Given the out-dated teaching methods that are typically used within

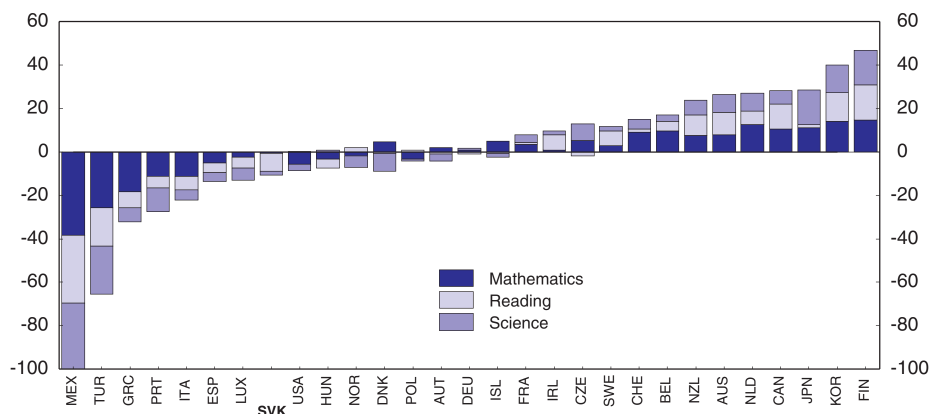
Figure 4.2. **Labour market status by educational attainment**

Prime working age, 25-54 year olds, 2003



Source: Statistical Office of the Slovak Republic, OECD, ELS Database.

Figure 4.3. **PISA scores relative to OECD average scores**[1]



1. The bars indicate the average PISA score for each country relative to the OECD average. The contribution of relative performance in mathematics, reading and science is also indicated (these three skills areas are weighted equally in the total score).

Source: OECD, *PISA Results 2003*.

Slovak primary and secondary schools, there is an urgent need for the Ministry of Education to provide a new core curriculum and to upgrade teaching methods. In order to facilitate competition between schools, the Ministry of Education should also consider making information on the performance of different schools public. The new state baccalaureate exam for final year secondary school students will facilitate cross-school comparisons.

With regard to total educational spending, there may be a case for redistributing the expenditure between the different levels of education. Figure 4.5 shows that while most OECD countries spend, on average, 2.2 times as much on education per student at the

Box 4.1. **Policies to mitigate the impact of socio-economic background on educational performance**[1]

Given that students from more advantaged socio-economic backgrounds generally perform better, one of the most useful lessons that can be drawn from cross-country analysis relates to the extent to which countries' education systems succeed in moderating this relationship. Countries where the relationship between socio-economic background and student performance is strong do not fully capitalise on the skill potential of students from disadvantaged backgrounds. In addition, the poorer performing students will almost certainly be the ones least likely to obtain the employment opportunities that offer the promise of economic mobility. This is a loss not just for individuals but also for societies increasingly dependent on the many effects of human capital.

For Slovakia the PISA index of economic, social and cultural status (ESCS)[2] showed that the distribution of socio-economic characteristics is not very different from that in the average OECD country. In other words, the Slovak education system does not need to cope with students from a wider range of socio-economic backgrounds than do the education systems of other countries. Yet the ESCS index was found to explain a higher proportion (about 22%) of the variance in student performance in mathematics[3] than on average across the OECD (about 17%).

This finding, summarised in Figure 4.4 (top panel), may be interpreted as implying that learning opportunities are not as equitably distributed in Slovakia as they are in other OECD countries. The vertical axis shows average performance on the PISA mathematics scale and the horizontal axis shows the strength of the relationship between socio-economic background and mathematics performance. Countries to the left side of the vertical axis, such as Slovakia, are those where the schooling system is not doing such a good job in moderating the impact of socio-economic background on performance. Since Slovak students performed particularly poorly on the reading scale, it seems reasonable to presume that for total student performance, Slovakia would be well within the bottom-left quadrant of Figure 4.4. Achieving an equitable distribution of learning outcomes thus represents an important challenge for Slovakia.

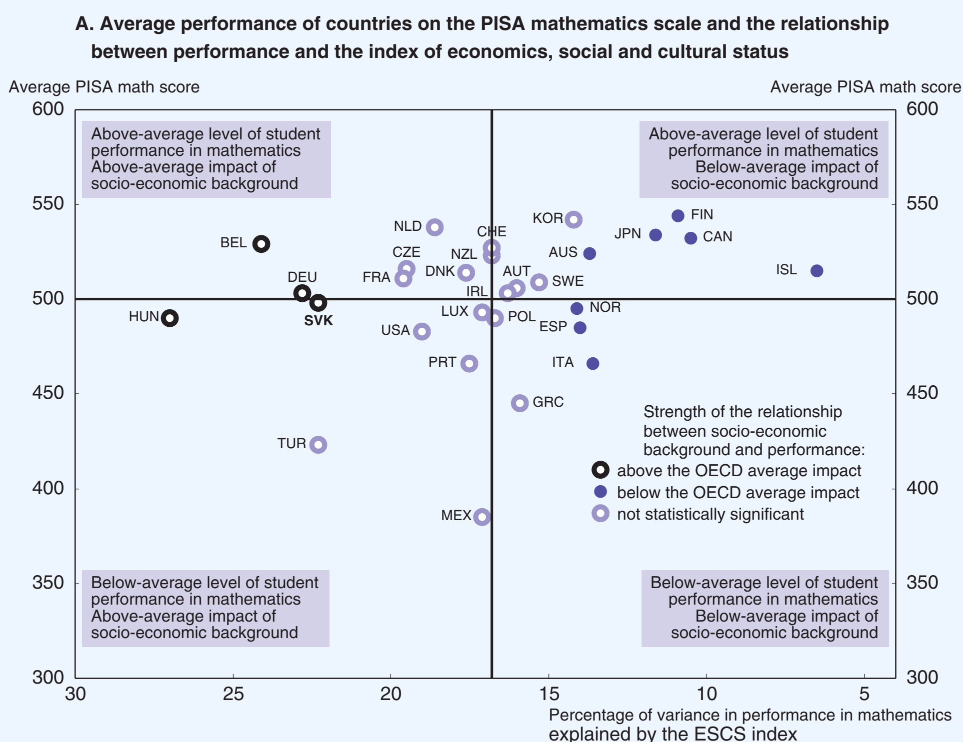
Additional analysis of the PISA results suggests that the *schools'* socio-economic context is the biggest determinant of performance in Slovakia. In Figure 4.4 (bottom panel), the dark-coloured bars represent the gap in predicted mathematics scores of two students within a school separated by a fixed amount of socio-economic background and the light-coloured bars represent the gap in predicted mathematics scores of two students with identical socio-economic backgrounds attending different schools. In Slovakia, and a number of other countries towards the left hand side of the chart, there is a very clear advantage to students in attending a school whose students are, on average, from more advantaged socio-economic backgrounds. But the results from some other countries (*e.g.* Poland) suggest that it is possible to distribute learning opportunities more equitably, without sacrificing the performance of the elite.

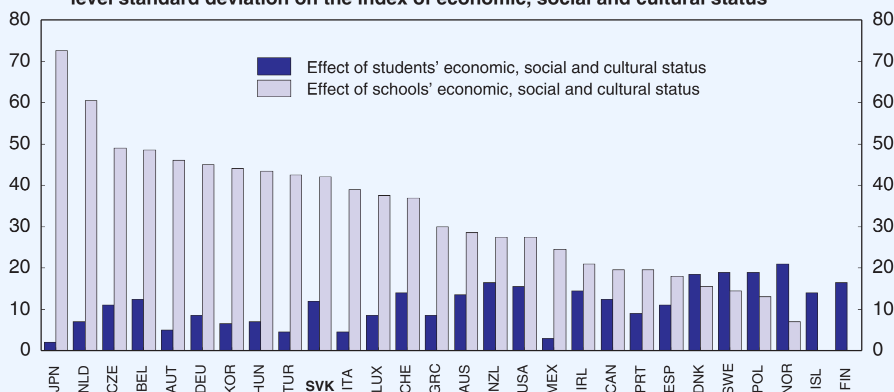
There are two main policy options that Slovakia could consider to achieve a more equitable distribution of learning outcomes. One option would be to reduce the extent of socio-economic segregation across schools. Cross-country analysis suggests that countries with greater segregation tend not only to have more disparities among students from different socio-economic backgrounds but also lower overall levels of performance. According to the PISA index of inclusion,[4] only Hungary, Mexico and Turkey among the OECD countries have greater segregation of schools by socio-economic background than does Slovakia. Socio-economic segregation sometimes stems from regional differences in standards of living, but it can also stem from educational policies that stream children into

Box 4.1. **Policies to mitigate the impact of socio-economic background on educational performance**[1] *(cont.)*

certain kinds of programmes (such as grammar *versus* vocational schools) early in their school careers. Poland is a good example of a country that completely overhauled its schooling system and in doing so achieved both reduced segregation and significantly improved overall performance.

Figure 4.4. **The impact of socio-economic background on mathematics performance**





Source: OECD, *PISA Results* 2003.

Box 4.1. **Policies to mitigate the impact of socio-economic background on educational performance**[1] *(cont.)*

The second main policy option is to more directly mitigate the effects of socio-economic segregation. Since schools with a higher average socio-economic status tend to have few disciplinary problems and a general school climate that is geared towards higher performance, these schools often attract the most talented and motivated teachers. A change to the school funding formula, so that additional resources are provided to disadvantaged schools, may help to counter these effects and ensure that students attending low socio-economic schools also have good opportunities to learn. While the existing special stipends for disadvantaged children may serve a useful social purpose,[5] they may not facilitate higher *school* performance (ability to attract more talented teachers etc). Differential funding of schools is already permitted by law.

1. This box draws on material published in OECD (2004a): *Learning for Tomorrow's World – First Results from PISA 2003*.
2. The index of economic social and cultural status (ESCS) is derived from the following variables: *i)* highest occupational status of father or mother; *ii)* the highest level of education of the father or mother converted into years of schooling; *iii)* possessions related to "classical culture" (the number of books at home as well as access to home educational and cultural resources such as a desk, a computer, a calculator, a dictionary, classical literature, works of art, etc.). This measure of possessions is included as a proxy for parental wealth.
3. Since the PISA 2003 assessment focused primarily on performance in mathematics, all detailed analysis has been performed with respect to performance on this sub-scale, rather than with respect to total performance.
4. The index of inclusion is calculated as the proportion of ESCS variance within schools. See Chapter 4 and Table 4.5, OECD (2004a).
5. In early 2005 approximately 3% of secondary school students and 4% of primary school pupils were receiving a stipend averaging SKK 919 (approximately EUR 24) per month for those at secondary school and SKK 300 (EUR 8) per month for those at primary school. To be eligible a pupil must be from a disadvantaged family and achieve good study results. A larger proportion of pupils (just over 10%) received support for study aids and food.

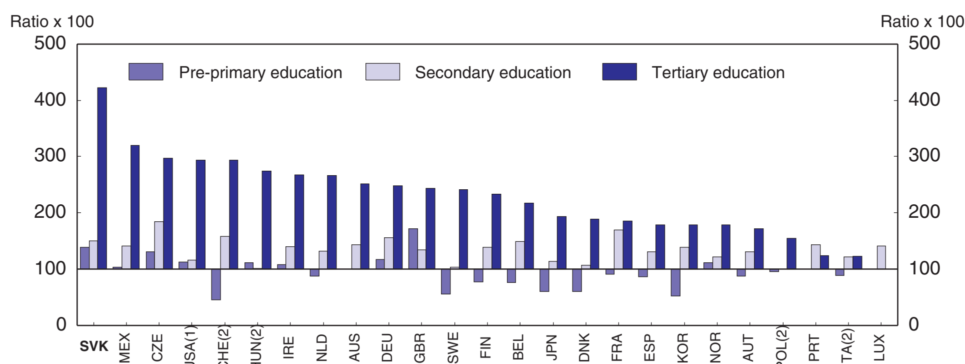
tertiary level as at the primary level, this ratio was 4.2 for Slovakia in 2001. Total expenditure on education is also very low. In 2001 expenditure on primary, secondary and post-secondary non-tertiary education was just 2.7% of GDP, compared to 3.8% in the OECD on average (and the only country with lower expenditure than Slovakia was Turkey with 2.5% of GDP).[4] The relatively low expenditure on education is also reflected in the poor remuneration of teachers (Figure 4.6). Although it is likely that rationalisation of class sizes etc would permit teachers' salaries to increase to some extent, teaching may remain a low status and poorly remunerated profession without more fundamental changes.

Although the unemployment rate for university graduates is much lower than the average, there is also a need to improve education outcomes at the tertiary level. The proportion of the population with a tertiary qualification is very low and has only begun to pick up very recently (see Figure 4.1 – bottom panel). There are also significant concerns about quality, with many graduates being employed in relatively low-skilled jobs. Indeed, Landesmann *et al.* (2004) show that, in comparison with the EU-15, the new member states have substituted low-educated with medium-educated workers in traditionally labour-intensive sectors.

One means to enhance quality is to encourage competition by permitting the entry of new high quality tertiary institutions. Another way is to raise students' expectations. It was hoped that the Tertiary Funding Bill, by permitting the introduction of partial tuition fees, would increase student demands for quality improvements. However, tensions within the

Figure 4.5. **Expenditure on educational institutions per student at various levels of education, 2001**

Primary education = 100



Note: A ratio of 400 for tertiary education means that expenditure per tertiary student is three times the level of expenditure per primary student.

1. Public and independent private institutions only.
2. Public institutions only.

Source: OECD, *Education at a Glance*, 2004.

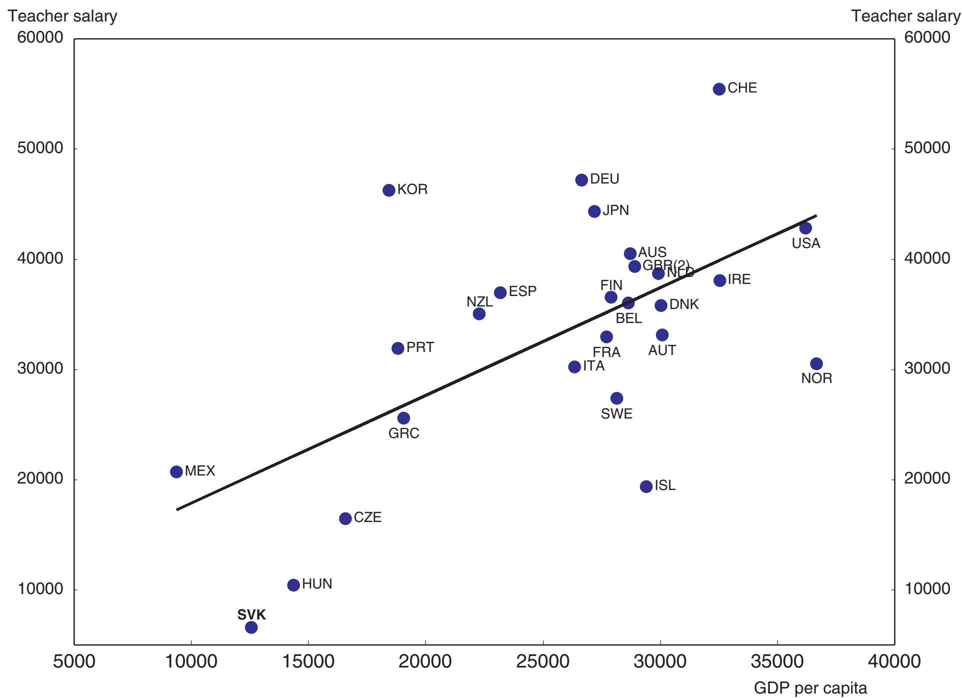
governing coalition led parliament to reject the Bill.[5] With this channel for motivating improvements in the quality of the universities now closed (for the present) it is even more important to promote quality improvements through the competition channel by facilitating the entry of new institutions, including from abroad. Competition could also be promoted by replacing regular budgetary allocations to universities with competitive research grants.

To date, the Accreditation Commission has rejected most new applications for accreditation, citing concerns about the quality of the proposed new degrees. While quality should indeed be the key criteria for accreditation, the Commission needs to guard against the risk of protecting the incumbents by imposing excessively high barriers to entry. It might be considered appropriate, in this light, to invite a larger proportion of international experts to participate in the work of the Accreditation Commission. The number of tertiary students has been increasing rapidly in recent years and is expected to continue strong growth. Thus, unless new institutions are established to provide additional capacity, there will be growing pressure on the existing providers.

Finally, given the relatively small number of people with tertiary qualifications, improved access of adults to life-long learning (LLL) opportunities is necessary. In the medium-term, LLL will help the poorly qualified to improve their employment prospects (both those with less than upper secondary education, and those who completed high school but who have not continued to study at a university). It may also promote more supply-driven employment (entrepreneurship etc) and increase the capacity of the less productive sectors to adopt more innovative practices. Over the longer term (as employment and tertiary participation rises) LLL will be useful as a means of lending flexibility to the human capital development process. It should also be an important element of the policy package for addressing the problem of exclusion faced by the Roma population (though discrimination appears to be another major factor). At present, there is inadequate attention being given to the LLL needs of adults in Slovakia, possibly because

Figure 4.6. **Teachers' salaries in lower secondary education, 2002**[1]

After 15 years, *versus* GDP per capita



1. Annual statutory teachers' salaries in public institutions and GDP per capita in equivalent US dollars converted using PPPs.
2. England.

Source: OECD, *Education at a Glance*, 2004.

of unclear lines of accountability. It would be useful for the authorities to consider how to strengthen the respective responsibilities of the Ministry of Education and the Ministry of Labour and Social Affairs for addressing the learning needs of adults.

Improving conditions for innovation in the business sector

Interpreted broadly, innovation refers not only to the extension of the applied knowledge frontier, but also to the successful implementation of new products and processes based on the pre-existing stock of knowledge.[6] In this sense, the innovative capacity of firms is an intrinsic part of the catching-up process in Slovakia. To date, Slovakia has made important productivity gains in the FDI-influenced sectors and in some other sectors where competition has been enhanced (such as retail). But other sectors continue to lag significantly behind the state of existing knowledge, both in terms of the implementation of new *products* and new *processes*. Policies that raise the capacity of the economy to absorb the existing stock of knowledge will boost productivity and at the same time increase the probability of employment-rich growth. Raising the *economy-wide* level of human capital is clearly a vital ingredient. But other business sector policies are also important.

The government's Lisbon agenda – which identifies innovation policy as one of the government's key long-term priorities – defines innovation as the effective combination of science, research and innovations. To ensure long-term development of quality scientific

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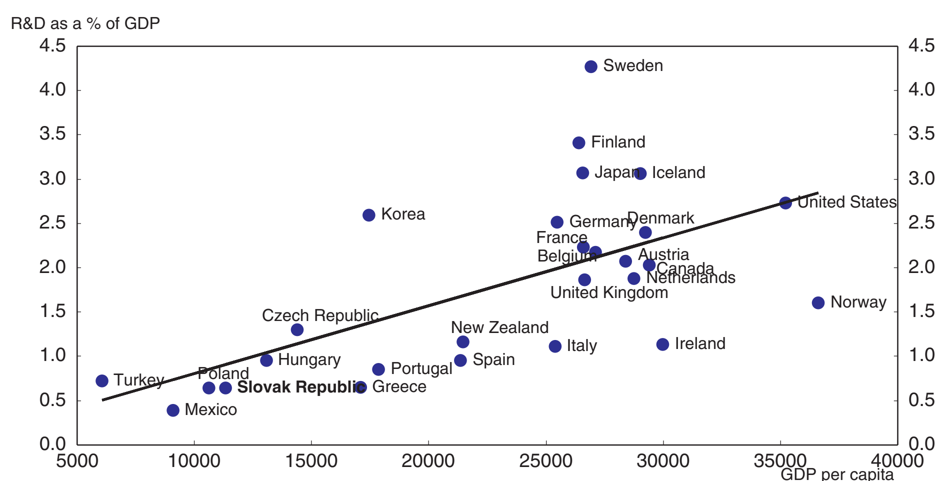
potential the government has proposed a number of innovation policy initiatives, including the following:

- To provide additional financial support for leading Slovak scientists and research institutions as well as for PhD students and PhD graduates.
- To identify 2 or 3 priority areas in which the state will create appropriate conditions for high quality research.
- To introduce a system for public co-financing of private sector research, development and innovations.
- To create a public instrument to improve access to venture capital for innovative firms in the early stages of their operation.

These goals are commendable given the relatively low ranking of Slovakia in R&D spending and in innovation outcomes (see Figure 4.7 and Table 4.1). Nevertheless, the

Figure 4.7. **R&D spending and income levels**



Source: OECD, *Main Science and Technology Indicators* (2004).

Table 4.1. **Key science and technology indicators**

	Gross expenditure on R&D, 2002 (% of GDP)	Business R&D expenditure, 2002 (% of industry value added)	New science and engineering PhDs, 2002 (% of total new degrees)	Number of triadic patent applications,[1] 2000 (per million population)	Science and engineering articles, 2001 (per million population)
Czech Republic	1.3	1.1	0.4	0.9	256
Hungary	1.0	0.6	0.2	3.3	243
Poland	0.6	0.2	0.3	0.3	147
Slovakia	**0.6**	**0.5**	**0.3**	**0.8**	**177**
EU 15	1.9	1.8	0.7	36.2	556

1. Patents filed at the European patent office (EPO), the US patent and trademark office (USPTO) and the Japan Patent Office (JPO).

Source: OECD *Science, Technology and Industry Outlook* 2004.

environment of fiscal consolidation requires that all public expenditures be very carefully vetted to ensure that they provide the best value for money possible. In this context, it is interesting to note that although richer economies tend to invest more in R&D than poorer countries, Figure 4.7 indicates that there is a large variation in R&D spending among the richer countries that isn't necessarily related to their GDP per capita. For example, both Australia (not shown in the chart) and Ireland have experienced very high rates of economic growth, despite relatively low levels of R&D investment. One explanation is that these two countries have benefited from a very rapid uptake of new technologies developed elsewhere, rather than focusing on extending the innovation frontier. That said, it is also known that R&D itself can raise "absorptive capacities" and thus facilitate the adoption of technologies developed elsewhere.

In light of this broader concept of innovation, the government may wish to consider two modifications to the Lisbon initiatives. First, education spending at the primary and secondary levels, as well as life-long learning, may be just as critical to innovation success, as tertiary sector spending. Recent OECD research has highlighted that it is at least as important to ask whether optimal use is being made of the *existing* stock of knowledge as it is to ask how that stock can be expanded (see Box 4.2). This principle may be particularly relevant for countries (such as Slovakia) that are further from the innovation frontier. Regarding the intention to provide addition support to Slovak PhD students, it should also be noted that Slovakia already allocates an unusually high proportion of total education spending towards the tertiary sector (see Figure 4.5). It is also well documented that there is a high *personal* return to tertiary level education, suggesting that tuition fees should be introduced and that direct financial support should be limited and replaced with student loans. Moreover, in order to attract and retain high quality scientists in the context of the European and global labour markets, employment conditions and scientific facilities may be at least as important as PhD support.[7]

Second, the government's intention to identify 2 or 3 priority areas in which the state will create appropriate conditions for high quality research should be approached carefully. While a small economy may require specialisation, so as to achieve critical mass in research, picking winners may not be the best way to achieve this. There are many success stories of governments that have "picked winners", but there are also many failures and there remains little consensus in the economics literature about the success of industrial policies. Moreover, there are questions about whether Slovakia's public institutions are sufficiently high quality to ensure good industrial policy. Rodrik (2004), a supporter of industrial policy, argues that programmes to co-finance private sector research and development work best when there is an interactive process of strategic co-operation between the private and public sectors which, on the one hand, serves to elicit information on business opportunities and constraints, and on the other hand, generates policy initiatives in response. But in order to do this, he emphasises that high quality public institutions are required. He also argues that governments need to have a well-defined strategy for cutting their losses if success is not forthcoming. Thus, the government should exercise considerable caution in developing their industrial policies and ensure that the focus is not only on facilitating new private sector research and development but also on facilitating the dissemination of global knowledge in a wider range of manufacturing and service sectors. Some specific goals for the government may include the following:

- Ensure coherence in innovation policy across government departments.
- Make all funding contestable.

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Box 4.2. Policies to encourage innovation in the business sector[1]

The importance of innovation for growth and per capita GDP has been well documented in OECD research.[2] However, the most effective combination of policies, institutions, and framework factors that support innovation may differ across countries and over time. It is at least as important to ask whether optimal use is being made of the existing stock of knowledge as it is to ask how that stock can be expanded.

An important justification for public policy interventions in the innovation process is that competitors and follow-on innovators can benefit from new knowledge generated by the original innovator, thus resulting in a less than socially optimal level of private innovation expenditure. In addition, imperfections in financial markets, the unavailability of skilled researchers, or simply a lack of awareness about research advances in other sectors and countries, can mean that worthwhile innovation expenditures will be foregone in the absence of policy intervention.

However, policy interventions are not always successful, and can involve substantial economic costs and deadweight losses. Analysis by the OECD has pointed to the following conclusions regarding which policies are most effective:

- There is a clear role for framework conditions, framework policies, and specific science policies in supporting innovation. These include: pro-competitive product market regulations; stable macroeconomic conditions and low real interest rates; and the availability of internal and external finance.
- Policies that help to make knowledge more accessible can be very effective. *E.g.* policies that facilitate access to the foreign knowledge stock and policies that encourage greater collaboration between the business and non-business sectors. Such policies not only help to stimulate new innovative activities, but also help to maximise the benefits to be gained from the existing stock of knowledge.
- Tax relief for private R&D is found to provide a stronger stimulus, on average, than direct government subsidies. However, account should also be taken of the potential costs of any fiscal offsets that might be needed if fiscal incentives for R&D were to be raised significantly. For countries with a very transparent tax system, such as Slovakia, such policies may also prompt the introduction of other tax exemptions, thus leading to an erosion of the tax base and overall tax system efficiency.
- It is important to take account of potential policy trade-offs in evaluating the effectiveness of specific policies. Some policies that offer benefits for innovation also have costs that could adversely affect innovation. For example, expanding research activities in the public sector may push up the wage costs of researchers in the business sector.

The OECD analysis also highlights the importance for innovation performance of policies that affect the location of internationally mobile researchers and research activities. An improved understanding of location choices would assist countries in developing appropriate policies.

1. This box draws on material published in Jaumotte and Pain (2005).
2. OECD (2001) and OECD (2003a).

- Maximise synergies by encouraging different actors to interact with one-another. *E.g.* by providing businesses with innovation vouchers, with which they can purchases services from other companies.

- Design innovation support programmes in a way that *ensures* that good quality evaluation takes place. In the event of poor outcomes, the programme should be changed or discontinued.

The following sections focus on and recommend policies to encourage business innovation through improving firm's access to capital, developing an information society and improving the general business environment.

Improving access to capital

Although survey results (*e.g.* PAS) suggest that large companies are not constrained by access to finance, this predominantly reflects the fact that many of these firms have access to capital from a foreign parent company. Lower interest rates and easier liquidity conditions in the banking sector have also improved access for firms with sufficient collateral. In contrast, access to finance remains a significant constraint for SMEs. Since both equity finance and venture capital remain relatively limited (see below), internal finance dominates as the primary source of capital for Slovak firms, while domestic and foreign loans make up the second most important source.

Equity finance

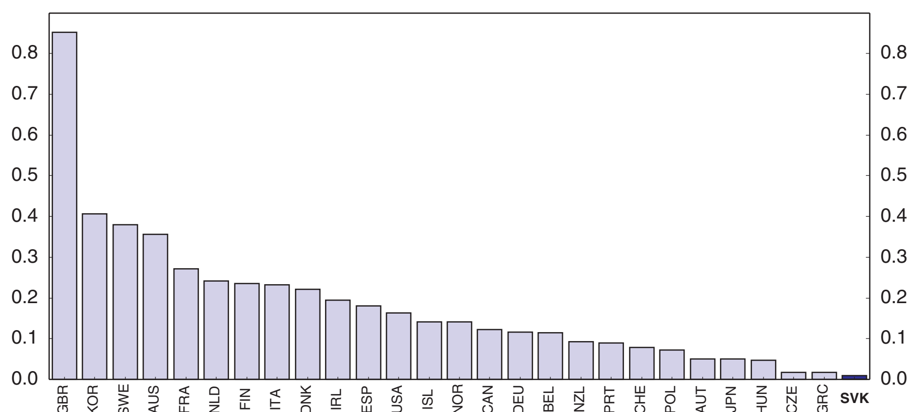
The trend towards *decreased* listing activity on the Bratislava stock exchange (BCPB) continued in 2004 with the total number of listed companies remaining stable at around 14, down from a high of 21 in 1996. Thanks to a substantial appreciation of the existing listed issues, total market capitalisation of listed equity securities rose, but at just 5.2% of GDP at the end of 2004 it funds only a small proportion of total investment.

There are a number of reasons for low equity market capitalisation. A key reason is a relative shortage of candidate firms. Most large state owned assets (banks, utilities, etc.) were privatised through international public tenders, rather than *via* sale on the stock exchange, and most large manufacturing firms are foreign owned. In addition, the minimum size for market capitalisation is relatively high compared with some Western stock exchanges, and overhead costs are comparable, despite lower liquidity and inferior access to foreign investors. Thus, the BCPB has become trapped in a low liquidity and high fee cycle with many Slovak-owned firms choosing to cross-list on foreign stock exchanges, which has led to a reduction of liquidity for the BCPB, thus further reducing the chances of this exchange to develop successfully.

In recognition of these problems, the government is advocating the formation of an integrated Central European stock market through a merger or close interconnection of the main regional stock exchanges (especially Bratislava, Prague, Budapest, Warsaw and Vienna). This would enable the region to benefit from economies of scale and the harmonisation of trading rules and cost structures. Since foreign investors put a high value on transparency, high quality regulatory requirements may also help to attract capital. However, there is a risk that if restricted to only a small number of central European countries, total capitalisation and liquidity may remain relatively low, limiting the attractiveness of the exchange to both issuers and foreign investors. In contrast, linkages with larger exchanges may facilitate access to non-regional capital markets. Thus an alternative proposed solution is for all of the CEE stock exchanges to jointly develop a CEE platform at the stock exchange of one western country.[8]

Figure 4.8. **Venture capital investments**

As per cent of GDP, 2003[1]



1. Or latest year available.

Source: OECD, Venture capital database.

Venture capital

For innovating firms that are too small to publicly list or obtain bank finance, private equity or venture capital is the major external source of finance. But the availability of such funds is very limited (Figure 4.8).[9]

One explanation is provided by the European private equity and venture capital association (EVCA) who rank Slovakia bottom out of 21 European countries in terms of the tax and legal environment faced by the supply-side of private equity (*i.e.* the investors) and the demand-side (*i.e.* the entrepreneurs).[10] Slovakia's aggregate score reflects a combination of areas in which the environment is very favourable (especially corporate and individual tax rates) and others that are rated as very unfavourable. Some of the main areas where the EVCA evaluated Slovakia as having an unfavourable environment for equity and venture capital were as follows:

- *Merger regulation*: The notification of a merger (not captured by the EU merger regulation thresholds) is mandatory and there is an obligation to suspend a deal until the responsible authorities take a decision.
- *Regulation of pension funds and insurance companies*: Pension funds and insurance companies are not allowed to invest in private equity and venture capital.
- *Speed of bankruptcy and insolvency*: In Slovakia it takes on average 2-4 years (756 business days) between the declaration of bankruptcy and the closure of proceedings, above the average of 566 business days across 21 European OECD countries, and much higher than in the best-practice countries (*e.g.*, 252 business days in the UK).

The EVCA also promotes reduced tax rates for SME firms. Indeed, as discussed in Box 1.1, the 19% capital gains tax distorts the choice of investment financing for domestic firms, who must pay more tax on the profits generated from an investment financed by retained earnings than if financed by debt or new share issues. This is a significant

disincentive for innovative activity by small domestic firms who do not have ready access to debt and equity markets.[11]

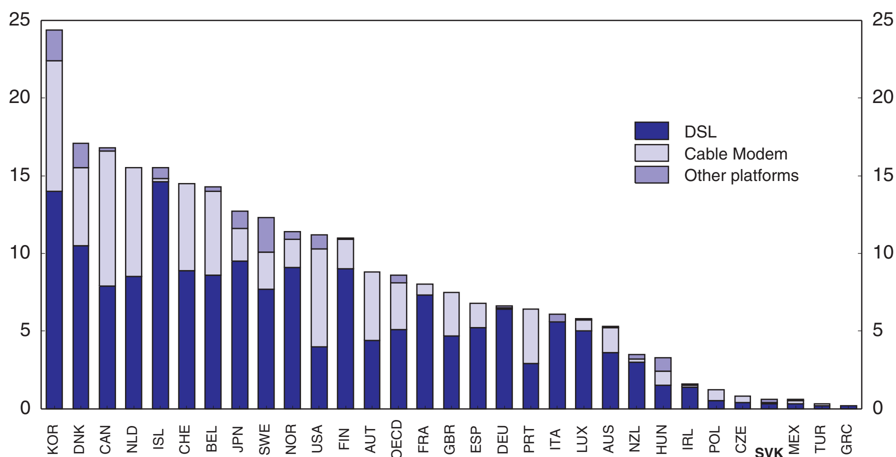
In conclusion, innovation activity in small firms would benefit from reforms in three main priority areas. First, the capital gains tax should be abolished or applied only to windfall capital gains, so as not to discourage investment from retained earnings. Second, as discussed in more detail below, SMEs would benefit from further improvements in the business environment (particularly in the judicial sector). Third, the supply-side of the venture funds and private equity industry could be significantly boosted by a relaxation of the current rules preventing private pension funds from investing in such projects.[12] However, given the additional volatility to returns that such investments would imply, the right to invest in such funds should be restricted to the *growth fund* (and perhaps, to a lesser extent, the *balanced fund*). Thus, risk-averse individuals could easily avoid exposure to such funds by choosing to invest their pensions in the balanced or *conservative fund* instead.

Developing an information society

An important part of improving innovation capacity and maintaining high productivity growth is the use of information and communication technology. As in other catching-up economies, most emphasis on Information and Communication Technology (ICT) to date in Slovakia has been placed on building and using the telecommunications infrastructure. Thanks to important liberalisation steps, there have been significant drops in telecommunication tariffs in recent years, although service costs still remain higher than the OECD average. In terms of the ICT infrastructure, the greatest weakness now appears to be in broadband networks and applications (Figure 4.9).

Figure 4.9. **Broadband subscribers per 100 inhabitants in OECD countries**

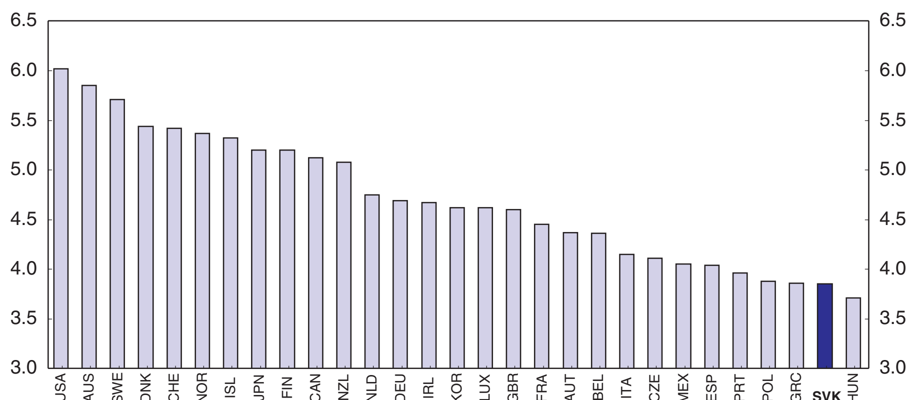
June 2004



Source: OECD *Communications Outlook* 2005.

Business sector use of ICT has also lagged that in other OECD economies. Based on factors such as the level of business-to-business and business-to-consumer e-commerce, the use of ICTs for activities like marketing, and levels of on-line transactions, Slovakia has

Figure 4.10. **Business usage of ICTs**



Note: Chart indicates the score on the business usage sub-index of the World Economic Forum Networked Readiness index 2003-04. Business usage is determinated by factors such as the level of B2B and B2C e-commerce, the use of ICTs for activities like marketing, and levels of on-line transactions.

Source: Dutta, Lanvin and Pua (2004).

been ranked by the World Economic Forum as 45th out of 102 countries worldwide and 28th out of the 29 OECD countries for which the WEF provides this data (Figure 4.10).

Better use of ICTs is therefore an obvious channel by which to raise the growth potential of the economy. OECD sector- and firm-level studies concerning the economic impact of ICTs have found conclusive evidence of the benefits of ICTs and demonstrated that the productivity gains from the use of e-business processes are greater than those that result from the use of e-commerce.[13] They show that the use of computer networks is associated with significantly higher total factor productivity, improved procurement, and efficiency of markets as well as firms' more efficient internal operation.[14] Consequently, the service sectors that use ICTs most intensively (wholesale and retail trade, finance, insurance and business services) are also the sectors that have contributed most to aggregate OECD productivity gains over the 1990s. Although detailed analysis on ICT use in different sectors of the Slovak economy is not available, it is likely that this is already the case in Slovakia also.

However, encouraging better use of ICTs is not easy. The experiences of other OECD countries show that the availability of computers and businesses' Internet access does not readily translate into e-commerce or more sophisticated e-business applications. Spending on ICT does not automatically lead to their effective use, nor does business use of ICTs directly translate into significant positive business benefits and positive economic impacts.[15] Consequently, business managers and policy makers who devise e-business policies need a concrete understanding of which type of ICT deployment (hardware, software, etc.) and complementary ingredients (skills, organisational change) lead to the significant business impact of ICTs which they seek. A number of specific policy recommendations stemming from OECD work in this field are summarised in Box 4.3.

Computer training opportunities are also crucial. However, the introduction of ICT equipment in schools is not sufficient to incorporate ICTs into the learning process if teachers do not possess the appropriate skills. Thus, great care should be taken to ensure that budgets to promote ICT learning are spent effectively.

Box 4.3. **ICT lessons from other OECD countries***

While only a few OECD countries have identified the ICT sector as an engine of economic growth in its own right, all have noted the positive impacts of ICTs when combined with enhanced skills and organisation change. In many countries this has been reflected in the organisational structure of policy-making bodies, with links between economic development and technology agencies being strengthened. The main challenge is to develop and deliver policies that enhance the dynamism of the ICT sector and the impacts of ICT use across the economy within the broader framework of general economic strategies for growth and employment.

Based on other OECD countries' experiences, the main lessons for ICT policy are as follows:

- Ensure a competitive market for telecommunication services and broadband.
- Recognise the primary role of the private sector in the expansion of the coverage and use of broadband, with complementary government initiatives that take care not to distort the market.
- Ensure that policy and regulations are technologically neutral among competing and developing technologies to encourage interoperability, innovation and to expand choice.
- To promote take-up and effective use of broadband services, use supply-based approaches to encourage infrastructure and service provision together with demand-based approaches, such as demand aggregation in sparsely populated areas.
- Facilitate more widespread uptake and use of complex ICT and e-business applications by implementing appropriate regulatory frameworks and technological developments (including certification, authentication, electronic signatures and online payment systems) that enable online processes and transactions. The necessary trust and security in such systems requires effective enforcement of privacy and consumer protection, and compatibility with international practices and regulations.
- Where the need exists, and without pre-empting private initiatives or inhibiting competition, complement private investment with public financial assistance to expand coverage for under-served groups and remote areas.
- Expand SMEs' use of low-cost online dispute resolution mechanisms, in conjunction with business and consumers groups. Seek to take part in international initiatives that strengthen cross-border co-operation between stakeholders.
- Expand the commercial use of information about the public sector, education and health care. E-government services to enterprises should be used as a tool to improve efficiency of government interaction and operations with SMEs.
- Reduce ICT skill impediments to the growth of SMEs. Strengthen government and private roles to improve basic ICT skills and develop frameworks to encourage higher-level ICT and e-business skills formation (marketing, organisational, security, trust and management skills in addition to ICT skills) in conjunction with education institutes, business and individuals.
- Regularly assess the market-driven availability and diffusion of broadband services to determine whether government initiatives are appropriate and how they should be structured.

* The lessons in this box are summarised from the *OECD Information Technology Outlook*, 2004.

Improving the general business environment

While regulation is essential for the good working of market economies, it is important to ensure that it is not so intrusive that it stifles market mechanisms. The Slovak government has made very significant progress in recent years to reduce unnecessary administrative burdens on businesses and to enhance competition in product markets. The 2003 tax reform and changes to the labour code also dramatically improved the underlying business environment, and FDI has responded well to these improvements.

In other areas – particularly those relating to the legal system, corruption, and several aspects of the regulatory environment – significant reforms are still required. In domestically-oriented sectors, where there is significant potential for the creation of low-skilled jobs, regulatory policy is likely to be a particularly important influence on the extent of new enterprise formation and their success. Indeed, Scarpetta (2005) finds that the entry of small and medium sized firms is highest in business environments with low start-up costs, high quality regulations and a low level of corruption.[16] Moreover, Scarpetta's survival analysis reveals that a low quality regulatory environment, high corruption, weak property rights or high labour adjustment costs are all associated with higher business failure rates, after controlling for such factors as sectoral demand and technology.

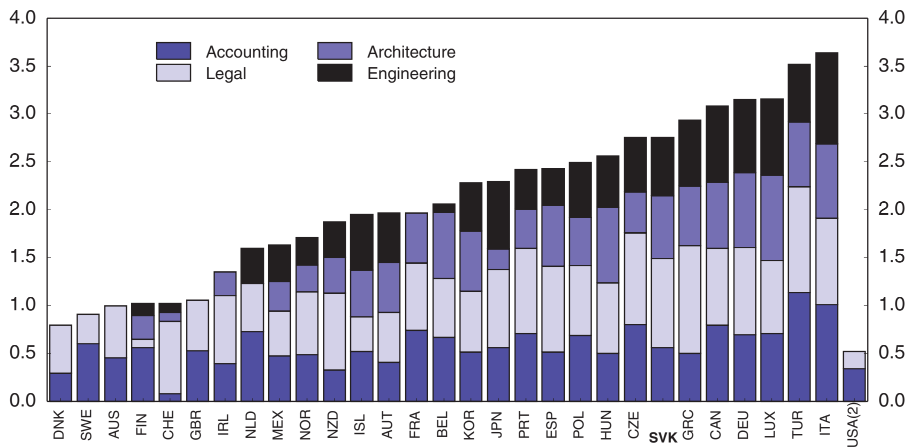
In this context, it is worth noting that responsibility for a significant number of regulations has now shifted to the municipal governments. This raises the risk that some sectors will be excessively regulated at the local government level, particularly since regulations at this level of government tend to be much less carefully scrutinised by international bodies. Thus the government may wish to promote a single national playing field for business by ensuring that as little business sector regulation as possible is assigned to the regional and municipal levels of government. Municipal governments also need to be careful to ensure that regulations serve not as a hindrance, but rather as a spur to overall wealth creation. This topic is discussed further in Chapter 5.

Reducing regulation in the sphere of professional services

Professional services (lawyers, notaries, engineers, architects, accountants and pharmacists) have a significant role to play in improving the competitiveness of the Slovak economy, as they are an important input for the economy and business more general, and their quality and competitiveness have spill-over effects on the competitiveness of the whole economy. They are also of direct importance for consumers.

In Slovakia, excessive regulation of lawyers has posed particularly significant problems, with the World Bank (2003) arguing that the high costs and low quality of legal services made justice a privilege of the rich. Indeed, Figure 4.11 indicates that Slovakia was the second most heavily regulated OECD country for legal services in 2003 (after the Czech Republic) and the most heavily regulated country for the services of notaries (not shown in chart – since this profession is non-existent in several EC countries). However, a new Act on Advocacy which came into force just prior to Slovakia's entry into the EU has improved the situation considerably by relaxing the barriers to entry for foreign lawyers, by removing restrictions on lawyers forming certain types of business associations, and by merging the professions of attorney and commercial lawyer (these changes are not captured in Figure 4.11). However, regulation remains excessive in a number of areas (such as continued price regulation in both the legal and notary professions).

Figure 4.11. **Regulation of professional services, 2003**[1]



1. The scale of the indicator is 0-6 from the least to the most restrictive.
2. Data on the regulation of architecture and engineering professions is not currently supplied for the United States.

Source: OECD, Product market regulation database.

There is also significant scope to reduce the intensity of regulation for the other professions (pharmacists, architects, engineers and accountants). For example, Slovakia is the only EU country which regulates the price of accountancy services. EC (2004) notes that Slovakia is currently reviewing regulations to allow sale of non-prescription medicines in supermarkets and petrol stations.

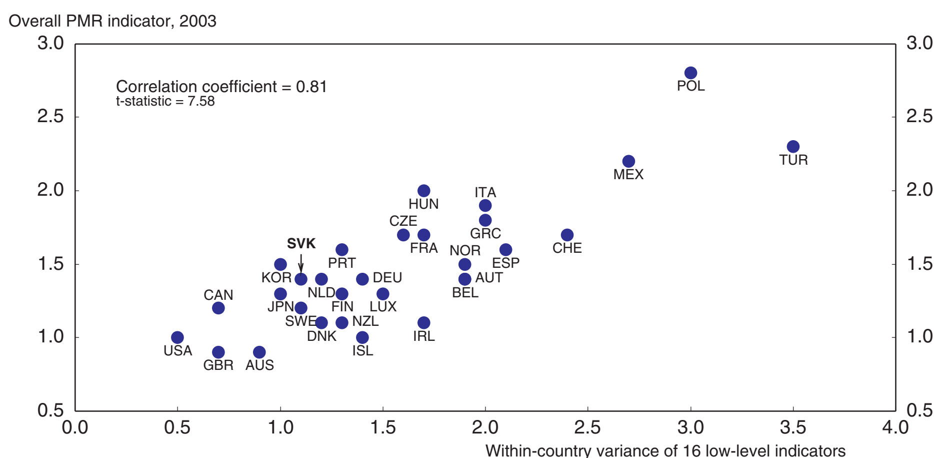
Further improving product market competition

Following very considerable reforms, Slovakia's regulatory policy environment is now significantly less restrictive than that of the other Visegrad countries in terms of its overall score on the OECD Product Market Regulation (PMR) indicator (see Figure 4.12). In addition, regulatory policy settings are quite consistent, in the sense that there is relatively little within-country variance among the low-level indicators.[17] Policy consistency is a very positive feature, since it minimises the risk that the potential benefits of product market reforms in one area may be reduced by ongoing restrictions in other areas.

The very significant progress that Slovakia has made in recent years has lifted Slovakia from a highly regulated economy to one that now ranks roughly in the middle of the OECD. However, in light of the government's ambitious agenda, the regulatory benchmark should now be the regulatory policy settings of the best-practise countries, rather than those of the average OECD economy, where regulation tends to remain excessive. From this perspective the OECD's PMR database[18] suggests the following areas for further reform:

- *Further reduce barriers to entrepreneurship*: A significant improvement in the business environment was realised with the introduction in February 2004 of a new business register. The new procedures make it possible to register a new business in 15 days, and significantly increase transparency by cutting down on the role of bureaucrats. As a result, the number of pending registration cases has dropped dramatically and the number of new applications per month has increased significantly (Figure 4.13). However, there are many other administrative burdens for entrepreneurs that need to be

Figure 4.12. **The relationship between the level of overall regulation and policy consistency in OECD countries**[1]

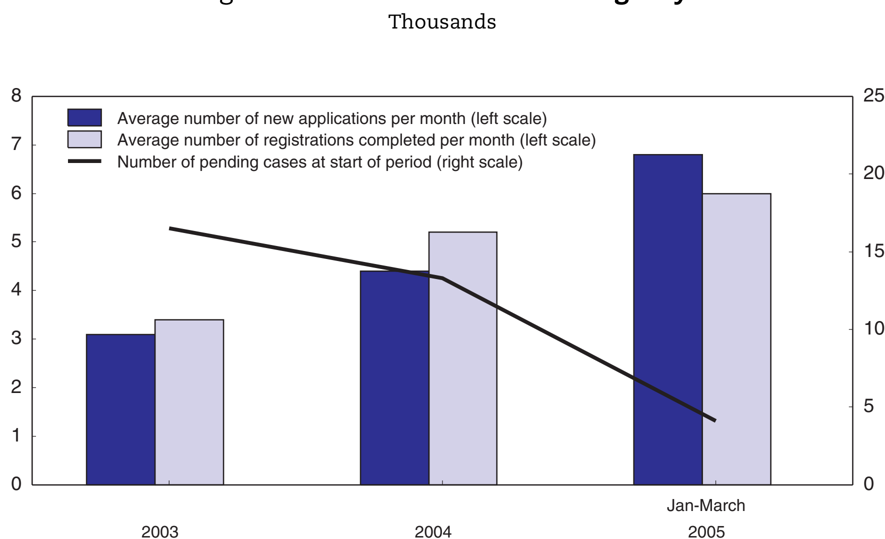


1. The scale of the indicator is 0-6 from least to most restrictive of competition.

Source: OECD, Product market regulation database.

Figure 4.13. **A better business registry**

Thousands



Source: Ministry of Justice.

significantly further reduced in order for Slovakia to approach the regulations of the best-practice countries such as the United Kingdom and the United States. The government's Lisbon strategy proposes carrying out a thorough procedural audit with the objective of simplifying the relationship between the public administration authorities and firms. A timetable for completing the audit and subsequent improvements would be welcome.

- *Reduce state control of private business operations*: OECD experience shows that competition is often restricted in industries in which the state has ownership involvement. It is therefore a very positive sign that Slovakia has continued with its privatisation agenda, including the sale of a majority 62% stake in the national air carrier Slovenske Aerolinie to Austrian Airlines in late 2004 and the sale of a 66% stake in the monopoly electricity producer Slovenske Elektrarne (SE) to Italian ENEL in February 2005. The government has also recently announced that the liberalisation of the postal market (in which the state-owned Slovak Post has a monopoly) will begin in 2006, earlier than previously expected. However, a more rapid privatisation of Slovak Telecom would be welcome. In other sectors (including railways) the state holds a controlling interest in privately owned firms *via* special voting rights (golden shares). In order to foster a stronger market environment, the use of special voting rights should be limited in general and, where national security concerns are involved, such voting rights should be replaced with arm's length regulation.
- *Improve enforcement of anti-competitive behaviour*: Significant progress has been made in the process of privatisation and encouraging competition in network industries, yet prices remain high in some sectors, notably in energy and telecommunications (Figure 4.14). The market regulators have found evidence of anti-competitive behaviour in a number of cases. For example, the fixed-line operator Slovak Telecom (ST) was found to have restricted competition in the market for fixed-line services. Although new legislation to regulate the telecommunications sector was introduced in January 2004 the government has recognised that it is not sufficient and has identified the unbundling of local loops, interconnection of networks, carrier selection and number transferability as areas requiring more effective regulation. Another problem is that the Transport Ministry, which exercises authority over the regulatory body (the Telecommunications Office), also holds a 34% ownership stake in ST, suggesting a possible conflict of interest.
- Questions have also been raised about the effectiveness of the regulatory bodies. In at least one case of suspected over-pricing behaviour (at the oil refinery Slovnaft), the Ministry of Finance stepped in to investigate price setting policies. Ideally the government should ensure that the formal regulatory bodies are vested with sufficient resources and power to undertake this role themselves. Similarly, price developments in network services should be followed closely and the regulatory framework used to restrict anti-competitive behaviour.

The professional services and PMR indicators discussed above are unique in that they only record "objective" data about rules and regulations, rather than "subjective" assessments based on opinion surveys. This allows explicit policy settings in Slovakia to be contrasted with those in other OECD countries to identify strengths and weaknesses. However, good policy settings will only have beneficial effects on economy-wide productivity and GDP per capita if they are well implemented in practice. Thus, the legal system, the efficiency of the public sector, and the role of the competition enforcement authorities play a crucial role in ensuring a strong link between good regulatory policy, and good economic outcomes. Opinion survey data can provide a useful way to illustrate progress on these more subjective factors.

The World Economic Forum (WEF) executive opinion survey canvasses the views of business executives in 104 countries about the factors that they perceive to be obstacles to growth.[19] The survey results for Slovakia are consistent with the picture of a country mid-

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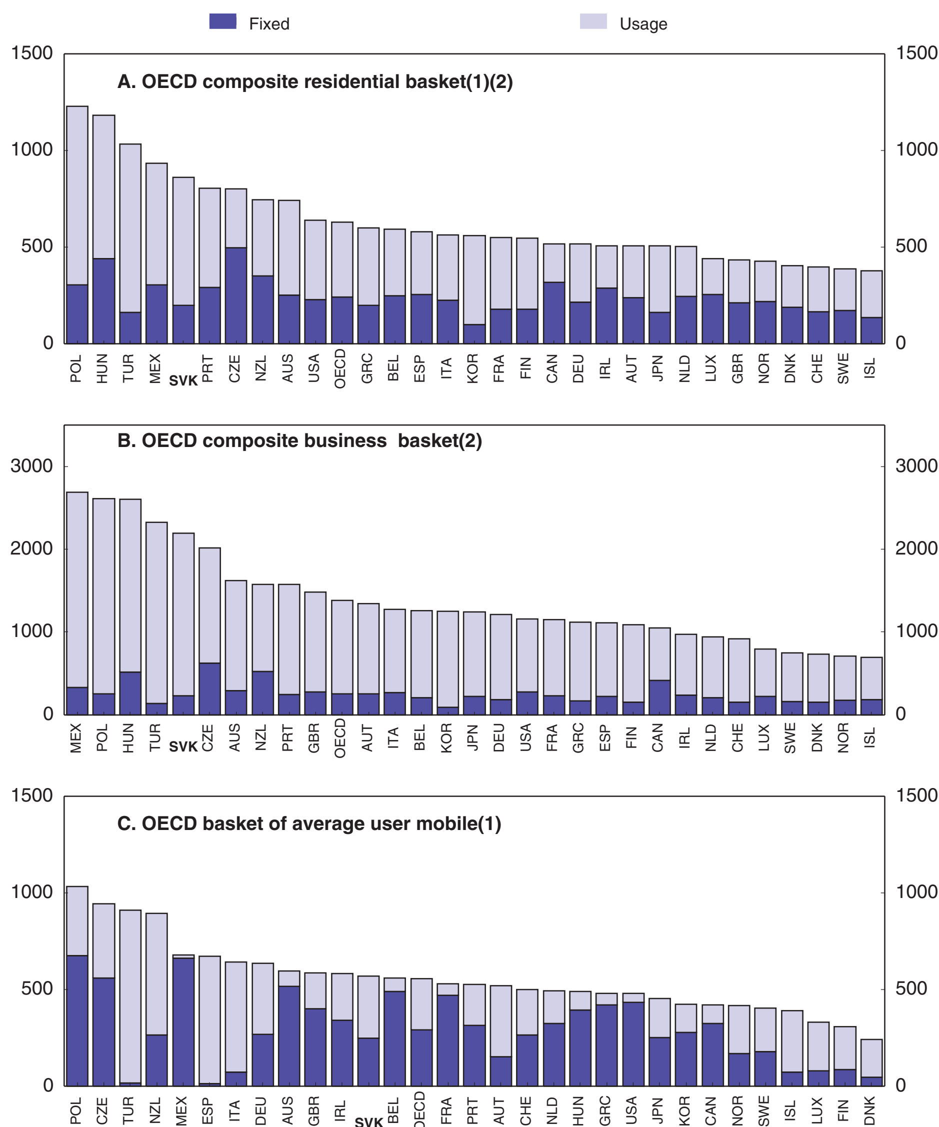
Figure 4.14. **Telecommunication tariffs**

August 2004, USD PPP



1. VAT included.
2. Calls to Mobile Networks and international calls included.

Source: OECD, Telecommunication Database 2004.

way through its reform process. In those areas where Slovakia has recently introduced significant new policies – taxation, labour market regulation, business registration procedures, foreign ownership – Slovakia tends to rank in the top half or even the top 20% of countries (see top panel of Table 4.2). But in a number of other areas – most notably those related to corruption and the effectiveness of the legal system – Slovakia tends to ranks in the bottom third of the 104 countries and close to the bottom of the OECD (see bottom panel of Table 4.2).

Table 4.2. **Perceptions of the Slovak business environment, 2004**

		Rank/104	OECD rank/30
Items on which Slovakia scores particularly well			
1	Extent of red tape (time spent negotiating with government officials)	13	7
2	Extent and effect of taxation	8	3
3	Efficiency of the tax system	14	4
4	Administrative burdens for start ups	29	15
5	Flexibility of hiring and firing practices	21	7
6	Efficacy of corporate boards	15	13
7	Flexibility of wage determination	25	6
8	Relationship between pay and productivity	8	4
9	Foreign ownership restrictions	5	4
Items on which Slovakia scores particularly poorly			
10	Effectiveness of bankruptcy law	66	27
11	Judicial independence	62	27
12	Efficiency of legal framework	60	25
13	Property rights	55	25
14	Wastefulness of government spending	77	26
15	Transparency of government policymaking	69	25
16	Favouritism in decisions of government officials	74	28
17	Effectiveness of law making bodies	64	25
18	Reliability of police services	60	27
19	Organised crime	70	27
20	Irregular payments in public contracts	86	30
21	Irregular payments in government policy making	79	29
22	Irregular payments in judicial decisions	76	30
23	Business costs of irregular payments	90	30
24	Diversion of public funds	59	26
25	Public trust of financial honesty of politicians	80	27
26	Prevalence of illegal political donations	87	29
27	Policy consequences of legal political donations	95	30
28	Extent of market dominance by a few enterprises	84	29
29	Effectiveness of antitrust policy	54	29
30	Regional disparities in quality of business environment	96	29
31	Strength of auditing and accounting standards	60	27

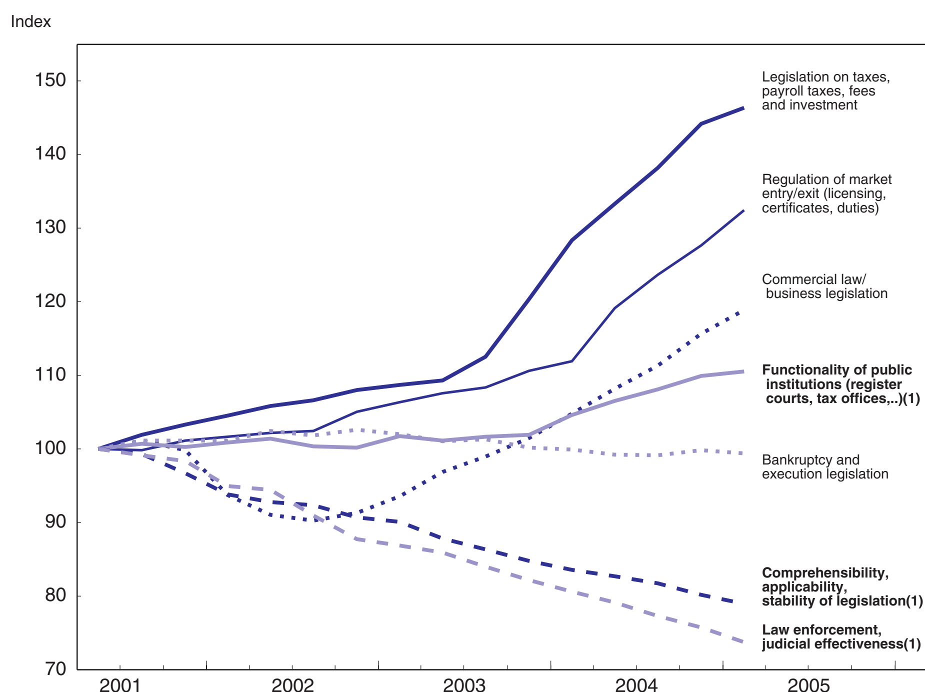
Note: Rank 1 is the best, rank 104 is the worst. The other OECD countries that intend to be rated similarly to Slovakia on these items are: Czech Republic, Italy, Mexico, Poland, Turkey.

Source: World Economic Forum, *Executive Opinion Survey* (2004).

Poor law enforcement and high corruption continues to inhibit efficient market mechanisms

This survey identifies the relatively ineffective legal system as one of the primary factors constraining more dynamic growth in the business sector, particularly for small domestic-owned firms, where there is the greatest potential for employment creation.[20] However, it is clear that gradual improvements are taking place. For example, a new computerised court management system, introduced in the early 2000s, has significantly improved the efficiency of managing and tracking court cases.[21] It has also reduced the potential for corruption by randomly assigning cases to judges. Numerous other new pieces of legislation have also been warmly received by the business community. Time series data on business opinion confirms that improvements in sentiment on particular aspects of the legislative environment have tended to coincide with new policies – *e.g.* commercial law, taxation, market entry, the efficiency of the business register (Figure 4.15).

Figure 4.15. **Perceived influence of legislative and regulatory framework on business**



Note: The indices shown are individual items from the aggregate Business Environment Index (BEI). Each quarter respondents are asked to indicate the extent to which each aspect of the legislative and regulatory environment has improved or deteriorated.

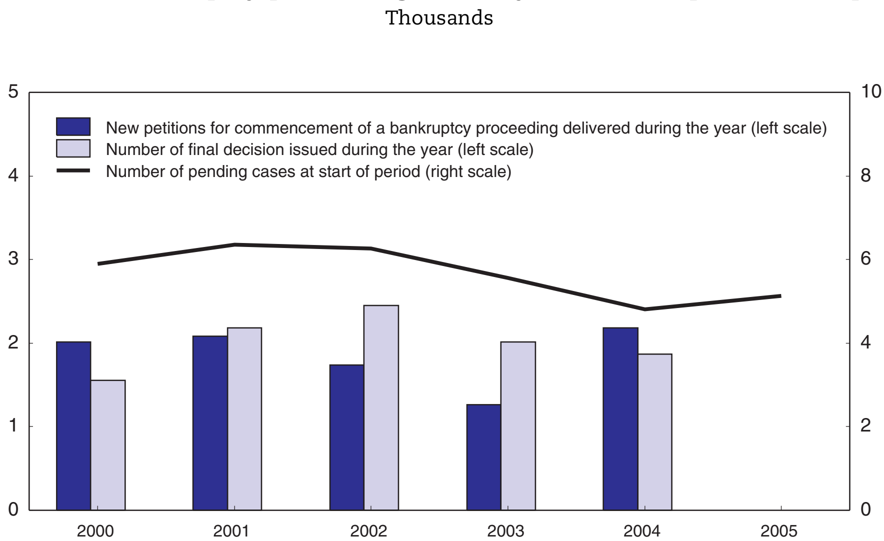
1. Items in bold refer to the quality of implementation. The others refer to the quality of legislation.

Source: The Business Alliance of Slovakia (PAS).

Although significant legislative problems persist, some of these are expected to improve over the next few years. For example, the effectiveness of current bankruptcy legislation is ranked poorly (see item number 10 in Table 4.2) and Figure 4.16 indicates that although the number of pending bankruptcy cases fell slightly in 2003 and 2004, they remain very high. However, the new Bankruptcy Act (adopted by parliament in December 2004) will come into enforce on 1 January 2006, and this is expected to significantly speed up bankruptcy proceedings.

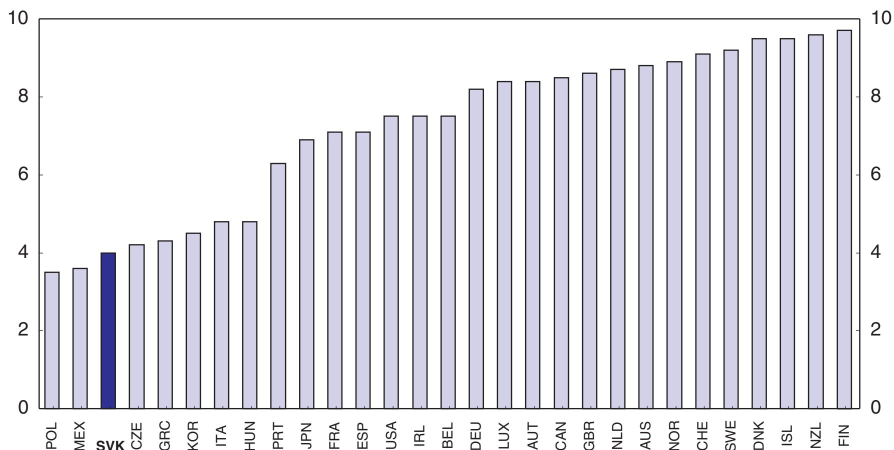
The most serious problem is that Slovakia continues to score very poorly on aspects of judicial *effectiveness*, and transparency of the law (see Table 4.2 and Figure 4.15). In recognition of these problems, a special government office devoted to the fight against corruption was set up in March 2003. As well as undertaking public education campaigns, significant new legislation has also been introduced. This includes new anti-corruption legislation, an amendment to the Code of Civil Procedures aimed at speeding up court proceedings; a new administrative procedures code and other legislative changes that minimise administrative processes involving subjectivity (*e.g.* the new property and business registers which streamline procedures and the planned possibility of exclusively electronic interactions with the administration). Perhaps in recognition of these steps, Transparency International's Corruption Perception Index recorded a small improvement

Figure 4.16. **Bankruptcy processing still very slow but expected to improve**
Thousands



Source: Ministry of Justice.

Figure 4.17. **Corruption perceptions index (CPI), 2004**



1. The scale of the index is 0 to 10 from the highest up to the lowest levels of perceived corruption.
Source: Transparency International.

in 2004 compared with 2003. However, according to this index Slovakia continues to rank third bottom in the OECD, after Poland and Mexico (Figure 4.17).

There are two complementary explanations for poor judicial effectiveness and the pervasiveness of corruption. Perhaps the most important of these is poor *implementation* of laws, many of which now conform to EU standards. One underlying problem, as identified by the World Bank (2003) may be excessive fragmentation of the management framework, resulting in unclear lines of accountability. The World Bank's proposed solution was to

strengthen the management capacity of the Ministry of Justice, with the Council of Judges of the Slovak Republic serving only as an advisory body. The Government should have the courage to continue pushing for such reform despite strong resistance from the Council of Judges itself. The World Bank also proposed the introduction of a performance management system to improve the effectiveness and efficiency of the courts, with performance indicators being refined over time as part of a continual and participatory process centred on the priorities of modernising the court system. The Ministry of Justice should also improve efforts to collect, analyse and disseminate comprehensive court statistics. If the Ministry believes that public perceptions have lagged behind actual improvements then statistics should be used to educate the public about improvements as they occur.

The second explanation for high perceived levels of corruption focuses on the perceived subversion of legal, regulatory, and political institutions by senior public servants and politicians (see items 20-21 and 24-27 in Table 4.2). As a transition country Slovakia has relatively limited experience with the rule-of-law, and a different historical culture of acceptance of corruption than in Western countries. Thus it is important to promote the practice of equality before the law at the highest levels in order to encourage cultural change and ensure the confidence of people in the efficiency of the market economy and pluralist democracy. Despite pre-election promises of reform, a law to reduce the legal immunity of members of Parliament was rejected by Parliament. Moreover, although the law for the forfeiture of illegally-acquired assets was recently adopted by Parliament, this law does not permit the forfeiture of illegally acquired assets held in the name of family members. Although these laws affect only a small number of people, they have important symbolic importance and failure to accept good practices may serve to inhibit cultural change. The immunity of judges should also be reduced; the ministry of Justice has prepared an amendment of the Constitution to this end, although it has not yet been approved by the Government. More generally, Transparency International has pointed out that nobody took responsibility for several corruption scandals in 2004 related to public procurement, the financing of political parties and conflicts of interest. At the sub-central government level, municipal governments have the power to appoint and dismiss their own internal audit officers, resulting (not surprisingly) in not a single case of corruption being successfully prosecuted at the municipal level. Thus there is a clear need for the government to pass the draft constitutional bill which extends the authority of the Supreme Audit Office to conduct checks on how regional and municipal governments handle public funds. This draft bill passed its first reading in Parliament in early July 2005.

While public procurement is not strictly part of the problems of the judicial system, it is considered to be a major problem and to embody the cultural acceptance of corruption. The responsibility for public procurement, at both the state and municipal levels, rests with the independent Public Procurement Office (UVO), whose most recent annual report indicated that around half of all public procurement contracts (worth roughly SKK 30 billion) were issued directly without a contract notice. A draft bill aimed at strengthening controls was recently rejected by the parliament, with Ministries arguing that pressures of time make direct selection more efficient than public tender. This may be true, but the time saved is likely to come at the cost of greater corruption and public money wastage. Indeed, a recent study by Transparency International identified serious problems in public procurement in regional governments, most of which were found to lack internal control methods for planning and evaluating public procurement.[22] Similar problems are expected to be found in state Ministries and municipal services (the subject of future reports). One positive result of the Transparency

International report is that some regional governments with poor rankings have been motivated to seek advice on how to implement better procedures for procurement. However, there is also a need for stricter regulation and monitoring by the UVO.

In summary, reform efforts by the Ministry of Justice indicate recognition that the legal environment is a key foundation for strong economic growth and that it provides a framework for all business activities. But the extent of improvement seems to have been held back by more limited reform motivation of the judiciary itself, and by a reluctance of politicians to set good standards of governance. Further improvements to legislation and stronger mechanisms to enforce new laws can be expected to significantly increase the speed of convergence of Slovak incomes to those of Western Europe.[23] In the shorter term it would also significantly assist in achieving many of the specific priorities of the government. For example, the earlier discussion about the promotion of greater ICT connectedness emphasised the importance of a sound judicial framework.

Box 4.4. **Recommendations to improve conditions for innovation and growth**

Education

1. Consider redistributing total education expenditure to give greater priority to primary and secondary education.
2. Introduce policies to achieve a more equitable distribution of primary and secondary school learning outcomes; *e.g.* reduce the extent of socio-economic segregation across schools and/or modify the school funding formula to provide additional per-pupil resources to socio-economically disadvantaged schools.
3. Reform the content of education with a new core curriculum and improved teaching methods and make information on the performance of different schools public.
4. Introduce tuition fees to the tertiary education sector to ensure that its expansion is sustainable.
5. Ensure that the Accreditation Commission does not impose excessively high barriers to entry. Consider increasing the proportion of international experts who participate in the work of the Commission.
6. Clarify responsibility and accountability for addressing the learning needs of adults.

Innovation

7. Re-orient innovation policy towards facilitating the dissemination of global knowledge in a wide range of manufacturing and service sectors. For example, remaining barriers to cross-border flows of technology and human capital should be reduced, and domestic firms should face the same tax incentives and business support opportunities as foreign firms.
8. Emphasise the *quality* of public institutions that are involved in any co-financing of private sector R&D.
9. Abolish the capital gains tax completely or apply it only to windfall capital gains, while exempting the capital gains which arise from re-invested profits.
10. Relax present restrictions on pension funds and insurance companies from investing in venture capital and private equity funds (at least for *growth* funds).

Box 4.4. **Recommendations to improve conditions for innovation and growth** *(cont.)*

11. Ensure that policy and regulations in the telecommunications industry are technologically neutral between existing infrastructure (whose majority owner is the state) and potentially new private sector technologies. Ensure that government initiatives to facilitate access (*e.g.* to broadband) do not distort the market.
12. Facilitate the ICT understanding of business managers and policy makers who devise e-business and e-government policies. Reduce ICT skill impediments to the growth of SMEs.
13. Further reduce the intensity of the regulation of the professional services to facilitate innovation in these sectors.
14. Carry out the proposed procedural audit of the relationship between the public administration authorities and firms, and provide a timetable for implementing proposed simplifications, including a fully electronic system for information exchange and public procurement.

Privatisation and competition

15. Continue to reduce state control of private business operations, by furthering the privatisation agenda and by making explicit the policy objectives concerning network infrastructures, in order to eliminate any need for political interference in their governance.
16. Ensure that the regulatory and competition authorities are vested with sufficient resources and power to be highly effective.

Judicial reform and corruption

17. Strengthen the management capacity and lines of accountability for judicial sector outcomes, using a performance management system to monitor improvements in the effectiveness and efficiency of the courts.
18. Introduce new procedures to reduce corruption in public procurement (*e.g.*, *via* e-tenders, international benchmarking of costs, etc.).
19. Adopt the draft Constitutional bill to extend the authority of the Supreme Audit Office to regional and municipal governments, and to reduce the immunity of members of Parliament and judges. Extend the coverage of the law permitting the forfeiture of illegally-acquired assets.

Notes

1. High productivity growth will also allow Slovakia to successfully compete with lower-cost labour in future EU accession countries (Romania, Ukraine, etc.).
2. Less than 5% of people older than 30 attended grammar school, compared with almost 20% of people now aged 20-24, and up to a third of current teenagers.
3. Given the uncertainty associated with estimating national performance, it is with 95% confidence that the rank of the country is within this range. Note also that the OECD average is pulled down by the particularly poor performance of Mexico and Turkey. So, relative to the EU average, Slovakia's performance is worse than that indicated in Figure 4.3.
4. See Table B2.1c, OECD (2004b).
5. The bill would have introduced tuition fees of around SKK 26 000 (around EUR 650) per student. However, in order to facilitate the passage of the bill, very generous increases in the level of support to students were also proposed, with up to one third of students being expected to receive a social stipend of up to SKK 6 500 per month (the level of the minimum wage), means tested according to each student's family income. At present around 10% of students receive a social

stipend of up to SKK 2 000 per month (around EUR 50). A new loan fund was also proposed to assist students to cover the cost of their tuition fees.

6. The OSLO manual on the measurement of innovation activity defines innovation as the *implementation* of new product and processes as well as well as the development of significant *improvements* to products and processes. An innovation has been implemented if it has been introduced onto the market (product innovation) or used within a production process (process innovation). Innovations involve a series of scientific, technological, organisation, financial and commercial activities. An innovating firm is one that has implemented technologically new or significantly technologically improved products or processes (OECD, 1997).
7. *i.e.*, There will be no benefit for Slovakia if qualified graduates emigrate permanently. On the other hand, work experience abroad is valuable and should not be discouraged.
8. This is the preferred option put forward by Köke and Schröder (2003).
9. Private equity investments are also very low, reaching just 0.02% of GDP in Slovakia in 2003, compared with 0.05% in the Czech Republic, 0.1% in Poland, 0.15% in Hungary, and 0.9% in the UK.
10. See EVCA (2004). Note, however, that the rankings were based on information as of early 2004, as so did not capture the subsequent improvements in the time it takes to register a new business.
11. This is only relevant for domestic firms since foreigners do not pay capital gains tax in Slovakia.
12. Of the 21 countries included in the EVCA study, only Slovakia, the Czech Republic and France restrict pension fund investments in this way, and only Slovakia and the Czech Republic restrict the investments of insurance companies.
13. OECD (2003b), OECD (2003c) and OECD (2004d).
14. Atrostic and Nguyen (2002), Clayton *et al.* (2003), Motohashi (2003), Maliranta and Rouvinen (2003).
15. OECD (2004c).
16. In contrast, the enforcement of property rights has a stronger impact on the entry of larger firms, probably because of the larger investment at stake.
17. There are 16 low-level indicators which make up the aggregate PMR indicator. Each one captures some of the important aspects of general regulatory practice or more industry-specific regulatory policies.
18. Conway, Janod and Nicoletti, (2005).
19. WEF (2004).
20. Government efforts to attract FDI have often meant that foreign investors have been given considerable assistance in negotiating regulatory impediments to purchasing land, accelerating investment in required infrastructure, etc.
21. The new system was almost completely funded by PHARE, the Swiss government and other non-profit organisations.
22. Vlach and Sicakova-Beblava (2005).
23. The WEF (2004) has found a significant effect on growth in per capita income of improving the extent of accountability and corruption control.

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ISBN 92-64-01267-2
OECD Economic Surveys: Slovak Republic
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Chapter 5

Building a modern public sector

This chapter describes Slovakia's efforts to build a modern public sector. The building blocks are an important fiscal consolidation since 2000, the establishment of stronger fiscal institutions, a far-reaching administrative decentralisation and a strategy of rationalisation of expenditures. Quantitative revenue, expenditure and deficit targets are well-rooted in a credible medium-term framework. Assuming that the fiscal risks induced by administrative decentralisation and the spending pressures in the social security system are reined in, qualitative improvements in public governance and services remain the most difficult part of the public sector reforms. This chapter argues that modernising the public sector will require: a further reinforcement of fiscal institutions; greater use of strategic priority-setting, results-oriented budgeting, performance-based pay and personnel management; and a wider recourse to market mechanisms in the provision of services. Care should be taken to ensure that decentralisation helps to accelerate rather than hinder the implementation of these reforms. More effective public management in education, active labour market support (notably for the poorly employed Roma minority), and strengthened sustainable development and competition policies will be particularly important for future growth.

Fiscal balances have considerably improved and fiscal institutions have been strengthened

Slovakia has achieved a major fiscal consolidation over the past five years (Figures 5.1a and 5.1b). This experience is seen by many observers as the most successful fiscal turnaround in Central and Eastern Europe.[1] A number of distinct achievements characterise this adjustment:

- The public deficit was sharply reduced from the highest ratio observed in Central Europe, at above 10% of GDP in 2000, to one of the lowest in 2004, at slightly above 3%. The consolidation has followed a more continuous path than in other countries.
- A regular decrease in the share of total expenditures has driven consolidation. The size of the public sector measured by the share of total government spending in GDP is now the smallest in the region. However, it remains higher than in some other OECD countries with a similar GDP per capita level[2] (Figure 5.2).
- Spending cuts were most pronounced in social security transfers and subsidies, and to a lesser extent in the government wage bill, making the Slovak policy a *high-quality* consolidation.[3]
- Tax cuts were granted but revenue losses remained limited. The phasing-out of tax exemptions, and the enhanced incentives which stimulated activity and compliance, kept the fiscal costs low.[4]
- Strong fiscal institutions have underpinned the successful consolidation. Slovakia has managed to put in place a comprehensive and transparent fiscal management framework within a short time, which has fulfilled the purposes of consolidation well. Adapting this framework to the evolving needs of fiscal policy is a persisting challenge (Box 5.1).

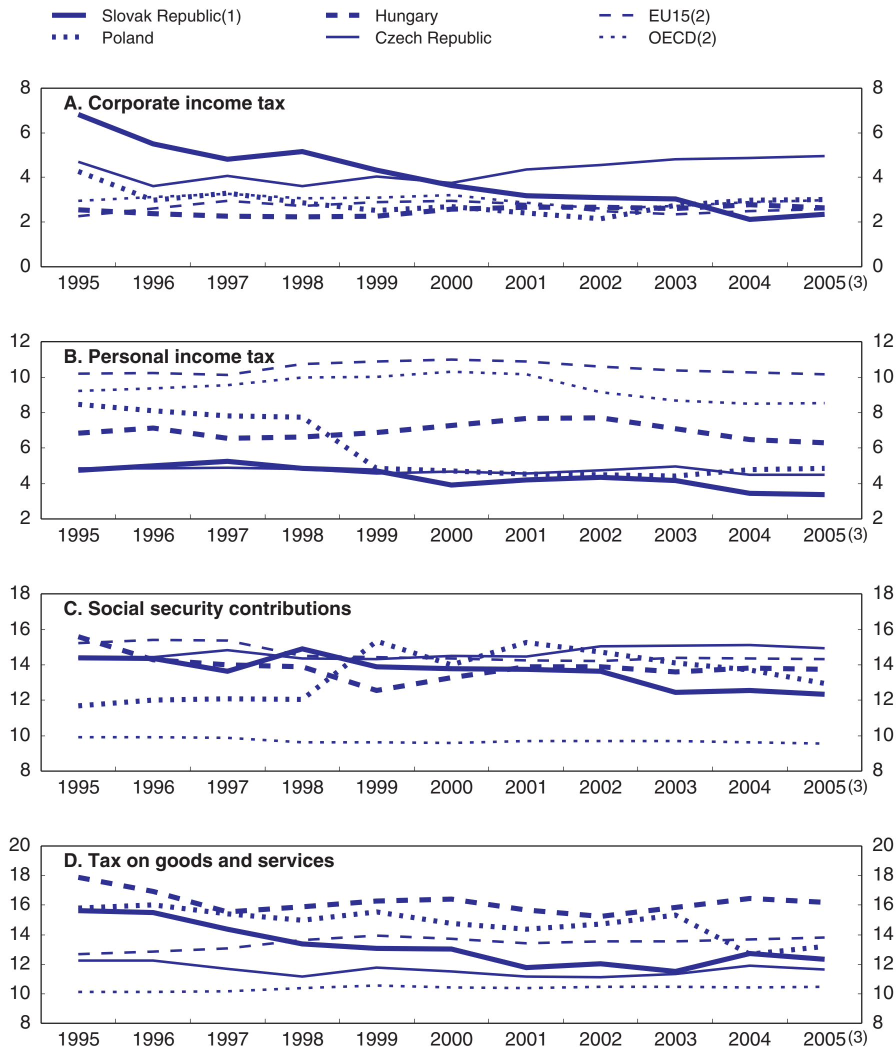
A far-reaching administrative decentralisation was launched

Fiscal decentralisation was a key objective of the government that was formed after the 1998 elections. It was seen as major step forward in strengthening democracy after politically difficult early post-transition years.[5] The Constitution was changed in 2001 to create a three-layer government structure with central, regional and municipal levels.[6] After the 2002 elections the government issued a plan of "General Government Decentralisation for the Years 2003-2006" and the Parliament passed a "Competencies Act" which extended the responsibilities transferred to sub-central governments.[7] Table 5.1 features this new distribution of government duties.

Decentralisation also involved the devolution of revenues, but at a slower pace. After a transition period in 2002-2004 during which sub-central governments received "decentralisation subsidies" from the central budget to carry out duties, all personal income tax (PIT) proceeds have been earmarked for sub-central governments and total PIT revenues are distributed through an equalisation fund.[8] Both the base and the rate of this tax remain centrally determined. Sub-central governments are entitled to collect nine

Figure 5.1a. **Adjustment of government revenues and expenditures**

Structure of revenues (as per cent of GDP)



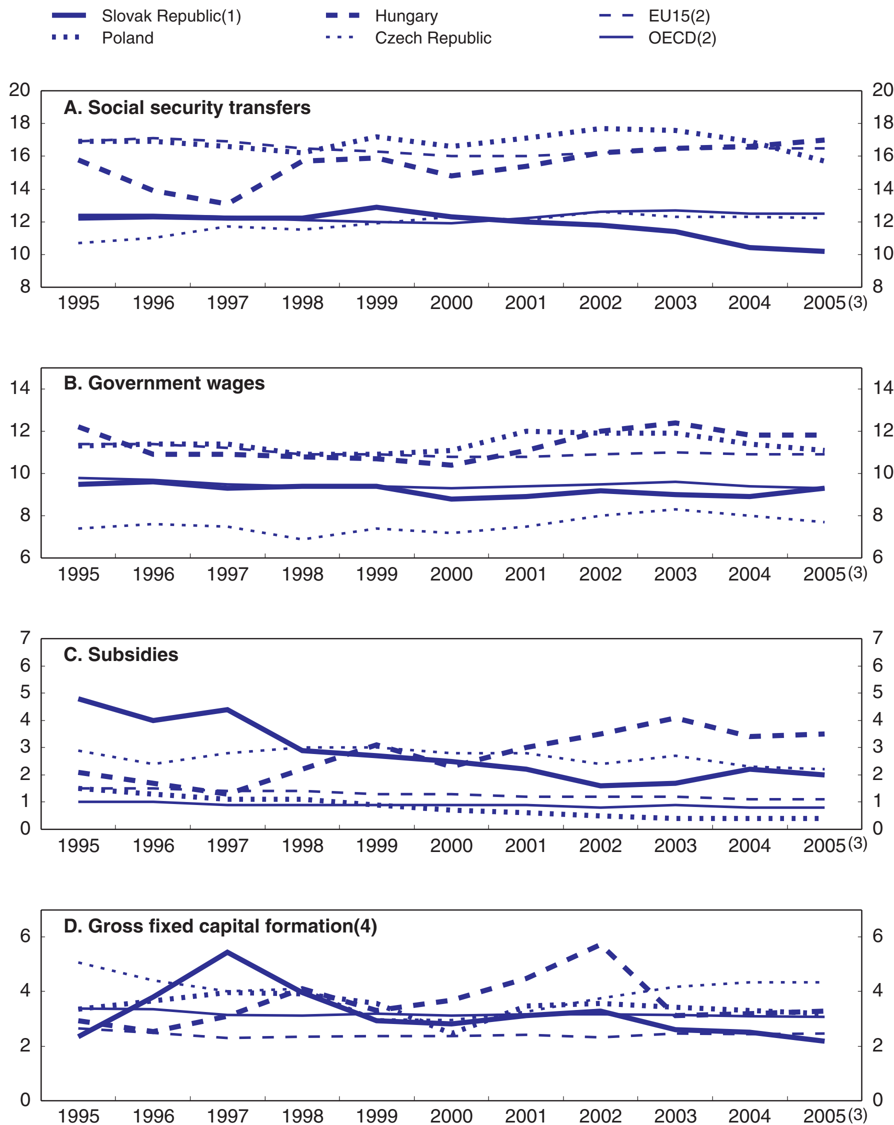
1. Consolidated general government accounts on a national accounts basis are not regularly published. Figures shown are OECD estimates, on the basis of the 2003 consolidated accounts, and non-consolidated accounts for the other years.
2. Weighted averages.
3. Projections.

other taxes, including road and real estate levies, which are marginal in size but may draw growing proceeds in the future.[9]

If personal income taxes are considered to be sub-central government revenues, and if the service spending that is delegated from the central government is treated as sub-central spending, decentralisation generates an important re-composition of general government finances. Figure 5.3 provides a breakdown of general government accounts in 2005 according to the sources of revenue and spending. In addition to their share in general government revenue and spending, regional and municipal governments are also, as owners of hospitals and health centres, recipients of a large part of the health spending realised by social security institutions.

Figure 5.1b. **Structure of expenditures**

Structure of expenditures (as per cent of GDP)



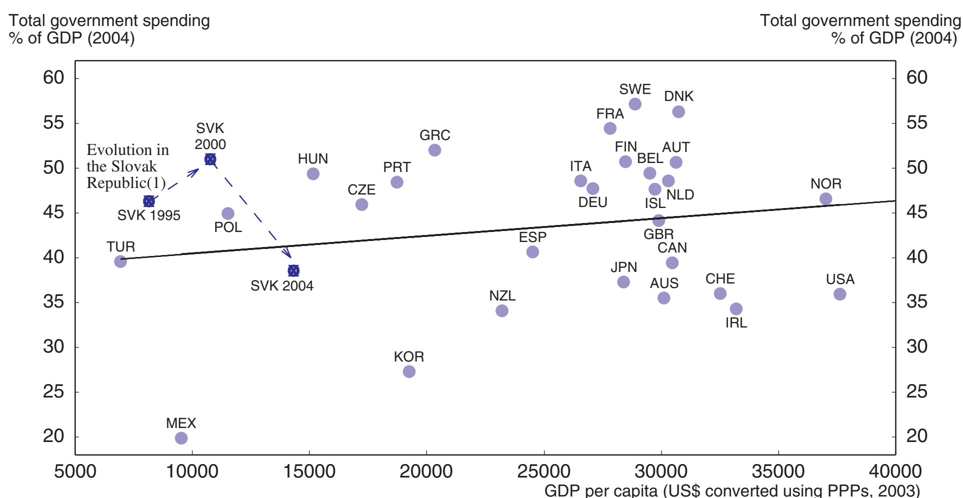
4. A national motorway company was created in 2003 as a state-owned business corporation; hence, only transfers to this company, and not total expenditures by it, are included after 2003.

Source: OECD estimates; OECD, *Economic Outlook* No. 77.

The political and economic rationale for fiscal decentralisation may be strong, assuming that the underlying administrative structures and fiscal institutions are sound enough to preserve the integrity of public finances and the quality of public services.[10] Compared to other OECD countries, the design of Slovak decentralisation appears to comply with a number of good international practices, but also faces important structural shortcomings. Annex 5.A1 provides a discussion of the effectiveness of decentralisation and the quality of intergovernmental fiscal relations. According to this review the main strengths and weaknesses of the Slovak decentralisation at this stage are:

- The distribution of government tasks between different administrative layers is transparent and relatively clear. There seem to be limited risks for overlapping responsibilities.

Figure 5.2. **Income level and adjustment of government size**



1. 1995, 2000 and estimated 2005 PPPs for Slovakia.

Source: OECD, *Economic Outlook* No. 77.

- Sub-central governments have been provided with large decision-making powers to decide how – through which organisational modalities – devolved services must be provided. Grants are provided in "block" forms and sub-central governments can decide on innovations in service provision, including through market-based mechanisms.
- Revenue collection remains centralised. The central government sets the bases and rates of the main taxes and determines the bulk of the sub-central revenues. Concerns about inter-regional differences in resources are therefore alleviated, but direct accountability of sub-central governments to taxpayers also remains limited.
- Local governments are granted new tax collection powers and there are some concerns that these may be too open-ended and may give rise, in the future, to excessive pressures on certain tax bases (such as household and industrial real estates).
- The key structural weakness of decentralisation is the excessive fragmentation of municipal structures. Additional amalgamations are needed to attain more efficient municipal sizes but there is no effective mechanism in place to make this happen.
- The fiscal rules applicable to sub-central governments are based on ceilings on their debt stock. As there is no central government authorisation required or any formal rules concerning their spending, revenue, deficit and borrowing levels, there is a risk that the government's fiscal consolidation efforts could be countered at regional and municipal levels. The "debt stock" rules exert some *de facto* discipline but a more direct mechanism ensuring the consistency of fiscal policy across government layers is probably needed.
- The audit infrastructure for sub-central governments appears excessively weak. Internal audit systems are not yet fully established and internal auditors have limited independence. In the area of external audits, the State Audit Office is not permitted by law to audit the accounts of sub-central governments, except concerning the utilisation of state resources and EU funds considered as state resources. The risks of fiscal fraud

Box 5.1. **Stronger budget institutions and areas for further convergence**

The economic literature stresses the role that good budget institutions play in improving fiscal discipline. It is particularly important that a budget preparation framework: *i)* cover all the main expenditure and revenue items of the general government; *ii) permit* the cabinet to agree on binding targets for aggregate spending and for the key sub-items early in the budget cycle; and *iii)* stick to these targets during budget execution.[1] Also important are the leverage of the Ministry of Finance over budget preparation, execution and reporting; the existence of strict rules for expenditure management; and rules for dealing with revenue windfalls and unexpected shortfalls. Recent empirical research confirms the importance of good budgeting institutions for fiscal performance. Notably, Gleich (2003) analyses the budgeting procedures of 10 EU accession countries,[2] indexes numerically their qualities, and investigates links with fiscal outcomes.[3] In comparison to other post-transition countries, including other OECD members in Central Europe, Slovakia came out well from this assessment. In budget preparation, it is ranked 4th out of ten EU accession countries after Latvia, Slovenia and Estonia; in budget legislation it comes 4th after the Czech Republic, Estonia and Slovenia, and in budget implementation it is ranked 4th after Latvia, Estonia and Romania. Overall, by averaging individual scores in the three areas Slovakia is ranked 4th after Estonia, Latvia and Slovenia.

According to this analysis and more recent developments, the most important strengths of Slovak budget institutions are:

- A multi-year fiscal consolidation strategy based on a medium-term fiscal framework for the entire general government sector. Since 2005, a three-yearly indicative budget for central government sets time-consistent budgetary objectives.
- Room for extra-budgetary revenues and spending has been kept limited. The general government fiscal framework is all-encompassing and execution is monitored by comprehensive general government accounts.
- The Ministry of Finance leads the budget round. It prepares yearly preliminary targets for the Cabinet, negotiates bi-laterally with line Ministries, and has decision power on carry-overs from the previous year and on transfers between chapters.
- The Cabinet has further political leverage for the fulfilment of targets. A senior Cabinet Committee can solve conflicts without a full consensus in the entire Cabinet. If a budget-related tension arises in the Parliament, a vote on the budget can be combined with a vote of confidence to ease disagreement.
- Revenue windfalls due to stronger than projected growth or other favourable factors – a common occurrence in EU accession countries – are not easily spent in pro-cyclical ways.[4]

According to the same review and more recent analyses,[5] there are certain remaining and emerging weaknesses in the Slovak fiscal management framework. Additional progress is needed in these areas to adapt institutions to new needs and to make them more robust:

- Risks of fiscal fraud and corruption have not yet been minimised. The audit infrastructure appears to lag behind. The internal audit units of spending organisations and the external audits of the State Audit Organisation should be further developed to enhance the integrity of spending, procurement and management.
- Strategic priority-setting and results-oriented budgeting are not yet integrated in fiscal institutions. The government's directives for the diffusion of such best-practices have not been enforced due to weak commitment and weak technical expertise in spending organisations.

Box 5.1. **Stronger budget institutions and areas for further convergence** *(cont.)*

- Accruals-based accounting, which permits the recording of capital and physical depreciation costs of various government services, is not sufficiently practiced in the public sector. Its diffusion is a pre-requisite for the utilisation of results-oriented budgeting.
- There is a risk that the swift process of fiscal decentralisation, which devolves increased spending powers to regional and municipal governments, may undermine the integrity of the budget process and its coherence with national macroeconomic policy. It could also amplify existing weaknesses in fiscal institutions in the areas of auditing, accounting, results-oriented budgeting and the fight against fraud and corruption. The fiscal framework should be further reinforced in these areas (see Annex 5.A1).

1. See Scott (2001), Von Hagen (2003), IMF (2004).
2. The ten countries included in the comparison are Slovakia, Czech Republic, Hungary, Poland, Estonia, Latvia, Lithuania, Slovenia, Bulgaria and Romania.
3. Gleich (2003).
4. Notably after 2005. An amendment in budget law is needed when revenues or expenditures deviate from targets by more than one per cent.
5. OECD-SIGMA "Peer Assistance to the Public Internal Financial Control System in the Slovak Republic", Support for Improvement in Governance and Management Programme, OECD, 2003; IMF "Slovak Republic: Report on the Observance of Standards and Codes", March 2005; IMF "Slovak Republic: Compliance with Data Dissemination Standards-General Report", May 2005.

Table 5.1. **Duties of central, regional and municipal governments**

As of 2005

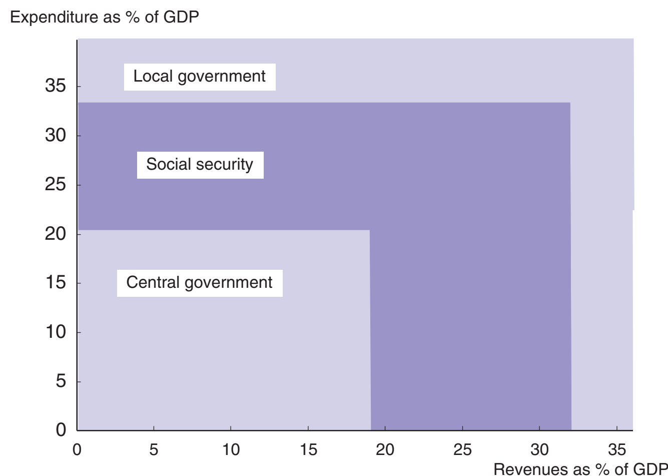
Central government	Regions	Municipalities
Economic policy, foreign policy, security policy, defence, civil defence, justice, police, fire corps, courts, prison services, customs rights, currency, tax authorities (excluding local taxes), post, class I highway network, railway network, water routes, labour and employment service offices, universities, selected medical, cultural and school facilities, airports.	Class II and class III roads, area planning, regional development, secondary schools, hospitals, some social service facilities (retirement homes, social services for children, crises centre, orphanages), cultural facilities (galleries, museums, theatres, some libraries) licences for pharmacies, licences for private physicians.	Local roads, area planning, public transportation, nature and environment protection, water economy, sewerage, communal waste, local economic development, housing, pre school and primary school facilities, health care facilities, some hospitals, culture, local police.
Central government supervision of "delegated" duties (under national standards and central government inspection)		
School inspection, health supervision, labour inspection, supervision related to social insurance, construction inspection, veterinary supervision, phyto (plants) supervision, environment supervision, cultural heritage preservation, shopping inspection, pharmaceutical supervision, supervision in the area of food production.		

and of other forms of corruption at sub-central levels are considered serious. A significant strengthening of the fiscal institutions is required in this area.[11]

In sum, the decentralisation has been very ambitious in scope. It has been primarily driven by political rather than economic efficiency considerations. Nonetheless it offers important opportunities to enhance accountability to local constituencies, improve the quality of public services, and reduce costs. However, in order to build on this potential, the government will need to address two important structural weaknesses: the excessive fragmentation of municipal structures, and the excessively thin institutional safeguards against excessive overspending and fiscal fraud at the local level.

Figure 5.3. **The breakdown of the general government accounts**

2005



Source: Ministry of Finance.

The medium-term fiscal framework is ambitious but more priority-setting is needed

In its Convergence Programme submitted to the European Union, the Slovak government announced a fiscal strategy which continues to be very demanding.[12] It entails that: *i)* the government deficit will be reduced to below 3% by 2007, without increasing the tax ratio (confirming a previously declared objective);[13] *ii)* public balances should come to balance by 2010; and *iii)* they should be put, after that date, on a sustainable long-term fiscal track despite deteriorating demographics.[14] As discussed in Chapter 2, this strategy aims at a smooth participation of Slovakia in the Economic and Monetary Union. The government confirmed and updated these objectives in the budget proposal for 2006 and the medium-term fiscal framework accompanying it for the years 2006-2008 (Table 5.2).

The most important objectives of the medium-term fiscal strategy are:

- Budgetary consolidation will rely on further reducing the share of spending in GDP, although real government spending is projected to increase moderately;[15] strong GDP growth will assist in achieving this objective.[16]
- Within government spending, transfers to households and to enterprises will continue to decline as a share of GDP.[17]
- The share of the government wage bill in GDP is projected to decline, mainly due to a fall in the number of teachers and slower growth of government wages; government wage growth is expected to remain slower than wage growth in the private sector.[18]
- The share of total public revenues in GDP is expected to increase, thanks to growing transfers from the EU. The share of own tax and social contribution revenues of the state will slightly decline.[19]
- In the longer term, the key objective is to continue to comply with the Stability and Growth Pact public deficit and public debt rules, in spite of adverse demographic developments which will cause the old-age dependency ratio to increase from 17%

Table 5.2. **The medium-term fiscal framework, 2006-2008**

General government revenues and expenditures as % of GDP, ESA 95, consolidated

	2003 E	2004 B	2004 E	2005 B	2005 E	2006 B	2007 B	2008 B
TOTAL REVENUES	**36.1**	**36.2**	**35.2**	**37.1**	**36.5**	**36.5**	**37.0**	**36.2**
Tax revenues	18.1	17.9	17.5	17.4	17.6	17.5	17.4	17.3
Personal income tax	3.3	2.1	2.5	2.4	2.6	2.7	2.8	2.8
Corporate income tax	2.8	1.8	2.2	2.1	2.4	2.5	2.5	2.5
Value-added tax	6.7	8.8	7.9	8.4	7.9	7.9	7.8	7.8
Excise taxes	3.1	3.3	3.4	3.3	3.4	3.3	3.2	3.1
Local taxes (paid into municipalities)	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2
Social security contributions	13.9	13.1	12.6	13.5	12.8	13.1	12.9	12.7
Social insurance agency	8.2	8.3	8.0	8.4	8.0	8.2	8.1	8.0
Health insurance companies	4.8	4.8	4.6	5.1	4.8	4.9	4.8	4.7
Non-tax revenues	4.1	3.8	4.3	4.0	3.9	3.7	3.5	3.1
Of which: interest	0.7	0.5	0.6	0.4	0.4	0.3	0.3	0.2
Grants and transfers	0.0	1.4	0.7	2.2	2.2	2.2	3.1	3.0
Of which: from EU	0.0	1.4	0.6	2.2	2.2	2.2	3.1	3.0
TOTAL EXPENDITURES	**39.9**	**40.2**	**38.5**	**40.4**	**39.9**	**39.4**	**38.6**	**37.4**
Current expenditures	36.8	36.4	35.2	36.4	36.0	35.5	35.3	34.7
Gross wages	7.4	7.2	6.9	7.0	7.0	7.1	6.9	6.7
Wages	5.5	5.4	5.2	5.3	5.2	5.3	5.1	5.0
Employer social security contributions	1.9	1.8	1.7	1.8	1.8	1.8	1.8	1.7
Goods and services	5.1	5.2	5.6	5.4	5.3	5.5	6.1	6.2
Subsidies and transfers	21.7	21.6	20.5	21.7	21.4	20.9	20.4	19.8
Subsidies to agriculture	0.7	1.0	0.8	1.0	0.9	0.8	0.7	0.6
Subsidies to transport	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.6
Active labour market policy	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Levies to EU budget	0.0	0.7	0.6	0.9	0.9	0.9	0.9	0.9
Other subsidies and transfers	1.7	1.8	1.5	1.5	1.5	1.3	1.3	1.2
Social security payments								
Health insurance companies	4.9	4.7	4.7	4.9	4.8	4.7	4.7	4.7
Sickness benefits	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.3
Old age and disability pension benefits	7.5	7.5	7.5	7.5	7.4	7.5	7.3	7.3
Unemployment benefits	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
State support and social assistance benefits	2.7	2.5	2.1	2.3	2.3	2.1	2.0	1.9
Social security contributions on behalf of certain groups	2.2	1.8	1.7	1.9	1.8	1.9	1.9	1.8
Interest payments	2.5	2.5	2.2	2.4	2.3	2.0	2.0	2.0
Capital expenditures	3.1	3.8	3.3	4.0	3.9	3.9	3.3	2.7
Capital assets	2.5	2.6	2.7	2.6	2.6	1.9	1.5	1.3
Capital transfers	0.6	1.2	0.6	1.4	1.4	2.1	1.7	1.4
NET BORROWING (–)/LENDING (+)	**–3.7**	**–4.0**	**–3.3**	**–3.4**	**–3.4**	**–2.9**	**–1.6**	**–1.3**
Pay-as-you-go pillar revenues shortfall	0.0	0.0	0.0	–0.4	–0.8[1]	–1.3[1]	–1.4[1]	–1.4[1]
NET BORROWING (–)/LENDING (+) Including PAYG shortfall	**–3.7**	**–4.0**	**–3.3**	**–3.8**	**–4.2**	**–4.2**	**–3.0**	**–2.7**

E = Estimates; B = Budgeted.

1. Budget costs of the pension reform projected by the Ministry of Finance and included in the 2006-2008 three year budget framework.

Source: Ministry of Finance Budget Proposal for 2006-2008.

in 2000 to 30% in 2030, and 50% in 2050. The authorities project that, with further adjustments in the pension parameters, this objective would be attainable and the ratio of public debt to GDP would not go above a peak of 45%.

The medium-term fiscal framework has been conservatively designed. It is already having operational leverage: starting with the 2005 budget, a three-yearly *public finance outlook* based on this framework has been adopted by the Parliament, and this practice will continue on a rolling three-yearly basis. If fully implemented, this framework should contribute to fiscal predictability in the second half of the decade and should play an important role in the implementation of the EMU accession strategy.

Nevertheless, the framework has certain vulnerabilities: *i)* the government may be faced with lower revenues and/or higher spending pressures, and *ii)* it appears to imply only limited changes in the strategic and functional orientation of public resources.

The implementation of the medium-term strategy could face more risks and tensions than those addressed in the official framework. These pressures may force the authorities to reduce spending more rapidly than planned – as the government excludes tax increases. The additional fiscal pressures could arise in two main areas: *i)* there are risks that the social security balances might deteriorate more then projected, and *ii)* fiscal policy may need to be tightened by more than planned for macroeconomic management purposes.

Social security balances are projected to remain in surplus during the projection period, but this projection is based on favourable conditions which might not be realised. Projections of unemployment insurance and pension balances are based on a trend decrease in unemployment.[20] Health projections assume that total health spending will be stabilized at 6.5% of GDP, and public health expenditures by health insurance companies at around 4.6-4.8% of GDP – both demanding assumptions.[21] Even if the authorities estimate that their macroeconomic projections are conservative, and that the recent health reforms manage to contain spending according to the budget resources available, lower employment growth and higher health spending are remaining risks.[22]

The deficit may also need to be cut more rapidly than planned, if overheating requires more stabilisation in the run-up to EMU, as discussed in Chapter 2. The risk of such a pressure should not be ignored. Stronger growth may help to reduce the level of public deficit if other conditions remain equal,[23] but pro-cyclical pressures, notably in *public wages* and *sub-central government spending,* can also be expected. The government is aware of these risks and has said that it is ready to adjust central government spending if faced with them. Spending prioritisation and selective cuts may become necessary in such circumstances.

The medium-term framework does not suggest any significant re-orientation of public resources during the projection period. As the medium-term framework is not a budget law, the government may see it as a static document as regards the composition of revenue and spending items and consider that re-allocations between them should be realised in the annual budgets. Alternatively, the authorities may consider that such strategic considerations must be delayed to future policy rounds, once the basic equilibria of public finances are secured and compliance with Maastricht targets is achieved.

In the light of the analysis of the earlier chapters, resource reallocations in the following three areas should be considered:

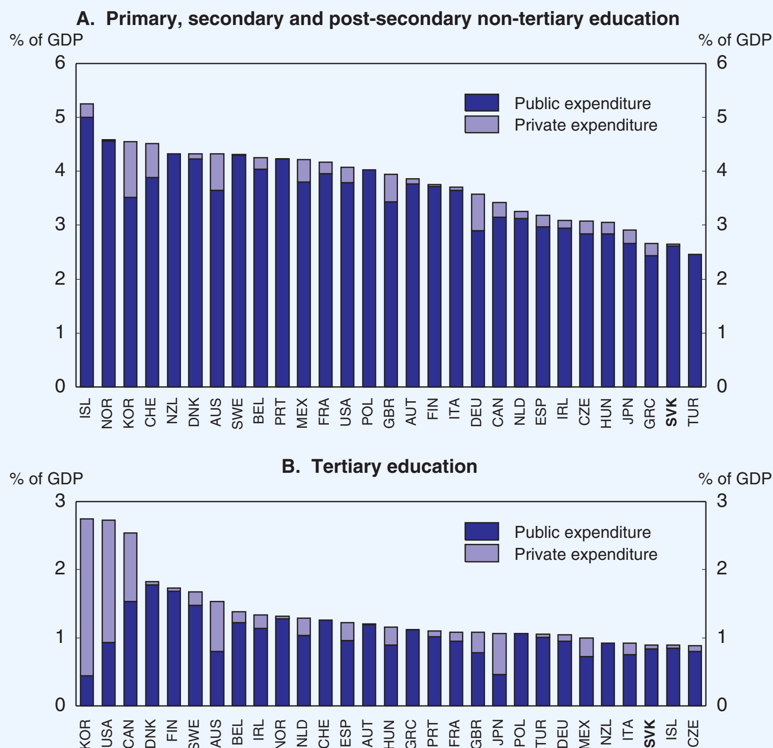
- Increases in the public resources dedicated to education appear desirable, so long as institutional reforms facilitating their good use can be put in place (Box 5.2).

Box 5.2. **Education spending: will Slovakia remain an outlier?**

Slovakia lags most other OECD countries in the level and composition of public and private resources dedicated to education (Figure 5.4). Public resources spent on primary, secondary and tertiary education amount to only 3.7% of GDP while they range between 5 and 9% in most other countries. Spending per tertiary student is also much higher than for primary and secondary students, another important difference from other OECD countries. Moreover, the medium-term programme projects stronger growth in tertiary education spending, at an annual rate of 5%. In primary and secondary education, *per pupil* costs are projected to remain constant in real terms. As the *level* of expenditures per pupil is low, and prospects for lowering the number of teachers are limited, this assumption of "constant real costs per pupil" assumes implicitly that the human capital and technologies engaged in public education will remain constant at a low level (Figure 4.6 in Chapter 4 documents the low level of teachers' relative wages in comparison to other OECD countries). The Ministry of Finance recognises that the medium-term framework factors in no specific fiscal initiative to increase the *quality* of education.

Figure 5.4. **Expenditure on educational institutions**

As a percentage of GDP, 2001



Source: OECD, *Education at a Glance*, 2004.

- Employers' social security contributions for low-wage workers could be reduced by 15-20%. If eligible worker groups are well-targeted the *direct* fiscal cost of this measure could remain below one per cent of GDP (see Chapter 3 for a discussion of this measure).
- Technically, it should be possible to fund these additional costs through expenditure savings and other reallocations. Potential sources of savings include: the 2% of the income taxes earmarked for non-profit organisations (which are a *de facto* allowance); the large agricultural subsidies (amounting to nearly 2% of GDP in 2005 – half from the EU – for agricultural workers accounting for 4% of the labour force – a reduction in these transfers has been proposed in the latest budget proposal for 2006-2008, see Table 5.2); the industrial subsidies which amount to nearly 2% of GDP, and the administrative costs of the fragmented municipal system.
- In the absence of cuts in existing spending, the Ministry of Finance has stated that limited room will be available for reallocations and new policies during the medium term. It has announced that only SKK 4.7 billion (0.4% of GDP) can be made available for high priority government projects per year.

New reforms aim at enhancing the quality of public governance and services

The medium-term fiscal framework seems to reflect an inertia in the allocation of expenditures, but the authorities remain aware of the need to upgrade the performance of the public sector. Wide evidence, from a set of "user surveys" to more specific reviews of public service needs, as discussed in earlier chapters, point to a compelling need to increase the quality of public services. Also, recent enhancements in the substance of the laws, rules and regulations require an adaptation in the quality of enforcement (Figure 5.5). The review of the reforms in the business environment in Chapter 4 has also illustrated the need to upgrade enforcement (Figure 4.15). The needed improvements can only be achieved by re-orienting expenditures and increasing the efficacy of resource use in the core areas.

Available information on the prevailing management practices in the public sector reveals that Slovakia has a traditional public administration system, making limited use of modern management techniques. Even if the efficacy of new techniques is not entirely demonstrated in all circumstances, Slovakia's lags may cause some concern because they may be revealing a weaker ability to introduce such innovations (Figure 5.6 and Table 5.3).[24]

A "Public Finance Management Reform Strategy" issued in 2003 stressed the need to enhance the quality of public expenditures and management through: *i)* better *transparency* of the costs of services; *ii)* a stronger focus on *results* in the design of services; and iii) medium-term planning of *priorities*. The 2004 Convergence Programme to the European Union stated that "the objective is to maximise the value received for the money spent. The introduction of results-oriented budgeting in which the budget process is centred around well-defined and measurable goals will play a crucial role".[25] The 2003 National Report on Economic Reform highlighted further dimensions by adding that: "An effective provision of public services requires first and foremost a highly qualified public administration, by attracting and retaining the most qualified human resources, and by continuing general government decentralisation".[26]

The government's intention to upgrade the performance of the public sector by channelling resources to key areas and using them in competitive, cost-efficient ways has been stated on several occasions. Three orientations back this agenda: *i)* the introduction

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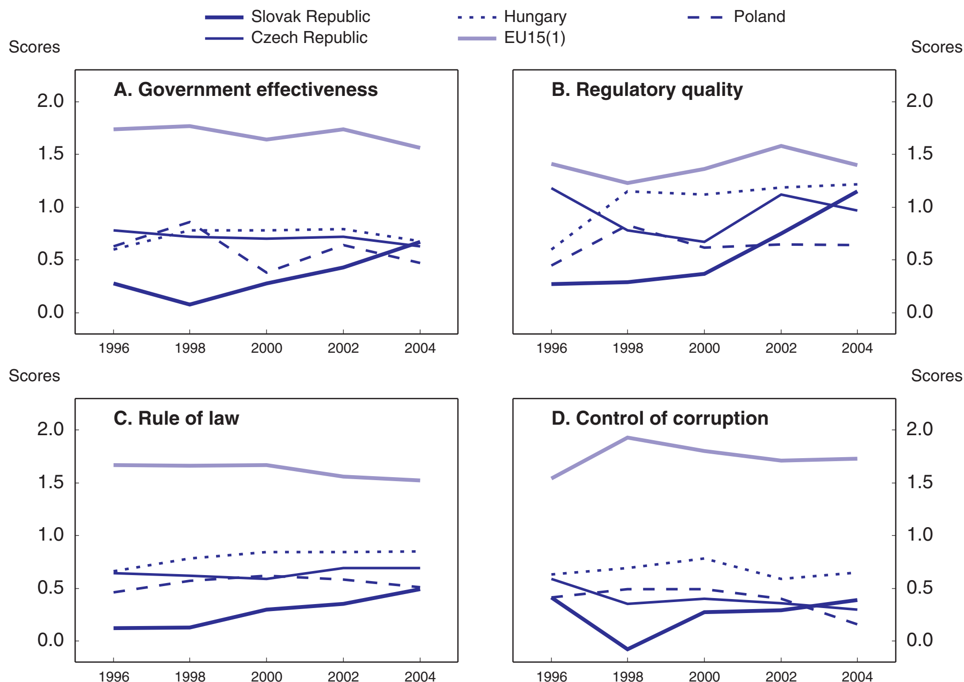
Figure 5.5. **Room for improved governance**



Note: The World Bank governance indicators are based on user opinion surveys and summary scores on specific governance issues. For instance, the indicator on "government effectiveness" combine perceptions of the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies.

1. Unweighted average of EU 15.

Source: D. Kaufmann, A. Kraay, and M. Mastruzzi (2005).

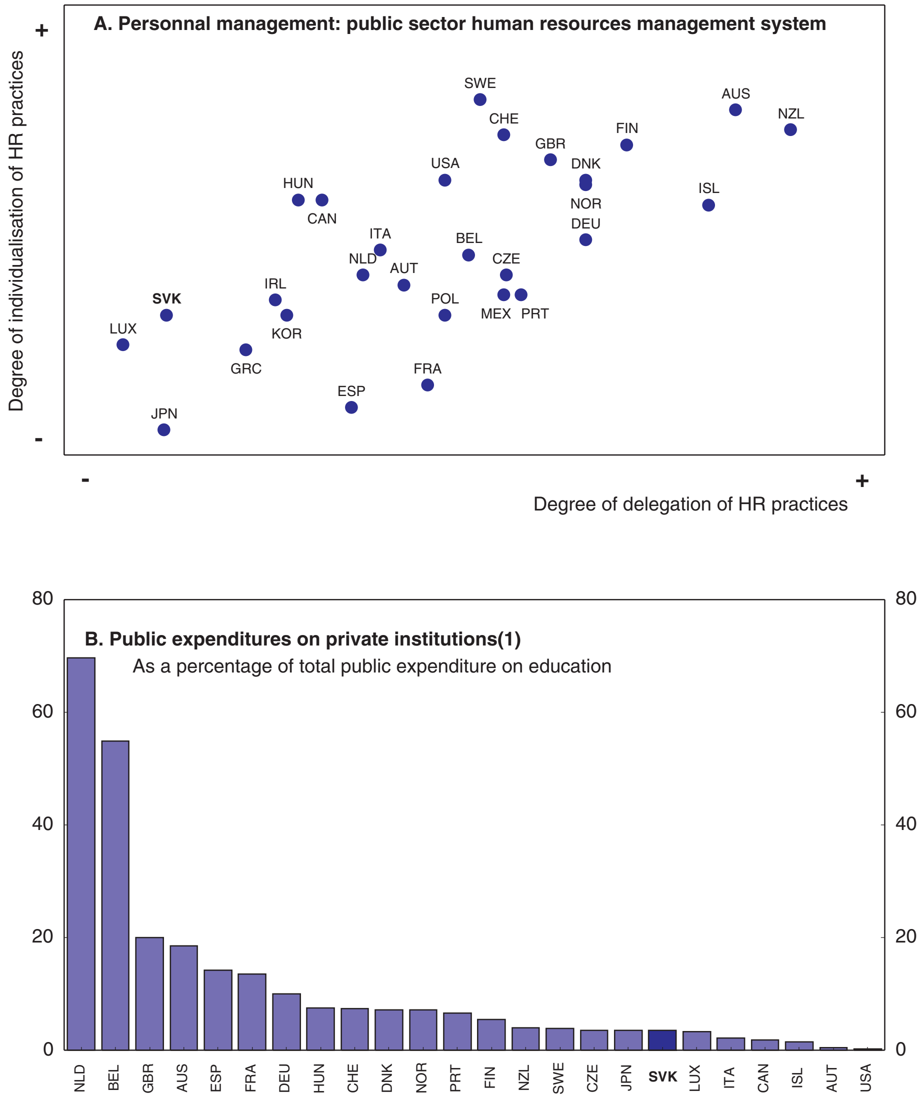
of *results-oriented budgeting*, *ii)* the utilisation of *performance-based personnel management*, and *iii)* the utilisation of *market mechanisms* in the provision of services. Together, these instruments should help with expenditure reallocation; however, they are still at a very early and quasi-experimental stage of implementation.

Results-oriented budgeting

Slovakia has been trying to introduce results-oriented budgeting since 2002 to subject public activities to explicit objectives, cost transparency and performance tests. The ultimate aim is to use the budget as a strategic resource allocation instrument.[27] The introduction of the technique has, however, faced political, technical and human resource bottlenecks. The target date of 2005 for its generalisation has not been met.

The government has decided to give a new impulse to results-oriented budgeting. New measures were announced in 2005 to overcome line ministries' reluctance to publish formal objectives and benchmarks. Ministries will now be required to issue *public* explanations of their programmes and targets, together with a detailed discussion of their financing requirements. Starting from 2006, the reports will be due every year during the May-June period, between the completion of the first draft of the budget and its discussion between the Ministry of Finance and line ministries.

Figure 5.6. **Public management reforms**



1. Direct public expenditures on private institutions.

Source: OECD, *Trends in Human Resources Policies in OECD Countries*, and *Education at a Glance*.

Performance-based personnel management

Slovakia suffers from the classical public sector dilemma whereby a high level of government employment keeps average wages low and undermines the motivation and human capital in the public sector. The problem has been particularly troublesome because of the heavy role of government employment in high unemployment regions – and its resulting rigidity – and the particularly low levels of public wages in certain sectors – for instance in education.[28] The new State Service and Civil Service Acts of 2001, which

Table 5.3. **Public private partnerships**

Status of public private partnerships (PPP's) by country and sector.

	Principle sectors for PPP activity					Subsidiary sectors for PPP activity					
	Roads and bridges	Light railway	Heavy railway	Schools	Health and hospitals	Central accommo-dation	Airports	Housing	Ports	Prisons	Water and wastewater (incl. solid waste)
Austria	❑		❑	■	❑	■	■			■	■
Belgium	❑	■	■	■			❑	❑			❑
Czech Republic	❑	■	■	■	■		■	■			❑❑
Denmark	❑		❑	❑		■			❑	■	
Finland	❑	■	■	❑	■	■					■
France	❑❑	❑❑	❑	■	❑	❑	❑		❑	❑	❑❑
Germany	❑❑	❑❑	❑❑	❑❑	■	❑	■			❑	❑❑
Greece	❑❑					■	❑❑				
Hungary	❑❑	■		❑❑	❑			■		❑	❑❑
Ireland	❑❑	❑		❑❑	❑	■		❑			❑❑
Italy	❑❑	❑❑			❑❑	■	❑	■	❑	■	❑
Luxembourg							■				
Netherlands	❑❑		❑❑	❑	■	■		■	■	■	❑❑
Norway	❑❑		■	❑	❑	■				■	
Poland	❑	■	■			■	■	■	❑		❑
Portugal	❑❑	❑❑	■	■	❑		■	■	■	■	❑❑
Slovakia	■						■				■
Slovenia											❑❑
Spain	❑❑	❑❑	■	■	❑	■	■		❑❑		❑❑
Sweden	■	■	■		■						
Turkey	■	■	■				❑❑				❑❑
UK	❑❑	❑❑		❑❑	❑❑	❑❑	❑❑	❑❑		❑❑	❑❑

■ Discussions ongoing on PPP projects.
❑ PPP projects tendered but not yet operational.
❑❑ Already operational PPP projects.

Source: OECD (2005).

opened new opportunities for skill checks, employment adjustments and performance-based hiring and pay were important enabling reforms which could have helped introduce adjustments.[29]

In practice however, this reform and the establishment of a new *Office of Public Service* to implement it have not triggered noticeable changes in public employment practices. Employment and wages have remained relatively stable in the past three years – if the 3% decrease in the number of teachers is taken into account (Tables 5.4 and 5.5). Difficult circumstances in the labour market have clearly created a "social" obstacle to adjustments. As a mirror image, pay practices could not be reformed either: the role of skill-, responsibility- and performance-based pay was not increased as planned.

What one particular Ministry (the Ministry of Finance) could achieve in these circumstances draws attention. The Ministry reduced its total volume of employment by 30% between 2002 and 2004, and re-allocated the resulting savings to skill- and performance-related pay increases for its personnel.[30] This allowed the hiring of a new cohort of highly qualified civil servants, including through transfers from private enterprises.[31] The Ministry seems to have succeeded with these reforms because it had a

Table 5.4. **General government employment and wages in the budget, 2001-2005**

	Number of employees	Change (%)	Wages (in ths. SKK)	Change (%)	Average wage (SKK/month)	Change (%)
2001	412 505	–	57 503 664	–	11 598	–
2002	414 770	0.55	65 836 269	14.49	13 195	13.77
2003	410 483	–1.03	71 873 707	9.17	14 557	10.32
2004	405 887	–1.12	78 802 158	9.64	16 099	10.59
2005	399 598	–1.55	82 645 955	4.88	17 235	7.06

Note: The reduction in the public employment volume reported in Tables 5.4 and 5.5 concern job positions directly included in the state budget.

Table 5.5. **Composition of general government employment in the budget, 2004-2005**

Sub-sector of general government	2004	2005	Difference
Central government[1]	181 847	176 936	–4 911
– Budgetary organisations	145 128	140 962	–4 166
– Allowance organisations	14 742	13 916	–826
– Public universities	21 353	21 413	60
– National Property Fund, Slovak Land Fund, Extra-budgetary funds	466	489	23
– Other bodies	158	156	–2
Local government[2]	215 140	213 582	–1 558
Social security and health care insurance funds	8 900	9 080	180
General government	405 887	399 598	–6 289

1. Excluding employees whose competencies were transferred from central government to local governments, *i.e.,* municipalities and regional governments.
2. Including employees transferred from the central government.

clear vision of what it wanted to achieve, but also, in all probability, thanks to its small size: it reduced employment only from 800 to 550. Yet this example in the ministry responsible for public expenditure control is important *vis-à-vis* other ministries and needs to guide employment policies elsewhere.

Utilisation of market mechanisms in the provision of publicly-funded services

While administrative price adjustments and competitive reforms are relatively well-advanced in network utilities, the main publicly-funded services such as education, health, and social services have been traditionally provided by national or local monopolies offering their services free of charge, or at highly subsidised prices. Like all other OECD countries but with a time lag, Slovakia has begun to introduce market mechanisms to make these services more effective and more cost-efficient.[32] This takes the form of *user fees* to help curb excess demand and improve accountability, and the *separation of funding from supply,* permitting the provision of services by competitive and private organisations. However, these innovations have stayed at a limited scale of application to date: partial user fees and a dose of private supply were introduced in health services but their targeted introduction in education met with strong resistance.

The new opportunities created by decentralisation (certain regional and municipal governments showing willingness to experiment with the new approaches) should widen

the room for innovations in the future. Public information on the outcomes of these experiences as presently planned by certain non-profit organisations can be expected to contribute to this process.[33]

As reviewed in the previous chapters, the provision of high-quality core public services is critically important for the future growth of the economy. Strengthening education at all levels, increasing the employability of the unemployed (including the Roma minority), better law enforcement, more effective competition policies and sectoral regulations, and sustainable development policies minimising compliance costs are such areas. Some key contributions from public management reforms in these areas could be:

- **Primary and secondary education:** The introduction of *results-oriented budgeting* at the municipal and regional levels would permit objectives to be set regarding the actual outcomes of pupils (*i.e.* their academic achievements). *Performance-based human resource management* for teachers, which should be introduced on the basis of practical insights obtained through international experiences[34] could back these reform efforts. Recourse to *competitive provision of services*, including by new private and international entrants, can also help to diffuse pedagogical innovations and best practices.
- **Tertiary education:** Wide room exists for the introduction of *market mechanisms* in university education. *Student fees* and the *competitive supply* of services by new tertiary institutions would help to improve capacity and enrolment and diffuse new teaching techniques. It is disappointing that the Government's efforts to introduce student fees (even when backed by the sweetener of generous student grants) failed twice in Parliament, in 2004 and 2005. In fact, additional reforms are also needed, to make the accreditation system more open and competitive, and to facilitate the entry of high quality national and international institutions. International providers could play a special role in diffusing international know-how in Slovakia, notably through their post-graduate and further education programmes. The funding mechanisms of tertiary education should be reformed in pro-competitive ways to facilitate such entries, and to offer a more level playing field. Competitive research grants should also be more widely used as contestable funding mechanisms.
- **Policies in support of the Roma minority:** Regarding policies in support of the Roma minority, *results-orientated management* of budget resources and the recourse to *market mechanisms* in the provision of the needed services may bring additional benefits (Box 5.3).
- **Law enforcement:** *results-orientation* and *performance benchmarks* (on the basis of statistical indicators on the efficiency of the judiciary system) could play an important role in making the "self-governing" judiciary more transparent and more effective.
- **Competition policy:** *results-orientation* and *skill- and performance-based pay systems* would strengthen the Anti-Monopoly Office and the Sectoral Regulators. These organisations have been provided with modern laws and have motivated staff, but their performance may need to be more formally assessed. They may be meeting resource constraints in carrying out their competition advocacy roles. They may also face difficulties in hiring expert professionals. New management and funding techniques may help set ambitious objectives for them and provide them with adequate resources.
- **Sustainable development:** Environmental concerns have grown in Slovakia. In spite of recent energy price increases, energy and emission intensity is not declining as rapidly as intended. The country might not be able to attain its own objective of reducing the greenhouse gas (GHG) emissions to 5% less than its 2008-2012 Kyoto target. In these

Box 5.3. **Policies in support of the Roma minority**

The Roma community represents 1.7% of the total population, according to the self-declared nationality data based on National Census 2001, and 6% of the total population, according to the ascribed nationality data from Sociographic mapping of Roma settlements in 2004; and has unemployment rates above 80%, largely related to extremely low educational achievements,[1] including for young age cohorts.[2] There are also hysteresis elements in the inactivity and unemployment rates of adult cohorts, spilling over to younger generations, with diminished expectations within the community and the broader society. Roma also appear to face discrimination from potential employers and customers in labour and service markets.

The goal of policy should be to increase the employability of the Roma population. This implies: *i)* stronger basic education for new generations; *ii)* targeted and cost-efficient adult education and other "active labour market policies" for working age cohorts (to increase their employability and to enhance the family and social environment for younger age cohorts); *iii)* improved access to transportation and housing services to facilitate participation in more dynamic labour markets; and *iv)* local economic development initiatives building on the existing human assets of Roma, and stimulating their entrepreneurial abilities.

The national policies of Slovakia include approaches of this type, even if the authorities estimate that adults with limited labour-market relevant skills would not be easy to employ, and that chances for their self-employment are also probably low.[3] The main recent policy initiatives in this area are:

- The Ministry of Labour is responsible for implementation of set of government programmes to fight *poverty and social exclusion* that were agreed with the European Union, namely "Joint Inclusion Memorandum" signed in 2003, and National action plan on social inclusion for 2004-2006. These benefit principally the Roma minority living in segregated settlements. They include: *measures to create and maintain working habits* (mostly *via* public works in municipalities); measures to develop *new and better adapted methods of adult education* and support to *entrepreneurship and self-employment by the Roma.*
- *Ministry of Education is responsible for* the project of a new *zero year of education* for all children (including Roma children) before the compulsory primary education in case of their lower adaptability level. An annual budget of SKK 115 million (EUR 3 million), co-funded by the European Social Fund, is earmarked for these programmes.
- The Office of the Plenipotentiary of the Government for Roma Communities allocates funds for secondary schools and for individual students of universities, *to facilitate the study of gifted Roma students*, with a yearly budget of SKK 5 million.
- The Ministry of Construction supports the building of flats and technical amenities in Roma settlements, with an annual budget of SKK 180 million (nearly EUR 5 million). Eighty per cent of costs are financed from the budget, requiring partial co-funding by future owners (municipalities).

The challenge of improving the labour market performance of Roma is at the crossroads of economic, labour market, social and educational policies, and simultaneously involves the central, regional and municipal governments. It requires a high degree of joint policy development and co-operative implementation. Co-ordination is also important to provide Roma communities with clear, simple and strong incentives and support. A "results-oriented" approach could help to bring together various policies in this direction.

Box 5.3. **Policies in support of the Roma minority** *(cont.)*

The Ministry of Labour has created Social Development Fund, which financially supports the projects aimed at employment enhancement and integration of socially excluded into the majority society. SDF establishes the "Local Social Inclusion Partnerships" (LSIP), an independent local association representing local communities, people representing key partnership organisations, different civil associations as well as entrepreneurs. The main LSPI task is to enable civil society and community organisations to handle social issues of community planning and local development. LSPI are also active in assessment of regional and local micro projects. It is be important to ensure that this initiative is fully integrated with general budget planning, under the standard rules of transparency, integrity and results-orientation.

The benefits of a results-oriented approach could be highest in the education of Roma children, and in adult education and labour market policies. Given the extremely unsatisfactory educational achievements of Roma children, clear quantitative targets for school attendance, school completion, secondary school participation and university education could help to focus energies and efforts. It is in this context that the "Roma Decade Plan for Slovakia" fixes numerous quantitative objectives.[4] Similar benchmarks in active labour market policy, on the basis of a candid investigation of the results obtained so far, may also be helpful.[5]

A bottleneck in the development of results-oriented policies is good information. Stigma is attached to ethnically-oriented personal identification – for historical reasons. Slovak law prohibits the collection and publication of such information by the government. Unfortunately, only 1.7 per cent of Roma in Slovakia identify themselves as Roma, and such biased information is of limited use for policy purposes.[6] Office of the Plenipotentiary for Roma Communities conducted the National Sociographic mapping of Roma settlements in 2004. This study represents solely source of data on Roma population and cohorts, providing very valuable data on social infrastructure in Roma settlements. Nevertheless other quantitative data on the living standards, educational background, work history and economic conditions and expectations of Roma cohorts and groups remains crucial to conduct the in-dept analyses of Roma phenomena. This is a real challenge for the development of result-oriented policies, as *taking stock of the facts*, *fixing objectives* and *monitoring outcomes* are made more difficult.

It is thus recommended that the law be changed to permit the collection of statistics (*e.g.*, in the Household Labour Force Survey) that include a (self-identified) ethnic classification. At the same time efforts should be made to assure people that these statistics are used only at an aggregate level and are not used to identify individuals. Efforts should also be made to reduce the stigma associated with being Roma – including through the active enforcement of anti-discrimination laws.

- The philosophy of state approach to the marginalized and endangered groups of population is based on the civilian principle, not on the ethnical principle. Therefore, the programs are focused on groups of endangered or socially excluded citizens broadly (dealing with infrastructure in the underperforming and separated locations and focusing on the segregated Roma minority *e.g.*) Specific programs of prevention and resolving the social exclusion and support of marginalized population are realized primarily by the demand side calls for proposal of the European Social Fund, and by the State budget via state subsidy programs. These include: **Support programs for the community social work in the municipalities**, targeted to the locations characterized by social deprivation and deprivation of the neighbourhood. In the first phase of the

Box 5.3. **Policies in support of the Roma minority** *(cont.)*

program, primarily locations recognised as separated or segregated (according to the Sociographic mapping of the Roma settlements) were supported.

- Program **providing subsidies for installation and technical equipment of the centers for personal hygienics and laundries in the disadvantaged locations**. Main objective of this program is integration of socially excluded groups of population into the civic society by eliminating the handicaps resulting from the social deprivation, deprivation of the surroundings (*e.g.* not existing source of drinking water, Roma settlement distant from the city, numerous group of socially disadvantaged Roma minority) and setting out the conditions to support providing the basic necessaries of life and integration of endangered groups in the society. The selection and consideration of applications of this program was primarily focused on segregated Roma locations with nonexisting infrastructure (*e.g.* source of drinking water).
- **Subsidies for food, board and school tools and social scholarships for the children whose parents are in the material need**. This program is targeting the socially disadvantaged groups of population, including also Roma minority.

1. According to the latest census in 2001, 75% of men and 80% of women of Roma origin had an educational attainment of "primary school or less". Only 2.2% of men and 1.9% of women had achieved a complete secondary education – for non-Roma Slovaks the proportions were respectively 30 and 36%. Only 0.4% of men and 0.2% of women had "more than secondary" education compared with 12% and 9% respectively for non-Roma.
2. 15% of the children of school age 6-15 are estimated to be of Roma origin in 2005 and this proportion is projected to reach 17% by 2025. Their success rate is already very low in the first grades of primary education, and many are transferred to "special schools" (for children with impaired abilities) through their primary school years. As many as 64% of primary school children needing to repeat one year of education or more are of Roma origin.
3. The main national policy document on measures in support of the Roma minority ("Basic Positions of Slovak Government's Roma Communities Integration Policy", 2003) states: "Traditional skills of the Roma do not offer a potential solution for their unemployment – they are only of marginal interest for the labour market". The "National Action Plan" regarding the decade of Roma Inclusion 2005-2015 which articulates Slovakia's objectives in this World Bank/Open Society Institute initiative also has limited expectations for their employment prospects. It advocates "projects for the long-term unemployed", and a "supporting programme for social work developments has already been put into practice. Ministry of Labour is monitoring and evaluating process for project improvement, that includes setting up quantitative and qualitative indicators.
4. Three main objectives are: *i)* 50% of Roma students graduating from primary school, *ii)* 15% of Roma students graduating from primary school attend grammar (classical secondary) school, *iii)* 0% of Roma students are incorrectly diagnosed as needing to attend special schools. However, no specific target dates have yet been announced for the attainment of these objectives.
5. Active labour market policies play an increasingly important role in the economic policies of many OECD countries and their effectiveness is increasingly better researched. The specific design of the programmes heavily influence their outcomes, and many countries have been introducing innovations based on international experiences. Innovations include wider recourse to competition in the provision of related services. See Martin and Grubb (2001) and Struyven (2004).
6. Policy makers and other analysts work form a narrow pool of census and labour force survey data on the Roma minority which was available until mid 1990s and was later discontinued. Extrapolations are derived from this set of data, with additional assumptions, as used by the OECD Secretariat for the purposes of Figure 1.12. Information is more readily available on Roma living in segregated settlements, and their children, including in schools, but this group represents only one third of the total Roma population and has extreme socio-economic characteristics.

circumstances, and growth strengthening, complying with the European Union environmental standards may become increasingly costly. It is acknowledged that the utilisation of *market-based instruments* would help minimise compliance costs, but this

Box 5.4. **Market mechanisms in sustainable development policies**

The budget costs of environmental policies are increasing. The budget of the Ministry of Environment will increase from SKK 4.4 billion in 2003 (0.4% of GDP) to SKK 11.7 billion in 2007 (0.7% of GDP).

In the area of greenhouse gas emissions, a carbon emission rights market will soon start to operate, which will be an important innovation. It should help channel abatement investments to the areas where they are most cost-effective. For the years 2005-2007 Slovakia's trading of emission permits will fall under the European scheme of greenhouse gas emissions. There are 16 000 firms in Europe which will participate in this scheme, to reallocate 500 million tonnes of CO_2 emission rights per year. The amount of greenhouse gas emissions which was allocated to Slovakia in the Kyoto agreement and the subsequent European burden-sharing arrangement was 30.5 million tonnes of CO_2 (a high figure for an economy of its size, but reflecting the historically high emission levels). Slovak authorities have allocated this total national cap to individual sectors through a National Allocation Plan, and trading will start on the basis of these initial appropriations. As energy efficiency has not improved as rapidly as expected and due to strong growth, only a limited part of these permits is expected to become available for exports. According to certain estimations, around 10% of the Slovak quotas could be sold to other European countries. However, in a worst case scenario, Slovakia may be obliged to import emission permits.

Economic instruments are also used in the area of air pollution, in the form of emission taxes. Emissions of sulphur dioxide, nitrous oxides, carbon monoxide and 150 other pollutants have been taxed since 1998. The policy challenges are complex; setting taxes at appropriate levels is not simple, as the economy's and households' ability to pay must be taken into consideration, but too low taxes cause an insufficient rate of abatement investment.[*] Policy makers will need to design adequate *tax adjustment* paths. Existing laws could benefit from *simplifications,* as a wide spectrum of emissions must at present be monitored, *and law enforcement* must also be strengthened, as there is reportedly large under-reporting of actual emission levels.

* For instance, sulphur dioxide emissions are charged at EUR 49 per tonne in Slovakia *versus* EUR 1 600 in Sweden.

also implies more demanding policy design and implementation capabilities by environmental policymakers.[35] *Results-oriented budgeting* and *skill- and performance-based pay systems* could help put in place the needed resources and help to develop more growth-friendly sustainable development policies (Box 5.4).

Box 5.5. **Summary of recommendations**

Fiscal institutions

- Upgrade the audit infrastructure to the level of the other budgetary institutions by: *i)* putting in place adequate internal audit units in all government departments, and *ii)* enabling the State Audit Office to increase the scope and frequency of its external audits.
- Encourage greater use of results and performance information in the budget process in all government departments.
- Encourage greater use of accruals-based accounting in the government sector, as the accounting basis for much of the results- and performance-based information used in the budget process.
- Publish annual consolidated general government accounts on a national accounts basis.

Decentralisation

- Provide the central government with a mechanism giving it more say on the level of the fiscal deficit generated by sub-central governments, to avoid a loosening in the national fiscal consolidation strategy.
- Amalgamate the municipal structures to attain minimum efficient scales of provision of cost-effective and adequate quality services. Economise through joint provision of services by small municipalities.
- Build on the flexible fiscal and regulatory framework of the sub-central governments to introduce competitive and market-based solutions for the provision of publicly-funded services. Analyse and publicise the results of these experiences.
- Extend the mandate of the State Audit Office to sub-central governments' accounts, and expenditure and procurement practices.
- Fully enforce the provisions of the Law on Conflicts of Interest, and the other instruments of the legal framework for fighting corruption in the sub-central government layers. Build public support for the adoption of the new draft Law on the Forfeiture of Illegally Acquired Assets.
- Fully enforce the law on sub-central government borrowing. Eliminate any loopholes for quasi-fiscal (non-commercial) borrowing by municipal corporations.

Medium-term fiscal framework

- Identify additional areas for savings in the 2005-2008 medium-term framework, to be used in case of need of additional fiscal tightening.
- Phase in labour tax cuts for low-wage workers and fund this measure with savings in lower priority areas (such as agricultural and industrial subsidies, and the earmarking of tax revenues for non-profit organisations)
- Consider increasing public funding for primary and secondary education, through results-oriented resource allocation in the national education system.

Public management reforms

- Extend successful "pilot" applications, such as the Ministry of Finance's performance-based personal management. Notably, competition and sectoral regulatory authorities could be encouraged to adopt skill- and performance-based pay systems (if necessary with additional financial support from the budget).

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Box 5.5. **Summary of recommendations** *(cont.)*

- Introduce market mechanisms in the provision of public services where they can assist in the provision of services in more efficient and effective ways. Encourage regional and municipal governments to develop innovative approaches in using such mechanisms, including in primary and secondary education and health services.
- Provide public policies in support of the Roma minority with a reliable information base. Facilitate the voluntary provision of information by reducing the stigma associated with being Roma, including through the active enforcement of anti-discrimination laws.

Notes

1. See for instance Afonso *et al.* (2005).
2. Theoretically, there is no optimal size of government as this depends on citizen preferences for public goods, taxation and protection against economic hardship. The IMF (2005) provides a thorough review of the literature on the size-of-government issue without reaching a normative conclusion. Nonetheless, following Rodrik (1998) and Persson and Tabellini (1999), Von Hagen (2003) estimated a model of the expected size of the government on the basis of countries' GDP per capita level and their degree of openness. The model, estimated with a panel of 22 OECD and 11 non-OECD countries produced a remarkably good fit. It identifies post-transition countries as having particularly oversized public sectors. Slovakia's size of government measured by the share of public expenditures in GDP was *expected* to be at 31 per cent of GDP in 2001, while it was in fact 42%. In a more qualitative assessment Tanzi (2004) qualifies countries with a public expenditure share above 50% of GDP as *large-government* countries, those situated between 30-50% as *medium-government* ones, and those with a share below 30% as *small-government* countries. He estimates that small governments are the most effective ones.
3. Alesina and Perotti (1996a) qualify consolidation programmes based on reductions in social transfers and government wages as high quality "Type 1" consolidations. The literature on fiscal policies suggests more generally that consolidations based on expenditure cuts prove more resilient than those based on tax increases. This is due to the fact that spending-based consolidations do not depend on a high tax ratio and therefore are not vulnerable to tax cut pressures. Von Hagen (2003) notes that in the run-up to EMU, fiscal consolidations based on expenditure cuts prove more durable.
4. The revenue neutrality of tax cuts was confirmed in 2004, when the tax system was further simplified by setting the tax rate on corporate income, personal income and value added tax at a uniform rate of 19%, without any major revenue losses.
5. See J. Kling and V. Niznansky (2003); and Brusis (2003).
6. Eight new regions, with approximately 700 000 inhabitants each were created, with no hierarchical relations with central government. 2 883 municipalities were also confirmed as self-governing legal entities, also with no hierarchical links with central and regional governments.
7. Competencies were devolved partly as "own responsibilities" of sub-central governments, and partly as state responsibilities "delegated" to them. To carry out the latter the sub-central authorities are entitled to central government funds and are accountable for meeting national standards.
8. From 2005, regional governments will receive 24%, and the municipalities 70% of the total PIT collected in Slovakia. Part of the proceeds will be redistributed through an equalization fund, according to objective criteria (for instance, the city of Bratislava is expected to generate SKK 12 billion of PIT in 2005 and collect SKK 4 billion of it after redistribution). In 2005, PIT revenues (the sum of locally-generated and reallocated PIT revenues) are expected to account for 44% of regional government revenues and 28% of municipal revenues. Central government transfers for the execution of "delegated tasks" should account for 53% of regional revenues, and 32% of municipal revenues. Municipalities will receive the rest of their revenues from non-tax sources and more marginally from local taxes.
9. In 2005, own taxes are expected to account for around 10% of the total revenues of municipalities and for only marginal amounts for regional governments. Business organisations are concerned about future increases in these taxes. The Small Business Association of Slovakia (SAMP)

demanded in May 2005 that the authority for setting real estate tax rates be returned to the central government, on the ground that certain municipalities are increasing these taxes in unbearable proportions for small businesses.

10. The literature stresses *i)* the effective transfer of taxation powers to sub-central authorities and *ii)* the mobility of the taxpayer base as two main mechanisms which help harness efficiency gains from decentralisation. Empirical evidence is more diverse and the consequences of decentralisation on macroeconomic balances and growth seem to depend on a wide range of economic and country-specific factors. See: De Mello and Barenstein (2001), Joumard and Kongsrud (2003), Meloche *et al.* (2004).
11. The recent government efforts to strengthen the fight against corruption and difficulties with harnessing the Parliament's support to the adoption of the full set of proposed laws are reviewed in Chapter 4.
12. Ministry of Finance of the Slovak Republic, Convergence Programme for the Slovak Republic Covering the Period 2004-2010, Bratislava, May 2004 – and its "Update", November 2004.
13. Government fiscal objectives are expressed in standard national account terms. This has implied, until 2005, that the "fiscal costs" of the pension reform introduced in 2005 were entirely included (treating all social security contributions *diverted* to the new private pension pillar as *revenue losses for the budget*). In March 2005, European Ministers of Finance permitted Slovakia, and other reformers, to deduct part of the costs of the pension reform from their fiscal reports for Maastricht-compliance purposes (100% of costs deducted in the first year of reform, 80% in the second year, etc., with no deduction permitted after the 5th year). This ruling offered Slovakia additional room in its fiscal compliance strategy (providing an additional margin of approximately 0.8 per cent of GDP in 2005, 1.3 per cent in 2006 and 1.0 per cent in 2007, on the basis of the Ministry of Labour projections on the number of workers expected to shift to the new pillar).
14. The authorities envisage *i)* to increase the retirement age from 62 to 65 after 2011, and *ii)* to shift to a "price-only" indexation of pensions after the same date (instead of an average of price and wage indexation by then). As a first step, the Slovak Parliament accepted a law indexing the highest pensions to prices from May 2005. Authorities might also consider reductions in the pension benefits for certain groups which are favoured by the new benefit calculation rulers. Such adjustments may contribute to long term sustainability of the pay-as-you-go pillar. OECD will publish, in the course of 2005, a detailed analysis of pension benefits after recent reforms which may contribute to the evaluation of alternatives.
15. The share of total public expenditures will decline from 40% of GDP in 2004 to less than 39% in 2007, in spite of a yearly growth rate of 0.8% in their volume. The decline is explained by a decrease in the share of primary expenditures rather than a fall in the interest cost of public debt. If the real volume of expenditures was frozen, the share of expenditures and the share of the deficit in GDP would decrease by more than 1.5% of GDP per year. Authorities stated that they did not find an absolute freeze in expenditures either realistic or necessary.
16. The government's growth projections are more conservative than non-governmental organisations". The Ministry of Finance projects average yearly growth of 4.5% up to 2010, the National Bank of Slovakia expects an average growth rate between 5-6% through 2007, and the OECD Secretariat projects 4.8% and 5.7% respectively for 2005 and 2006 (OECD *Economic Outlook*, Spring 2005).
17. Subsidies to the enterprise sector reported in the budget include: *i) transportation subsidies* (mainly to railway companies, and amounting to 0.7% of GDP) in 2005; *ii) agricultural subsidies* (1% of GDP in 2005, on top EU transfers to farmers which amount to another 1% of GDP); and *iii) subsidies to industrial parks and training expenses of FDI investors* (approximately 0.3% of GDP). The fiscal cost of tax holidays granted as FDI incentives is not included in these calculations. Tax expenditures (the fiscal cost of tax holidays) granted to two large investors (Volkswagen Slovakia and US Steel Kosice) have been estimated at SKK 5.4 billion in 2004 (around 0.4% of GDP).
18. At around 2% per year.
19. These tax and social security contribution declines will occur for technical reasons. Neither tax nor social security contribution rates are projected to change during this period.
20. The number of registered unemployed people is projected to fall from 426 000 in 2004 to 394 000 in 2007.
21. Health cost projections assume that *i) per capita* health spending will remain constant in real terms for each age cohort, *ii)* health service and product prices will not increase above inflation, and *iii)* technological innovations in the health system will not increase costs.

22. The present efforts by the Ministry of Labour to find additional saving sources in the social security system for 2006-2008 may be reflecting these underlying pressures. The Ministry announced in May 2005 that savings will be sought in the sick leave system by raising the number of employer-compensated days of absence (from 10 to 15 days) and by reducing the sick leave *premia* of the self-employed. The decision to index the top pensions on inflation, instead of an average of inflation and nominal wages, passed by the Parliament in May 2005, should also generate savings.
23. If the real volume of expenditures is kept constant.
24. Many of these practices remain somewhat experimental in other OECD countries and their leverage on the quality and cost-efficiency of public services is not entirely established. However, lack of experimentation would slowdown learning and delay the discovery of the more effective ways of providing various services.
25. EU Convergence Programme for the Slovak Republic covering the period 2004-2010, Bratislava, 2004.
26. *National Report on Economic Reform of the Product and Capital Markets*, Bratislava, 2003.
27. See Diamond (2005). This approach is accepted as international best practice in fiscal management, despite remaining questions about its degree and conditions of adoption in different national contexts. See: Shick (1998), OECD (2004) and Lienart (2005).
28. See OECD *Economic Survey of Slovakia*, 2004.
29. These public employment laws and the innovations they introduced in the employment and remuneration conditions of civil servants were described in the OECD *Economic Survey of Slovakia*, 2004.
30. The Ministry has retained 75% of the total savings resulting from job cuts in its own budget, returning the rest to the state budget.
31. Interestingly, many of these experts have been employed in the design and successful implementation of the new fiscal management techniques.
32. OECD organised in March 2005 a symposium to review the recent Member country experiences in introducing market-type mechanisms in the provision of public services. See OECD (2005a).
33. Transparency International Slovakia has, for instance, launched a nation-wide project to review and compare the way local governments provide their main services. The review will examine the degree of utilisation of market mechanisms and their outcomes. Quantitative indicators of service quality and costs will be utilised in the Survey.
34. OECD has recently reviewed the international experiences in this area and concluded that “performance based pay’ for teachers works when supported with additional measures and conditions. See OECD (2005b).
35. There are concerns that national and regional governments may face difficulties in implementing, and verifying, the more complex emission measurements needed for the utilisation of economic instruments.

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ANNEX 5.A1

Fiscal decentralisation in Slovakia

As discussed in the main chapter, Slovakia is currently undergoing a major decentralisation which transfers both spending responsibilities and revenues from the central government to regions and municipalities. This Annex briefly describes the main elements of this reform with respect to spending assignments, funding, fiscal discipline and transparency and points to some of the remaining problems.

Spending assignments

Most public services and infrastructure, such as education (with the exception of universities), health-care facilities, social services, public transportation, road-building and maintenance (with the exception of highways) have to be provided by regions and municipalities (see Table 5.1 above). However, the central government supervises this provision in order to ensure that national standards are met. The distribution of duties appears to be generally clear and uncontroversial and the problem of overlapping responsibilities between different levels of government has not been noticeable in recent decentralisation. In certain areas, such as maintaining the health care, long-term care, and other specialised care networks the respective responsibilities of central, regional and municipal governments will, however, likely involve overlapping responsibilities in the future.

Furthermore as social services are provided by local governments and as there exists a relatively large "welfare-dependent" population, the problem of "welfare migration" to more generous jurisdictions could also arise. Currently much of the welfare-dependent group is geographically static (notably the Roma population living in settlements), but it could become more mobile in the future – if increases in real incomes made transportation to and settlement in other regions more affordable – and might therefore become more responsive to differences in the quality of public services and possibly of local social support. At present, there are serious problems in the access of this group of the population to basic public services.[1]

Cost-efficiency and quality of public service provision

While decentralisation generally increases accountability and responsiveness and thus leads to a more efficient provision of public services, in the case of Slovakia this is hampered by the highly fragmented administrative structure due to the small size of municipalities. There are at present 2 891 municipalities, 70% of them with less than 1 000 inhabitants. The small size of many municipalities prevents the exploitation of economies of large scale as it clearly below the minimum size of 3 000-8 000 inhabitants

which has been estimated for the effective provision of basic services in Slovakia.[2] The abolishment, in 1996, of a Law requiring that each municipality should have at least 3 000 inhabitants further accelerated fragmentation. There is presently no floor for the creation of municipalities depending on the will of inhabitants. Each municipality has a council, and there are now 25 000 elected local officials across the country (*i.e.*, one elected local official for every 220 inhabitants). In many places the administrative costs of municipalities eat up to 50% of their yearly budget. Voluntary amalgamations were very rare until 2003, but new funding methods have forced the merger of certain services.[3] Given the negative experiences during the 1960s and 1970s with forced amalgamations of local governments and the subsequent perception of arbitrariness and lack of representation[4] there is strong local opposition to amalgamation. As a result, any natural amalgamation process is expected to be slow; government officials frequently mention the Danish experience where mergers took over two decades – an unacceptably long period in Slovakia's circumstances. The Plenipotentiary for Decentralisation will submit a report to the government on this issue in the course of 2005.[5]

The small size of jurisdictions also hinders the building up of the necessary expertise. Many municipalities and, for certain sophisticated tasks, also regional governments, face problems in providing services of an adequate quality, notably in urban development, land planning, construction permits, primary school management, social assistance – notably long-term care for the elderly – and housing policy.[6] Municipalities are also not well-equipped in dealing with network industry and competition issues in local water, energy, transport and other public utility sectors in their jurisdiction.[7] Regional governments are faced with similar problems in the planning and management of secondary education – particularly vocational secondary education – and health network planning.

Funding

There has already been a shift from earmarked grants to block grants, and from these to shared taxes. The central government will continue to "allocate" revenues based on objective criteria for the execution of the "delegated tasks" of sub-central governments (for instance, in primary and secondary education per pupil allocations will be granted), but sub-central governments will be given increasing room to make their revenues "fungible" and to provide services on a cost-minimising basis.[8]

The central budget generally provides for the devolved responsibilities to regions and municipalities on the basis of the earlier budget allocations for the same functions (before decentralisation). However, the provision of infrastructure services may be under-funded as capital and depreciation costs are not fully reflected in current funding, reflecting partly the lack of accruals-based accounting in the costing of services. As a result, a "maintenance and replacement backlog" seems to have formed in certain areas, notably school and transportation facilities and an "unfunded mandate" debate recently arose in the area of regional and municipal transportation, with regional and local governments stating that these services are under-funded while the central government argues that cuts must be effected in less priority services. More generally, there seems to be a lack of clarity on "national service availability and quality standards" for services devolved to sub-central governments, including those devolved "in delegation" from the central government.[9]

The revenues from the personal income tax (PIT) are fully distributed to regions and municipalities although the central government keeps full control over the base and the

rate of this tax. The distribution of these revenues is carried out through an equalisation scheme which is based on demographic and topographic criteria.[10] However, this system does not take into account in detail the differences in service provision costs and needs across jurisdictions. Since these differences are not reflected in the formal criteria, pressures for discretionary transfers can be expected to mount in the future.

Sub-central governments have, however, unlimited taxing power on some taxes, such as road and real estate levies. They are also allowed to raise user charges for municipal services. Local taxes do not appear yet to differ significantly, but may be expected to do so in the future. Local taxes may concentrate on tax bases with limited mobility, such as the profits or fixed assets of small and medium-sized enterprises. The national grant and revenue re-distribution system, in its present design, is not likely to curb incentives to increase local taxes.

Fiscal discipline

There is currently no rule with regard to expenditure and annual borrowing at the regional and local level although there is a general ceiling for the total level of debt (60% of their total budget revenues for the previous year) and the level of debt service costs (principal and interest) (25% of annual spending).[11] Below this ceiling regions and municipalities are entitled to issue securities so that the capital market may, perhaps, sanction higher indebtedness of individual municipalities by higher risk *premia*. Indeed, many regions and municipalities are already seeking independent ratings. The municipal bank has been privatised to a specialised international private institution and this has closed a major loophole in municipal financing. The central government formally refrains from underwriting sub-central debt, and regional and municipal government bankruptcies are formally possible. However, it is not clear if a region or a medium-to-large size municipality can go bankrupt in practice, and, if not, if "moral hazard" risks remain in the system with the central government having to bail out failing sub-central authorities.[12]

Therefore, the "debt ceiling" rule, as mentioned above, remains the main instrument for ensuring fiscal discipline but there are risks that it may be circumvented by quasi-fiscal borrowing by municipal corporations and other means. The internal audit practices of municipalities appear insufficiently strong to prevent fiscal slippages and to identify cases of fraud, and the State Audit Office is not legally entitled to audit the accounts of regional governments and municipalities; a recent Ministry of Justice attempt to extend coverage was blocked in the cabinet because of lack of support in the Parliament.

Given the need for fiscal consolidation and to keep the general government deficit within the limits of the Stability and Growth Pact, other countries have developed frameworks for an appropriate division of responsibility between the national and sub-national levels and for achieving consistency between national and sub-central fiscal policies. In Slovakia there is currently no such framework. Before decentralisation the central government could ensure fiscal consistency between the various levels of government through its high share of transfers in total local revenues, but as the share of own-revenues of sub-central governments (including shared taxes) grows, this control will be more difficult. The risk of inconsistency of fiscal policy between the central and local level of government and of a pro-cyclical spending behaviour at the local level has therefore increased with decentralisation.[13]

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Transparency

The government aims at generalising accruals-based ESA 95 national accounts across all government layers. However actual practice is lagging.[14] Comparative information on the quality of services offered by sub-central governments is also very limited. This type of benchmark information has even weakened in certain areas following decentralisation.[15] Civil society (non-profit) organisations contribute performance reviews which are partial substitutes for lack of official information. On the other hand, the laws promoting the disclosure of personal assets of public officials and the rules preventing conflicts of interest of public officials have not been extended to local politicians.[16]

Notes

1. See Zoon (2001).
2. This is a wide-range estimation in the Slovak context taking account of assessments by various researchers. See Kling, Niznansky and Pilat (2002).
3. 300 primary schools were closed and merged by municipalities in the past two years, while such closures were politically very difficult before, when attempted by the central government.
4. Martinez-Vazquez and do Carmo Oliveira (2005).
5. The report will explore possibilities for voluntary (for municipalities above a given size) and mandatory (for municipalities below a given size) mergers. The use of financial incentives for amalgamation, as in other highly fragmented countries, could smoothen the process.
6. Before the full implementation of decentralisation a report on Slovakia's housing policies by the United Nations report noted that: "Slovak municipalities have not made the institutional changes needed to carry out their new role in the housing sector. Very few municipalities have adopted clearly structured local housing policies. This is due partly to the lack of municipal institutions with clear responsibility for such policies and partly to the limited freedom that municipalities have to formulate and implement such policies (*e.g.*, continued State responsibilities, inadequacies in municipal funding)" [UNECE (1999)].
7. Kling and Niznansky (2003).
8. In 2005, municipalities are entitled to re-allocate 20% of their "per pupil based" educational allowances to other uses.
9. The Ministry of Finance recognised in a report in Spring 2005 that certain municipalities are short of resources to fund the assigned public transportation responsibilities. The funding gap in this area is due to the discontinuation of part of transportation subsidies, and could attain in 2005 SKK 1.1 billion (0.1% of GDP) in 2005.
10. Each locality is given a redistribution coefficient based on: the size of its resident population (accounting for 23% in the composite coefficient), height from the sea – a proxy for heating and road maintenance costs – (32%), size of settlement (40%), and the weight of the elderly population (5%).
11. The debt ceiling is constraining for the few municipalities who have already attained their debt limits (such as Bratislava and Kosice) but not for the others. The total debt of municipalities amounted to not more than 4% of total public debt at the start of decentralisation in 2002.
12. There have been recent cases of municipalities going bankrupt in some other Central European countries, sending the financial markets the signal that central governments are not "bailers of last resort". However, these cases concerned only some small municipalities.
13. The government is aware of these risks and is prepared to adjust central government fiscal balances in the short-term if sub-central behaviour is inconsistent with general fiscal objectives. This is clearly a transitory approach.
14. Accruals-based accounting is being used in some central government organisations but has not yet been generalised.
15. For instance, secondary schools' performance in university entry and labour markets, once followed and publicised by the local offices of the national labour service, is no longer tracked.
16. A draft law by the Ministry of Justice – backed by a multi-partite parliamentary commission – which would permit a significant improvement in this area faced strong resistance and was withdrawn in 2005.

ANNEX A

Table A1. **The implementation of previous OECD recommendations**

A number of specific structural recommendations were made in the previous *Economic Survey* that was published in March 2004. A brief evaluation of the actions since taken by the Slovak authorities is presented below.

Key issues/ 2004 recommendations	Action taken	Assessment	Follow-up recommendation
Panel A: Product markets			
Follow through on the privatisation of the remaining state-owned enterprises.	Privatisation continued.	Recommendation was partly implemented.	Continue with the privatisation process.
Consider selling part of the 51% share still held by the government in large-size energy sector companies such as SPP and Transpetrol.	The strategic companies act was amended to allow for this approach.	The government is moving cautiously – Yukos/Gazprom has been the main investor.	Continue to consider the privatisation option (with partners with clear ownership and governance structures).
Accelerate rationalisation of Slovak Railways, including reductions in labour costs and the closure of some lines.	The railway company was split into an infrastructure agency and two state owned corporations for rail freight and passenger services. Some limited rationalisation of the network and some employment cuts took place. The rail freight company is being prepared for privatisation.	Recommendation was partly implemented.	Proceed with the privatisation of freight company. Open passenger services to competition.
Simplify regulations and administrative procedures for starting new companies.	The government prepared new legislation that considerably simplifies and shortens the entry process.	Implemented in 2004.	
Ensure that the Anti-Monopoly Office (AMO) has the independence and resources necessary to implement the 2001 Competition Act, which brings the legal framework in line with EC norms.	The Antimonopoly Office is functioning as an independent authority.	The resources and competition advocacy role of AMO can be strengthened.	Continue with the implementation of the Competition Act.
Use the Regulatory Office for Network Industries (RONI) to enhance competition in energy industries and accelerate the liberalisation process.	All EU directives concerning the liberalisation of electricity and gas markets have been transposed in 2004 and common rules for internal electricity and gas markets have been implemented.	Actual competition remains limited.	Keep implementing the recommendation.
Monitor the qualification criteria imposed by professional and business groups to ensure that they do not act as entry restrictions.	Certain regulations for legal professions have been simplified.		Continue to implement the initial recommendation.
Improve the professional expertise of the Financial Market Authority so that insider trading and price manipulation can be detected.	Financial Market Supervision has been fully integrated with the surveillance responsibilities of the Central Bank.		Continue to implement the initial recommendation.
Adopt a new bankruptcy framework improving the selection of trustees, granting greater rights to creditors facilitating industrial restructuring.	The new Bankruptcy and Settlement Act has been approved by Parliament.	The new law provides the needed legal framework for bankruptcy management.	Expand the institutional and technical capacity of the judiciary system to swiftly and competently apply the new framework.

Table A1. **The implementation of previous OECD recommendations** *(cont.)*

A number of specific structural recommendations were made in the previous *Economic Survey* that was published in March 2004. A brief evaluation of the actions since taken by the Slovak authorities is presented below.

Key issues/ 2004 recommendations	Action taken	Assessment	Follow-up recommendation
Panel B: The financial sector			
Include the prudential supervision of the new pension funds in the mandate of the Financial Market Authority.	The supervision of the pension funds is included in the integrated financial market supervision system in the Central Bank.		
Panel C: Labour markets			
Accompany the reinforcement of labour supply incentives by stimulating labour demand through social contribution cuts or targeted employment subsidies.	Social security contribution rates were reduced by 3% early 2005 but labour tax wedges remain high. The government has announced that further cuts are not envisaged (due to fiscal constraints).		Implement substantive reductions at the low wage end of the labour market, and fund this measure with expenditure cuts in lower priority areas.
Implement pilot projects to test the abilities of commercial placement services to support public job placement.			Implement recommendation.
Provide incentives to regional governments to enhance vocational school *curricula* in co-operation with local businesses.	Certain regional governments have initiated such co-operative programmes.		Analyse and advertise the successful experiments and encourage their diffusion.
Monitor closely the effectiveness of active labour-market programmes. Fund the re-training programmes on a competitive and "money follows the student" basis.	National Labour Office monitors statistically the utilisation of the ALMPs.		Implement recommendation.
Upgrade the education and training systems. Facilitate the establishment of private universities. Monitor the performance of decentralised primary and secondary schools.	A new Law on Universities transforms them into autonomous institutions. The ownership of secondary and primary schools has been decentralised to regional and municipal governments.	University Law is a positive first step but a new Law on student fees has been rejected by Parliament. The university accreditation system remains restrictive and the performance of primary and secondary schools is not transparent.	Implement recommendation.
Adapt curricula of vocational schools to the needs of enterprises.	The responsibility for vocational schools has been decentralised to regional governments.	Decentralisation should facilitate the co-operation of vocational schools with local businesses.	Monitor the experiments of decentralised vocational schools. Make transparent the comparative performance of regional vocational school systems.
Eliminate the extension of collective agreements to firms not involved in the negotiations.	The government banned such extensions in 2004 with an explicit amendment in the Law.	Implemented.	
Panel D: Public sector			
Remove distortions in the housing market.	Regulated rents were increased sharply but the market for rental housing remains underdeveloped.	Partly implemented. Current law provides little incentive for rental housing development by the private sector.	Facilitate rental housing development by the private sector.
Improve the transport system.	The national road network is being developed according to a new plan. A specialised motorway company was created to develop and operate the national motorway network.	Avoid a quality gap forming between the nationally funded motorway network, and the local road networks managed by the regions and municipalities. Avoid maintenance backlogs in regional and local roads. Road construction costs appear high.	Monitor the costs and the pace of development and the quality of maintenance on the various components of the national road network.

Source: OECD.

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2005 16 1 P) ISBN 92-64-01267-2 – No. 54233 2005

Slovak Republic

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ISSN 0376-6438
2005 SUBSCRIPTION
(18 ISSUES)

Volume 2005/16 – September 2005

ISBN 92-64-01267-2
10 2005 16 1 P