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Table of Contents

Executive summary 9

Assessment and recommendations 11

Chapter 1. **Turkey's challenges to achieving a sustainable catching-up** 19

Turkey's recent economic performance and outlook 20
Managing macroeconomic risks and improving resilience to shocks 32
Deepening structural reforms to sustain a rapid catching-up 33
Conclusions. 36
Notes 37

Chapter 2. **Managing macroeconomic risks and improving resilience to shocks** 39

Despite good macroeconomic outturns, recent turmoil has highlighted Turkey's vulnerabilities 40
Improved macroeconomic resilience to international shocks is essential 42
Monetary policy is being tested 53
Fiscal policy institutions need to be strengthened 59
Structural policy can also play an important role. 62
Prudential banking supervision should be further improved, to strengthen financial sector resilience. 64
Conclusions. 69
Notes 71
References. 72
Annex 2.A1. Debt sustainability scenarios: methodology and assumptions 75

Chapter 3. **Enhancing competitiveness and growth and reducing incentives to operate in the informal economy** 79

A dynamic business sector facing new challenges 80
Performance differs across sectors and firms 82
Policies to cope with increased competition 87
Conclusion: Regulatory simplification is the key to enhancing competitiveness and growth 108
Notes 111
References. 114
Annex 3.A1. An analysis of the evolution and determinants of profitability in Turkish manufacturing industry, 1998-2005 117
Annex 3.A2. The effective tax burden of companies in Turkey 123
Annex 3.A3. Surveys on the competitive strengthsand weaknesses of firms of different sizes 127
Annex 3.A4. Dynamic medium-sized enterprises' access to credit and equity capital 129

Chapter 4. **Making the pension system less of an obstacle to formalisation** 133

The slow transition to the new rules is expensive and creates poor incentives for formal sector participation 134
Social security contribution rate cuts should be made an priority 143
Ways to address concerns about poverty among the older population 144
The agenda for further reform 146
Notes 149
References 150
Annex 4.A1. Assumptions underlying the pension analysis 151

Chapter 5. **Making quality education accessible to the whole population** 153

The education system perpetuates economic *duality* 155
Summary 165
Notes 167
References 167

Chapter 6. **Freeing the potential of agriculture** 169

Productivity in agriculture is low... 170
... and exports remain below potential 170
Public support is high 172
The support system has been challenged... 175
... and has been fundamentally reformed 178
Conclusions 188
Notes 190
References 191

Boxes

1.1. Is the political climate important for reforms? 31
2.1. Life after the IMF 43
2.2. Public and external debt ratios could reverse trend 49
2.3. Inflation targeting in Turkey 54
2.4. Managing public finances: remaining challenges 60
2.5. The fiscal risks of health reform 63
2.6. The agenda for strengthening prudential banking supervision according to the Imar Commission 68
2.7. Summary of recommendations to improve resilience to shocks 70
3.1. Strengths and handicaps of small firms 89
3.2. Strengths and handicaps of medium-sized firms 92
3.3. Strengths and handicaps of formal sector firms 95
3.4. The inflation tax 99
3.5. The political discussion about the appropriate minimum wage in other emerging countries 104
3.6. A comprehensive strategy to raise competitiveness and growth based on regulatory simplification and formalisation 110
4.1. The 2006 social security reform 136
4.2. Early retirement incentives and continued work incentives 139

4.3. Lowering social security contribution rates without blowing out the system deficits . . . 145
4.4. Recommendations for further pension reform . . . 148
5.1. Recent education reforms . . . 154
5.2. Overcoming education policy fragmentation and finding a consensus about the role of vocational schools, including Imam Hatip schools . . . 162
5.3. Summary of recommendations . . . 166
6.1. A unique political economy environment . . . 178
6.2. Competitiveness costs of low-productivity agriculture . . . 179
6.3. Recommendations for freeing the potential of agriculture . . . 189

Tables

1.1. Main economic reforms . . . 23
1.2. EU negotiations: a selection of completed and intended convergence reforms during 2005-07 . . . 24
2.1. Key indicators of economic vulnerability . . . 44
2.A1.1. Baseline assumptions for public debt scenarios . . . 76
2.A1.2. Baseline assumptions for external debt scenarios . . . 78
3.1. Informal employment in manufacturing and service sectors . . . 89
3.2. Severance payments in OECD countries . . . 102
3.3. Minimum labour costs in OECD countries . . . 103
3.4. Major privatisations in 2005 and 2006 . . . 109
3.A1.1. Performances of individual sectors . . . 121
3.A2.1. Assumption of the calculations . . . 124
3.A2.2. Tax parameters used in the calculations . . . 124
3.A2.3. Effective Average Tax Rates (EATR) at Corporate Level . . . 125
3.A2.4. Effective Marginal Tax Rates (EMTR) at Corporate Level . . . 125
4.1. Options for further pension reform . . . 143
4.2. Means-tested pension versus the poverty line for a single individual . . . 148
4.A1.1. Summary of key features of the different pension rules . . . 152
6.1. Prospects for tariff convergence: Trade tariffs in Turkey and the EU . . . 180
6.2. Transfers from consumers and transfers from taxpayers after reform . . . 181
6.3. From sheltered to competitive agriculture . . . 183

Figures

1.1. Economic performance after reforms . . . 21
1.2. Institutional transition and growth: where Turkey stands . . . 25
1.3. Macroeconomic balances and international risk perception . . . 26
1.4. Perceptions of Turkey's business environment compared to 7 countries, 1995-2005 . . . 27
1.5. The sources of real income differences, 2004 . . . 28
1.6. The skewed distribution of labour mobilisation and labour productivity . . . 29
1.7. Working age population growth, exits from agriculture and unemployment . . . 30
1.8. Turkey's higher risk premium in response to the weakening international risk appetite . . . 31

1.9. "What if" reforms of uneven depth lead to different medium-term paths? . . . 34
2.1. Positive macroeconomic fundamentals . . . 41
2.2. Risk spreads have narrowed, not only in Turkey . . . 42
2.3. Current account trends . . . 46
2.4. Net FDI flows by sector and in comparison with other countries . . . 47
2.5. Developments in the nominal exchange rate . . . 48
2.6. Net public debt stock under alternative scenarios . . . 50
2.7. Gross external debt position . . . 51
2.8. Gross external debt stock under alternative scenarios . . . 52
2.9. Inflation trends . . . 55
2.10. Measures of the output gap . . . 56
2.11. The Central Bank faces a credibility challenge . . . 57
2.12. Nominal effective exchange rate and auctions . . . 58
2.13. Available measures of recent fiscal outcomes in Turkey . . . 61
2.14. Composition of foreign assets in Turkey . . . 64
2.15. A credit boom in Turkey . . . 65
2.16. Consumption growth outstripping wage growth . . . 66
2.17. Foreign exchange exposure varies across sectors . . . 67
2.18. Moody's weighted average bank financial strength index . . . 68
3.1. Recent business sector performance . . . 81
3.2. The real exchange rate and profit margins in domestic and export markets . . . 82
3.3. Recent performance in some representative sectors . . . 84
3.4. Wage growth in a declining and in a highly competitive sector . . . 85
3.5. Employment shifts from declining to growing sectors . . . 86
3.6. Shift of specialisation towards medium technology and the trade balance, 2000-05 . . . 87
3.7. Turkey and China in the European clothing market . . . 88
3.8. The "advantages" of informality . . . 90
3.9. Micro entreprises' structural handicaps . . . 91
3.10. "Anatolian Tigers" . . . 92
3.11. The extent of informality among medium-sized firms . . . 94
3.12. International comparison of the effective average tax rates in 2005 . . . 97
3.13. Seigniorage and inflation tax in Turkey . . . 99
3.14. Average tax wedges on labour, international comparison . . . 100
3.15. Employment protection regulations, Turkey *vs.* OECD countries, 1993-2003 . . . 101
3.16. Product market regulations, Turkey *vs.* OECD countries, 1998-2003 . . . 106
3.17. High infrastructure costs . . . 107
3.A1.1. Contributions to export profit margins in manufacturing industry (1998-2005) . . . 119
3.A1.2. Revealed comparative advantages: Turkey *vs.* China . . . 120
3.A2.1. Structure of the model . . . 123
4.1. Deficits in the pension system . . . 135
4.2. Net replacement rates: international comparison . . . 136
4.3. Minimum pension eligibility age is only gradually being increased . . . 138

4.4. Effective gross replacement rates by sex and birth cohort after the 2006 reform 140
4.5. Older cohorts are benefiting enormously 142
4.6. Old age income disparities within the population are large 147
5.1. Educational attainment of the population 156
5.2. Student performance and enrolment rates 157
5.3. Relationship between student performance and the PISA index of economic, social and cultural status (ESCS). 159
5.4. Public spending is skewed towards the elite schools 159
5.5. Labour market status by educational attainment, 2006 161
5.6. PISA performance and ESCS index of Imam Hatip students *vs.* other public school students 163
6.1. Agriculture's performance gap 171
6.2. Weak farm fundamentals 172
6.3. Productivity gap in international comparison 173
6.4. Agricultural exports 174
6.5. Policy support and the weight of agriculture in the economy 176
6.6. The evolution of policy support to agriculture. 177
6.7. Are support purchases starting again? 182
6.8. The pricing of irrigation water 185
6.9. Remaining potential for employment adjustment 188

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 Turkey were reviewed by the Committee on 7 September 2006. 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 19 September 2006.

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

The previous Survey of Turkey was issued in December 2004.

BASIC STATISTICS OF TURKEY

THE LAND

Area, (thousand sq. km)	779	Major cities, 2000 (thousand inhabitants):	
Agricultural area (thousand sq. km), 2004	281	Istanbul	10 019
Forests (thousand sq. km)	212	Ankara	4 008
		Izmir	3 371

THE PEOPLE

Population, 2005 (million)	72.1	Civilian labour force, 2005 (million)	24.6
Per sq. km, 2005	92.6	Civilian employment	22.0
Annual rate of change of population, 1995-2005	1.6	Agriculture, forestry, fishing	7.0
		Industry	3.9
		Construction	1.1
		Services	10.0

PRODUCTION

Gross national product (GNP), 2005 (TL million)	486 401	Origin of GDP, 2005 (per cent):	
Gross domestic product (GDP), 2005 (TL million)	487 202	Agriculture, forestry, fishing	10.2
Per head (GDP), (USD)	5 008	Industry	29.8
Gross fixed investment, 2005 (TL million)	95 307	Services	60.0
Per cent of GDP	19.6		
Per head (USD)	985		

THE GOVERNMENT

Public consumption, 2005 (per cent of GDP)	13.1	Gross public debt, end-2005 (per cent of GDP)	71.6
Central government current revenue,		Domestic	52.9
2005 (per cent of GDP)	27.7	Foreign	18.7

FOREIGN TRADE

Commodity exports, 2005, f.o.b. (per cent of GDP)	20.3	Commodity imports, 2005, c.i.f. (per cent of GDP)	32.3
Main exports (per cent of total exports):		Main imports (per cent of total imports):	
Textiles and clothing	25.4	Mineral fuels and oil	18.2
Machinery and equipment	7.1	Machinery and equipment	14.0
Motor vehicles	13.0	Vehicle	9.0
Iron and steel	10.5	Iron and steel	9.1
Other exports	43.9	Other imports	49.6

THE CURRENCY

Monetary unit: New Turkish lira		Currency unit per USD, average of daily figures:	
		2005	1.3408
		2006 (January-September)	1.4226

Executive summary

Substantial progress in macroeconomic stabilisation and institutional reform has laid a foundation for strong GDP growth. However, the recent inflation shock and turmoil in the financial markets highlight Turkey's on-going vulnerabilities. A further comprehensive programme of structural reform would increase productivity growth, expand the formal sector of the economy and consolidate macroeconomic stability.

Managing macroeconomic risks

The main macroeconomic priority is to consolidate the progress already made.

In the area of fiscal policy, the Government should follow through with its announced intention to complement the annual primary fiscal balance target with an expenditure cap. This move would allow the government to register a primary surplus above the target in economic upswings. The Government should also further improve budgetary transparency and the quality of institutions and processes and adhere to National Accounting Standards.

In the area of monetary policy, the Central Bank needs to restore inflation to the desired path and the Banking Regulation and Supervisory Authority should strengthen its corporate governance and human resource management.

Improving framework conditions for the formal sector

Because of the high burden of regulations, a large number of firms and individuals are pushed into the informal sector, where productivity is low and working conditions are poor. In order to overcome this impediment to growth, the Government needs to:

- Improve conditions for job creation in the formal sector *by cutting social security contribution rates, adopting more flexible employment protection regulations, replacing severance payments with unemployment insurance, and permitting the minimum wage to vary across regions and gradually decline as a share of the average wage.*
- Implement further changes to the pension system to raise formal sector employment. *Cuts in pension contribution rates would make it cheaper to employ labour in the formal sector, and the cut can be partly funded by a package of other reforms including a reduction in early retirement incentives.*
- Further simplify the legal and regulatory environment *governing the business sector, eliminate remaining obstacles to foreign direct investment, and focus on promoting competition and competitiveness in all sectors of the economy, avoiding sector-specific measures.*
- Re-focus educational priorities, within the limits of budget discipline, towards making good quality education available to the entire youth population, *rather than just to the most able. Better prepare young people directly for the labour market.*
- Continue to replace agricultural subsidies with income support to farmers, *and raise productivity in agriculture by strengthening the legal framework for land consolidation, enhancing technology transfers and encouraging private investment in irrigation.*

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Assessment and recommendations

Economic growth has been strong over the past few years and Turkey is well-placed to break with the previous history of boom and bust cycles…

The recovery from the 2001 crisis has been impressive. Over the 2002-05 period, output increased by a third, representing the strongest pace of growth among OECD countries. At the same time, annual inflation fell steadily, reaching single digits in 2004 for the first time in three decades, while sound fiscal and monetary policies improved confidence and reduced risk premia, thereby enhancing business investment and FDI inflows. Thus good progress has been made towards a shift to a stronger and more sustainable growth path. Indeed, the process of real income convergence seems to have begun, following the disappointing periods of the late 1980s and the 1990s. If this path can be maintained, this would represent a significant break from the past decades of short-lived economic booms, followed by sharp downturns or recessions.

… but the economy remains vulnerable to external and domestic disturbances

Turkey's positive macroeconomic performance between 2002 and 2005 was also supported by a favourable international environment, characterised by strong world trade and – despite higher oil prices – relatively low inflation, low interest rates and a strong global appetite for emerging market assets. In early-to-mid 2006, however, interest rate hikes in major industrial countries prompted a change in the risk appetite of the international financial markets. This significantly affected the Turkish economy: the currency depreciated significantly, long-term interest rates rose sharply and inflation accelerated. More recently pressures weakened and the exchange rate recovered somewhat and long-term interest rates declined again. Turkey was not the only country hit by the reduced risk appetite of international investors, but it was among the group of emerging market economies that was most affected. One reason for this was Turkey's large and widening current account deficit, fed by large capital inflows, including a large share of portfolio capital, which had fuelled an appreciation of the currency. Furthermore, Turkey's relatively short history of responsible macroeconomic policies makes it vulnerable to external shocks. Last but not least, market uncertainty may also have been fuelled by concerns about the independence of key institutions, further progress in structural reforms and some emerging political tensions within Turkey. *Sustained strong economic performance in this more difficult international environment will require the bolstering of confidence in macroeconomic policy and political commitment to structural reform.*

Monetary policy credibility needs to be bolstered

The Turkish central bank has gained much credibility and achieved an impressive record in lowering inflation since being made independent in 2001 and charged with the task of disinflation. Tight fiscal policies, structural reforms and high productivity growth also contributed to the disinflation process. Furthermore, exchange rate appreciation played a particularly important role in reducing inflation while price rises in non-traded goods remained sticky at around 12–14% per annum. To a large extent, this seems to be due to remaining barriers to competition, and other structural rigidities – such as in the labour market – which keep prices artificially high and slow the pace of disinflation, making it more difficult for the Central Bank to lower interest rates. The challenge faced by the Central Bank has become even more acute in recent months following an unexpected up-tick in inflation, together with significant exchange rate depreciation. The Bank responded to the inflation surprise by abandoning its previous course of interest rate cuts and raising the short-term policy rate in three consecutive rounds by a total of 425 basis points, pushing the short-term interest rate up to 17.50%. Although the Bank acknowledged that the 2006 end-year inflation target of 5% (with an uncertainty band of +/–2%) would not be achieved, it stressed its commitment to achieving the medium-term inflation target of 4%. Given the circumstances, the Bank's policy action was essential. But surveys indicate that over the summer medium-term inflation expectations have risen sharply and despite a recent small decline are still significantly above the medium-term target. *The Bank thus faces significant challenges in restoring inflation to the desired path and further sensible policy measures will be required, together with strong communication of the analysis underpinning these measures, to convince the public that the deviation of inflation from target is temporary. More generally, a broad-ranging structural reform programme is needed to facilitate the disinflation process and bolster credibility.*

The prudential regulatory framework should be further reinforced

Following the 2001 crisis, bank regulation and supervision was significantly upgraded, and this limits the potential risk that increased foreign indebtedness of the private sector and the recent boom in domestic credit pose to the soundness of the banking system. The new banking law implemented in 2005 further improved the prudential regulations and, according to the 2006 Financial Stability Report of the Central Bank, banks are in a healthy situation. In particular, the direct exchange-rate risk of the banking sector is reportedly low – although mainly through renewable hedging instruments contracted with other domestic financial intermediaries. But banks remain exposed to the exchange rate through the *credit risk* of domestic borrowers with unhedged foreign currency liabilities. *In the current risky financial market environment it is crucial to ensure that prudential banking supervision is sound. To this end the quality of financial supervision should be stepped up further, in particular by improving the efficiency and governance of the Banking Regulation and Supervision Authority, as recommended by the Imar Commission. The authorities should also consider additional mechanisms to reduce the indirect foreign exchange exposure of banks.*

Maintaining fiscal discipline is crucial

Since the 2001 crisis, Turkey has achieved some impressive fiscal outcomes – in particular, an increased primary fiscal surplus, although this was achieved partly by raising taxes which were already at a high level. Lower interest rates led to a sharp decline in government interest payments and the overall general government deficit has declined from around 30% of GDP in 2001 to around 1% in 2005. Similarly, net public sector debt declined from 91% of GDP in 2001 to 56% in 2005. While the overall fiscal stance has been relatively tight over the past few years, the practice of targeting the *actual* primary balance means that it became less tight during the recent cyclical upswing. In order to prevent such pro-cyclical behaviour in future, the government has recently announced an intention to complement the annual primary balance target with an expenditure target. *Expenditure targets should be introduced within the multi-year budgeting framework and extended to all layers of general government, including health care institutions and local governments.*

Fiscal transparency and the quality of fiscal institutions should be further improved

A number of new laws introduced since the 2001 crisis aim to improve fiscal transparency and budgeting practices. These have included the introduction of a three-year budgeting framework and a reduction in the room for extra-budgetary and quasi-fiscal spending. However, further progress with implementation is important, and uncertainty in the legislative environment should be reduced. In addition, although fiscal notification to the EU represents progress, transparency continues to suffer from the absence of consolidated general government fiscal accounts prepared according to National Accounting Standards. At present, the IMF closely monitors fiscal performance through a range of indicators, as part of Turkey's Stand-By Arrangement, and this provides market participants with a significant degree of reassurance. *Fiscal data prepared according to National Accounting Standards should be published prior to the end of the current programme with the IMF in spring 2008. The government should also take steps to ensure that key fiscal laws cannot be easily weakened in the future, to improve the co-ordination of fiscal responsibilities, to steadily expand the scope of performance-based budgeting and to incorporate all extra-budgetary funds into the general government accounts. Revolving funds should either be incorporated into the budget or the relevant institution should be corporatised.* Pushing ahead with these reform steps would significantly improve the international perception of the quality and reliability of Turkey's fiscal institutions and facilitate a renewed decline in the risk premium.

Structural reforms should focus on improving framework conditions for the entry of firms into the formal sector

A key reason for Turkey's relatively low GDP per capita is its low level of productivity. However, the low average level hides a very skewed distribution of performance across different parts of the economy. The productivity gap is particularly large between formal and informal enterprises. While informality reduces firms' costs and provides them with the flexibility to survive under difficult conditions, it also limits their access to capital markets, their investment capacity and their ability to develop international partnerships,

therefore restricting the potential efficiency gains that they could achieve. Informality thus reduces the overall growth potential of the Turkish economy. *Improving framework conditions for firms in the formal sector would enable more firms to expand and become formal, thus narrowing the large productivity gaps between firms and sectors, and raising the average productivity level of the Turkish economy.*

A successful formalisation strategy would lift the growth potential of the economy and broaden the tax base

Job creation in the formal sector has been weak, in large part because of the heavy burden of regulations. As a result, the formal sector has been unable to absorb the growing urban labour force, a challenge which will become even more acute in the years ahead with an expected acceleration of the labour force transition out of agriculture and a likely pick-up in labour force participation in the urban areas, notably by women. Enlargement of the formal sector will require a carefully planned combination of reforms in various areas – as policies are closely inter-related. *Priorities include: further reducing tax distortions – including a significant cut in the labour tax wedge; easing labour market regulations; reforming pension rules so that middle-aged workers are not pushed into the informal sector; improving competition in product markets; and facilitating access to bank and equity financing.* Each of these is discussed in more detail below. A successful formalisation strategy would lift the growth potential of the whole economy and broaden the tax base, permitting a reduced burden on formal sector firms and a leveling of the playing field for doing business in Turkey. These reforms would also encourage a pick-up in the level of foreign direct investment flows, which would contribute to stronger long-term growth and improved macroeconomic stability and resilience. By contrast, improving law enforcement alone would be no solution in the present tax and regulatory environment, as many firms could not cope with the additional costs that formalisation would entail, causing firm closures, with net output and employment losses for the economy.

The most important structural challenge is in the labour market…

The Turkish labour market is characterised by particularly cumbersome regulations and very high taxes on labour, both of which serve as a significant disincentive to formal sector employment:

- Very high labour tax wedges make the cost of employing someone in the formal sector prohibitive in many cases – particularly for low skilled labour.
- The official minimum wage is too high in relation to the productivity level of the economy. While it could, perhaps, be justified in high productivity and high-cost regions such as the Istanbul area, it is a major obstacle to job creation in the formal sector in some Eastern regions where productivity and living costs are much lower. The ratio of the minimum wage to regional GDP per capita peaks at well-above 100% in the poorest regions.
- The Labour Code is one of the most restrictive in the OECD. Very high severance payment liabilities make *permanent* employment contracts costly, while *temporary* employment is almost completely prohibited, with *fixed-term, interim* and *agency* work authorized only in very limited circumstances. The intended substitution of severance payments with the newly introduced unemployment insurance scheme has not been achieved so far.

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- The Labour Code also requires that firms with more than 50 employees comply with a range of additional regulations, such as the requirement to employ a certain number of disabled people, ex-convicts, etc. The additional costs that this imposes give firms little incentive to grow beyond a certain size, with adverse implications for productivity.

… where comprehensive reform is essential

Comprehensive labour market reform is urgently needed to improve the incentives for formal sector employment. Social security contribution rates should be significantly reduced, employment regulations and severance payment requirements should be made much less costly for firms, the minimum wage should be permitted to decline as a percentage of the average wage, and the minimum wage should be differentiated across regions, according to differing productivity levels and living costs. In addition, the administration of tax and social security contribution collection should be improved. The cut in social security contribution rates should be sizeable (for example, a halving of the current rate) to ensure that it has a real effect. At present, the prevalence of informality means that social security contributions from the private sector make up only around 5% of GDP (which is a lot lower than in other OECD countries with similarly high social security contribution rates). This suggests that the fiscal cost of such a large cut could be affordable – given the significant broadening of the tax base that would result if the cut is implemented in the context of a comprehensive formalisation strategy. The fiscal cost of this cut could also be partly funded by reducing the very high net replacement rates in the pension system and by reducing incentives for early retirement. However it is funded, it is vital that the fiscal targets still be achieved.

Additional pension reform would increase employment in the formal sector

Recent social security reform has significantly improved the long-run sustainability of the pension system. However, the transition to the new pension parameters is slow and early-retirement incentives (not all of which are directly related to the pension system) will continue to push many middle-aged qualified workers into the informal sector. Moreover, even once the new parameters are fully phased in, net replacement rates of pensions will remain very high by comparison with other OECD countries, requiring high social security contribution rates, which directly contribute to the high labour tax wedge mentioned above. *The next steps for pension reform should involve i) a significant cut in social security contribution rates to make it more affordable for firms to employ low-skilled workers in the formal sector, and ii) a package of reforms to improve the incentives for middle-aged people to remain in the formal sector labour force. This package will require:*

- *A cut in the net replacement rate, which could be brought about by taxing pension income, and by charging pensioners a health insurance premium.*
- *The introduction of an actuarially equivalent reduction in the pension benefit of anyone who chooses to retire younger than the normal retirement age of 60 for men and 58 for women.*
- *The removal of retiring workers' entitlement to severance payments.*
- *An accelerated increase in the formal-sector retirement age to 65.*
- *Improved enforcement of social security registration and tax compliance among middle-aged pensioners.*

Additional product market reforms are also needed

Despite the streamlining efforts undertaken in the first half of the 2000s, formal sector firms remain exposed to a plethora of regulations which are considerably more detailed than those in other OECD countries. This complexity of regulations increases entry costs and creates room for bureaucracy to exert discretionary power over business creation. These risks are compounded by the complexities of the laws governing the conduct of business, which create uncertainty about the decisions of the commercial judiciary. Such shortcomings are particularly taxing for foreign firms, which often do not have the experience or resources to operate in such an environment. Although considerable progress has been achieved, further *simplification of the legal and regulatory rules governing the conduct of business is needed, and the commercial justice system should be reformed to provide a streamlined and predictable framework for enforcement*. Although the regulatory framework for competition in network industries such as electricity, natural gas and telecommunications has been reformed according to EU directives, prices remain very high relative to those in other countries. *Co-operation between the sectoral regulators and the competition authority should be strengthened and further steps taken to accelerate competition in the network industries. Fostering competition in all tradable and non-tradable activities should be a prime objective for reducing inflation and strengthening the competitiveness of the economy.*

And the access of firms to finance should be improved

Policies that make it easier for firms to join the formal sector will also significantly improve the access of these firms to credit and equity finance, which is now becoming more widely available (as a result of reduced crowding-out by public borrowing and more competition in banking and institutional investment). However, in order to draw on these resources, firms need to demonstrate a high degree of financial transparency and corporate governance – standards that only the most advanced formal sector enterprises are currently able to meet. Capital markets laws and the Corporate Governance Principles set rigorous financial reporting, external audit and governance standards for *publicly held companies* and draft revisions to the Turkish Commercial Code (TCC) will extend similar standards to all companies. As these are demanding standards, *the capacity of smaller companies to comply with any new compulsory requirements should be carefully monitored. If the burden turns out to be too high in relation to benefits, then adaptation of the standards for private, smaller firms could be considered.*

Education reforms are needed to raise the productivity of the labour force and support job creation in the formal sector

Productivity and living standards are also heavily influenced by the quality of human resources. Turkish primary and secondary school education produces very poor average results, relative to those in other OECD countries. But in the best schools, standards are high. This reflects an education system that focuses on providing a good education to the most able students, who are admitted into the best schools (Anatolian and science high schools) and then channelled towards university and work in the formal sector. As a result,

the most binding human capital shortages arise in the middle and low-end of the labour market. Despite this, resources continue to be skewed towards the "high end". Overcoming this education duality, which is mirrored in the economy as a whole, will require a reorientation of education sector priorities, and a reallocation of educational resources so that higher quality education opportunities can be offered to all. *The fundamental purpose of basic education should be reoriented away from the sorting and selecting of students for the elite schools, to a broader focus on providing the majority of young people with the basic literacy and numeracy skills that are necessary for the modern workforce. To achieve this, educational resources will have to increase when budget room is available, and increased spending should be allocated in a way that spreads resources more equitably across schools and regions. In addition, schools should be made more accountable for outcomes. Finally, all exams – including the university entrance exam – should be fully aligned with the curriculum to reduce the current barrier to higher education for students who do not have the means to pay for test preparation programmes.* A more efficient and equitable education system will provide Turkey with a significantly higher-skilled labour force in the future, which will permit a higher pace of productivity growth and a significant increase in the average standard of living.

Agricultural reform has the potential to significantly raise productivity

The agricultural sector continues to employ as much as one third of the Turkish workforce and low productivity has been entrenched to date by a protective policy regime. Establishing a more competitive environment would help to modernize agriculture and raise output growth and productivity. In 2000-01 an important reform was introduced, with emphasis given to direct income support for farmers in place of more distortive and fiscally costly input and output subsidies, and the privatization of state-owned organizations which control agricultural output and input markets. *But reform efforts now need to be revitalized. The 2000-01 reform agenda should be fully implemented and accompanied by additional policies to encourage the transition to commercial agriculture, such as ensuring that the legal framework is adequate for the transfer of land ownership to facilitate the creation of larger and more productive farms.* However, given the large population working on small farms, and the absence of a safety net, land consolidation poses significant social challenges. The best way to ease these challenges is to implement the comprehensive package of reforms discussed above, in order to enhance job creation in industry, including in rural areas. *But some social policy measures might also be needed to facilitate the transition, such as an increase in the means-tested public pension, which is currently below the absolute poverty level or the provision of other social support. Additional policies are also needed to improve framework conditions for private investment in irrigation and other infrastructure.*

A significant pick-up in structural reform would accelerate Turkey's catching-up and facilitate the negotiation process with the European Union

A broad-ranging reform package, such as that recommended above, would minimise the risk of Turkey falling back into a boom-bust cycle and would also help transform the economy from one with a low average level of human capital and a significant duality between relatively few highly productive enterprises and a large number of low

productivity enterprises, to one that operates with a more even playing field, permitting a more rapid catch-up in living standards. Such success would also enhance perceptions of Turkey as a country that can absorb and productively employ its rapidly growing working age population and contribute to Europe's prosperity. In turn, this would facilitate the negotiation process with the European Union.

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Chapter 1

Turkey's challenges to achieving a sustainable catching-up

The Turkish economy has grown by a third since the 2001 crisis. Far-reaching macroeconomic and structural reforms have helped to increase confidence, reduce risk premia *and stimulate domestic and foreign investment. However, Turkey was one of the countries most affected by the decline in the risk appetite of the international financial markets earlier this year and a number of challenges must still be addressed to minimize the risk of falling back into a boom-bust cycle and to ensure that strong growth is sustainable. The priorities are to further strengthen fiscal, monetary and prudential policy institutions in order to make the economy more resilient to shocks, and to accelerate the pace of reform in labour, product and agricultural markets and in the social security and education systems in order to overcome the deep dualities which hinder the long-term growth performance.*

Following the severe 2001 economic crisis, far-reaching policy and reform initiatives were taken. Initially motivated by the Stand-By Arrangement with the IMF and the National Convergence Programme to the EU *acquis,* these were later reinforced by the Urgent Action Plan of the current government. In the wake of the opening of accession negotiations with the EU in the autumn of 2005 the government made further strong commitments to continue its reform agenda. As a result of these reforms, and helped by a favourable international environment, the Turkish economy bounced back and has become one of the fastest growing economies in the OECD. At the same time, this growth momentum and the positive interest rate differential led to large capital inflows, a significant real currency appreciation and a deterioration in the current account, creating some concern that – if imbalances continue – the economy could fall back again into a boom-bust cycle. When international market conditions turned less benign in Spring 2006 and the global risk appetite decreased, Turkey indeed experienced significant depreciation of its exchange rate and a strong increase in its risk premium. The extent to which Turkey was affected by the changed international environment highlights Turkey's ongoing macroeconomic vulnerabilities. The main macroeconomic policy challenge is clearly to bolster confidence and prevent a reversion to a boom-bust cycle.

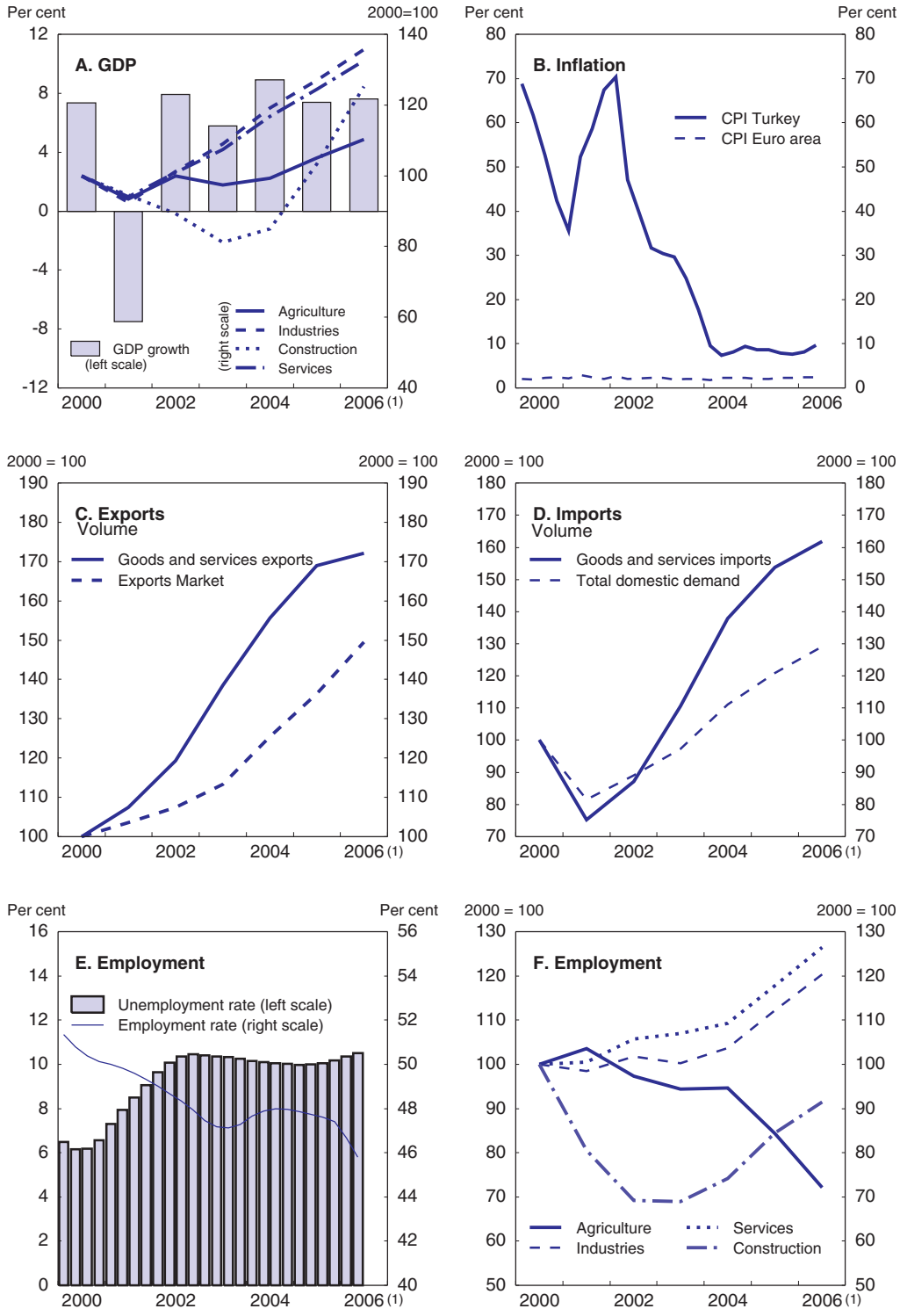
The microeconomic framework conditions for doing business, despite some progress, have still a way to go to match the business sector flexibility of other OECD countries. The formal regulatory framework remains rigid and costly and continues to provide strong incentives for private business to conduct at least part of its activity in the informal sector. As a result, the tax base remains narrow and the tax burden on the formal sector remains high. Furthermore, firms that are forced into the informal sector remain small and have limited access to credit and high quality human capital, thus depressing productivity growth and the pace of catch-up.

Turkey's recent economic performance and outlook

Reaping the first benefits of reforms

The key strength of the economic rebound which has followed the reforms was the fact that it was entirely driven by the private sector. Business investment and household consumption led to a steady increase in demand, while public consumption and investment remained subdued under a strict fiscal consolidation programme. Net exports, initially positive in response to the strong depreciation of the exchange-rate in 2001, turned negative with subsequent strong real appreciation stimulated by large capital inflows. These inflows, which were made up of a significant share of portfolio investment but also an increasing proportion of long-term trade credit and foreign direct investment, contributed directly to the growth of domestic demand. The disinflation process, led by the newly independent Central Bank, remained on track until 2006 in spite of strong growth, though helped by currency appreciation (Figure 1.1).

Figure 1.1. **Economic performance after reforms**



1. The first two quarters of 2006 (not seasonally adjusted).

The strength of domestic demand and real currency appreciation provoked a sharp widening of the current account deficit which reached a record level of more than 6% of GDP in 2005; the sustainability of this external imbalance has raised concern. While capital inflows help to finance investment which enhances growth potential, it is also true that the easier access to credit increased private consumption and household indebtedness at a pace that may be unsustainable. Against this background, a tightening of international capital market conditions in spring 2006 (coinciding with the emergence of some internal political tensions) triggered a sharp exchange-rate depreciation in May and June 2006. Following this depreciation, already looming inflationary pressures increased and inflation expectations surged well beyond the year-end target. The Central Bank reacted with sharp successive increases of its policy interest rate and real incomes, household consumption and business investment are now expected to weaken throughout the rest of the year, despite the stimulus of competitiveness gains in export industries.

Despite the recent volatility, there are signs that the post-crisis reforms, backed with credible external anchors, may have triggered a "structural break" in the long-term capital formation and growth process. Fiscal, monetary, banking and a number of product and capital market reforms, together with the *perceived (trend) convergence of economic policies toward OECD and EU benchmarks*, have stimulated an acceleration of domestic and international investment. Table 1.1 presents a summary of these key recent and remaining reform areas, as reviewed in this Survey.

Turkey has undertaken this structural reform programme with the help of major international anchors. Conditionality requirements included in successive Stand-By agreements with the *International Monetary Fund* set commonly agreed objectives, and deadlines, for the reform of fiscal institutions, the independence of the Central Bank and major privatisations. The World Bank contributed technical expertise and funding for the preparation of agricultural and social security reforms. In addition, the process leading to the opening of accession negotiations with the European Union provided a unique opportunity to review and assess a wide range of economic laws and regulations and offered a roadmap and technical assistance for making them converge with European standards. *Convergence with the EU Acquis* has been particularly important in product market regulations, competition policy, and network industry reforms which are particularly relevant for the functioning of the Customs Union between the EU and Turkey.

Table 1.2 summarises progress on a selection of convergence reforms associated with the start of accession negotiations in October 2005 (in 17 chapters out of 35 for which exploratory and bilateral screenings have been completed). The authorities plan to issue a total of 54 primary and 254 secondary regulations during 2006-07 on these 17 chapters. They plan to complete exploratory screenings on all chapters in Autumn 2006 and prepare reform programmes for the adoption of the *acquis* in the following years. This agenda is expected to boost the reform process and speed-up the legal-institutional modernisation.

Drawing on a methodology proposed by the *International Monetary Fund* to identify countries which have implemented important reforms over the past two decades,[1] Figure 1.2 shows that reforms in Turkey have triggered a multi-year growth acceleration typical of such transitions. The stimulus went beyond the average results achieved in the first years of such transformations in other countries. Macroeconomic fundamentals and the international risk rating of Turkey also strongly improved during this period, despite important remaining vulnerabilities (Figure 1.3). The perceptions of the international business community about the upgrading of the Turkish business environment have also improved (Figure 1.4).

Table 1.1. **Main economic reforms**

Reforms after the crisis	Remaining agenda
Fiscal policy	
– Public Financial Management and Control Law made the central budget the main fiscal policy instrument. – Introduction of a three-yearly budget framework. – Introduction of a functional classification system for the budget and of accrual based accounting. – Legal introduction of strategic and results-oriented budgeting.	– Full transparency of general government accounts to be achieved according to national accounting standards. – Implementation of spending targets as a first step toward automatic stabilisation. – Full implementation of functional budgeting and accrual based accounting. – Full implementation of strategic and results-oriented budgeting.
Monetary policy	
– The Central Bank was made independent of the government and mandated to focus on price stability. – In its first four years of independent operation the Central Bank built strong credibility. – Explicit inflation targeting introduced in 2006.	– To bolster the credibility of the Central Bank under less favourable international capital market conditions and resulting exchange-rate depreciation and inflationary pressures.
Prudential regulation	
– A new prudential regulatory framework in line with international best practices. – Public banks will operate on an arms-length basis from government with explicit budgeting of their policy missions. – Private banks re-capitalised according to Basel rules and intra-group lending capped.	– To improve the efficiency and governance of the Banking Regulation and Supervision Agency. – To minimise systemic risks which may arise from the non-bank foreign exchange exposure of bank borrowers.
Tax policy	
– Corporate and personal income tax rates as well as allowances and exemptions were reduced (tax bases broadened and rates reduced).	– Fully enforce the new tax regime and avoid re-introducing exemptions. – Improve tax administration by making the autonomous Tax Collection Agency fully operational.
Product market regulations	
– Company creation and market entry conditions considerably streamlined with a new Commercial Law in 2003.	– Sectoral licensing requirements remain very demanding and should be simplified. – Internal inconsistencies in the legal and regulatory framework for conducting business should be eliminated. – Commercial justice system should be made more reliable through simplification and upgrading.
Labour market regulations	
– The 2003 Labour Code increased the threshold for employment protection from firms with 10 to 30 workers but certain aspects of the law were made more rigid than before.	– Reduce substantially the social security contribution rates. – Reform employment protection legislation, notably by replacing severance payments with unemployment insurance. – Reduce the ratio of the minimum wage to the average wage by slowing down the pace of minimum wage increases and by regionally differentiating the minimum wage.
Financial markets	
– The regulatory framework of capital markets was significantly strengthened. – Corporate Governance Principles were issued. – Major FDI investment in the banking sector was authorised, improving the capital and knowledge base of the banking sector.	– Promote level-playing field competition between different types of financial institutions. – Complete the privatisation of public banks. – Reduce financial intermediation taxes.
Foreign direct investment (FDI)	
– The FDI regime was considerably streamlined with a new FDI law granting national treatment to foreign firms.	– Eliminate the remaining discriminatory elements for FDI firms in sectoral licensing regulations and local government policies.
Infrastructures	
– New Electricity, Natural Gas and Telecommunications Laws in line with pro–competitive EU directives. – Authorised market entry for new air carriers in domestic and international routes.	– Fully enforce the new regulations for Electricity, Natural Gas and Telecommunications through co-operation between sectoral regulators and the competition authority. – Establish a new, competitive framework for the transport sector.
Agriculture	
– Market distortive price supports were significantly reduced and replaced with direct income support (DIS) for farmers. – State funding of agricultural marketing co-operatives was reduced. – A new Agricultural Law in 2006 re-defines available agricultural policy institutions and instruments.	– Fully implement the reform according to objectives and avoid stepping back to traditional support purchases. – Back the reform with additional legal measures and services supporting the development of commercial agriculture. – Engage additional private funding in critically important irrigation investment (which was slowed down under budget constraints).

Table 1.2. **EU negotiations: a selection of completed and intended convergence reforms during 2005-07**

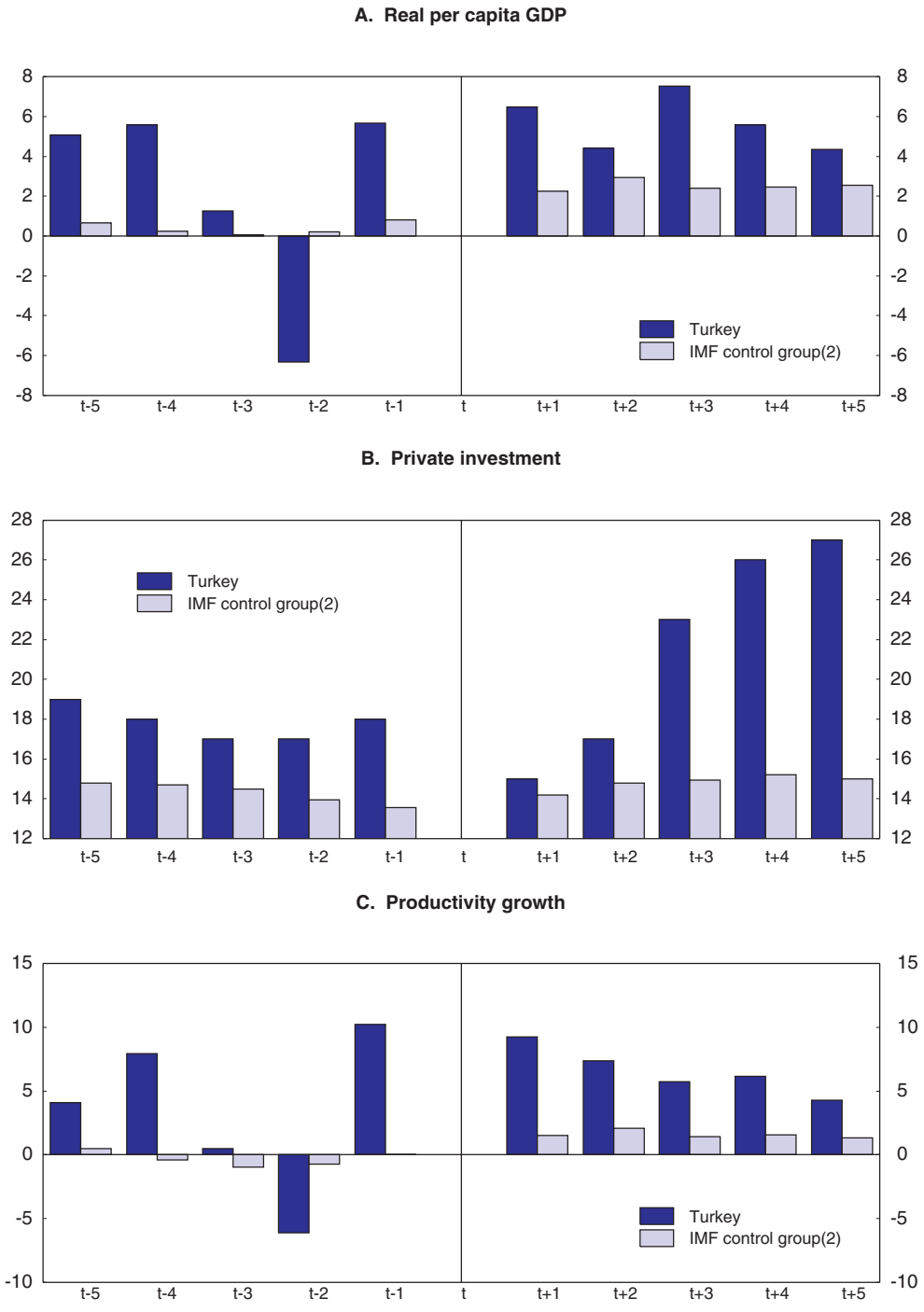
Convergence reforms completed since the opening of accession negotiations in 2005	Planned key reforms for the period 2006-07
Customs Union and free circulation of goods	
– Law on the simplification and convergence of the common customs regime with the EU. – 26 secondary regulations for simplifying customs operations in different product groups.	– New Law on the Creation and Duties of Turkish Accreditation Agency. – New Law on Product Safety.
Competition policy	
– Abolition of compulsory notification of inter-enterprise agreements and introduction of a voluntary notification system. – Bloc exemption of vertical agreements in the motor vehicle sector.	– General and sector-specific regulations for the implementation of Competition Law (in maritime transport, telecommunications, air transport, insurance and postal sectors). – New Law on Monitoring and Control of State Aid. – Adoption of a National Restructuring Plan for the steel industry.
Public procurement	
– Law for the Creation of Public Procurement Agency.	– Amendments to the Law on Public Procurement. – New Law on Public Procurement Contracts. – New Law on Public Utilities.
Free circulation of capital	
	– New Law for an Agency Against Financial Fraud. – Regulation for the implementation of Anti-Money Laundering Law.
Financial services	
– Law on Banking. – Law on Bank Credit Cards.	– New Law on Insurance Services. – Regulation of financial holdings.
Intellectual property rights	
– Regulation for the enforcement of Intellectual Property Rights in Industrial Designs.	– New Law on Patents. – New Law on Trademarks.
Business and industrial policy and right of establishment and freedom to provide services	
– Law on Co-operation Between Turkish Government and European Space Agency.	– New Law on Postal Services. – New Law for the Creation of Turkish Foreign Investment Support Agency. – New Law on Occupational Qualifications Institution.
Social policy and employment	
– Law on Social Security Institution (unifying previously separated social security institutions). – Law on Social Insurance and Universal Health Care (improving the fiscal sustainability of the pension system and extending the coverage of health insurance).	– New Law on Trade Unions. – New Law on Industrial Disputes. – New Law on Health and Safety at Work.
Agriculture and rural development	
– A new Agricultural Law defining a policy framework converging with (the changing objectives of) Common Agricultural Policy.	– Amendments to the Law on the Production, Distribution and Hygienic Verification of Food Products. – Framework Law on Veterinary Services. – New Law on Agricultural and Rural Development Support Institution (IPARD Agency).

Where Turkey stands in the resource mobilisation and productivity performance of the economy

Despite this major leap forward in the last four years, the *level of labour productivity* in Turkey still remains far below that of other OECD countries, other than Mexico, which is also very low. The *level of labour mobilisation* (labour force participation and the employment rate of the working age population) is also still the lowest in the OECD, as shown in Figure 1.5. Turkey has therefore an immense potential to catch-up in both its labour productivity and labour utilisation performance.

The low average level of productivity does not reflect underperformance across-the-board, but rather hides a very skewed distribution of performance between different parts of the economy. Productivity levels tend to converge with OECD averages in some segments of the

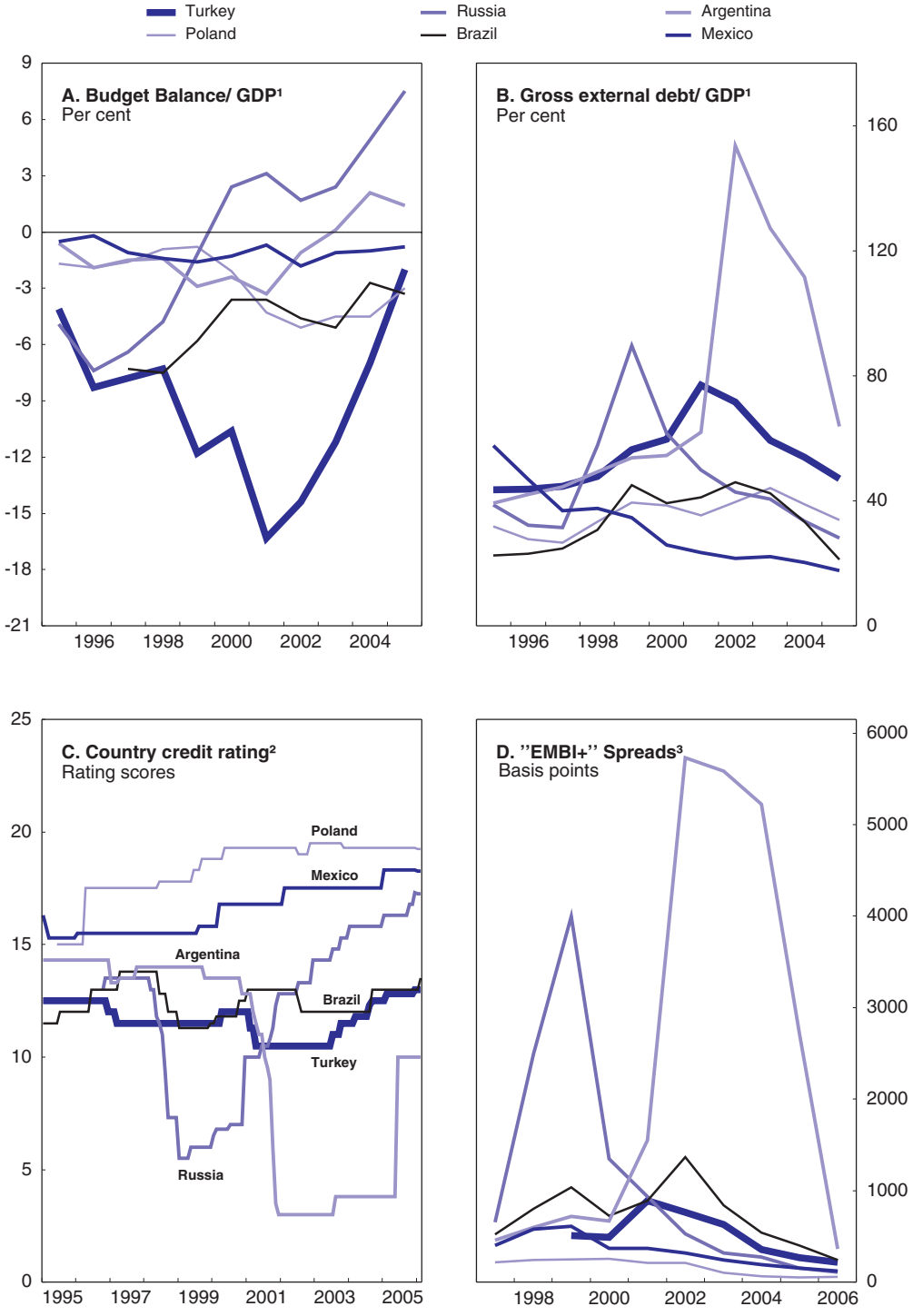
Figure 1.2. **Institutional transition and growth: where Turkey stands**[1]



1. Central Bank of Turkey and OECD projections for 2005 and 2006.
2. Countries having experienced an institutional transition over the period 1970-2004. Institutional transition is defined as a significant increase (of one standard deviation or more) in a composite set of measurements of macro- and micro-institutional quality. The year of transition (t) is defined as the first year in which the forward-looking multi-year moving average of the composite indicator is significantly larger than the backward-looking multi-year moving average. Year t for Turkey is 2001 and t + 5 figures are OECD projections.

Source: Central Bank of Turkey, OECD and IMF, *World Economic Outlook*, May 2006.

Figure 1.3. **Macroeconomic balances and international risk perception**



1. Consolidated central government budget figures as reported in IMF International Financial Statistics (IFS).
2. Average of ratings by Moody's and S&P of local and foreign currency government bonds. Moody's and S&P grades were scaled from 0 ("Default" of Moody's and "D" of S&P) to 25 ("Aaa" for Moody's and "AAA" for S&P).
3. The Emerging Markets Bond Index Plus (EMBI+) tracks total returns for external-currency-denominated debt instruments of the emerging markets. It refers to the interest rate which is to be paid above the rate of 30-year US treasury bonds, which are assumed to have a risk-rating of zero.

Source: IMF-IFS, World Bank, JP Morgan, Moody's, Standard and Poor's (S&P).

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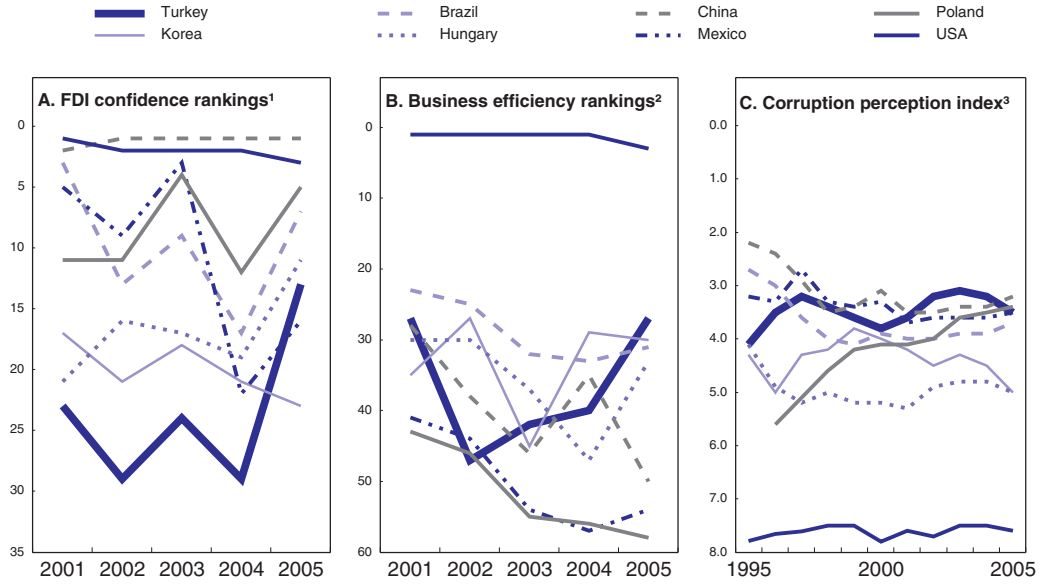
Figure 1.4. **Perceptions of Turkey's business environment compared to 7 countries, 1995-2005**



1. Senior Executives of 1000 FDI firms were surveyed. The index is the weighted average score of "high", "medium", "low" and "no interest" responses to a question on the likelihood of a direct investment in a market over the next 1 to 3 years (Source: AT Kearney).
2. International business executives were surveyed. The rankings are based on 68 criteria from survey and hard data, under categories covering productivity, labour market, finance, management practices, and attitudes and values (Source: IMD).
3. International business executives and experts were surveyed. The index combines survey data to scale corruption level between 0:corrupted to 10:clean. In this inversed graph, upward trend implies increasing corruption (Source: ICCR).

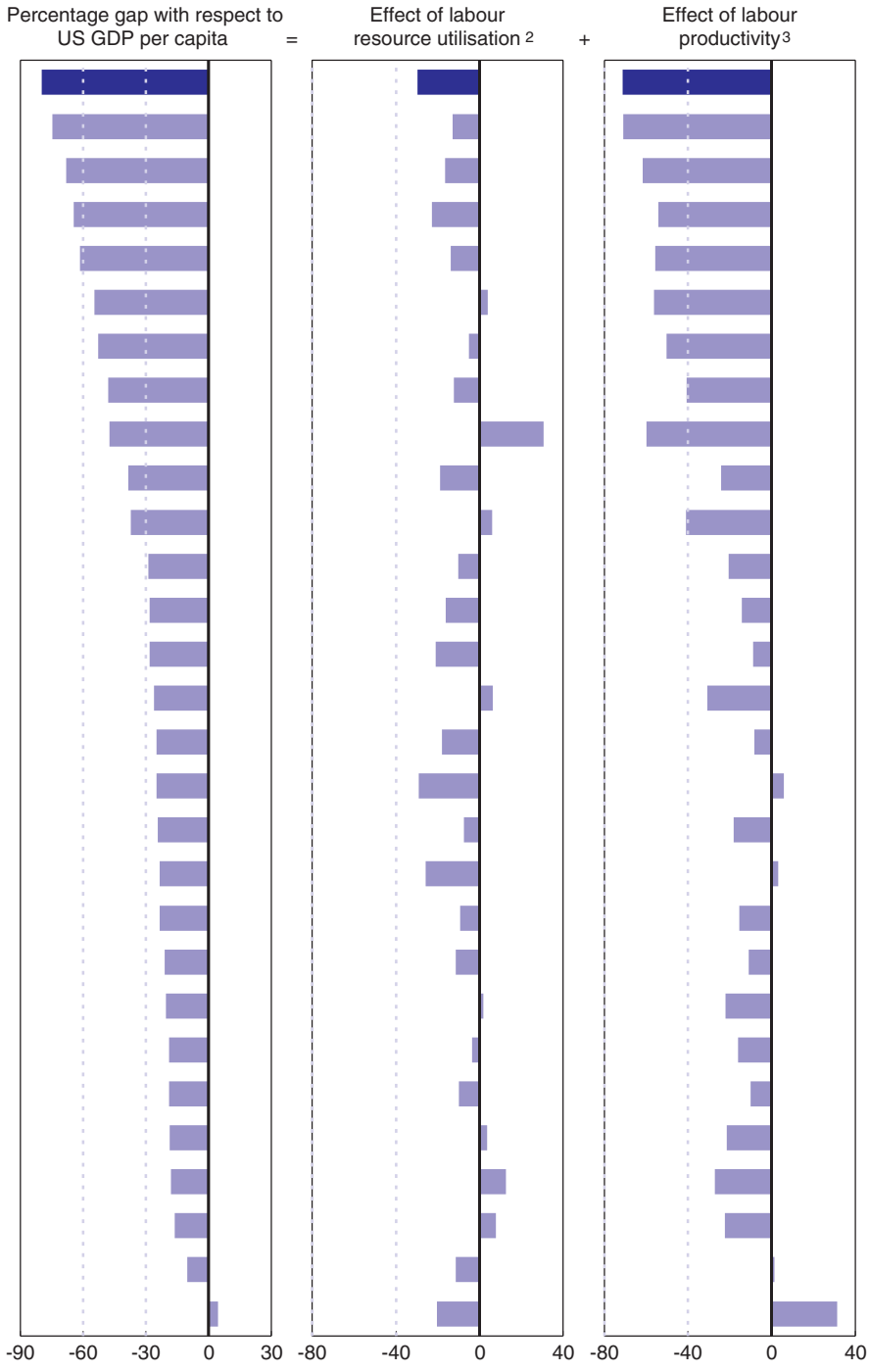
Source: AT Kearney, International Institute for Management Development, The Internet Center for Corruption Research (ICCR).

business sector, while they lag significantly behind in other, wider segments. The productivity gap is also large between formal and informal enterprises, while "half-formal" firms have achieved a significant catching-up in the past decade and are now at an intermediate level of productivity (Figure 1.6). Agriculture is an exception, as it is almost entirely informal and employs about one third of the workforce at a very low level of productivity. Raising productivity in the least productive sectors and firms would therefore significantly increase average productivity levels. This convergence implies overcoming the deep duality persisting in the labour market as the uneven educational background of individuals determine their degree of participation in the labour force – notably for women – and their ability to work in the formal *vs.* informal sectors.

Growth potential could further be boosted by fully integrating the growing number of young workers who are entering the labour market in the coming years and by raising the utilisation of existing labour potential. However, so far the labour market has not been flexible enough to fully absorb those entering the labour market or those who have lost their jobs in declining sectors, notably agriculture, despite the strong increase in non-agricultural employment in recent years. As a result, the unemployment rate has stayed above 10% despite higher growth and there is "underemployment"[2] (Figure 1.7).

Figure 1.5. **The sources of real income differences, 2004**[1]

PPPs, 2000



1. Percentage gap with respect to the United States level.
2. Labour resource utilisation is measured as trend total number of hours worked divided by population.
3. Labour productivity is measured as trend GDP per hour worked.

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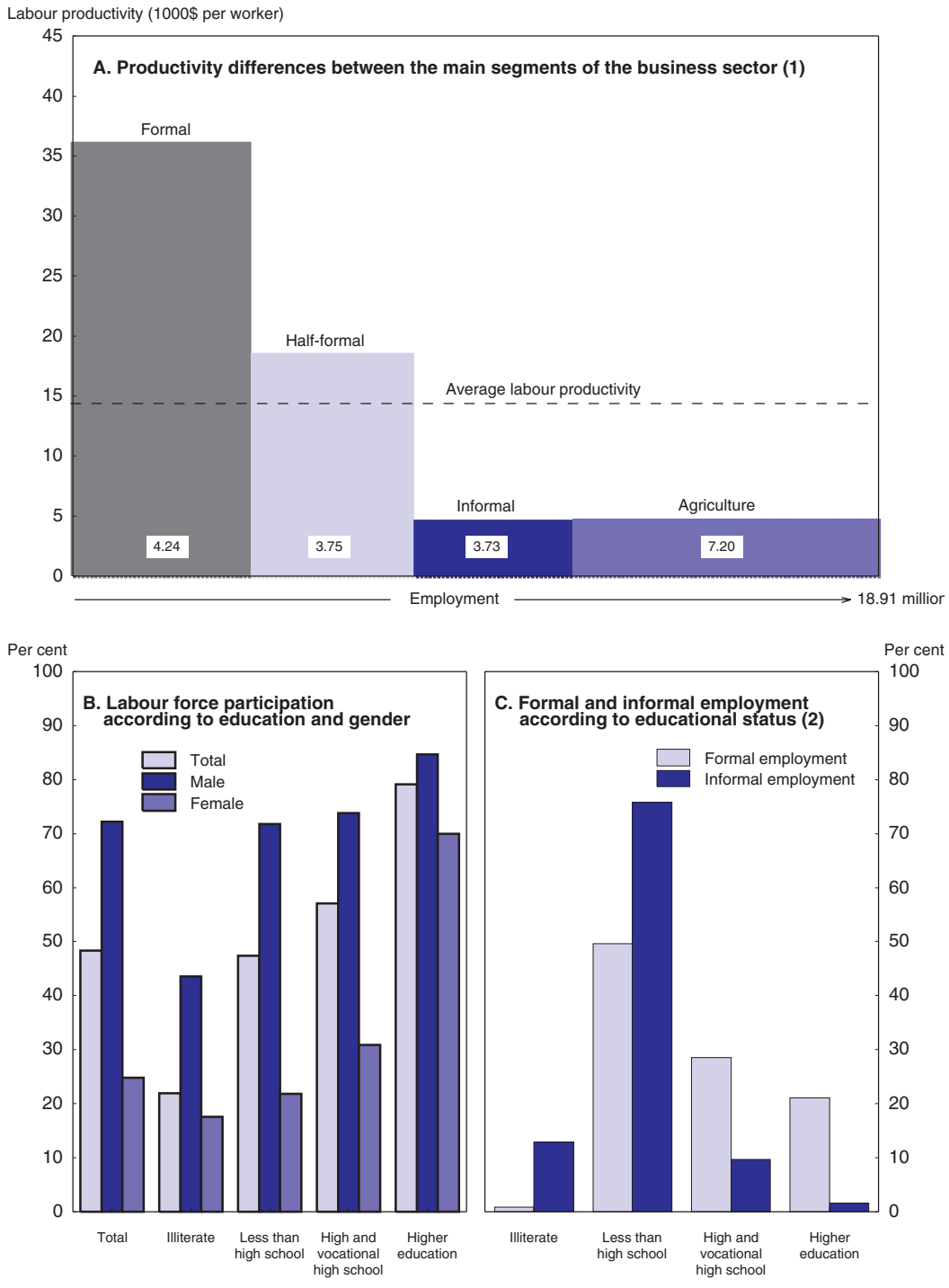
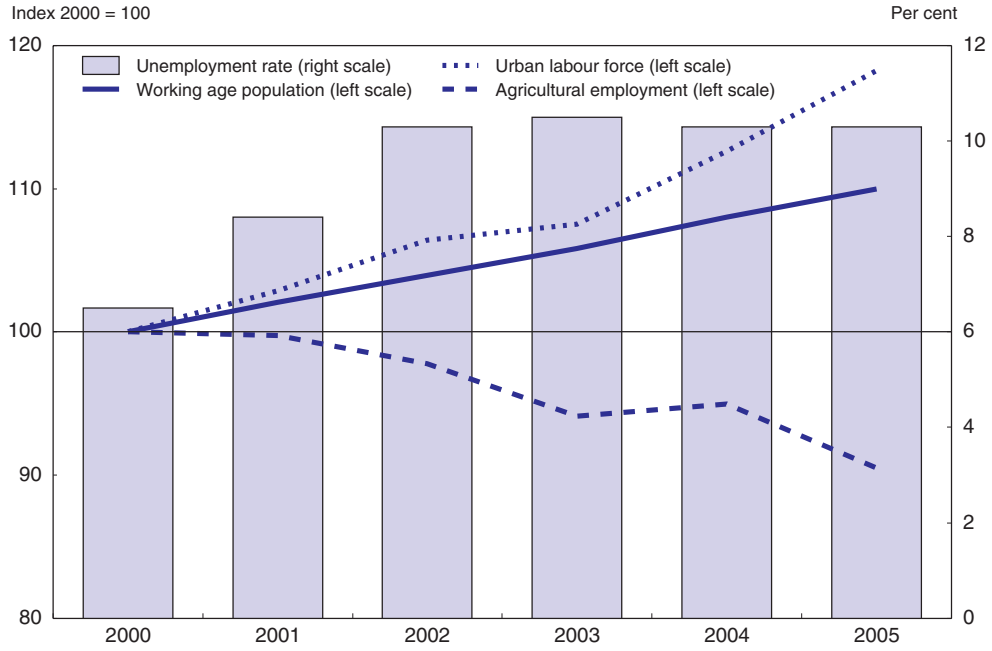
Figure 1.6. **The skewed distribution of labour mobilisation and labour productivity**



1. OECD estimates.
2. Share of formal and informal sector workers in the working age population with given educational background.

Source: TURKSTAT, SPO, OECD.

Figure 1.7. **Working age population growth, exits from agriculture and unemployment**



Source: TURKSTAT and OECD.

The outlook ahead

The sharp fall in the exchange rate in May-June 2006 amplified the acceleration in inflation which had started in April, pushing up prices above their uncertainty band for this period and lifting inflation expectations for the end of the year well above the official target (see Chapter 2). The Central Bank responded to this serious threat to its credibility with significant interest rate increases. The short-term net impact of this exchange-rate based adjustment and the resulting monetary tightening will be a deceleration in GDP growth, despite the competitiveness gains due to depreciation. While after the past appreciation an exchange-rate adjustment had been expected, the turnaround has been much faster and sharper than anticipated. Before this adjustment there was a risk that the desirable pace of disinflation may come at the cost of a prolonged appreciation of the exchange rate and losses in competitiveness. The main short-term challenge now is to preserve confidence.

Nonetheless, the medium-term prospects of the economy remain strong, provided that the underlying fiscal and monetary policies remain on track and are backed by further progress in structural reform. This will require continued domestic and international confidence in Turkey's ability and willingness to maintain its policies in their mainstream orientation and proceed with an ambitious reform agenda, including preserving a favourable political environment for reforms (Box 1.1).

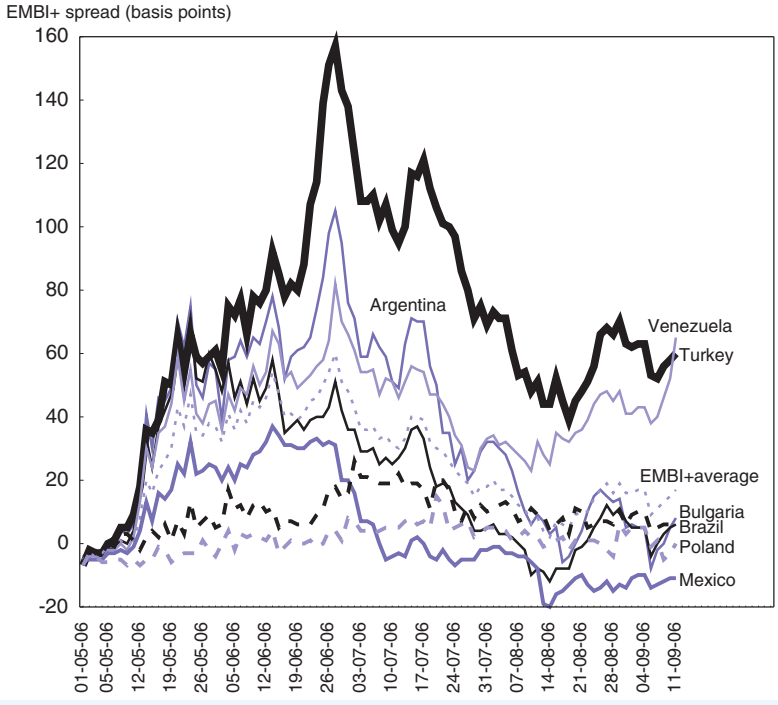
Box 1.1. **Is the political climate important for reforms?**

Domestic and international confidence in the orientation of economic policy was an important contributor to the strong decline in Turkey's risk premia during 2001-05; all main political parties and forces participated in the adoption and implementation of the post-2001 reform programme, giving it broad support and credibility.

Just after the crisis the economic programme was first engineered by a coalition of centre-left, centre-right and nationalist parties. The only other large party – AKP – was then in opposition. When it came to power with 34% of the votes and the majority of the seats in Parliament in November 2002, it confirmed its commitment to reforms. Subsequently, the new government implemented the programme diligently (possibly more rapidly than could have been expected from a coalition government). The government then reinforced the two main international anchors behind this programme by renewing Turkey's Stand-By agreement with the IMF, and by opening accession negotiations with the European Union in 2005 (see Tables 1.1 and 1.2 above).

Figure 1.8. **Turkey's higher risk premium in response to the weakening international risk appetite**

Cumulated change relative to 1 May 2006 level



Source: JP Morgan.

This reform programme was a major step forward in Turkey's convergence with other OECD countries' macroeconomic and microeconomic policy institutions. The preamble to the first economic programme described the transformation that the reforms aimed at achieving in the following terms: "The apparent origin of the macroeconomic bottleneck that Turkey faces is unsustainable public debt dynamics… The underlying source of this is

Box 1.1. **Is the political climate important for reforms?** *(cont.)*

the struggle for rents across politics and economics, the state and the society. The crisis experienced in 2001 demonstrated that this situation is not sustainable. The majority of Turkey's population wants to get rid of this prevailing 'rent sharing' process. No privileges will be granted to special interests, no economic actors should fear unfair competition, and all actors should dedicate their efforts to enhancing production, productivity and employment. Public authorities will dedicate their efforts to provide better education, health and justice services for the population, instead of facing and dealing with overwhelming rent expectations from all quarters. Circumstances for both public and commercial action will change. Such is the ultimate objective of this programme."[1]

During 2001-06, reforms in a wide range of areas were phased in and major progress was achieved. From 2007, as Presidential and Parliamentary elections are approaching, the political climate surrounding the reforms could change. The short-term costs of reforms for special groups may become more visible than their long-term economic and social benefits. In this setting, it is important to preserve the sizeable primary fiscal surplus and to continue to proceed with structural reforms. Any further measures that authorities can take in order to reduce risks on the continuation of reforms would add to confidence.

Turkey's political environment has been stable in recent years, including during the difficult crisis period. Yet, Turkey's risk premium increased every time political tensions arose within the country and normalized after tensions were defused.[2] It therefore appears important to avoid such tensions in order to consolidate domestic and international confidence.

1. Preamble to the "Programme of Transition to a Strong Economy" adopted in May 2001.
2. See *OECD Economic Survey of Turkey*, 2004.

Managing macroeconomic risks and improving resilience to shocks

Compared with more advanced economies, Turkey remains highly vulnerable to the whims and changing risk appetites of international investors. This is largely a reflection of Turkey's relatively short history of responsible macroeconomic management. Fiscal outturns have been very impressive for several years now, but these are largely the results of strong political will rather than of an overhaul of fiscal institutions. Although fiscal institutions and processes were improved significantly in recent years through new laws, these new measures should be fully implemented and there is still room for further improvement. As a result, the vulnerability "thresholds" for public and external debt remain much lower for Turkey than for more advanced economies. Moreover, recent volatility in the exchange rate, together with the large current account deficit, suggest that Turkey remains susceptible to larger shocks than those seen recently, in which case the recent downward trend in public and external debt ratios could reverse direction.

These risks suggest that Turkey could benefit enormously from further improving the robustness and transparency of the fiscal institutions. In terms of monetary policy, after initially establishing significant credibility, the central bank has recently suffered a set-back in terms of an upward inflation surprise, and expected high pass-through from the recent exchange rate depreciation. It is therefore very important that credibility be re-established by successfully returning inflation to the previously announced disinflation path.

Chapter 2 examines the challenges of macroeconomic stability by discussing in particular the following questions:

- What are the priorities for further improving the transparency, stability and permanence of fiscal institutions and processes?
- How can the credibility record of the Central Bank of Turkey be restored following the 2006 inflation surprise and the recent lira depreciation?
- What role can an acceleration of structural reforms play in assisting disinflation, in particular in the non-tradable sector? To what extent can structural reform also increase the quality of capital flows and improve the resilience of the economy to shocks?
- How can the vulnerability of banks and businesses to exchange-rate fluctuations be limited? Do the present prudential provisions for the banking system need to be strengthened in light of Turkey's high degree of corporate sector currency mismatches?

Deepening structural reforms to sustain a rapid catching-up

A sustainable and rapid catching-up in living standards will require the formal business sector, which generates the high productivity jobs, to expand at its full potential. To achieve this, the entrenched duality between formal and informal sectors must be overcome.

The pace at which resources can be shifted to the formal sector will influence the medium-term growth path of the economy. To illustrate the possible implications for medium-term growth outcomes, Figure 1.9 presents two "what if" scenarios: one based on assumptions about what might result from a relatively slow implementation of structural reforms facilitating formalisation (the *status quo* scenario) and the other assuming a faster reform process.[3] The medium-term growth outcomes are truly different. In the *status quo* scenario, the average labour productivity level reaches only 36% of the 2005 OECD average within ten years, whereas it approaches 43% of the OECD average in the fast adoption scenario. While the *status quo* scenario results in a trend GDP growth rate of 4½ per cent per annum, the fast adoption scenario pushes the trend growth rate up to more than 6½ per cent. These are just mechanical quantifications of "what if" assumptions, rather than sophisticated scenarios. They nevertheless show that an acceleration of the formalisation process has the potential to significantly affect medium-term performance (Figure 1.9).

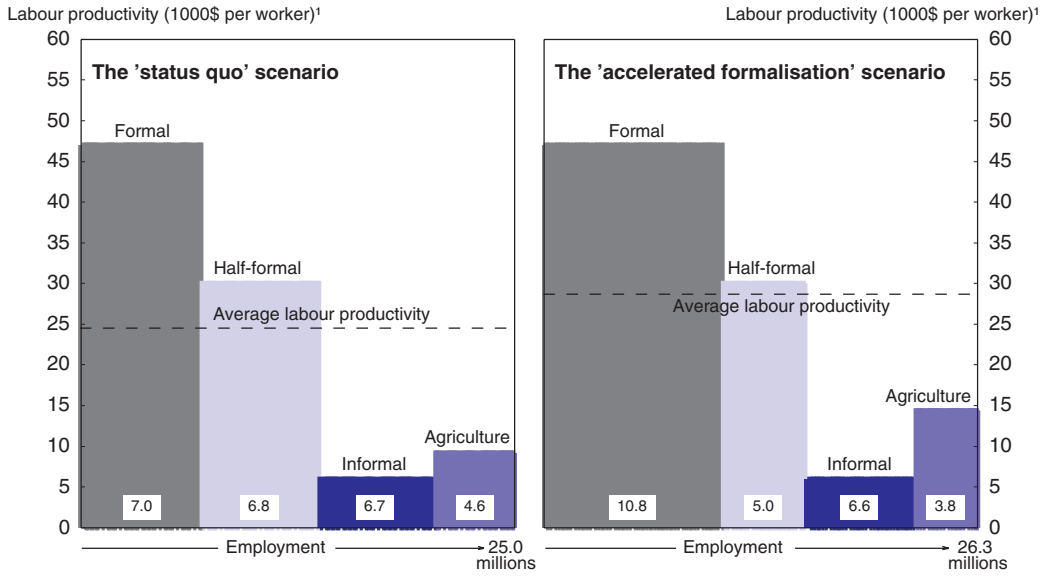
Four policy areas are of particular importance in shaping the required structural adjustment: *i)* a thorough simplification of business sector regulations; *ii)* additional changes in the social security system; *iii)* reforms in the education system; and *iv)* the pursuit of agricultural reform.

Simplifying business sector regulations

The business sector has been re-invigorated since 2001 with new enterprise creation picking up, private investment soaring and business sector productivity accelerating above trend. However, businesses also face important new challenges in the new environment: *i)* real currency appreciation weakened the competitiveness of many business activities – even if the exchange-rate depreciation in mid-2006 offset some of these losses; *ii)* rising competition from low-cost countries increasingly threatens the labour intensive industries; *iii)* comparatively high labour costs reflect a high minimum wage to average wage ratio and a costly employment protection and severance payment system. Confronted with such costly burdens for doing business, many firms operate informally but this limits their ability to build up human and physical capital, reap economies of scale and build international partnerships.

Figure 1.9. **"What if" reforms of uneven depth lead to different medium-term paths?**

By 2015



1. At 2005 USD (2005's YTL/USD exchange rates).

Main productivity assumptions:

- Formal sector productivity to grow by OECD's last 10 years' productivity growth rate of 1.75%.
- Half-formal sector's productivity to grow by 4% on the average, closing the productivity gap with the formal sector by about one-fourth.
- Informal sector's productivity to grow by 2% on the average, closing the productivity gap with the formal sector very slowly.
- Agricultural productivity to grow by *i)* 3.9% on the average in the *status quo scenario* (same as the rate of total productivity growth resulting from the above assumptions) and *ii)* 8.9% on the average in the *accelerated formalisation scenario* (in order for Turkey to catch-up Spain's 2005 agricultural productivity level by 2025).

Memorandum:	*Status quo*	Accelerated formalisation
2006-15 average real GDP growth (%)	4.5	6.7
2006-15 labour-force growth (%)	2.4	2.8
2006-15 total employment growth (%)	2.9	3.4
2015 unemployment rate (%)	8.0	7.0

Chapter 3 examines the conditions for enhancing productivity, competitiveness and employment creation in the formal business sector through assertive regulatory simplification. It addresses the following issues:

- What role do labour market and product market regulations, legal minimum wages, social security contributions and institutional impediments play in preventing firms and workers from participating in the formal economy and how could these impediments be reduced?
- Are constraints particularly costly for dynamic medium-sized firms which contribute prominently to export, output and employment growth? Do these firms face a "glass ceiling" to their further growth because of their semi-formal status?
- Would large-size and highly productive formal sector firms, including foreign direct investment (FDI) firms, have significant additional growth potential if the regulatory environment were to be simplified?

- Could sectors perceived today as "condemned" by competition from low-wage countries be partly revived through such reforms?

Making the pension system less of an obstacle to formalisation

The 2006 pension reform has considerably improved the long-run sustainability of the pension system even if it will continue to run large deficits for decades to come due to continued low minimum pension eligibility ages and the slow transition to the new pension parameters. The recent reform has not, however, addressed the fact that the pension system continues to be an important barrier to a more rapid expansion of the formal sector. There are two strands to the formalisation barrier: first, early-retirement incentives seem to be pushing many middle-aged workers into the informal sector; and second, high net replacement rates require high social security contribution rates which contribute to a relatively high minimum cost of labour, making it unprofitable for firms to employ labour in the formal sector.

Chapter 4 proposes further changes that would make the pension system less of an obstacle to formalisation and focuses on the following questions:

- What additional measures could be introduced to encourage middle-aged people who have already qualified for a pension to remain in, or return to, the formal sector labour force?
- What cost-saving reforms could be implemented to fund a significant cut in the social security contribution rate? To what extent would additional reforms help to fund such a significant cut?
- Should the value of the targeted pension (the pension available for those aged 65 or older without any other income, including former informal sector workers) be increased to the absolute or general poverty line?
- Should formal sector retirement ages converge more rapidly than planned to this "informal sector retirement age" of 65?

Boosting long-term productivity growth by upgrading the education system

The education system produces lower average academic results than other OECD countries. But in the best schools, standards are very high. These results reflect a schooling system that has traditionally focused on providing a good standard of education for the most able students, who receive a good preparation for jobs in the formal labour force. By contrast, the quality of the "non-selective" high schools is poor, and the most binding human capital shortages seem to be in the middle and low-end of the labour market. Although roughly half the workforce is employed in the informal sector, the poor quality of the "non-selective" schools means that many children leave school with low literacy and numeracy skills and a weak human capital structure on which to build further knowledge and productivity through their working lives. Moreover, survey evidence shows that businesses have few problems hiring people with good tertiary-level qualifications but have significant difficulties hiring good staff with mid-range skills. A greater investment in the non-selective education system is therefore required to increase the productivity and employability of the majority of new entrants to the labour force.

Chapter 5 examines the conditions for upgrading the education system by addressing the following questions:

- What features of the education system are resulting in a shortage of human capital in the middle and low end of the labour market?

- Should the funding of schools be done on a per-pupil basis, to ensure a more equitable distribution of educational resources? How else can the quality of the non-selective schools be improved?
- Should the primary purpose of end-primary school and end-secondary school exams be to document pupils' acquired skills for potential employers (including informal sector employers), rather than to sort students according to their abilities?

Improving productivity in agriculture

The productivity of Turkish agriculture and its contribution to growth have been constrained by socio-economic weaknesses in rural areas and a protective regime of subsidization and trade protection, which has created a *status quo* of highly fragmented, low-skilled, low technology and domestic-market-oriented farming. Important reforms based on cuts in price subsidies and the privatization of the state-owned organizations which dominate the agricultural output and input markets were introduced in 2000-01. This effort should be reinvigorated and backed with additional reforms to stimulate the development of commercial agriculture across the country.

Chapter 6 examines the conditions for improving productivity in agriculture and covers the following questions:

- What are the remaining specific obstacles to the development of productivity growth and commercial agriculture? What is the best way to resume the stalled reform effort?
- Is the existing legal framework adequate to permit the necessary consolidation of small land holdings into more efficient farm sizes?
- Given the much needed irrigation investment and existing fiscal constraints, should policymakers aim at attracting more private investment in irrigation? Would more economic pricing of water help with private investment in irrigation?
- Is the establishment of a formal social safety net for retiring farmers feasible?

Conclusions

The Turkish economy has grown by an average 7.5% per annum since the 2001 crisis, the strongest growth performance among OECD countries. The far-reaching macroeconomic and structural reforms helped to increase confidence, reduce risk premia and stimulate domestic and foreign investment. However, Turkey still faces a number of challenges that it must address to minimize the risk of falling back into a boom-bust cycle and to ensure that strong growth is sustainable. Further strengthening of fiscal, monetary and prudential policy institutions is needed to make the economy more resilient to shocks, and further reforms in labour, product and agricultural markets and in the social security and education system are required to overcome the deep dualities which hinder its long-term performance. Success with reforms would facilitate Turkey's negotiation process with the EU as a country proving its potential contribution to the Union's prosperity and capable of productively employing its growing working age population. The following chapters analyse the challenges outlined in this chapter and develop specific policy recommendations to meet them.

Notes

1. This methodology identifies the national economic reform programmes which are comprehensive enough to be qualified as "institutional transitions". It identified Turkey's post-2000 reforms as one of them. Institutional transitions are defined as reform episodes which improved by at least one standard deviation the multi-year moving averages of a composite index aggregating a large set indicators of national institutional environment. Indicators including trade openness, openness to FDI, regulatory quality are included *(International Monetary Fund*, *World Economic Outlook*, 2005).
2. Labour Force Surveys monitor *underemployment* as the sum of *visible underemployment* (*i.e.* persons working less than 40 weekly hours a week for economic reasons – "could not find full-time work", "slack employment for technical or economic reasons", etc.) and *other underemployment* (*i.e.* persons seeking to change jobs because of insufficient income or not working in their usual occupation). Based on this definition, "underemployment" reached 3.9% in March 2006, in addition to the standard unemployment rate of 10.9%.
3. The detailed quantitative assumptions of the two scenarios are in the footnote of Figure 1.9.

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Chapter 2

Managing macroeconomic risks and improving resilience to shocks

Since the crisis of 2001, an impressive package of fiscal consolidation and institutional reform has created a strong foundation for economic growth. As a result, GDP growth has been strong and stable, inflation has fallen, and the public debt burden has been significantly reduced. Yet the current account deficit is large, exchange rate movements have been volatile, and the recent increase in inflation and rising levels of private sector external debt draw attention to Turkey's vulnerabilities and to the need for additional policies to contain risks. This chapter summarises the vulnerabilities of the Turkish economy and the steps that can be taken to improve macroeconomic resilience to shocks.

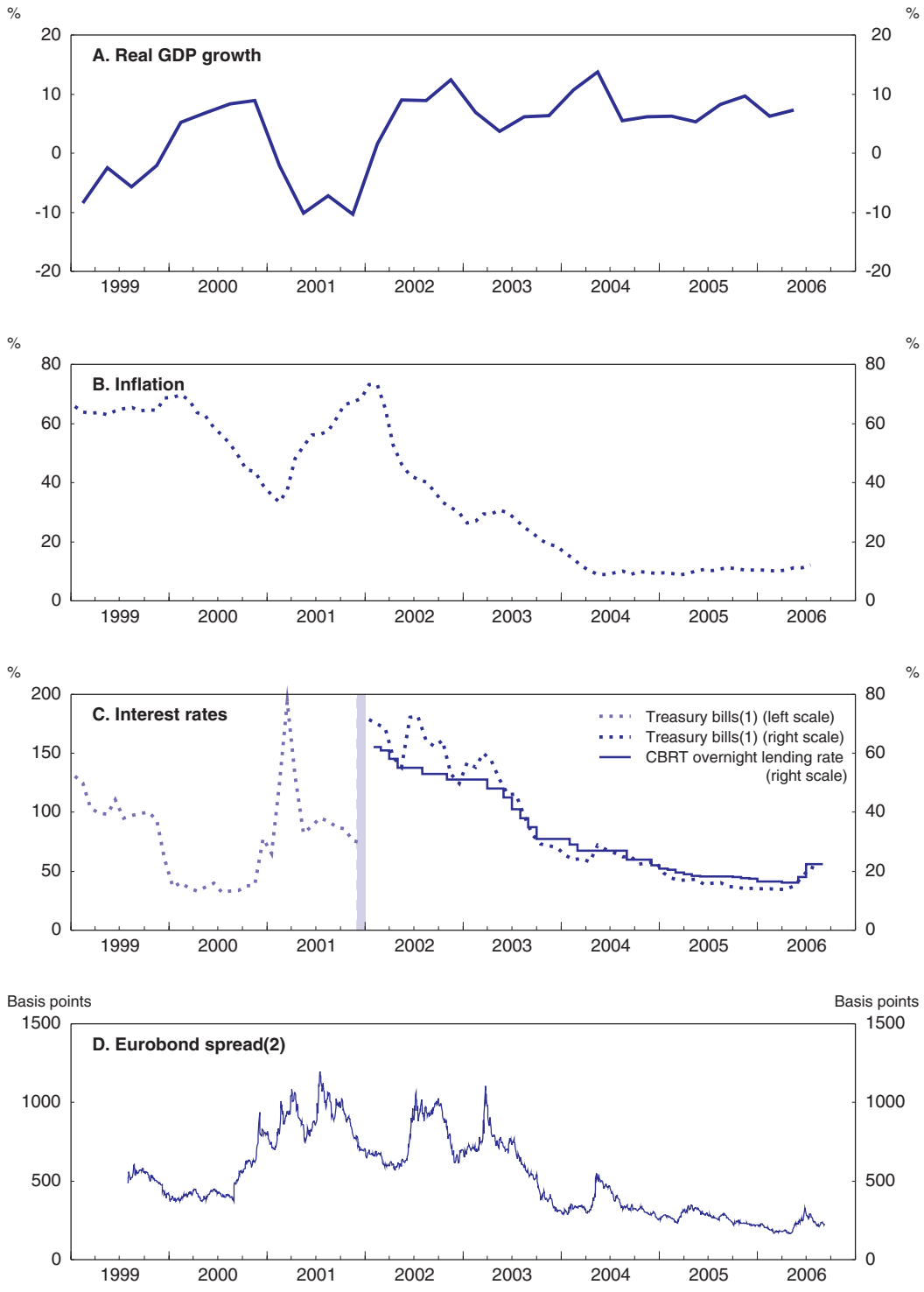
Despite good macroeconomic outturns, recent turmoil has highlighted Turkey's vulnerabilities

As summarised in Chapter 1, and illustrated in Figure 2.1, Turkey has made good progress in stabilising the key macroeconomic indicators in recent years, notwithstanding the recent upward blip in inflation. In particular, Turkey has achieved significant primary fiscal surpluses every year, including outcomes close to the target of 6.5% of GDP in the past three years. Moreover, since 2001 the total fiscal deficit has fallen from 30% of GDP to around 1% in 2005, net public debt has fallen from around 90% of GNP to around 50%, inflation has fallen from over 50% to around 10%, and interest rates have fallen from triple digits to below 20%.

These positive outcomes are due mainly to the combination of impressive fiscal consolidation efforts and sound disinflationary policies. At the same time, Turkey's positive macroeconomic performance is also due in part to the benign external environment, characterised by unusually low global interest rates, strong world growth and high risk appetites for emerging market assets. Until May this year, when global risk premiums reversed trend, this environment had provided Turkey with a valuable window of opportunity to stabilise the real economy and significantly improve the stability of the banking sector and the quality of monetary and fiscal institutions. Indeed Turkey's experience is not unique; the falls in Turkey's risk premia have been matched by those in other emerging markets (Figure 2.2).

Turkey is not the only emerging market economy to have been hit by the reduced risk appetite of the international financial markets. However, it has been more affected than the others, as illustrated by the fact that Turkey's risk spread widened by much more than the EMBI index (Figures 2.2 and 1.8). There are a number of reasons for this. First, even prior to the change in international investor sentiment, many analysts were already pointing to Turkey's large and growing current account deficit, which was widely seen as being unsustainable. At the same time, there was evidence that strong capital inflows had been fuelling a credit boom. Second, the change in international investor sentiment coincided with concerns about the independence of key institutions and was followed soon after by an inflation surprise, prompting some deterioration in central bank credibility and a reassessment of expected inflation. Finally, some emerging political tensions within Turkey together with concerns about progress with structural reform may also have amplified market uncertainty. The challenges posed by these developments, and the possible tools that can be used to address them, are the focus of the rest of this chapter. In particular this chapter will consider the extent to which the Turkish economy still remains vulnerable to both external and internal shocks, and identify some key reform priorities oriented towards improving Turkey's resilience to shocks.

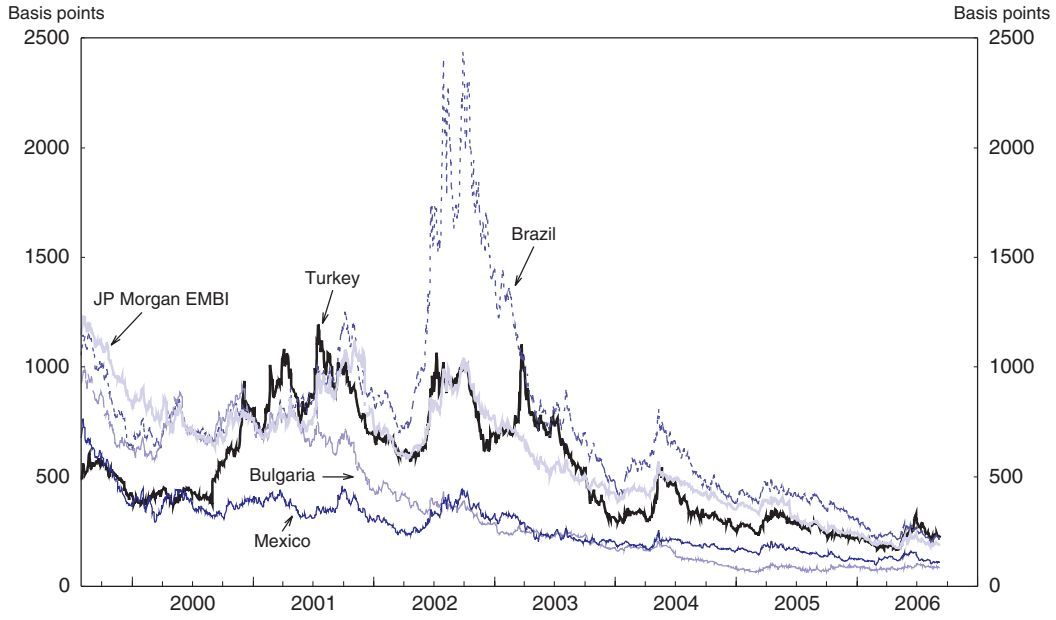
Figure 2.1. **Positive macroeconomic fundamentals**



1. Primary market treasury bill interest rate (compound) (weighted by net sales).
2. Turkey's secondary market bond spread over US Treasuries.

Source: JP Morgan, Central Bank of Turkey and OECD.

Figure 2.2. **Risk spreads have narrowed, not only in Turkey**
EMBI spreads in selected countries



Source: JP Morgan.

Improved macroeconomic resilience to international shocks is essential

The factors determining the vulnerability of emerging market economies have been the subject of a considerable body of economic research in recent years.[1] One key conclusion to emerge from this literature is that the vulnerability "thresholds" for various economic indicators can vary considerably between advanced and emerging market economies. For example, a gross public debt ratio below 60% of GDP is generally considered sustainable for advanced economies (for example, according to the European Union's Maastricht criteria). However, an IMF (2003) study found that over half of all public debt defaults occurred in countries with public debt ratios below 60%. In this context it is worth noting that the Turkish Treasury's gross debt level was 68% of GDP at the end of 2005 and according to some scenarios (discussed in Box 2.2) may not continue its recent downward trend. Similarly, Reinhart *et al.* (2003) have argued that "safe" *external* debt-to-GNP thresholds can be as low as 15-20% for debt intolerant countries, compared with significantly higher thresholds for countries with a positive credit history and long-term stable inflation.

The policy implications of the "threshold" literature are two-fold. At the very least, it is clear that Turkey still has considerable progress to make towards strengthening the most obvious areas of weakness, in order to reduce the vulnerabilities of the economy to shocks. These priorities are discussed below. In addition, the vulnerability literature discussed above, together with the historic opportunity that the EU negotiations present, suggest that Turkey should aim even higher. The possibility of considerably closer integration with Europe presents Turkey, unlike most emerging market economies, with a unique opportunity to fundamentally modernise its institutions and its economic system. If Turkey is willing to do this, then it should gradually progress, in the minds of the financial markets, towards the club of more

advanced economies, for whom much less rigorous vulnerability thresholds are applied. In turn, this would significantly reduce Turkey's risk premia, creating a virtuous circle that would considerably facilitate the achievement of Turkey's key macroeconomic goals.

While such a complete transformation of the economy will take some time, there are important steps that could be taken now, to signal Turkey's commitment to further reform. For example, the IMF has undoubtedly played a very important role in recent years in restoring confidence, stabilising expectations, and providing fiscal discipline. An active policy to promote substitutes for this IMF role could be expected to significantly ease the transition to a post-IMF world (Box 2.1).

Box 2.1. **Life after the IMF**

The economic programme negotiated between the IMF and the Turkish authorities has undoubtedly played an important role in keeping Turkey on the straight and narrow path of reform. The direct and tangible benefit of IMF loans has probably made the goal of achieving primary fiscal surpluses of 6.5% of GDP easier to sell to the public, and within the government itself. Many macro-institutional and structural reforms, including the recent social security reform, have been key platforms of the IMF agreement and would, arguably, have been more difficult to pass without the backing and insistence of the IMF. Although fiscal notification to the EU represents progress, transparency continues to suffer from the absence of consolidated general government fiscal accounts prepared according to National Accounting Standards. In this context, the IMF has played an important role in ensuring investor confidence by monitoring/auditing the Turkish fiscal accounts.* Paradoxically, however, the confidence provided by IMF fiscal monitoring may have actually reduced pressure for the more general improvement of fiscal transparency, and the publication of consolidated general accounts.

The current (and last) IMF agreement is now due to end in May 2008. The fact that some goals have slipped even with IMF surveillance (*e.g.* the timing of social security reform) raises concerns that more serious reform fatigue could set in once they are gone. To guard against any confidence losses, and to further build investor confidence in the good intentions of the government, renewed reform efforts will be required. The highest priority should be to significantly improve fiscal transparency by publishing consolidated general government accounts according to national accounting standards and by introducing a high quality and fully transparent medium-term budget planning framework.

* See Box 3.3 in OECD (2004) for a description of the IMF methodology of fiscal monitoring.

As background to the following discussion, Table 2.1 summarises some of the key debt-related indicators that can be used to gauge Turkey's vulnerability to various shocks. While both public and total external debt ratios have recently been trending downwards, these trends could reverse (as discussed in Box 2.2). Meanwhile, debt servicing continues to command a very high proportion of government revenue and the average maturity of domestic debt instruments remains short. Other potential indicators of vulnerability, not included in the table, include: the widening current account deficit; exchange rate volatility; very strong credit growth; and currency mismatches.[2]

Table 2.1. **Key indicators of economic vulnerability**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Public debt												
Gross Treasury debt/GNP	53.7	42.9	44.3	43.3	40.6	53.1	50.6	100.8	88.2	79.3	73.8	68.2
YTL Denominated Domestic Debt/Gross Treasury Debt					49.8	52.4	52.6	44.2	41.9	53.7	58.5	62.4
Floating Rate YTL Debt/Gross Treasury Debt					32.8	38.2	32.1	10.0	15.5	24.3	30.0	30.6
Fixed Rate YTL Debt/Gross Treasury Debt					17.0	14.2	20.4	34.3	26.4	29.4	28.5	31.8
FX Denominated or Indexed Debt/Gross Treasury Debt					50.2	47.6	47.4	55.8	58.1	46.3	41.5	37.6
FX Denominated or Indexed Domestic Debt/Gross Treasury Debt					3.6	2.7	4.7	24.4	19.9	15.1	12.5	11.4
Fixed Rate External Debt/Gross Treasury Debt					37.4	36.1	33.6	24.4	22.5	18.8	17.3	16.6
Floating Rate External Debt/Gross Treasury Debt					9.2	8.8	9.2	7.0	15.7	12.5	11.8	9.6
Net public sector debt/GNP							57.1	90.4	78.4	70.3	63.4	55.3
Net public sector debt/central government revenue							212.4	308.9	282.2	250.2	245.5	199.6
Net public sector debt/general government revenue[1]									194.7	171.4	151.5	127.6
Treasury debt servicing/GNP	7.7	7.3	10.0	7.7	11.5	13.7	16.3	23.3	18.9	16.4	13.2	9.4
Treasury debt servicing/central gov. revenue	40.0	41.3	55.4	39.6	52.0	56.5	60.6	79.3	67.9	58.5	51.0	33.9
Average maturity of domestic debt instruments (in months)					13.4	16.3	15.5	38.5	32.1	25.1	20.6	23.5
External debt												
Public Sector External Debt/GNP	31.5	24.5	21.9	20.2	19.2	23.0	24.3	31.6	35.2	29.0	24.6	18.9
Treasury's external debt/GNP	25.1	19.9	17.6	16.4	15.7	18.7	19.7	26.6	31.4	26.5	22.9	17.9
CBRT external debt / GNP	7.4	7.2	6.7	6.1	6.3	5.9	7.0	16.7	12.2	10.2	7.1	4.3
Private sector external debt/GNP	13.0	13.0	14.6	17.4	21.1	26.8	27.9	29.6	24.6	21.4	22.4	24.1
Total external debt/GNP	49.6	43.1	43.2	43.8	46.6	55.7	59.3	77.9	72.0	60.6	54.2	47.3
Short-term external debt/GNP	8.5	9.1	9.3	9.2	10.1	12.4	14.2	11.3	9.1	9.6	10.9	10.6
External debt/exports of goods and services	224.8	200.3	175.9	164.0	178.8	228.1	236.2	229.1	240.4	209.7	180.3	166.0
External debt / Reserves	922.4	591.4	487.9	457.3	488.1	444.9	534.5	604.8	485.6	431.4	450.6	337.7
Macroeconomic indicators												
Central Bank Reserves/GDP	5.4	7.4	9.0	9.8	9.8	12.7	11.2	12.8	14.7	13.8	12.0	14.0
nominal t-bill rate			135.5	127.2	122.5	109.5	38.0	96.2	63.8	45.0	25.7	16.9
Ex post real rate (GNP deflator)			32.3	25.4	26.9	34.5	–8.5	26.3	13.4	18.4	14.8	6.4
EMBI+ spread in basis points						514.9	487.3	889.5	762.5	629.5	354.2	270.6

1. For TL denominated debt instruments only.
2. General government revenue for 2005 is a government estimate.

Source: Turkish Treasury, SPO, TURKSTAT, CBRT, JP Morgan.

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The current account deficit is large and the exchange rate volatile

Turkey has a long history of running current account deficits, with surpluses having been achieved only in crisis years, when exceptionally high real interest rates prompted a spike in national savings and a fall in investment rates (Figure 2.3, panel A). In terms of the composition of the current account, the key trends have been high deficits in merchandise trade, and net factor income, only partly offset by surpluses in the balance of trade in services (thanks to tourism) and net transfers (Figure 2.3, panel B).

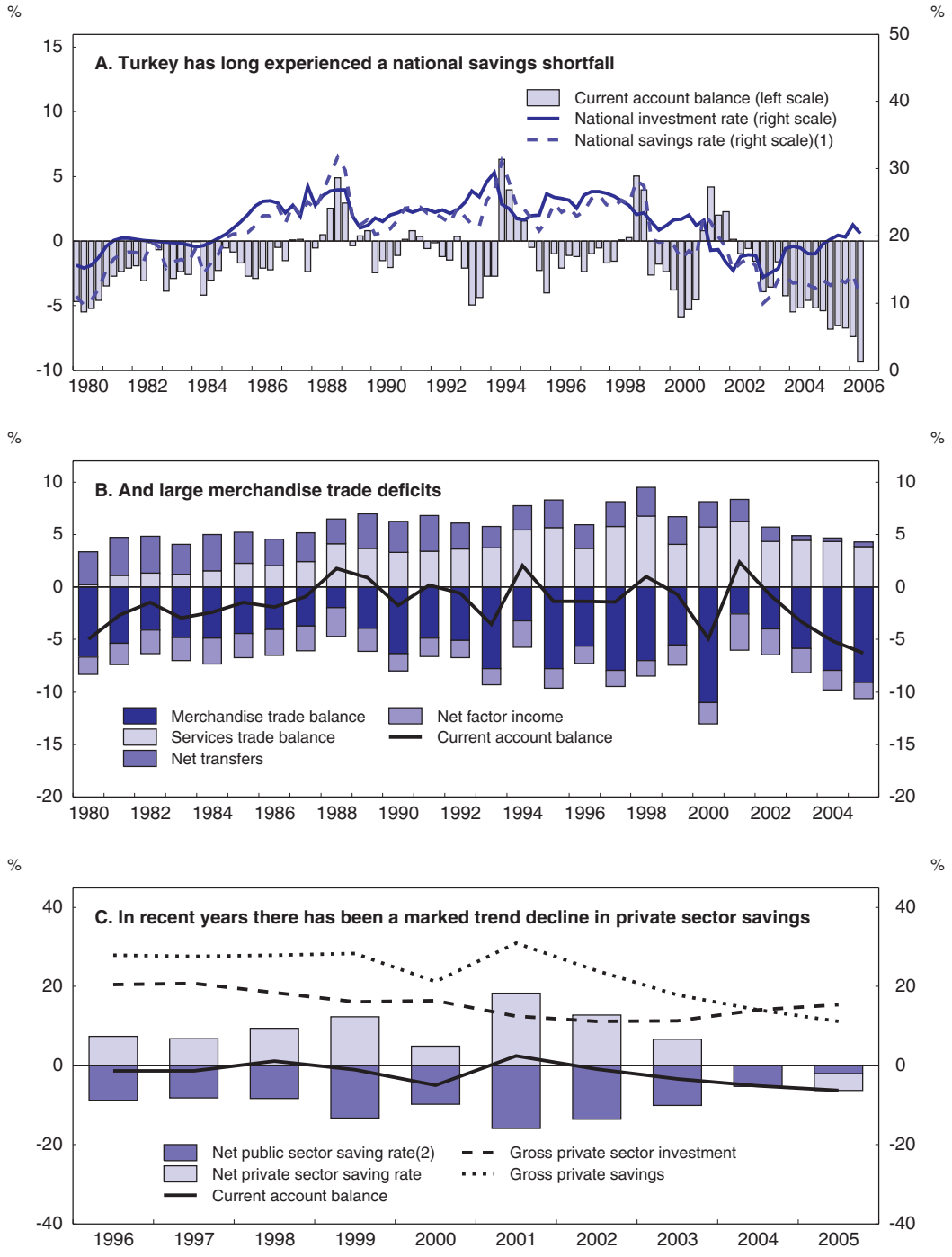
In recent years, the current account deficit has reached record levels, coming in at 7.5% of GDP in the second quarter of 2006. While much of the widening in the current account balance can be attributed to the increased price of energy imports, the deterioration still prompted many economists to voice concerns about unsustainability and possible exchange rate overvaluation.[3] Other more optimistic economists sought to provide reassurance, by arguing that high current account deficits are normal among catching up economies, and that deficits driven by high private sector investment are relatively benign, because they will eventually deliver a significant increase in exports. However, the subsequent lira depreciation suggests that there may have been some degree of overvaluation.

There are two main reasons why Turkey might not be able to sustain current account deficits of this magnitude for long periods of time. First, while it is true that gross private sector investment rates have picked up (Figure 2.3, panel C), they still remain relatively low by the standards of other fast-growing OECD economies. Second, the financing of the current account may be sensitive to the fact that equity portfolio flows are still subject to reversal, as are residents' lira-denominated deposits. Although the recent trend has been one towards de-dollarisation,[4] the highly developed sense of currency convertibility among Turkish residents makes significant domestic capital outflows possible (including re-dollarisation) in the event of any trigger that prompted expectations of significant lira depreciation. Indeed, there has recently been some small decrease in the proportion of bank deposits denominated in lira, although there is little evidence of a more significant domestic capital outflow in response to recent lira weakness.

More recently, net FDI flows picked up to 2.4% of GDP in 2005, following just 0.6% in 2004. But these flows have been directed predominantly towards the services sector (such as investment in banks) rather than consisting of greenfield manufacturing sector investments that would significantly raise Turkey's export capacity. Moreover, even after the recent pick-up, net FDI flows to Turkey remain low relative to flows to Turkey's key competitors, such as China and other catching up OECD countries (Figure 2.4). This survey argues that a significant increase in greenfield FDI is unlikely without an acceleration of the structural reform agenda.

The question of current account sustainability is also intrinsically linked to questions about the stability of capital flows and real exchange rate sustainability. Recent financial and exchange rate volatility – driven partly by a global reassessment of emerging market risk appetites and partly by some Turkey-specific political factors – has highlighted the fact that capital flows to Turkey are vulnerable. Indeed, Turkey is far more vulnerable to such changes in sentiment than are more advanced economies. One explanation for this was proposed by Reinhart and Rogoff (2004), who argued that financial markets may sometimes under-estimate the risk of default in emerging markets, resulting in an excess of capital flows from rich to poor countries, such that they create unsustainable balances and

Figure 2.3. **Current account trends**
As per cent of GDP



1. Gross national savings is calculated as the sum of gross national investment and the current account balance.
2. Net public sector saving is defined as the general government borrowing requirement as measured by the State Planning Office (SPO). Net private sector saving is calculated as the residual between the current account balance and net public savings.

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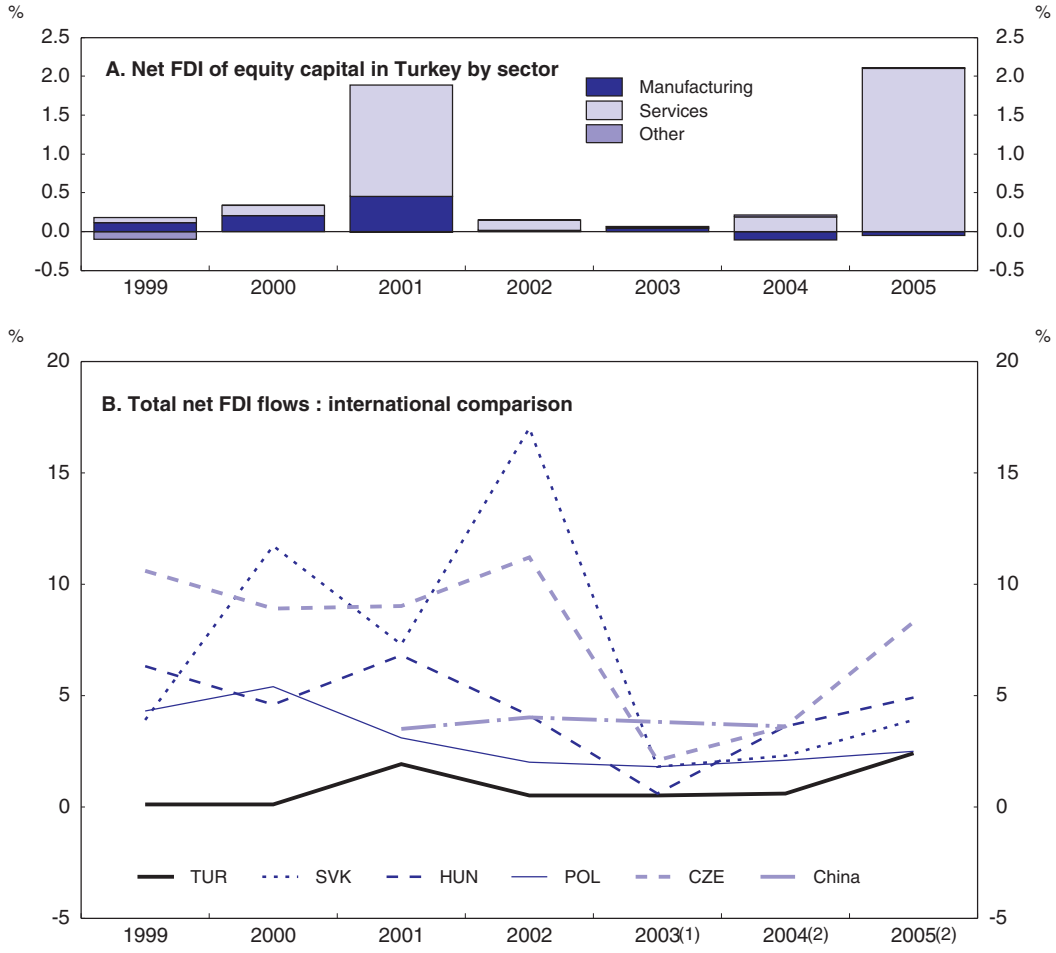
Figure 2.4. **Net FDI flows by sector and in comparison with other countries**
As per cent of GDP



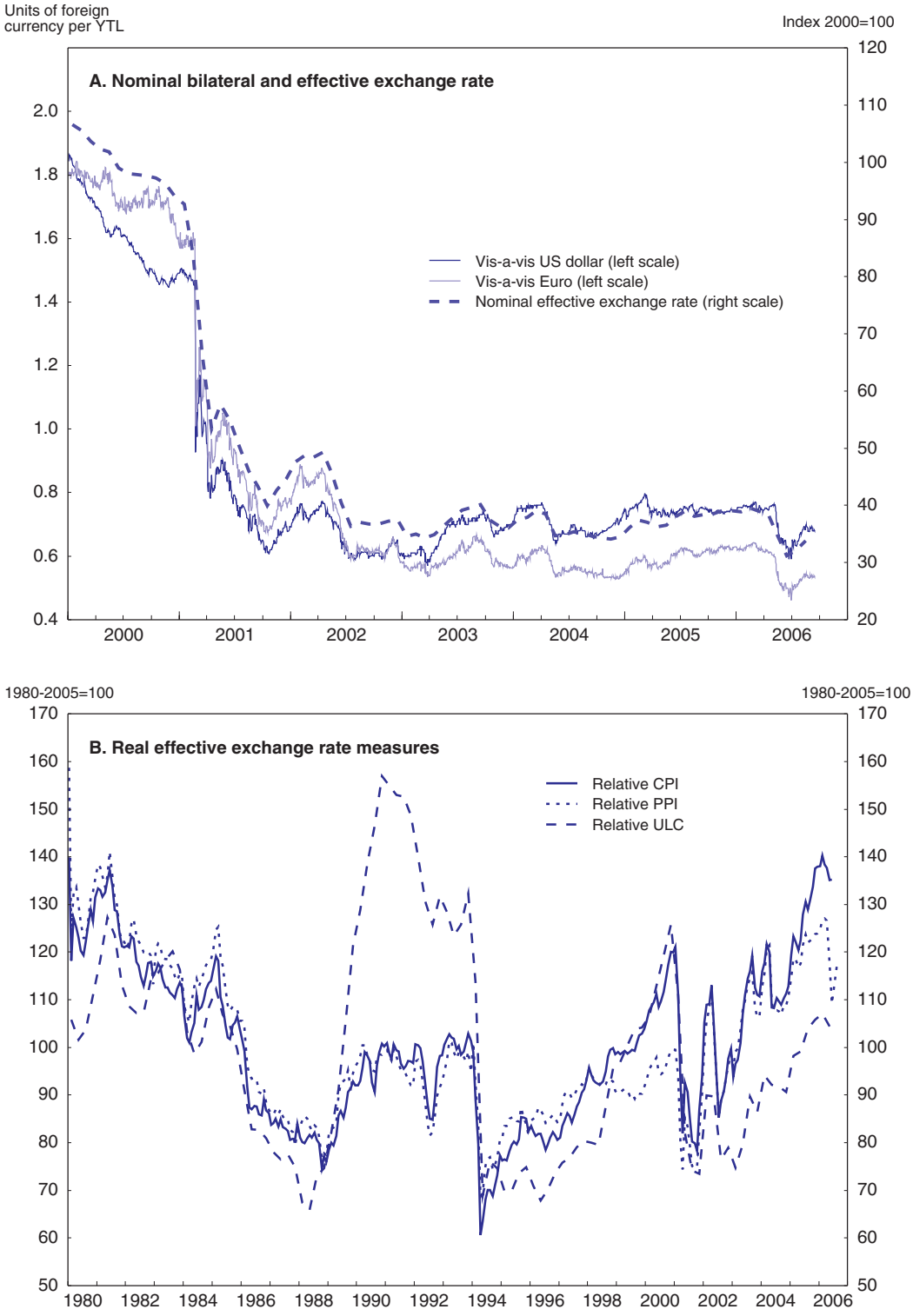
1. Preliminary.
2. Estimate.

Source: Central Bank of Turkey and OECD International direct investment database.

exacerbate the risk of crisis. They called this the "paradox" of rich to poor capital flows. In turn, such a paradox leaves emerging market policy makers facing an important dilemma: the inability to slow exchange rate appreciation in an environment of open capital markets and inflation targets.[5]

To the extent that the lira was too strong, the recent depreciation (illustrated in Figure 2.5, panel A) is welcome – although it does create some problems for inflation (discussed later). But it is not yet clear how much of the depreciation is permanent, or how much impact it will have on the current account balance. As Chapter 3 makes clear, the loss of competitiveness of the most labour-intensive segments of the business sector, such as textiles and clothing, is due only in part to the appreciating exchange rate, but also to the increased openness of European trade to much lower-cost competitors such as China. For these sectors, the real exchange may still be overvalued. But, other more modern *capital-intensive* sectors, such as automobile manufacturing, have been successful in maintaining competitiveness through high productivity growth and restrained wage inflation. The key to

Figure 2.5. **Developments in the nominal exchange rate**



1. All indices of the real effective exchange rate have been rebased to average 100 over the full time period.

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improving export performance, therefore, lies not so much in *nominal* exchange rate trends, but in improving business sector conditions so as to facilitate faster productivity growth in the traditional sectors (which remain the dominant part of the economy) as well as a more rapid reallocation of resources towards the modern sectors. Indeed, when the real exchange rate is calculated using relative unit labour costs, it is clear that the loss of competitiveness over the 2001-05 period was much smaller than that calculated using relative CPI or PPI inflation (Figure 2.5, panel B). According to the relative unit labour cost measure, the nominal appreciation between 2002 and 2005 was not sufficient to fully offset the downward real wage adjustment that took place at the time of the 2001 crisis.

Even after the recent re-pricing of risk, a more severe shock is still possible – one where a partial drying up of capital inflows is accompanied by domestic capital outflows (re-dollarisation). In the event of such a shock, a sudden reduction in the current account deficit would be required, and this would most likely be achieved through a further large depreciation of the real exchange rate, possibly accompanied by a painful contraction in domestic absorption.[6] Such "sudden stops" (and re-dollarisation) are more likely in emerging markets, which are more susceptible than advanced economies to changes in risk appetites. In turn, large and sudden exchange rate depreciation can cause financial distress for banks and non-financial firms with currency mismatches on their balance sheets, resulting in a sharp fall in output, major declines in asset prices, and a surge in bankruptcies.[7] Box 2.2 and Annex 2.A1 illustrate the extent to which such shocks could reverse the recent trend in Turkey's key debt ratios.

Box 2.2. **Public and external debt ratios could reverse trend**

Public sector primary fiscal surpluses and exchange rate stability are the key to further reductions in net public debt ratios

The four years following the 2001 crisis saw a significant reduction in the government's net public debt burden to pre-crisis levels. Whereas the very sharp increase in net public debt in 2001 was due to the government taking over the debts of the banking system, the subsequent unwinding can be attributed to strong GDP growth, together with very commendable fiscal and macroeconomic discipline: primary fiscal surpluses have been around 6% for several years in a row, and most nominal interest rates are below 20% for the first time in more than 20 years, contributing to the reduction of the government's debt servicing burden from 23% of GNP in 2001 to 9% in 2005.

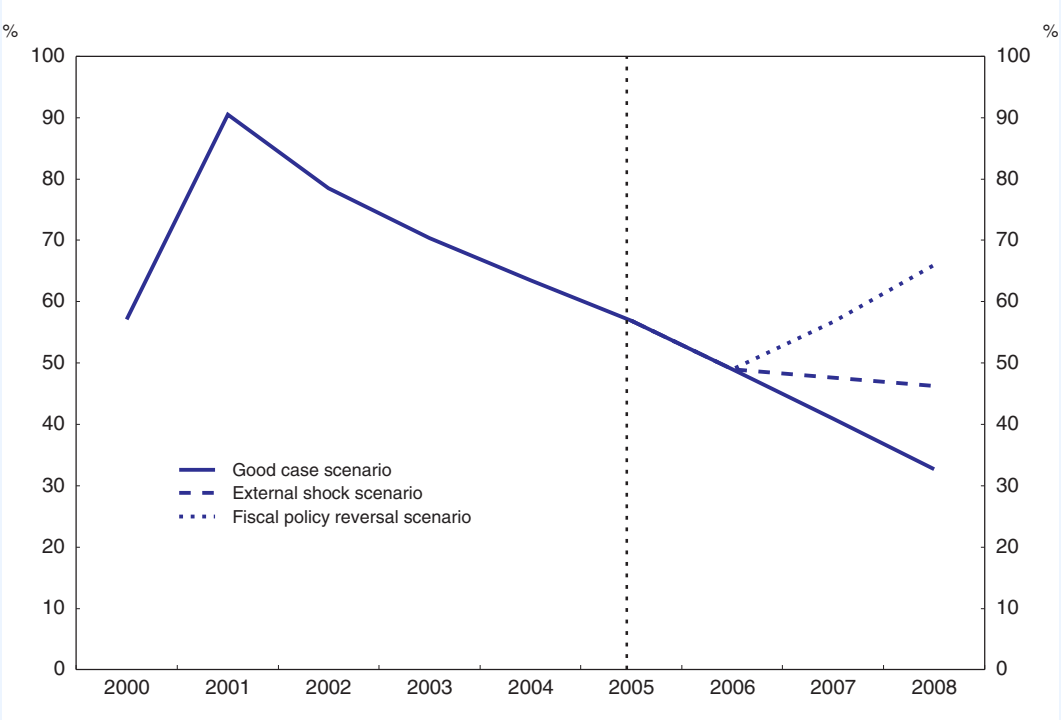
Whether or not the downward trend in the net public debt stock will continue depends on a number of factors. A good case scenario – one where the government achieves a 6.5% primary fiscal surplus each year and there are no negative external shocks – could see the net public debt stock drop towards 30% of GNP by the end of 2008 (good case scenario, Figure 2.6).[1] In this case, Turkey would reach appropriate public debt thresholds within a few years. For example, Klingen (2005) argues that a *gross* public debt ratio of 40% of GDP might be a sensible yardstick for Turkey, and this is broadly comparable to a *net* public debt ratio of around 30%. Even so, there have still been many documented cases of public debt default when the gross public debt ratio was below 40% of GDP, suggesting that it may be prudent for Turkey to aim even lower.[2]

Less positive scenarios emerge in the event of negative external shocks (see external shock scenario, Figure 2.6) or if the government is unable to maintain large primary surpluses (fiscal policy reversal scenario). The external shock scenario considers the case of a further significant deterioration in the global risk environment, perhaps sparked by a rebalancing of the US current account deficit or by a financial crisis in another emerging market economy. In this case it is assumed that for a two year period (2007 and 2008) all real interest rates on Turkish debt would rise by 400 basis points, GDP growth would fall to 2% per annum, and the Lira would depreciate by a further 10% in each of 2007 and 2008. Under these circumstances it is assumed that cyclical pressures would cause the fiscal primary surplus to fall back slightly to 4% of GDP. Despite the fact that the government has prioritised the repayment of foreign-currency-denominated debt over recent years, limiting the vulnerability of the public debt position to sharp exchange rate movements,[3] this scenario would still see the recent decline in net public debt stall, remaining at a level a bit below 50% of GDP.

Box 2.2. **Public and external debt ratios could reverse trend** *(cont.)*

Figure 2.6. **Net public debt stock under alternative scenarios**

As per cent of GDP



Source: Turkish Treasury and OECD.

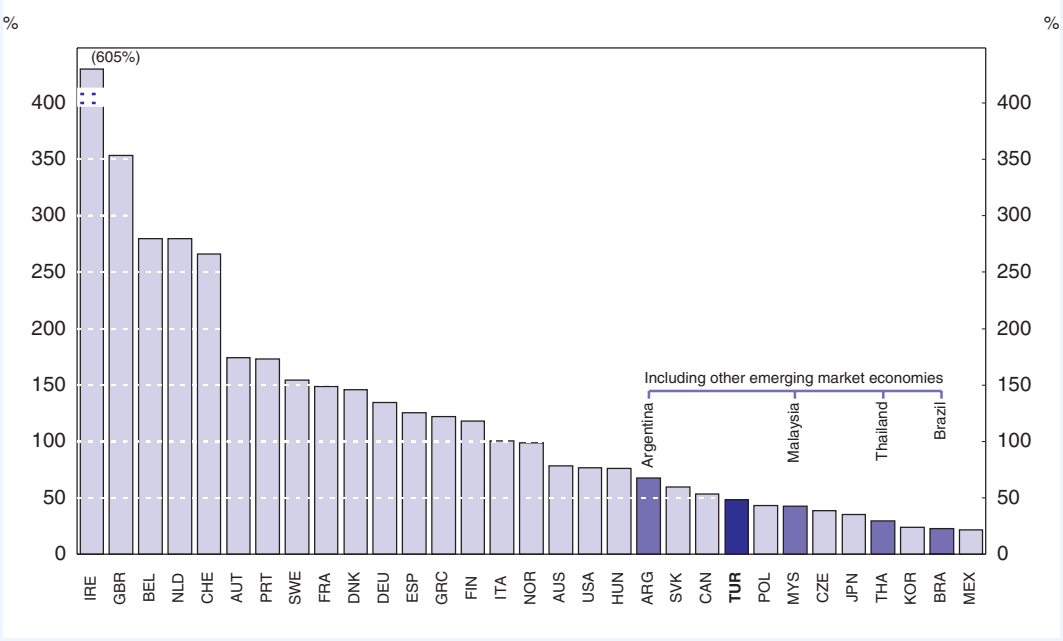
The fiscal policy reversal scenario is more serious. In this scenario it is assumed that the government's primary fiscal surplus falls to 2% of GDP as a result of a regime shift to weaker fiscal discipline. Given the importance that the financial markets place on the government's fiscal balance as symbolic of fiscal rectitude and commitment to macroeconomic stabilisation, it is assumed that such a result would prompt a reassessment of the Turkish risk premium and a selling off of Turkish assets, resulting in a significant (800 basis point) increase in floating interest rates and a 400 basis point increase in fixed rates. Consistent with this, it is assumed that the economy would fall into recession with GDP contracting by 2% per annum. In this case, the public debt ratio would reverse its recent trend, rising to well over 60% of GNP by 2008.

External debt ratios are more vulnerable

In the vulnerability literature, high levels of external debt (relative to GDP and relative to debt servicing capacity) are consistently found to be closely associated with the emergence of sovereign debt distress.[4] This is partly because the government sector is often forced to take on private sector debts in times of crisis (as happened in Turkey in 2001 when the government absorbed the losses of the banking sector), and partly because high levels of private external debt can create conditions for a crisis, forcing the government into an unsustainable position. As a result, the literature on debt intolerance and serial default (*e.g.* Reinhart *et al.*, 2003 and Reinhart and Rogoff, 2004) suggests that prudent external debt thresholds in emerging markets may be closer to 15 to 30% of GDP than to the higher levels that are found in many advanced OECD economies. At 47% of GDP at the end of 2005, Turkey's external debt ratio remains well above these threshold levels, even if it is at the same time significantly lower than the levels of external debt seen in the advanced economies (Figure 2.7).

Box 2.2. **Public and external debt ratios could reverse trend** *(cont.)*

Figure 2.7. **Gross external debt position**[1]
2005 Q4, as per cent of GDP[2]



1. Missing OECD countries are those who did not participate in the collaborative effort by the World Bank and IMF to bring together external debt statistics of SDDS subscribers.
2. In 2005.

Source: World Bank, *Quarterly External Debt Statistics*, and OECD.

In this context, it is of concern that the recent downward trend in Turkey's external debt ratio is unlikely to continue (Figure 2.8). In the first few years after the crisis (2002 and 2003) the falls in the external debt ratio were driven largely by high growth in nominal GDP (particularly the inflation component), assisted in 2002 by a trade surplus. As inflation rates fell, and the trade balance returned to deficit, this effect dissipated. In 2005, however, the pace of external debt reduction picked up, thanks to significant nominal exchange rate appreciation, together with a marked increase in non-debt-creating capital inflows (*i.e.* FDI). While FDI inflows are projected to continue, the exchange rate has now reversed direction. Looking forward, the baseline scenario assumes that the real exchange rate will remain at its August 2006 level throughout the scenario horizon. This exchange rate weakness, together with a persistently large current account deficit, leads to a reversal in the recent decline in the external debt ratio.

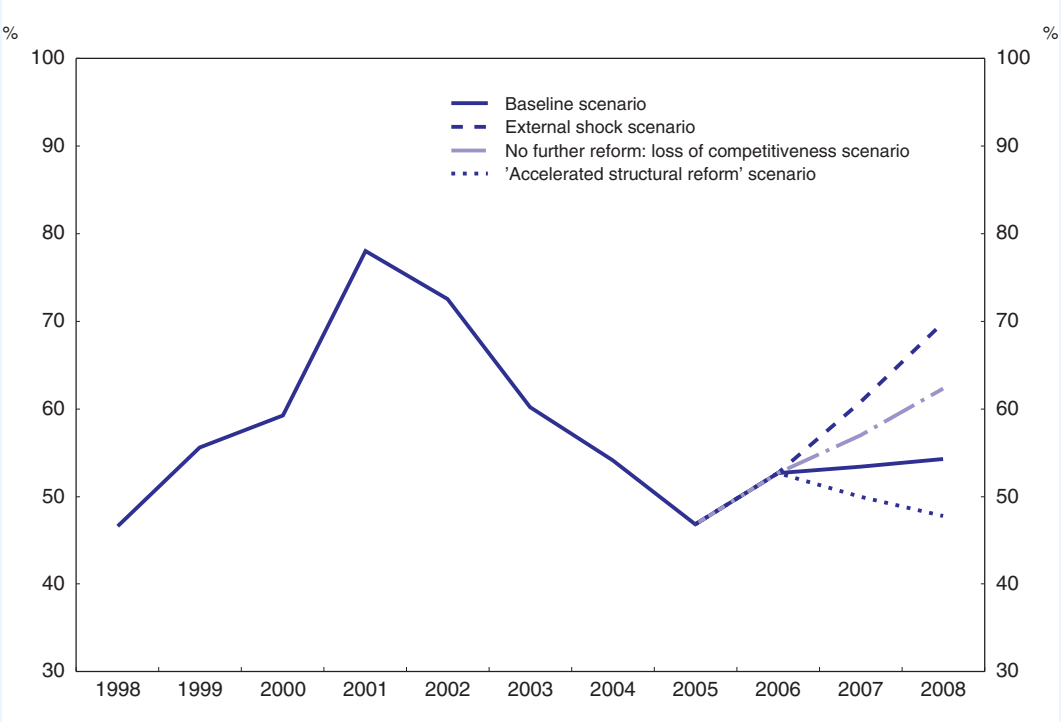
The baseline scenario can be characterised as a "muddling through" or "most likely" scenario, in the sense that it assumes a continuation of sound macroeconomic management, but no acceleration in the structural reform agenda, and therefore no further pick-up in FDI inflows. Importantly, the baseline scenario does not anticipate any kind of crisis.

Worse case scenarios suggest a more rapid increase in the external debt ratio. For example, the "external shock" scenario (see Figure 2.8) is based on the same general assumptions as the external shock discussed in the public debt sustainability exercise above. In such an environment of increased risk sentiment and loss of confidence in emerging markets it is also assumed that net FDI inflows drop to zero. Despite some mitigation from an improvement in the trade deficit, in response to the exchange rate depreciation, the consequent revaluation of current debt stocks and the higher debt servicing costs would push external debt up to around 70% of GDP.

Box 2.2. **Public and external debt ratios could reverse trend** *(cont.)*

Figure 2.8. **Gross external debt stock under alternative scenarios**

As per cent of GDP



Source: TURKSTAT, Central Bank of Turkey and OECD.

Alternatively, a negative shock could also stem from a faltering in the structural reform agenda, perhaps in the run-up to the 2007 elections. In this case, a further loss of competitiveness in the traditional sectors, and a slowing of growth in the more capital-intensive sectors, could lead to a significant expansion in the trade and current account deficits, prompting nominal exchange rate depreciation and higher interest rates. The "no further reform" scenario in Figure 2.8 assumes a widening of the trade deficit to 6% of GDP, a further nominal exchange rate depreciation of 5% in each of the two next years, and an increase in interest rates of 200 basis points.

More optimistically, a positive scenario could result from an acceleration of the structural reform agenda (see Figure 2.8 and Appendix A for more details). Not only would an acceleration in reforms be likely to reduce the extent of increase in external debt (as in the "accelerated structural reform" scenario), but it would also improve the perceptions of Turkey in the eyes of investors, and thus reduce Turkey's vulnerabilities for any given level of external debt.

1. See Annex 2.A1 for details about the assumptions underpinning these scenarios.
2. In a history of sovereign defaults over the last three decades, the IMF (2003) found that gross debt was below 40% of GDP in 35% of the default cases. The fact that some advanced economies (Japan, Italy, Belgium) have lived with a debt ratio above 100% highlights the fact that a different yardstick is used for more developed economies.
3. Public debt denominated in foreign currency fell from 43% of GNP in 2001 (just over half total net public debt) to just under 26% of GNP by the end of 2005.
4. Klingen (2005) provides a review of this literature.

In the context of these vulnerabilities, the remainder of this chapter discusses the immediate challenges facing Turkey's macroeconomic institutions and the steps that the monetary and fiscal authorities can take to further improve the resilience of the Turkish economy to volatile capital flows and other shocks.

Monetary policy is being tested

Only several months after the formal introduction of inflation targeting (see Box 2.3) inflation surprised on the upside, reaching as high as 11.7% in the year to July 2006, before falling back to 10.3% in August, still up significantly from the 7.7% recorded at the end of 2005. This upward blip has exceeded the upper edge of the target uncertainty band, constituting a breach of the targets under the economic programme with the IMF. Moreover, the ongoing pass-through from the recent nominal exchange rate depreciation to higher prices of imported goods is likely to provide an ongoing source of higher inflation – at least for a while – even if the impact of higher energy prices recedes. Since the lira was floated in 2001, the pass-through from lira-denominated import prices (*i.e.* jointly capturing the effect of the exchange rate and foreign-currency-denominated import prices) to consumer prices has been estimated as being in the 0.3-0.4 range after 12 months.[8] While this is significantly weaker and slower than under the fixed exchange rate regime (estimated at 0.6 after 6 months), it remains significant, highlighting the importance of the recent exchange rate adjustment on consumer prices.

To some extent the higher inflation numbers simply represented a surprise. While the central bank did expect some temporary increase in headline inflation this year, in response to supply-side shocks which pushed the prices of energy, unprocessed food and gold upwards, both the magnitude and scope of the increases was underestimated; inflation picked up not only in energy and food items but also in clothing and some other components. Moreover, measures of core inflation also increased significantly (Figure 2.9).

The Bank responded to these shocks by holding an emergency monetary policy committee meeting on the 7th of June, at which it was decided to raise the short-term policy rate by 175 basis points. This was followed by another 225 basis point increase on the 25th of June and a further 25 basic point increase on the 21st of July, taking the policy interest rate back up to 17.50%, a level not seen since the end of 2004. Measures to address the liquidity squeeze in the foreign exchange market were also introduced (see further discussion below). For a given projected increase in inflation, the Bank's decision about how much to raise policy rates can be seen as depending on a number of factors including: the cause and perceived permanence of the shock; the effectiveness of the interest-rate transmission channel; the expected impact on output and the financial sector; and the credibility of the Bank. In Turkey, it is unclear how effective the interest rate transmission channel is. Most economists believe that inflation expectations (*i.e.* credibility) play a more important role in the inflation generating process in Turkey than the output gap, which in any case shows little sign of significant excess demand (Figure 2.10), although measurement is very difficult. However, other factors suggest that the central bank was sensible to respond to the inflation surprise by significantly raising short-term policy rates: First, to the extent that the exchange rate shock stemmed from a portfolio shift, rather than fundamental factors, it makes sense to offset it with significantly higher interest rates.[9] Second, it is critical that the Bank restore its anti-inflation credibility, even if this involves behaving as a "strict", rather than "flexible" inflation targeter by putting significantly more weight on stabilising inflation, than on stabilising growth.[10] Otherwise: recent gains in credibility would be lost, and be more

Box 2.3. **Inflation targeting in Turkey**

The introduction of explicit inflation targeting in January 2006, following several years of careful disinflation, was accompanied by a clear exposition of the inflation targeting framework:

- End-year inflation targets of 5% for 2006 (with an uncertainty band of ±2%) and 4% for 2007 and 2008 were announced. For the purposes of meeting IMF conditionality, annual inflation in 2006 must be consistent with an announced quarterly path for inflation, consistent with the end-year target.
- It was clarified that these inflation targets are to be treated as mid-points – with upward and downward deviations from target to be dealt with symmetrically – as distinct from the targets during the disinflation phase, which were treated as "upper limits".
- Although the inflation targets are expressed in terms of CPI inflation, the central bank has emphasised the importance of monitoring several different measures of core inflation to ensure that policy is not unduly influenced by temporary CPI price movements which are beyond the influence of monetary policy.[1]
- The central bank has adopted a relatively transparent approach to communication, by publishing inflation and output gap projections, conditional on various alternative assumptions for the short-term interest rate, oil prices, etc.[2]
- In case the inflation figures fall outside the uncertainty band, the central bank must make public a separate report explaining the reasons for the incident, and the measures to be taken. Such an event would also be considered to be a breach of the economic programme with the IMF, prompting consultation with IMF staff.

Overall, the framework for inflation targeting in Turkey is reasonably sound. Yet inexperience with a stable inflation environment, together with the fragilities of the Turkish economy, suggest that the challenges of achieving the inflation targets – particularly in the face of shocks, such as the one that has occurred recently – are much greater than in other inflation targeting countries. The challenges of this environment suggest the need for a superior level of economic analysis and communication.

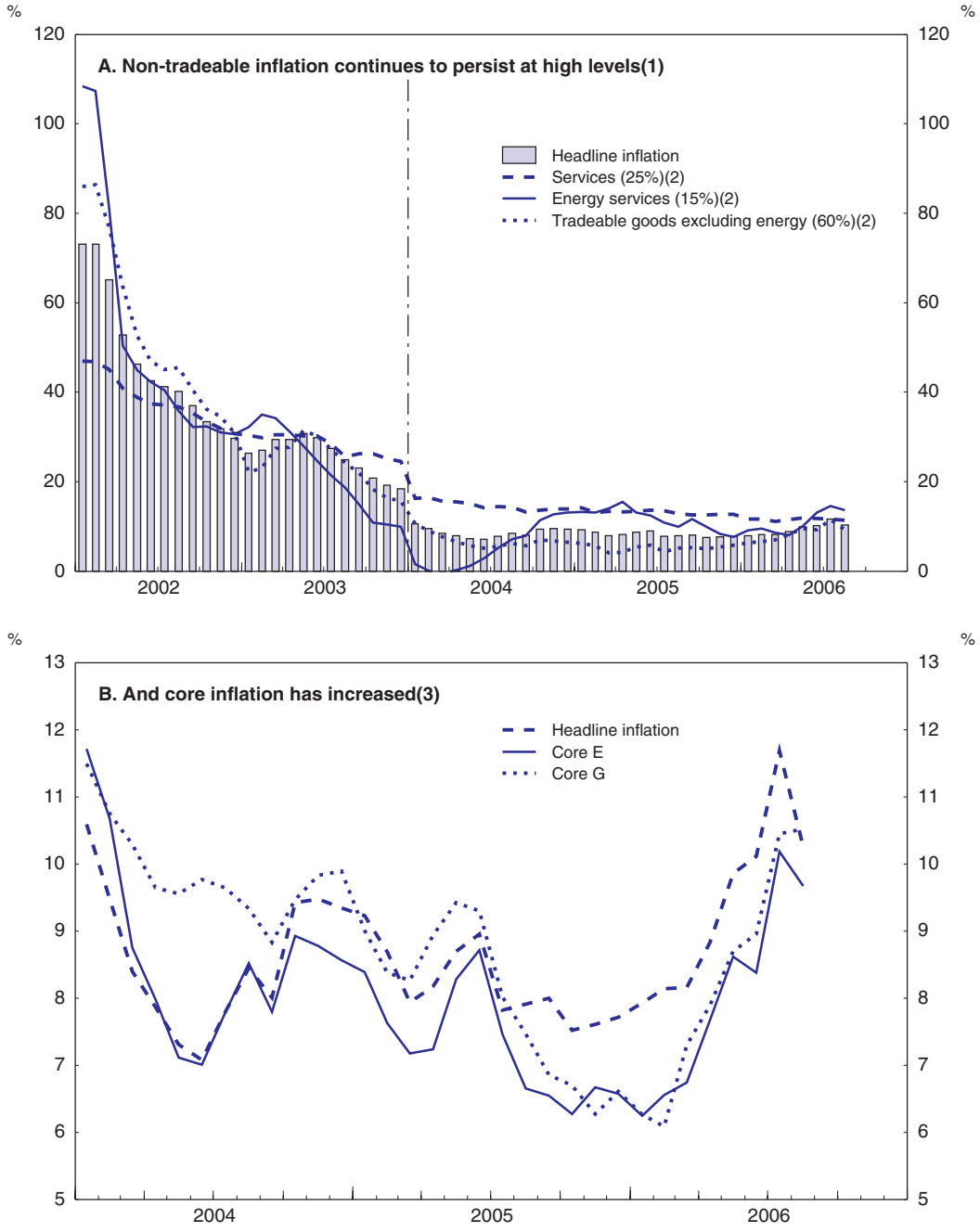
Communication is particularly critical in response to the uncertainty band being breached – both in terms of justifying the breach to the government and the IMF, and in terms of convincing the public that the deviation is temporary and that inflation will be quickly returned to the desired path. In this context there is room for improvement. For example while end-year targets for 2006-08 were published in December, a more explicit exposition may be required of the *longer-term* inflation target (beyond 2008), together with the convergence pace and time horizon for bringing the CPI back to this path.

Given the importance of the international investor community, a greater emphasis on providing prompt English-language translations of all press releases and inflation reports would also be helpful.

1. To date, however, only exclusion-based measures of core inflation have been produced. To complement these, the CBRT should also consider calculating alternative measures of central tendency – such as median inflation and trimmed means.
2. *E.g.* see CBRT (2006a) Inflation reports I and II.

difficult to win back; this loss of central bank credibility would be reflected in higher rates at the longer end of the yield curve; and a wider inflation differential, relative to Turkey's trading partners, would partially offset the impact of the nominal exchange rate depreciation, implying that Turkey's external competitiveness could still deteriorate even without renewed nominal appreciation.

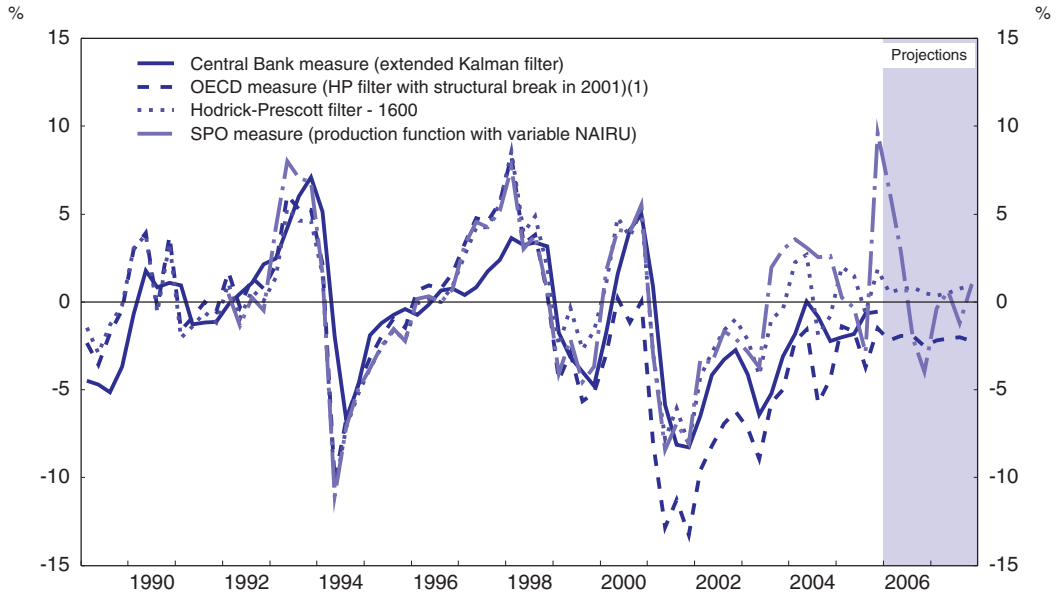
Figure 2.9. **Inflation trends**
Year-on-year percentage changes



1. Starting in January 2004 a new index of CPI inflation was published, resulting in a structural break in the historical series.
2. Numbers in parentheses represent the approximate weight in the consumer price.
3. CPI excluding energy, alcoholic beverages and tobacco products for Core E and excluding also other products with administrated prices, and unprocessed food for Core G.

Source: TURKSTAT, Central Bank of Turkey and OECD.

Figure 2.10. **Measures of the output gap**[1]



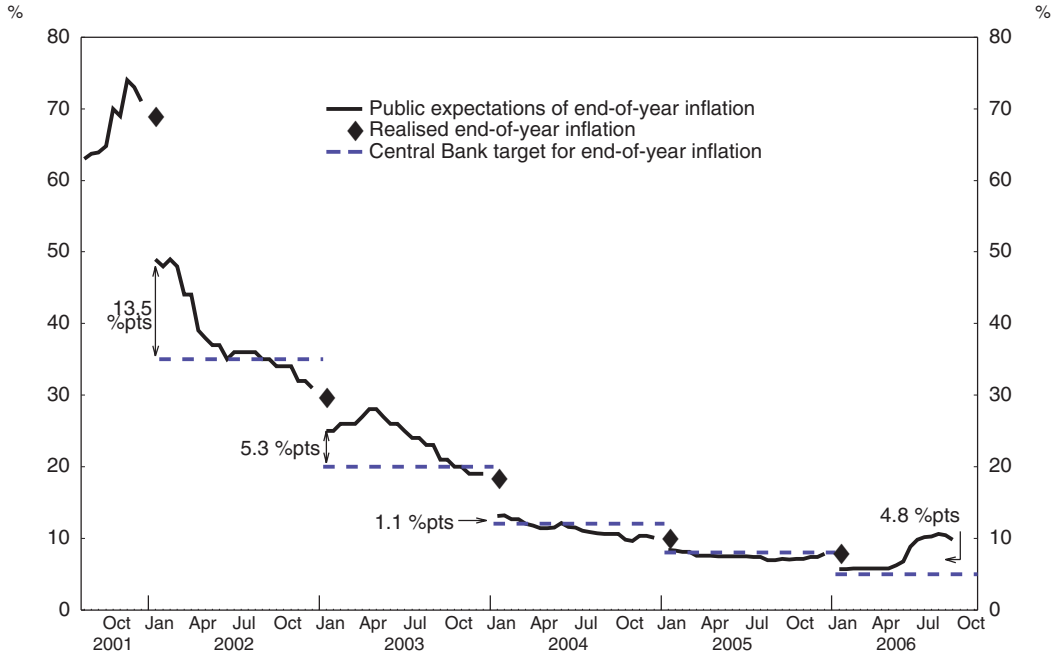
1. The OECD measure of potential output, on which the gap is based, is calculated using an HP filter with constraints on labour productivity and a structural break in 2001.

Source: Central Bank of Turkey, State Planning Organisation and OECD.

Looking ahead, the central bank has acknowledged that end-year inflation is likely to overshoot the 3 to 7% uncertainty band for December 2006, although they continue to expect a single digit inflation figure. The latest (early September) survey of public inflation expectations also reported a single digit figure for end-year inflation – although at 9.9% it was only *just* in single digit territory (Figure 2.11). Exchange rate uncertainty makes these projections particularly uncertain. If the exchange rate were to remain approximately 10% lower (on a nominal basis) than before the financial market turbulence, then it could be expected to contribute an additional 2 percentage points of inflation over the year to mid-2007 (given a 0.35 pass-through coefficient and a 60% weight of tradable goods in the consumer goods basket). If enough of this additional inflation passes through before the end of the 2006 year, then single-digit inflation would require lower rates of inflation elsewhere, which – given the stickiness of non-tradable goods (services) inflation, at around 12% (Figure 2.9, panel A) – could be difficult to achieve. While this estimate of 2% is a bit lower than the central bank's mid-summer estimate of 3.5 percentage points of pass-through throughout 2006 (CBRT, 2006b), this probably reflects different assumptions about the extent to which the exchange rate depreciation will be permanent. In any case the total impact could be even higher if high inflation expectations result in significant second round effects.

It is now a significant challenge for the central bank to show that they deserve the medium-term credibility with which they had previously been bestowed, by communicating a plausible recovery plan for returning inflation to the required dis-inflationary path. To date, surveyed measures of medium-term inflation expectations suggest that the credibility of the Bank's medium term target has not yet been restored. The central bank has projected that based on an endogenous interest rate assumption, end-2007 inflation will be in the range of

Figure 2.11. **The Central Bank faces a credibility challenge**



Source: Central Bank of Turkey.

3.0 to 6.5% with a probability of 70%. However, the fact that the median 24-months-ahead inflation expectation increased from 4.7% in April to 6.0% in June, July and August. suggests that the Bank's inflation target of 4% for December 2007 is not seen as attainable.

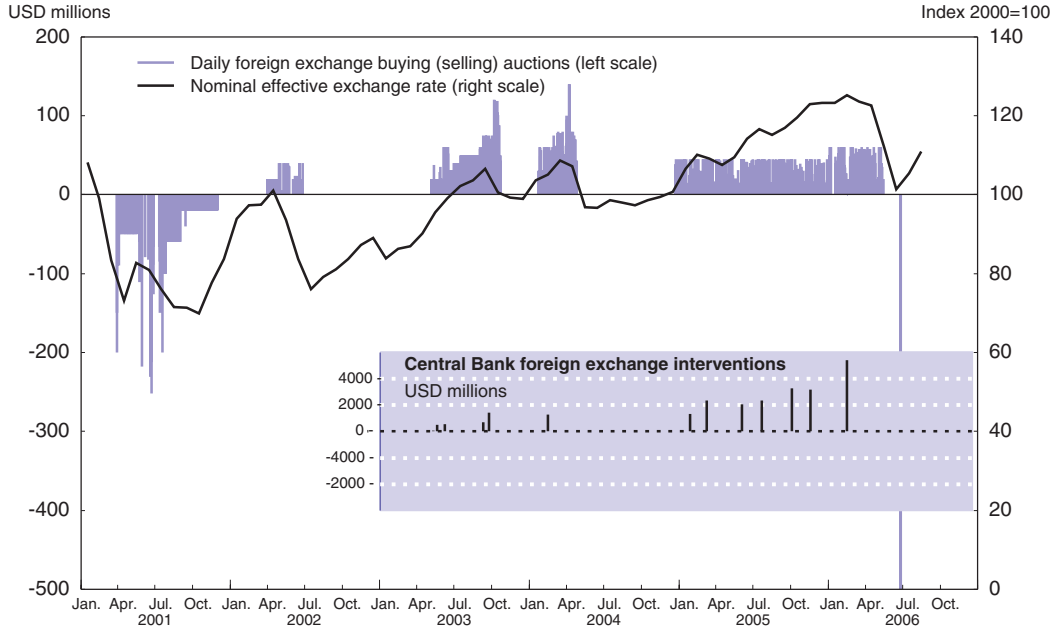
With the current inflation targets not expected to be met, the targets themselves are currently providing an insufficient guide to market expectations. What markets and economic agents need is a comprehensive road map for the re-establishment of disinflation. This need was partly fulfilled by the central bank's recent letter to the government and IMF in response to the target breach (CBRT, 2006b), which provided updated projections for 2006 and 2007. However, as discussed in Box 2.3, a clearer exposition is also needed of the Bank's *longer-term* inflation target (beyond 2008), together with the convergence path and a more detailed discussion of the risk factors that could put the new convergence path at risk; and how the Bank would respond to unforeseen events.

The government has made it clear that achieving price stability is the responsibility of the entire government, not only the central bank. This emphasis reflects the important role that good fiscal policy management plays in the inflation process in Turkey; according to a recent piece of IMF research, price-setting behaviour in Turkey has historically been dominated by inflation expectations, which in turn are heavily influenced by fiscal variables.[11] So continued confidence in fiscal management will be important, including steps to ensure that public sector wages do not accommodate the inflationary shock. But government policy in other areas should also assist. Most importantly, an acceleration in the structural reform programme would improve competitiveness and help to bring about a more rapid slowing in services sector inflation. To date, this structural policy agenda has been the weakest leg of the disinflation process.

Exchange rate policy and further risks

Besides policy interest rates, the other relevant tool of the central bank is the use of foreign exchange intervention and auctions to stabilise liquidity conditions in the foreign exchange market. The Bank uses two means of transactions in the foreign exchange market: prior to May 2006 this involved daily auctions to build up foreign exchange reserves (which were invested in high-rated foreign bonds); and occasional large foreign exchange interventions (Figure 2.12). The purpose of such foreign exchange intervention was to reduce the potential short-run exchange rate volatility in the foreign exchange market which helped to limit the impact of capital inflows on the real exchange rate. In 2005, almost half of the total USD 39 billion capital inflows were channelled into accumulation of foreign exchange reserves.[12] In May, exchange rate depreciation prompted the Bank to suspend the use of these daily auctions. Subsequently, auctions to *withdraw* excess lira liquidity in the money markets were introduced, through a lira deposit facility with one and two-week maturity in which the interest rate is determined by the market in competitive auctions. The direction of Bank interventions in the foreign exchange market have also changed with several large sales of foreign exchange (totalling USD 1 billion) conducted in June (a data release lag of 3 months means that the recent interventions are not reflected in Figure 2.12). It was hoped that these actions would reduce volatility in the foreign exchange market and prevent excessive under-shooting of the exchange rate. Indeed, the exchange rate trend did turn around soon after.

Figure 2.12. **Nominal effective exchange rate and auctions**



Source: Central Bank of Turkey and OECD.

An important exchange rate risk in the Turkish context is a reversal of the recent de-dollarisation trend. At the end of 2005, the two thirds of total bank deposits that were denominated in lira amounted to approximately 150 billion YTL (112 billion USD), roughly equal to almost three times the size of total net capital inflows (including IMF loans) in 2005.

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If, in the event of a more severe shock, the extent of dollarisation were to return halfway to its 2001 peak of 55% of total deposits, the magnitude of currency substitution could be estimated at approximately 15 billion YTL (30% of 2005 net capital inflows).[13] Since the pass-through from exchange rate movements to CPI inflation is usually non-linear – intensifying with the rate of currency depreciation – all possible actions to prevent an excessive under-shooting of the exchange rate would be needed in such a situation.

To further reduce the risk for excessive depreciation, tight fiscal policy is crucial, together with an acceleration in the structural reform agenda (including more flexible labour market regulations and improved product market regulation) to maintain investor confidence. Continued high inflation in the non-traded service sectors (see Figure 2.9) also suggests structural impediments to competition. Finally, improved bank regulation and supervision can also help, primarily by reducing the risk of macroeconomic destabilisation in the event of a capital flow reversals, or large exchange rate changes. Policies in each of these three areas are discussed in further detail below.

Fiscal policy institutions need to be strengthened

Fiscal policy has an important influence on Turkey's vulnerability to shocks for several reasons. First, in the event of diminished risk appetite for emerging-market securities, investors may decide to apportion their pull-back according to the perceived sustainability of individual countries' fiscal and monetary policies. Second, contagion is more likely to penalise emerging economies with high debt levels or prospective fiscal deficits. Third, economies with a good fiscal reputation find it easier to stabilise growth through the use of countercyclical policies.[14] Finally, most economists agree that tight fiscal policy can be the most effective tool to counter the effects of capital inflows.[15]

To date (since the 2001 crisis) Turkey has achieved some very impressive fiscal outcomes, while improving the quality of fiscal institutions and processes. This is testament to the sheer political will of the Government, motivated by recognition of the need for Turkey to achieve and maintain fiscal credibility.[16] But to ensure a longer-term commitment to strong fiscal control and public spending efficiency, fiscal institutions and processes will need to be made more robust to both economic and political cycles, and greater attention will need to be devoted to controlling current expenditures. The potential benefits to be gained from establishing more robust and transparent fiscal institutions and processes are huge. Although this process has begun, significant challenges remain (see Box 2.4).

A significant problem for external observers of fiscal policy is that, apart from Mexico, Turkey is the only OECD country that does not publish consolidated general government fiscal accounts according to National Accounting Standards. Essentially, external observers are left with three rather sub-optimal measures to monitor: the official Ministry of Finance (MOF) measure of the government balance; the State Planning Organisation (SPO) measure of the general government balance; and the IMF measure of the fiscal position.

Of these three measures, the official MOF measure of the "central government balance" is the most timely. This is the consolidated central government balance which takes into account budget transfers to the social security institutions and budget transfers to local governments. This measure has been widely used as a proxy for *general* government net lending. However, the total spending and total revenues of general government entities are not reported, making it unclear what other liabilities could be missing and where possible remaining weaknesses lie.

Box 2.4. **Managing public finances: remaining challenges**

Several new laws introduced since the 2001 crisis – including the Public Financial Management and Control Law (PFMCL) – have aimed to introduce modern budgeting procedures to Turkey, although the required secondary legislation to support the new laws will not be fully implemented until the end of 2007.[1] As with most aspects of policy, the key challenge will be in the *implementation* of these laws. This box, which draws on IMF (2006) and Sigma (2005) summarises some of the primary implementation challenges that must still be addressed:

- *Improving the legislative environment:* In the recent past, some laws have been modified soon after they were passed. Other legislation can include exemptions to the provisions of the PFMCL. This has created some confusion about the legal framework. Therefore, to provide permanence and stability in the new fiscal framework, some steps need to be introduced for a better legal environment. Some options for ensuring the primacy of key laws are suggested by the IMF (2006)[2] although it is noted that their implementation would require the strongest political support from the government at the highest level. Resolution of this problem is very important for the international perception of the fiscal and business environment in Turkey.
- *Institutional co-ordination of public financial management:* Fiscal responsibilities are currently shared between the Ministry of Finance (MOF), the State Planning Organisation (SPO) and the Treasury. Successful medium-term performance-based budget management will require improved co-ordination between these three players.
- *Performance-based budgeting:* Budget documentation remains heavily focused on inputs. The introduction of performance-based budgeting will require a major cultural change among civil servants, given Turkey's history of centralised decision-making and the absence of experience with individual agency-specific goals. See IMF (2006) for specific measures to support the implementation of the new budget legislative framework.
- *Off-budget channels:* The importance of revolving funds (RFs) has not diminished and their status has not yet been resolved. Since revolving funds evolved as a way to get around excessively restrictive budgetary regulations (such as restrictions from charging fees in the healthcare system), their resolution will require major reform in the various line ministries (especially health and education). Essentially, a decision should be made to either incorporate these revenues and expenditure flows into the general government accounts or to corporatise the relevant institutions (*e.g.* hospitals). Given the inconsistency of RFs with the government's goals of accountability and transparency, these reforms should be given priority.
- *Tax system transparency:* Despite improvements, the taxation framework remains complex and subject to discretion by the Council of Ministers and the Minister of Finance. Tax exemptions should be consolidated, the discretionary power of the Council of Ministers and the Minister of Finance should be limited, and a mechanism for the issuance of binding advanced rulings on tax issues should be introduced.
- *Public sector training:* Despite the significant cultural change that the reforms require, the training of officials, although ongoing, remains insufficient, especially for: the formulation of medium-term performance-based budgets; the roll out of the new system to local governments; the implementation of new accounting practices at local government level; and the adherence to new reporting requirements.
- *Public private partnerships:* To ensure that PPPs do not result in unforeseen fiscal liabilities, it may be wise to set up a dedicated PPP management unit to manage the complex nature of PPP agreements, and make explicit the extent to which the risks will be borne by the public versus the private sector.
- *Effective devolution of responsibilities across levels of government:* The dependency of municipalities on State transfers should be reduced and fiscal responsibility should be fostered by strengthening the municipalities' own revenue base. Decentralisation of local government expenditure responsibilities should be clearly linked to resources and activities and Iller Bank should be restructured in order to subject it to market forces and improve transparency in intergovernmental fiscal relations.

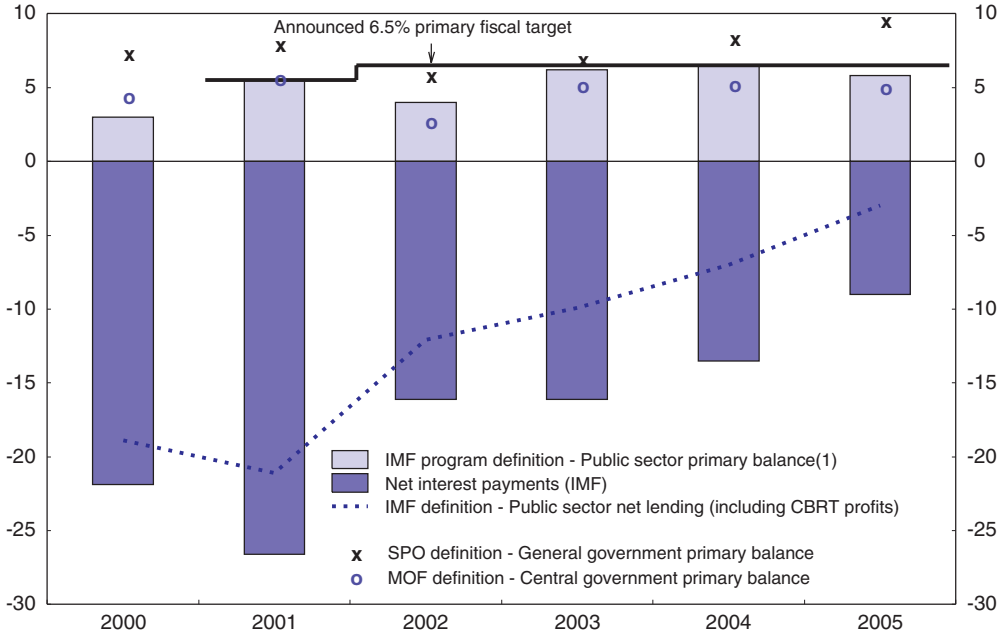
1. See OECD (2004), IMF (2006) and Sigma (2005) for a more detailed description of the new regulations.
2. For example, one proposed possibility is the introduction of a procedural rule in Parliament, prohibiting consideration of any draft law that includes an amendment of the PFMCL or of a principal law in a given area. Of course processes should still exist for modifying these principle laws directly when required.

To fill in the gaps on total government revenues and expenditures, the State Planning Organisation (SPO) publishes a measure of the "consolidated general government balance". Unlike the MOF measure, this incorporates most general government revenues and expenditures, providing a measure of the size of the general government. However, since it is not prepared according to National Accounting Standards and procedures, it is unclear what might be missing.

Finally, in response to the lack of suitable official data, the IMF has defined its own methodology for monitoring the fiscal position of the Turkish government. The IMF's monitoring system does not aim at exhaustive general government accounting but focuses on the key and fiscally most risky components of public finances.[17] As such it is not a substitute for putting in place fully fledged general government accounting – particularly since data publication lags are long and the current IMF programme in Turkey is expected to come to an end within the next two years. In the meantime, the absence of general government fiscal accounts prepared according to National Accounting Standards continues to serve as a barrier for outsiders to fully monitor Turkish fiscal policy.

Figure 2.13 illustrates these three measures of the primary fiscal balance, together with the IMF measure of net interest payments and the total budget deficit. According to the SPO definition, the government has been running large primary surpluses every year. According to the IMF definition, the primary surplus targets were roughly met in 2001, 2003 and 2004, and missed by around 2% of GDP in 2002 and by 0.7% of GDP in 2005.

Figure 2.13. **Available measures of recent fiscal outcomes in Turkey**
As per cent of GDP



1. Data for 2005 is calculated according to a revised/*consolidated government sector* definition adopted by the IMF in January 2006.

Source: State Planning Organisation, Ministry of Finance and IMF.

The multiplicity of fiscal indicators makes the close monitoring of the fiscal position particularly difficult, as is the case for 2006 to date. Although the consolidated central government balance has significantly improved in the first half of 2006, relative to the same period in 2005, this is largely due to fiscal revenues that were more buoyant than anticipated; if expenditures had not also surpassed projections, the fiscal position would be even better.

As discussed earlier, the strategy of targeting a high primary surplus has been critical to reducing debt, establishing confidence and supporting the central bank's disinflation objective. However, a fixed primary surplus target does not easily allow automatic stabilisers to operate. While the overall fiscal stance has been relatively tight over the past few years, the practise of targeting the *actual* primary balance means that it became less tight during the recent cyclical upswing, at a time when the widening current account deficit would have argued for more contractionary fiscal policy.[18] In order to prevent such pro-cyclical behaviour in future, the government has recently announced an intention to complement the annual primary balance target with an expenditure cap. This effectively implies that the automatic stabilisers will be permitted to work *asymmetrically*, in the sense that the primary surplus would be permitted to exceed 6.5% of GDP in conditions of economic strength, but that the government would still take measures to preserve the target if revenues disappoint. This step is to be commended in the context of the traditional Turkish susceptibility to unfavourable external assessments, which suggests that Turkey is not yet ready for a symmetric operation of automatic stabilisers. The cyclicality of fiscal policy is sometimes used as an indicator of the quality of fiscal policymaking, with some emerging economies (such as Chile) having successfully graduated from the pro-cyclical group to the more advanced countercyclical/neutral group.[19] Less pro-cyclical fiscal behaviour in Turkey would also be very helpful.

One of the largest fiscal risks in recent years has been in the area of *social security*, where projected deficit targets have been persistently breached. Even after the 2006 social security reform, however, large budgetary transfers to the social security system are expected to continue, at least in the short to medium term (as discussed in Chapter 4). Large deficits have also been recorded in the health leg of the social security system and there is a significant risk that health spending may be significantly under-estimated in current long-term projections (see Box 2.5).

Finally, prudent debt management could also help to reduce vulnerabilities by prioritising the pay-down of public sector external debt. The public and external debt scenarios discussed in Box 2.2, assume that the public stock of gross external debt will be reduced only according to the IMF debt repayment schedule.[20] As a result the public share of external debt is expected to fall from close to one half in 2005 to under a third by 2008 (Figure 2.14). An even faster repayment of foreign-currency-denominated debt would be more prudent, in the interests of reducing Turkey's public sector exposure to the exchange rate, even at the cost of higher debt service payments.[21]

Structural policy can also play an important role

The need for an accelerated pace of structural reform was already discussed in Chapter 1, in the context of raising the potential growth rate of the economy. This would also reduce Turkey's macroeconomic vulnerabilities in three ways. First, higher GDP growth would directly serve to reduce the external debt ratio. Second a faster pace of structural

Box 2.5. **The fiscal risks of health reform**

Following the 2006 approval of the social security administrative reform law, Universal Health Insurance (UHI) is due to be introduced in January 2007. Despite its name, however, health insurance will not be fully universal, since differences in coverage will continue to exist. While the scope of health services that is currently provided to workers insured under one of the social security institutions, and their beneficiaries, will continue, the state will pay UHI premiums only for the poor and children (to be paid from the resources allocated for social benefits). Those who do not pay the premiums themselves will qualify on the basis of objective minimum subsistence level criteria. A similar system exists at present, whereby a relatively large number of poor people qualify for a green card – and therefore some basic health services – on the basis of relatively subjective criteria, administered by local government officials. Since the new criteria for qualifying as poor are less subjective than under the current green card system, the number of fraudulent claims for free health coverage is expected to drop.

Other informal sector workers, who do not qualify as being poor, but who do not pay any health premiums, will not be eligible for any health services, "except in emergency situations", and even in those situations they will be expected to repay all expenses, together with interest and premium debt.

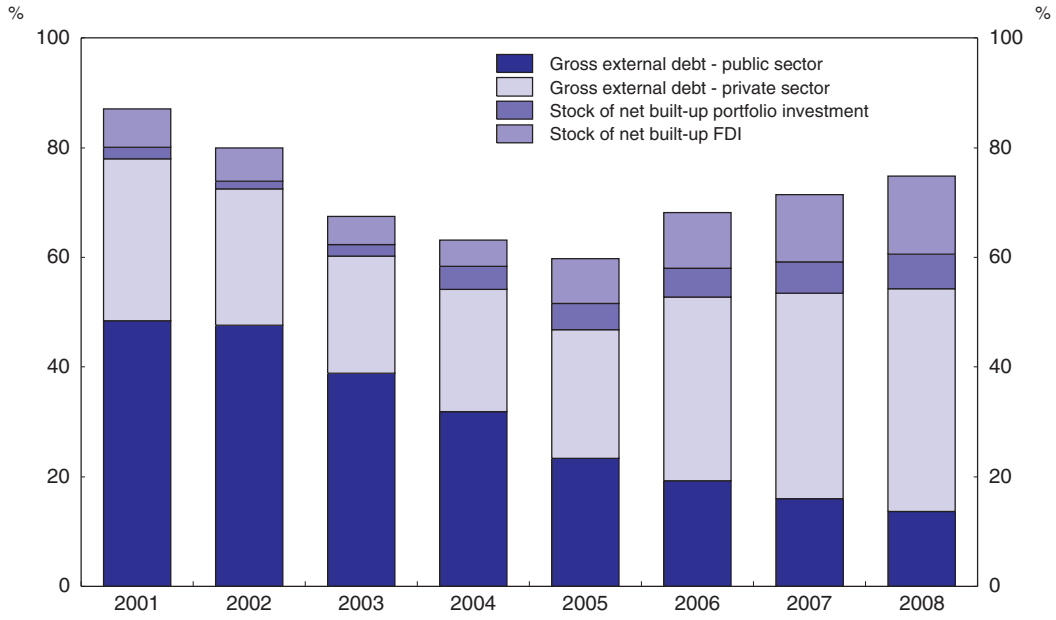
The fiscal impact of the new system is unclear, but risky. On the one hand, the single health financing system that will be introduced along with UHI is expected to result in significant efficiencies relative to the serious waste and misuse of resources under the current mixed-model health system.* In particular, a nationwide database for social benefits will be created using the national identity number. The government claims that making health benefits conditional on payment of premiums could be expected to increase social security registration and payments. On the other hand, many informal sector workers are likely to find that the benefits of premium payment do not outweigh the cost; especially since paying health premiums would also oblige informal sector workers to start paying pension premiums and income tax at the same time (a very large tax wedge – as documented in Chapter 3). Moreover, such workers can expect health coverage anyway for their children and in case of emergencies.

Not only are the incentives for registration still weak, but the cost/coverage of health care for former green card holders can be expected to increase significantly. The government's long-term projections for the health leg of the social security system implicitly assume that efficiency gains will significantly outweigh the potential cost of extending quality health services to a wider portion of the population and the increases in *demand* for health care that might result. In light of the poor average health status of the population and the low level of health spending per capita, the fiscal risks of significantly higher health spending would seem to be considerable.

* At present the health system is funded by insurance premiums for people registered with the SSK or Bağ-Kur social security institutions, and government financed for civil servants, green card holders and needy citizens over the age of 65.

reform would significantly improve the Turkish business environment and attract a higher level of FDI investment. Such higher non-debt-creating capital inflows would lower the need for additional external debt flows to fund the current account deficit. Despite their recent pick-up, non debt-creating capital inflows to Turkey (*i.e.* FDI) still remain quite low in comparison with other emerging market economies (Figure 2.4) and to date have been mainly directed to the services sector, rather than manufacturing, and are unlikely to pick

Figure 2.14. **Composition of foreign assets in Turkey**
Baseline scenario, as per cent of GDP



Source: Central Bank of Turkey and OECD.

up significantly further without these reforms. Finally, a better business environment would improve the sustainability of the current exchange rate level by permitting faster productivity growth and competitiveness gains in the external sector – as described, for example, in the "accelerated structural reform" scenario illustrated in Figure 2.8.

The required structural reforms are discussed in detail in Chapter 3. Essentially, Turkey must considerably reduce the very high burden of regulations that businesses must comply with, in order to permit more flexible business practices, to increase formalisation of firms currently operating with one foot in the informal sector, and to bring technology adoption and economies of scale within their reach. Without such reforms, the deterioration in the trade balance is likely to continue, increasing the chance of a large exchange rate depreciation, and a considerable rise in Turkey's external debt ratio.

Prudential banking supervision should be further improved, to strengthen financial sector resilience

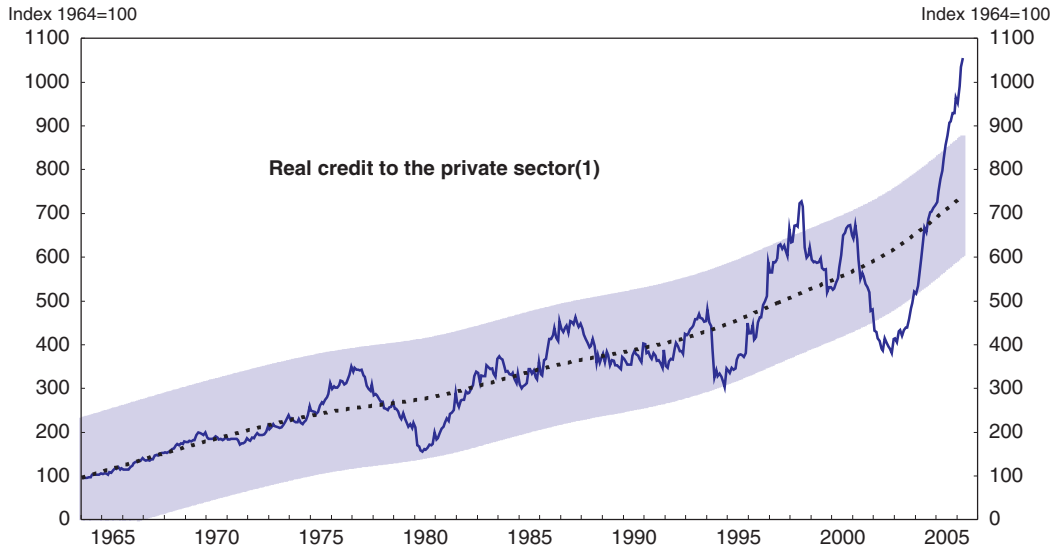
Turkey's banking system is significantly more at risk of negative fall-out from recent events than are banks in other OECD countries. Not only is Turkey in the process of adjusting to a downswing in credit growth, following a very considerable boom, but the extent of currency mismatches in the private sector also suggests that the corporate sector may suffer significant costs in response to exchange rate depreciation. These could have potential repercussions on the banking system. Finally, despite significant progress, the quality of financial supervision can be stepped up further. Each of these concerns is discussed in more detail below.

Excessive credit growth

Following a significant fall in credit availability in the aftermath of the 2000/01 banking crisis, the level of real credit to the private sector rebounded strongly, reaching record highs. In fact, real credit increased by enough relative to its long-term trend that, according to the IMF (2004), it qualified as a "credit boom" (Figure 2.15).[22] This definition of a boom captures only extreme credit expansions (the worst 5%), which can have quite severe potential consequences. In particular, the IMF study found that there was almost a 70% probability that a credit boom would coincide with either a consumption or investment boom; that about 75% of the credit booms were associated with a subsequent banking crisis; and that 85% of the booms were associated with subsequent currency crises.[23] While much of this expansion in private sector credit reflected the release of pent-up demand for credit that was stifled under excessively high real interest rates, and public sector crowding out of private sector borrowing from banks, there were concerns about the ability of the banking system to cope with such a fast pick-up. A significant proportion of the increased private sector credit was directed into the housing market, but some of it also financed a pick up in real consumption growth, which has outstripped real wage growth (Figure 2.16).

More recently, this unsustainable boom has ended. Whereas banks had previously been lending at negative margins based on an assumption that interest rates would continue to fall, banks are now introducing more normal interest rate margins and adjusting to lower credit growth. The impact on corporate balance sheets remains to be seen. However, the combination of a sharp slow-down in demand together with significantly higher interest rates and a weak exchange rate could, at the least, be expected to result in a significant repositioning of balance sheets and a cut-back in borrowing. A worse case scenario would result in a significant increase in debt defaults, with implications for bank health.

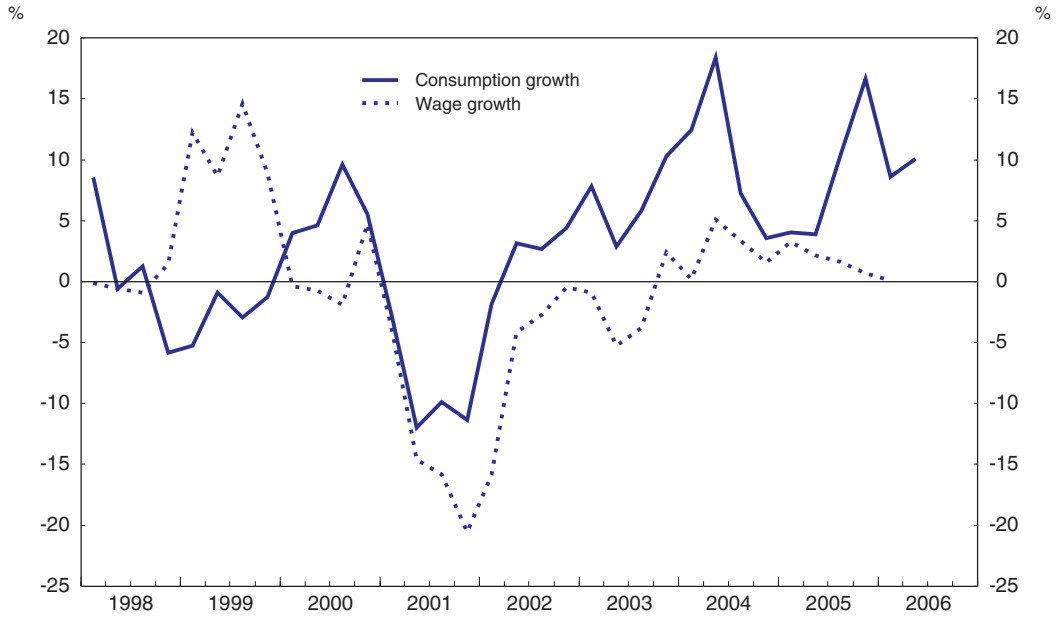
Figure 2.15. **A credit boom in Turkey**



1. Real credit is calculated as the sum of claims on the private sector by deposit money banks (IFS line 22d) and claims on the private sector by other financial entities (IFS line 42d), deflated by the CPI. Note : HP filter trend, plus band equal to +/–1.75 times the standard deviation of historical fluctuation, around trend.

Source: IFS, TURKSTAT and OECD calculations.

Figure 2.16. **Consumption growth outstripping wage growth**
Year-on-year percentage change



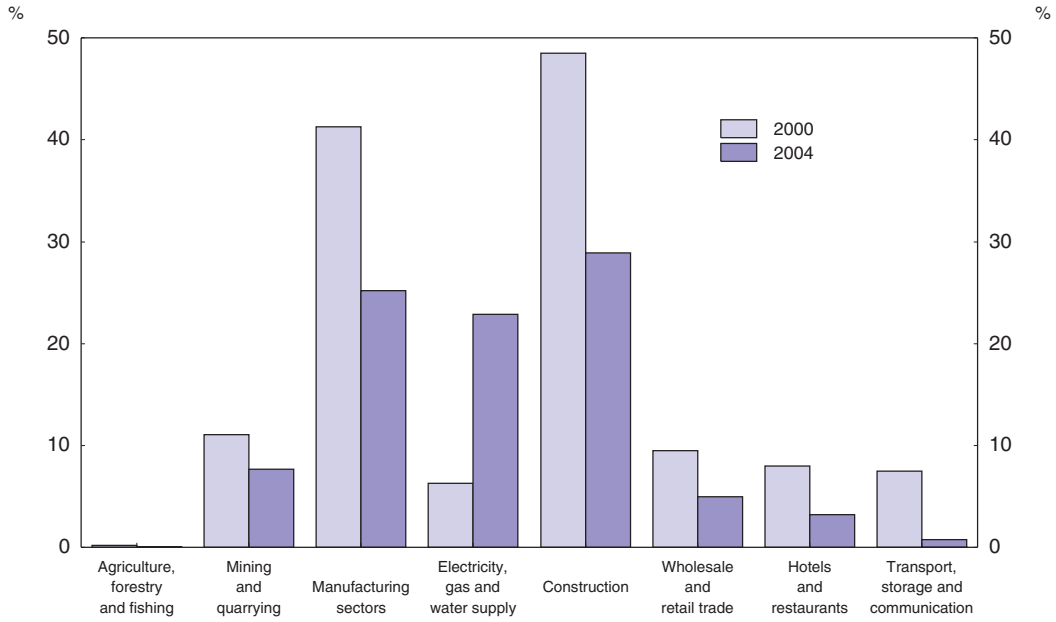
Source: TURKSTAT.

Currency mismatches

The prevalence of *asset and liability dollarisation* in Turkey means that currency mismatches are higher than in most economies, aggravating the possible impacts of exchange rate depreciation. The extent of *asset dollarisation* has fallen in Turkey since the 2001 crisis, but it remains high,[24] as does the extent of *liability dollarisation*. To date, Turkey has hoped to encourage de-dollarisation through ensuring sound and credible monetary and fiscal policies. While these are indeed necessary conditions for de-dollarisation, they may not be sufficient. Recent research has shown that financially dollarised economies are burdened with considerable costs – a more unstable demand for money, a greater propensity to suffer banking crises after a depreciation of the local currency, and slower and more volatile output growth – without significant gains in terms of domestic financial depth.[25] Intuitively, the magnitude of depreciation would tend to be exacerbated by the likelihood that residents would rapidly increase their dollarisation of assets as soon as *expectations* of a significant depreciation developed.

While the extent of asset dollarisation is relatively well documented in Turkey,[26] less information is available on the magnitude and incidence of liability dollarisation. This is unfortunate, since it is the holders of foreign currency liabilities who suffer in the event of exchange rate depreciation. The available evidence suggests, however, that most foreign-currency assets (bank deposits) are held by households whereas most liabilities are held by businesses. For exporting firms, foreign exchange liabilities are unlikely to present a significant risk, since their foreign currency earnings provide a natural hedge. However, evidence from firms' balance sheets suggests that one of the three sectors with the highest levels of foreign exchange liabilities, relative to GDP, is the Electricity, Gas and Water (EGW) sector, which would seem to be limited in its foreign exchange earnings potential (Figure 2.17).[27] The other two sectors with significant foreign exchange liabilities are the manufacturing sector and the

Figure 2.17. **Foreign exchange exposure varies across sectors**
Foreign exchange credit by sector, as per cent of sectoral GDP



Source: Central Bank of Turkey.

Construction sector, both of which can be considered partially hedged through their export receipts, which could be expected to rise in response to exchange rate depreciation.[28]

Improved prudential banking regulation is therefore important

The quality of prudential banking regulation and supervision has dramatically improved since the banking crisis of 2001. However, some required reforms in the areas of financial sector reform and banking supervision are yet to be implemented, particularly in the fields of corporate governance, human resources and organisational incentives, as recommended by the Imar Commission (Box 2.6). By continuing to maintain and build on the financial sector reforms introduced over the past five years, further improvements in the performance and governance of the Banking Regulation and Supervision Agency (BRSA) can further strengthen the banking system, contributing to improved macroeconomic resilience and investor confidence. Although the banking system is certainly much stronger today than during the crisis, room for improvement remains (Figure 2.18).

In addition, the risks associated with currency mismatches suggest that there is a case to be made for the introduction of more active de-dollarisation policies to discourage private-sector borrowers and lenders from issuing and holding assets denominated in foreign currency. For example, consideration could be given to more far-reaching policies, such as those proposed by Levy-Yeyati (2006) as follows:

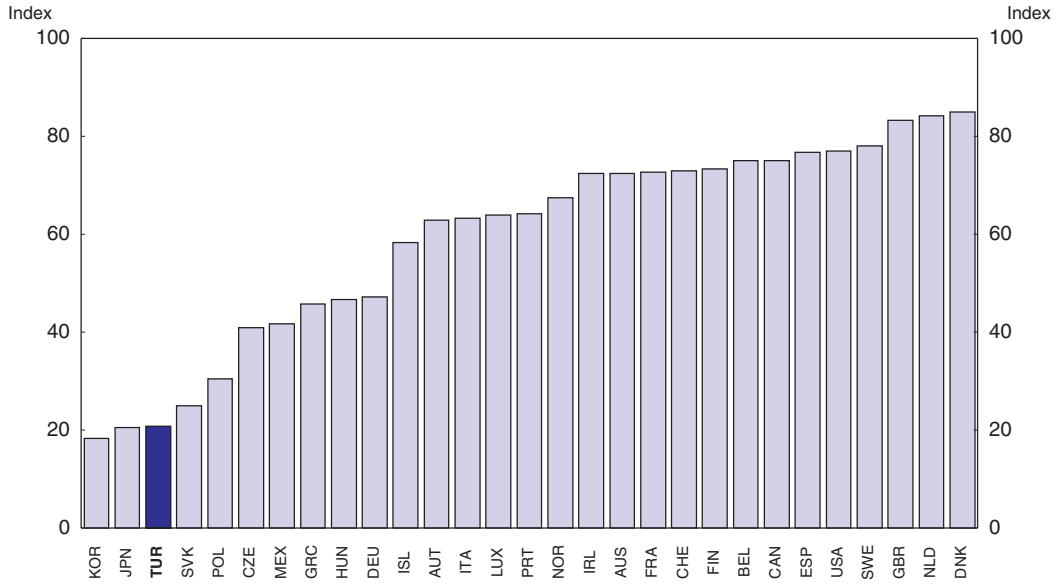
- A further modification of the standard prudential best practices such that higher credit risk is assigned to FX-indexed loans to non-FX earners.[29]
- The introduction of a larger deposit insurance contribution on dollar deposits, or a liquid asset requirement proportional to the dollar share of the bank's liabilities. The goal of this policy should be to ensure that financial safety nets do not discriminate in favour of highly dollarised banks that are more exposed to balance sheet effects of large exchange rate shifts.

Box 2.6. **The agenda for strengthening prudential banking supervision according to the Imar Commission**

Following the banking crisis of 2001, private banks were successfully recapitalised and returned to profitability with sufficient financial resources to contribute to economic growth. Wide-ranging reforms to the financial sector and the banking system were also introduced. However, these reforms did not prevent the 2003 failure of Imar Bank, which stemmed from accounting fraud which had not been identified by the Banking Regulation and Supervision Agency (BRSA). The cost to the Turkish government of compensating Imar Bank depositors has been estimated at around 2.5% of GDP.[1] In response, the government formed an independent commission (consisting of two reputable international bank supervisors) to draw lessons from this incident. The resulting report, published in August 2004, concluded that the likelihood of such bank failures in the future could be reduced by modernisation of the system of corporate governance in banks and external audit processes and by strengthening the BRSA's incentives to undertake its work effectively.[2] Most of the suggested reforms have subsequently been implemented, particularly those that related to the legal framework.[3] However, further improvements are required, particularly in the areas of financial and human resources and the organisation of the supervision and governance structure of the relevant institutions.

1. Josefsson and Marston (IMF, 2005) have estimated that the total cost to the government of restructuring the banking system since the crisis amounted to about USD 47 billion (32% of GDP), of which USD 6 billion was the cost of compensating depositors in Imar Bank and an estimated USD 2 billion for the recapitalisation of Pamukbank.
2. Fort and Hayward (2004).
3. The Imar Commission report prompted legislative changes to the Banking Law which were introduced in November 2005.

Figure 2.18. **Moody's weighted average bank financial strength index**[1]



1. Constructed according to a numerical scale assigned to Moody's weighted average bank ratings by country. Zero indicates the lowest possible average rating and 100 indicates the highest possible average rating.

Source: IMF, *Global Financial Stability Report*, September 2004.

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Such policies designed to improve the prudential regulation of the banking system, should also be complemented by policies to actively promote the availability of hedging and derivative instruments, to better enable corporations to manage their foreign exchange exposures.

Conclusions

Despite, and perhaps partly *because of*, good macroeconomic management after the crisis of 2001, Turkey attracted considerable capital inflows, most of which were seeking high yields, and this put upward pressure on the exchange rate and contributed to a significant widening in the current account deficit. More recently the global risk appetite for Turkish assets weakened and the exchange rate depreciated. This should largely be seen as a good thing, in the sense that it reduced the risk of a larger adjustment later. However, together with the recent upward blip in inflation, this implies a significant loss of central bank credibility, and this will be difficult to restore. Despite the recent volatility, there still remains a significant risk that a *further* deterioration in the global economic environment, or a loss of domestic confidence could prompt even more abrupt changes in the exchange rate, inflation, and the financial sector, leading to severe macroeconomic instability. For given public and external debt ratios, these risks are significantly greater for Turkey than for most other OECD economies.

Box 2.7 summarises a number of steps that the government can take to minimise the risk of the situation worsening further. Significant policy efforts should be devoted both to reducing the risk of shocks, and to strengthening the resilience of the economy to cope with such shocks should they occur.

Box 2.7. **Summary of recommendations to improve resilience to shocks**

Fiscal policy

- Strengthen the transparency and credibility of fiscal institutions by:
  - Announcing an intention to publish consolidated general government accounts according to national accounting standards, together with a timetable for getting there. At a minimum, the goal should be to begin publishing these accounts before the end of the government's current agreement with the IMF.
  - Addressing concerns about the permanence and stability of the new fiscal framework.
  - Improving the co-ordination of fiscal responsibilities within the government.
  - Continuing to press ahead with performance-oriented budgeting, including the active promotion of cultural change within the public sector.
- Continue to improve the functioning of the automatic stabilisers by extending the new expenditure targets to the 3-year budget framework and to other branches of the general government.
- Prioritise the re-payment of foreign-currency-denominated public debt, even at the cost of higher lira-denominated debt-service payments.
- Ensure that the draft mortgage law does not make interest rate payments tax deductible, or otherwise prompt excessive lending.

Monetary policy

- Make public a comprehensive road map for the re-establishment of disinflation. The risks entailed in achieving this medium-term objective, and the Bank's likely response to such risks should be clearly articulated, and all communications should be made promptly available in English as well as Turkish.
- The central bank should also begin calculating and publishing alternative measures of core inflation, such as a median measure and a trimmed mean.

Other policies that impact on inflation

- Use considerably greater restraint in adjusting the minimum wage and introduce regional differentiation in this wage (see Chapter 3).
- Use greater restraint in public sector wage adjustments, and encourage the containment of wage and price increases in the private sector. In particular, ensure that public sector wages do not accommodate the recent inflationary shock.
- Promote a considerable relaxation in employment protection legislation to improve the efficient functioning of the labour market.
- Promote far-reaching structural reform to improve productivity growth and business competitiveness, and to improve wage and price flexibility (both of which will help to reduce services inflation).

Bank regulation and prudential supervision

- Ensure that the corporate governance of the BRSA is further improved, as recommended by the Imar banking commission, in order to ensure strong incentives to monitor the financial sector well. Consider strengthening the prudential supervision of the banks in a way that further reduces the risks to the financial system.

Notes

1. For example see Goldstein (2005), Reinhart *et al.* (2003), and IMF (2003).
2. In addition, Reinhart *et al.* (2003) report that Turkey has defaulted on external debt six times over the past 175 years – most recently in 1978. Of course, many advanced economies also have a history of defaulting on external debt (*e.g.* Spain defaulted 13 times between 1500 and 1900, France defaulted 8 times between 1550 and 1800, and Germany defaulted 5 times in the 1800s), indicating that the markets do eventually forget – even if it takes a while.
3. In 2005 the impact of the higher net import energy bill is estimated to have increased the level of the current account deficit by around 1.5% of GDP relative to its 2004 level.
4. The terms *dollar* and *dollarisation* are used as a proxy for "foreign-currency-denominated" assets and liabilities (most, but not all of which are denominated in US dollars). The extent of de-dollarisation by Turkish residents is reflected in strong growth in TRY bank deposits. For example, the share of bank deposits that are denominated in YTL increased from 45% in 2001 to 58% in 2004 and to 66% by the end of 2005. However, the de-dollarisation trend was probably driven not only by macroeconomic stabilisation but also by high TL deposit rates and expectations of further exchange rate appreciation.
5. While some countries (such as Chile) have used administrative measures to limit the volume of portfolio capital inflows (such as a minimum reserve requirement on financial investment by non-residents and/or a tax on investments under one year) it is less clear that such measures could work in Turkey, given the increasing sophistication of financial markets.
6. While there are historical examples of current account reversals that were achieved smoothly and without precipitating a crisis, most of these occurred under the gold standard or during the Bretton-Woods years. In more recent years, disruptive current account reversals have become more common (Eichengreen and Adalet, 2005).
7. Eichengreen and Choudhry (2005).
8. Kara, H. and F. Öğünç (2005).
9. To the extent that the exchange rate was previously over-valued, some of the depreciation may have reflected a correction. However, to the extent that the shock was entirely due to a shift in portfolio preferences, higher interest rates may help to reverse the depreciation.
10. Svensson (2005) defines strict inflation targeting as monetary policy that is focused only on price stability, rather than also on stabilising the real economy, as represented by the output gap or the unemployment gap. For central banks that are still undergoing a disinflation process, such as in Turkey, and whose credibility may still be questioned, the scope for flexible inflation targeting is often reduced. Nevertheless, the existence of this trade-off between inflation variability and output variability should not necessarily be attributed to the regime of inflation targeting. The IMF (2005) found no evidence that inflation targeters, including those in emerging markets, meet their inflation objectives at the expense of real output stabilisation.
11. Celasun and McGettigan (IMF, 2005).
12. USD 17.85 b were added to central bank reserves over this period.
13. At the end of 2005, 34.9% of total bank deposits (259.6 billion YTL) were denominated in foreign currency. An increase to 45% (the peak of dollarisation in 2001 was 55%) would imply an additional conversion of 10% of total bank deposits, or 15 billion YTL, to dollars (or other foreign currencies), equal to approximately 12 billion US dollars, or 30% of 2005 net capital inflows.
14. Goldstein (2005).
15. Some, such as Eichengreen and Choudhry (2005), even argue that fiscal consolidation may be the *only* truly effective policy.
16. IMF research (Ramirez-Rigo, 2005) shows that Turkey's fiscal adjustment has been surprisingly long-lasting, relative to other countries' achievements, given its emphasis on revenue measures rather than expenditure cuts. He emphasises the importance of the stable political backdrop in explaining this outcome.
17. See Box 3.3 in OECD (2004) for further details.
18. The composition of fiscal contraction is also important given evidence that the greater the contraction in fiscal expenditure at the time of capital inflows, the weaker the extent of real exchange rate appreciation. Calvo *et al.* (1996).

19. Kaminsky, Reinhart and Vegh (2004).

20. The Treasury's debt management strategy for the 2006-08 period aims for performance-based borrowing at minimum cost and at a prudent level of risk based on the following principles: to borrow mainly in YTL; to use fixed rate TL instruments as the major source of domestic cash borrowing; to increase the average maturity of domestic cash borrowing taking market conditions into consideration; to keep a certain level of cash reserves so as to reduce the liquidity risk associated with cash and debt management; not to exceed the roll–over ratio associated with foreign exchange denominated domestic debt over 80%. Also, as a part of the domestic borrowing strategy the Treasury has announced that it will not issue foreign exchange indexed bonds in domestic market in 2006. Thus the share of both floating rate and foreign currency denominated debt in total public debt is expected to decrease over 2006-08.

21. *E.g.* Williamson (2005) argues that emerging markets should limit, and perhaps ultimately eliminate, foreign currency borrowing by their governments. He proposes that emerging market governments should instead issue inflation-indexed, plain-vanilla bonds on their local markets and growth-linked bonds on the international market (such that the country would pay a higher yield when growth was strong and less when times were difficult).

22. Following the IMF (2004), a credit expansion in a given country is identified as a boom if it exceeds the standard deviation of that country's credit fluctuations around trend by a factor of 1.75. Using annual data the IMF calculates the HP filter using a lambda of 100. In Figure 2.15, which uses monthly data, a lambda of 2073600 was used, following the HP-filter frequency adjustment technique of Ravn and Uhlig (2001). This technique converts the lambda of 100 for monthly data to a yearly lambda using the following formula: 100*124 = 100*20736.

23. These conclusions followed from analysis of rapid credit growth in 28 emerging market economies during the period from 1970 to 2002.

24. *E.g.* see Yilmaz (2005) who uses Reinhart *et al.* (2003) framework to show that Turkey's degree of dollarisation is high by international standards.

25. Levy-Yeyati (2006).

26. The central bank's asset dollarisation index shows the share of the non-banking sector's total portfolio which is denominated in foreign currency. According to this index, the degree of dollarisation fell from 40% at the end of 2001 to 26% as of October 2005. See Box 4.1 "De-dollarization Process and Turkey" in the CBRT monetary Policy Report 2005-III (*www.tcmb.gov.tr/research/monpolreports.htm*).

27. Since the EGW sector is largely an importer of energy, these foreign exchange liabilities may largely represent supplier credits. In this case the vulnerability of this sector to exchange rate depreciation may largely depend on whether or not the credits are essentially forward agreements (in which case the vulnerability would be limited) or subject to exchange rate changes.

28. Approximately 15% of GDP in the construction sector in 2004 came from construction sector "exports of services". While the proportion of manufacturing sector earnings that are in foreign currency may be larger (around 29% in 2004), the extent to which manufacturers' net foreign exchange earnings would increase in the event of exchange rate depreciation would also depend on the import-intensity of their inputs.

29. At present standard prudential practices only address currency imbalances at the bank level and through limits on open currency positions, rather than by acknowledging the positive correlation between exchange rate risk and credit risk in financially dollarised economies.

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ANNEX 2.A1

Debt sustainability scenarios: methodology and assumptions

The stochastic debt sustainability scenarios discussed in the text stem from a simple accounting framework and the recognition that the relevant economic variables such as growth, real interest rates, and the exchange rate are subject to uncertainty. In order to ensure some margin for comfort in the event of unforeseen circumstances, the authorities should set policy so as to ensure that debt levels remain sustainable even in the face of adverse shocks.

This annex describes the identities that were used for as a base for developing the stress-testing framework discussed in Section 2.4, and the assumptions behind the baseline scenarios.

A.1. Public debt dynamics

In nominal terms, the stock of public debt at time t can be explained by the following identity:

$$B_t = (1 + r_t)B_{t-1} + D_t - S_t - Pr_t \quad (1)$$

where:
B: public debt (bonds)
r: weighted average nominal interest rate on government bonds
D: primary fiscal deficit
S: Seigniorage (monetary financing of the fiscal deficit)
Pr: privatisation receipts

All stock variables are expressed as end-of-period values, while flow variables and interest rates are period averages.

By expressing the key variables as a percentage of GNP (small letters), by differentiating between public debt denominated in local versus foreign currency, and by introducing nominal exchange rate appreciation/depreciation so as to account for the revaluation of last period's foreign-currency denominated debt the following equation is obtained:

$$b_t = [(1+ r^{fl}_t)\, \gamma\, b_{t-1} + (1+ r^{fl*}_t)\, (1 - e_t)\, \gamma^*\, b^*_{t-1} + (1 + r^F_t)\, (1 - \gamma)\, b_{t-1} + (1 + r^{F*}_t)(1 - e_t)\, (1 - \gamma^*)\, b^*_{t-1}]/(1 + g_t) + d_t - s_t - pr_t \quad (2)$$

where:
r^{fl}, r^{fl*}: domestic and foreign nominal interest rates on floating rate debt.
r^F, r^{F*}: domestic and foreign nominal interest rates on fixed rate debt.

g: nominal GNP growth rate

γ, γ^*: shares of floating debt in total lira-denominated and foreign-currency-denominated debt respectively

e_t: per cent nominal exchange rate appreciation over period t. The nominal exchange rate is expressed as units of foreign currency per unit of domestic currency (*i.e.* an increase in E corresponds to a nominal appreciation).

Equation 2 is the one that is used to produce the public debt scenarios in Figure 2.6 of this chapter. The key economic assumptions behind the baseline scenario is summarised in the following table.

Table 2.A1.1. **Baseline assumptions for public debt scenarios**

	2005 (estimates)	2006	2007	2008
Real GDP growth (%)	7.4	5.5	5.5	5.5
Real effective exchange rate appreciation (%)	20.5	–10.0	0.0	0.0
Primary fiscal balance (% of GNP)	6.0	6.5	6.5	6.5
Privatisation receipts (% GNP)	0.4	1.7	1.5	1.5
Nominal floating interest rate on lira-denominated public debt (%)	17.0	17.0	16.0	14.5
Nominal fixed interest rate on lira-denominated public debt (%)	16.3	16.3	15.0	13.5
Nominal floating interest rate on for-currency-denom public debt (%)	8.0	8.0	7.7	7.4
Nominal fixed interest rate on foreign-currency-denom public debt (%)	4.5	4.5	4.2	3.9

For the other two public debt scenarios the assumptions for 2007 and 2008 are changed as follows:

***External shock scenario*:** All interest rates 400 bps higher (this is around the magnitude of the increase in Turkish spreads in 2001, compared with 2000); GNP growth falls to 2% per annum; the primary fiscal surplus falls to 4% of GNP; the nominal exchange rate depreciates by 10% in each of 2007 and 2008.

***Fiscal policy reversal scenario*:** In this scenario it is assumed that the primary fiscal surplus falls to 2% of GNP and this is entirely due to a weakening of fiscal discipline, rather than due to cyclical factors. Floating interest rates are assumed to be 800 bps higher (in previous crises domestic borrowing rates have more than doubled. This assumption implies a smaller increase than that); Fixed rates are assumed to be 400 bps higher (about half the impact of floating rates, consistent with the longer maturity structure); GNP contracts by 2% per annum;

A.2. External debt dynamics*

In nominal terms, an equation defining the stock of external debt (*i.e.* debt owed to foreigners) at time t can be derived from the following balance of payments identity:

$$TD_t + (r1^*_t K^{FDI}_t + r2^*_t K^{Port}_t + r3^*_t FD^G_t + r3'^*_t FD^P_t) - Tr_t = FDI_t + Port^{Debt}_t + Port^{Equ}_t + (L^G_t + L^P_t) - \Delta Res_t \quad (3)$$

* The focus of this analysis is on gross, rather than net external debt, in recognition of the fact that while some private sector participants have external *assets*, these are not normally the same agents who hold the external *liabilities*, so that dollar- and euro-assets would normally provide little hedge to debtors in the face of a significant exchange rate depreciation.

where:
TD: trade deficit
$K^{FDI/Port}$: Net stock built-up from FDI/Portfolio investment flows
$FD^{G/P}$: Net foreign-currency-denominated debt of the government/private sector
r1* and r2*: nominal interest rates (dividend payments) paid on the stocks of FDI and of portfolio investment
r3* and r3'*: nominal interest rates paid on foreign debt by the government and the private sector
Tr: transfers
$Port^{Debt/Equ}$: portfolio flows, debt and equity
$L^{G/P}$: new loans (borrowing) subscribed by the government and the private sector
ΔRes: change in the shock of foreign reserves (an increase in the stock of reserves would reduce the external funds available for current account financing needs).

As in the case of public debt, all stock variables are expressed as end-of-period values, while flow variables and interest rates are period averages.

This identify can also be expressed in terms of new debt flows that contribute to external indebtedness ($L^G + L^P + Port^{Debt}$):

$$L^G_t + L^P_t + Port^{Debt}_t = (TD_t + r^*_t Liabilities_t - Tr_t) - (FDI_t + Port^{Equ}_t) + \Delta Res_t \quad (4)$$

In other words, all capital outflows resulting from the trade deficit and net investment income payments, that are not offset by capital inflows stemming from net transfers, capacity-building investments and sales of domestic assets (FDI and equity portfolio inflows), has to be financed via increased external indebtedness of the government sector (L^G) or the private sector [through external borrowing by commercial banks (L^P) and/or portfolio debt flows ($Port^{Debt}$)], and/or by the use of reserves by the central bank.

In practice, however, since the central bank is not permitted to use foreign exchange reserves to reduce the level of MOF or private sector external indebtedness, this term is dropped from the equation. With all variables expressed in lira terms, the stock of gross foreign debt (FD) expressed as a percentage of GNP (fd) at time t is given by the following equation:

$$fd_t = [(1 - e_t)\, fd_{t-1} + r1^*_t\, k^{FDI}_{t-1} + r2^*_t\, k^{Port}_{t-1} + r3^*_t\, fd^G_{t-1} + r3'^*_t\, fd^P_{t-1}]/ (1 + g_t) + td_t - tr_t - (fdi_t + port^{Equ}_t) \quad (5)$$

where :
fd: gross external debt expressed in domestic currency as a percentage of GNP
$k^{FDI/Port}$: net stock built-up from FDI / portfolio investment flows in terms of GNP
$fd^{G/P}$: net external debt of the government / private sector in terms of GNP
r1*, r2*: nominal interest rates (dividend payment) paid on the stocks of FDI and of portfolio investment
r3*, r3'*: nominal interest rates paid on foreign debt by the government and the private sector
td: trade deficit, as percentage of GNP
tr: transfers, as percentage of GNP
fdi: net FDI flows, as percentage of GNP
$port^{Equ}$: net equity portfolio flows, as percentage of GNP

Equation 5 is then used to produce the external indebtedness scenarios illustrated in Figure 2.8 of this chapter. The key economic assumptions behind the baseline scenario are summarised in Table 2.A1.2.

Table 2.A1.2. **Baseline assumptions for external debt scenarios**

	2005 (estimates)	2006	2007	2008
Real GDP growth (%)	7.4	5.5	5.5	5.5
Real effective exchange rate appreciation (%)	20.5	–10.0	0.0	0.0
Net FDI flows (% of GNP)	3.5	2.0	2.0	2.0
Net portfolio equity capital flows (% of GNP)	0.5	0.5	0.5	0.5
Trade deficit (% of GNP)	5.2	5.0	4.0	4.0
Weighted dividend payments on net FDI (%)	3.3	3.0	3.0	3.0
Weighted dividend payments on net portfolio equity capital[1] (%)	5.0	5.0	5.0	5.0
Weighted nominal interest rate on foreign-denom public debt (%)	6.3	6.3	6.0	5.7
Weighted nominal interest rate on foreign-denom private debt (%)	9.3	9.3	9.0	8.7

1. Estimated cash returns only, not including capital gains.

In addition it is assumed that the public sector continues to pay down its stock of external debt only according to the IMF net repayment schedule (USD 3.4b in 2006; USD 2.9b in 2007 and USD 1.8b in 2008). The stock of non-IMF public external debt is thus assumed to remain unchanged.

For the other two scenarios the assumptions for 2007 and 2008 are modified as follows:

External shock scenario: All interest rates 400 bps higher; GNP growth falls to 2% per annum; FDI flows fall to zero; the nominal exchange rate depreciates by 10% in 2007 and by a further 10% in 2008; in response to the exchange rate depreciation, the trade deficit improves to 3% of GNP in 2007 and to 2% of GNP in 2008. This shock is the same as the external shock in the public debt sustainability exercise, with the addition of the assumptions that FDI flows drop to zero and the trade deficit improves.

Loss of competitiveness scenario: The trade deficit increases to 6% of GNP; nominal interest rates increase by 200 basis points; the nominal exchange rate depreciates by 5% in each of 2007 and 2008.

Structural reform scenario: FDI flows pick up to 4.0% of GNP per annum; GDP growth increases to 6.5% p.a; the real exchange rate appreciates by 3% per annum, in line with improved productivity growth and business sector competitiveness.

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Chapter 3

Enhancing competitiveness and growth and reducing incentives to operate in the informal economy

Turkey's business sector has achieved high growth over the past few years and – on average – has coped well with increased competition. However, some labour-intensive sectors lost competitiveness prior to the currency depreciation in mid-2006 and faced employment losses, raising political pressure for interventionist policies. This chapter argues that the government should resist such pressure and instead follow a broad-based strategy to improve framework conditions for firms, irrespective of their size, sector and legal status. Overcoming the duality between the formal and informal sectors should be the central point of this strategy. In particular, the cost of labour should be reduced and regulatory hurdles in labour and product markets should be minimised, to help formal firms to remain competitive and increase employment. This would also make it easier for the many small and medium-sized firms to move into the formal sector, thereby raising productivity through economies of scale. This would increase the growth potential of the whole economy, broaden the tax base and level the playing field for doing business in Turkey, not only for the wide variety of domestic firms but also for foreign investors.

A dynamic business sector facing new challenges

The early liberalisation reforms of the 1980s, which put an end to protectionism and state dirigisme, considerably strengthened Turkish enterprises.[1] As a result, over the past two decades the private business sector has, on average, shown considerable strength in spite of political instability, severe macroeconomic shocks, regulatory and institutional uncertainties and resulting increases in risk premia and capital costs. The macroeconomic stabilisation and structural reforms which followed the 2001 crisis have also helped. The credibility of the new macroeconomic institutions and of the market-enhancing structural reforms (backed by the strong international anchors of reform programmes agreed with the IMF and the convergence agenda with the EU *acquis*[2]) created a more supportive and predictable environment for business sector development. New enterprise creation has picked up, private investment has soared and business sector productivity has accelerated above trend (Figure 3.1, Panel A).

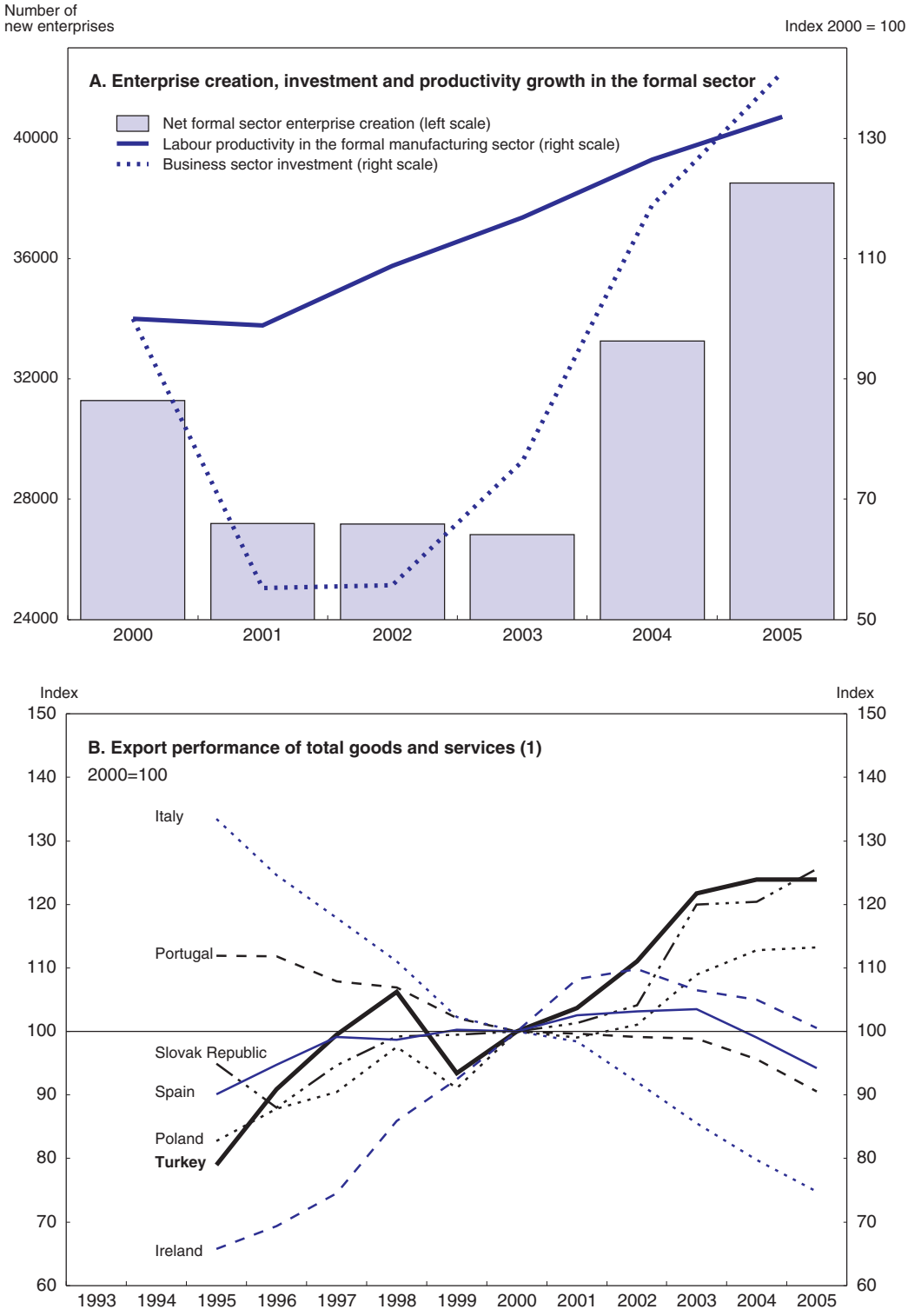
These reforms, together with the real depreciation of the exchange rate in the 2001 crisis led to a rapid increase in exports, which outstripped export market growth by a cumulative 30% between 2000 and 2005. Turkey thus achieved – together with Ireland and the Slovak Republic – one of the largest gains in export market shares among all OECD countries during this period (Figure 3.1, Panel B).

However, in the period of stabilisation that followed the 2001 crisis Turkish businesses have also faced important new challenges:

- *Strong real currency appreciation*. The real effective exchange rate against the average of trading partners appreciated by 2.5% in 2004, and by a further 14.5% over 2005.[3] Part of the increase in the real effective exchange rate (as measured by relative unit labour costs) was due to sharp increases in the minimum wage in 2004. This strong pace of real appreciation weakened the competitiveness of many business activities. In the first half of 2006 this trend was interrupted, with the nominal exchange rate depreciating again and the real exchange rate depreciating by around 20% between end-February and end-June 2006 – more than offsetting the earlier appreciation.
- *Rising competition from low-cost countries*. Increased competition from China, India and other Asian countries is threatening the labour intensive segments of Turkish industry. In particular, the textile, clothing and leather industries, which represent one third of total manufacturing exports and employment, are heavily affected.

The rising pressures on competitiveness are reflected in the export performance of the economy. Market gains slowed after 2003, and in 2005 and early 2006 Turkey has, on average, only just been able to preserve earlier gains, with market share losses in some sectors and gains in others. Import penetration has also accelerated. Domestic producers of many consumer goods and industrial inputs have faced growing import competition and the trade deficit has increased. The share of imported consumer goods in total private consumption is estimated to have grown from 5.5% in 2001 to 8.5% in 2005, while the use of intermediate inputs in total industrial production also increased significantly.

Figure 3.1. **Recent business sector performance**



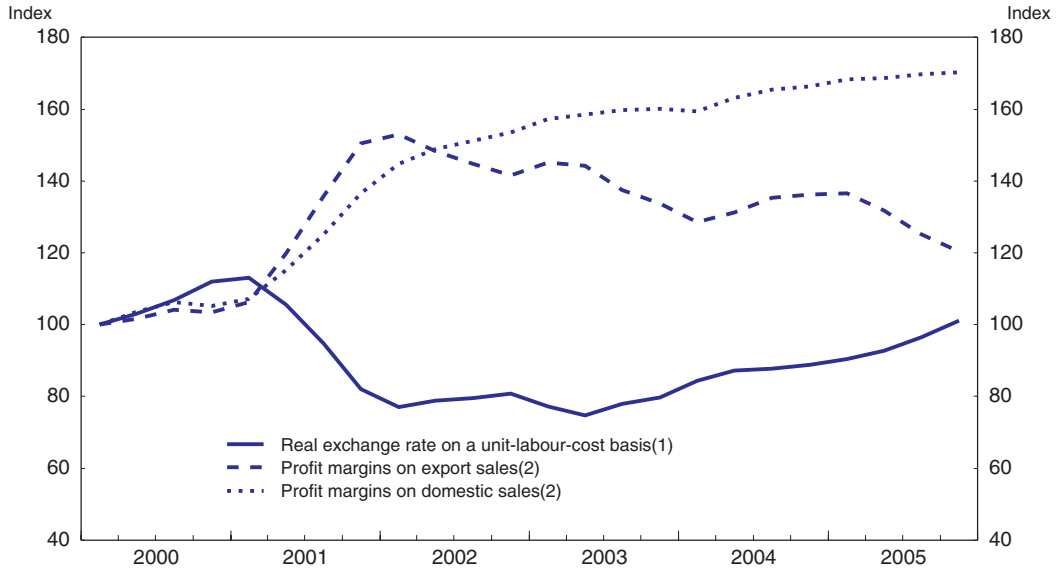
1. Growth of exports divided by growth of export markets.

Source: State Statistical Institute; OECD Analytical Database and *Economic Outlook 79*.

Evaluated with the standard OECD indicator of competitiveness,[4] the Turkish business sector came under pressure through 2004-05, although not enough to fully offset the strong competitive gains generated by the sharp currency depreciation and real wage falls of 2000-01 (Figure 3.2). The indicator then improved again in the first half of 2006, as a result of the exchange-rate depreciation and moderate real wage growth. Compared to other OECD countries, Turkey has in all instances faced the sharpest fluctuations in its competitiveness over the past decade, and particularly in the past five years.

Figure 3.2. **The real exchange rate and profit margins in domestic and export markets**

2000Q1 = 100



1. An increase shows appreciation.
2. The estimation methodology of profit margins on domestic and export sales is summarised in Annex 3.A1.

Performance differs across sectors and firms

a) Sectors

The intensity of international competition varies across business sectors and has resulted in uneven pressures on firms' prices and profits. In particular, the exposure of manufacturers to competition from low-wage Asian countries depends on their sector of activity. These differences have caused the competitive position of different business activities to diverge.

To map these differences in competitive pressure, the development of profit margins and their principal determinants has been analysed for exports and domestic sales and for total sales of a range of manufacturing sectors (the methodology and findings is described in Annex 3.A1).[5] The main findings are:

- Over the 2000-05 period Turkish firms experienced a significant squeeze in their profit margins on export sales while profits continued to increase on domestic sales although at a decelerating rate (Figure 3.2), subsequently picking up after the currency depreciation in early-mid 2006.

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- The profitability of different sectors diverged strongly in this period of exchange rate fluctuations. The inter-sectoral divergence has been wider in export markets than in domestic markets. Turkish firms in labour-intensive industries are more exposed to competition from low-wage countries in their export markets than in their domestic market. However, they may well face more intense competition at home in the future.
- The profit squeeze was strongest in industries which suffered from a fall in output prices as these firms were not able to raise productivity or cut wages sufficiently to protect their profit margins. By contrast, the more successful industries faced less pressure on prices (due to product specialisation, high demand, and/or less competition from low wage countries) and also achieved more wage restraint, as their more skilled labour force was less affected by the sharp increase in minimum wages, so that their profit margins remained larger.[6]

As a result of these differences in the determinants of their profitability in the past five years, sectors can be placed into three groups according to the extent of their profit squeeze and their price, productivity and cost performance: *i) The highly-competitive sectors:* which experienced no profit squeeze as they maintained or increased output prices, and achieved relatively high labour productivity growth and moderate wage growth;[7] *ii) The declining sectors*: which, in contrast, suffered from a pronounced profit squeeze as they under-performed in terms of price, productivity, and wage cost developments;[8] and *iii) The intermediary sectors*: which had a more mixed performance, bycombining good and bad performances along the three dimensions of competitiveness or achieving only average performance in all of them.[9] Figure 3.3 illustrates this clustering by comparing the post-2000 profitability, export, output and employment performance of firms in six representative sectors.[10] The car and electronics industries represent the highly competitive sector, textiles and clothing the declining sector, and food and plastics the intermediary sector.

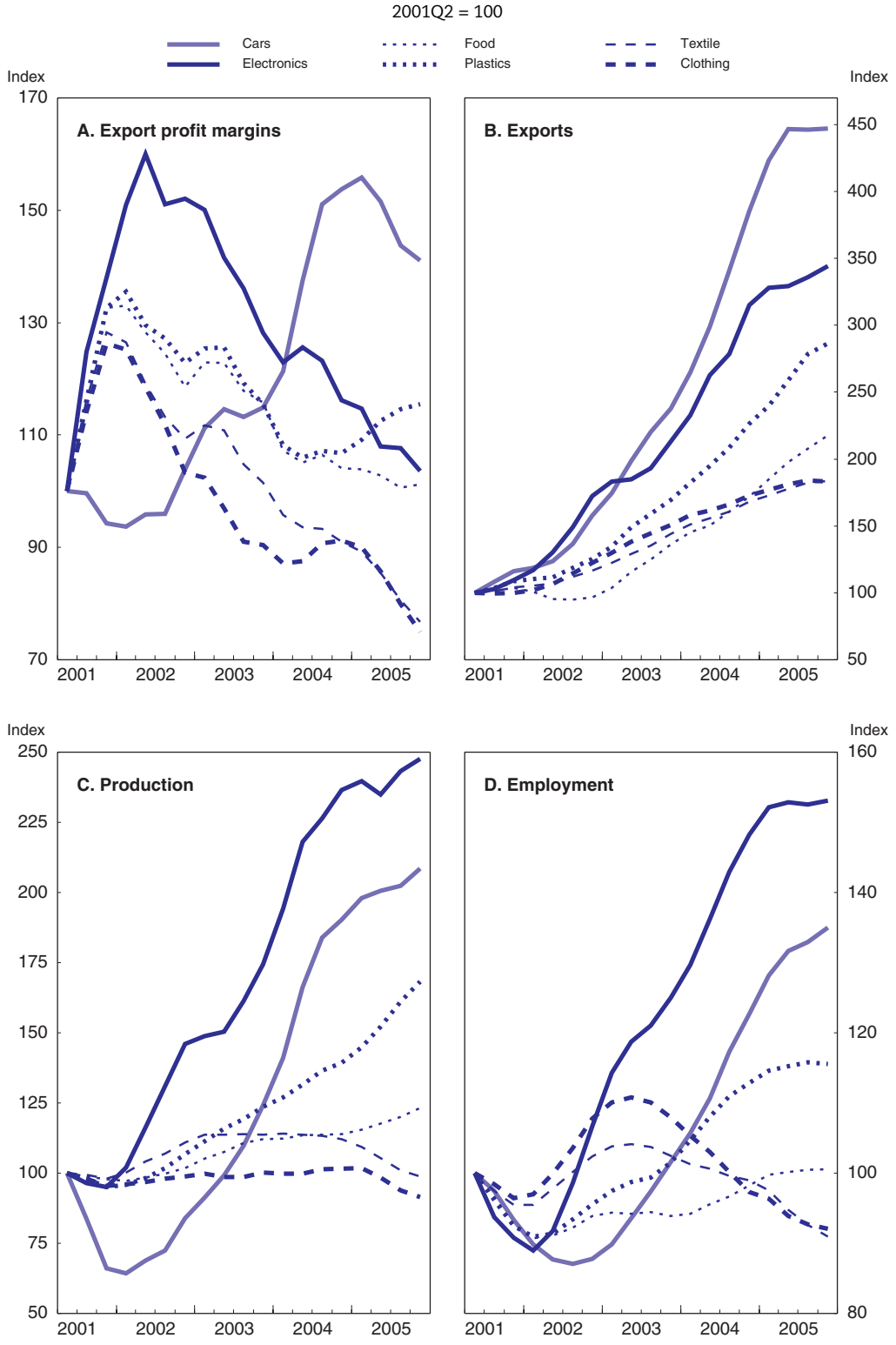
Problems of the declining sectors…

The declining sectors have suffered from a fall in output prices, low productivity growth and rising wage costs. Price declines appear to be largely due to Asian competition and are particularly steep in low quality products. At the same time, the large increases in the minimum wage in the 2000s had a big impact on the wage costs of these sectors as they employ many minimum wage earners. Therefore, and paradoxically, real wages have on average increased more in the declining sectors than in the highly competitive sectors (Figure 3.4).

… have been accompanied by employment losses in the formal economy…

The declining activities have a very large share in total employment (36% of total manufacturing employment in 2003) while the highly competitive sectors are smaller (13% of manufacturing employment) and intermediary sectors represent the bulk of employment at 50% of the total. While many new jobs have been created in the highly competitive and intermediary activities over the past five years, their growth has not been sufficient to absorb those losing their jobs in the declining sectors plus new labour force entrants. In particular, there has been insufficient job growth in the formal sector – reflecting firms' efforts to preserve employment by shifting it to or creating it in the informal sector. Indeed, registered employment figures indicate net employment losses in manufacturing between 2000 and 2005, whereas the entire economy (including unregistered activities) recorded net

Figure 3.3. **Recent performance in some representative sectors**



Note: Highly competitive sectors are shown with thick lines, declining sectors with dashed lines and intermediary sectors with dotted lines.

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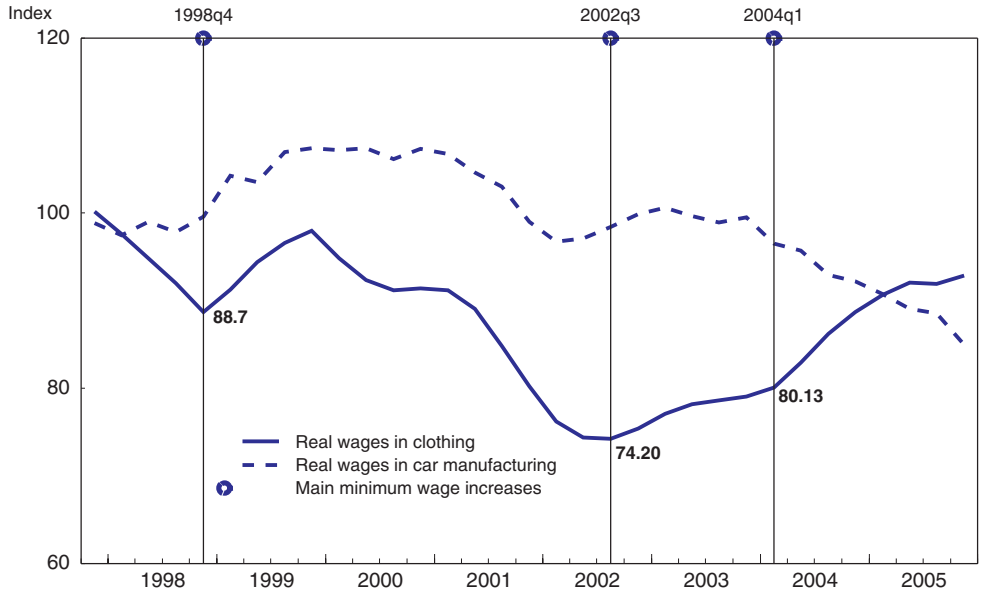
Figure 3.4. **Wage growth in a declining and in a highly competitive sector**
1997Q4 = 100[1]



1. Four quarter moving averages.
Source: OECD on basis of TURKSTAT.

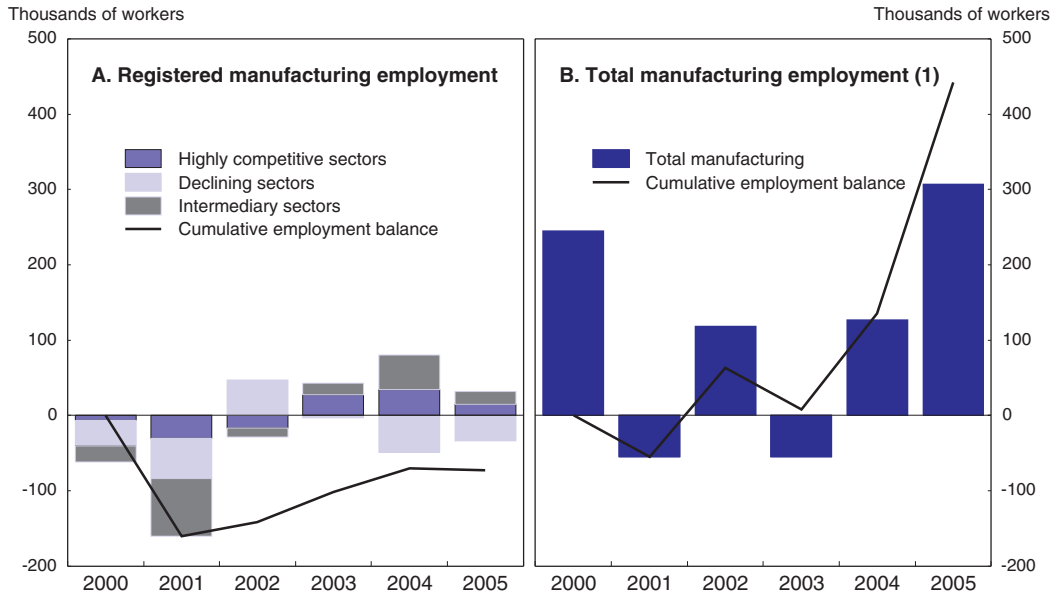
employment gains (Figure 3.5). Even using the total economy figures, net employment gains have been insufficient to absorb the workers who have lost their jobs in the declining sectors as well as the many workers leaving agriculture and the new entrants in the labour force which – despite a fall in labour force participation – continues to grow as Turkey has a relatively young population.

… and a deterioration in the trade balance

The trade specialisation of Turkey is evolving as a result of these developments and the trade balance is directly affected. Imports of low-technology consumer goods and industrial inputs more competitively produced by low-wage countries are on a strong rise. These shifts, together with a surge of imports due to strong domestic demand have contributed to the deterioration of the trade balance since 2003[11] (Figure 3.6).

At the same time, competition from low-wage countries is spreading to medium-technology areas. While Turkey has changed its trade specialisation to more sophisticated products it has remained exposed to competition from China which has developed its trade in a rather parallel way (Figure 3.7). A comparison with other low-wage countries would probably reveal a similar picture. At the same time the geographical proximity of Turkey to European Union markets permit Turkish manufacturers to interact more closely with customers and reduce their delivery times. Manufacturers are increasingly taking advantage of this by specialising in demand-responsive, customised, higher value-added products.

Figure 3.5. **Employment shifts from declining to growing sectors**
Year-on-year and cumulated change in employment



1. Total manufacturing employment (including part of unregistered employment) is based on Household Labour Force Surveys which do not provide their distribution according to manufacturing sub-sectors.

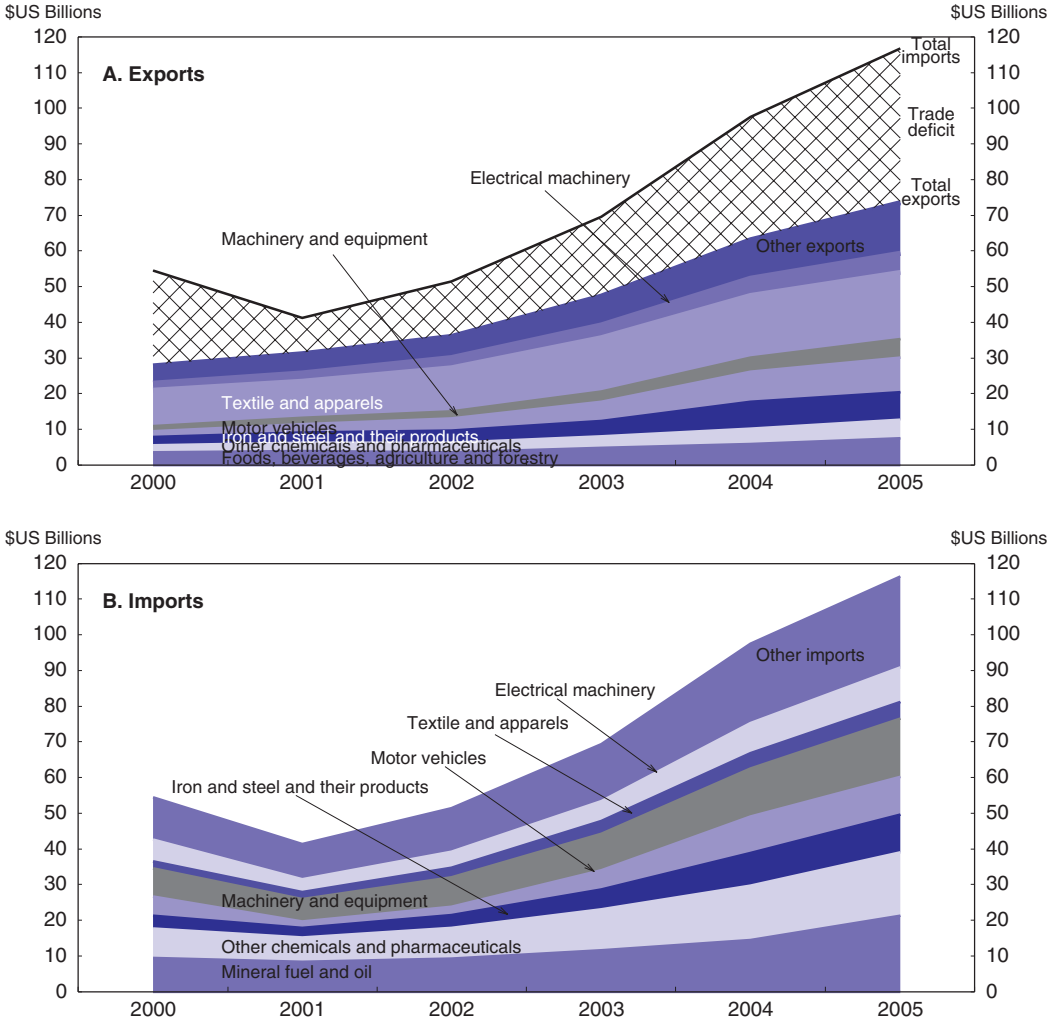
Source: Manufacturing Output and Employment and Quarterly Labour Force Surveys, TURKSTAT.

b) Firms

Not only different sectors but also different types of firms cope unevenly with competitive pressures. The Turkish business sector is indeed particularly heterogeneous and firms' resources (assets) and framework conditions appear to cluster them into three groups:

- *Small-sized firms have traditionally* compensated a thin resource base – and low productivity – with significant latitude to operate outside the regulatory and tax framework. However these firms are now increasingly squeezed by domestic and international competition and their "equilibrium" appears less sustainable (Box 3.1).
- *Medium-sized firms* have grown particularly well in the recent period, helped by their vibrant entrepreneurship, their growing physical and human capital base and their escaping – at least partly – the burdens of the formal framework. However, they cannot continue to grow at full potential in such semi-formality (Box 3.2).
- *Large-size firms in* the formal sector have a robust physical and human capital base, are well connected to international markets and partners, and increase their productivity at a high pace. However, they are severely constrained by the burdens of the formal regulatory framework. Should this framework be significantly reformed, they would grow at an even higher pace (Box 3.3).

Figure 3.6. **Shift of specialisation towards medium technology and the trade balance, 2000-05**



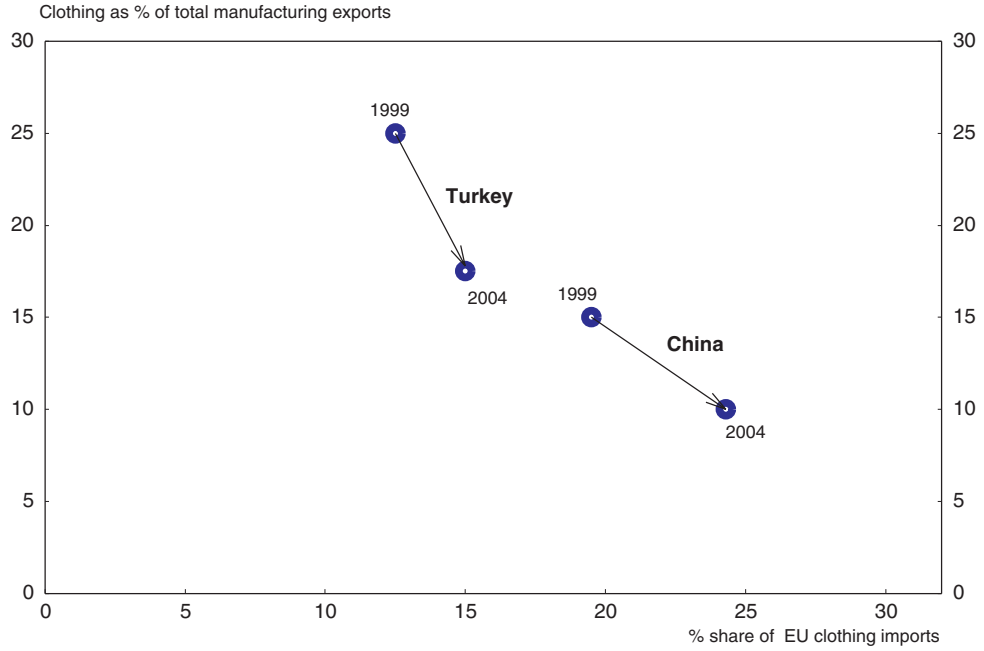
Source: TURKSTAT.

Policies to cope with increased competition

While there is political pressure for interventionist policies…

As the textile, clothing and leather sectors represent as much as one third of total manufacturing export and employment, the competitive pressures that they face led to an important policy debate in Turkey. In recent years, prior to the recent lira depreciation, industry representatives incessantly complained about the "unsustainable squeeze" arising from the combination of fierce competition from low-cost countries and strong currency appreciation. These sectors, together with tourism sector representatives, have become vocal advocates of special support from government. In response to these pressures, the government reduced the value-added tax (VAT) rate on textile products from the standard 18% to a preferential 8%, starting from March 2006.[12] However, introducing preferential rates for certain products distorts resource allocation across sectors and complicates the VAT system. Furthermore, as the VAT is a consumption tax which taxes imports similarly to

Figure 3.7. **Turkey and China in the European clothing market**



Source: Economic Policy Research Institute, Ankara.

domestically produced goods, it is not clear how this measure helps domestic firms to better cope with foreign competition. On the other hand, the reduction of the VAT rate on textile products may reduce tax fraud. Indeed, the Ministry of Finance estimated that because of lower fraud the net fiscal impact of this measure could even be positive. But if this proves to be true, it may rather be an argument for improving tax administration.

An *Experts Group* of the State Planning Organisation created for the preparation of the 9th Development Plan 2007-13 acknowledged the pressures faced by the sectors exposed to low-cost country competition but refrained from advocating trade protection and subsidisation measures. It stated that "Public policies can help reduce the costs of adjustment in the sectors under stress, but should do it without hindering the process of adjustment".[13] To this effect the group made three proposals: "*i)* innovative firms in the declining sectors which prove their capacity to upgrade themselves could be granted incentives; *ii)* measures under consideration to enhance the competitiveness of the industry in general (such as reductions in taxes and social security contributions) could first be introduced in these sectors, provided that they are also rapidly generalised to the entire industry; *iii)* the established physical capital base of declining firms should not be liquidated with fire-sales to less advanced countries but can be delocalised under enterprises' own control toward special enterprise zones benefiting from free-trade agreements with the United States in Egypt, Jordan, Israel and the occupied territories."[14] This discussion indicates that the government is under considerable political pressure to support declining sectors. International experience has shown, however, that subsidies are generally not effective and introduce new distortions and risk reducing growth potential of the economy. Instead, as outlined in the next section, a broader-based strategy which improves general framework conditions for doing business would more effectively help firms to cope with increased competition and increase the growth potential of the Turkish economy.

Box 3.1. **Strengths and handicaps of small firms**

Small-sized enterprises (SSEs) comprising the self-employed and the so-called "micro" enterprises are an important feature of the Turkish business sector. They operate for the most part informally (Table 3.1). It is estimated that although less than 10% of value-added is generated in this sector, these firms make up more than 30% of total manufacturing employment and 95% of the total number of manufacturing firms. These enterprises are found in large numbers in all manufacturing and service activities and many have no other regular employees than their family members. They are particularly numerous in clothing, metal working and food industries. In services, they are widespread in retail trade, construction and transportation.

Table 3.1. **Informal employment in manufacturing and service sectors**

Percentage share of unregistered workers in each sector

	Total economy	Agriculture, forestry hunting and fishing	Manufacturing	Construction	Wholesale and retail trade, restaurants and hotels	Transportation, communication and storage	Finance, insurance, real estate and business service
1988	58.1	93.5	23.9	56.2	37.5	34.5	9.8
1989	58.7	92.2	26.3	56.7	39.2	34.9	8.4
1990	55.6	90.3	23.5	52.8	34.5	28.4	8.1
1991	51.2	79.8	24.5	59.2	32.5	21.6	6.6
1992	49.2	78.8	27.1	55.6	32.1	19.5	8.2
1993	47.5	78.0	24.5	52.2	31.5	19.7	9.3
1994	45.7	70.2	27.3	55.2	47.5	19.7	9.9
1995	49.2	78.0	25.2	57.8	34.3	22.6	9.3
1996	52.7	88.4	23.0	58.0	31.5	20.0	11.3
1997	51.6	89.2	21.6	60.8	30.3	23.6	8.9
1998	50.3	88.5	20.7	53.1	29.0	25.5	8.0
1999	52.1	89.3	25.6	60.4	33.1	29.8	10.4
2000	50.6	88.6	26.4	65.5	37.1	31.4	13.8
2001	52.9	91.8	27.2	61.7	39.5	33.1	16.2
2002	52.1	90.2	31.7	61.5	42.7	34.0	18.9
2003	51.7	91.2	30.7	63.8	42.2	33.9	20.1
2004	53.0	90.0	31.3	66.5	44.4	38.8	20.6
2005	50.1	88.2	32.0	64.3	43.8	39.0	21.6

Source: TURKSTAT, Household Labour Force Survey.

The core strengths of SSEs are their very low operating costs and very high flexibility. They enter and exit markets at little cost and adjust employment quasi-spontaneously. Few of them are formally registered, pay taxes, or are bound by regulations for market entry, physical settlement, environment and safety, and can therefore avoid minimum wage rules, social security obligations and other regulatory costs (Figure 3.8). Even if a minority of them, notably those settled in the "organised industrial zones" can be considered as "half-formal", because they register some proportion of their sales, revenues and employment,* most of them remain entirely informal.

The biggest handicap of the SSEs in Turkey is their weak equity base and their low physical and human capital stock which pulls their productivity well below industry averages. Essentially, these firms allow low-skilled workers to participate in the economy but they also face competition from imports from low-wage-countries while not being able to reduce wages to such low levels. In some sectors, such as retail trade and construction, they also face more intense competition from larger domestic firms which have much higher productivity.

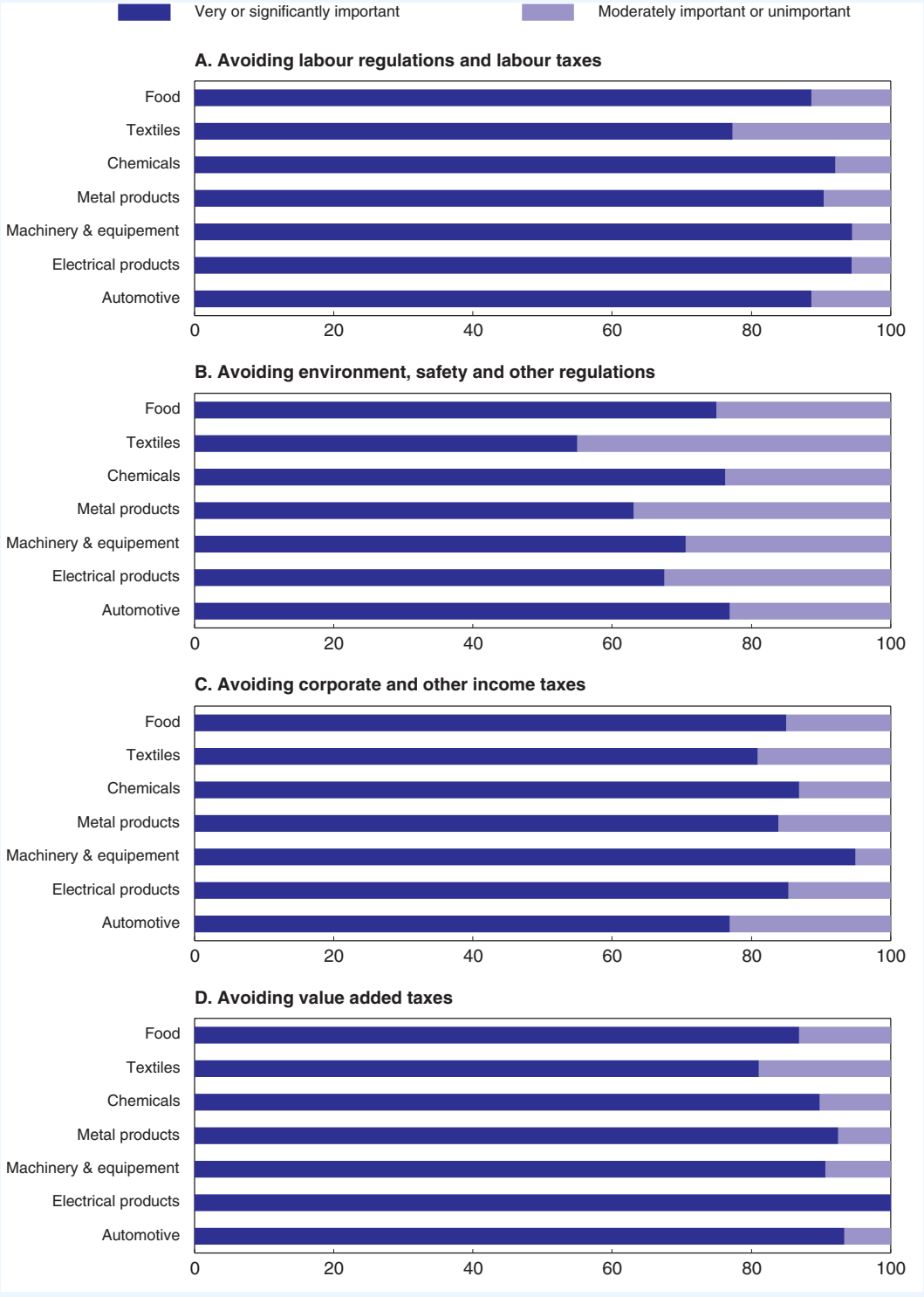
Data on the entry, exit and employment performance of micro enterprises is limited and biased by massive informality. Yet, according to the partial and anecdotal evidence available, it seems that many micro-firms have recently exited business and reduced employment, in both tradable and non-tradable activities, pointing to important structural handicaps (Figure 3.9).

* In the international literature "small firms" are those employing between 10-49 persons. However, in the Turkish context even firms employing less than 10 persons may be considered as "small firms" if they register part of their activities, pay social security contributions for some of their employees, and pay some taxes (in opposition to fully informal "micro-scale" firms).

Box 3.1. **Strengths and handicaps of small firms** *(cont.)*

Figure 3.8. **The "advantages" of informality**

Percentage of total respondents



Source: Economic Policy Research Foundation (TEPAV).

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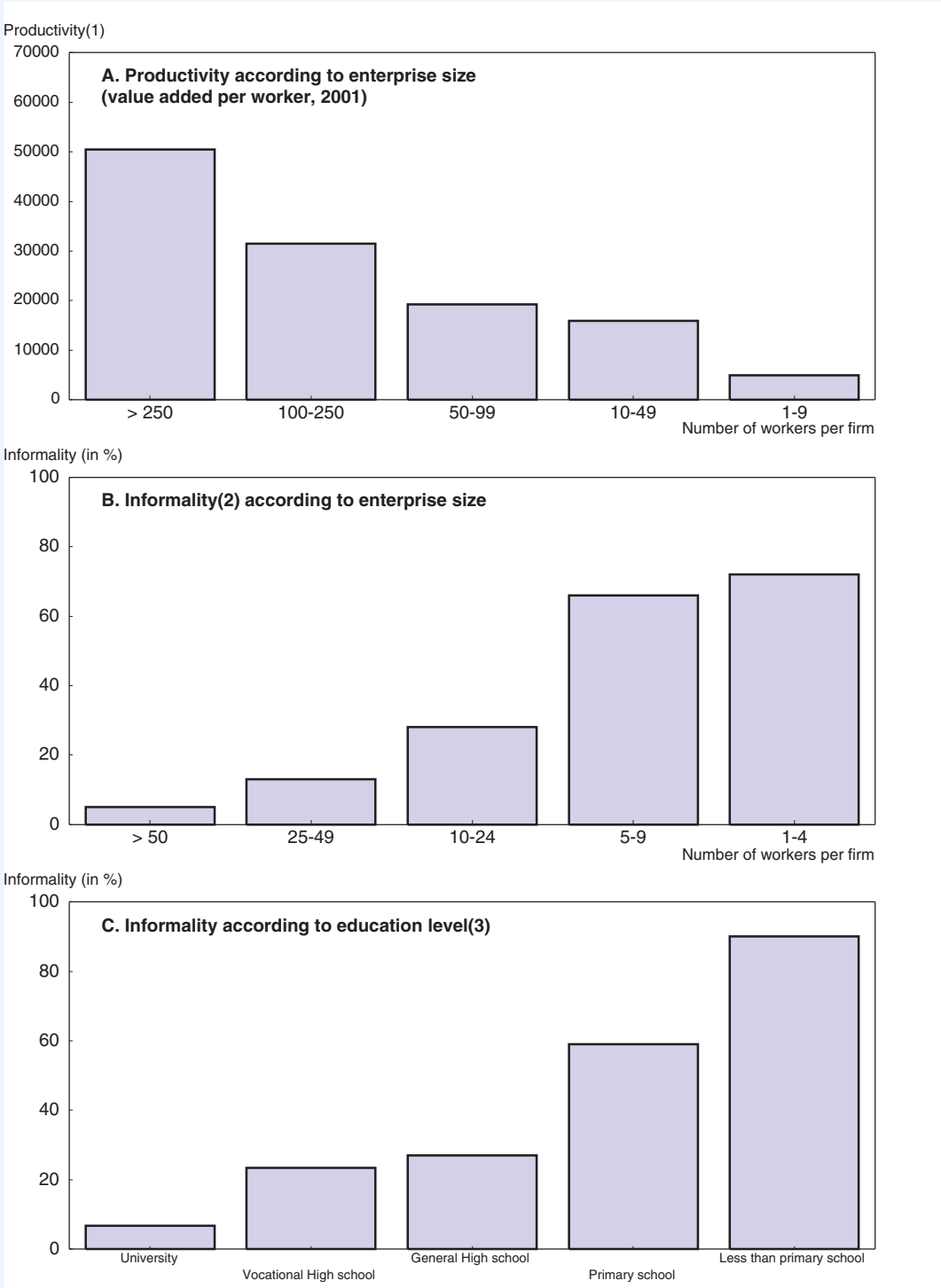
Box 3.1. **Strengths and handicaps of small firms** *(cont.)*

Figure 3.9. **Micro entreprises' structural handicaps**



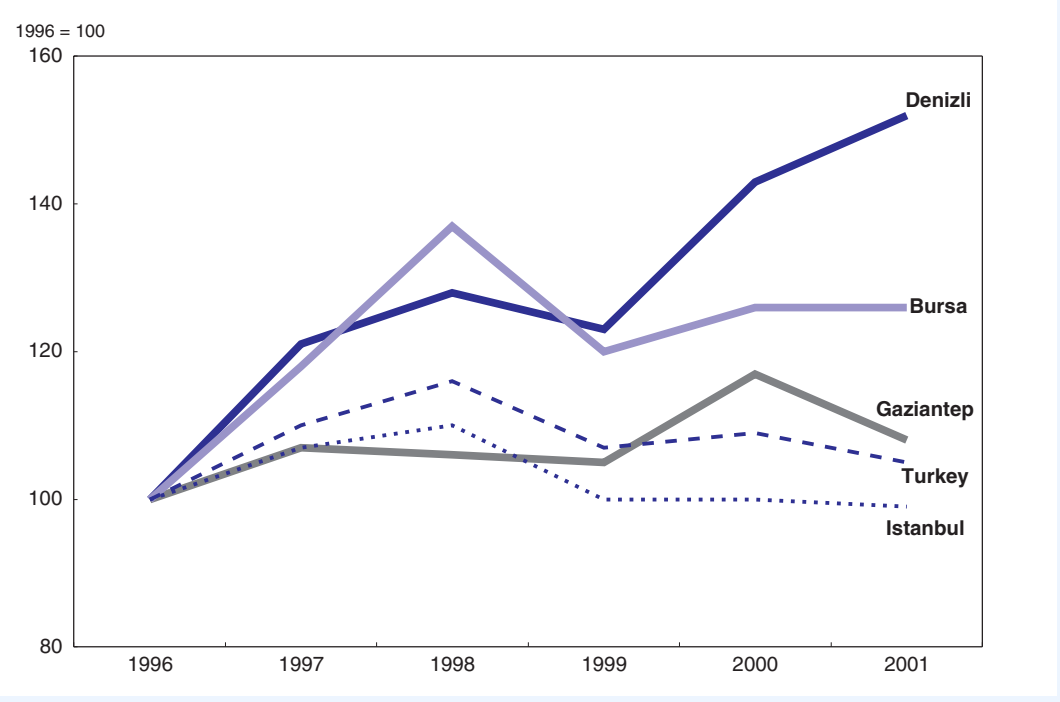
1. Value added in euros per workers, current exchange rates.
2. Percentage of workers not declared to social security institutions.
3. Percentage of workers in each education group not declared to social security institutions.

Source: TURKSTAT and Turkan (2005).

Box 3.2. **Strengths and handicaps of medium-sized firms**

Medium-sized enterprises (MSEs) have been the most dynamic component of the Turkish business sector over the past decade.[1] Enterprises employing between 10 and 249 employees represented 34% of manufacturing employment and 35% of manufacturing value added in 2000, and these figures must have increased since that year. One of the distinct features of these firms is that they are mostly owned and run by families (most of them of the first generation) and that – while being registered – they only partly comply with official regulations, thus permitting them to partly escape the *rigidities and costs of the regulatory and tax system*. These firms operate in all manufacturing and service activities, and particularly in the tradable sectors such as textiles, clothing, metal working, machinery, food, and furniture (Annex 3.A3 summarises some Surveys on the competitive position of medium-sized enterprises in comparison to both large- and small-size firms). They have grown in the traditional industrial centres of Turkey (Istanbul, Izmir and Bursa) but also, and more typically, in a range of Anatolian towns which have achieved exceptional industrial growth (such as Denizli, Gaziantep, Eskisehir, Kayseri – scattered through many different regions of Turkey). "Organised industrial zones" established in these towns have provided the infrastructure for this development.[2] Due to their propensity to nurture a large population of high-growth firms these towns have been dubbed "Anatolian Tigers" (Figure 3.10).

Figure 3.10. **"Anatolian Tigers"**
Growth of manufacturing employment in high growth towns



Note: "Anatolian Tiger" cities are shown with thick lines.
Source: TURKSTAT.

The strength of these MSEs is their outstanding entrepreneurial spirit and their generally decent engineering and technical capabilities. Their equity-based capital structures have also made them less vulnerable to financial shocks in the past. After the 2000-01 crisis, as the domestic market

Box 3.2. **Strengths and handicaps of medium-sized firms** *(cont.)*

contracted and currency depreciated, many of them sharply accelerated their opening to global markets,[3] not only by increasing exports but also by diversifying their sources of know-how and technology. In particular, they began imitating commercially successful international designs at much lower cost.[4] Many of them consider now *any domestic and international market accessible via internet,* whatever its location and distance, as an opportunity for doing business, but also as a source of potential competition. Their strategies appear to be increasingly shaped by such an open, pro-competitive mindset.[5] Many medium-sized firms also aim to develop their own know-how and technology base, and their size, in order to exploit economies of scale. However, financial and human capital constraints often tend to limit their options.

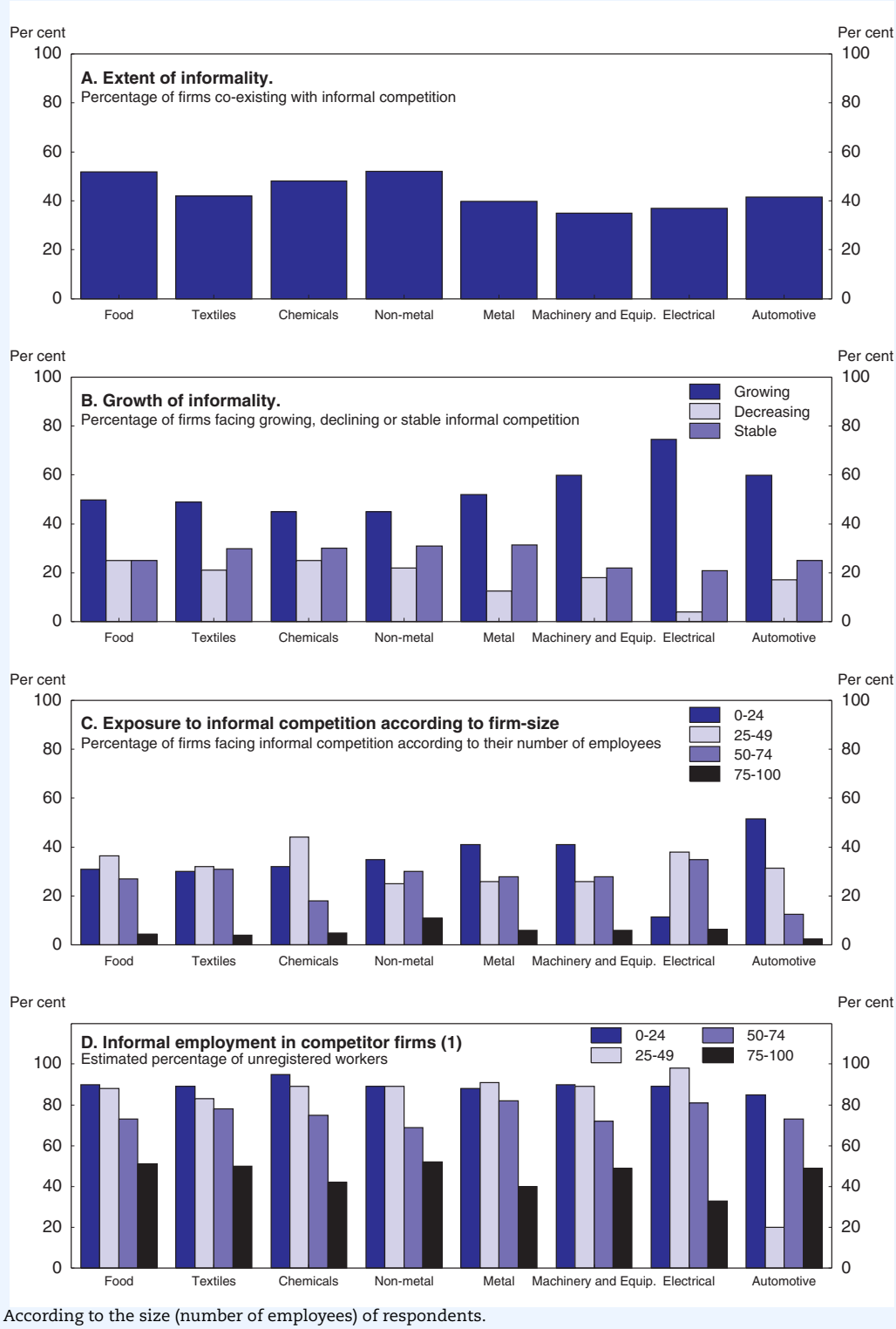
These firms generally use special arrangements to avoid the full burdens of formality. A popular avenue is to employ their workers under *sub-contracting contracts,* outside company payrolls. This allows enterprises to remain below critical thresholds for the application of regulations concerning employment protection and other workplace rules.[6] Such avoidance is often achieved with the consent of workers who consider such flexibility a requirement for the survival of the firm.

Semi-formal firms usually do not hire high-skilled managers. Even if they would be prepared to pay a high salary, high-skilled managers are normally reluctant to take on the reputational and other risks of running a semi-formal entity. Firm owners would also rather avoid too much exposure to outsiders who may acquire sensitive information and prefer to deal with family members. Many firms thus miss out on access to state-of-the-art technical and managerial knowledge. Enhancing the knowledge base of these enterprises including managerial skill, foreign language education and information technology know-how would improve the growth potential of these firms.Medium-sized firms also seem to derive other financial gains from semi-formality by only partial compliance with the environmental and health-and-safety rules. Direct data is of course missing on the informal practices of medium-sized firms, but a recent survey by the Turkish Economic Policy Research Institute (TEPAV) appeared to corroborate the wide reach of these practices[7] (Figure 3.11).

1. There are two statistical definitions of a medium-sized firm: 50-150 employees (Turkish) and 50-250 employees (international) both of which show strong growth in the past decade. In Turkish circumstances, many firms employing between 10-49 employees would also qualify as medium-sized firms if they demonstrate a robust capital base and operational stability.
2. "Organised industrial zones" provide physical facilities at low cost and offer standard energy, transportation and logistical services.
3. Dynamic medium-sized firms' performance has not been thoroughly analysed, as information about them is limited. A long-time observer has recently offered a number of observations on ongoing changes in their behaviour. See Bozkurt (2006).
4. Without necessarily infringing the existing intellectual property rights. They often duplicate the basic designs of the models, and the inputs and materials utilised, rather than directly counterfeiting.
5. These enterprises seem to form a new constituency for policymakers. As a difference from traditional SMEs – which are interested primarily in trade protection and subsidies – they know that they can only prosper through global competition and favour an open, rule-based and level-playing business environment. These new expectations are reflected in their professional and trade organisations' pro-reform policy positions.
6. Firms employing less than 30 employees are not subject to employment protection legislation – but remain liable to severance payments – and firms employing less than 50 employees are exempt from obligations to hire "socially assisted" employees (handicapped, ex-convicts, etc.) and to provide mandated health, recreational and social facilities.
7. This 2005 survey realised by TEPAV only covered registered businesses of a minimum size. 800 firms employing 10-to-100 workers were asked about the formal and informal business practices they face in their immediate competitive environment. The OECD Secretariat is grateful to the Economic Policy Research Foundation for sharing the detailed findings of this survey.

Box 3.2. **Strengths and handicaps of medium-sized firms** *(cont.)*

Figure 3.11. **The extent of informality among medium-sized firms**



1. According to the size (number of employees) of respondents.

Source: Economic Policy Research Foundation (TEPAV).

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Box 3.3. **Strengths and handicaps of formal sector firms**

The formal sector in Turkey is characterised by mainly large-size enterprises which employ well-trained entrepreneurs, managers and workers, and are well-equipped to modernise, invest and cut costs. The share of large-sized firms is smaller than in other OECD countries but they have been performing well over the past decade and have grown at an above-average pace. Large-size manufacturing firms employing more than 250 workers accounted for around 60% of manufacturing output and 30% of manufacturing employment in 2003. In addition to their good growth performance, the profitability of large firms has been better than in the rest of the economy and further improved in the recent period.[1] The key strength of these firms is their high level of productivity which comes close to international standards, and contrasts with their relatively low labour costs in international comparison.[2] The automotive industry epitomises the recent performance of the large-size formal sector. Car assembly facilities have been able to achieve international quality and productivity standards at relatively low cost. A larger share of car industry investment and production in Europe has consequently shifted to Turkey.[3] An important source of strength of formal sector firms is their close ties with multinational firms, which encompass equity investments but also marketing, licensing and technology transfer agreements. Such ties are being developed with European, North American and Asian partners, frequently via joint-ventures. Firms with foreign investors in their equity capital realised more than 40% of the total sales of the top 500 companies in 2005 and nearly 20% of the sales of the next 500.[4]

In contrast to their strengths, formal sector businesses face handicaps which can be binding constraints for their competitive performance and growth. Despite recent reductions in corporate tax rates, the Turkish regulatory framework is out of line with international standards and best practices and is very costly and rigid. If these handicaps could be alleviated, these businesses could grow more rapidly and employ a higher proportion of the labour force at a higher level of productivity.

1. According to the Turkish Central Bank's Enterprise Balance Sheet database the profit margins of large firms increased from an average of 3.1% in 2002 to 4.6% in 2004, while they remained stable at 2.3% for medium-sized firms, and declined from 0.1% to –0.7% for small firms.
2. Domestic and foreign formal sector firms have access to high-quality human capital trained in prime Turkish and international universities. This helps them to absorb international management, technical, and finance know-how. A 2002 study by McKinsey of 11 manufacturing and service sectors found that formal-sector firms reach around 70% of the benchmark productivity level of US counterparts.
3. According to data from the International Organisation of Motor Vehicle Manufacturers, Turkey's automotive output increased from 298 000 vehicles in 1999 to 823 000 in 2004 (a 176% increase), while it decreased from 16 900 000 to 16 854 000 in EU-15 (a decrease of 0.4%) and from 2 544 000 to 1 680 000 in Central and Eastern Europe (a decrease of 34%).
4. Istanbul Chamber of Industry (ISO) "Top 1000 Corporations" database.

... a strategy of simplification of the regulatory framework is needed

Efficient product and labour markets facilitate the swift reallocation of resources to their most productive uses and the continuous upgrading of products in line with changing demand. However, as discussed above, Turkish firms are currently operating under quite different regulatory frameworks. While large firms face the full burden of the formal regulatory environment, small and medium sized enterprises totally or partly escape it, but face the difficulties of operating outside full formality. While this reduces their costs and provides some flexibility to survive under difficult conditions, it also deprives them of potential productivity gains through economies of scale and access to other critical resources. This reduces the overall capacity of the Turkish economy to cope with competitive pressures and its growth potential.

At the same time the opportunity cost of having a large part of business activities "trapped" in the informal or semi-informal sector has increased with the stabilisation of the Turkish economy. Interest rates have declined, borrowing opportunities have increased, and many domestic and international equity investors are eager to invest in promising companies. More FDI and joint-venture candidates are also approaching the Turkish market, while new technologies become available from various international and domestic sources. The *unrealised gains* of the small- and medium-sized enterprises, which cannot seize these opportunities because of their informal or semi-formal status, suggest a need for a strategy to break this ceiling.

What is needed is a simple, low-cost, unified, pro-competitive and pro-growth regulatory framework for all sectors and firms. Such a framework would help improve the performance and growth of formal firms and facilitate the move of informal firms into the formal economy. Although many micro-firms possess a genuine entrepreneurial drive and interesting business niches, their generally low level of productivity makes it difficult for them to register as they would be unable to afford the relatively high minimum wage and costly social security contribution obligations. Improving enforcement alone is no solution as many would be forced to exit, with net output and employment losses for the economy. With less costly regulations, however, many of the currently informal or semi-informal firms would have a good chance of survival in the formal sector.

The following sub-sections discuss the main policy areas which should be addressed to achieve this low-cost unification of the framework conditions for the business sector. Policies are closely inter-related. Reducing tax distortions – including by cutting labour taxes – easing labour market regulations, improving competition in product markets and facilitating access to bank and equity financing, as discussed below, would help achieve this thorough upgrading of business conditions.

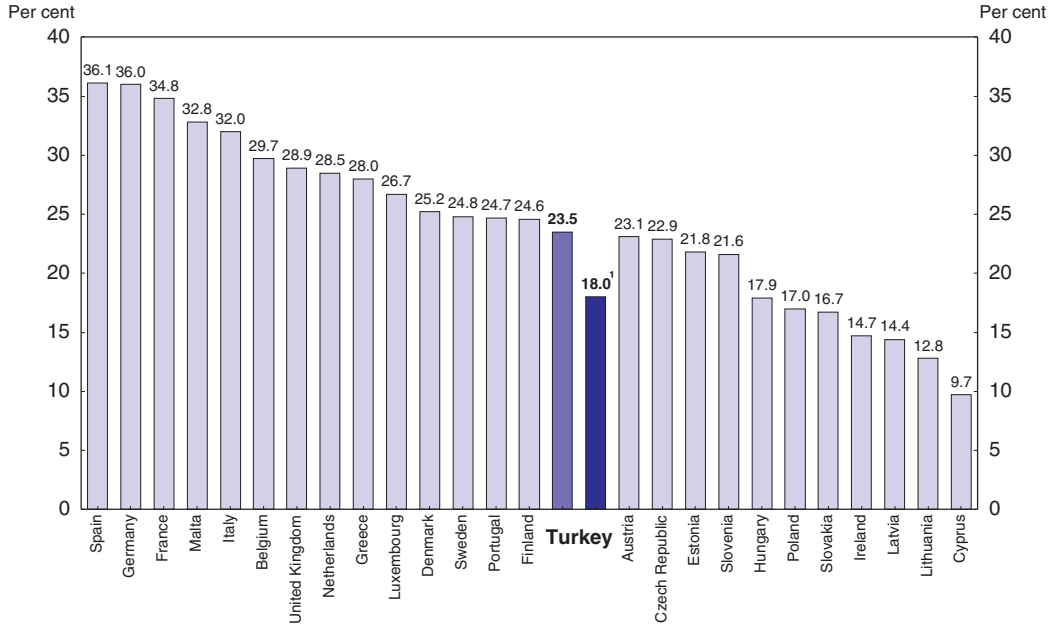
The tax reform is on track but weaknesses remain

The corporate tax rate has been reduced…

The corporate tax environment has in the past been characterised by relatively high standard tax rates and an excessive number of exemptions and loopholes providing incentives for tax planning and affecting investment decisions. The complexity of the tax system has created wide inequalities both between informal and formal firms as well as *within* the formal sector, as the effective corporate tax burden has fallen on a small population of contributors.[15] This highly opaque environment has led to very low public and business sector confidence in the integrity of the corporate tax system. Recent tax reform has improved the situation although weaknesses still remain:

- The reduction of the standard corporate rate from 30% to 20% in June 2006 has reduced the effective average and marginal tax rates of firms. The effective average corporate tax rate is now close to the level in other low-tax European countries (such as Hungary, Poland and Slovakia) and significantly lower than in most other European countries (with a few exceptions like Ireland, Latvia, Lithuania and Cyprus) (Figure 3.12 and Annex 3.A2). Without the recent cut in the statutory tax rate the effective average and marginal tax rates would have increased above their 2005 levels as the 40% investment allowance was eliminated at the end of 2005. Overall, and particularly after the recent reform, the Turkish corporate income tax appears to be attractive enough for domestic and international investment. The focus should now be on other policies which affect business environment and job creation, such as labour costs and regulatory hurdles as discussed below.

Figure 3.12. **International comparison of the effective average tax rates in 2005**



1. After 2006 reform.

Source: ZEW.

- The authorities have been reluctant to offer *ad hoc* tax holidays to potential foreign investors and this seems sensible, not only because of the fiscal costs but also because it would create new distortions within the business sector.[16] Concerning transparency, tax expenditures started to be reported from 2006 but the coverage of reporting should be further improved and other state aid should be made transparent.[17]
- The government introduced an incentive package in 2004 for investment in less-developed regions (in 36 provinces among 81 where yearly GDP per capita was less than USD 1 500 in 2001, plus 13 others), offering newly created firms employing more than 30 workers and old firms increasing their employment by at least 20%, 80 to 100% exemption from workers' personal income taxes (capped by the minimum wage), 80 to 100% exemption from employers' social security contributions, and a Treasury subsidy of 20% on their electricity bill.[18] An extension of this measure to more provinces was envisaged in 2006 but was not implemented because of fiscal constraints.
- Since 2004, all enterprises in Turkey can also deduct 40% of eligible R&D investment from their taxable income, and enterprises established in designated sites near Universities and co-operating with them ("Technoparks") are exempt from corporate taxes for their software and R&D sales. Such firms' research and engineering personnel are also exempt from personal income taxes. The generosity of these incentives and their potentially distorting impacts on competition would justify an evaluation of their costs and benefits and of their specific provisions.[19]
- A withholding tax of 15% on revenues of financial assets held by domestic and foreign investors was introduced in early 2006, to replace the previously declaration-based system. When capital outflows accelerated and the Turkish Lira weakened toward

mid-2006 these taxes were eliminated for foreign investors, and reduced to 10% for domestic investors. Investment in TL Treasury bonds and equity securities benefit from these exemptions while taxes remain in place for bank deposits and repo accounts.

- Tax administration has been delegated to a semi-autonomous agency and is now organised according to functional lines (and not according to tax types as before). As is the case in all large-scale tax administration restructurings the transformation is taking time and weaknesses remain. Active co-operation has begun between the tax administration and the banking system to chase tax evaders. This project is in an early phase of implementation and should be backed with safeguards preserving privacy and confidence in the banking system – along OECD best-practices.

… the indirect "tax burden" on the informal economy also declined

A main reason for firms not to register in the formal economy is to evade taxes. The losers of this tax evasion are – besides the government – the honest firms and workers who dutifully pay taxes but see their prices and wages bid down by the competition from tax evaders. However, even if the informal sector does not directly pay taxes, some of its activities are taxed indirectly. Given the flexibility of prices and wages it is often unclear who finally bears the tax burden (tax incidence). Tax shifting from the formal sector to the informal sector can occur through higher output prices or lower input prices. For example, the money which is earned in the informal sector and spent on purchases from the formal sector bears the VAT and other indirect taxes. Also, if informal firms sell intermediate goods to the formal sector these sales are finally taxed as the purchasers cannot claim VAT tax credits on these inputs. At the same time, tax shifting from the formal sector to the informal sector may be limited as informal sector activities may drive down the prices and wages of formal firms and workers through competition.

In the high inflation environment that previously existed in Turkey, the so-called inflation tax was another way of taxing the underground economy (Box 3.4). However, with lower inflation – which is clearly positive for the whole economy – the inflation tax has been reduced. As the informal sector holds relatively large cash balances to finance its transactions and these balances are now less eroded by inflation, it benefits more from disinflation than the formal sector. This also underlines the importance of policies to facilitate the entry of informal firms into the formal sector and also to improve tax enforcement.

The large tax wedge on labour should be reduced

High taxes on labour income, mainly in the form of social security contributions, push up the cost of employing a worker formally. In recent years most other OECD countries have tended to reduce the tax wedge on labour, while in Turkey it increased. As a result, Turkey is among the OECD countries with the highest average tax wedge[20] (Figure 3.14). This large gap between the effective employment costs of workers and their net income creates strong incentives to work informally.

A formalisation strategy will require a reduction in these rates. Even more than income taxes, the high rate of social security contributions contributes to the size of the wedge (as also discussed in the following chapter). Due to the exceptional extent of informality in the economy, which keeps fiscal revenues from social security contributions at a very low 5% of GDP (versus nearly 15% of GDP in other countries with high social security contribution rates), the fiscal cost of cutting social security contributions may be relatively limited and their claw-back effect would be expected to be larger than in other countries.[21]

Box 3.4. **The inflation tax**

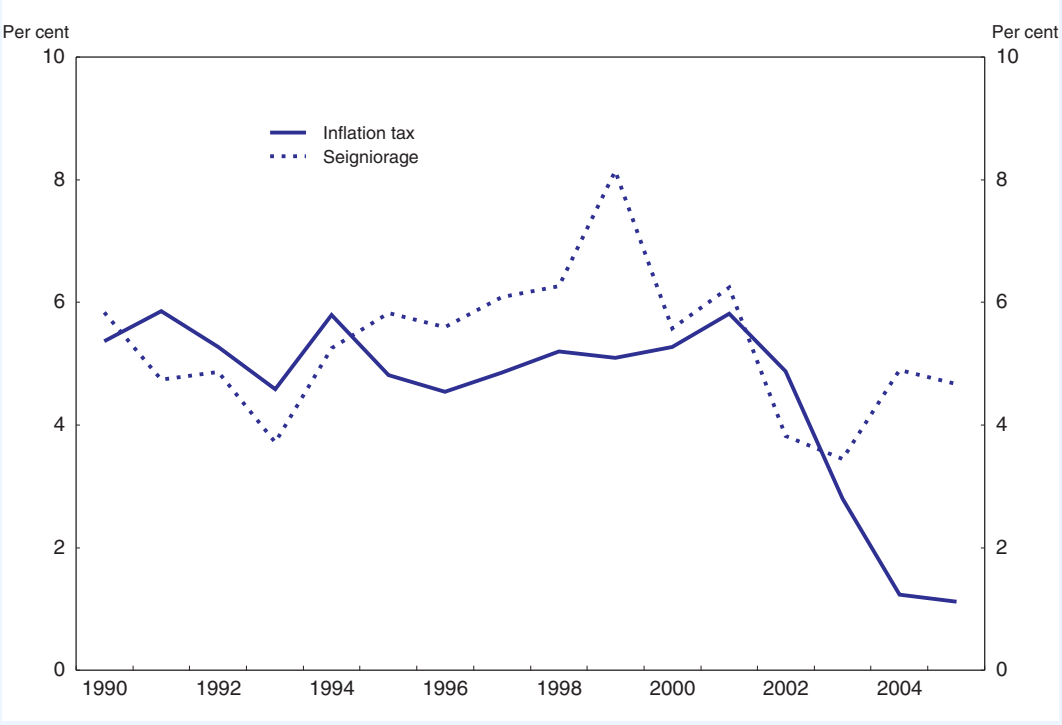
With the so-called inflation tax, governments absorb real resources from the private sector by running fiscal deficits and financing these by printing money and thus creating inflation. As inflation reduces real cash balances of the private sector so that it can buy less while the government can buy more, resources are shifted to the government sector in a similar way as if public purchases would be financed by ordinary taxes. The real amount of goods and services which the government obtains by increasing the nominal money stock is the so-called "seigniorage". Seigniorage is defined as:

$$\frac{(M_t - M_{t-1})}{P_t} = \pi_t m_{t-1} + (m_t - m_{t-1})$$

where M is the nominal and m is the real money stock, P is the price level and π is the inflation rate defined as $\frac{P_t - P_{t-1}}{P_t}$. The first term is the inflation tax and the second is the increase in the real money stock. The seigniorage thus has two sources. The first (the first term in the formula) is the so-called inflation tax which is the (real) amount of resources which the private sector must give to the government to hold its real money stock constant in the face of rising prices. The second term (the change in the real money stock), reflects the desire of the private sector to alter its real money holdings. Figure 3.13 presents the development of the total seigniorage and of the inflation tax component for Turkey. A feature of the inflation tax is that it is not only paid by the formal sector but also by the informal sector. In fact, as cash balances are generally larger in the informal sector it tends to be particularly burdened by the inflation tax.

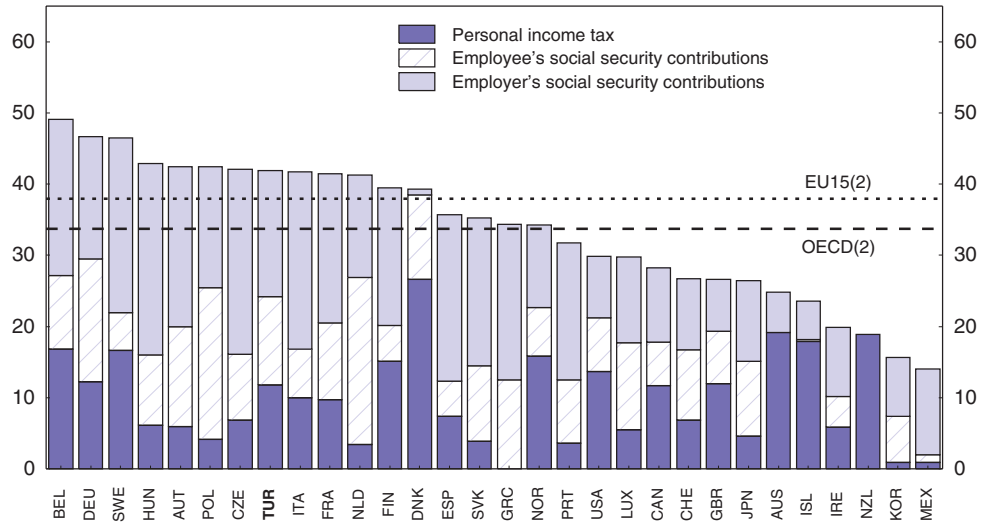
Figure 3.13. **Seigniorage and inflation tax in Turkey**

% of real GDP



In the past, Turkish governments used this "source of government financing" to a large extent so that the size of the (ordinary) tax level understates the true burden which the government put on the private economy. In recent years with the reduction of inflation the inflation tax has declined significantly. Turkey is thus making progress in creating a more normal environment where government spending is financed by ordinary taxes rather than by inflation. While the lowering of inflation is clearly positive for the economy as a whole, a side effect is that the reduction of the inflation tax has reduced the burden on the underground economy.

Figure 3.14. **Average tax wedges on labour, international comparison**[1]
As per cent of gross labour costs, 2005



1. For a single individual without children at the income level of 67% of the average production worker, or estimated wage levels of the average production worker.
2. Weighted average using 2000 GDP and PPP.

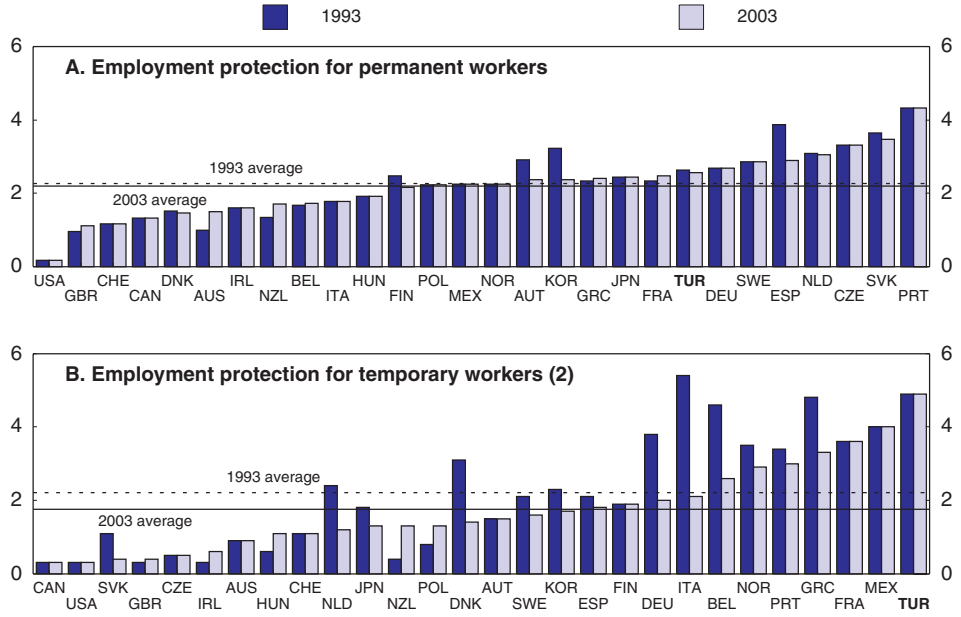
Source: OECD, *Taxing Wages*, 2005.

Labour market regulations should be considerably simplified

Turkish labour market regulations remain rigid despite two legislative revisions in the past decade and the convergence of the Labour Code with OECD best practices is thus a key requirement:

- For *temporary employment* Turkey has the most rigid code of OECD by a significant margin. "Temporary", "interim" and "agency" work contracts are authorised only in limited circumstances and there are strict limits to the number of times they can be renewed. "Agency work", whereby an enterprise makes temporary use of another firm's workforce, was made significantly more difficult by the Labour Code amendment of 2003 (Figure 3.15).
- Regulations concerning *permanent employment* are not the most rigid in the OECD, but remain far from being flexible. They are characterised by relatively long notice periods for the termination of employment, and a particularly costly severance payment regime. Various amendments to the Labour Code in 2002 and 2003 did not alter these provisions, even if they raised the "enterprise size threshold" for the application of employment protection from 10 to 30 workers. All enterprises remain obliged to pay the high severance payments**.** Other employment-related rules apply to enterprises employing more than 50 workers, such as the requirement to hire 6% of their workforce from "socially assisted" groups (ex-convicts, handicapped people, victims of terrorist acts), the requirement to hire a certain number of lawyers, physicians and nurses, and the requirement to establish social and recreational facilities. In these circumstances many enterprises ensure that their total number of (formal) employees remains below the relevant threshold (30 or 50 employees) in order to avoid compliance with these additional rules.[22]

Figure 3.15. **Employment protection regulations, Turkey *vs.* OECD countries, 1993-2003**[1]



1. 0-6 scale from least to most restrictive.
2. The figure for Spain is different from the one reported in Employment Outlook (2004) due to a re-assessment of regulation in this area.

Source: Brandt, N., J. Burniaux and R. Duval (2005), "Assessing the OECD Jobs Strategy: Past Developments and Reforms", OECD Economics Department Working Paper, No. 429.

- *Severance payments* represent a very significant employment cost for formal sector firms. The law prescribes one month of compensation at the latest wage level for each year of service, which can be further increased under collective agreements. This rate of severance payment is the highest in the OECD (Table 3.2). Moreover, severance payments are payable even in the case of certain voluntary departures (such as retirement). Many Turkish enterprises have a huge off-balance-sheet liability in the form of such obligations which, according to certain analysts, would make many of them insolvent in case of large employment adjustments. If compulsory severance payments were included in the labour tax wedge the wedge would increase by 8%,[23] making it the highest tax wedge in the OECD by a wide margin (see Turkey's position in Figure 3.13 above, without this element). Many firms circumvent this rule by firing workers and re-hiring them before they have been employed for 12 months, after which they become eligible for severance payments. However, those that play by the rules face growing liabilities. In 1999 formal unemployment insurance was introduced, with contribution and benefit rules inspired by standard practices in the European Union.[24] This was motivated by an intention to replace the severance payment system. However, the severance payment regime was maintained and formal sector enterprises found themselves paying both high unemployment insurance premia (amounting to 3% of the wage bill) and hefty severance payments.[25]

The minimum wage should not be an obstacle to formal employment

The high cost of legal employment also stems from the high level of the legal minimum wage. In 2005, the gross monthly minimum wage in Turkey averaged € 364, lower than in Spain (€ 491), but significantly higher than in Poland (€ 183), Slovakia (€ 167),

Table 3.2. **Severance payments in OECD countries**
Severance pay for no-fault individual dismissals by tenure categories, in 2003

	Severance pay after		
	9 months	4 years	20 years
Australia	0.0	1.0	1.0
Canada	0.0	0.4	2.1
Czech Republic	1.0	1.0	1.0
Denmark	0.0	0.0	1.5
France	0.0	0.6	4.0
Greece	0.3	1.0	5.9
Ireland	0.0	0.4	1.9
Japan	0.4	1.4	2.9
Portugal	3.0	4.0	20.0
Slovak Republic	1.0	1.0	1.0
Spain	0.5	2.6	12.0
Switzerland	0.0	0.0	2.5
Turkey	**0.0**	**4.0**	**20.0**
United Kingdom	0.0	0.5	2.4

Estonia (€ 159), Bulgaria (€ 120) and Romania (€ 69). The level of the minimum wage as a percentage of the formal sector average wage was 38% in Turkey, against 39% in Slovakia, 40% in Bulgaria, 37% in Hungary, 35% in Poland, 34% in Estonia, 30% in Spain and 29% in Romania.[26] The ratio would be higher if lower wages in the informal sector were taken into consideration. The high minimum wage magnifies the negative impact of the labour tax wedge on employment in the formal sector, as the formal wage costs of low-skilled workers can easily exceed their productivity levels.[27] Among OECD countries Turkey has the second-highest labour costs for minimum wage earners relative to formal sector median wage workers, and this ratio has sharply increased as a result of successive minimum wage increases over the past five years (Table 3.3). These developments have undoubtedly contributed to employment losses in the formal sector.

The level of the minimum wage is particularly high when the uneven distribution of productivity across firms, sectors and regions is taken into consideration. Indeed, the minimum wage/median wage ratio would be much higher if median wages were calculated on an economy-wide basis, *i.e.* by also taking into account the informal sector. The employment cost of a minimum wage earner appears to be *above* average labour productivity in small size informal manufacturing firms, suggesting that the "true" ratio in Table 3.3 could be more than 1.0. This gap between actual productivity and the mandatory minimum wage is even wider at the regional level. According to available estimates, the ratio of the minimum wage to regional GDP per capita was around 20-30% in western regions in 2001 but peaked at 150-160% in the poorest regions of the East. These ratios must have increased since 2001 but they cannot be calculated as regional GDP per capita has not been published since that date. But given the high labour cost of minimum wage earners it is not surprising that only an infinitesimal minority of workers in the poor Eastern provinces are employed in the formal sector, and then mainly by municipalities and state-owned enterprises. Employing workers legally in the lower productivity areas is difficult as long as this gap between wage costs and productivity persists.

In Turkey (as well as in some other OECD countries), the increase in the minimum wage has been justified by the social policy objective to alleviate poverty. However, if it pushes labour costs of low-skilled workers above their productivity level it doesn't serve that

Table 3.3. **Minimum labour costs in OECD countries**

Ratio of employers' labour costs[1] for minimum wage workers relative to formal sector median wage workers

	1997	2000	2004
Mexico	0.23	0.21	0.19
Korea	0.22	0.23	0.27
Spain	0.33	0.31	0.29
United States	0.38	0.36	0.31
Japan	0.31	0.31	0.32
Czech Republic	0.22	0.30	0.37
Slovak Republic	–	0.43	0.39
Ireland	–	0.40	0.39
Poland	0.45	0.41	0.40
Canada	0.44	0.44	0.41
Portugal	0.43	0.46	0.44
United Kingdom	–	0.42	0.44
Hungary	0.25	0.27	0.45
Belgium	0.50	0.48	0.45
New Zealand	0.45	0.44	0.47
Greece	0.52	0.50	0.49
Netherlands	0.48	0.50	0.51
France	0.55	0.55	0.54
Luxembourg	0.55	0.52	0.54
Turkey	**0.42**	**0.39**	**0.57**
Australia	0.59	0.57	0.58

– Not applicable.

1. Gross wage payment plus employers' mandatory social security contributions, as proxied by employers' contribution rates for a single worker with no children earning 67% of the average production worker's earnings level.

Source: OECD Employment Outlook, 2006.

purpose as unemployment increases and/or jobs are only created in the informal sector where wages are lower and social security is not provided. Other countries inside and outside the OECD have implemented other policies to mitigate poverty which take better account of the equity-efficiency trade-off of minimum wages (OECD *Economic Outlook* 2006 and Box 3.5).

In Turkey, formal employment of low-skilled labour would be stimulated by reducing the minimum wage. As this may be politically difficult, as a second best solution, the future increase in the minimum wage should be limited so that it falls as a ratio of the average wage. Furthermore, harmonising the real minimum wage across regions (so that the nominal minimum wage falls in regions where living costs are lower) would improve efficiency as more formal jobs would be created in poorer regions. Such a policy would thus take equity concerns into account at the same time.

Improving access to external financing is becoming more important

Access to efficient capital markets is becoming more important in all segments of the business sector. In particular, informal and semi-formal firms face costs in terms of diseconomies of small scale as (full or partial) informality puts a "*glass ceiling*" on their access to capital markets and therefore on their investment capacity:

- As informal and semi-formal firms' *financial* accounts understate the true dimensions of their activities – *i.e.* the actual volume of their sales, assets, profits, employment and capital – firms have difficulty getting full support and services from properly supervised

Box 3.5. **The political discussion about the appropriate minimum wage in other emerging countries**

Other countries have explored new ways to support low-skilled and low-income individuals, without pricing them out of the labour market. An interesting recent policy discussion took place in Singapore, an economy which is often hailed as a success model for emerging countries.[1] In Singapore there is no national minimum wage and the lowest-paid workers earn around SGD (Singapore dollars) 750 (USD 460 or € 380 per month).[2] This amounts to about 50% of the average wage while the same ratio is 48% in Turkey. Charged with investigating ways of assisting low wage workers, a recent Ministerial Committee concluded that the best way to help low wage workers would be not to increase the minimum wage, but to increase opportunities for upward mobility. Interestingly, employers rather than unions had proposed the introduction of a minimum wage "to protect low wage workers from cost competition by employers, to enhance the image of jobs, and help attract/retain workers"). The committee rejected this proposal on the following grounds: "When wages are propped up artificially through a minimum wage, then some companies in Singapore would lose their competitiveness and relocate to other countries. We will end up with more job losses and higher unemployment. Rather, we should pursue initiatives such as job re-creation, whereby the jobs become more productive and thus can pay more". Instead, the Singaporean government's approach is to promote higher wages through increased productivity of low skill workers, backed by policies such as: training programs for low wage workers (in particular, English language, Information Technology literacy and numeracy training); the expansion of the Workforce Skills Qualification System (to promote productivity gains); a focus on workfare rather than welfare (to ensure strong worker incentives to participate in the workforce); and affordable education and pre-school education for low income households (to ensure that low wage workers have help to look after their dependents if they work).

1. See "Report of the Ministerial Committee on Low Wage Workers", *www.mom.gov.sg/MCLWW*.
2. Some domestic workers from Indonesia or the Philippines earn as little as USD 150-200 per month.

banks. Turkish banks, subject to looser regulations in the past, used to provide informal and semi-formal firms with a limited amount of credit through a system of informal books and bilateral information. But stricter bank regulations are making this more difficult.[28]

- The peculiarities of their *governance structure* also make it difficult for these firms to raise funds for investment and acquisition from equity investors (as discussed in more detail in Annex 3.A4). Semi-informality is also a hindrance in their communication with other partners such as joint-venture candidates, technology suppliers and new customers. Large international customers also increasingly prefer suppliers with a clear management structure and financial basis, which they can document and rate.

In order to draw on the new funding opportunities arising in financial markets, firms should upgrade their governance and financial reporting processes. Policy reforms can back these efforts. Capital markets laws already impose more rigorous financial reporting, external audit and governance standards on "publicly held" companies (those with more than 250 shareholders and those listed on the stock exchange). To extend similarly demanding standards to "closely-held" companies (the category to which the vast majority of medium-sized enterprises belong), draft revisions to the Turkish Commercial Code (TCC) propose more rigorous financial reporting and external audit rules for all companies.[29] These initiatives appear well-intentioned but it must be ensured that compliance costs

do not outweigh the benefits of stricter regulation, or create new incentives for firms to operate informally. The adaptation of regulatory requirements to the different circumstances of smaller, privately held firms might prove to be necessary. Authorities should also facilitate and encourage pension and mutual funds to consider pro-actively exercising their shareholder rights, and encourage private sector organisations, including self-regulatory organisations (SROs) to help diffuse good governance practices among enterprises and investors on voluntary and market-friendly grounds.[30]

Product market regulations should be eased

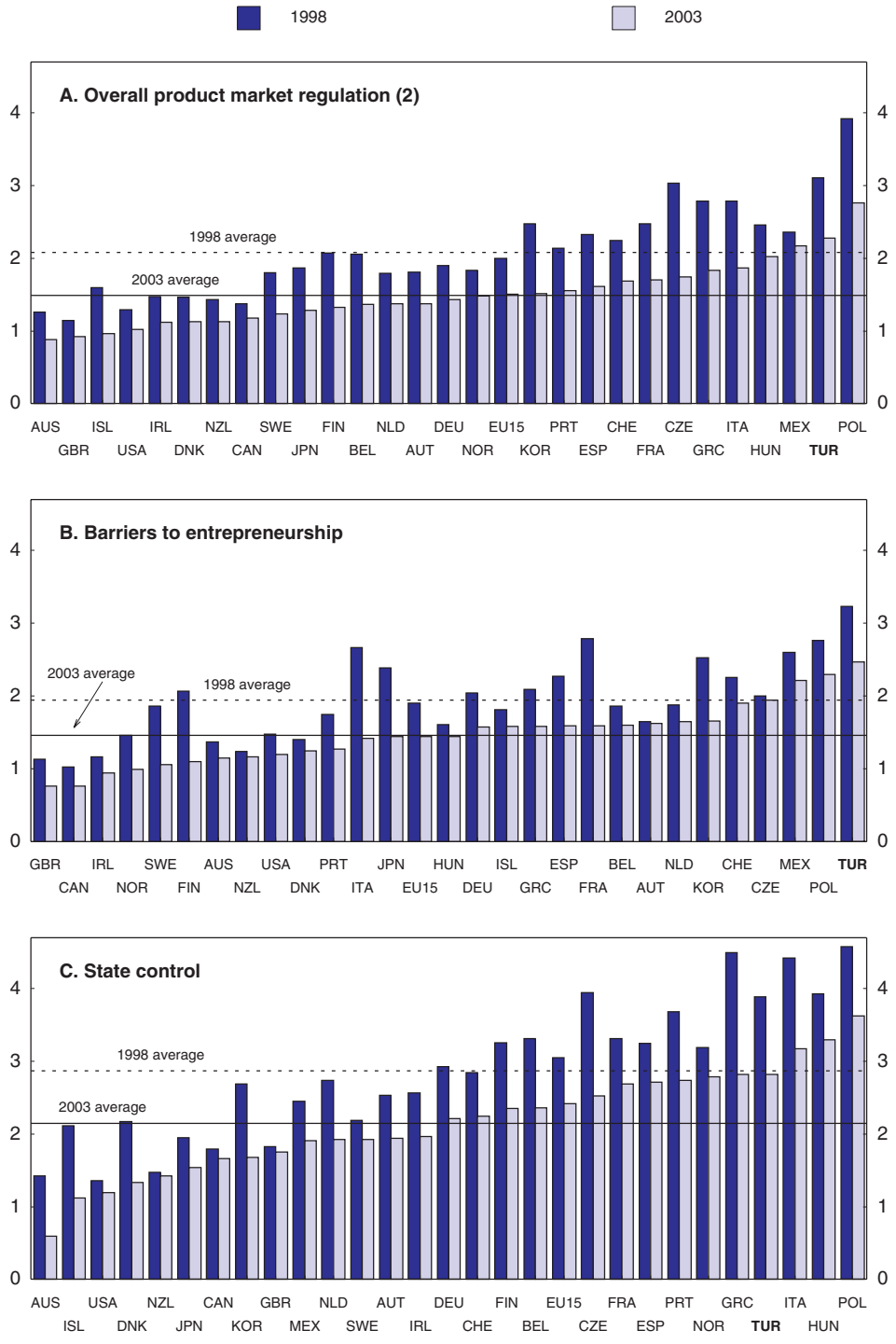
Firms playing to the rules are exposed to a plethora of product market regulations which remain considerably more detailed than in other OECD countries, despite the simplification efforts undertaken in the 2000s (Figure 3.16). The complexity of regulations increases entry costs and creates much room for government bureaucracy to exert discretionary power over business creation, a recipe for fostering competition distortions and, according to some cross-country studies, increasing the scope for corruption.[31] These risks are compounded by the complexities of the laws governing the conduct of business and create unpredictabilities in the commercial justice system.[32] These shortcomings are particularly taxing for foreign firms which have more difficulty coping with them. Empirical studies show that countries with relatively strict product market regulations tend to receive less FDI.[33] In contrast, domestic firms are more accustomed to operating in this setting, and have developed resources to better cope with it, such as increasing their influence in the political and media spheres to preserve their interests. Nonetheless, as recognised by government authorities and business organisations, and despite the streamlining of administrative procedures for firm creation in 2003, a comprehensive simplification of the legal rules governing business-making is urgently needed and the commercial justice system should be reinforced to provide a streamlined framework.[34] This would reduce informality and attract more foreign investors.

A topical issue is the regulation of market entry in retail trade. Further restructuring is needed to increase productivity and reduce the massive informality in this sector, and to contribute to greater price-competition in the entire economy. The development of large-size retailers is promising, as evidenced by the increase of their market share from 30% in 2002 to 37% in 2005.[35] Unfortunately, certain legislative initiatives now aim to make hypermarkets' market entry more difficult. A draft law proposes to submit the opening of new large-size retail facilities to local and central administrative authorisations, to constrain their working days and hours, and regulate their prices and discounts. This draft law is based on laws in certain other OECD countries which, in order to slowdown the exit of less efficient operators, unduly held back the modernisation and productivity of their retail trade at large economic costs.[36] Given the importance of this sector in furthering price competition and overcoming duality, it is important to provide it with open and predictable framework conditions. More domestic and international investment in distribution should therefore be encouraged.[37]

Infrastructure should be made less costly through more competition

Turkish firms also have to pay high energy costs reflecting the stranded costs of past investments in the energy sector, high energy taxes and various supervisory shortcomings.[38] Telecommunication tariffs are also very high (Figure 3.17). As a consequence, a large proportion of enterprises consider infrastructure utilities as a major bottleneck in their doing

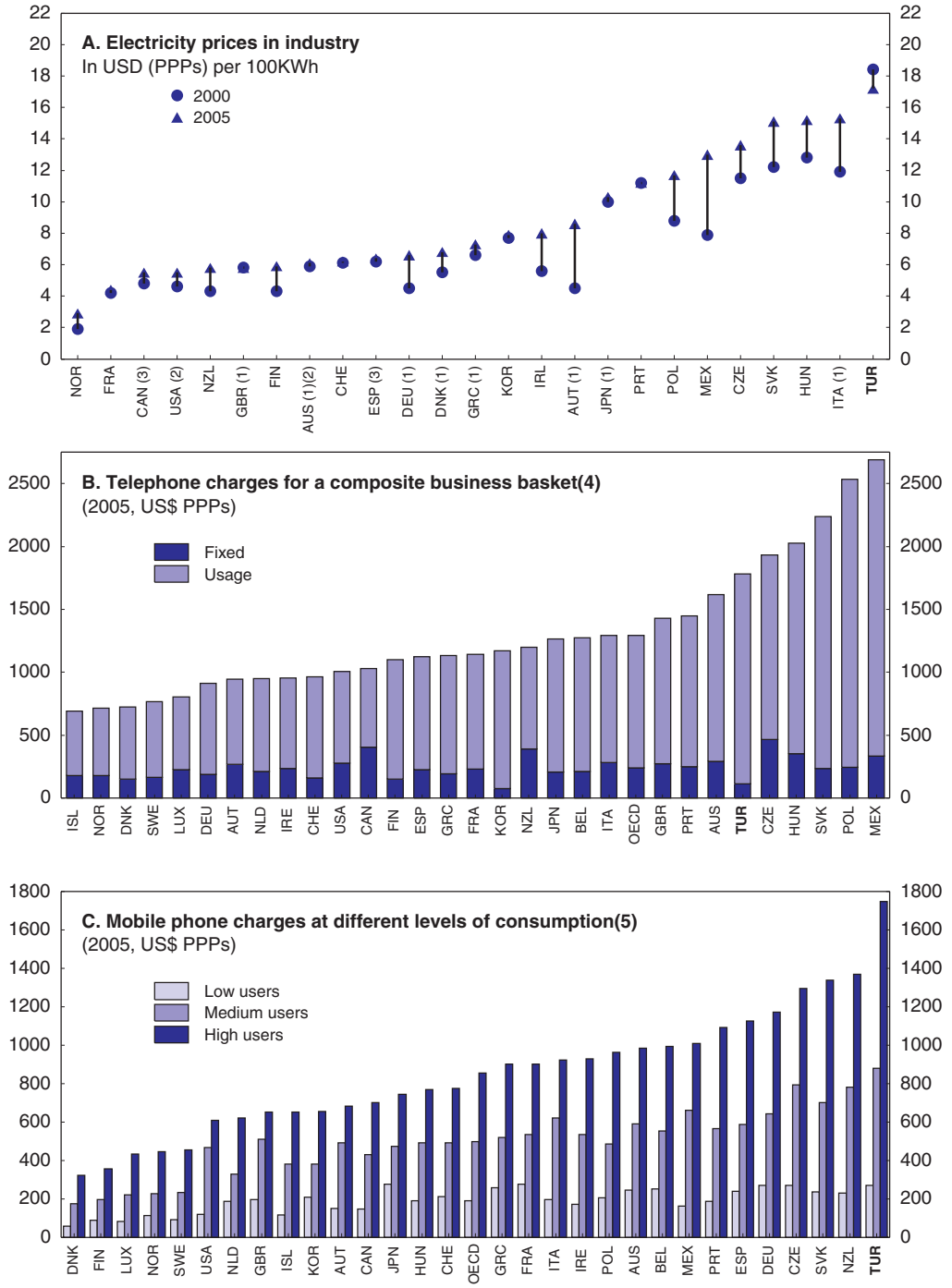
Figure 3.16. **Product market regulations, Turkey *vs.* OECD countries, 1998-2003**[1]



1. Sorted by 2003 values. The scale of indicators is 0-6 from least to most restrictive.
2. The overall product market regulation index is a compound of 16 low-level indicators aggregated into three intermediary-level indicators on "barriers to entrepreneurship", "state control" and "barriers to trade and investment".

Source: Conway, P., V. Janod, and G. Nicoletti (2005), "Product Market Regulation in OECD Countries, 1998 to 2003", OECD Economics Department Working Paper, No. 419.

Figure 3.17. **High infrastructure costs**



1. Data for 2004.
2. Excluding taxes.
3. Data for 2003.
4. Excluding VAT.
5. Including VAT.

Source: AIE, *Energy Prices and Taxes* and OECD, Communications Outlook database.

business.[39] The recent pro-competitive regulations of the energy and telecommunication sectors should be fully enforced according to a clear calendar, and through co-operation between sectoral regulators and the Competition Authority. The prices and the quality of services should be closely monitored and made transparent to the business sector and to the general public.[40]

Privatisation should be backed with sound corporate governance

Large ongoing privatisations are increasing the size of the formal private sector. After delaying for more than a decade, large-size privatisations only really began in 2004-05. *TurkTelekom* (telecommunications monopoly), *Tupras* (main oil refiner) and the *Mersin port* (one of the major export ports – its privatisation has not yet been entirely completed) have been sold to foreign and domestic controlling investors (Table 3.4). Plans for the privatisation of three large public banks have advanced more slowly but appear to be in progress. Twenty-five per cent of the equity of *Vakifbank* (the Bank of Foundations) was sold to stock market investors in July 2005, a financial adviser was hired for the privatisation of *Halkbank* (Bank of SMEs), while the privatisation of *Ziraatbank* (the Bank of Agriculture, the largest bank in Turkey) should in principle follow on the basis of these two privatisation experiences. The government intends to publish a banking sector privatisation strategy and timetable before the end of 2006.

As these privatised companies are major suppliers of goods and services to other businesses and their performance matters for the competitiveness of the economy as a whole, it must be ensured that they remain subject to strict competition policy, more consistently than when they were under state ownership.[41] These privatisations may also be a step towards the creation of truly *publicly-owned*[42] corporations in Turkey: although most privatisations have resulted in controlling ownership of privatised entities by either domestic or foreign investors, a non-negligible portion of their equity is likely to remain in the hands of public investors. Less concentrated ownership structures should permit the emergence of active minority holders and facilitate the diffusion of international corporate governance standards in Turkey, provided that the rights of minority shareholders are fully developed and enforced.[43]

Conclusion: Regulatory simplification is the key to enhancing competitiveness and growth

Enhancing the growth potential of the Turkish economy in a context of growing competition from low-wage countries requires a broad-based strategy of improving framework conditions for all types of firms. Reducing labour market regulations and labour costs, improving competition in product markets and improving infrastructure would not only enhance the productivity of firms in the formal sector, but would also facilitate the creation of new firms and the move of the large population of informal firms into the formal sector.

A strategy of *regulatory simplification and formalisation* would help replace the distinctly *layered* regulatory and tax framework with a unified, low-cost, level-playing and much more flexible formal framework. The resulting streamlined business environment would stimulate the productivity and competitiveness of *large-size*, *dynamic medium-size and micro-scale firms* alike, and would facilitate resource shifts between these groups according

Table 3.4. **Major privatisations in 2005 and 2006**

Privatised company	Area of activity	Date of privatisation	Employment in company (before privatisation)	Total (notional) market value of the company on the basis of its privatisation price (USD)	Percentage of equity sold to the new controlling investor	Percentage of equity issued on or already in the stock market	Percentage of the equity still owned by the government
Turk Telekom	Telecommunications (incumbent fixed-line operator/GSM-AVEA)	14 November 2005	54 000	11.9 billion	55	–	45
Tupras	Petroleum Refining	26 January 2006	4 302	8.12 billion	51	49	Nil
Tupras (Sale Channelled through Istanbul Stock Exchange)	Petroleum Refining	4 March 2005	4 330	3.1 billion	14.76	49	Nil (then 51%)
Istanbul/Ataturk Airport (Operating rights for 15.5 years)	Airport Operations	July 2005	–	3 billion	Transfer of Operational Rights/BOT Scheme	–	–
Erdemir	Iron and Steel	27 February 2006	14 414	6 billion	49.29	47	Nil
Vakifbank	Banking / Financial Services	November 2005	7 164	5.1 billion	(25.18% Initial Public Offering)	25.18	58.45
Mersin Port (Operating rights for 36 years)[1]	Seaport Operations	12 August 2005	1 336	755 million	Transfer of Operational Rights	–	–
Motor Vehicle Inspection Stations[1]	Public Service Concession Agreement (for 20 years)	20 December 2004	–	613.5 million	Concession Rights	–	–
Eti Alüminyum	Bauxite/Aluminium Production	29 July 2005	2 212	305 million	99.99	–	Nil
Petkim	Petro-chemicals	April-December 2005	3 761	809.8 million	34.57 (Secondary Public Offering)	38.68	61.32
Başak Sigorta and Başak Emeklilik	Insurance / Retirement Fund (Occupational Pensions)	16 May 2006	469	473 million	56.67 +41% separately	–	43.33 (Indirectly-through agriculture sales co-operatives)
Istanbul Hilton Hotel	Tourism/Hotel Business	15 November 2005	–	255.5 million	Asset Sale	–	–
THY/Turkish Airlines	Air Transport/passenger carrier	16-18 May 2006	10 928	723 million	28.75% (public offering)	53.57	46.43
Ataköy Group of Companies	Tourism	28 February 2005	568	199.1 million	Various Stakes	–	Nil
THY/Turkish Airlines	Air Transport/passenger carrier	1-3 December 2004	10 956	831.6 million	23% (public offering)	53.57 (then 24.82%)	46.43 (then 75.18%)

1. The privatisation process of the Mersin port and of the Motor Vehicle Inspection Services have not yet been completed.

to their true underlying efficiencies rather than according to their uneven exposure to legal and tax liabilities:

1. It would reduce the heavy regulatory burden on formal-sector firms – particularly in the areas of costly product and labour market regulations,
2. It would help informal micro operators to become normal business firms – enhancing their capacity to build-up physical and human capital,
3. It would break the glass ceiling that is currently impeding the performance of dynamic medium-sized firms – by permitting them to expand and by giving them access to the funding, technology and marketing resources that they need.

The main pillars of this suggested approach are summarised in Box 3.6.

Box 3.6. **A comprehensive strategy to raise competitiveness and growth based on regulatory simplification and formalisation**

The first priority

Reducing labour costs and regulations for formal employment

- Labour taxes: substantially reduce social security contribution rates (for example by halving them). This measure should be a fiscal priority and can be funded through reductions in pension costs (as discussed in the following chapter) and cuts in lower priority expenditure areas.
- The minimum wage: limit the growth of the minimum wage so that it falls as a ratio of the average wage; harmonise the real minimum wage across regions so that the nominal minimum wage cost are reduced in regions where productivity and living costs are lower. As these are also the regions where formal employment is particularly low, it would boost (together with the other measures) the creation of formal jobs.
- Labour regulations: liberalise labour market regulations for both *permanent* and *temporary* contracts; and permit standard unemployment insurance to fully replace the severance payment system.

Other important reforms

Ease regulations in product markets

- Review and simplify sectoral licences and minimise local government authorisations for doing business, thereby reducing the room for discretionary influence on businesses by administrative authorities.
- Reduce the complexity and the overlaps in the legal framework for doing business, in particular by reducing potential conflicts between different sources of law.
- Reinforce the commercial justice system on the basis of this simplified framework.

Ease access to capital markets

- Enhance the financial transparency of small- and medium-sized firms by adopting and enforcing the new draft provisions of the Turkish Commercial Code but reducing compliance costs to a strict minimum.
- Facilitate the funding of publicly-owned companies through compulsory transparency and other governance standards and by encouraging companies to fully implement the Corporate Governance Principles.
- Align with OECD good practices of institutional investment by amending the relevant laws and encouraging private sector organisations to raise awareness and provide training on investment best practices.

Box 3.6. **A comprehensive strategy to raise competitiveness and growth based on regulatory simplification and formalisation** *(cont.)*

Improve infrastructure and make it less costly through more competition

- Fully implement the new sectoral regulations for energy, telecommunications and transportation, through co-operation between sectoral regulators and the competition authority.
- Make available low-cost broadband services across the entire territory.

Improve knowledge base

- Promote basic management education for the owners of micro- and small- and medium-sized enterprises.
- Promote basic information technology and internet education.

Ensure effectiveness of investment incentives

- Resist pressures for sectoral subsidies.
- Increase transparency about state aid and its economic impacts.

Improve the efficiency of the tax system

- Simplify and consolidate the indirect tax structure.
- Continue to eliminate tax exemptions.
- Assess the efficiency of tax incentives for research-and-development and technoparks.
- Continue to improve tax administration and auditing.

Notes

1. See *Turkey: OECD Review of Regulatory Reform*, 2002.
2. See *OECD Economic Survey of Turkey*, 2004.
3. On basis of relative consumer prices.
4. The *relative unit labour costs adjusted for the exchange rate* (or, in other words, the *real exchange rate calculated on a relative unit labour cost basis)* published bi-annually by the OECD.
5. All sectors of the economy – tradable and non-tradable activities, manufacturing and service sectors – should have been ideally covered but data availability (of the needed price, wage and productivity data) imposed the restriction of the analysis to manufacturing.
6. The analysis also included two additional elements which influenced the competitiveness and profitability of enterprises: energy and credit costs. The analysis suggests that energy costs had a non-negligible but relatively limited impact on estimated profitability. In contrast, the high variation of credit costs (which soar in periods of currency depreciation and decline in periods of appreciation) has partially off-set both the positive impacts of depreciation and the negative impacts of appreciation on profits. Interest rates have therefore played a countercyclical role in the evolution of profitability. See Annex 3.A1.
7. Or in at least two of them, together with average performance in the third. Highly competitive sectors include consumer electronics, industrial machinery, steel and car manufacturing.
8. Textile, clothing and leather industries are in this situation. While improvements have been observed in their performance in certain years, they are overall experiencing a declining trend.
9. Plastics, electrical equipment, metal product and furniture manufacturing are in this category.
10. Annex 3.A1 offers more detail on the distinct performances of individual sectors.
11. The increase of oil and gas prices has also contributed to this deterioration of the trade balance. Turkey imports most of its energy needs in form of fossil fuels and the imported energy bill increased by USD 7 billion (1.9% of GDP) in 2005. Only part of this inflated energy bill was offset by

increased exports to energy producers. Turkey's imports from its four main crude oil providers (Iran, Russia, Saudi Arabia and Libya) increased by 68.8% in 2005 but its exports to them increased by only 22.5%.

12. Tourism sector enterprises also requested VAT exemptions for services sold to foreign tourists – on the ground that these are export sales. The Ministry of Finance rejected this request for fiscal and administrative reasons.

13. See SPO and TEPAV (2006).

14. See SPO and TEPAV (2006).

15. The Ministry of Finance found in 2004 that in the Istanbul metropolitan area – where most Turkish formal businesses are registered – only 352 firms (4.2% of local corporate taxpayers) paid 87.8% of all corporate income tax collected. When the Ministry reviewed in detail the tax declarations of 670 enterprises in 2005 it found that they had declared a total taxable income of YTL 420 million (€ 270 million) for the year, whereas their actual taxable revenues had reached YTL 2.87 billion (€ 1.8 billion), a rate of understatement of 700%. See Milliyet (2006).

16. As experienced with the Hyundai case in 2004-05. This company ran, as many others, a "contest" for tax concessions and free land between Eastern and South-Eastern European countries to select its site for a 12 000 (3 000 direct and 9 000 indirect) job-creating investment. Turkish authorities, evoking their fiscal constraints and the need to preserve a level-playing field between international and domestic investors, stopped bidding and lost the project, although non-tax factors probably also played a role in the company's decision to build its new factory in the Czech Republic.

17. State aid to enterprises is not regularly reported and is not monitored by a specialised agency as is the best practice in other OECD countries.

18. After a strong early response to these incentives, which also involved partial re-location of some labour- and energy-intensive manufacturing between provinces, their impact seems to have declined. In mid-2006, 33 000 enterprises employing a total of 150 000 workers (less than 1% of total labour force) were operating under these incentives.

19. In addition to tax expenditures, R&D activities of small-and-medium-sized enterprises are supported with the technology transfer services of the Small-and-Medium-Sized Enterprises Agency (KOSGEB), which have been on offer for several years. The number of beneficiary enterprises remains limited and a more demand-driven provision of such services were recently advocated (including by the *OECD Economic Survey of Turkey*, 2004). KOSGEB has recently taken initiatives to become a catalyst for the overall modernisation efforts of enterprises, notably by acting as a partner for the preparation of strategic business plans inspired by Basel II principles. It estimates that around 10 000 enterprises could be involved.

20. Turkey has at present a "tax rebate to wage earners" scheme which is not taken into account in the calculation of the tax wedge because it is not a standard deduction in the tax system. The government plans to restructure it as a standard deduction, the labour tax wedge may then decline by about 3-4 percentage points.

21. If, for example, social security contribution rates were halved, direct fiscal costs would amount to less than 3% of GDP. If following such a drastic cut informal employment could be reduced by 15% in the first year and an additional 15% in the second, a claw back effect of 1% of GDP in the first year and a further 1% of GDP in the second year could be expected. If, better control and enforcement of wage declarations accompanied this measure – since more accurate wage reporting would become more legitimate and better accepted after such cuts, against massive underreporting at present whereby the majority of private sector employees are declared as minimum wage earners -, the reform could nearly fund itself. In all instances, given the crucial importance of this reform its funding deserves fiscal precedence.

22. The size distribution of enterprises in Turkey confirms the existence of these thresholds, at least for the registered part of their employees.

23. 8% of the wage bill is the provision that an enterprise would have to set aside in order to fund the severance payment liability that it incurs by employing a worker for one more month.

24. A minimum contribution period of 600 days is required for unemployment benefits amounting to 50% of the last wage during six months.

25. Enterprise provisions to fund severance payment obligations amount to 8% of gross wages (one month of salary per year of seniority) while the unemployment insurance premium is 3%. On the other hand severance benefits are made available not only at unemployment, but also at retirement. If policymakers want to converge the economic incentive properties of the two schemes, severance

payments at retirement would need to be eliminated and unemployment insurance premia would need to be made "experience dependent" – *e.g.* the premia paid by firms firing a higher proportion of their workers would need to be raised. Large funds have already been accumulated in the Unemployment Fund. Fully replacing severance payments with unemployment insurance should now be a policy objective.

26. 2004 figures for countries other than Turkey (data from "Minimum Wages in Europe", European Industrial Relations Observatory, 2006).

27. The estimated annual value added per worker was about USD 5 300 in small size informal manufacturing firms in 2005 (OECD Secretariat estimation, see Chapter 1), while the yearly effective employment costs of a minimum wage earner was about USD 5 800.

28. Basel II Banking Supervision Rules vary the capital adequacy requirements for commercial loans according to the financial and governance transparency of borrowers. These rules will apply in Turkey from 2007. See Annex 3.A1.

29. The proposed regime allows for future alignment with simpler, "SME-specific" reporting rules which may in the future be developed by the International Accounting Standards Board.

30. These questions are discussed in more detail and recommendations will be issued in OECD, "Corporate Governance in Turkey: A Pilot Study", to be published in the second half of 2006.

31. Djankov *et al.* (2002) found a strong statistical correlation between the complexity of product market regulations and the extent of corruption across countries.

32. It has been asserted, and confirmed in several recent cases, that the sources of law are particularly disparate in Turkey so that parties to a commercial case can always hope to find a legal provision backing their argument – including from the Constitution which contains sectoral prescriptions. They can therefore expect to have unfavourable justice decisions reversed by some higher Court. This explains the snowballing of appeal cases, the average processing time of which increased from 152 days in 2002 to 202 days in 2003. Cases in the Administrative Court of Appeal (Danistay) also grew spectacularly: For 87 000 pending cases at the beginning of the year, 68 000 new cases were open in 2005 and only 58 000 cases were solved by the end of the year. Judicial enforcement proceedings also reached high numbers: 3 million actions were resolved in 2003 and 4.4 million proceedings were pending at the end of the year. Commercial courts received around 95 000 new cases in 2003, decided half of them and the average processing time of a commercial case reached 417 days at the end of the year. In this litigation-intensive environment, the application of regulations to large-size domestic and international businesses gave rise to a number of well-known judicial stalemates – some of which are still pending. See Dutz et *al.* (2005).

33. See Nicoletti *et al.*, 2003.

34. In January 2006, the Turkish Association of Industrialists and Businessmen (TUSIAD) issued a statement on the reform of the justice system. Among many other points it has been stated that: "*i) An independent judiciary is imperative for reform*. The structure of High Council of Judges and Prosecutors should be changed, the Secretariat of this Council should be separated from the Ministry of Justice; *ii) The practice of retrospective unilateral actions of the state should be abandoned***.** They alienate local and foreign investors and diminish public confidence in the legal system; *iii) Financial, personnel and training problems of the judiciary should be solved*. In addition to increased financial compensation for judges and prosecutors, the training of key and office personnel is crucial" (TUSIAD, 2006).

35. There were around 2 000 supermarkets and hypermarkets in Turkey in 1998 and 5 500 in 2005, while the number of smaller grocery stores (without mentioning the numerous open-air retailers) fell from 37 000 in 1998 to 31 000 in 2005. See TEPAV (2005a).

36. See O. Boylaud (2000).

37. A straining development affected the international furniture retailer IKEA which opened two facilities in Turkey in 2005 and 2006, met massive consumer interest and rapidly gained market share. Its imports were made subject to new and cumbersome procedures, hampering its procurement. This retailer had started developing procurement relations with high-quality local manufacturers in Turkey.

38. The high "loss ratios" in the Turkish electricity distribution grid – reflecting both technically lost and illegally used electricity – are around 15% and increase the energy fees paid by legal users.

39. According to the *Business Environment* (BEEPS) survey of the World Bank in 2005 23% of Turkish enterprises considered energy service provision, 20% the telecommunication service provision and 21% the transportation services as serious problems for doing business; against 11%, 12% and 14% respectively in the eight new EU-accession countries.

40. At current exchange rates, Turkey remains the third most expensive OECD country after Japan and Italy in terms of electricity prices for industry. For household consumers electricity prices are moderate in comparison to other OECD countries, hinting at cross-subsidies from industrial to household users. The authorities control most energy prices, notably the electricity tariffs for end-users, and have not increased them since November 2002 in spite of rises in international oil and gas prices. They decreased electricity tariffs for industry in 2003. Deficits are reportedly building up in the electricity system as a result of this price repression, which is not fiscally sustainable as long as structural reforms do not help improve productivity and reduce costs in the energy chain.

41. This is particularly important for TurkTelekom which has a dominant position in fixed line telecommunications and basic internet services, TUPRAS which is the main supplier of refined oil, and cement factories which have strong regional market power. The post-privatisation competitive surveillance of Turk Telekom and cement factories has already raised some controversies. The "learning" process in the enforcement of pro-competitive rules in these large and complex industries must be recognised, while the performance outcomes (price and quality of services) should be closely monitored.

42. The so-called "Berle-and-Means" corporations with dispersed equity and no dominant owners do not exist in Turkey. (A. Berle et C. Means, The Modern Corporation and Private Property, New York, 1932).

43. *OECD Guidelines on Corporate Governance of State-Owned Enterprises* (2005) represent what OECD governments agree as the core elements of a good corporate governance regime for SOEs – already before privatisations.

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ANNEX 3.A1

An analysis of the evolution and determinants of profitability in Turkish manufacturing industry, 1998-2005

The profit margins of seventeen manufacturing sectors have been analysed for the period between 1998 and 2005 at aggregate and sectoral levels by drawing on the standard methodology of calculation of unit labor costs. The analysis also includes additional elements and represents an extended version of the standard approach:

- Sectoral disaggregation permits the reporting of significant differences in the evolution of the unit labour costs and prices in different sectors.[1] This provides a *proxy* for the difficult-to-calculate and unpublished *sectoral relative unit labour costs* (*i.e. sectoral real exchange rates on a ULC* basis).
- The analysis also broadens the standard unit labour cost approach by taking into account unit capital and unit energy costs. As capital and energy costs differ significantly in Turkey from competitor countries, both in level and trend, their inclusion enhances the monitoring of competitiveness.[2]
- The methodology also permits to evaluate the specific contributions of individual determinants of profit margins by distinguishing the estimated impact of changes in output prices, wages, labour productivity, capital costs and energy costs. These contributions have been estimated for different time periods, at aggregate and sectoral levels.

Two models have been utilised:

Simple Model

EPMI: Index of Export Profit Margins

(EPMI) = (EXPr)/(ULC)

EXPr: Index of Export Prices[3]

ULC: Index of Unit Labor Costs

ULC = (Wn * PWH)/ (IP)

Wn: Index of Nominal Wages per Worked Hour

PWH: Index of Worked Hours

IP: Index of Industrial Production

(EPMI) = (EXPr*IP)/(Wn*PWH) (1)

To estimate the contribution of individual factors to export profit margins, a logarithmic differentiation of equation (1) was used:

$$d(EPMI)/EPMI = (d(EXPr)/EXPr) + (d(IP)/ IP)) - (d(Wn)/Wn) - (d(PWH)/PWH) \quad (2)$$

DPMI: Index of Profit Margins on Domestic Sales has been calculated by substituting export prices with producer prices in the same formula.

Extended Model

A second model included *unit capital* and *unit energy costs*. In this model, instead of estimating export and domestic profit margins separately, a general profit margins index (GPMI) was calculated. In GPMI, *composite price index* is constructed by weighting export prices and producer prices by the shares of the export and domestic sales in total output in each sector:

$$(GPMI) = (WPr)/\{0.5*ULC + a*UCC + b*UEC \quad (3)$$

WPr: Weigted Price index
UCC: Index of interest rates for real sector credits
UEC: Index of Unit Energy Costs
a: Coefficient of sectoral unit capital costs.
b: Coefficient of sectoral unit energy costs.

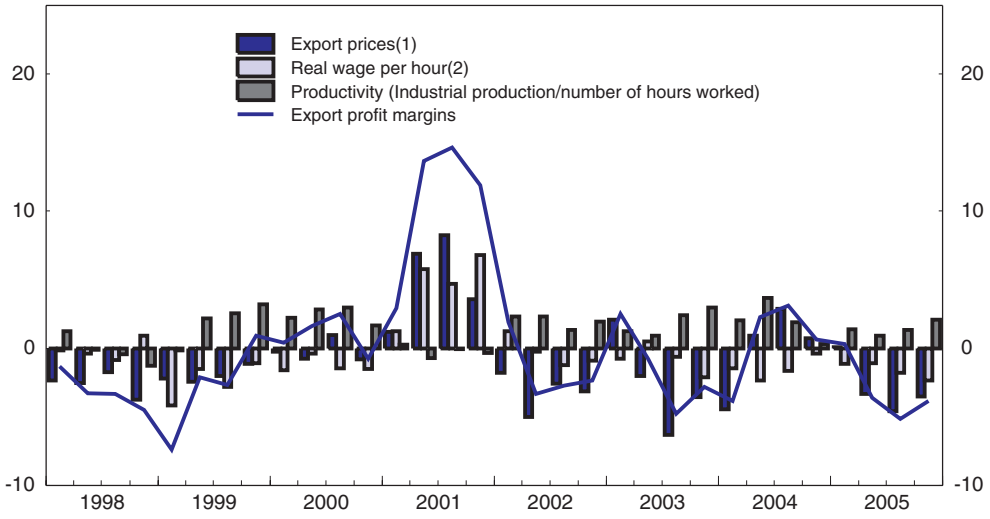
The main findings for the period 1998-2005 are:

- The estimated profit margins of the manufacturing industry as a whole closely tracks the real exchange rate on a unit labour cost basis, confirming the relevance of the standard competitiveness indicator. Correlations between profit margins and the real exchange rate are particularly strong in export sales while, in domestic markets, profitability grows with depreciation but diminishes less with appreciation – there is an asymmetry in the pass through from the exchange rate to domestic prices and profits.[4] As a result, the main outcome of the recent period's strong real currency appreciation has been a sharp erosion in export profits.
- Three phases in the evolution of competitiveness must be distinguished: *a)* the period preceding the 2000-01 crisis which saw a regular erosion in the aggregate profitability of the business sector, mainly due to the pressures of real currency appreciation (1998-2000); *b)* in the crisis years 2001-02, *sharp* real currency depreciation and *sharp* real wage declines permitted a spectacular restoration of profitability; and c) in the post-crisis reform period, structural changes in industry on the one hand and strong real currency appreciation on the other hand generated mixed competitiveness outcomes (2003-05). The nominal and real depreciation of the currency in May-June 2006 must have helped manufacturers improve their margins (before a partial re-appreciation of through the summer) but the needed statistical data is not yet available to document these most recent developments.
- The profitability of domestic and international sales, after evolving in parallel until the crisis years have diverged in the post-crisis stabilisation period. While profit margins on domestic sales continued to expand exports margins have been compressed under apparently stronger price competition in international markets and strong real currency appreciation.
- Estimated export profit margins for the manufacturing industry as a whole appeared above their 1999 level at the end of 2005 while domestic margins attained even higher levels.

- Individual sectors' profitability has increasingly diverged and this divergence is deeper in export markets than in the domestic market. The divergence of sectoral profitabilities reflects mainly weakening sectors' loosing their margins more severely in export markets than at home, while sectors which succeeded to preserve their profitability achieved a comparable performance in foreign and domestic markets.
- The contributions of changes in *prices*, *wages* and *productivity* reveal that divergences in the profitability performances are first and foremost due to sectors' uneven ability to preserve and increase their *prices* against the pressures of international competition. *Labour productivity growth* also diverges across sectors, as do their paces of *real wage growth*. Figure 3.A1.1 displays these contributions to export profit margins in the manufacturing industry as a whole.

Figure 3.A1.1. **Contributions to export profit margins in manufacturing industry (1998-2005)**

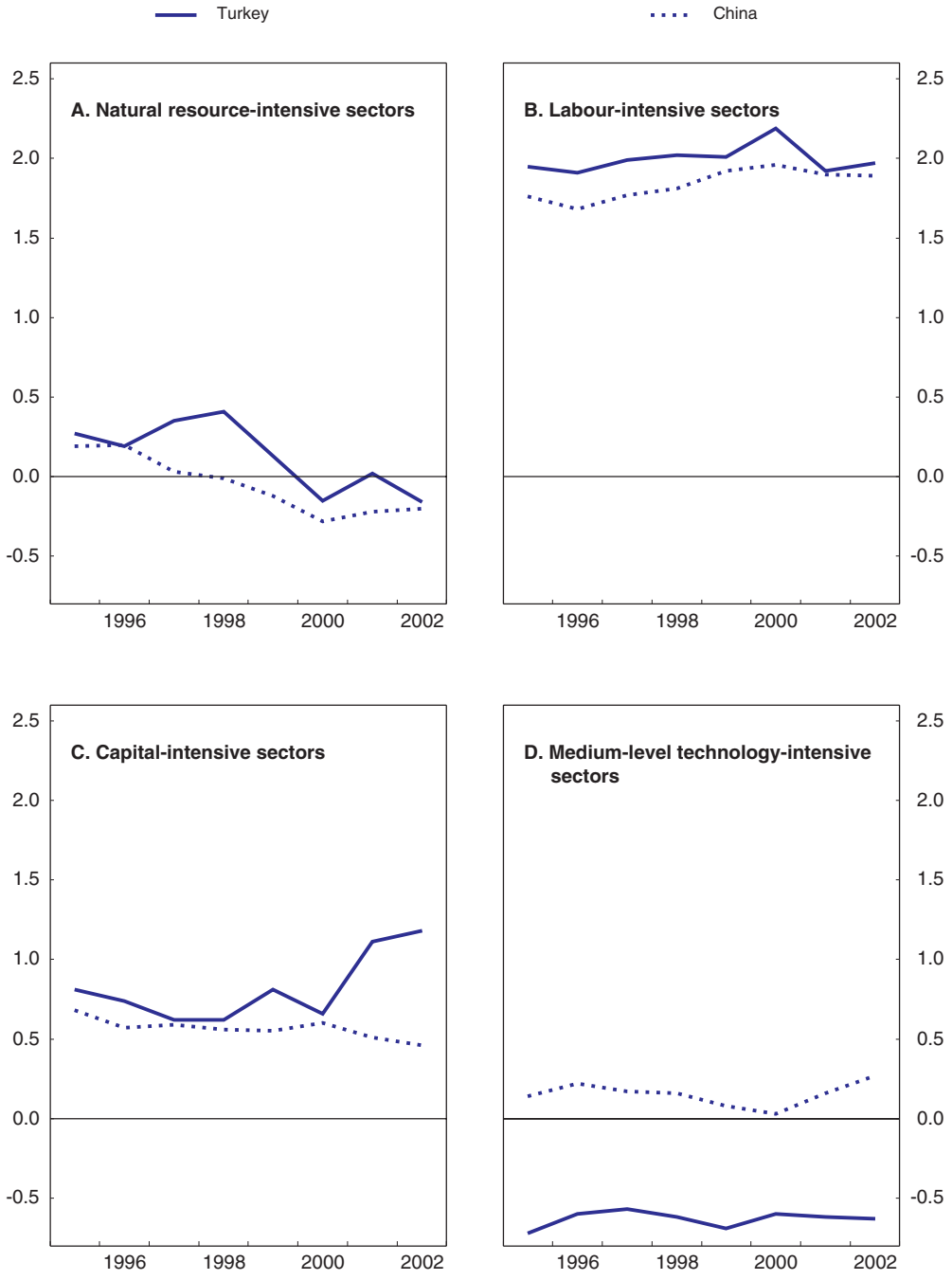
Percentage change in export profit margins and estimated contributions of export prices, real wages and productivity



Note: For the decomposition formula of contributions, please refer to the text.
1. Export price increases contribute positively.
2. Real wage increases contribute negatively.

- As a result of these differences in the determinants of their margins, manufacturing sectors cluster in three groups:
  - *i)* sectors which do consistently well along the three determinants of competitiveness[5] and, as a result, cope successfully with the pressures of appreciation. These sectors include electronics, industrial machinery, steel and car manufacturing (*highly-competitive sectors*);
  - *ii)* sectors which, in contrast, tend to under-perform in all three dimensions and consequently face a severe deterioration in their competitiveness. Textile, clothing and leather industries are in this situation (*declining sectors*); and

Figure 3.A1.2. **Revealed comparative advantages:[1] Turkey *vs.* China**



1. The "Revealed Comparative Advantage" (RCA) indicator proposed by Wollrath (1991) was compiled for China and Turkey for the period 1995-2002. It is defined as RCA = [(Xij/Xit)/(Xnj/Xnt)]/[(Mij/Mit)/(Mnj/Mnt)] with X = exports, M = imports, i = country, j = product, n = all countries and t = all products.

Source: Seymen and Şimsek (2006).

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iii) sectors with a mixed performance, either because they combine good and bad performances in different determinants of competitiveness or achieve only average performance in all of them. Several industries such as plastics, electrical equipment, metal product and furniture manufacturing are in this case. They have resisted generally well to the pressures of appreciation to date but remain vulnerable (*intermediary sectors*). To illustrate the continuing pressures from international competition, Figure 3.A1.2 shows Turkey's continuing exposition to competition from China.

Table 3.A1.1. **Performances of individual sectors**

Sectors	Performance
Highly competitive sectors	
Car manufacturers	Firms have achieved remarkable wage moderation over the past two years despite a successful pickup in their prices and profits.
Electronic goods	Manufacturers have achieved significant wage moderation under strong downward pressures on prices and profits.
Steel	The sector benefited from exceptional price and profitability increases (due to excess demand in international markets) but avoided wage drifts.
Intermediary sectors	
Electrical machines	In response to growing import competition from China producers have shifted to higher value-added products.
Metal products	Firms have not stopped developing their international activity in spite of narrowing export profit margins.
Furniture	Manufacturers responded to a sharp loss of competitiveness by accelerating productivity gains and by shifting to higher value-added products.
Plastics	Manufacturers reacted to a sharp fall in international prices with very strong productivity gains.
Declining sectors	
Textiles	In spite of steep price declines and mediocre productivity gains, firms were effectively forced to grant above-average wage increases, due to large increases in the minimum wage.
Clothing	Protection measures against Chinese exports in OECD markets in 2005 permitted some restoration in margins, without however slowing down sharp employment adjustments.
Leather manufacturing	Producers recently improved their product differentiation and pricing power. A pickup of exports ensued but employment adjustments continue.

The *extended* model confirms these broad trends and provides additional insights. When capital and energy costs are taken into account : *a)* the erosion of competitiveness becomes less sharp in the pre-crisis period 1998-2000; *b)* the recovery of competitiveness appears less startling during crisis years; *c)* estimated performance improves in the post-crisis reform and stabilisation period. The details of this decomposition will be provided in the background Working Paper.

- Changes in *interest rates* have a non-negligible influence.[6] In the past credit costs soared in Turkey in periods of macroeconomic strain and currency depreciation, and declined in periods of macroeconomic stabilisation and currency appreciation. The variation of capital costs partially offsets the impact of the exchange rate fluctuations on competitiveness. Notably, the decline of capital costs in the most recent post-crisis stabilisation period has made an important positive contribution.
- *Energy costs* also showed a high variation and affected profit margins.[7] However, the estimated effect of energy costs appears more limited than the estimated effect of interest rates.

Notes

1. Data average out performance differences between firms *within sectors*. Also, the competitive performance of very small firms which usually account for a limited share of output but a sizeable share of employment is not fully reflected. This limited coverage is due both to *i)* many firms' not accurately reporting their actual output and employment levels, and *ii)* their falling below the minimum size thresholds in Surveys. The Quarterly Manufacturing Output and Employment Surveys of the State Statistical Institute provide generally good quality data, but exclude enterprises employing less than 10 workers. In contrast, Quarterly Household Labour Force Surveys and Quarterly Sectoral GDP data from National Accounts provide a fuller coverage of the business sector, but at the expense of data precision and quality. Since this analysis focuses on *changes in* rather than *levels of* productivity (as *changes* of productivity bear on the profitability indicator), the Manufacturing Output and Employment Survey has been utilised.
2. *Interest rates* and *energy costs* varied strongly between 1998 and 2005, as a result of fluctuations in *credit* and *currency* markets, and changing *energy taxes*. The weight of debt service (interest) in total enterprise costs was estimated using the Turkish Central Bank's sectoral balance sheets database. The measure of "interest rates for real sector credits" published by the Central Bank was used to estimate the rates of change in capital costs. For energy costs, sector-specific energy intensity matrixes from the State Planning Organisation were used to estimate sector-specific cost weights and the "wholesale energy price index" of the Central Bank was used to estimate the rates of change in energy costs.
3. The export prices of manufacturers depend both on the level of international prices (reflecting the unit labour cost performance of trade competitors) and domestic manufacturers' ability to earn a product differentiation rent over international prices. The second and third factors (labour productivity and wages) together determine unit labour costs at the domestic level. The ratio of export price growth and unit labour cost growth provide a proxy for export profit margins.
4. This observation appears consistent with available estimations of exchange-rate pass-through to domestic prices. Re. CBT reference.
5. Or in at least two of them, together with an average performance in the third.
6. Their share in total enterprise costs is limited but their high variance ensures that they play an important role. The decline of real interest rates before 2000-01 helped to offset the pressures of currency appreciation, their subsequent sharp increase during the crisis moderated the (otherwise) stronger surge in profitability.
7. The variation of energy costs is high because of the high share of imported fuels in total energy consumption, the fluctuations in exchange rates, and the high variation of energy taxes. Discretionary political control of electricity prices has also made them subject to cycles of price repression, followed by (frequently abrupt) adjustments.

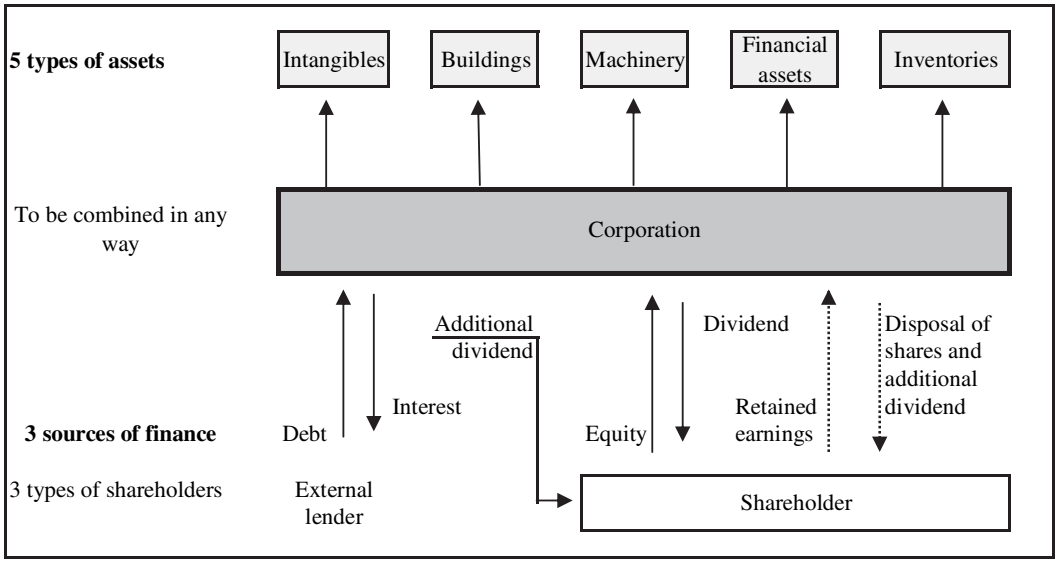
ANNEX 3.A2

The effective tax burden of companies in Turkey[1]

Methodology

The measuring of effective corporate tax rates follows the Devereux/Griffith approach.[2] This approach considers an incremental, hypothetical corporate investment. The investment we assume consists of five different types of assets (intangibles, industrial buildings, machinery, financial assets, and inventories). Three different sources of finance are considered: retained earnings, new equity, and debt. Figure 3.A2.1 describes the structure of the model, although when calculating the effective average and marginal tax rates only the corporate level is considered and not the level of savers. This is adequate in the case of location decisions of multinationals, because domestic shareholder taxation does not effect decisions of multinationals under substantial international capital mobility.

Figure 3.A2.1. **Structure of the model**



The model considers several important economic parameters: the market interest rate, the rate of inflation, geometrically declining economic depreciation of intangibles, industrial buildings and machinery, and the pre-tax rate of return on the investment. In order to isolate the effects of taxation from other economic effects, these economic parameters are set as exogenous, except for the calculation of the pre-tax rate of return of

a marginal investment. This means that their values are supposed to be equal for all investments regardless of their location. Consequently, real interest rates and also nominal interest rates are equal across all the locations and regardless of the level of profitability of an investment. We assume a corporation in the manufacturing sector which undertakes a particular mix of investments and uses a particular combination of sources of finance. Table 3.A2.1 presents the assumptions of the calculations, Table 3.A2.2 the tax parameters.

Table 3.A2.1. **Assumption of the calculations**

Assumption on...	Value
Legal form	Corporation
Industry	Manufacturing Sector
Assets	Intangibles, industrial buildings, machinery, financial assets, inventories (at equal weights)
Sources of finance	Retained earnings, new equity, debt (at equal weights)
True economic depreciation	Intangibles – 12.5 years Industrial buildings – 53 years Machinery – 11 years
Real interest rate	5%
Pre-tax real rate of return (for calculation of EATR)	20%
Inflation rate	2%

Table 3.A2.2. **Tax parameters used in the calculations**

Turkey	2005	2006 before reform	2006 after reform
Nominal corporate income tax rate	30%	30%	20%
Effective Real Estate Tax	2.1%	2.1%	2.4%
Valuation of inventories	Weighted average cost	Weighted average cost	Weighted average cost
Capital allowances for			
Industrial Buildings	Year 1-5: Declining Balance 20%, Year 6-10: Straight-Line, 6.55%.	Year 1-5: Declining Balance 20%, Year 6-10: Straight-Line, 6.55%.	Year 1-5: Declining Balance 20%, Year 6-10: Straight-Line, 6.55%.
Intangibles	Year 1-7: Declining Balance 13.32%, Year 8-15: Straight-Line, 4.55%.	Year 1-7: Declining Balance 13.32%, Year 8-15: Straight-Line, 4.55%.	Year 1-7: Declining Balance 13.32%, Year 8-15: Straight-Line, 4.55%.
Machinery	Year 1-4: Declining Balance 28.57%, Year 5-7: Straight-Line, 8.68%.	Year 1-4: Declining Balance 28.57%, Year 5-7: Straight-Line, 8.68%.	Year 1-4: Declining Balance 28.57%, Year 5-7: Straight-Line, 8.68%.
Investment allowance for			
Industrial buildings	Allowance of 40% of acquisition cost in addition to ordinary depreciation.	–	–
Machinery	Allowance of 40% of acquisition cost in addition to ordinary depreciation.	–	–
Personal income taxation			
Taxation of dividends	0%-20%	0%-17.5%	0%-17.5%
Taxation of interest	0%-40%	0%-35%	0%-35%
Taxation of capital gains	0%	0%	0%

Results

The effective average tax rate (EATR) measures the effective tax burden on profitable investments, whereas the effective marginal tax rate (EMTR) depicts the effective tax burden on a marginal investment earning only its cost of capital. Therefore the EATR is an indicator for the attractiveness of a location for international companies. Detailed results are presented in Table 3.A2.3. The elimination of the 40% investment allowance at the end of 2005 increased the overall EATR from 23.5% to 27.0% but the reduction in the statutory corporate tax rate from 30% to 20% reduced the EATR to 18.0%. As the model calculations only consider the level of the firm (*i.e.* disregard the taxation of dividends at the household level), EATRs are the same for both types of equity financing (retained earnings and new equity). But the EATR of a debt-financed investment is lower as the firm can deduct interest payments so that only the higher return (relative to the market interest rate) is taxed at the corporate level. Although EMTR is less important for international investment decisions, Table 3.A2.4 provides some supplementary information. The lower the EMTR, the larger the theoretically optimal level of an investment. It is shown that the existence of the generous 40% investment allowance had reduced the EMTR to a very low level (5.5% in 2005) while its elimination by the end of 2005 raised the EMTR significantly (20.3%). After the recent the cut in the corporate tax rate the EMTR is now again relatively low (13.2%), although above the 2005 level.

Table 3.A2.3. **Effective Average Tax Rates (EATR) at Corporate Level**

Per cent

Turkey	2005	2006 before reform	2006 after reform
Overall average (EATR)	**23.5**	**27.0**	**18.0**
Average for each source of finance			
Retained earnings	27.0	30.4	20.4
New equity	27.0	30.4	20.4
Debt	16.6	20.0	13.4
Average for each asset			
Buildings	18.5	23.1	15.7
Intangibles	29.0	29.0	19.3
Machinery	12.6	25.3	16.8
Financial Assets	29.5	29.5	19.6
Inventories	28.0	28.0	18.7

Source: ZEW.

Table 3.A2.4. **Effective Marginal Tax Rates (EMTR) at Corporate Level**

Per cent

Turkey	2005	2006 before reform	2006 after reform
Overall average (EMTR)	5.5	20.3	13.2

Source: ZEW.

The Centre for European Economic Research (ZEW) prepared several international studies, which compare the effective tax Burden of Companies. Figure 3.12 in the main text provides an international comparison of the effective average tax rates in Europe. The EATRs on investments are based on an actual study about "The Effective Tax Burden of Companies in Europe", with the new information on Turkey added on.[3]

Notes

1. This annex is based on the work by the ZEW, Zentrum für Europäische Wirtschaftsforschung, Centre for European Economic Research, Mannheim, Germany and the calculations as shown here and in the main text have been carried out by Michael Overesch, ZEW, with the tax parameters provided by the Turkish Ministry of Finance.
2. See Devereux, M. P. and Griffith, R. (1999): The Taxation of Discrete Investment Choices, IFS Working Paper W98/16, Revision 2.
3. See Overesch, M. (2005).

ANNEX 3.A3

Surveys on the competitive strengthsand weaknesses of firms of different sizes

In 2002, The Istanbul Chamber of Industry (ISO) surveyed 500 enterprises of different sizes across Turkey and asked them to evaluate their own strengths and weaknesses in the face of international competition. Large, small and medium-sized firms were investigated separately and the findings are summarised below. The results of the Survey are interesting, also because they reveal how quickly the international competitive scene is changing and how much perceptions about different players' strengths and weaknesses may prove elusive:

- Enterprises of all sizes considered themselves to be in a generally favourable position *vis-à-vis* their trade competitors. This positive assessment was systematic across all parameters of performance, including price competitiveness, quality of products and response-time-to-market of production facilities.
- Competition from low-wage countries was not on the radar screen of enterprises in 2002. Only very large enterprises saw Chinese and Indian firms as their direct competitors.
- The Turkish Lira was undervalued at the time of the Survey. Enterprises of all sizes saw their price competitiveness as solidly established – a perception challenged by subsequent developments.
- Enterprises had precise views on their weaknesses *vis-à-vis* trade competition. Firms of all sizes wanted to move away from pure price competition and saw technical upgrading, product differentiation and marketing muscle as key priorities.
- Medium-sized firms were particularly confident about their competitive strengths. The share of firms claiming to have a competitive advantage over both EU and non-EU competitors was highest among medium-sized firms.
- Large-size firms identified their main competitive handicap as infrastructure costs. These included energy, water and infrastructure tariffs. In all other areas, from labour costs to management performance, the majority of large firms found that they were matching international competition.
- Small firms found that they were lagging competition in the areas of information technology, research-and-development, international brand image and infrastructure costs.
- Medium-sized firms felt that their two main handicaps were their limited research-and-development capability and their high infrastructure costs.

The State Statistical Institute carried out a similar Survey on the innovation and technological activities of firms of different sizes during 2002-04. It found that:

- Large firms (> 250 employees) were more engaged in innovative projects, around 55% of them reporting innovative investments, both in manufacturing and service sectors.
- Small firms (10-49 employees) were less engaged in innovative activities, in a proportion of 37% in manufacturing and 25% in services.
- Medium-sized enterprises (employing between 50-250 employees) ranked themselves between the two groups, with a proportion of 40% innovators among manufacturing firms and 31% in services.
- *Highly competitive sectors* such as automotive and electronics are prominent innovators, with respective proportions of 60 and 81% of firms engaged in innovative projects.
- *Declining sectors* such as textiles and clothing have a narrower, yet non-negligible percentage of innovative firms.
- The *intermediary sectors* of metal products, food, furniture and machinery-equipment also seem to maintain an innovative drive with 30 to 50% of firms reporting technological innovation projects.

ANNEX 3.A4

Dynamic medium-sized enterprises' access to credit and equity capital

Dynamic medium-sized enterprises have made limited use of formal banking and financial services to date – even if they have taken full advantage of government-subsidised credit.[1] They are funded to a large extent by own-equity and inter-enterprise trade credit, which serve as the main financing channel of this sector in Turkey.[2] The "participation banks" have also gained some market share in the working-capital and export financing of dynamic enterprises.[3]

These enterprises now also need standard banking and financial services. In particular, the demand for and potential supply of medium-to-long-term investment credit[4] is expected to develop rapidly. Enterprises' investment for modernisation and long-term asset-building increase demand for such funding, and the decline of real interest rates makes such funding more attractive. Recent entries of prime international banks have also stimulated the supply of a new financial products to the enterprises.[5]

To fully benefit from this supportive environment, medium-sized enterprises need to improve their corporate governance and financial reporting practices. Banks' new credit allocation procedures, resulting from both their modernisation strategies and new banking laws, are expected to force borrowers to provide more transparent and reliable financial accounts. Implementation of the "Basel II" prudential rules in Turkey from 2007 is expected to change the way banks allocate capital to risks and change banks' need for information about their loan customers. Each bank has to decide between a "standardised" approach (resorting to external credit rating) or an "internal ratings-based (IRB)" approach for all its lending business. Whether their bank adopts the standardised approach or the IRB approach, borrowers of all sizes will have to be able to: *a)* deliver either to banks or external credit assessment institutions high quality financial statements; and *b)* demonstrate – through good corporate governance and independent audits of financial statements -that there are good reasons for relying on such financial statements. (If they do not comply with these requirements their credit demands will fall into a significantly higher risk category (akin to non-collateralised household loans), and may be may rejected or imply higher costs.[6] Standard business plans also need to be prepared and shared with long-term lenders.

In 2005 most Turkish firms – unless compelled to do so under capital market laws because they had offered securities to the public – remained reluctant to publish financial statements audited by an external, independent auditor. Furthermore, only around 3-4% of registered firms are thought to have standard business plans. If produced along best

practices, a b*usiness plan* represents a formalisation of the enterprise's strategic, managerial and financial outlook, set out in the following: *i)* the *description of the business* setting out the products and the legal structures of the business; *ii)* the *marketing plan* reviewing customers and competitors and pricing strategies; *iii)* the *financial plan* a balance sheet, an income statement and cash flow projections.[7] Privately held firms in Turkey rarely develop such formal descriptions and plans.

Medium-to-long term credit has nevertheless picked up in form of export loans provided by foreign suppliers of capital goods. As discussed in Chapter 2, the improvement in Turkey's credit risk and trend currency appreciation reduced both the service costs and the face value of foreign-currency loans during 2004-05. Total foreign currency debt of non-financial firms increased from USD 11 billion in 2002 to USD 15 billion in 2003, USD 23 billion in 2004 and USD 28 billion in 2005 (8% of GDP). As dynamic, medium-sized firms (and more generally the non-financial sector) are not subject to any prudential borrowing regulations – while banks and financial firms are – they need to voluntarily adopt strategies and practices to carefully manage their exposure and risks.

A similar change of scene is also happening in the equity-funding of enterprises. The main new avenues of development are: *i) venture-capital and private equity*: the emerging domestic and international interest in this area remains still marginal in practice; *ii) merger, acquisition and other equity participations* by non-financial domestic and international firms, which are on the rise;[8] and *iii) initial and secondary public offerings (IPOs and SPOs)* on the stock market, which are slowly picking up.[9] Medium-sized firms are likely to need more such equity funding in the future.[10]

Both creditors and equity investors in these firms will expect more transparency and more reliable corporate governance, to protect their interests as lenders and minority investors. Publicly held companies (*e.g.* companies with more than 250 shareholders as well as companies listed on the Istanbul Stock Exchange) are subject to more rigorous financial reporting standards and must have their annual financial statements audited by independent, external auditors. There were 625 publicly held companies at the end of 2005, including 303 listed companies. The Capital Markets Board of Turkey (CMB) has also issued voluntary corporate governance principles, inspired by the OECD Principles of Corporate Governance. While a number of listed firms demonstrate a willingness to gradually align with such standards, overall compliance remains uneven in some key areas, including disclosure about major participations in other companies, significant direct shareholders, significant related party transactions and the quality of auditor oversight and supervision of financial statements. Prevailing corporate governance practices reflect in many firms the dominance of controlling owners who generally limit the capital share of third party investors. As a consequence the latter generally have not, to date, played an active role in enforcing their shareholder rights. The protection of minority investors rests primarily upon a public enforcement model, with the CMB playing a leading role in enforcing the relevant laws.

The asymmetry between controlling and minority owners is likely amplified in closely-held corporations. A recent study of corporate governance in Turkey concluded that, in general, "family control is valued more than efficiency… it is not really accepted that assets belong to the company and not to controlling parties… and tax concerns do not favour transparency".[11] More recently, draft revisions to the Turkish Commercial Code (TCC) have aimed at extending comprehensive financial reporting standards (based on International Accounting Standards Board (IASB)'s International Financial Reporting

Standards (IFRS) to all companies, irrespective of their size and status. On balance, the potential advantages of implementing IFRS in Turkey at this time are significant, and so the proposed reform is supported. This ambitious proposal, however, could present some concerns about compliance costs and compliance capabilities for small firms unless, for example, a phased-in approach or streamlined reporting framework for the smallest firms is also implemented. The Turkish Accounting Standards Board, which under the proposed amendments would be granted the authority to set national accounting standards consistent with IFRS, expects to be able to introduce IFRS-compatible standards for small firms at about the same time as the relevant, proposed amendments to the TCC come into effect. It will be important for the authorities to ensure that an appropriate financial reporting framework for small firms is introduced and that small firms have the right incentives, resources and support to implement the new standards, in order to ensure that this proposed amendment does not create an additional incentive to operate informally.

Under the authority of its Steering Group on Corporate Governance, OECD conducted a Pilot Study of corporate governance in Turkey in 2005-06.[12] The study focused on publicly held companies and evaluated the extent to which the OECD Corporate Governance Principles have been implemented by the authorities and the private sector. While noting that the overall corporate governance outlook for publicly held companies is positive, the study stresses the importance of implementing certain key reforms, including: *a)* proposed reforms to the company law provisions in the TCC; and *b)* amending the laws governing pension and mutual funds to facilitate the exercise of their rights as shareholders. The study also comments favourably on public and private sector initiatives to diffuse knowledge about the benefits of international good practices throughout the business community, including through new self-regulatory organisations (SROs) that could conduct research and offer training.

The collateral regime is also in need of improvement. Movable asset registries exist only for vehicles, boats, intellectual property and trademarks. As a result, small firms cannot easily pledge most of their assets, notably their equipment and other movables. On the other hand, few cadastres have automated their processes and computerised records, making it costly to use land as collateral. The collateral requirements for formal sources of credits are also very high (about 200%) and personal guarantees are often required for corporate borrowing. Improving the collateral regime would both strengthen lenders' protection and reduce the costs of borrowers.

Lenders also have fragmented and limited information about small firms' repayment behavior. Turkey has two credit information registries, one managed by the Central Bank and another managed by a private bureau, but the information available about the credit and repayment history of small-size borrowers is thin. Phasing in Basel II regulations in 2007, which is likely to result in more published credit ratings of firms as well as increasing banks' demand for more nuanced and reliable data about small firms' repayment behaviour, is expected to stimulate this activity.

Notes

1. Such as Halk Bank and Eximbank. Halk Bank granted subsidised loans to small-and-medium sized businesses. After the 2001 crisis these loans were drastically reduced and their costs became closer to market rates, the bank is now in the process of being privatised. Eximbank continues to extend working capital loans and guarantees to exporters.

2. Inter-enterprise credits are bi-lateral and information-intensive credit channels between trade partners. Cascades of trade credits, notably in form of trade bills and pre-dated checks are re-cycled by their holders according to the credibility of their issuers. Entirely informal, they are not subject to any intermediation taxes.
3. Participation banks provide funding inspired by "islamic" principles, such as no-interest lending (but claiming a share of the profit earned in the operations that they finance).
4. Long-term investment loans were traditionally provided by two special financial institutions sponsored by the World Bank: the Turkish Industrial Development Bank (TSKB) and the Industrial Investment Bank (SYB).
5. As an example, the first product innovation launched after the take-over of 50% of the up-market Turkiye Ekonomi Bankasi (TEB) by Banque Nationale de Paris in 2005 was the introduction of a new "SME-credit package".
6. The implications of the "Basel II" rules for the Turkish commercial loan market were reviewed in the OECD Economic Survey of Turkey 2004.
7. See, OECD, "A Framework for the Development and Financing of Dynamic Small and Medium Sized Enterprises in Turkey", OECD Center for Private Sector Development, Istanbul, 2005.
8. Merger and acquisition investments (excluding privatisation purchases) were estimated at USD 113 million in 2003, USD 1.2 billion in 2004 and USD 12.1 billion in 2005 (around 3% of GDP). Thirty-three among the 92 acquisition deals recorded in 2005 were by foreign investors.
9. Initial Public Offerings (IPOs) and Secondary Public Offerings (SPOs) in the Istanbul Stock Exchange (ISE) rose from USD 11 and 89 million respectively in 2003 to USD 613 and 701 million in 2004 and to USD 1.75 and 1.39 billion in 2005 (nearly 1% of GDP together in 2005). Fourteen medium-sized firms were listed in the Second Market of ISE in 2005.
10. Potential underwriters and intermediaries anticipate an acceleration of industrial restructurings involving outside equity injections. See for example: ISI Emerging Markets, "Deal Watch Turkey", 2006.
11. See Institute of International Finance (2005).
12. See OECD (2006), forthcoming.

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Chapter 4

Making the pension system less of an obstacle to formalisation

Recent social security reform has significantly improved the long-run sustainability of the pension system. However, the pension system continues to serve as an important barrier to a more rapid expansion of the formal-sector economy in two ways. First, early-retirement incentives (including severance payments) continue to push many middle-aged workers into the informal sector. Second, even when the transition to the new pension rules is complete, net replacement rates will remain very high by OECD standards, requiring high social security contribution rates that make it too expensive for firms to employ low-skilled labour in the formal sector. Thus, further pension reform is one of the keys to overcoming Turkey's economic duality. Finally, since the pension system does not cover the informal sector, it does little to alleviate poverty among the wider population of older people. This chapter discusses a number of reforms that would increase the retirement age, reduce inter-generational inequities, and permit a significant cut in the tax wedge on labour, while better addressing old-age poverty concerns at all levels of income.

Before May 2006, the Turkish social security system was made up of three separate social security institutions: SSK, for private and public sector workers; Emekli Sandiği (ES), for civil servants; and Bağ-Kur, for self-employed workers and farmers. Together, the system has been running deficits for more than a decade, despite very favourable demographics. Over time these deficits have required increasingly large transfers from the general budget (Figure 4.1, panel A), prompting several attempts at reform. The first reform, in 1999, led to a temporary fall in the size of the deficits in the SSK and Bağ-Kur systems, although they subsequently started to rise again due to a combination of discretionary increases in the pension level and shrinkage of the premium base. In the Emekli Sandiği (ES) system, only one of the main parameters was changed and deficits have risen continuously.

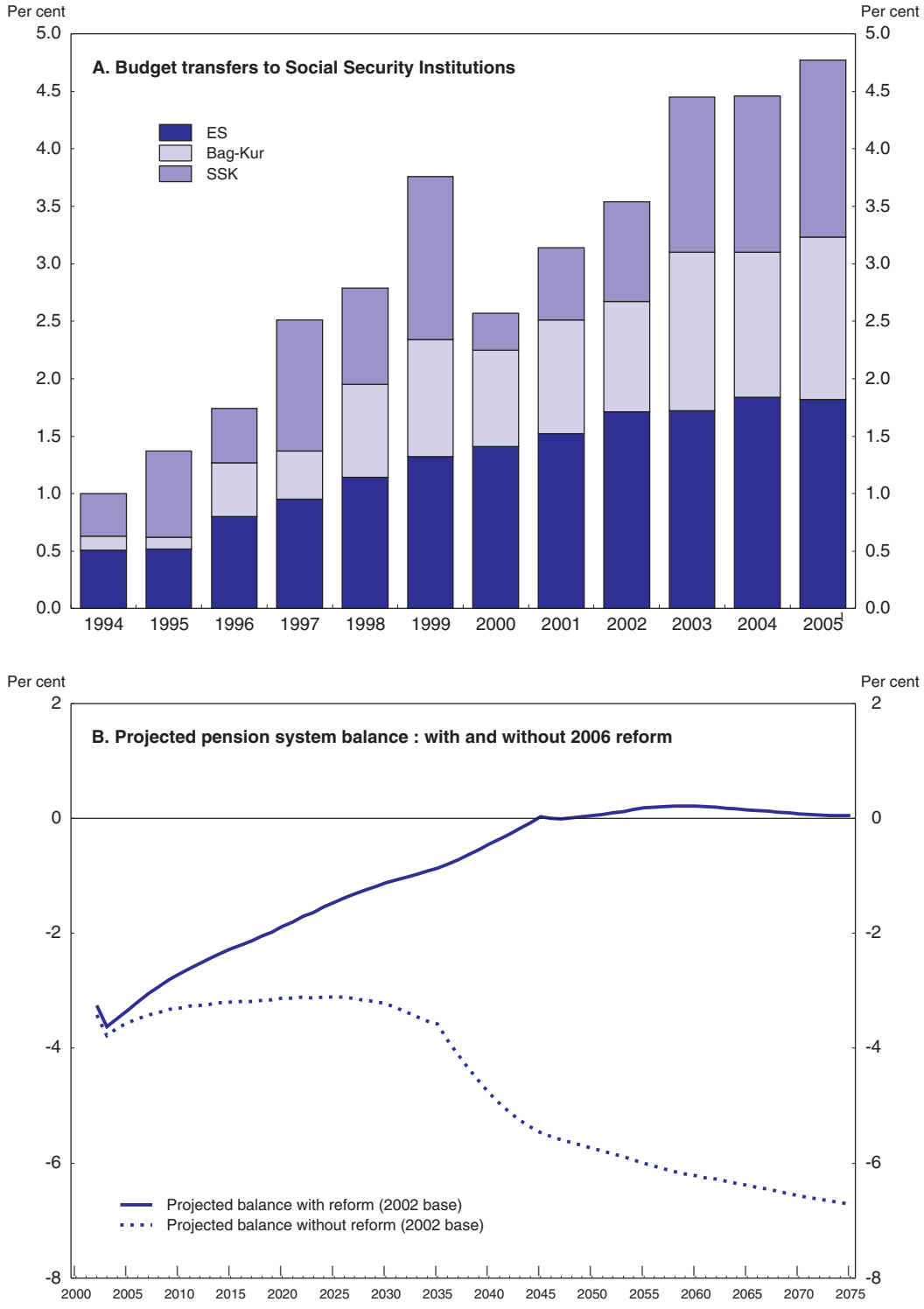
The cumulative value of these deficits between 1994 and 2004, plus their debt servicing cost (calculated using the Treasury bill rate), was 475 billion YTL in 2004 prices, equal to approximately 110% of GDP and 1.5 times the total consolidated debt stock as at the end of 2004.[1] Thus, the unsustainable social security system deserves a large part of the blame for Turkey's fiscal challenges over the past decade. In this context, the 2006 social security reform was essential (see Box 4.1 for a summary). Rather than continuing to increase, actuarial scenarios for these deficits now show them gradually declining over the next four decades and reaching balance by around 2045 (Figure 4.1, panel B).[2]

Despite the essential reforms that have now been passed, the pension system is still a significant barrier to an expansion of the formal sector in two respects. First, the grandfathering of previous early retirement entitlements serves to push the (generally more educated) middle-aged formal sector workforce into the informal sector at a relatively young age. Second, social security contributions remain high, making up a significant portion of the tax wedge which discourages firms from employing low-skilled workers in the formal sector.[3] Moreover, Turkey's pension system does little to address poverty and equity issues in the wider population. This chapter documents these remaining problems with the pension system and proposes some "next steps" for reform to address these issues.

The slow transition to the new rules is expensive and creates poor incentives for formal sector participation

The new pension rules are being phased in too slowly in two respects. First, although the pension eligibility age in Turkey is the lowest in the OECD, it is expected to increase only very gradually (see Figure 4.3, top panel). This problem originated between 1986 and 1992 when populist measures eliminated the minimum retirement age, permitting retirement in some cases after less than 15 years of contributions, apparently in the hope that it would cut unemployment. It did not – although it did send the social security deficit soaring and permit early retirees to continue working informally while drawing their pension (see Box 4.2). Despite the stricter conditions for early retirement that were introduced with the 1999 reform, more than half of the current pensioners in the system

Figure 4.1. **Deficits in the pension system**
Per cent of GNP



Source: Social Security Institutions.

Box 4.1. **The 2006 social security reform**

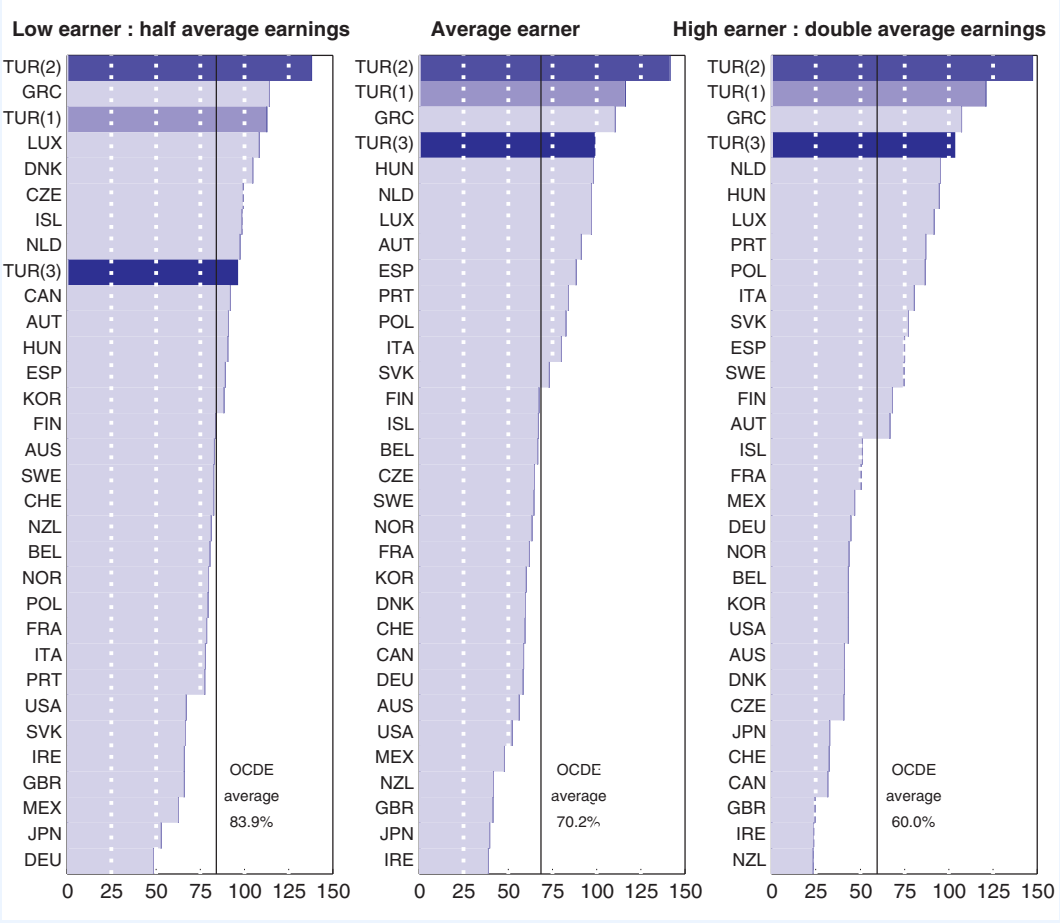
Following considerable delays, two new social security laws, both of which constituted structural performance criteria in Turkey's IMF program, were passed into law in May 2006. The social security administrative reform law became effective as of May 2006 and the social insurance and health reform law will take effect in January 2007.[1]

The first of these laws (the social security administrative reform law) will unify the three social security institutions into one. This change will considerably improve the ability of the administration to accurately monitor the number of insured persons, revenues and expenses, as well as to provide better customer service. The benefits of a unified system are perhaps greatest in the area of health financing (as discussed in Box 2.5). However, an important benefit in the area of pensions will be the facility with which social security registration can be enforced. Finally, the establishment of an integrated social security system will also permit greater mobility of the workforce between the public, private, and self-employed sectors, thus also potentially contributing to higher labour productivity.

The second law (the social insurance and health reform law) unifies the three pension systems by introducing a single pension formula which is based on more sustainable parameters than those currently in force. Figure 4.2 illustrates the impact of this change by comparing *full-career* net replacement rates in

Figure 4.2. **Net replacement rates: international comparison**

Net pension as a percentage of individuals pre-retirement earnings



1. Turkey: pre-99 SSK system.
2. Turkey: 2000-06 rules for SSK.
3. Turkey: 2007 long-run parameters.

Source: OECD, *Pensions at a Glance*, 2006, and Secretariat calculations.

Box 4.1. **The 2006 social security reform** *(cont.)*

other OECD countries with those in Turkey under three sets of pension rules: the pre-1999 rules (system 1); the 2000-06 rules (system 2); and the post-2016 rules (system 4).[2] Although replacement rates were already high under system 1 (see Annex 4.A1 for further discussion), it is clear that system 2, which was introduced in 1999, implied even higher replacement rates. It is therefore fortunate for Turkish public finances that the 2006 reform has cut replacement rates back. In practice, no worker would receive a full-career replacement rate under system 2, since this system has been in place for only 7 years. As discussed later, however, workers who participated in the formal labour market over this 7 year period will end up with higher replacement rates than those who did not.

Despite the cuts implied by the 2006 reform, net replacement rates remain high by OECD standards. An important reason for this is the fact that pensioners in Turkey do not pay income tax or health insurance premiums. With the exception of Mexico and the Slovak Republic, all other OECD countries tax pensions, and a significant number also require pensioners to pay health insurance premiums.[3] In addition, some of the new parameters are still quite "generous", although the impact of this is partially offset elsewhere. In particular, the new long-term accrual rate of 2.0% per annum, while lower than previously (meaning that workers now have to work more years for the same pension) still remains relatively high by OECD standards. The only country with a higher rate is Spain. Moreover, the accrual rate in Turkey is even higher – 2.5% per annum – in the short term; only from 2016 will the lower rate of 2.0% kick in. On the other hand, the new valorisation rate is slightly less generous than the OECD average. While in Turkey past earnings will, in future, be valorised by an average of consumer price inflation and economy-wide earnings growth, many other OECD countries put 100% weight on average earnings (which usually grow faster than prices), although some countries (such as Belgium, France and Spain) use only prices, and some use a combination.[4] Pension indexation post-retirement is linked to inflation, as was the case pre-reform.

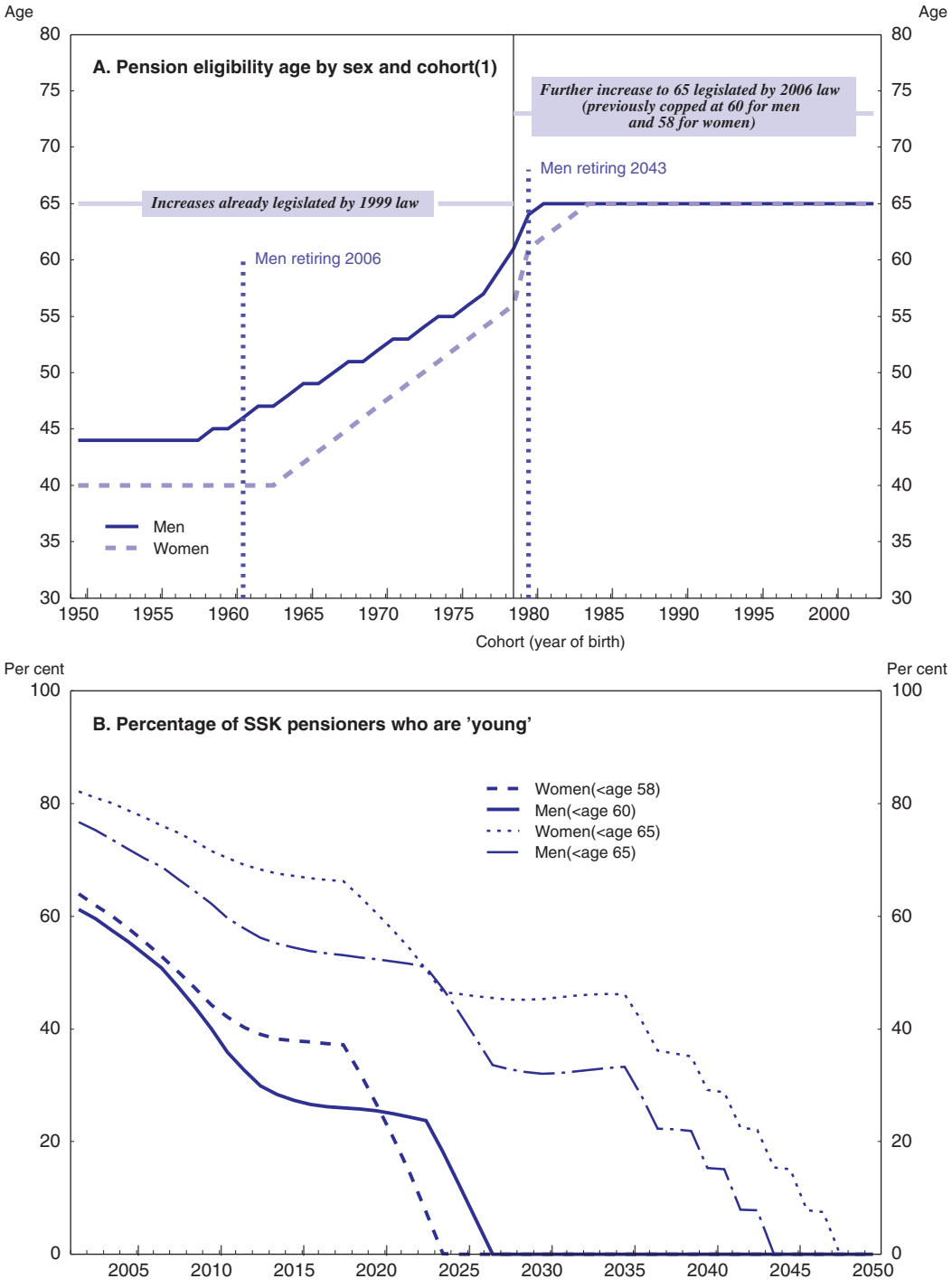
Overall, the improved pension formula explains only part of the projected improvement in the fiscal sustainability of the system. Other important factors include: *i)* an increase in the premium base for ES and Bağ-Kur; *ii)* a change in the indexation of ES pensions from wages to inflation; and *iii)* the gradual phasing in – after 2036 – of a higher minimum retirement age of 65. Although the 1999 reform already legislated for the gradual phasing out of the very young minimum retirement ages that are seen currently, the 2006 reform has also legislated for a further increase to 65 – including for women – between 2035 and 2048 (Figure 4.3, panel A). In the meantime, however, workers are still entitled to full pension benefits at very young ages, providing little incentive for them to continue to work – at least in the formal sector – after qualifying for a pension.

1. The President has appealed several articles of the pension reform law in the Constitutional Court. Following a similar appeal (by an opposition party) of the 1999 reform law, the introduction of several parts of that law were delayed until 2002.
2. The results of system 3, which are guided by some interim rules between 2007 and 2015, are not illustrated.
3. OECD countries in which pensioners pay some level of social security contributions include Austria, Belgium, Finland, France, Germany, Japan, Luxembourg, the Netherlands, Norway and Poland.
4. See OECD (2005) for further details.

for private sector workers (SSK) are still below the *official* retirement age (58 for women and 60 for men). Moreover, more than three quarters of the pensioners are younger than the higher benchmark of 65 years, and this percentage is expected to remain high for several decades to come (Figure 4.3, panel B).

At present women are allowed to retire earlier than men and, because they live longer on average, they typically extract higher implicit rates of return on their contributions. This suggests that some savings could be made, and some increases in female participation rates achieved, by accelerating the equalisation of the retirement ages for women and men.[4] At present, with a pension eligibility age of 44, and a life expectancy (at age 44) of 76, women enjoy an average retirement period of 32 years, whereas men, with a pension eligibility age of 47, enjoy an average retirement period of 28 years (given life expectancy of 75 at age 47).[5] No other OECD member country has such long average periods of pension eligibility.

Figure 4.3. **Minimum pension eligibility age is only gradually being increased**



1. This chart presents pension eligibility ages for those workers who had not already retired at the time the 1999 law was introduced. Prior to the 1999 law, some workers could retire younger than the age presented here (as discussed in Box 3.2). The minimum eligibility ages presented here assume that each worker joins the labour force at 20.

Source: Social Security Institutions and OECD.

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Box 4.2. **Early retirement incentives and continued work incentives**

Under the rules introduced between 1986 and 1992, a Turkish man was permitted to retire after being registered with a social security institution for 25 years and having contributed for 5000 days.[1] Since it was possible for young people to register during their studies, many years before actually starting work, the 5 000 days (or 15 years) of contributions often became the binding criteria, permitting some workers to retire in their late-30s. Neither the 1999 nor the 2006 pension reform have restored the minimum retirement age to the *official* retirement age (which is currently 58 for women and 60 for men)[2]. Instead, the 1999 reform introduced a gradually increasing minimum age scale which largely preserves the early-retirement rights of the existing labour force, while the 2006 reform increases the minimum pension eligibility age only after 2036. As a result, the minimum pension eligibility age is gradually increasing but only slowly (see Figure 4.3, panel A). Even by 2010 there will be many retirees in their 40s, and by 2020 many people will still be qualifying for retirement in their early 50s.

Unlike most other OECD countries, Turkey does not reduce the pension benefit for workers who retire younger than the official retirement age, leaving little incentive for qualifying early-retirees to continue working in the formal sector.[3] Turkish retirees do not pay any taxes on their pension and are entitled to full health insurance, without having to pay any social security contributions. In addition, retirees are eligible to receive a severance payment on retirement, equal to one month's salary for each year of service. Although severance payments are not part of the pension system, this can add up to a substantial sum of money and serves as a significant incentive for retirement.

These rules serve to boost the numbers of middle-aged pensioners working in the informal sector. Indeed, estimates suggest that there are more than 1 million male pensioners working informally. Most of these (approximately 700 000) are aged 50-59, comprising a quarter of the male population in that age group and almost double the number of registered male workers in this age group.[4]

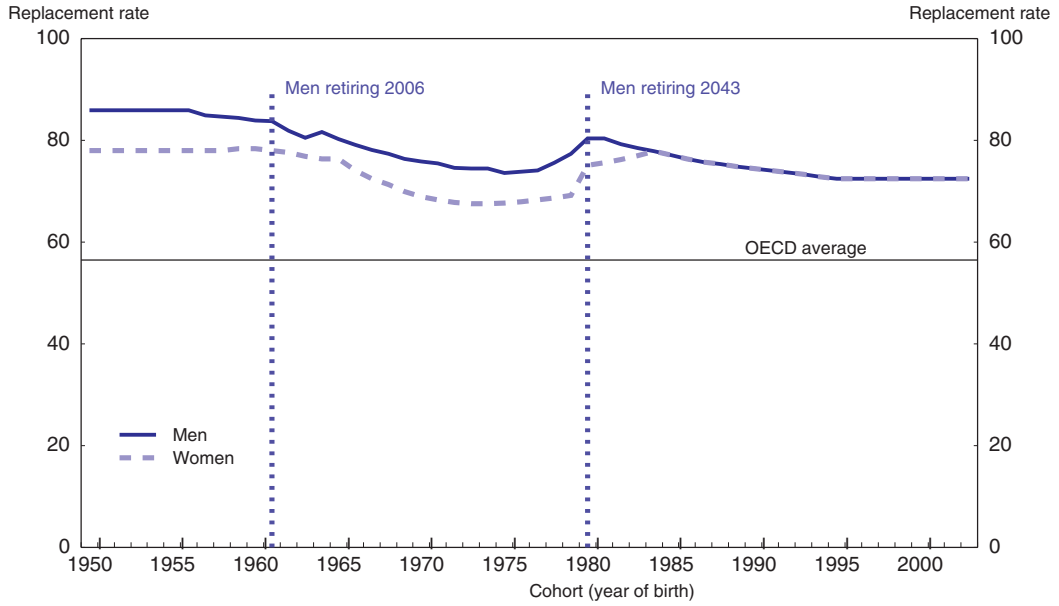
Anecdotal evidence suggests that in the private sector (where unregistered work is widespread), it is relatively common for workers to officially retire, and then to continue to work in the informal market (often for the same employer). This arrangement benefits both the worker (who on top of receiving his or her pension now pays no social security contributions and no income tax) and the employer (who pays no social security contributions on behalf of that worker) with the 2006 reform law. By contrast, if a pensioner remains registered with a social security institution, he or she must pay the full social security contribution rate on his wage and salary income (of between 33.5% and 39%, depending on the industry). The big loser from informality is the government, which suffers from lower tax revenues while still having the obligation to provide all retirees with free health insurance on top of their pensions. To some extent the 2006 reform has even increased incentives for pension-eligible workers to shift to the informal sector, since registered pensioners previously paid social security contributions of only 30% in SSK and 10% in Bağ-Kur. While it does make sense to tax pensioners the full social security contribution rate on their wage and salary income, other policies need to change to provide incentives for continued formal-sector work.

1. For women the rules were even more lenient, requiring just 20 years of registration.
2. Based on the 1950 Pension law No. 5417 the minimum retirement age was originally 60 for both men and women. Subsequently, it was lowered to 55 for women with the 1965 Social Insurance Law No. 506. The minimum retirement age for both men and women was then eliminated altogether in 1969 with law No. 1186.
3. An ES worker is not permitted to continue work as a civil servant after retirement. In the other pension systems, a worker who qualifies for a pension but who wishes to continue to work could choose to delay pension receipt. In this case the final pension would take into account the additional years worked. However, it would be more favorable to the worker to begin pension receipt immediately – which is also possible – in which case there is no increment to the subsequent pension, also implying an implicit tax on continued work. However, the more urgent distortion to correct in Turkey is the lack of a pension reduction for those who retire young, rather than the lack of a pension increment for those who continue working.
4. Of 2.9 million men aged 50-59 only 0.6 million were contributing to a social security institution in 2005, while 1.6 million were receiving a pension. From the Household Labour Force Survey, however, only an estimated 0.9 million men in that age group stated that they were not participating in the labour force due to retirement, suggesting that the remainder (1.6 million – 0.9 million = around 700 000, or ¼ of the male population in that age bracket) were participating informally. Due to very low female labour force participation, the comparable figures for women – both the number of pensioners and the number of informal workers – are much lower.

Second, and also extremely costly, is the grandfathering of previous pension entitlements and the slow speed with which the new pension parameters are being phased in. One of the problems under the pre-1999 system was the lack of a link between social security contributions paid and subsequent retirement salaries. As a result, it was common for many employees to pay the minimum legal social security premium, subsequently being promoted to a higher grade just in time to qualify for an actuarially generous pension.[6] Although a very high percentage of workers are still registered as earning the minimum wage, workers who pay the minimum premium will now have that reflected in their retirement pensions, at least for the post-1999 portion of their working life.

Rather than applying the new pension formula to current workers, however, it will be fully applied only to new entrants to the labour force from 2007. Workers who straddle the different sets of pension rules will have their pension calculated as the weighted average of the full-career pensions that they would be entitled to under each of the four sets of rules.[7] This means that the more generous pension rules of the existing system, and the pre-1999 system, will continue to impact on pension entitlements for many decades to come. In addition, the long-run parameters of the new pension formula will only take effect from 2016, creating an interim formula from 2007-15. Figure 4.4 shows the weighted average gross replacement rates that will result for different sexes and birth cohorts.[8] This chart makes it clear that replacement rates in Turkey will continue to be very high relative to the OECD average.

Figure 4.4. **Effective gross replacement rates by sex and birth cohort after the 2006 reform**



Note: Effective gross replacement rates for an SSK worker earning the average wage and retiring at the minimum age of pension eligibility (see Annex 3.A1 for more details).

Source: Social Security Institutions and OECD pension models.

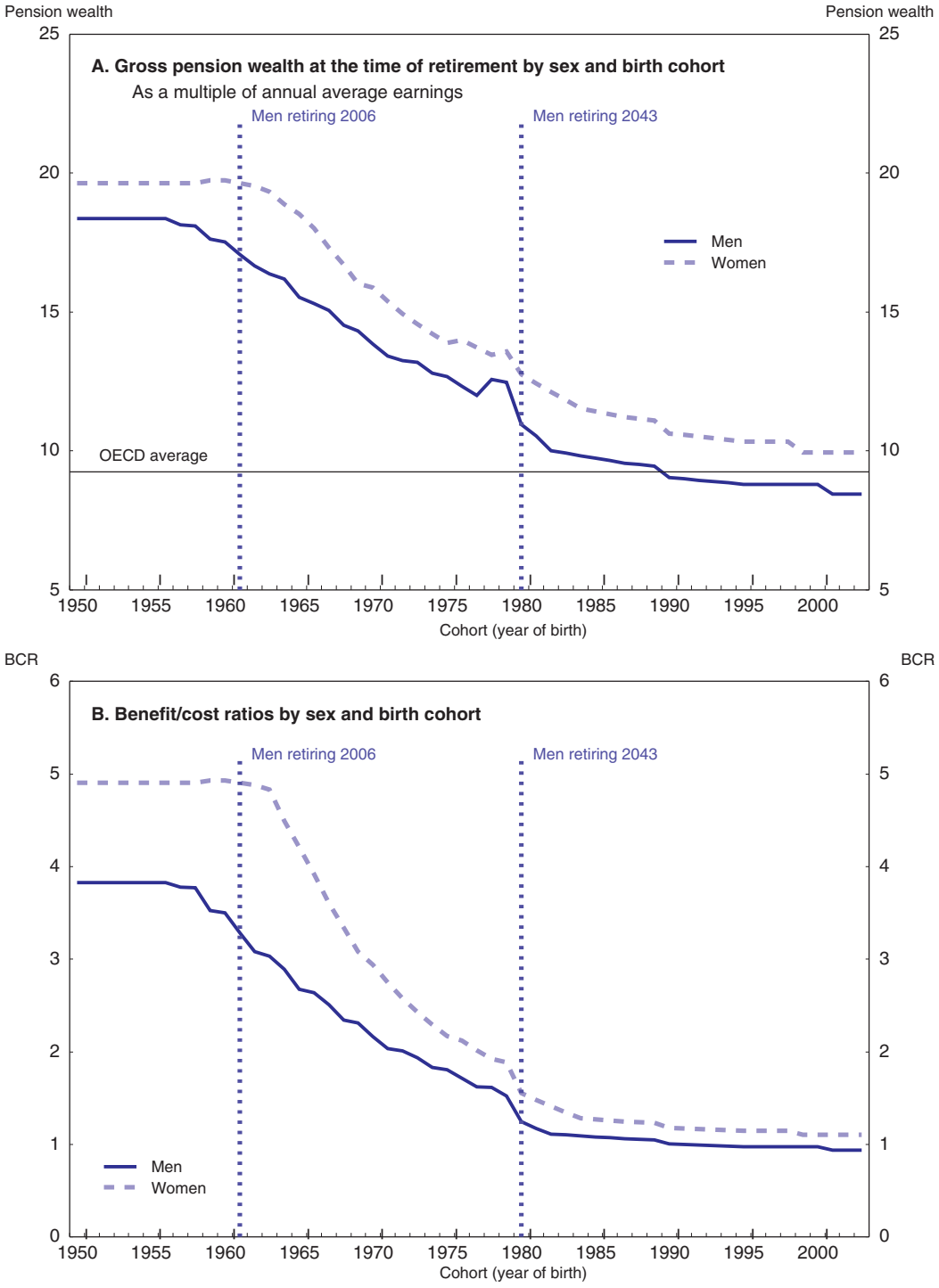
Because of the different pension eligibility ages across birth cohorts, a comparison of replacement rates does not capture differences in the generosity of the system across cohorts. This can better be illustrated by comparing pension wealth (PW) and Benefit/Cost

Ratios (BCRs) across birth cohorts (Figure 4.5). These are calculated by assuming that each person begins work at age 20 and retires as soon as he or she qualifies. The results illustrate the significant reduction in the generosity of the pension system across cohorts. While part of this is due to the different full-career replacement rates under the different systems, it is predominantly due to the higher retirement ages of the younger cohorts; by working longer the younger cohorts both increase their contribution period and reduce their duration of pension receipt. Generally speaking, the only cohorts to face the full impact of the reformed pension system will be those born in the 1980s or later, while the 1970s-born cohorts are still permitted to retire young and so are in a mid-way position between the old and the new regimes.[9] This raises intergenerational equity concerns as the younger generations have to bear the burden of current pension obligations through higher taxes and social security contributions, while seeing their own pension wealth reduced below that of their parents. Full details of the rules in each pension system and other assumptions made are provided in Annex 4.A1.

In addition to illustrating the generational impacts of the reforms, the BCR measures also provide some indication of the long-run sustainability of the different pension rules. Generally speaking, BCRs of greater than 1.0 are only fiscal sustainable if the size of the registered population is increasing. Although Turkey has a growing population, the *contributing* population has been falling as a percentage of the working age population, thus helping to explain the growing social security system deficits. Under the new long-run parameters, the BCR is close to 1.0, suggesting that the system could (in the long-run) be close to sustainable. In Turkey, however, a BCR of less than 1.0 would probably be required for long-run sustainability as long as the rate of dependent beneficiaries remains high and as long as pensioners continue to receive free health insurance.[10] Some OECD countries with BCRs of less than 1.0 include Germany (0.8), Italy (0.7) and Japan (0.8).[11]

There are three reasons why steps should be taken to reduce the system parameters for the *older* cohorts. First, because the current pension rules effectively serve to push middle-aged formal-sector workers into the informal sector. Since these workers are often well educated, and can command above-average salaries, this is very costly in terms of the diminished tax base. Second, it seems inequitable for the older cohorts to get so much more out of the pension system than the younger generations. In addition to receiving pension benefits that are several times greater than their contributions, these cohorts, and their beneficiaries, also benefit from free health insurance after retirement and the possibility of (tax-free) work in the informal sector. Third, net replacement rates remain very high by OECD standards, and this generosity keeps the tax wedge high, restricting the potential for more formal sector job creation, thus impeding productivity growth (as discussed in Chapter 3) and the pace of improvement in the standard of living for the poor. One important reason for Turkey's high net replacement rates is that pension income is not taxed. All other OECD countries, except Mexico and the Slovak Republic, tax pension income. At present Turkey has an EEE tax scheme, whereby a tax exempt status applies to originally earned income, investment returns on that income, and pension income received. The introduction of taxes on pension benefits would imply a shift to an EET tax system. Figure 4.1 (panel B) shows that Turkey will continue to run large social security deficits for several decades to come, despite the window of opportunity that current demographics present.

Figure 4.5. **Older cohorts are benefiting enormously**



Note: Gross pension wealth and BCRs are calculated for an SSK worker earning the average wage and retiring at the minimum age pension eligibility. The Benefit/Cost ratio BCR is the ratio between the pension wealth at retirement and the sum of contributions paid into the system (both expressed in present value terms). (See Annex 3.A1 for more details.)

Source: Social Security Institutions and OECD calculations.

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For the 1950s and 1960s cohorts – most of whom have already qualified for early retirement – new policies should ensure sharper incentives to continue work, combined with stricter enforcement of current registration requirements, as follows:

- Reduce net replacement rates by taxing pension income, as in most other OECD countries, and by requiring pensioners to pay health insurance premiums, to be deducted from pensions at source.
- Target tax fraud and social security registration enforcement measures on middle-aged retirees, to improve incentives for them to continue work within the *formal* sector, and to improve tax and social security revenues.

For the 1970s cohorts, who have not yet qualified for retirement, there are several additional options for further reform, as illustrated in Table 4.1. These include: A) an immediate increase in the retirement age to 60; B) an immediate switch to calculating the full pension according to the 2007 pension rules; or C) a combination of the two.[12] These scenarios suggest that significant fiscal savings could be achieved by immediately applying the *official* retirement ages of 60 for men and 58 for women, while additional savings could be achieved by accelerating the transition to the new pension parameters. Even under option C, however, the pension system would continue to treat the 1970-born cohort more generously than the 2000-born cohort (final column in Table 4.1). This is because the 2000 cohort faces a retirement age of 65, which is 5 years higher than that of the 1970 cohort under reform option C, despite the fact that the life expectancy is only around 3 years higher. Finally, early retirement incentives should also be reduced by eliminating the obligation for employers to pay severance payments to retiring workers.

Table 4.1. **Options for further pension reform**

Expected Pension Wealth and Benefit/Cost ratio for a male born in 1970 under different reform assumptions

	Base case	A) Accelerated increase in the retirement age	B) Same pension age: new pension rules	C) Higher pension age *and* final pension rules	2000 cohort male (for comparison)
Gross Pension Wealth (PW)	13.4	12.1	10.6	10.0	9.2
Benefit/Cost Ratio (BCR)	2.1	1.5	1.7	1.2	1.0

If political constraints prevent an immediate increase in the minimum retirement age, an alternative would be to introduce a decrement to the pension benefit for each year that the pension is claimed early (where "early" could be defined as younger than the *official* retirement age of 58 for women and 60 for men). In order to be actuarially neutral, OECD pension models show that, for someone retiring at age 45, the pension benefit should be reduced by 4% for each year before the *official* retirement age. The reduction increases with the retirement age, peaking at around 6% per annum for someone retiring only a few years before the official retirement age.[13] This policy could be expected to proxy reform option (A) in Table 4.1, by significantly improving the incentives for middle-aged workers to retire later.

Social security contribution rate cuts should be made an priority

As discussed in Chapter 3, the high cost of employing someone formally is an important part of the explanation for Turkey's very large informal sector. Of that cost, social security contributions make up the bulk of the tax wedge on labour in Turkey (Figure 3.13) suggesting that further pension reform must be an important part of the

formalisation agenda. Compared with other OECD countries, the very low rate of social security compliance, the sheer scale of the informal sector, and low levels of human capital and productivity, suggest that high contribution rates are more harmful in Turkey than in wealthier countries with high tax wedges. By pushing the cost of low-skilled labour above its marginal productivity rate, firms are forced to hire such workers informally, creating the economic duality that characterises almost all aspects of the Turkish economy. Indeed, it is difficult to imagine any significant contraction in the size of the informal sector as long as the cost of labour in the formal sector remains so high.[14]

Unfortunately, cuts in the compulsory social security contribution rate would have important transition costs, due to the pay-as-you-go (PAYG) nature of the pension system; the social security institution would receive less income, while still having to meet pension obligations acquired in the past when contribution rates were higher. Given the already high deficits in the social security system, successive governments have argued that cuts to social security contribution rates are unaffordable. This survey, however, argues that funding the cost of significant cuts to the social security contribution rate should be prioritised. Since social security tax revenues from the private sector are a relatively small source of revenue in Turkey (due to low compliance), the first-round impact of halving the contribution rate would reduce net government revenues by around 2.5% of GDP (see Chapter 3 for further discussion). Even without accounting for dynamic scoring effects (via higher compliance) much of this could be funded by the fiscal savings that would result from the pension system reforms that are required to reduce incentives for early retirement and improve intergenerational equity. As discussed above, these changes are: to introduce a decrement to the pension benefit for those workers who wish to retire earlier than the *official* retirement age; to reduce net replacement rates by taxing pension income and by introducing a health insurance premium payable by pensioners; and to remove the obligation of employers to pay severance payments to retiring workers.

Workers contributing at lower social security contribution rates would inevitably end up with much smaller pensions (as discussed in Box 4.3). However, with an expanded role for private savings, to plug the gap for those who would prefer to save more, this would not necessarily imply lower retirement incomes. For those at the lower end of the income distribution, who can not afford to save voluntarily, the resulting pension may be small but it would undoubtedly be larger than the means-tested pension that poor older people currently qualify for (see discussion below). In order to ensure incentives for the poor to participate in the formal sector labour market, it may also be necessary to consider introducing a social safety net that is available for very low-income workers in the formal-sector, rather than only for those in the informal sector with no pension income.[15]

Ways to address concerns about poverty among the older population

If the deficits of the social security institutions – which are tax-financed through transfers from the central government budget – were being used to achieve important social goals, such as a reduction in poverty, then the *status quo* may be more easily justified. However, those benefiting from the actuarially generous pensions (those with BCRs significantly above 1.0) are formal-sector wage and salary earners, the group of workers that already has the lowest incidence of poverty. This conclusion is reinforced by the fact that a large number of "retirees" are actually relatively young workers, who supplement their pension with "informal-sector earnings", on which they pay no tax and no social security premiums.

Box 4.3. **Lowering social security contribution rates without blowing out the system deficits**

The three main pension parameters in a defined benefit system are: the retirement age, the contribution rate, and the value of the accrual rate. The latter two of these determine the replacement rate. The relationship between the three of them is constrained by financial sustainability. Policymakers can choose to set only two parameters, with the third being determined by the future fiscal costs.

The 1999 and 2006 reforms in Turkey have focused on making the system more sustainable by reducing the accrual rate and raising the pension eligibility age (at least for new entrants), while leaving the contribution rate more or less unchanged. This has been an important and commendable effort. But if one of Turkey's key challenges is the reduction of informality, then the pension eligibility age will need to be increased and/or the replacement rate cut, to allow a reduction in the social security contribution rate.

Many analysts (*e.g.* Robalino *et al.*, 2005) have argued that the contribution rate should not be used as the parameter that "closes" the finances of the scheme given choices of pension age and accrual rate. One reason is that high payroll taxes can reduce the level of employment and expand the informal sector: first, because it may lead firms to adopt production processes that use lower levels of labour, relative to other production inputs, and second, because some firms and individuals experience liquidity constraints and cannot afford to pay the high rates. In Turkey, these costs of the high payroll tax are generally recognised, but it is sometimes argued that they are offset by the acquired social security benefits to workers who participate. Yet it has been shown that high contribution rates can reduce individual welfare, even when the expected rates of return on these contributions are high. This is because the contribution rate is a form of forced savings for workers. If workers are forced to save well beyond their individual preferences, they are worse off even if they enjoy high pensions when old. On the basis of this argument, Robalino *et al.* recommend that payroll taxes should not exceed 15%, and that the contribution rate should be constant over time.

The bottom line, therefore, is that if Turkey is seriously committed to reducing the informality problem, then some further explicit choices will need to be made about the level of income replacement that the public pension system will target for workers with different levels of earnings, including those who are earning below the minimum wage, and who are therefore kept out of the formal system. Key outcome variables to consider include the level of the basic (or means-tested) pension and the replacement rate for the average full-career worker.

With respect to the basic pension, some of the factors that should be taken into account include: the general standard of living of the population, estimates of the poverty line and the minimum wage (it can be argued that the basic pension should be lower than the minimum wage but higher than the poverty line), the existence of other formal and informal social assistance, and the costs. In Turkey, where there is a strong culture of families supporting their older relatives, the current system of paying the means-tested pension only to older people without this support can probably be maintained for quite some time in the future, but possibly not forever.

In the Turkish system, retirement ages remain low and replacement rates high by OECD standards, pushing up social security contribution rates and limiting the possibility for low-skilled workers to be incorporated into the formal sector. In general, except for individuals at the bottom of the income distribution, there is no good reason to consider public pensions as the only source of savings for retirement. In Turkey this suggests a strong case for lower social security contributions, lower replacement rates, and a stronger role for voluntary savings while maintaining the current defined benefit, public scheme.

Social security registration figures indicate that only around ¼ of the working age population, or around ½ of the labour force (as measured by the HLFS) pay social security contributions to a social security institution. As they get older, the remainder of the population is either supported by relatives or receives a "means-tested pension" which is available for those people over the age of 65 who have a low living standard, do not receive any other income, and have no one else (*i.e.* no family members) responsible for their care.[16] In Turkey, approximately 22% of the 65+ population receive the means-tested pension, 40% receive a pension from one of the three social security agencies, and the remaining 38% receive no pension income (Figure 4.6, panel A).[17] However, many of those receiving no income are probably spouses of pension-earners, who will qualify for a survivor allowance (and therefore move into the 40% statistic) in the event that the primary pension recipient dies first. Indeed, almost half of the civil servant pension recipients (Emekli Sandiği) aged 65 or older are survivors or other dependents.[18]

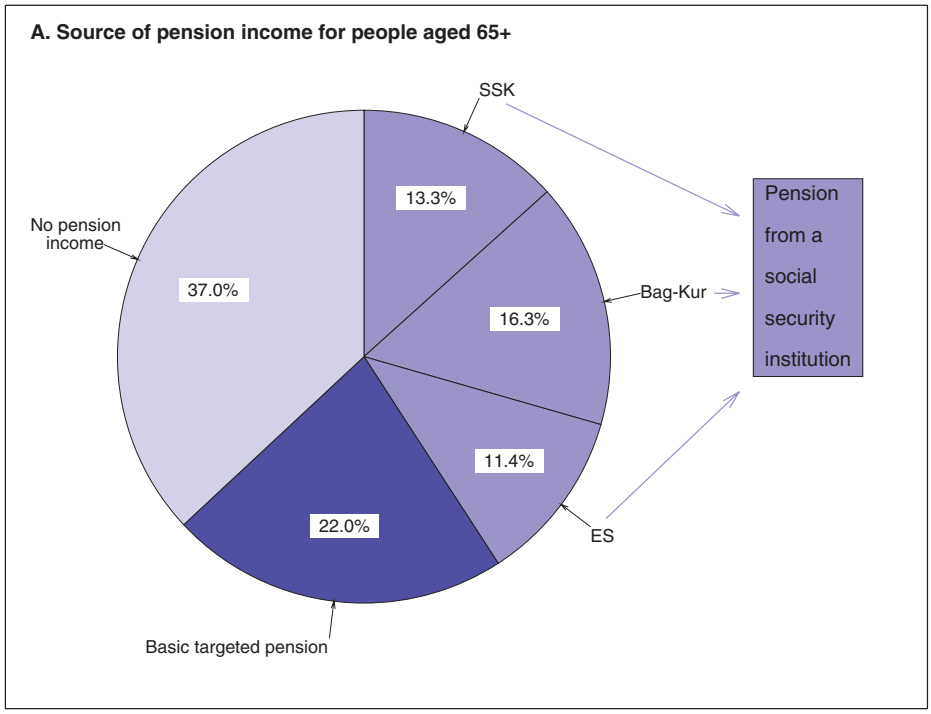
The level of Turkey's means-tested pension is extremely low by any benchmark (*e.g.* see Figure 4.6, panel B). In 2005 the means-tested pension was equivalent to approximately 65 YTL (around USD 50 or € 40) per month. According to OECD (2005) this basic pension is equal to 6 per cent of average earnings, making it the lowest means-tested pension in the OECD (the next lowest are: Greece: 12%; Canada: 16%; Denmark: 17%; Mexico: 19%; Portugal and the United States: 20%). It is also significantly lower than the absolute (food only) poverty threshold (Table 4.2).[19] Given the very low level of this pension and its low fiscal cost, it could be increased to the absolute poverty line.[20]

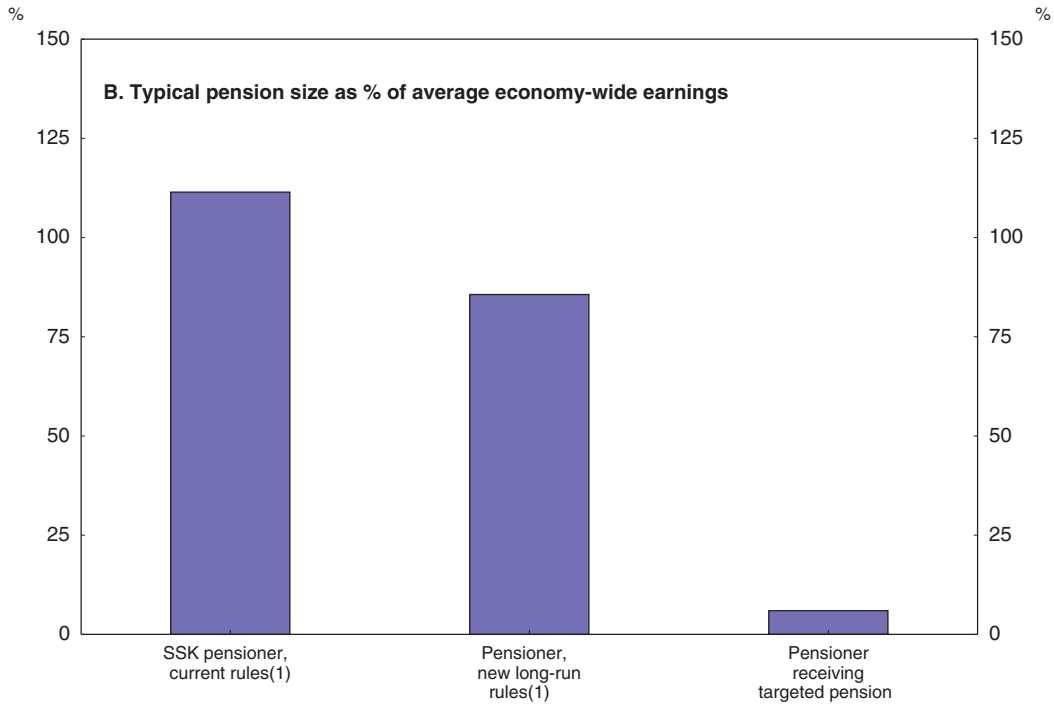
Finally, it is inequitable that the eligibility age of 65 for receipt of the means-tested pension is significantly higher than minimum pension eligibility ages for formal-sector workers. This not only argues in favour of an immediate increase in the minimum pension age but also a more rapid convergence of the *official* retirement ages of 60 for men and 58 for women to the "informal-sector retirement age" of 65.[21] The retirement age in the formal sector should represent only the age at which the worker would become eligible for the *full* pension. By introducing decrements to the pension benefit, workers could still be permitted to retire earlier, at the cost of an actuarially fair reduction in their pension.

The agenda for further reform

As discussed in Chapters 1 and 3, the extent of informality in Turkey is a serious impediment to improved economic growth and higher living standards. Addressing the problem will require a comprehensive approach, of which further pension reform is only one part, albeit an important part. At present, several cohorts of formal-sector workers are currently benefiting enormously at the expense of the taxpayer and the younger generations. No OECD country has ever had normal retirement ages anywhere near as low as those in Turkey, although such low retirement ages can be found in certain Middle East and North African countries.[22] In Turkey, it is often argued that the pension rights that incumbent workers anticipated on the day that they joined the labour force should be protected, regardless of the fiscal cost. However, most countries only protect the pension wealth that has already been accrued, rather than guaranteeing expected pensions in a forward looking sense. Some OECD countries have even cut accrued pension rights in a backward-looking sense.[23] The very slow pace of transition in Turkey to higher minimum pension ages and to more affordable pension parameters shows that an attempt is being made to also safe-guard the *future* pension expectations of workers who entered the labour force under more generous rules.

Figure 4.6. **Old age income disparities within the population are large**





1. Pensions are calculated for an individual earning the average wage.

Source: Social Security Institutions; Emekli Sandigi; UN demographic projections; OECD calculations.

Table 4.2. **Means-tested pension versus the poverty line for a single individual**
In YTL per month

	Means-tested pension	Absolute poverty line	*% of population*	General poverty line	*% of population*
		Food only		Food and non-food	
2002	24.5	59	*1.4*	137	*26.9*
2003	51.5	75	*1.3*	186	*28.1*
2004	57.9	81	*1.3*	190	*25.6*
2005	64.5	85		206	

Source: TURKSTAT Poverty Studies (2002-05), Emekli Sandigi.

Accelerating the transition to the new rules would have several positive effects. First, it would reduce the incentives of the middle-aged population to move into the informal sector. Second, significant fiscal savings would be made, and these could be used to partly fund significant cuts in the social security contribution rate. By reducing the tax wedge, this would assist the creation of more formal sector jobs. Finally, an accelerated transition to the new rules would be more equitable.

The recommendations proposed in this chapter (and summarised in Box 4.4) try to strike a balance between protecting the pension rights of incumbents (for example, cuts to the gross replacement rate of current pensioners are not proposed) and permitting the pension system to be further reformed in a way that will encourage greater formalisation and mitigate the inequities of past populist policies. This survey argues that reducing the social security contribution rate should be a top priority of the Turkish government, in order to permit a significant expansion of the formal sector. The further reform priorities discussed in this chapter would generate fiscal savings and can help to fund the transition costs associated with reducing the social security contribution rate.

Box 4.4. **Recommendations for further pension reform**

Improve incentives for middle-aged pensioners to remain in or return to the formal sector:

1. Introduce an actuarially equivalent reduction (of 4-6% per year) to the pension benefit of anyone who chooses to retire younger than the *normal* retirement age of 60 for men and 58 for women.
2. Reduce net replacement rates by taxing pension income and deducting a health insurance premium from all pensions.
3. Remove the entitlement of retiring workers to severance payments.
4. Accelerate the convergence of the formal-sector retirement age to the informal-sector retirement age (65) and equalise the retirement ages for women and men sooner.
5. Focus a social security registration and income tax enforcement team on pensioners who continue to work.

Box 4.4. **Recommendations for further pension reform** *(cont.)*

Reduce the tax wedge on labour, in order to permit the expansion of the formal sector:

6. *Significantly* reduce (for instance, cut by half) both employers' and employees' social security contribution rates. The transition costs of this policy should be partially funded by the reforms listed above as well as the following:
7. Accelerate the phasing in of the new pension parameters by introducing the long-term accrual parameter of 2.0 earlier than 2016 or by calculating the pensions of retirees on the basis of the new (long-run) pension formula alone, rather than only for the portion of their careers that took place after 2007.

Envisage a pension system that will address old-age poverty concerns for all

8. Eliminate barriers that prevent the formal sector from expanding to encompass low-skilled workers, even if that means that such workers will pay only low social security contributions and thus accumulate only low levels of pension wealth.
9. Increase the means-tested pension to the absolute poverty level, and consider further increases in the future as finances permit. Consider introducing a pension safety net (means-tested pension) that is independent of participation in the formal sector.
10. Introduce a voluntary savings scheme into which workers would be automatically enrolled, with the option of active opt-out, and into which the difference would be paid between the employees' current (high) and future (low) social security taxes.

Notes

1. Ministry of Labour and Social Security (2005).
2. Even with reform the additional pension system deficits between 2006 and 2040 cumulate to more than 50% of GDP (without taking into account the implicit debt servicing cost).
3. Only around ¼ (23.5%) of the working age population (defined as those aged 15-64) are contributing to a social security institution, while approximately ½ are not participating in the labour market, and the remainder are working in the informal sector.
4. Under the 2006 social security law the *official* retirement ages (of 58 for women and 60 for men) do not begin to increase until 2036. According to that law they will be equalized at 65 in 2048. It is often argued that the younger retirement age for women can be justified on the grounds that women do more unpaid work at home. However, this argument can become circular, implicitly serving as a justification for the *status quo*, rather than promoting gender equality.
5. UN Demographic projections.
6. In this context the term *actuarially generous* is used when the present value of the pension entitlements is much higher than the present value of social security premiums paid.
7. These four sets of rules are: the pre-1999 rules; the current rules; the 2006 formula with the interim accrual rate; and the 2006 formula with the long-run parameters. See Annex 4.A1 for further details.
8. The lower female replacement rate stems from women's shorter contribution period. The variations across cohorts stem partly from the varying weight on each of the full-career pensions that are calculated under each set of rules and partly from the fact that the number of years of contributions varies across cohorts as the minimum pension eligibility age is adjusted.
9. Women's PW and BCR remain higher than those of men, even after full equalization of the retirement age, due to women's longer life expectancy.
10. Low female participation in Turkey means that the proportion of *dependent* pension beneficiaries is much higher than in other OECD countries. Since the BCR takes into account only the pension wealth of the registered worker, the liabilities of beneficiaries are not captured. In addition to spouse benefits, Turkey's social security institutions also pay benefits to a rather large number of female orphans (as long as they remain unmarried, orphaned daughters are eligible for these pensions throughout their lives, rather than only until adulthood, as is the case for sons).

11. Calculations from OECD pension models.
12. Note that while each of these options successively reduces gross pension wealth, option B results in a higher BCR than options A or C, due to the extra years of pension entitlement (since early retirement is still permitted in this case).
13. See Queisser and Whitehouse (2006) for technical details about calculating actuarially neutral decrements.
14. The cost of labour could be cut either by reducing social security contributions or by abolishing the minimum wage, permitting low skilled labour to be hired formally at a much cheaper rate (see Chapter 3 for a discussion of the minimum wage). With a lower contribution rate, the resulting pensions would, of course, have to be much lower than the minimum pensions paid today (but probably still much higher than the means-tested pension).
15. As discussed later, only older people who do not have any other pension income, or family support, are currently eligible for the means-tested pension.
16. The means-tested pension is funded from the Emekli Sandiği (ES) social security fund. However, at a cost of less than 1 billion YTL in 2005 (0.2% of GDP) the cost of these pensions is negligible in the bigger scheme of things.
17. Source: Emekli Sandi˘gi for number of means tested pensioners, the Social Security Institutions for the number of pensioners (including dependents) and UN demographic projections for 65+ population size.
18. The share is slightly lower (around 1/3) among those in the scheme for the self-employed (Bağ-Kur) and private sector wage and salary earners (SSK).
19. The 1.3 million 65+ year-olds who received the means-tested pension in 2005 make up about 1.8% of the total population. If the means-tested pension is the only income received by these people (a requirement for entitlement) then all 1.3 million (1.8% of the population) should be living below the absolute poverty threshold. However, Table 2.1 suggests that only 1.3% of the population live below this threshold. A likely explanation is that some of the recipients of the means-tested pension also receive assistance from their families, even though – strictly speaking – family support would make them ineligible for the means-tested pension. Some may also be disabled and thus qualify for additional assistance up to a total of 208 YTL (2005 disabled benefit level).
20. 1.3 million recipients in 2005, times 64 YTL per month, equals approximately 1 billion YTL per annum, or 0.2% of GDP. If the pension were increased to the absolute poverty line of 85 YTL per month, the additional cost would be less than 0.1% of GDP per annum.
21. At present, a Turkish man aged 65 can, on average, expect to live for another 13 years, and a Turkish woman for another 15 years. However, life expectancy is highest for those who work within the formal sector, who are in the upper half of the income distribution and lowest for those at the bottom of the income distribution (for whom the age for eligibility of the means-tested pension is already 65). Moreover, average life expectancy is increasing. By the year 2035, UN demographic projections suggest that these numbers will have increased to 15 years, and 18 years respectively.
22. *E.g.* For men, the earliest full-career pension eligibility age in private sector pension schemes is 40 in Bahrain and Egypt, 45 in Jordan, and 50 in Algeria, Djibouti, Iran, Tunisia and Yemen. Even among this group, Turkey's minimum retirement ages are unusually low (Robalino *et al*., 2005).
23. For example, by switching from earnings valorisation to prices valorisation the French pension reform of 1993 significant reduced pension wealth on workers' accrued rights as well as on their future acquired rights.

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ANNEX 4.A1

Assumptions underlying the pension analysis

This annex describes the methodology and assumptions used to model the future pension entitlements of Turkish workers. The analysis is based on the microeconomic approach used in *Pensions at a Glance* (OECD, 2005) permitting the comparison of key pension entitlement statistics for Turkey, with those for other countries. The calculations show the pension entitlements of private sector workers who enter the system at age 20 and work continuously until the age of full pension eligibility. The generic pension model uses individual lifetime average earnings in the benefit formula, and this is assumed to track the economy-wide average (2% real earnings growth per year). Mortality rates are based on country-specific data from the UN/World Bank population database. The discount rate used for actuarial calculations is 2% per year.

Compared with the analysis in *Pensions at a Glance*, this chapter models not only the long-run pension parameters but all four sets of pension rules that are relevant for calculating Turkish pensions: system 1 for the period prior to 1999; system 2 from 2000-06; system 3 from 2007-15: and system 4 for the post-2015 period. For workers who straddle the different sets of pension rules (summarised in Table 4.A1.1), the pension is calculated as the weighted average of the full-career pension that they would be entitled to under each of the four sets of rules, where the weights are the proportion of working years spent in each system.

Once the weighted average replacement rate has been calculated for each birth cohort of workers, this is multiplied by a cohort-specific annuity factor to produce a measure of gross pension wealth (PW). The PW represents the present value of the future stream of pension payments, expressed as a multiple of average earnings. Its calculation takes into account the replacement rate at which pensions are paid, the age at which each birth cohort becomes eligible to receive a pension, each cohort's life expectancy and how pensions are indexed after retirement. Finally, Benefit-Cost Ratios (BCRs) for each birth cohort are calculated. These indicate each cohort's pension wealth at retirement as a multiple of what he or she has paid in over the years. A BCR of 1.0 would therefore be required to ensure a sustainable pension system in a country with a stable insured population and no additional liabilities (such as survivors' pensions). Although Turkey has a growing population, the *insured* population has been falling as a percentage of total workers, and the number of non-contributing dependents is also high.

All calculations are based on the pension retirement rules for an SSK worker earning the average (formal-sector) wage; in future, following the amalgamation of the three pension systems, the pension analysis for future cohorts will be the same for all workers.

Table 4.A1.1. **Summary of key features of the different pension rules**

	System 1: pre-1999 pension rules (up to 1999)[1]	System 2: current pension rules (2000-06)	System 3: temporary new pension rules (2007-15)[2]	System 4: final new pension rules (2016-)
Key rules for calculating the replacement rate under the different pension laws:				
Minimum retirement conditions: for men	*i)* Insured 25 years + 5 000 contribution days, or *ii)* Age 55 + 5 000 contribution days.	*iii)* Age 60 + min. 7 000 contribution days, or *iv)* Age 60 + insured 25 yrs + 4 500 contribution days. (NB: These rules are being phased in only gradually).[3]	*v)* Age 60 + 25 working years (but only for those who join the labour force after the new law is introduced). *vi)* From 2036 the age will begin to rise towards 65.[4]	Same as system 3.
For women	*i)* insured 20 years + 5 000 contribution days, or *ii)* Age 50 + 20 years of insurance.	Age 58 + 20 years of insurance. (Being phased in only gradually).[3]	As for men but age 58 instead of 60.	Same as system 3.
Accrual rate	n.a.	3.5% per annum (p.a.) for first 3 600 days then 2% p.a. until 9 000 days, then 1.5% p.a. after that.	2.5% for every year until end 2015 and then 2% for every year after that.	2% per annum.
Valorisation	n.a.	Real GDP growth rate	50% real earnings growth: 50% CPI inflation.	Same as system 3.
Indexation	Discretionary	CPI inflation	CPI inflation	Same as system 3.
OECD assumptions:				
Real GDP growth rate	n.a.	2% real earnings + 1.0% labour force over the next 50 years= 3.0% real GDP growth	n.a.	n.a.
Real earnings growth	n.a.	n.a.	2% (standard OECD assumption).	Same as case 3.

1. Following the pension reform of 1999, implementation of the higher retirement age did not begin to be enforced until May 2002. For the purposes of this exercise it is therefore assumed that the pre-1999 retirement age is relevant up and until the end of 2001.
2. It is assumed that the new pension rules will begin to be implemented in January 2007. However, implementation could be further delayed by constitutional appeals (as was the case following the 1999 law change).
3. The minimum pension eligibility age for workers who joined the labour force before 2000 is defined according to Article 3-B SSK of Law 4759 (adopted 23 May 2002) as a function of the duration of insurance prior to 23 May 2002.
4. From 1936 onwards, the pension eligibility age is determined by a table included in the 2006 law.

In all cases the pension contribution rate for pensions is assumed to be 20%. Other rules and assumptions underpinning the pension analysis for each of the four sets of pension rules are summarised in Table 4.A1.1.

Pension rights accrued before 1999 are calculated on the basis of so-called *indicator tables* (which are based on job grade and qualifications), rather than by use of an earnings-related formula, as is the case under the subsequent rules. In order to model the pre-1999 pension rights, a generic formula-based model has thus been used to proxy for the tables. This model is based on the fact that the pre-1999 SSK pension rules specify the pension relative to that of a full-career worker – defined as a man (woman) aged 55 (50) with 5 000 contribution days. The base pension for such a worker roughly equates to a gross replacement rate of 60%. The replacement rate is increased by 1% for each year older than 55 (50) and for each additional 240 contribution days. So a man who retired at age 45 with 25 years of contributions (9 000 days) would receive a pension with a replacement rate of 76% [= 60% + 16% (9 000 – 5 000)/240], and a woman who retired at age 40 with 20 years of contributions (7 200 days) would receive a replacement rate of 69% [= 60% + 9% (7 200 – 5 000)/240].

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Chapter 5

Making quality education accessible to the whole population

In recent decades the access of the school-age population to education has been expanded significantly. However, the quality of education remains low at the majority of schools, and the education system focuses predominantly on providing good quality education to the most able students, who are channelled towards university and work in the formal sector. As a result, the most binding human capital shortages are at the middle and low end of the labour market. Despite this, resources continue to be skewed towards the "high end". Although it was originally conceptualised as a merit-based system, the way the system works favours students from higher-income families with more resources and this raises efficiency and equity concerns. This chapter documents these problems and discusses the fundamental challenge of reorienting the key focus of the education system and the changes to the allocation of funding and school governance that this will require.

As discussed in Chapters 1 and 3, the catching-up of Turkish living standards (as measured by GDP per capita) will require a significant increase in average productivity levels. This will also need a continued up-skilling of the labour force. Yet most workers in the informal sector have relatively little education and significant reform will be needed if the education system is to provide primary and high school graduates with the skills that are needed to bring about the required productivity surge. Despite these shortcomings, very significant progress has been made over the past decade in some areas of the education system, particularly with respect to extending the scale of compulsory basic education and improving the curricula (Box 5.1).

Box 5.1. **Recent education reforms**

Over the past decade Turkey has pursued a striking education reform agenda focused on implementing free eight-year compulsory basic education (grades 1-8, provided for ages 6-14) and narrowing the participation gap between boys and girls at the primary education level. Prior to 1996, when law No. 4306 was passed, eight-year education was at times required by law but sufficient resources for implementation were not provided. The reforms have been quite successful. For example, between 1996 and 2004 the net primary school participation rate rose from 86% to 93% for boys and from 76% to 87% for girls.* Higher primary school participation by girls has been assisted by the campaign "Girls! Let's Go to School", which was gradually rolled out over the 2003 to 2005 period, starting with the most disadvantaged provinces. Nevertheless, there remains significant room to further improve participation – particularly for girls.

Other recent reforms include the development of new curricula. The new curriculum for grades 1-5 was introduced in the 2005/06 academic year throughout the country, and pilot implementation of the new grade 6-8 curriculum began in the same year. OECD (2006) reports that the curriculum development process followed steps that reflect best practice in other OECD countries. The new curricula puts an emphasis on "student-centred learning" which will require a change from the usual memorizing approach to a more active learning role of the students. This is, however, putting new demands on teachers.

Another new policy was the introduction of a 100% tax reduction for investment in education. Such private sector investment funded 14 000 additional classrooms over 2004 and 2005. This had a particularly positive impact in those provinces experiencing significant inward migration. With almost 20 million students, 67 000 educational institutions and more than 700 000 teaching personnel, the scale of the national education system is huge, and Turkey deserves significant credit for its expansion in size as well as for progress in a number of areas, such as the widespread introduction of information technology across schools. See MONE (2005) for details of other accomplishments.

* OECD (2005a) and MONE (2005). Net schooling rates are calculated by subtracting the number of older (adult) students from the gross number of students. Between 1990 and 2004 the net secondary school participation rate has increased from 32% to 58% for boys and from 21% to 48% for girls.

Despite these major improvements, Turkey remains far from fully exploiting the potential of education as a tool for ensuring social development and cohesion, and economic growth. Participation rates at secondary and to a lesser extent at tertiary education are still low by OECD standards (Figure 5.1) and the average quality of education is not satisfactory. Not only are average PISA (Programme for International Student Assessment) results for the academic performance of 15-year-olds very low (Figure 5.2, panel A), but less than 60% of 15-year-olds are included in this group, suggesting that the population-wide academic performance of 15-year-olds would be much lower (Figure 5.2, panel B).

In discussing the challenges facing the education sector, this chapter builds on the key conclusions of two recent reviews of Turkey's education system: *i*) the OECD Education Directorate's 2005 in-depth review of basic education in Turkey; and *ii*) the World Bank Education Sector Study (2006). The chapter emphasises several key fundamental reforms, which will be essential if Turkey wishes to maximise its growth potential and improve the living standards of the lower-income social groups. These reforms would ideally require an overall increase in public expenditure on education. But even without additional spending as a share of GDP, significant quality improvements could be engendered through improvements in the cost-effectiveness of education spending.

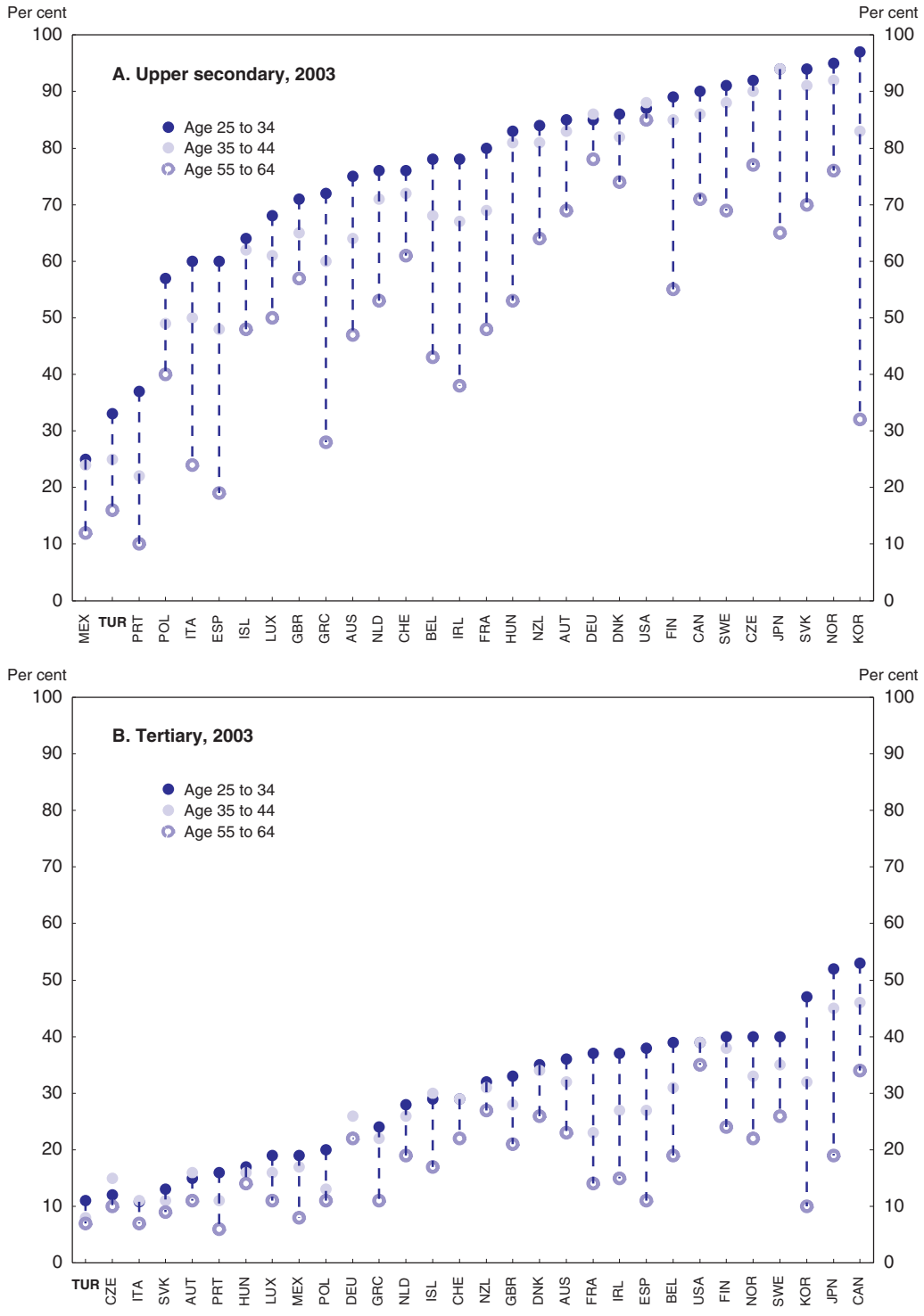
The education system perpetuates economic *duality*

Despite low average academic performance in Turkey, education standards are very high in the best schools. This reflects a schooling system that focuses on providing a good standard of education for the most able students – who are admitted into the most selective and well-resourced schools (Anatolian and science high schools), and who receive a generally good preparation for university study and for jobs in the formal labour force. By contrast, the quality of the "non-selective" high schools is poor, and it is much more difficult for the graduates of these schools to be accepted into a good quality university or to find jobs in the formal sector. Unless a student attends a selective Anatolian or Science high school, he or she can usually only hope for placement in a lower quality higher education institution.[1] Thus, there is a duality in educational outcomes that mirrors the formal sector/informal sector duality of the economy more broadly (Chapter 3).

Given this duality, it is not surprising that parents who can afford it devote considerable resources to private tuition, oriented towards preparing their children for the high-school selection exam (OKS) which is taken by around 60% of children of that age cohort[2] (those who wish to compete for science or Anatolian high schools) and subsequently for the university entrance exam that can be taken at the end of high school. While public sector spending on education is the lowest in the OECD as a share of GDP [3.6% of GDP in 2002, versus an OECD average of 5.4% according to OECD (2005b)], very high private spending on tuition and private school fees pushes total education spending up significantly. According to the World Bank and SIS (2005), public plus private education spending in 2002 was around 7% of GDP; among OECD countries, only Denmark and the United States spent more on total education as a share of GDP in that year. Given poor overall education outcomes in Turkey, it would seem that total education spending is not being used efficiently.

The flip side of the duality in human capital formation is that firms face a shortage of good quality "mid-level" staff. At the "top end" of the education market, high productivity firms report that they have no difficulties in recruiting well-qualified people.[3] Generally

Figure 5.1. **Educational attainment of the population**



1. Share of 25 to 34 and 45 to 54 age groups with at least upper secondary or tertiary education.

Source: OECD, *Education at a Glance* (2005).

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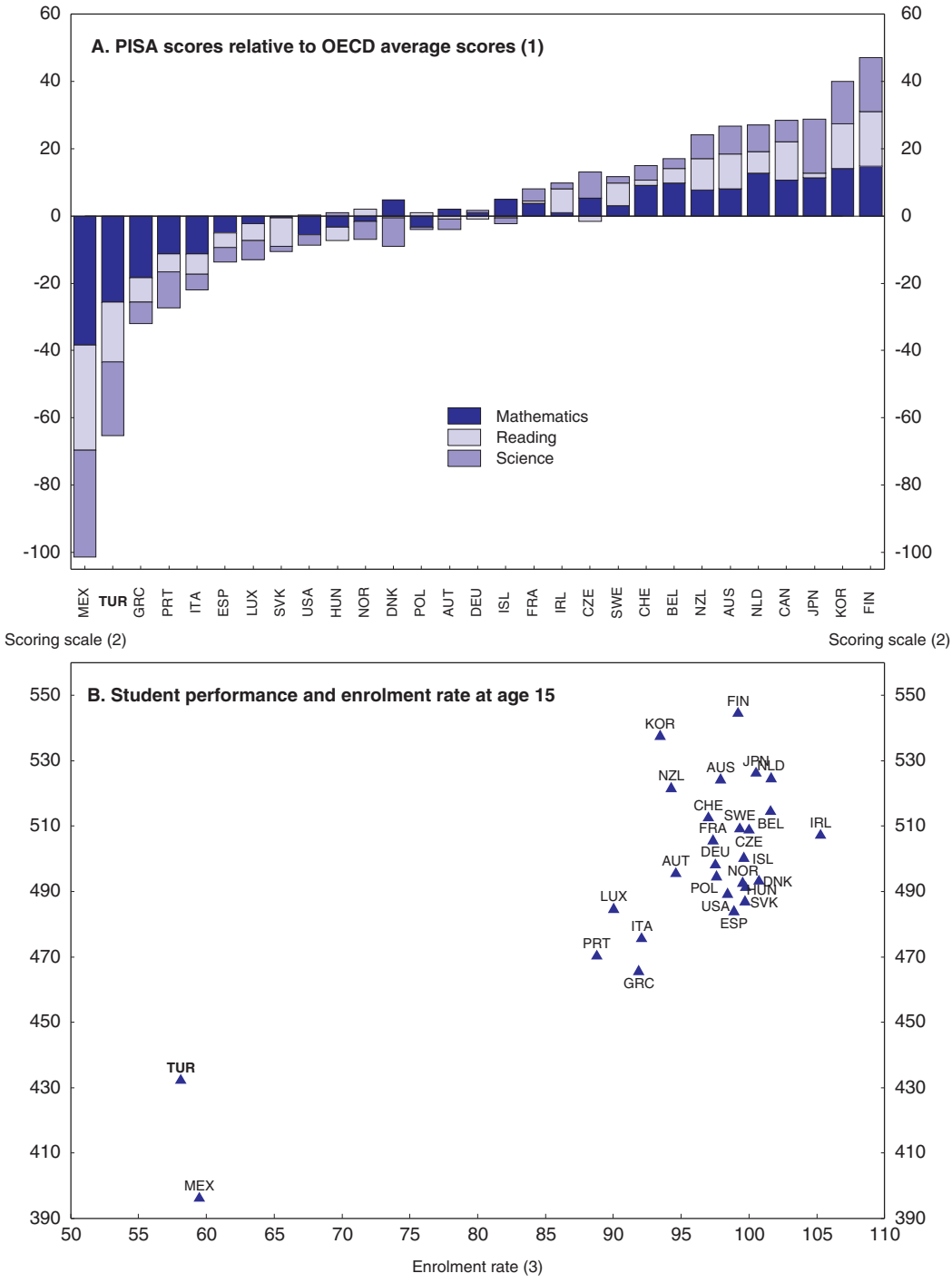
Figure 5.2. **Student performance and enrolment rates**



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).
2. Average performance across the combined reading, mathematical and scientific literacy scales in 2003 (United Kingdom 2000).
3. Net enrolment rate at age 15.

Source: OECD, PISA results 2003 and Literacy Skills for the World of Tomorrow: first results from Pisa 2003 (2004); OECD, *Education at a Glance* (2005).

speaking, their recruits are the students that were lucky enough to get into an "elite" high school, which afforded them a good chance of making it to a high quality university and to a protected high-skilled formal sector job. By contrast, firms report difficulties in recruiting good quality technical and vocationally trained workers. The main causes of this mismatch in labour supply and demand seem to be the following:

- Financial resources are allocated unequally across pupils and types of schools, with significantly greater per-pupil financing being awarded to the "elite" schools.
- Able children are discouraged from enrolling at technical and vocational schools by a penalty coefficient that is applied to the university applications of students from these schools (Box 5.2).[4]
- Examinations at the end of primary and secondary school are focused almost entirely on sorting students according to their ability, for the next steps of education, rather than on documenting already-acquired competencies, providing schools with little incentive to prepare students directly for the labour market.
- School accountability remains very weak, with principals generally focused on implementing top-down mandates rather than focusing on quality improvement and effective outcomes.

The remainder of this chapter discusses each of these problems, and then proposes some measures for improving the quality of education and bringing it more into line with labour market needs.

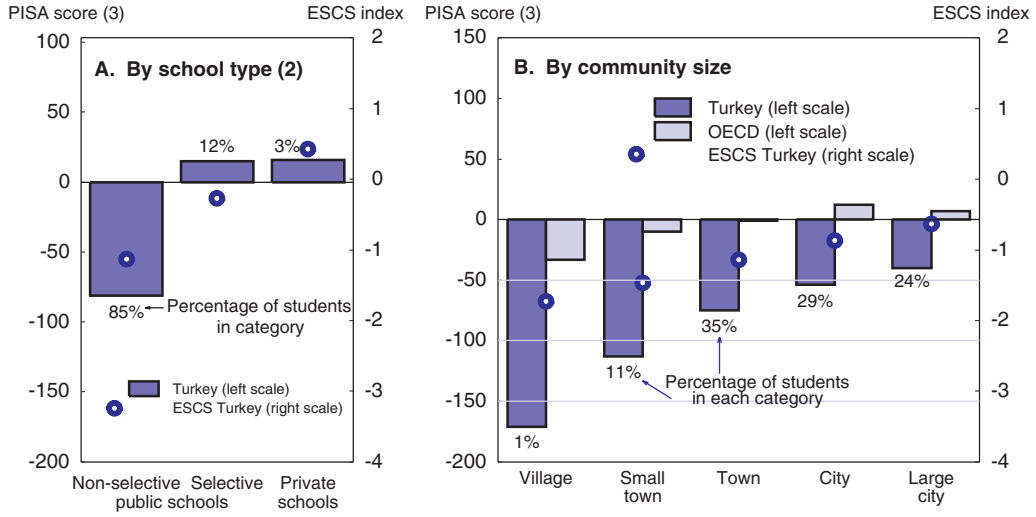
Making the allocation of public resources and access to quality education more equitable

In theory, all children have a chance of being selected to attend the elite high schools, since selection is based on the exam that is offered at the end of primary school. In practice, however, the fact that the exam is not fully based on the school curriculum (see further discussion below) benefits children from families who can afford to pay for private tuition. Unsurprisingly, data from the PISA II database confirm that children attending the selective schools come from significantly higher socio-economic backgrounds than children at the non-selective schools (Figure 5.3, panel A).[5] Figure 5.3 also shows that children from the highest socio-economic backgrounds often attend private schools, although their academic performance, as measured by the average PISA score, is no higher than that of pupils at the *selective* public schools.

The PISA II data-set also reveals large gaps in educational outcomes across community sizes – much more so than is the case in other OECD countries – which in turn is also correlated with the socio-economic backgrounds of the pupils (Figure 5.3, panel B). By international standards Turkey has unusually large regional disparities in per capita income. Improved education quality in the poorest regions would contribute to reducing these disparities while also encouraging faster growth of the economy as a whole. It would also facilitate the massive transition of labour out of the agricultural sector (Chapter 6).

The allocation of public education spending does not help to narrow educational gaps. While a comprehensive assessment of the allocation of public education spending is not possible, due to data limitations, a partial analysis suggests that the elite "selective" high schools receive at least twice as much funding per pupil as the regular "non-selective" high schools (Figure 5.4, panel A).[6] In addition, the *selective* schools undoubtedly serve as a

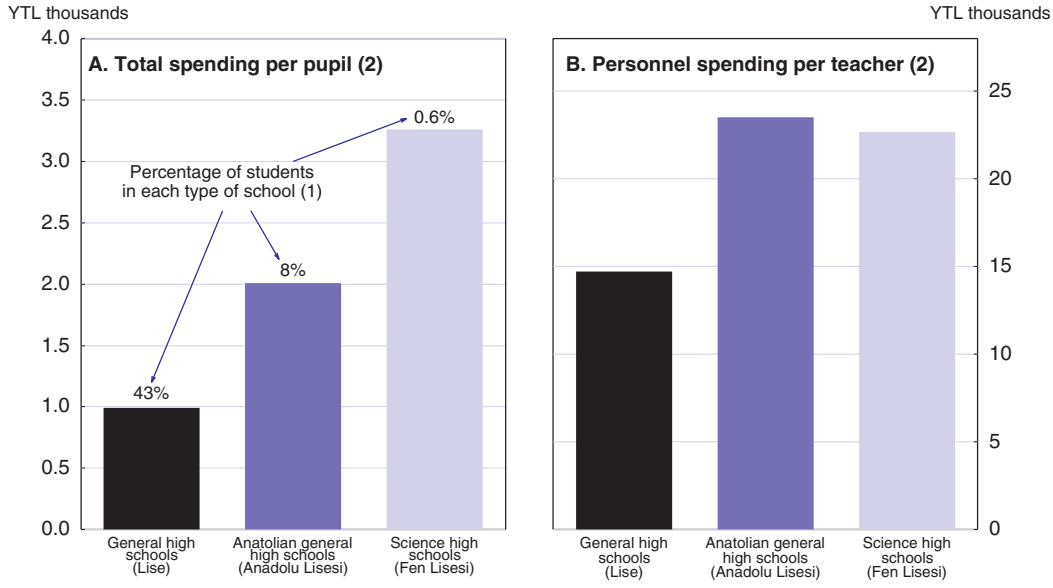
Figure 5.3. **Relationship between student performance and the PISA index of economic, social and cultural status (ESCS)**[1]



1. The PISA score is a simple average of the 2003 performance on mathematics, reading and science. The OECD-wide average score on the ESCS index is 0.0 and the standard deviation is 0.25 (see text for further details).
2. "Selective" public schools are those that reported that the student's school record is used as a "prerequisite" or "high priority" for determining admission, in the PISA 2003 survey. "Non-selective" public schools are those who reported that the student's school record is "considered" or "not considered".
3. PISA score relative to OECD average.

Source: OECD, Pisa results, 2003.

Figure 5.4. **Public spending is skewed towards the elite schools**



1. The remainder of students attend vocational and technical schools (19%), open education high schools (10%).
2. By school type.

Source: Ministry of National Education.

magnet for the best and most experienced teachers, who tend to be paid more (Figure 5.4, panel B), and the number of students per classroom in these schools is normally restricted to less than 25.

The inequitable distribution of education spending in Turkey is confirmed by Mete (2004), who found that the poorest 40% of the population captured only 28% of total secondary education spending in 2004. While some recent policies have attempted to reduce these disparities – for example by cash transfers to poor families with children at school, and by distributing course books free of charge[7] – significant disparities in per-pupil funding continue to exist – including across regions. The uneven distribution of public funding may even be more severe at other levels of the education system. For example, OECD (2005a) emphasised the importance of pre-primary education for narrowing regional disparities, and identified this as an area in the most urgent need for improvement.

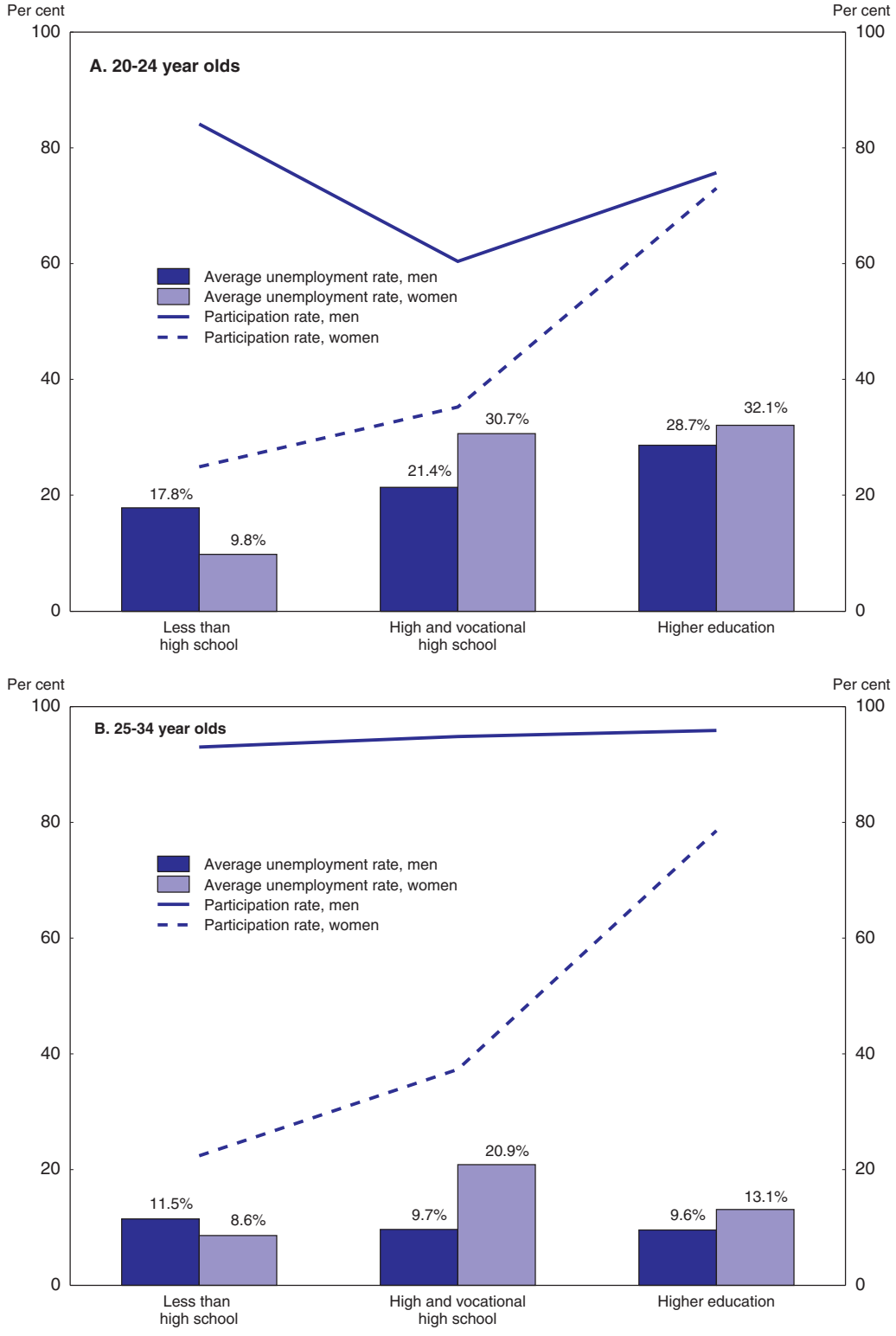
To address these concerns, it is recommended that the ministry work towards a goal of funding primary and secondary schools on a per-pupil basis, with additional adjustments made only for other relevant factors such as differences in heating costs, boarding facilities, etc. As fiscal consolidation permits, this should be achieved through gradual increases in the overall education budget, together with a freeze on per-pupil spending in the current elite schools. Moreover, consideration should also be given to providing higher per-pupil funding to schools with a high proportion of students from very low socio-economic backgrounds.

Improving the quality and attractiveness of "mid-level" education

Despite the fact that the government has an explicit goal to encourage greater participation in vocational-technical schools, together with the fact that firms report difficulties in hiring qualified technical staff, students continue to give preference to attendance at *general* (comprehensive) high schools, which are not penalised in the university entrance assessment. To a large extent, this probably reflects a widespread perception that a university degree is essential for getting a good job and being a "full participant in society". In other words, the preference for a general education seems to be a direct result of the dual labour market, with a university degree being perceived as the best way of getting an "insider" job and vocational jobs being perceived as leading to a narrower career track and one that is more likely to be stuck in the informal sector.[8] This interpretation is supported by the fact that although unemployment rates are quite high among University graduates, particularly in the 20-24 age group, there is a quite sharp drop in the unemployment rate of University graduates in the 25-34 age group (Figure 5.5).

Correcting this bias is likely to require a multi-pronged approach. First, eliminating the penalty coefficient that is currently applied to university applications from vocational school students would increase the attractiveness of these schools to able children, who have an interest in vocational-technical fields but who do not wish to rule out the possibility of a University education. However, such a proposal remains controversial in Turkey for political and religious reasons (Box 5.2). Second, there is an urgent need to raise the general quality level of education provided in the *non-selective* schools. Since the number of unemployed vocation-technical graduates is high, the reason why firms report difficulty recruiting mid-level qualifications is clearly not because of insufficient quantity, but it rather reflects a quality problem; the general education system is not providing the majority of young people with basic literacy and numeracy skills that are necessary for the modern work force. For example, results from PISA show that 28% of the students who sat the test were not proficient at level one on the mathematics scale, the lowest of six levels of proficiency, and 74% were proficient only at level 2 or below. Performance was slightly better on the reading scale, with only 13% failing to reach level one, but still a significant

Figure 5.5. **Labour market status by educational attainment, 2006**



Source: TURKSTAT (Household Labour Force Survey).

Box 5.2. **Overcoming education policy fragmentation and finding a consensus about the role of vocational schools, including Imam Hatip schools**

There are some differences of opinion about the appropriate role of religion in schools. While some people would like children to have the option of attending Imam-Hatip high schools in order to receive more religious education on top of the regular programme, others would prefer that religion courses in these schools be offered only for the purpose of training Islamic clerics and preachers. Given the strong – and welcome – desire of both sides to avoid conflict, there is a certain degree of acceptance of the current *status quo*, a situation which permits Imam-Hatip schools to remain available to all. However, the *status quo* also creates some significant negative externalities for the efficiency of the education system more generally. In order for Turkey to further improve the quality of the education system, a better solution could be found. However, this would require seeking a broader-based consensus within Turkish society about the appropriate role of religious education in the public schooling system.

An important source of inefficiency in the current system is the limited co-operation between the Ministry of National Education (MONE), which is responsible for primary and secondary education, and the Higher Education Council (YÖK), which is responsible for most aspects of tertiary education policy. While MONE is under direct responsibility of the government, YÖK is an independent body, appointed by the President of the Turkish Republic[1]. Since 1999 YÖK has restricted the accessibility of Universities to children attending vocational and technical high schools, by applying a "negative multiplier" to the grade point averages of students from these schools. While part of the motivation for the negative multiplier was to correct for a perceived upward bias in grade point averages at vocational and technical schools, it was also motivated by the desire to discourage children from attending the religious Imam Hatip high schools. While these schools have the official purpose of training religious clerics – and are therefore classified as vocational schools – they are widely seen as filling a general demand for a religious-based education. After the introduction of the negative multiplier, enrolments at Imam Hatip high schools fell from 185 000 students in 1996/97 to around 100 000 today. At the same time, the future options of students who attend any vocational and technical school were narrowed, making these schools less attractive, thus limiting the quality of vocational and technical school graduates more generally.

Limited co-operation between MONE and YÖK has resulted in a fragmentation of education policy-making more generally, particularly with respect to the transition from secondary school to tertiary education. For example, the content of the University entrance examination (ÖSS) – which is administered by YÖK – aims to test general aptitude, creating incentives for many students to stop attending regular school classes in order to prepare for the exam. This problem, which to some extent is also relevant for the transition from primary to secondary education, is discussed in more detail below.

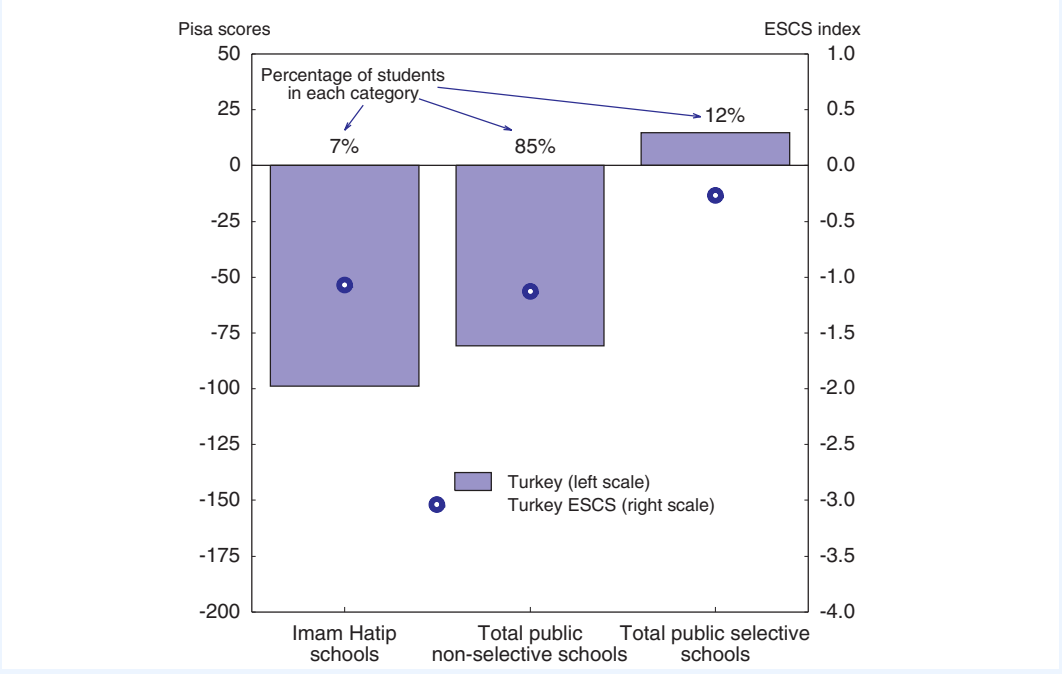
A well-functioning education system in Turkey will clearly require less fragmentation in policy-making between MONE and YÖK. One priority should be to ensure that the University entrance examination is sufficiently linked to the high school curriculum. Another urgent priority is to improve incentives for smart children to attend vocational and technical schools. Unfortunately, there seems to be no simple solution to the current controversy over the negative coefficient. While eliminating the coefficient would remove the penalty currently applied to vocational and technical schools, this would probably lead to a sharp increase in enrolments at Imam Hatip schools, which could be seen as inconsistent with the secular nature of public education, especially since it is already clear that Imam Hatip schools are serving a function significantly different from their official role (for example, more than 40% of students at these schools are girls, who have less options than boys for undertaking a religious profession).

Besides a general demand for religious education, another factor explaining the attractiveness of Imam Hatip schools is the greater availability of scholarships – which, together with the building of dormitories (which are also more common at Imam Hatip schools), are often funded through donations. This makes these schools particularly popular among the rural poor (TESEV, 2006). In terms of academic performance, PISA results suggest that students attending Imam Hatip schools

Box 5.2. **Overcoming education policy fragmentation and finding a consensus about the role of vocational schools, including Imam Hatip schools** *(cont.)*

perform generally less well than average, despite the fact that the average socio-economic index ranking of the students is no worse than that at other *non-selective* schools (Figure 5.6).[1] This argues in favour of making public more information on school performance (both academic and subsequent employment rates) in order to assist parents with the decision of school choice and it would also put pressure on schools of all kinds to improve the quality of education.

Figure 5.6. **PISA performance and ESCS index of Imam Hatip students *vs.* other public school students**



Note: Also that the results for total public selective and non-selective schools include religious schools.

Source: Pisa 2003, database.

Improved co-operation between MONE and YÖK will be essential to promote a higher degree of student achievement and significantly raise the quality of "mid-level" human capital. In turn, this will require some compromise about the role of religion in public schools. One possibility would be for YÖK to eliminate the negative coefficient and for MONE to limit the expansion of places in Imam Hatip schools. Another possibility would be for MONE to follow the international trend towards more comprehensive education by converting all vocational and technical schools to diversified or comprehensive schools and by meeting specific vocational and technical training needs in another way.[2] In either case, a new consensus would have to be reached on the appropriate role of religious education in the public schooling system. For example, it may be possible to agree on a particular number of hours per week for teaching religion (to be an elective course for the students), with the rest of the curriculum matching that of the non-religious high schools.

1. YÖK is composed of 21 members: seven nominated by the Inter-university Council, seven by the government, seven elected by the President of the Republic and all appointed by the President for four years (renewable). YÖK's Chairman is directly appointed by the President from among the Council members.
2. The data for students at Imam Hatip schools were identified on the basis of student responses on the PISA questionnaire as to whether their school had a particular religious philosophy. Therefore, it is possible that this category could also include some other schools (*e.g.* Christian schools). However, this is unlikely to significantly influence the results.
3. The integration of vocational and general high schools is also recommended by the World Bank (2006).

two thirds were unable to perform better than level 2. An improved focus on teaching basic literacy and numeracy skills is clearly required at both general and vocational schools. Third, a significant deregulation of formal sector regulations – particularly in the labour market – as advocated in Chapter 3, would be likely to result in faster job growth in the formal sector. It would also narrow the perceived advantage of jobs that require a university education relative to mid-level qualification jobs which are currently more likely to be found in the informal sector.

Finally, the problem of over-emphasising university studies could be addressed by restructuring the existing vocational higher education schools as a new type of tertiary institution that combines theoretical studies and practical experience, and which in other countries leads to qualifications that are highly valued in business and industry (for example, polytechnics, following the original British model, *Fachhochschulen*, according to the German, Austrian, Swiss and Finnish model, or *Instituts universitaires*, following the French model).

Given the low average level of human capital in Turkey, any strategy to reduce economic duality must also consider the role of life-long learning. Turkey has a system of on-the-job training for adults, and some public training centres. However, Turkey could also benefit from the development of community centres which offer employment-relevant skills.

The role of school examinations in promoting quality education at all levels

The OECD (2005a) in-depth review of education identified two ways in which the end-primary OKS exam (for selective high school entrance) and the ÖSS exam (for university entrance) impede educational achievement. First, the ÖSS exam has traditionally attempted to measure a student's *aptitude*, rather than testing the extent to which the student has mastered the school syllabus. In this respect, it has been similar to the traditional Scholastic Aptitude Test (SAT) of the College Board in the US. While this approach has some merits, it has the significant disadvantage of detracting students' attention from the school curriculum. The OKS exam, which is taken by children wishing to apply to *selective* high schools, does have links to the grade 4–8 curriculum, although it also tries to measure aptitude at the same time. In Turkey, it is not uncommon for students to stop attending regular school classes in order to prepare for these exams, through an enormous private tuition industry. Based on unofficial reports, OECD (2005a) noted that students preparing for the OKS and ÖSS exams paid USD 263 million (or 1.4% of GDP) to private tutoring centres in 2001/02. This figure compares with total public education expenditures in that year of 3.7% of GDP. OECD (2005a) concluded that the new school curriculum will not be successful as long as these exams continue to be disconnected from secondary education standards and assessments. In light of this problem, YÖK's recent modification of the ÖSS exam to improve the links with the curriculum is very welcome.

The second problem is that these exams have been conceptualised only as tools for selecting and sorting students, rather than for measuring and signalling student achievements. As a result, these exams are not compulsory for all students, and they do not lead to any qualifications system for school-leavers to use in seeking work. This reflects little recognition within MONE of the role that the education system should play in preparing students for the labour market, including those who leave school with relatively low formal skill levels. HLFS statistics show that around 15 million workers have only primary school education or less – albeit mainly within the informal sector. Even today,

close to 40% of students drop out before completing high school. The education ministry should enhance its efforts to address the education needs of these students and not only focus on those who continue to higher education.

To do this, one of the most important priorities for Turkey should be the development of a national qualifications framework, such as proposed by OECD (2005a). The goal of such a framework should be to communicate to students the basic expectations and standards for the knowledge, skills and competencies that they must have to perform in different occupations, to participate in democracy and citizenship, and to live and work in a global knowledge-based economy. Such a framework should serve as an umbrella for and complement to the new national primary and secondary school curricula.

Developing a school culture of innovativeness and accountability for outcomes

Those OECD countries that perform best on PISA have a culture of school administration which holds schools accountable for student learning as well as for developing and maintaining the characteristics of effective schools (OECD, 2004). In Turkey, by contrast, the education system is described as being highly centralised and bureaucratic, with a focus on top-down mandates and detailed regulations that perpetuate a focus on compliance, rather than quality improvement and accountability (OECD, 2005). A key challenge for MONE will therefore be to foster a culture that puts less focus on top-down administration and more focus on encouraging schools to assume greater responsibility for outcomes. The OECD's in-depth review of basic education (2005) reported that key policy planners in MONE are clearly familiar with international trends in school reform, and that they have been deeply engaged in studying and piloting a range of reform proposals that reflect the most progressive thinking among OECD countries. However, there was little evidence of implementing such reforms and of quality impact-analysis. As a result of this, together with the highly fragmented and unco-ordinated efforts of different administrative units, OECD (2005a) concluded that few of the many good ideas have been brought to a scale sufficient to have a systemic impact on the Turkish education system. The systemic reform that is needed will also require substantial training and professional development of teachers, school principals and other officials at the provincial and national levels.

Summary

Given Turkey's relatively young and fast growing population, the ability of the basic education system to up-skill the future labour force must be significantly enhanced. Attempts to reduce the duality in the economy, by deregulating the formal sector (as discussed in Chapter 3), often meet with opposition on the grounds that, if left to the market, wages and employment conditions would be "too low". But a large proportion of the population are already employed in the informal sector under these conditions. Raising the productivity level and the living standards of the lowest skilled portion of the population requires a fundamental reform of the education system. Such reform is made even more urgent by the fact that it takes time for improvements in education to affect the skill level of the workforce.

With respect to basic education, one of the main goals of MONE should be to "make explicit the goal of broadening the fundamental purposes of secondary education from the current, narrow focus primarily on elite schools and sorting and selecting students for higher education, to a broader focus on preparing all students completing primary education for entering the labour market and/or higher education, and for lifelong learning" (OECD, 2005). This broadening of focus is still lacking, and this chapter argues

that it will not be achieved without a fundamental change in the way in which schools are *funded* and *governed*, together with a cultural change making schools more accountable for student outcomes.

The large stock of under-educated adults is also of concern. Hence significant effort will need to be devoted to improving the effectiveness of Turkey's existing system of adult education and to expanding its capacity, for instance by facilitating the development of community colleges or other institutions which can offer employment-relevant courses to the adult labour force.

The key recommendations stemming from this chapter are summarised in Box 5.3.

Box 5.3. **Summary of recommendations**

1. Make explicit the goal of broadening the fundamental purposes of secondary education away from the current focus on the elite schools and sorting and selecting students for higher education to a broader focus on preparing all students completing primary education for entering the labour market and/or higher education, and for lifelong learning.
2. Financial resources should be allocated with the aim of reducing inter-regional and socio-economic disparities. The medium-term goal should be to fund schools on a per-pupil basis, as in most other OECD countries. This should be achieved through gradual increases in the overall education budget, as fiscal considerations permit, and a freeze on per-pupil spending in the current elite schools. This refocusing of public funding needs to be accompanied, however, by a sharper focus on ways to improve the general quality of education.
3. Incentives for able students to attend vocational and technical schools should be improved. This will require removing the current disincentive to attend these schools posed by the negative coefficient. In turn, this may require a new consensus on the role of religious education in the secular state's public school system. Independent from such consensus, however, the Higher Education Commission and the Ministry of Education should recognize that the current situation is suboptimal for Turkey's vocational and technical education performance and reduces Turkey's growth potential. Both administrations should considerably improve co-operation.
4. Make fundamental changes to the examinations that are currently used at the transition points from primary to secondary education and from secondary to higher education. Insist that testing and assessment at all levels of the system – including higher education – be fully aligned with the curriculum.
   - Replace the current OKS entrance examination for high school with an assessment fully aligned with the new curriculum and administered to *all* students in primary education. Focus the new assessment on student achievement and design it as a diagnostic and guidance tool to identify areas for improvement, inform student choices, and provide information for school improvement.
   - Establish a new assessment for all secondary education students in both general high schools and vocational and technical high schools. The assessment should be aligned with the new curriculum.
   - The new assessment could also be used by the Higher Education Commission (YÖK) to assess university entrance in order to reward mastery of the curriculum already taught to students in secondary school, and reduce the current barrier to university education for students who do not have the means to pay for test preparation programs.
5. Seek to bring about a fundamental reform in the role, mission and functions of the Ministry of Education, including significant decentralisation of responsibility to schools. Such devolution of responsibility should be accompanied by appropriate training of school personnel and by improved accountability, such as by making indicators of school performance – adjusted for the socio-economic status of the students – public.

Notes

1. Open Higher Education is distance learning via mail and television broadcasting, and this tends to be the lowest quality higher education. The number of students in the Open Education system has increased rapidly in recent years – averaging around one third of total tertiary enrolment in 2004.
2. Of the number of children enrolled in the final year of primary school, 66% take the OKS exam.
3. References: TÜSİAD and YASED (2004), World Competiveness Yearbook (2005) and McKinsey (2003).
4. Although vocation and technical school students have the option to by-pass the university examination and attend 2-year tertiary education programmes in fields directly related to the student's high school speciality, the quality of these programmes is often questioned, and little horizontal flexibility is provided, which limits the possibility for a change in speciality or multi-disciplinary study. In contrast, there has been a general trend away from limiting the options of vocational students in other OECD countries.
5. 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.
6. Unlike many other OECD countries, MONE does not use a funding formula that is based on enrolments, socio-economic conditions and other variables.
7. Within the context of the "Social risk migration project", conditional cash transfers have been made available to poor families to partly cover the expenditures of their children at school. In addition, course books in primary education have been distributed to all students free of charge since 2004. Moreover, starting from this year, this policy will be extended to secondary education students.
8. While there are some examples of sought-after vocational schools, these tend to be in sectors with usually good (and well remunerated) employment prospects, such as tourism. However, such schools make up only a very small proportion of total high schools.

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Chapter 6

Freeing the potential of agriculture

The productivity and competitiveness of Turkish agriculture have been constrained by socio-economic weaknesses in rural areas and a protective trade and subsidy regime, which has created a status quo of highly fragmented, low-skilled, low-technology and domestic-market-driven farming. A major reform based on cutting distortive price and input subsidies and replacing them with direct income support was introduced in 2000-01, but there are risks that the reform will be less successful than anticipated. The reform effort should be reinvigorated and backed by improved framework conditions – legal infrastructure, technology transfer services, irrigation and other infrastructures – needed for the stronger development of commercial agriculture.

Productivity in agriculture is low…

The highly skewed distribution of labour productivity in the business sector – analysed in Chapter 3 – is amplified further when agriculture is included. Agricultural productivity is much lower than in the non-farm business sector, averaging around the level of the non-farm sector's informal and lowest-productivity segments (see Figure 1.6 in Chapter 1). As agriculture employs as many as one third of all workers, its low productivity is an important drag on overall productivity.[1] Despite its low level, the growth rate of productivity in agriculture has also lagged that in other sectors, pulling down total productivity growth. This divide between agriculture and the rest of the economy is deeper than in other OECD countries with relatively large agricultural sectors (Figure 6.1).

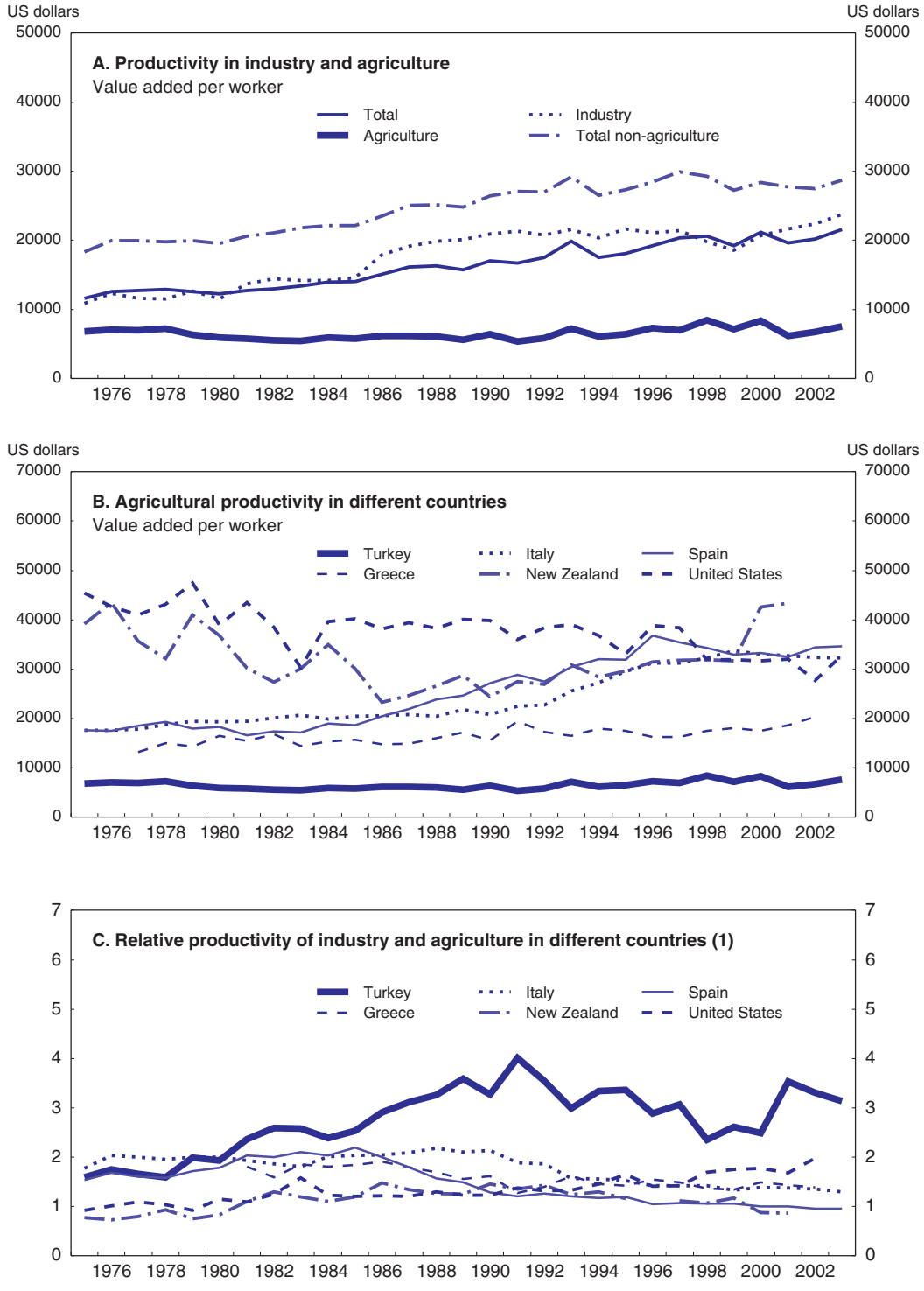
Supply structures have remained largely static over the past years, with the exception of some new entrepreneurial (and non-subsidised) areas such as poultry farms, fish farms, fruit and vegetable plantations and cut-flower glasshouses, which have grown in ways more typical of non-farm businesses. The bulk of farming has remained small and family-owned, highly fragmented and capital shallow, and has continued to use only elementary technologies. Farmers' formal human capital has also remained very limited, the vast majority having no more than primary education or less. As a result, the agricultural sector operates almost entirely in informality: although participation in the self-employed social security scheme is supposedly mandatory, 91% of farmers do not participate and farmers paying income taxes are a very small minority.[2]

Farm sizes have continued to shrink across generations instead of being consolidated into more efficient scales. The average farm had only 6 ha in 2003 and the majority of farms (about 85%) were smaller than 9 ha, significantly smaller than in other OECD countries.[3] Moreover, arable land in each farm is generally divided into a large number of parcels. Despite the recent emergence of more commercial farms, the small-size and fragmented structure still dominates the rural world (Figures 6.2 and 6.3).

… and exports remain below potential

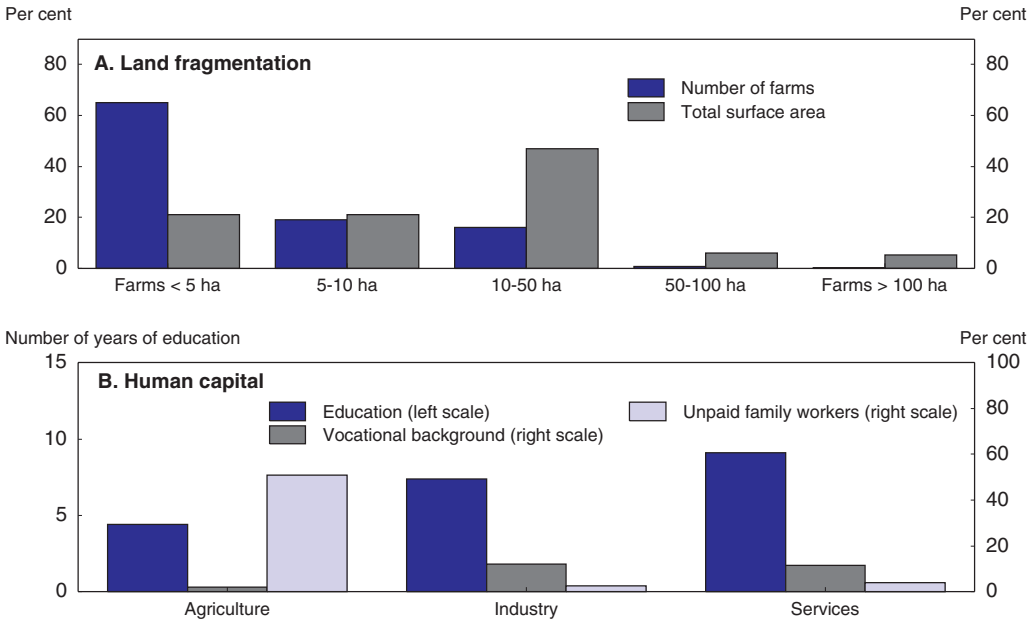
Exports have never been a priority of policymakers, and farmers and traders have generally paid limited attention to foreign markets. The domestic-market orientation of agriculture contrasts with other emerging economies which have achieved significantly stronger export growth in the past decade.[4] Backed by input subsidies, and operating on high quality land in a temperate climate belt, the agricultural sector has nonetheless increased its exports of some products. Turkey is a world leader in its traditional specialties (hazelnuts, oriental tobacco, dried fruit) and in some new areas (tomatoes, potatoes, watermelons). But overall, Turkey's share in world agricultural markets remains limited and, according to expert opinion, exports fall significantly short of potential[5] (Figure 6.4).

Figure 6.1. **Agriculture's performance gap**
USD, PPP-adjusted, 2000 prices



1. Labour productivity in industry/labour productivity in agriculture.

Figure 6.2. **Weak farm fundamentals**



Source: Turkstat and E. Türkan (2005).

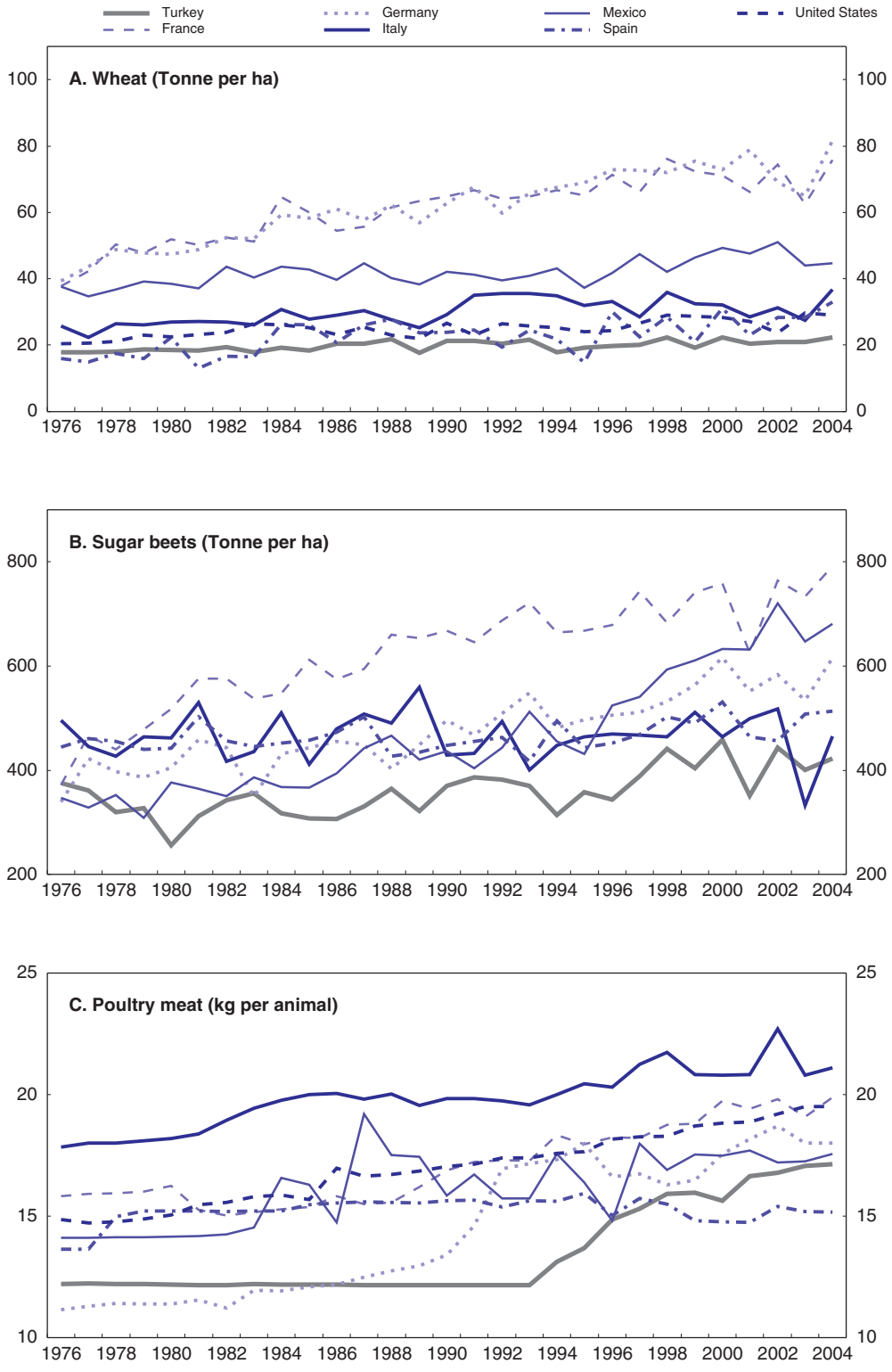
Public support is high

Many factors influence the performance of agriculture. While agriculture is a highly heterogeneous sector in terms of farm size and regional and climatic conditions, which all influence performance, a common factor which distinguishes it from other business activities is its being sheltered by trade protection and subsidies. Turkey's agricultural policies have traditionally targeted the level and composition of output to ensure food security for the country. Governments traditionally aimed to secure adequate food supply by strongly subsidising the utilisation of core inputs such as elementary mechanisation, fertilizers, pesticides, enhanced seeds and irrigation water. These early *input-based* policies stimulated a steady growth of production even if efficiency fell short of the productivity frontier and a number of distortions arose in the production process.[6] Although output has by and large grown as intended, these policies have kept agriculture on a technically suboptimal trajectory.

Together with food security, the other key objective of agricultural policies has been to protect the income and employment of the large farming population. However, public support was mainly linked to outputs and inputs, which particularly benefited the large and medium-sized producers rather than the small low income farmers. Nonetheless, these interventions have broadly stabilised income and activity in rural areas as a whole. As a result, the *level* of agricultural employment has remained roughly stable between the 1950s and 2000s, while its *share* in total employment has gradually declined, dropping below the threshold of 50% only in 1986.

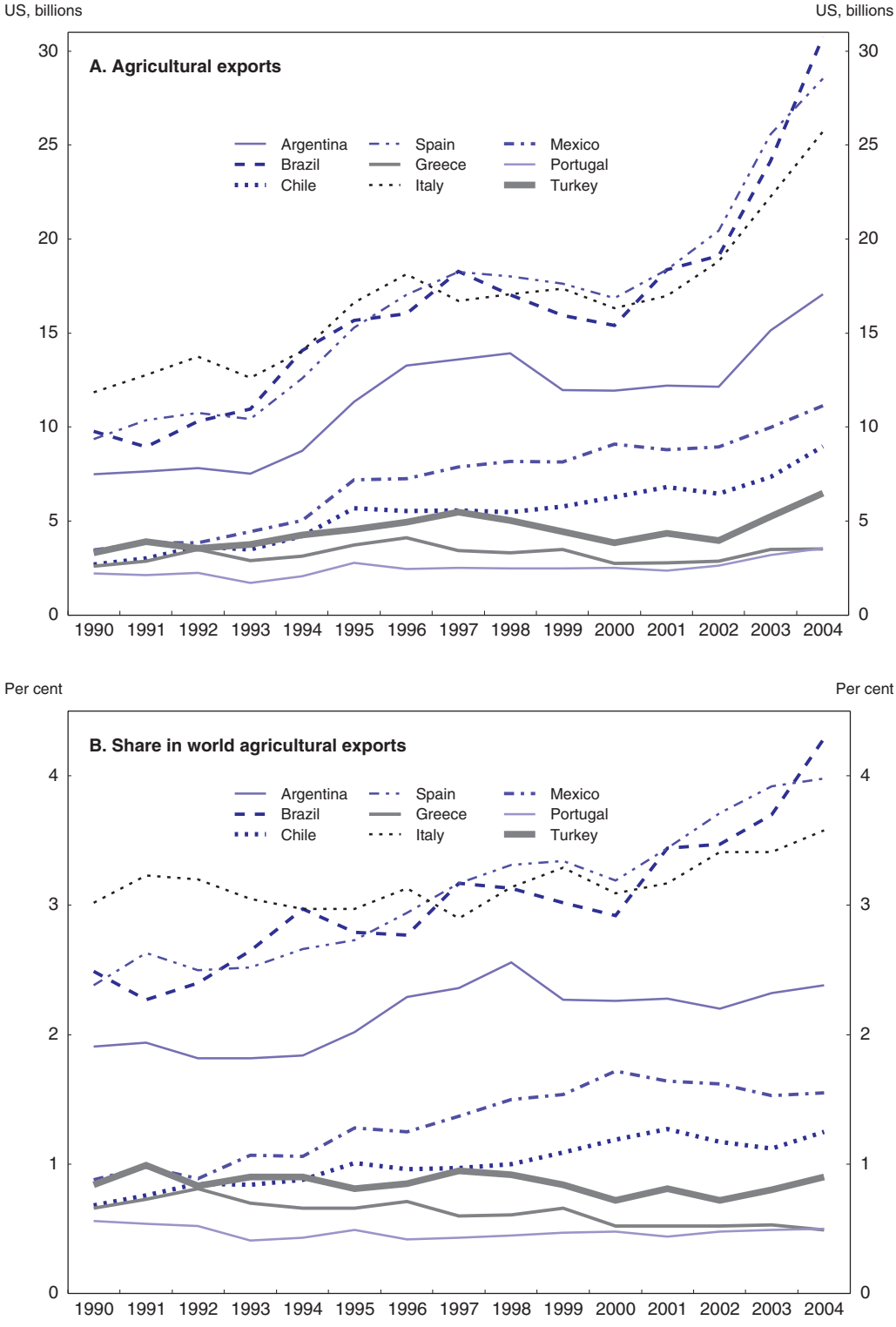
A large variety of aid schemes and implementation institutions characterise the agricultural support system. Over the past decades this system was centred on state-owned purchasing agencies implementing price support in product markets.[7]

Figure 6.3. **Productivity gap in international comparison**



Source: FAO.

Figure 6.4. **Agricultural exports**



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Furthermore, agricultural sales and credit co-operatives which were initially launched as commercial organisations became state-managed subsidisation channels.[8] At the same time key inputs such as fertilizers, pesticides and grains were provided at subsidised prices by state-owned enterprises or private suppliers, and basic infrastructural services of irrigation and technology diffusion were provided at highly subsidised tariffs by state monopolies. Finally, the state-owned agricultural bank (Ziraat, the largest financial institution in Turkey) was the only supplier of formal loans to agriculture. Informal credit dominated the financing of the rural world at a high cost.[9]

Through these various channels the agricultural sector receives significant resources. Measured by the OECD's "Producer Support Estimate" (PSE) methodology, agricultural support approached 3½ per cent of GDP in 2005, the highest level observed among OECD countries.[10] But this also reflects the particularly large weight of agriculture in the economy (Figure 6.5). The appreciation of the Turkish currency after the 2001 crisis may also have played a role. The share of total support to agriculture has remained high over the past decade, but as support to farmers is distributed to a large number of recipients, the contribution to farmers' individual incomes – at around a quarter of farm receipts – has remained lower than in some other countries which are also intervening heavily in favour of their agriculture (Figure 6.6).

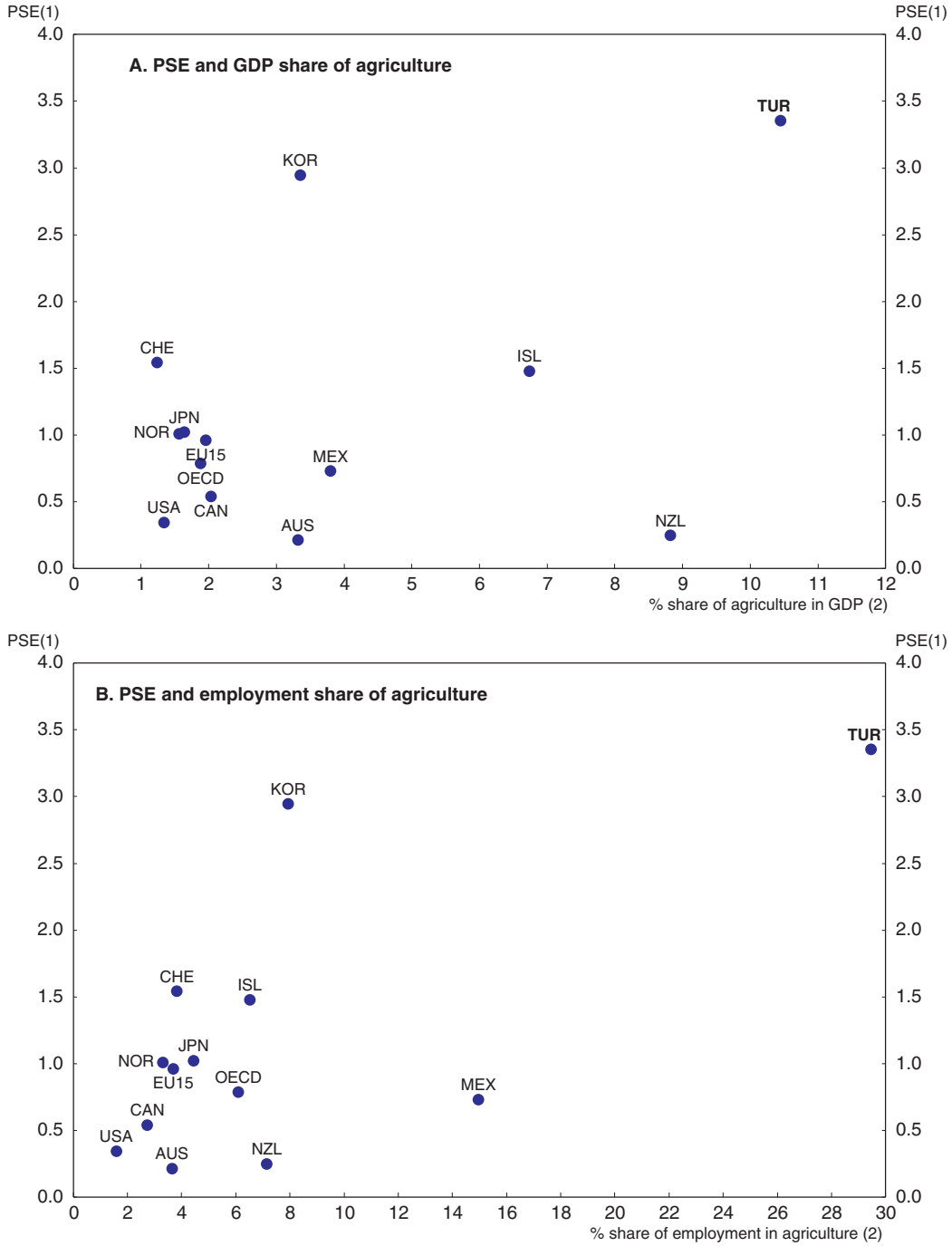
Support is also highly cyclical and less stable than in other OECD countries – a feature which has persisted in the most recent period (Box 6.1). This reflects both fluctuations in international commodity prices but also political economy effects, with transfers to farmers increasing above trend in pre-electoral and immediately-post-electoral periods and declining outside these periods. In 2002-04, over three quarters of support to Turkish farmers was financed by consumers through border protection, while the other quarter was financed by the budget. This compares with OECD averages of 61% and 39% respectively.

The support system has been challenged...

In recent years the agricultural support system has come under pressure:

- The *direct costs* of agricultural support are now better understood. New analysis in the wake of the disinflation and fiscal consolidation policies which followed the 2001 crisis has better exposed the consumer and fiscal costs of the prevailing system, including its extremely low "transfer efficiency".[11]
- The *competitiveness costs* of a low-productivity agricultural sector for the whole economy are also becoming clearer. High relative prices of agricultural products create problems for downstream industries which use agricultural products as inputs and also reduce the living standards of consumers (Box 6.2).
- The *opportunity costs* of the support system have also become more visible. A new generation of farming entrepreneurs and policymakers realise that restructuring and rationalisation in farming can generate major gains in output, higher incomes for farm workers and investors, higher tax revenues, gains in the trade balance and important synergies with downstream industries.[12]
- Finally, Turkey has also to comply with *international requests* implying the reform of its agricultural policies. The economic programme agreed with the International Monetary Fund after the 2001 crisis included explicit provisions regarding the reduction of agricultural subsidies. Furthermore, the pre-accession negotiations with the EU will imply major cuts in trade protection *vis-à-vis* the EU and its third-party trade partners[13] (Table 6.1). The new round of world trade talks will also put pressure on Turkey's subsidy regime, as the present

Figure 6.5. **Policy support and the weight of agriculture in the economy**
2005



1. Producer support estimates as a share of GDP.
2. Or latest year available.

Source: OECD, PSE/CSE database, 2006 and *National Accounts*.

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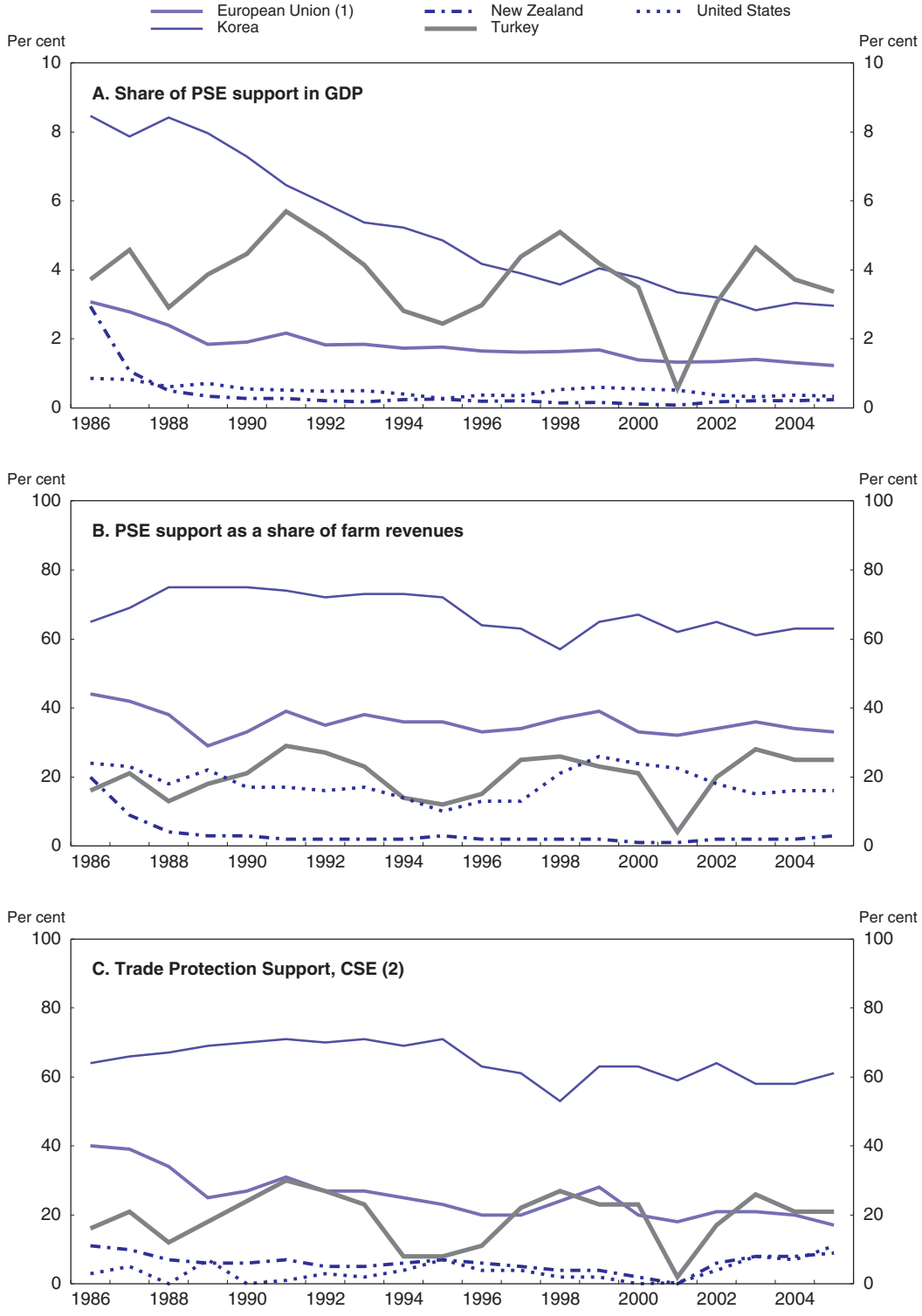
Figure 6.6. **The evolution of policy support to agriculture**



1. European Union-12 until 1996 and European Union-15 thereafter.
2. CSE = consumer support estimate, percentage of consumption prices.

Source: OECD Producer and Consumer Support Estimates database.

Box 6.1. **A unique political economy environment**

Agricultural policies in Turkey are rooted in a political economy environment which is unique within the OECD. Rural voters have made up the *majority* of the population until the late 1980s, and still represent nearly 40% of all voters.[1] Against this background, all successive governments and most political parties have felt committed to deliver a minimum degree of stability in rural incomes and employment, without challenging the existing production and skill structures.

The vast majority of farmers possess only small pieces of land and low levels of human and physical capital. They do not support policies which may introduce more market competition and require changes in techniques, know-how and marketing channels. They back policies preserving the *status quo* and individual incomes, rather than more competitive stances which would generate structural changes, land reallocations and technological transformations. The conservative bias that this introduced in policies slowed down aggregate productivity and output growth.

In spite of a powerful constituency for protection and support, average incomes have stayed low for the vast majority of farmers. The low level of productivity and the limited room available to governments for granting transfers to a large population of beneficiaries – both from the public budget and from consumers via trade protection – have put a cap on farm incomes. Poverty has remained widespread among small farmers and in many regions, without degenerating into deprivation.[2]

1. The rural population, almost entirely dependant on agriculture, represented 54% of the total population in 1985, and declined to 39% at the end of 2003 and to 38% at the end of 2005. However, many emigrants maintain close ties with their villages, continue to draw part of their income from agriculture, and stay partly within the political constituency of agriculture.
2. According to the latest household income surveys, only about 2% of the rural population suffered from absolute "food poverty". In contrast, 35% of rural households suffered from "general poverty" (which measures access to basic consumer goods) in 2002, 37% in 2003 and 40% in 2004.

aid system is only just compatible with the commitments that Turkey took at the end of the previous round in 1995. Turkey will face additional demands for cuts in the forthcoming negotiations.[14]

… and has been fundamentally reformed

After earlier attempts to reform agriculture and make it more competitive,[15] a major reform was begun during 1999-2001. In the framework of the fiscal consolidation started under a Stand-by Agreement with the IMF at the end of 1999, and on the basis of additional technical support provided by the World Bank in an *Agricultural Reform Implementation Project*, measures were taken in four areas:[16]

- Phasing out of agricultural price support and fertilizer and credit subsidies, and their replacement by a *direct income support* (DIS) system for farmers through a uniform per hectare payment (roughly USD 90/ha) unlinked to the production of any specific crop, on the basis of a National Registry of Farmers (NRF);
- Commercialisation and privatisation of the government-controlled enterprises and co-operatives which dominate the marketing channels of the main agricultural products, including wheat, sugar, tobacco, tea, olive, cotton, meat and milk;

Box 6.2. **Competitiveness costs of low-productivity agriculture**

Four major agricultural products (cotton, wheat, sugar and milk) are prime inputs for important Turkish industries. However, low productivity relative to the international competition, together with the existing trade protection in these products, undermine the competitiveness of downstream industries. Policymakers have introduced certain measures to minimise the negative spill-overs from the low competitiveness of agriculture, but the implementation of these policies raises a number of economic and administrative challenges.

Cotton is the core input of the Turkish textiles and clothing industry, and the high quality and the secure supply of domestic cotton was a traditional competitiveness driver for the industry. In recent years, however, price falls in international cotton markets – one of the agricultural markets most affected by production subsidies – tended to make local supplies uncompetitive in most years. To avoid negative spillovers to the textile and clothing industry the government reduced the tariff rate on cotton to zero, giving manufacturers access to their main input at international prices. Domestic cotton production then declined and there is a concern today that an irreversible eradication of capacity may result in this sector where Turkey arguably enjoys a long-term comparative advantage – in the absence of international price distortions. As crop switching (out of and back to cotton) has sunk costs, there are proposals to introduce a price compensation mechanism to offset the subsidy-induced price distortions in international markets and to restore a level-playing field for domestic producers. A "deficiency payment" scheme has already been introduced with this rationale, on a limited scale. However, at full implementation such a scheme would have very high and open-ended budgetary costs. Also, given Turkey's WTO commitment not to subsidise its cotton by more than 10% of production value, it appears impossible to fully offset international distortions with domestic subsidies. In these circumstances a legitimate question is whether it would be preferable to let the distorted industry decline somewhat and support a re-start when international market conditions are liberalised.

Competitive **wheat** supplies are central to the competitiveness of the flour and pasta industries, which have grown strongly in the past two decades in both domestic and international markets. A competitiveness problem is faced in these industries in the years where international wheat prices fall below the (protected and supported) domestic price level. Wheat production being the largest agricultural sub-sector supported by a public purchasing agency (TMO), policymakers, instead of liberalising imports as they did for cotton, devised an alternative measure by guaranteeing the downstream wheat processing industries, for the *international part of their sales*, supplies of domestic wheat *at international prices*. Since its inception this scheme has faced incessant controversies about the determination of reference international prices, as well as allegations of fraud in the form of re-cycling of subsidised wheat in the domestic market.[1] Competition distortions arose in the food industry with the co-existence of two input prices – one for domestic food production and one for exports. The implementation of the scheme has therefore proven more difficult to manage than initially anticipated. The first-best solution to the problem is, clearly, to increase the productivity of domestic wheat crops, and liberalise trade (the adoption of the direct income support system should facilitate this solution).

Sugar is also a controversial case. Both beet production and its transformation into sugar are two large-size industries, one in agriculture and the other in manufacturing, with a large number of sugar beet farmers supplying 9 sugar factories under high trade protection and widespread arrangements of "contract agriculture".[2] In 2005, tariff protection helped lift the domestic price of sugar to well above the international market price. Confectionary and other food producers then claimed that, in order to remain competitive, they should have access to i) sugar at international prices, and ii) to its cheaper substitute *fructose* which is derived from corn. While Turkey has a high latent production capacity in fructose, this capacity has been capped to date by regulatory controls under the pressure of sugar beet producers. The competitiveness of the food industry is hampered by these sugar sector policies.

Box 6.2. **Competitiveness costs of low-productivity agriculture** *(cont.)*

Milk and milk powder are other major inputs for the food industry. The government liberalised imports of milk *powder* at international prices but imports of *liquid* milk, besides being technically difficult, face high trade tariffs so that domestic prices result only from domestic market balances. On the other hand technological development is rapidly improving the substitutability between milk and milk powder, extending the (international) price trends in milk powder to the (domestic) liquid milk market. At the same time, allegations of important price distortions in the international milk powder market arise from subsidies granted by several producer countries. Simultaneously, the large share of informality in milk processing in Turkey gives cost advantages to the users of – mostly informally traded – domestic liquid milk, over the processors of – largely formally traded – milk powder. In these opaque circumstances, the organisation of a level-playing market between liquid milk and milk powder is difficult. Although "marketing boards" have been questioned in a number of OECD countries and have been targets of competition enforcement when they acted like monopolists in the purchase of milk and the distribution and sale of milk products, there have been suggestions to establish a "milk board" to promote a more transparent milk market.[3]

1. Wheat prices fluctuate in international markets and domestic food producers argue that their international competitors have access to the lowest prices, including in spot markets. In contrast, the wheat purchase agency TMO, in order to minimise its trading losses, aims at maximising the reference price of the scheme. This tension became particularly acute in 2005, when the reference price of TMO wheat was, according to flour and pasta producers, much above the price of the Ukrainian wheat in massive supply at their Northern border.
2. "Contract agriculture", whereby agricultural output is ordered and purchased at prices agreed ex ante was introduced to Turkey by the sugar industry.
3. SETBIR (Union of Milk and Dairy Producers) has recently proposed the creation of a "milk board".

Table 6.1. **Prospects for tariff convergence: Trade tariffs in Turkey and the EU**

	Number of tariff lines	Tariff rates applied by the EU to imports from Turkey	Tariff rates applied by Turkey to imports from the EU (weighted)	Tariff rates applied by the EU to imports from third countries (weighted)	Tariff rates applied by Turkey to imports from third countries (weighted)
Live animals and animal products					
Live animals	27	0[1]	1.7	56.7	1.7
Meat and edible offal	10	0[1]	71.4	68.6	71.4
Fish and sea products	89	0[1]	19.6	11.6	37.6
Milk and diary products; eggs; honey	72	0[1]	101.8	69.2	103.2
Vegetable products					
Vegetables, plants roots, tubers	78	0[1]	20.4	13.8	20.4
Edible fruits; citrus fruits	93	0[1]	120.2	12.1	120.2
Coffee, tea, spices	45	0[1]	46.1	4.3	47.3
Cereals	39	0[1]	17.0	79.1	17.0
Oilseeds, various seeds/fruits industrial plants	88	0[1]	3.6	1.0	5.5

1. These imports may be made subject to "tariff-quotas" (application of a tariff when imports increase above a threshold) and to an "entry price system" (specific duties are applied if import prices fall below the "entry price").

Source: Togan *et al.*, 2005.

- Sharp reduction of output intervention purchases financed from the budget leading to price cuts. Targeted price cuts were as large as 20-30% in most products. Intervention purchases were to be reduced by 45% in the main commodity, wheat, within two years;
- One-time grants were made available to farmers switching out of crops suffering excess supply, such as hazelnuts and tobacco, to help cover their transitional costs.

These measures were swiftly introduced. The largest purchasing agencies (TMO in cereals, TSFAS in sugar, ÇAYKUR in tea and TEKEL in tobacco) remained public – at the same time as TSFAS and TEKEL are in the privatisation portfolio – while most other policies were rapidly implemented. As a result, starting in 2002 and accelerating in 2003 – the first year of full implementation of the measures – the budgetary costs of agricultural support fell, contributing to fiscal consolidation (Table 6.2). Real incomes in agriculture declined by 16% as a result of price and output falls, while direct support (DIS) payments compensated for around 45% of these losses. The consumption of previously subsidised fertilizers and chemicals declined by 25-30%, and new subsidised credit by Ziraat fell almost to zero. The total surface of cultivated land declined by 2% in all regions except in the Mediterranean where commercial agriculture continued to grow and total agricultural output in volume (in constant prices) fell by 4%. DIS support was made conditional on land ownership and tenancy rather than agricultural activity – DIS-supported land had only to be "cultivated", but this could be achieved in many ways and at a low cost.

Table 6.2. **Transfers from consumers and transfers from taxpayers after reform**

	Total support estimate (TSE)[1]		Transfers from consumers		Transfers from taxpayers	
	TL millions[2]	As % of GDP	TL millions[2]	As % of GDP	TL millions[2]	As % of GDP
1995	14 678	3.6	4 994	1.2	10 240	2.5
1996	18 260	4.3	7 598	1.8	10 828	2.5
1997	25 484	5.7	14 887	3.3	11 182	2.5
1998	30 636	7.0	18 832	4.3	12 083	2.7
1999	25 960	6.6	14 518	3.7	11 902	3.0
2000	22 039	5.4	12 730	3.1	9 753	2.4
2001	10 450	2.7	944	0.2	9 633	2.5
2002	17 012	4.2	8 997	2.2	8 099	2.0
2003	21 405	5.1	16 565	3.9	4 717	1.1
2004	18 379	3.9	13 253	2.8	4 440	1.0
2005	18 660	3.8	13 069	2.7	5 141	1.1

1. Millions of new Turkish Liras, 2005 prices.
2. Total support estimate is not exactly equal to the sum of transfers from consumers and taxpayers. Transfers to the budget (budget revenues) generated by policies – amounting to 0.1% of GDP or less – account for the difference.

Source: Agriculture and Food Statistics Database.

These early results were compliant with the fiscal objectives. Due to the change in policy instruments the so-called "transfer efficiency" of agricultural support improved significantly.[17] At the same time, net losses of agricultural output and income have remained relatively limited given the depth of the reforms. Nevertheless, it became apparent that additional measures were necessary to build on the potential offered by the new market environment for productivity and output growth.

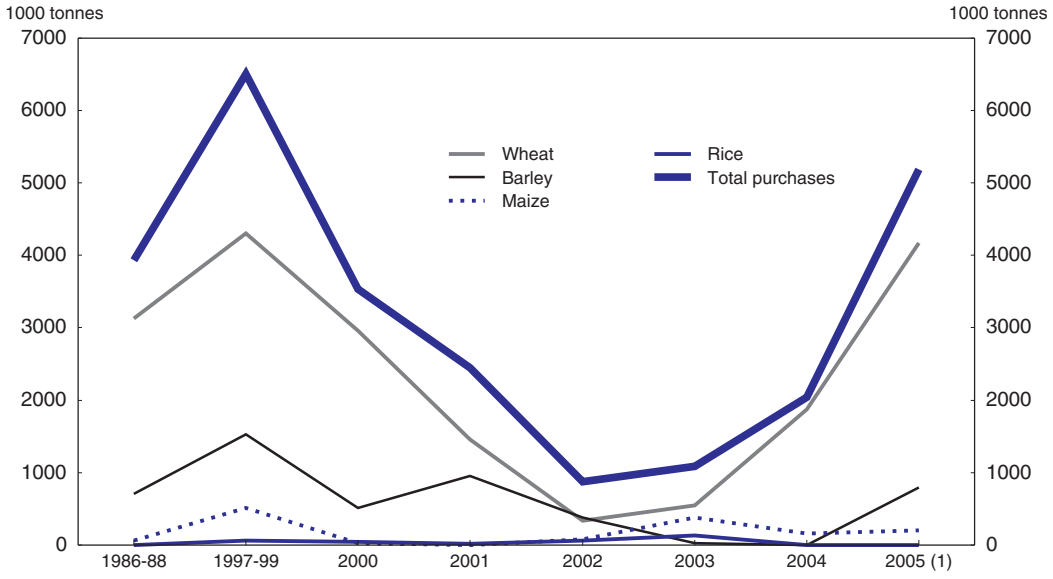
Certain sub-sectors have responded quickly to the liberalised market – such as olive oil where exports soared. In other sectors however an asymmetry seemed to arise between the low-technology and small scale suppliers and the highly concentrated (monopsonistic or oligopsonistic) commercial purchasers, with a fall in market prices and alleged increases in trade margins. Also, large groups of farmers seemed to lack technical and marketing resources to switch crops and re-orient their production. In an assessment of the early outcomes of the reform the World Bank stated that "The adoption of the DIS Program should be viewed as only the first phase of an agricultural reform. A second phase is now needed that builds on the DIS Program, by promoting agricultural productivity and

boosting agricultural profitability through both investment in rural infrastructure, and in sustainable rural institutions that deliver critically needed services, including rural credit, marketing and processing, and technology transfers".[18]

Starting from the understanding that accelerating diversification into new products, improving quality and enhancing productivity require a more pro-active approach, an "Agricultural Strategy" was adopted by the government and transformed into an "Agricultural Law" in 2006.[19] This strategy stresses DIS as the prime, but not exclusive, support instrument, and makes room for *deficiency payments* topping-up international market prices in the product areas where the government aims at preserving a national production capacity. *Crop-switching subsidies, livestock and rural development supports, aids to "agro-environmental" projects* and *subsidies to commercial insurance contracts* are also envisaged. The toolkit excludes, in principle, the most distorting forms of support such as output intervention purchases and input subsidies. The Law prescribes the creation of an "Agricultural Support and Orientation Council" which, with the participation of a wide range of government departments, will determine the objectives and instruments of agricultural policy at yearly intervals.

However, there are still risks that the reform will be less successful than anticipated. Indeed, the share of support to farmers in total receipts (% PSE) has tended to increase since the beginning of the 2000s, and reached almost its pre-reform levels (Figure 6.6 above). Border protection has remained rather high and support purchases, which were abolished in 2002, started again in the face of excess supply in certain sectors (Figure 6.7). Because of the administrative organisation of these purchases (intermediated by TMO, which is not a budgetary agency) budgetary costs are only paid with a lag. Indeed, fiscal constraints may be making the transition from traditional forms of support to explicit DIS more difficult, and this may explain the resurgence of border and other conventional forms of support.

Figure 6.7. **Are support purchases starting again?**
Intervention purchases of cereals by TMO, 1986-2005



1. As of mid-October 2005.

Source: Çakmak and Eruygur (2006) on basis of MARA, TMO and TURKSTAT.

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At this juncture it is important to re-assert the main elements of the structural reform that is required to transform a highly protected farming sector into a competitive agricultural sector. As illustrated in Table 6.3, a comprehensive reform requires both improvement in the framework conditions in the full range of agricultural product and factor markets *which should continue to be liberalised*, and *improved support from associated public services and market institutions*. It is hoped that such comprehensive reform would have potential to raise productivity and output and prevent backsliding into the older system of government interventions.

Table 6.3. **From sheltered to competitive agriculture**

	Sheltered agriculture	Competitive agriculture
Product markets	– Administered prices. – Dominated by public purchasers. – Marketing co-operatives operate as state agencies. – Public policy aims at balancing supplier and buyer interests. – Commodity exchanges marginal. – Markets closed to foreign competition (very high trade tariffs).	– Market prices. – Dominated by private purchasers. – Marketing co-operatives operate as competitive firms. – Competition policy keeps supplier and buyer market power in check. – Commodity exchanges are central. – Opening to foreign competition (a tariff reduction schedule).
Land markets	– Land ownership changes through bequests. – Land ownership rights are partly customary and informal. – Land fragmentation in motion.	– Land ownership changes through bequests and market transactions. – Land ownership rights are formalised through cadastre. – Land consolidation in motion.
Capital markets	– State-supplied credit at subsidised rates, rationing of low cost loans. – Informal loans complete (and dominate) banking loans.	– Commercial credit at market rates, credit available at varying costs for different market segments. – Smaller need for informal loans.
Input markets	– Subsidised input prices encouraging. economically inefficient input use (fertilizers, seeds, energy).	– Market prices for inputs determining. economically efficient input use (fertilizers, seeds, energy).
Labour markets	– Unpaid and unskilled family work kept as the bulk of the workforce.	– Dominating entrepreneurial farmers raise productivity by hiring more skilled labour.
Infrastructure: irrigation	– Irrigation water is subsidised. – Irrigation investment capped by budget constraints. – State monopoly manages irrigation. – Simultaneously excessive use and rationing of water (depending on farmers).	– Irrigation water is priced. – Irrigation investment can be locally and privately-funded. – Local and private organisations manage irrigation. – Economic allocation of water by using the price mechanism.
Infrastructure: technology	– Agricultural research in a few under-funded public laboratories. – National technological transfer services.	– Decentralised contract research in agriculture. – Regional, quasi-competitive technical extension services.
Coverage against risks	– *Ex post* and *ad hoc* coverage by the government of weather, disease, etc., risks.	– Commercial insurance of explicit risks with possible government support.
Social safety net	– A costly "umbrella" of price support and trade protection. – Social security not enforced.	– Direct income support to eligible farmers. – Social security enforced.

Source: OECD Secretariat.

Transition from the old "protection and support" regime to the new market-based environment is a process that cannot be achieved overnight. This is not the place to review all the complementary components and dimensions of this course. Nonetheless, it is important to recognise the systemic character and the underlying logic of the transformation at stake, in order to pursue it on all fronts: new policies should build on the incentives and disciplines of competition in the entire set of agricultural product and factor markets, and support this liberalisation with modern and effective public services. Certain areas, such as in the following paragraphs, deserve particular attention:

Technology transfer

Technology transfer services which have to date played a relatively limited role in the technological upgrading of Turkish farming should help to diffuse information on higher value-added and market-demanded products and product mixes, and their production technologies. Attention should be devoted to a full span of technologies ranging from "organic" products and technologies (where Turkey seems to possess a certain potential – as of now only 0.8% of total agricultural land is dedicated to organics) to internationally recognised and best-practice genetic technologies (which also appear to have an important potential in Turkey for reducing irrigation needs, for instance in cotton crops). Technology transfer services should also help contain the excessive and uncontrolled utilisation of fertilizers, chemicals and other additives which poses risks to the quality and food-safety of Turkish agriculture. The administrative decentralisation of these services could help make them more responsive to market needs.

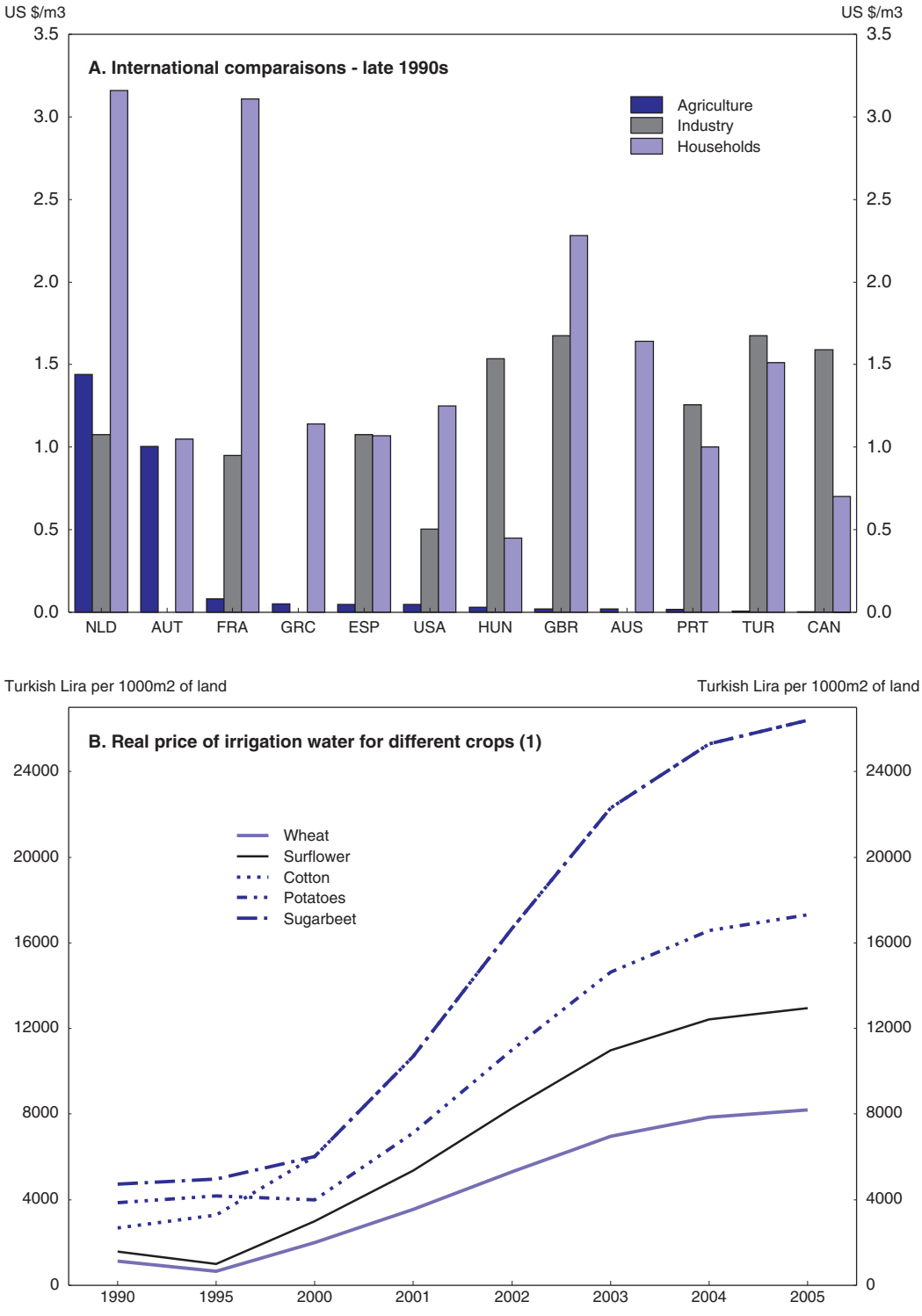
Irrigation

Turkey has 8.5 million hectares of irrigable land and only a gross 5 million hectares were irrigated at the end of 2005. Climate and land characteristics mean that well-managed irrigation has very high returns. In the past, few mechanisms were available to promote adequate irrigation. In certain areas excessively cheap water, lack of technical knowledge and the limited geographical reach of distribution networks led to widespread waste by those having easy access to water, to excess salinity of land, and wide imbalances between farmers who could irrigate and the others. On the other hand, recent budget constraints have reduced the expansion of irrigated land to 50 000 hectares per year, including in the important South-East Anatolian Project (GAP) which has a potential of 1.7 million hectares (20% of the total irrigable arable land of Turkey). GAP caters to the needs of an underdeveloped but high-agricultural-potential region where only 13% of the intended coverage area has been irrigated. The societal benefits of these early irrigation efforts have been highly positive.

At the present pace of irrigation investment, the completion of plans may take up to 80 years. Instead, more regional, co-operative and private investment would help to accelerate irrigation investment. Indeed, the authorities declare that they are exploring possibilities for more private investment in irrigation. To achieve that goal, they agree that water prices would need to be increased and this has already triggered an adjustment of irrigation tariffs (which were among the lowest in OECD in late 1990s) (Figure 6.8). Even if tariffs cannot be abruptly increased so as to cover full investment and capital costs, numerous opportunities exist for complementary commercial projects (such as water pipelines) to make better use of available water resources. The authorities should closely follow financial and organisational innovations ongoing in other OECD countries.[20] The slow pace of irrigation has at present very high opportunity costs.

Operation and management responsibilities for local irrigation networks (previously run by the national monopoly DSI) were recently transferred to self-financing local organisations. These have increased the excessively low prices in order to cover their operating costs and are proving more effective in managing water scarcity. These changes are important steps forward in the rationalisation of irrigation policy.

Figure 6.8. **The pricing of irrigation water**



1. At constant GDP prices, 2000.

Source: Turkish Ministry of Agriculture, OECD.

Land consolidation

Stopping land fragmentation and consolidating the highly fragmented land is indispensable for raising agricultural productivity. The legal and regulatory framework has to date not facilitated this process. Prior to 2001, land was automatically divided at the time of a bequest, while in other OECD countries the preservation of economic farm sizes is normally taken into account. The Turkish Civil Code was modified in 2001 with a new article prescribing that "farm properties below economically efficient sizes should not be divided at bequests" (although division of land can still be obtained through a court decision).

Not only stopping but *reverting* land fragmentation may prove more difficult if transaction costs are high, even if a more competitive market process should now drive land consolidation. The increased availability of investment capital and credit to agriculture should also help. The degree of adequacy of the present legal and regulatory framework for facilitating these operations will be revealed in practice.

At present, policy-makers believe that the existing legal and regulatory framework for land consolidation is adequate. If "land consolidators" face excessive hurdles in practice, policymakers may need to envisage additional remedies. There are already plans to issue a new "regulation for the preservation, use and consolidation of agricultural land" and vest a special agency with the task of facilitating the required transactions.

One problem is that an estimated 20 to 30% of agricultural land is not yet covered by cadastres (formal land registers). This is an obstacle to consolidation as the enforcement of ownership rights involves lengthy court procedures. A complete and reliable agricultural cadastre is also a pre-requisite for Turkey's joining the European Union's Integrated Administration and Control System for farm policy (IACS). IACS aims at putting in place a satellite-based land monitoring system superimposed with cadastres, and Turkey plans to participate in this effort. Completing and modernising the cadastre should be a top priority of agricultural policy.

Competition

Competition policy has an essential role to play in the functioning of agricultural markets. In most OECD countries, complaints about domination of markets for agricultural products are common, due in large part to the low short-term elasticity of supply and demand. In Turkey, the challenge is amplified because liberalisation is recent and still incomplete in many areas. In particular, after the privatisation of the traditional state-owned intermediaries, some time will be required for the establishment of new marketing channels and institutions found in the other OECD countries, such as commodity futures and product-specific processing and marketing co-operatives. Competition authorities should oversee the emergence of these institutions, notably of any product-specific commodity boards – to guard against the creation of unnecessary monopolies. It is fortunate in this regard that Turkish Competition Law does not provide any anti-trust exemption concerning practices in agricultural markets. In the recent period since reform, the Turkish Competition Authority has already addressed some controversial cases – including the purchasing practices of the Union of Tomato Purchasers, milk purchasing practices of large dairy enterprises and a large merger case in the fertilizer industry (where it rejected the merger). Ensuring that output and input markets are fully competitive and operating efficiently are key requirements for the development of commercial agriculture.[21]

Agricultural financing

Investment capital and commercial credit are important ingredients for the development of productive farms. The agricultural sector has been endemically cash-constrained to date, and the subsidised (state-owned) Ziraat loans were unavoidably rationed. These loans were also partly allocated according to non-economic criteria. Private bank loans are restrained by the information, collateral and enforcement failures in this sector overwhelmed by informality. Informal credit has filled the void at a high cost to borrowers. The government's cash constraints have also made the financial constraints of farmers more serious; for instance, the DIS payments for 2004 were partially paid in 2005, and payments were completed in January 2006. A pick-up in private loans has been observed in the past five years, from practically zero in 2000 to a total portfolio of 110 million YTL in 2005 (still very marginal at 0.03% of GDP). These private loans are extended to large farms purchasing heavy agricultural machinery under leasing arrangements. Yet many banks (Isbank, Sekerbank, Finansbank, Denizbank) announced that they plan to develop more diversified loan packages for agriculture. The improvement of the legal and administrative framework for collateral (including the completion of the cadastre) is a pre-requisite.

Easing the social costs of adjustment

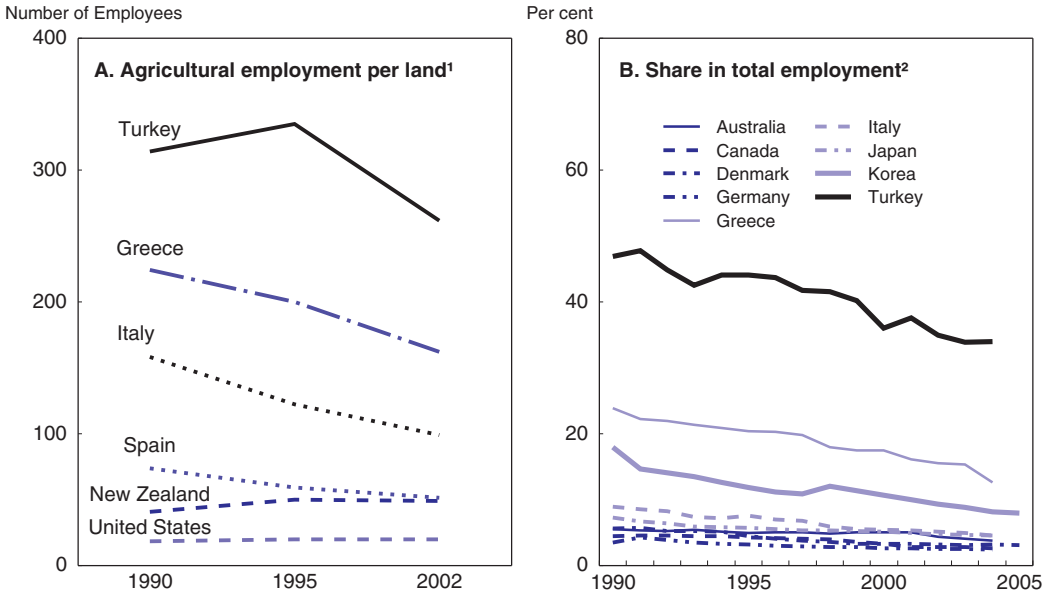
"Protecting the low-income farmer" has long been a political slogan supporting market distorting policies, which have encouraged small farmers to remain in the sector, although they were rarely the main beneficiaries of such policies. The large size of the population working on small farms has made consolidation of the agricultural sector socially difficult and may be one of the factors making the pursuit of reforms politically demanding. While agricultural transition would be eased by the economy-wide comprehensive reforms suggested in this Survey – which would enhance job creation outside agriculture, including in rural areas – this pull factor might not be sufficient. Social measures might be needed to facilitate the transition, such as by encouraging older farmers to retire and sell or lease their land which currently protects their subsistence. Indeed, despite the recent acceleration of labour force exits from agriculture, more labour adjustment is to be expected,[22] as confirmed by the experience of other catching-up countries (Figure 6.9).

A number of OECD countries have applied special programmes to facilitate the agricultural transition in the past, notably by funding retirement schemes (in particular when farmers had not contributed at all to social security and therefore were not eligible for pensions in their own capacity). However, experience with such reforms shows that they may also lead to early and excessive withdrawals from the labour force and entail large fiscal costs. In Turkey's circumstances such risks would justify a very careful design of any policies aimed at easing the social costs of adjustment.

One feasible policy to ease the transition would be to raise the means-tested public pension, which is currently below the absolute poverty level, a measure which would alleviate poverty more generally. Policies could also involve other social support to farmers. With properly defined eligibility criteria, the overall fiscal costs of such measures could be manageable.[23] The net costs of policies could also be reduced by re-orienting part of ongoing budget transfers to agriculture to such programmes.[24] Table 6.2 showed that agricultural reforms have already resulted in significant fiscal savings, and further savings should be possible if the reform process continues and is not reversed by policy changes.

This justifies a special attention to sustaining the reform momentum. The re-allocation of agricultural land to more efficient commercial farms would also widen the tax base, thus also contributing to the funding of policies.

Figure 6.9. **Remaining potential for employment adjustment**



1. Employees per 1 000 hectares of arable land.
2. Share of agricultural employment in total employment.

Source: OECD and FAO.

Conclusions

The recommendations of this chapter are summarised in Box 6.3.

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Box 6.3. **Recommendations for freeing the potential of agriculture**

General policy

Pursue the transition from "sheltered" to "competitive" agriculture as a strategic objective in all areas of agricultural policy. In order to maximise returns from reforms, pursue liberalisation in the full set of product, land, input, capital and infrastructure markets.

Technology transfer

- Technology transfer services should diffuse information on high value-added and market-demanded products, and on their production technologies.
- The full span of technologies ranging from "organic" products to internationally recognised genetic technologies should be covered.
- Technology transfer services should be made more market-responsive – decentralising them is an option.

Irrigation

- Avoid waste of water by farmers who have easy and excessively cheap access to it. The price of irrigation water should be based at least on operational costs.
- Make irrigation investment a fiscal priority. At the same time make sure that projects are selected according to economic criteria and run efficiently.
- Resume and fund the irrigation leg of the South-East Anatolian (GAP) project.
- Seek opportunities to involve private investors in irrigation projects. Pilot projects can play a demonstration role, and water-using farmers as well as third-party commercial investors should be encouraged to participate.

Land consolidation

- Monitor trends in land consolidation and make sure that legal and transaction costs remain affordable. Monitor the effects of the 2001 change in the Civil Code on land fragmentation at bequests.
- Complete and implement the "regulation for the preservation, use and consolidation of agricultural land".
- Make the completion and the modernisation of the agricultural cadastre a priority.

Competition

- Encourage the competition authority to take an active role in competition advocacy in agricultural product, input and service markets.
- Monitor the new marketing and purchasing organisations in agricultural products and ensure that they comply with competition principles.

Agricultural financing

- Strengthen the legal framework for agricultural collateral (land, livestock, etc.).

The social safety net

- Increase the level of the means-tested public pension and assess the need for other social support to those retiring from agriculture and contributing to land consolidation.
- Carefully study eligibility criteria for social assistance and aim to fund it with savings from other agricultural spending.

Trade policy

- Anticipate Turkey's future liberalisation obligations in the context of the WTO and EU negotiations and target more pro-active liberalisation.

Notes

1. The agricultural sector is particularly large: it employs 7.4 million workers and cultivates 22 million ha of land, representing 103% of the agricultural population of the EU-15 and 64% of the EU-25, and 17% of the cultivated land of the EU-15 and 12% of the EU-25. It generates living incomes for a population of 25 million.
2. Only 3 000 farmers (less than 0.05% of the total) paid any income taxes in 2005 on the basis of income declarations. Total income taxes collected from agriculture amounted to 340 million YTL in 2005 (0.08% of GDP).
3. This is well below the European Union's average farm size of 17 ha although even there, significant farm support may has probably efficient aggregation from occurring. The average farm size is much higher in the United States, at 180 ha per farm.
4. Turkey not being part of the European Union's Common Agricultural Area has certainly been a factor restricting export growth when compared to catching-up EU members.
5. For example Kasnakoglu *et al.* (2005).
6. Various studies have documented the excessive utilisation of basic inputs in Turkish agriculture – notably excessive irrigation and salinisation in water-subsidised areas and excessive utilisation and presence of phosphates in fertilizer-subsidised arable land. See, Oskam *et al.*, 2004.
7. Cereals (TMO), Sugar beat (TSFAS), Tobacco (TEKEL), Tea (ÇAYKUR), Meat (EBK), and Milk (SEK), etc. Many *except the largest* of these agencies have been privatised in recent years.
8. Many of these organisations became subject to non-commercial and political influences and operated under soft budget constraints.
9. According to a 2001 study formal outstanding loans to agriculture amounted to 13% of agricultural GDP in that year. Informal loans amounted to 30% of agricultural GDP.
10. When the costs of the general government services to agriculture as a whole are taken into account – these are low in Turkey, they account for around 10% of total support to agriculture – the so-called Total Support Estimate (TSE) amounted to 4% in 2005, still one of the highest in the OECD.
11. Net benefits received by farmers are much lower than the costs incurred by consumers and taxpayers ("transfers are inefficient"). This is due to the costs of production (seed, fertilizer, pesticide, etc., costs) of a massive "deadweight" of low-value agricultural output as a result of distortive price support, and to the multiplication of intermediaries in the support system. It was recently calculated that only about one quarter of the total fiscal and consumer costs of agricultural support in 1999 was actually benefiting farmers. See Lundell *et al.* (2004).
12. Several organisations have published reports on the latent and unused potential of Turkish agriculture in the past two years. TUGIAD (2004), TUSIAD (see Kasnakoglu *et al.* 2005), MUSIAD (2005).
13. Even if new types of support compatible with the Common Agricultural Policy will also become available.
14. Two analysts of Turkey's agricultural trade negotiations with the EU and in the WTO have recently observed the slow-down in these talks but argued that such delays can only be temporary: "The delays in finalising the new agreement on agriculture of WTO and the accession period to EU may give Turkey the opportunity to pursue past policies for about a decade, but eventually Turkey will be forced to shift to policies which will enhance the structure of production. Turkey seems to have two effective policies to consider: i) upgrade land and decrease the semi-arid nature of production (increasing access to irrigation) and/or ii) invest in R&D for technology transfer". See Çakmak and Eruygur (2006).
15. Important reform efforts were undertaken in 1982 and 1994. While they had sound technical objectives political support was weak and they were overwhelmed by subsequent political developments.
16. The main and only domestic exposition of this programme was a policy statement issued by the Turkish Treasury in June 2001: "Agricultural Sector Reform: What is it and why is it necessary?". The summary of the reform and its early record presented here draws on Lundell *et al.* (2004) and Ministry of Agriculture and Rural Affairs of Turkey (2004).
17. As input subsidies with a low transfer efficiency were replaced with the Direct Income Support (DIS) system which has a higher transfer efficiency.

18. In an assessment of the reform on behalf of the Dutch government a Group of Experts stated: "Although some structural change is being driven by private sector developments upstream and downstream from agriculture, a stronger and more competitive food supply chain requires restructuring of the farming sector. The pace of this will be too slow if it is left to market forces and economic pressures." (Oskam *et al*. 2004).

19. See Yuksek Planlama Kurulu (High Planning Council) (2004).

20. See OECD (2002) and OECD (2006c).

21. The OECD Competition Law and Policy Committee recently organised a Round-Table discussion on competition issues in agriculture. After reviewing the common claims about monopsony buyer power and producer co-operatives in agriculture it concluded with a general recommendation that "Antitrust exemptions for the agricultural sector are not necessary. Joint-activity organisations that involve a small percentage of output or that result in the creation of brands can provide substantial benefits to consumers and as a result, such joint activity would not generally be illegal under many antitrust laws. In contrast, joint-activity organisations that have mandatory membership and engage in output restricting or redirecting activity likely harm consumers and do not promote the public interest. Only in exceptional cases would such activities enhance the public interest, so they do not merit a broad exemption" (see OECD, 2005). The Turkish Act for the Protection of Competition No. 4 054 does not provide any such exemption.

22. In its background projections for the IXth Development Plan 2007-13 the State Planning Organisation estimated that the share of farm employment in total employment could decline from 29% in 2005 to 19% in 2013.

23. If, for purposes of an illustration, it is assumed that 20% of the farming population is made eligible for means-tested pensions, the fiscal costs of such a measure would range from a third to three quarters of a percentage point of GDP according to whether the level of the means-tested pension were to be fixed at the "food only" poverty line (currently 85 YTL per month, € 43) or the "general" poverty line (currently 206 YTL, € 105). Means-tested pensions are at present below these poverty lines at 65 YTL (€ 33), as discussed in Chapter 4. Total fiscal costs would obviously depend on specific eligibility and benefit criteria and the number of already inactive rural inhabitants who would be made eligible.

24. Part of the present DIS payments could be re-oriented. There are reportedly widespread abuse in DIS entitlements, and any savings achieved through the tightening and better administration of this programme could be used to help finance social programmes.

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