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2007



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This report was prepared in the Economics Department by Christian Gianella and William Tompson, under the supervision of Andreas Wörgötter.

Substantial contributions were made by the following individuals: Andrzej Kwiecinski (agriculture), Volodymyr Dubrovskiy (competition), and David Brown and John Earle (entry, exit and privatisation). Oksana Kuziakiv assisted with the conduct of the review of product-market regulation.

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BASIC STATISTICS OF UKRAINE

(2005, unless otherwise noted)

THE LAND

Area (thousand sq. km)	603.5
Agricultural area (thousand sq. km)	417.2

THE PEOPLE

Population (millions, end-year)	46.9
Inhabitants per sq. km (end-year)	78
Average annual population growth (per cent, 1995-2005)	-0.9
Employment (millions)	20.7
By branch (per cent of total)	
Industry	19.7
Agriculture	19.2
Construction	4.6
Services	56.5
Unemployment rate (ILO, 15-70, 2006)	6.8
Inhabitants in major cities (millions)	
Kyiv	2.7
Kharkiv	1.5
Dnipropetrovsk	1.0
Odesa	1.0
Donetsk	1.0

GOVERNMENT/ADMINISTRATION

Head of state: President, popularly elected for a 5-year term	
Head of government: Prime Minister heads Cabinet accountable to parliament	
Parliament: unicameral Supreme Council (Verhovna Rada)	450 seats

PRODUCTION

GDP (UAH billion, current prices, 2006)	537.7
Gross value added by branch (per cent of total, 2006)	
Industry	28.5
Agriculture	8.4
Construction	4.9
Services	58.1
GDP per capita (USD, market exchange rate, 2006)	2 284

PUBLIC FINANCE

General government revenue (per cent of GDP)	42.2
General government expenditure (per cent of GDP)	43.6
Public sector debt (per cent of GDP, end-year)	15.0

FOREIGN TRADE AND FINANCE

Exports of goods and services (USD billion, 2006)	50.2
Imports of goods and services (USD billion, 2006)	53.3
Central bank gross foreign exchange reserves (USD billion, end-year, 2006)	22.3
Gross external public debt (per cent of GDP, end-year, 2006)	12.1

THE CURRENCY

Monetary unit: Hryvnia	
Currency units per USD (period average):	
Year 2006	5.05

Executive summary

After a decade of crisis, Ukraine has been enjoying a period of sustained strong growth

Real GDP growth averaged an impressive 7.4% during 2000-06, as the economy bounced back from the severe transition recession of the 1990s. Yet there is more at work here than simply a post-crisis recovery. The achievement of macroeconomic stabilisation together with the structural policies of the late 1990s did much to harden firms' budget constraints and to unleash at last the Schumpeterian processes of creative destruction that drive economic development. Like many CIS countries, Ukraine lagged behind the more advanced transition countries of Central Europe with respect to market-oriented reforms, as governments often focused more on preventing structural change than facilitating it. Hence, there is much still to be done in order to make strong growth more sustainable. One of the major emphases of this report is therefore on what more Ukraine can do to reduce the many remaining barriers to entry, exit and competition and thereby to stimulate a greater degree of dynamism and flexibility than its market economy has yet achieved. The potential benefits arising from such reforms are likely to be particularly great in view of the complementarities that exist among them, especially those involving regulatory reform, competition and privatisation. Tackling these issues is all the more urgent now because, although Ukraine continues to grow strongly and the scope for catch-up remains considerable, a number of the factors that have underpinned growth since 1999 have exhausted, or will soon exhaust, their potential.

Growth has been driven by domestic consumption and supported by rising terms of trade

In the initial phase of its recovery after a decade of contraction, Ukraine benefited from a sharp devaluation of the hryvnia and from the presence of substantial spare capacity. Throughout the period, Ukraine has also enjoyed comparatively low energy prices. Growth has been broad-based across sectors, with the largest contributions coming from services – the services share in total value added rose by 8.5 percentage points during 2001-06. On the demand side, growth since 2001 has been driven chiefly by booming private consumption, although the investment contribution has also been substantial. Rapidly growing household consumption has been supported by rapid increases in wages and social transfers, as well as spectacular growth in retail credit. Rising incomes have benefited the great mass of Ukrainian households, and both unemployment and poverty have fallen sharply since 1999. Demand growth was supported by a cumulative 17% increase in the terms of trade during 2002-06. This was primarily the result of strongly

rising international prices for metals, which account for around 40% of exports. In 2006, metals price increases were sufficient even to offset the shock of a near-doubling of import prices for Russian gas.

Firms need to adapt to less favourable external conditions

Despite healthy productivity growth in manufacturing and steadily rising terms of trade, the non-mineral trade surplus has fallen rapidly in recent years. This is in part because Ukrainian industry has largely exhausted the post-crisis gains in labour-cost competitiveness. Productivity gains far outstripped wage growth in the first years of the recovery, but wages have been rising rapidly in recent years and this gap has now closed. The evidence also suggests that Ukrainian manufacturers find it difficult to compete on quality in non-CIS markets. In the coming years, moreover, the competitiveness of the export sector will be hit by further increases in the price of natural gas imports. The gas-price issue is particularly sensitive, given that Ukraine has a rather narrow range of revealed comparative advantages and that these are largely concentrated in energy-intensive manufactures.

Fiscal discipline has underpinned the recovery, but the level of fiscal pressure is too high

The maintenance of fiscal discipline since 1999 has been a major achievement; keeping debt low and deficits in check has helped restore confidence and support growth. However, the degree of fiscal pressure has risen markedly since 2003 and is now probably excessive. A sizeable and highly consumption-oriented shift in fiscal policy during 2004-05 pushed the expenditure-to-GDP ratio above 43%, mainly as a result of a near-trebling of the basic pension in real terms. In 2005, the government executed an impressive fiscal consolidation, chiefly via the elimination of tax privileges for firms rather than expenditure cuts. The net result of these shifts in policy was a large-scale transfer of resources from firms (with a higher propensity to save) to households (with a higher propensity to spend). Moreover, dramatic increases in pension benefits left the country with a pension expenditure-to-GDP ratio in excess of 14%, one of the highest in the world. Given demographic trends, ensuring the long-term sustainability of the pension system is likely to be impossible unless current low retirement ages are adjusted upwards. The heavy burden of pension spending also limits the scope for reducing payroll taxes, which are exceptionally high and constitute a major incentive to under-report wages and salaries. The growth-impeding effect of Ukraine's high tax burden is reinforced by the distortions created by the structure of taxation itself. Despite evident progress in simplifying the corporate and personal income taxes and reducing tax exemptions, there is still considerable room for improving both tax administration and the design of the tax system while broadening the tax base. The distortions created by the overly generous simplified tax system are particularly problematic.

Reducing inflation should become the primary focus of monetary policy

A *de facto* nominal dollar peg remains the cornerstone of monetary policy. While this nominal anchor helped Ukraine achieve macroeconomic stability in the aftermath of the 1998 financial crisis, it is now contributing to increasing inflation volatility and the risks associated with growing dollarisation of households' and firms' assets and liabilities. The current exchange-rate regime, combined with more attractive interest rates on foreign currency loans, constitutes a particularly powerful incentive to borrow in dollars. Allowing the exchange rate to fluctuate more freely could make exchange-rate risks more apparent to agents and thus help to reduce dollarisation. Greater exchange-rate flexibility could also serve as the first step in a phased transition towards an inflation-targeting regime. Any transition to a new monetary policy framework will of necessity be gradual, given the underdevelopment of financial markets (particularly the market for government securities), the relatively low level of monetisation and the consequent weakness of the interest-rate channel. Yet while the adoption of a fully fledged inflation-targeting regime must therefore take some time, the authorities could begin by making greater use of the exchange-rate channel, which appears to be relatively strong, to reduce the level and volatility of inflation. Macroeconomic conditions now appear to be broadly favourable for such a change.

Continued strong growth now depends primarily on improving the business climate

The economy has now built up considerable momentum, and Ukraine still has considerable scope for “catch-up” growth. Nevertheless, some of the factors underlying recent growth are transitory: the terms of trade are expected to deteriorate this year; energy prices are set to rise further; the period of “easy” productivity gains via labour shedding and increases in capacity utilisation has come to an end; and consumer credit growth is bound to slow. If Ukraine is to sustain strong growth over the medium-to-long term, therefore, it will need to make the transition to a pattern of self-sustaining investment- and innovation-led growth. In addition to capital deepening and more efficient resource allocation, this will require maintaining robust total factor productivity (TFP) growth at a time when production factors are being used more intensively. Poor framework conditions for business currently constitute the principal obstacle to increasing the level and efficiency of investment. Entrepreneurs face very high levels of legal, regulatory and policy uncertainty, making any long-term undertaking highly risky. The uncertainty and unpredictability of state action stem in many cases from a lack of transparency. These factors, in turn, fuel widespread corruption and undermine property rights. Improving the quality of public administration and strengthening the rule of law thus remain absolutely critical priorities. A consistent, broad-based policy of deregulation could also do much to address these problems, since excessive and often inconsistent regulation tends to create opportunities for arbitrary bureaucratic action and rent-seeking. However, in many spheres, Ukraine needs *better* regulation rather than simply less regulation. This will require correcting the many gaps and contradictions that exist in legislative and regulatory frameworks.

Barriers to entry and impediments to exit need to be reduced

Stimulating robust productivity growth and increased innovation will also require a profound reform of product markets in order to enable the process of creative destruction to unfold. Cross-national empirical studies find that higher firm turnover (*i.e.* higher entry and exit) is growth-enhancing. Because the restructuring of large state-owned enterprises (SOEs) is fraught with difficulty and often subject to considerable delay, reducing barriers to entry and allowing the growth of new activities has been a crucial engine of transformation in the more successful transition economies. Barriers to entry and exit are still substantial in Ukraine. The economy – particularly the industrial sector – is still dominated by energy-intensive heavy industrial sectors, and this is one reason why so much past policy has been oriented towards averting rather than facilitating needed structural change. Empirical analysis of entry and exit confirms the impression that Ukraine has particular problems with exit.

- Overall firm turnover rates in manufacturing (entry plus exit) tend to be rather low by OECD standards, although entry rates rose sharply after 1995. Exit rates, by contrast, remain extremely low and appear to account for most of the difference between Ukraine's turnover rates and those of OECD members.
- Entering firms in Ukraine are significantly more productive than incumbents – around 40% more productive on average, for the entire 1992-2005 period. This may reflect entrants' awareness of the difficult conditions in which they will operate – they will need to be exceptionally efficient to have a reasonable chance to survive and grow.
- The selection of firms for exit in Ukraine appears to be inefficient, as the link between productivity performance and exit is weak. In particular, exiting new private firms are significantly *more* productive than the surviving privatised firms and SOEs.

Implicit and explicit subsidies and excessive state ownership add to the impediments to exit

The weak link between productivity and survival is largely the product of the wide array of explicit and implicit subsidies provided to particular sectors and enterprises. While these are not limited to “old” firms, it is fairly clear that such subsidies enable poorly performing incumbents to remain on the market far longer than they would otherwise. Continued support for a large population of SOEs constitutes yet another part of the problem with exit: on the official data, roughly 48% of the country's capital stock was still in the hands of the state or municipal authorities at the end of 2005, with a further 10-11% in mixed public-private ownership. The size of the SOE sector serves to limit both exit and restructuring; this, in turn, reduces the scope for new entry, both because lack of exit limits the resources available to new entrants and because SOEs often enjoy formal or informal privileges that make it harder for entrants to compete with them. Moreover, the weak corporate governance of most SOEs means that many, perhaps most, are easy targets for rent-seeking by insider-managers or well connected outsiders. In many cases, continued state ownership of such assets also distorts competition and creates conflicts of interest for the authorities, particularly where the state's role as regulator is in tension with its role as owner.

Over-regulation constrains firms' growth...

In Ukraine as elsewhere, barriers to entry, exit and reallocation are often the product of excessive and often ill-administered regulation. A systematic assessment of product-market regulation (PMR) in Ukraine using the indicators developed by the OECD Economics Department highlights the potential contribution that competition-enhancing regulatory reform could make to the country's economic performance:

- The level of overall product-market regulation is higher than that of any OECD country in 2003. While Ukraine scores relatively well on some of the sixteen individual PMR indicators, particularly in areas where reforms have recently been enacted, the burden of product-market regulation is well above the OECD average with respect to all three major components of the aggregate indicator: state control, barriers to entrepreneurship and barriers to trade and investment.
- Overall, barriers to business growth appear to be more constraining than barriers to entry. There has actually been considerable improvement with respect to market entry in recent years, but the regulatory impediments to growing businesses of whatever size remain extremely onerous. The burden imposed by the excessive application of licensing and permit regimes is particularly great, as is the cumulative cost of the bewildering array of rules and regulations governing issues like property registration and the conclusion of contracts. These serve little purpose except to raise transaction costs, in terms of both time and money.
- Regulatory *process* is in some respects as much of a problem as the substance of regulation. Ukraine scores rather poorly on indicators concerned with such issues as the formulation of regulatory policy and effective communication with the business community. This reflects in part a failure to define with clarity the various roles that the state is to play in the economy or to differentiate between them in ways that avoid undesirable conflicts of interest.

...and reduces Ukraine's attractions as a location for foreign direct investment

One of the major disappointments of Ukraine's performance to date has been its relative failure to attract foreign direct investment (FDI): the stock of FDI *per capita* reached only 372 USD in 2005, just over 16% of the corresponding figure for neighbouring Poland. This would appear to be far below Ukraine's potential, given its human capital endowments and the comparative advantages conferred by relatively low wages, proximity to EU markets and the size of the domestic market. Institutions like the rule of law and the quality of bureaucracy are among the most important determinants of FDI location, and the institutional and regulatory problems identified above appear to constitute the major reasons for low FDI inflows. While the economy is very open in many respects, the PMR benchmarking exercise highlights the exceptionally high regulatory barriers to trade and investment in Ukraine. However, one should not exaggerate the degree of discrimination: the main barriers to investment are rooted in the overall institutional and regulatory framework encountered by *all* firms, foreign and domestic. Given the potentially substantial positive effect of FDI on domestic TFP growth, Ukraine is missing a major opportunity to facilitate industrial modernisation. However, the corollary to this

conclusion is that steps to address regulatory and institutional weaknesses could bring significant benefits. Accession to the World Trade Organisation (WTO) is likely to help. The direct benefits of WTO accession, via tariff changes and improved access to foreign markets, are likely to be limited, but the welfare gains arising from the reduction in formal and informal barriers to foreign investment, the strengthening of property rights and the overhaul of technical regulation are expected to be substantial indeed.

Competition-friendly regulatory reform could contribute to stronger productivity growth

The results of the PMR exercise suggest that regulatory reform could contribute to greater efficiency of both resource allocation and production, accelerating Ukraine's convergence with its more advanced neighbours. Indeed, the potential benefits of increasing competition are likely to be greater in Ukraine than in most OECD members or in many neighbouring countries, because competition in Ukrainian markets, though increasing in recent years, is relatively weak overall. Markets tend to be very concentrated at national level and the high degree of segmentation between regional markets means that competition is weaker still at regional level. The positive effects of enhanced competition find confirmation in an econometric analysis of the impact of competition on labour productivity, using enterprise-level data for 2000-05. The following conclusions emerge from this analysis:

- Concentration has a negative and highly significant effect on labour productivity growth.
- These results are robust for manufacturing as a whole, and there is evidence that the relationship is stronger when import- or export-competing industries are considered separately.
- For market services, the effect is found to be weaker but still substantial.
- Import competition has a positive impact on domestic firms' productivity. The effect is stronger where foreign penetration is lower, which may suggest that the initial opening to imports has a particularly strong effect in stimulating local firms to raise productivity.

Further privatisation could magnify the benefits of increased competition

Research on developed market economies, developing countries and economies in transition shows that private enterprises generally respond more readily to increasing competitive pressures than do SOEs and that the gains from privatisation tend to be greater where privatised enterprises are subject to competition. This complementarity between competition and privatisation suggests that competition-enhancing reforms would achieve greater impact if accompanied by a reduction in the role of SOEs in the economy. The loss of privatisation momentum in Ukraine is therefore particularly unfortunate. The defects of Ukrainian privatisation processes cannot be denied and account for much of the criticism of privatisation within the country, but they should not deflect attention from the positive impact of privatisation on enterprise performance. An analysis of longitudinal, enterprise-level data on manufacturing firms finds that in the case of privatisation to domestic owners, total factor productivity increases by between 10 and 25%, depending on the specification used, during the seven years following privatisation.

The impact of privatisation to foreign owners appears to be even stronger, though the results are less robust, owing to the sample size. Positive effects appear within a year of privatisation and continue increasing thereafter. This implies that the contribution of privatisation to aggregate manufacturing productivity growth in recent years has been substantial.

Chapter 1

Macroeconomic performance and policy: the challenge of sustaining growth

This chapter presents the analysis of recent economic performance and macroeconomic policy that will frame the discussions of structural and regulatory reform in Chapter 2 and of competitiveness, competition and productivity developments in Chapter 3. The main conclusions of this analysis may be summarised as follows:

- *Recent strong growth has been driven in part by factors that are likely to prove transitory, including terms-of-trade gains, comparatively low energy prices and the existence of substantial spare capacity. If Ukraine is to sustain strong growth over the medium-to-long term, it will need to make the transition to a pattern of self-sustaining investment- and innovation-led growth.*
- *Macroeconomic management has succeeded in keeping debt low and deficits in check, but pension system sustainability presents a serious challenge, and the economy is already subject to a very high level of fiscal pressure.*
- *A de facto nominal dollar peg remains the cornerstone of monetary policy. While a nominal anchor served Ukraine well in the aftermath of the 1998 financial crisis, it is now contributing to the volatility of inflation and increasing risks, not least those associated with growing dollarisation.*
- *The major challenges facing Ukraine as it seeks to embark on a sustainable “catch-up” path include improving framework conditions for business, reforming product markets to make entry and exit easier, and strengthening competition.*

An impressive recovery, but uncertain prospects

After a decade of crisis, Ukraine has been enjoying a period of strong growth

Ukraine has experienced one of the most difficult economic transitions in the post-communist world. Real GDP fell by 60% on the official data between 1990 and 1999.¹ In neighbouring Poland and Hungary, by contrast, output fell by only 14% and 18%, respectively, before growth resumed, and both countries returned to growth relatively early in the transition.² Even in Russia, which underwent a particularly severe contraction, output bottomed out in 1998 roughly 40% below its 1990 level. Macroeconomic stabilisation proved extremely difficult in Ukraine, and inflation, which exceeded 10 000% in 1993, remained in triple digits through 1995. It was brought down fairly successfully after the introduction of a new currency, the hryvnia, in 1996,³ but output continued to contract until 1999. Living standards likewise fell sharply, and by the early 2000s, over 30% of the population was living below the World Bank's absolute poverty line.⁴ Since 1999, economic growth has been quite strong, with real GDP rising by an average of 7.4% per year during 2000-06 (Table 1.1). While growth in 2005 was very much affected by political uncertainty, the rebound in 2006 was particularly striking, as real GDP grew by 7.1% despite a 90% increase in the price of imported Russian gas.

This growth performance was supported to some extent by steady terms of trade gains: from 2001 through 2006, Ukraine's terms of trade rose by a cumulative 17%. Even in 2006, the average terms of trade for the year improved despite the gas-price shock, owing to the recovery of metals prices in the spring. Given the orientation of the Ukrainian economy to foreign trade – total trade turnover in 2006 was around 100% of GDP – rising terms of trade have provided a substantial boost to Ukraine's growth. In order to appreciate fully their impact on purchasing power, it is helpful to look beyond the conventional measure of real

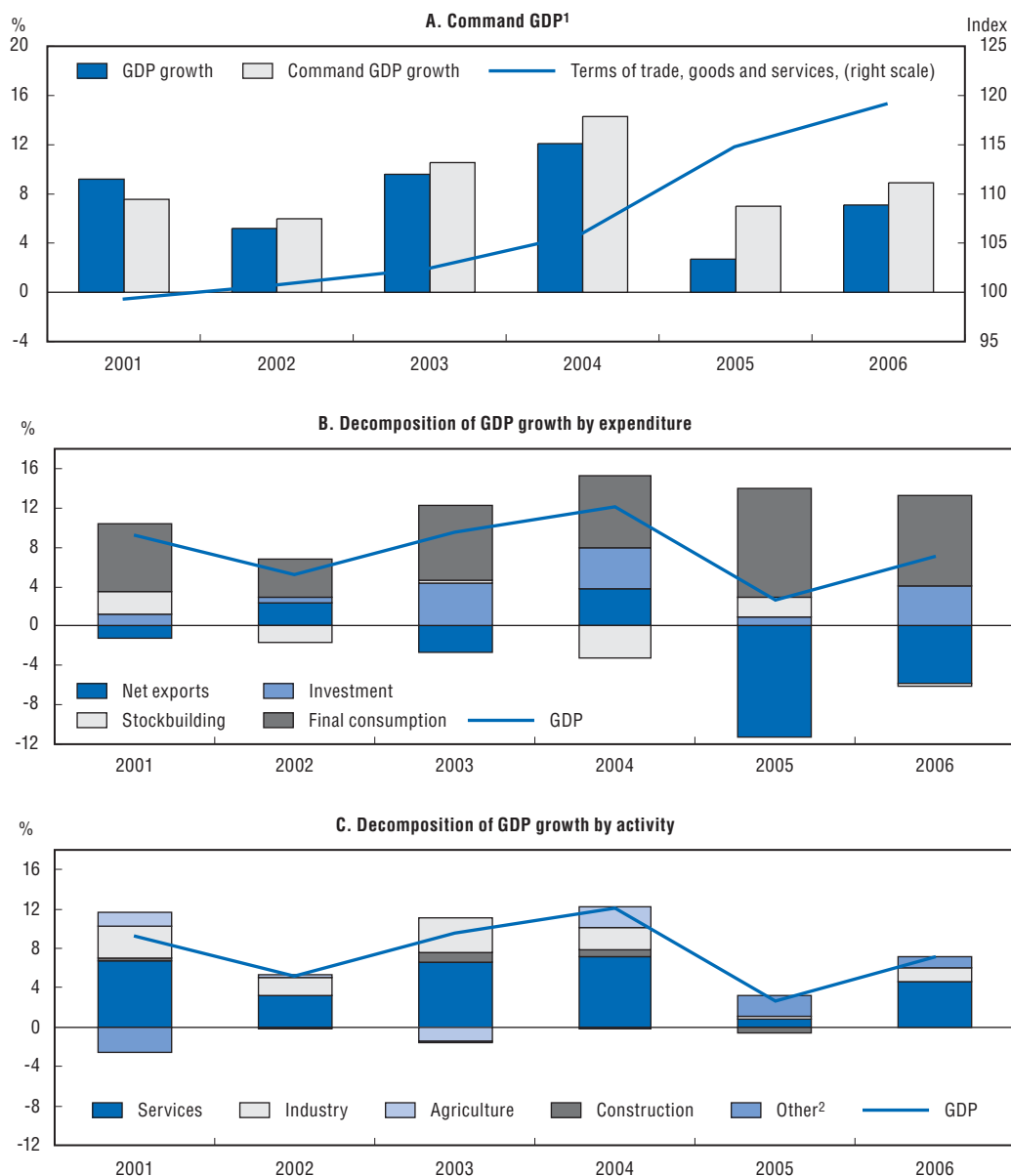
Table 1.1. **Basic economic indicators**

	2001	2002	2003	2004	2005	2006
GDP at current prices (billion UAH)	204.2	225.8	267.3	345.1	441.5	537.7
Real GDP growth	9.2	5.2	9.6	12.1	2.7	7.1
Industrial production growth	14.2	7.0	15.8	12.5	3.1	6.2
Private consumption growth	9.6	9.5	11.5	13.1	20.6	14.4
Gross fixed capital formation growth	6.2	3.4	22.5	20.5	3.9	18.7
Unemployment rate (ILO; 15-70)	10.9	9.6	9.1	8.6	7.2	6.8
Employment (15-70, millions)	20.0	20.1	20.2	20.3	20.7	20.7
CPI inflation (average)	12.0	0.8	5.2	9.0	13.5	9.1
Real wage growth	19.3	18.2	15.2	23.8	20.3	18.3
Exchange rate (UAH/US\$, average)	5.4	5.3	5.3	5.3	5.1	5.1
Current account as a per cent of GDP	3.7	7.5	5.8	10.6	2.9	-1.5
Budget balance (general government, per cent of GDP)	-0.3	0.7	-0.2	-3.2	-1.8	-0.6
Central Bank gross foreign exchange reserves (US\$ billion, end of period)	3.1	4.4	6.9	9.5	19.4	22.3

Source: State Statistics Committee of Ukraine, National Bank of Ukraine, IMF, IFS database.

GDP, and calculate the so-called command GDP indicator.⁵ Command GDP yields a summary measure of the impact of terms-of-trade shifts on a country's purchasing power – i.e. on its ability to *command* goods and services. Over the period 2000-06, command GDP grew by an average of 8.6% per year – 1.2 percentage points higher than real GDP growth (Figure 1.1A).

Figure 1.1. **Command GDP and the decomposition of GDP growth**



1. Command GDP is defined as follows: $\text{Command GDP} = \text{TDDV} + \text{XGSV} \cdot (\text{PXGS}/\text{PMGS}) - \text{MGSV}$, where TDDV is real domestic demand, XGSV and MGSV are, respectively, export and import volumes, and PXGS and PMGS are the export and import deflators.

2. Net taxes, financial intermediation services indirectly measured and statistical discrepancy.

Source: Derived from State Statistics Committee of Ukraine.

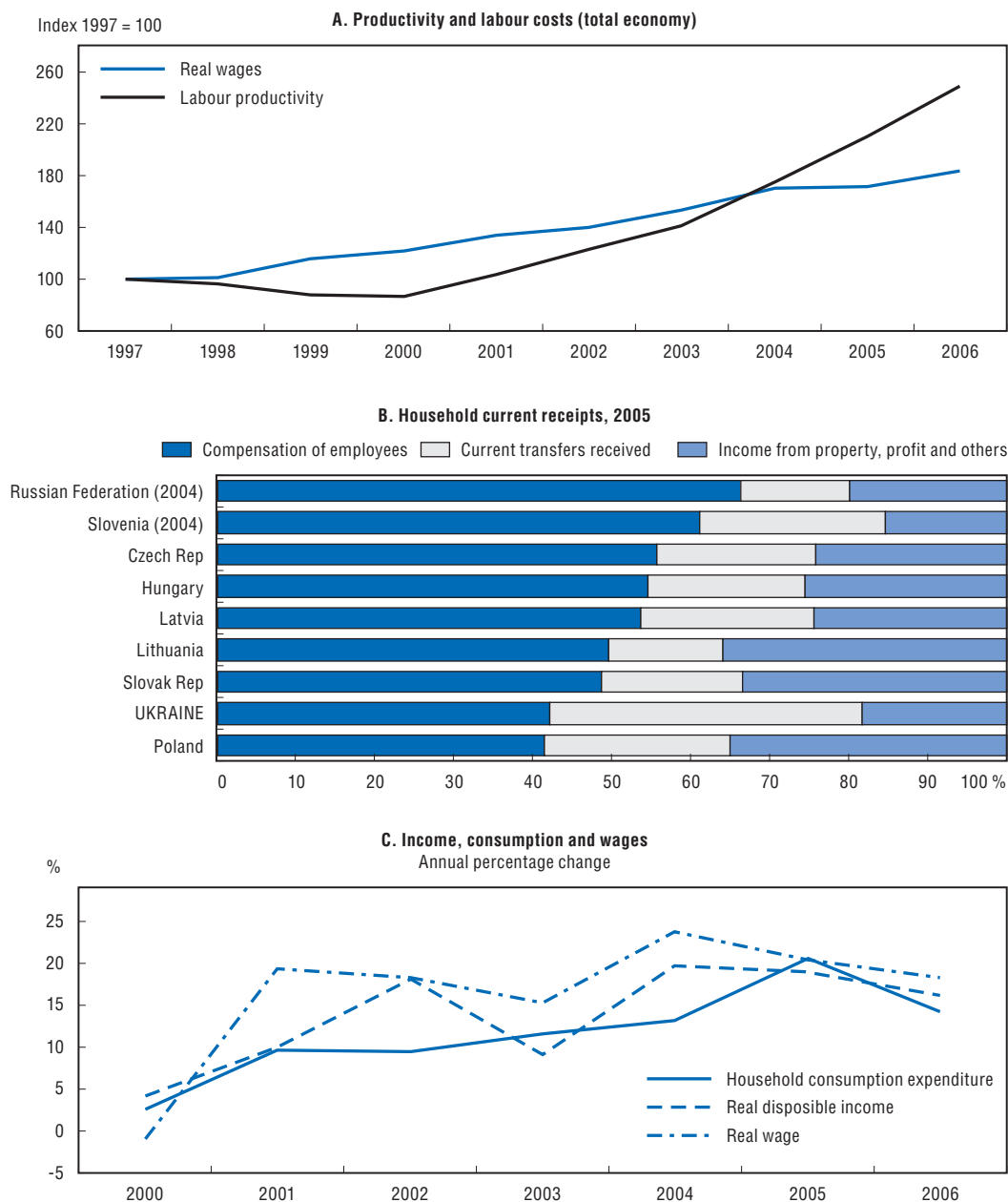
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These terms-of-trade gains have given further impetus to the growth of domestic demand and, not surprisingly, growth since 2001 has been driven chiefly by booming private consumption (Figure 1.1B). Buoyant household consumption growth has been sustained by rapidly increasing incomes and the strong growth of consumer credit. Real disposable incomes grew by 15.2% per annum in 2001-06, with real wages rising by an average of 19.2% per year. The pace of real wage increases is clearly remarkable, but part of this wage dynamic has to be seen as a “catching-up” phenomenon, as wage increases were lagging productivity gains by a large margin at the end of the 1990s (Figure 1.2A). At the same time, the outstanding stock of consumer credit grew dramatically, reaching 14.2% of GDP at the end of 2006, up from just 0.6% at the end of 2000. Real disposable income growth slowed in 2006, but the consumer credit boom continued: during 2005-06, the increase in retail borrowing was equivalent to 30% of the total increase in household consumption. Households’ purchasing power was also supported by improving labour market conditions: the unemployment rate fell from 10.9% to 6.5% between 2001 and 2006.

While the direct contribution of government consumption to growth was modest, fiscal policy very much affected the *pattern* of growth, playing a key role in pumping up consumption, in particular, in 2004-05. Governments before and after the “Orange Revolution” aggressively raised pensions and other social transfers, while simultaneously curtailing public investment. As a result, the share of transfers in household disposable income – which was already high – reached levels comparable to the wage share (Figure 1.2B).⁶ The cycle of fiscal expansion and consolidation that accompanied the 2004-06 electoral contests brought about a substantial transfer of resources from firms (with a higher propensity to save) to households (with a higher propensity to spend).⁷ As a result, gross national saving decreased substantially between 2004 and 2006, after having risen during 2000-03.⁸ That said, it is striking that, even at a time of rapid growth in consumer credit, the household savings rate did not decline (Figure 1.2C).⁹

Rising incomes and consumption have benefited the great mass of Ukrainian households: the Gini coefficient for consumption in Ukraine has roughly stabilised at 0.29-0.30 after falling back from the highs of the 1990s, and the proportion of the population living below the World Bank’s absolute poverty line fell from a peak of 31.7% in 2001 to just 7.9% in 2005. This is because a significant (albeit unquantifiable) portion of the reported increase in wages and incomes probably represents the legalisation of shadow earnings. Steady increases in the level of the mandatory minimum wage may have contributed to this trend, at least at the bottom of the income distribution, since employers are effectively required to report that they are paying their employees *at least* the statutory minimum.¹⁰

The robust growth of final demand and the rapid expansion of credit to enterprises¹¹ – in an environment characterised by high levels of liquidity – have contributed to the healthy growth of investment (around 12.5% per annum in real terms during 2000-06).¹² The share of debt financing in total investment grew substantially, rising from around 2% in 2000 to 15% in 2005,¹³ a trend that accelerated as the degree of fiscal pressure increased. Fixed investment was a particularly important driver of growth in 2003-04, before plummeting in 2005 as a result of exceptionally high levels of political uncertainty and concerns about property rights in the immediate aftermath of the “Orange Revolution”. The redistribution of wealth from firms to households and the sharp slowdown in public investment that occurred that year served to accentuate further this “boom-and-bust” investment cycle. The strong revival in private investment in 2006, which was broad-based across sectors, re-balanced somewhat the demand and supply components of growth at a

Figure 1.2. **Wages, disposable income and savings**

Source: Derived from State Statistics Committee of Ukraine, OECD Economic Outlook database, Eurostat and national sources.

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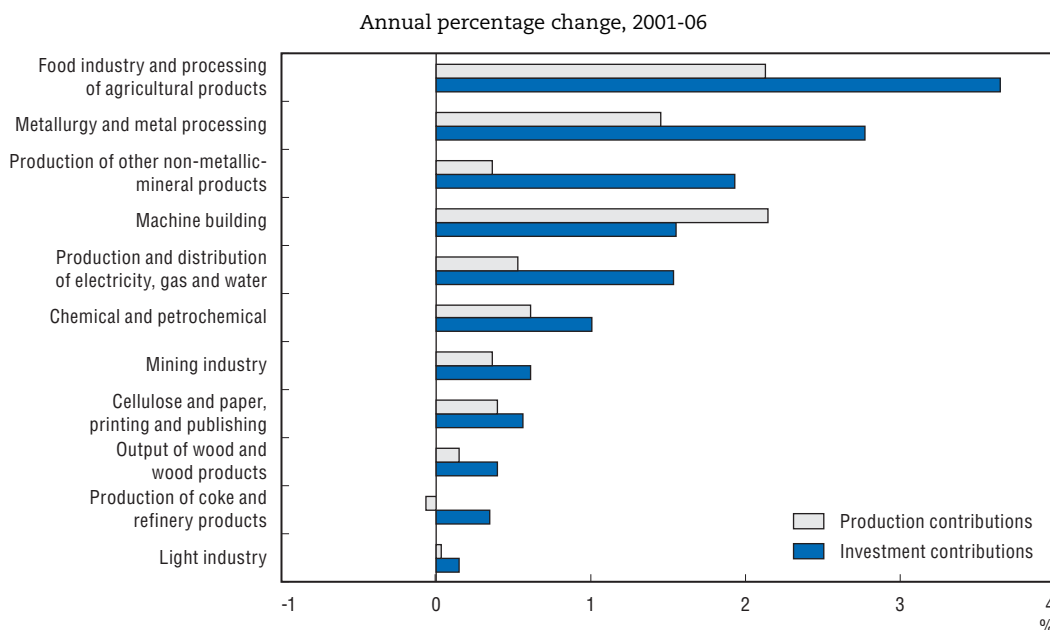
time when capacity utilisation rates were already approaching levels that could begin to constrain the expansion. Fixed investment growth, which dropped to just 3.9% in 2005, rebounded to reach 18.7% in 2006, with both agriculture and manufacturing recording particularly strong growth, as did trade and repair services. This investment recovery has also translated into rapidly rising imports of capital goods.

On the supply side, growth has been broad-based, with the largest contribution coming from non-tradables (Figure 1.1C). Market services did not develop as quickly during the second half of the 1990s as they did in many other transition countries, largely because the creation-destruction process was initially rather slow in Ukraine, but the speed of restructuring and the emergence of new activities have accelerated markedly since growth resumed.¹⁴ During 2001-06, the share of services in total value added rose by 8.5 percentage points to reach approximately 58%, while the share of agriculture dropped by 8 percentage points to less than 10%.¹⁵ Financial activities have recorded the fastest growth among market services sectors,¹⁶ followed by real estate and trade, which grew in line with household incomes. The leading position of financial services is hardly surprising, given the spectacular credit boom. After two years of very strong growth on the back of rising investment, construction contracted sharply in 2005, when investment collapsed. The sector's poor performance in 2006 (+1.9%) is, however, somewhat surprising, given the strong rebound in private fixed capital formation and the still buoyant demand for housing.¹⁷ However, activity in the sector accelerated markedly in early 2007 (+13% for January-April, year-on-year).

The manufacturing sector, on the other hand, grew faster than GDP, averaging around 10% per year during 2001-06, and its share in total value added remained relatively stable at around 20%. The reallocation of labour away from industry to services was, however, relatively intensive, and employment in manufacturing fell by approximately 15% over the period.¹⁸ Productivity thus rose by a healthy 12.5% per year on average. In 2006, despite a massive input-price shock, the manufacturing sector as a whole proved remarkably resilient. Chemical industries, which were most vulnerable to gas-price rises and which were confronted with less favourable fertiliser-price dynamics,¹⁹ experienced a marked slowdown but did not actually contract. Output in the metals industry – which accounts for approximately 40% of goods exports and 22% of industrial production²⁰ – rebounded firmly in the second quarter of 2006, in parallel with the recovery in world prices for steel. The machine-building sector, particularly the production of vehicles and transport equipment, enjoyed good export performance to CIS countries, as it continued to benefit from buoyant Russian demand and the real appreciation of the rouble *vis-à-vis* the hryvnia. Yet the structure of production and exports exhibits a relatively limited degree of diversification (Figure 1.3), which leaves the economy vulnerable to further external shocks. Moreover, the expansion of the food industry, which has recently been very impressive, may be hampered in the medium term by lagging structural reforms in the agriculture sector (see Annex 1.A2).

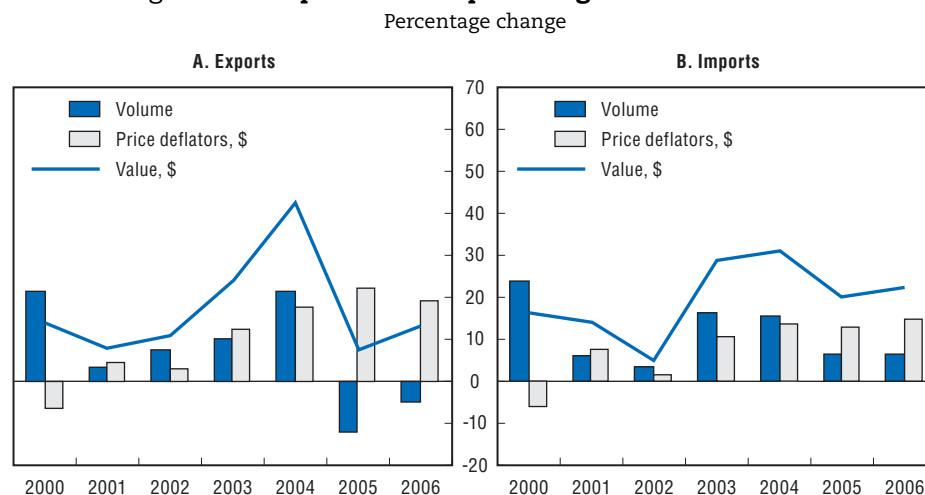
As the discussion of command GDP above makes clear, the terms-of-trade shifts of 2001-06 had a substantial impact on performance. However, any attempt to assess the contribution of net exports to growth is complicated by data issues (Box 1.1). The decomposition of changes in the export bill between price and volume is somewhat problematic. While there is no doubt about the overall trend with respect to the terms of trade, the magnitude of the increase in any given year is open to question. In particular, there is reason to think that Ukraine's terms-of-trade gains might have been larger than they appeared in 2004 and therefore more in line with GDP growth dynamics and external account developments.²¹ Despite these uncertainties, the following picture emerges:

- The trade balance improved markedly after the 1998 crisis and moved well into surplus until 2005. The dramatic increase in steel prices in 2004 pushed the surplus to a record 5.8% of GDP, as revenues from metal product exports rose by 55% in dollar terms.²²

Figure 1.3. **Sectoral contributions to the growth of industrial production and investment**

Source: Derived from State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072245077282>

Figure 1.4. **Exports and imports of goods and services**

Source: Derived from State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072245550763>

However, the surplus vanished in just one year as a result of a sharp drop in export volumes (Figure 1.4).²³ In 2006, the contribution of net exports to growth was again negative and the merchandise trade deficit reached 4.9% of GDP (as against 1.4% in 2005).

- Not surprisingly, given the magnitude of the positive terms-of-trade shock, changes in export revenues were primarily driven by price movements: during 2001-06, the volume of exports rose by 27%, while their dollar value rose 2.5-fold. Even so, export-price movements were insufficient fully to offset import growth averaging around 20% per year in dollar terms over the period.

Box 1.1. Trade data, GDP measurement issues and the shadow economy

As noted above, trends in shadow activity may have an influence on reported wages and incomes and should be borne in mind when assessing Ukrainian data. The potential of shadow activity to distort trade data is at least equally great. Reported export values and export prices exhibit a very peculiar pattern over recent years, particularly in 2004-05. The decomposition of export changes into their volume and price components – and thus estimates of real GDP growth – may have been significantly affected by changes in shadow activity:

- There was an abrupt swing in the trade balance, from a surplus of 5.7% of GDP in 2004 to a deficit of 1.3% in 2005. On the export side, the main contributors to this drop were the stagnation of revenues from exports of metal products and the collapse of machine-building exports to non-CIS countries. Neither of these developments can easily be explained in terms of economic factors, and neither is easy to reconcile with figures for domestic production. Mirror data from Ukraine's trade partners tell a different story (Table 1.2): they suggest that the collapse in exports may have been far less dramatic than it appeared.

Table 1.2. Exports of Ukrainian machine-building

Percentage change, USD

	2003	2004	2005
Reporting country: Ukraine			
Exports to :			
World	33.9	52.2	-11.7
CIS	19.4	54.4	18.1
EU15	47.8	26.3	-37.9
Reporting countries: trading partners			
Imports from Ukraine of :			
World	34.3	39.4	22.2
CIS	23.3	58.1	22.1
EU15	44.3	30.7	28.0

Source: Derived from United Nations, COMTRADE database, OECD calculations.

- The official data show particularly large terms-of-trade gains in 2005, and only moderate improvement in 2004. Yet world steel prices skyrocketed in early 2004 (rising by 60-80% for different qualities of hot-rolled steel, Ukraine's major export product), before falling back in 2005. This difference might be partly explained by a lag between contracting prices and current market prices, but it probably also reflects the difficulty of measuring export/import prices where transfer pricing is being used on a large scale. It is worth noting that this measurement issue could affect a wide range of goods, not only metals. OECD estimates suggest that terms-of-trade gains for goods may have been of the order of 8% in 2004, rather than the -1% underlying the national accounts, and that the shift in 2005 was +2% rather than the officially reported 7%.¹
- The measurement difficulties just described may be linked to the evolution of the shadow economy: many observers believe that exports in 2004 and in previous years were substantially inflated under the tax-evasion schemes then being employed in some sectors. Many of these schemes were rendered ineffective after the abolition of tax privileges for special economic zones in 2005. The impression that grey schemes based in the zones played a role here is reinforced by Finance Ministry data suggesting that

Box 1.1. Trade data, GDP measurement issues and the shadow economy (cont.)

activity in free economic zones and priority development areas more than doubled in 2004. Moreover, the use of transfer pricing might have become less widespread in response to improvements in customs administration and the government's generally tougher stance on tax issues. This would imply that real exports may have been somewhat lower than recorded prior to 2005, meaning that the export performance in that year was substantially better than it appeared. As GDP estimates rely primarily on the expenditure decomposition and take external trade as exogenous, this might have led to some overestimation of real GDP growth in 2004 and – above all – an underestimation in 2005.²

1. These calculations are based on disaggregated export and import prices at a two-digit level.
2. It might also have had an impact of the decomposition itself, to the extent that GDP calculations rely on the decomposition from the production side, which is not biased by export figures; more generally, this raises the issue of the estimation of the real size of the economy and the real size of GDP. The shadow economy is estimated at around 15% of GDP, while estimates from the Ministry of the Economy point to much higher figures (approximately 10 percentage points higher). This would suggest that there is potentially a very significant underestimation of real GDP.

- A positive services balance, due mainly to Ukraine's role as a transit country for oil and gas and also to a high level of transfers,²⁴ kept the current account deficit to a modest level (1.5% of GDP) as the merchandise trade deficit opened up. Even so, the speed of the deterioration of external balances is striking, especially given that the real appreciation of the hryvnia was very moderate in 2006.²⁵ While foreign exchange reserves continued to grow, thanks to capital inflows, the trade balance movements raise questions about the evolution of competitiveness. This issue is addressed in Chapter 3.

Labour market conditions and living standards have improved substantially since the expansion began. Total employment grew by around 3.5% over 2001-06. Rapid wage growth has been absorbed relatively smoothly, without interrupting the downward trend in unemployment, thanks largely to very healthy productivity gains in the private sector.²⁶ Public sector pay has been rising equally briskly, albeit from a much lower base, but without any corresponding rationalisation of the large public sector.²⁷ Public-sector wage dynamics have been driven largely by hikes in the minimum wage,²⁸ which serves as a reference for wage scales in the budget sector. The impact of the minimum-wage rise in the private sector is less apparent, as the ratio of the minimum wage to the average wage in industry has been fairly stable.²⁹ In general, the labour market also appears to have become more fluid: the gross job turnover ratio, defined as the sum of hiring and firing over total employment, rose steadily from around 45% in 2000 to 58% in 2005.³⁰ The share of long-term unemployment has been dramatically reduced and the reallocation of labour now takes place increasingly as a result of voluntary quits or expiry of short-term contracts.

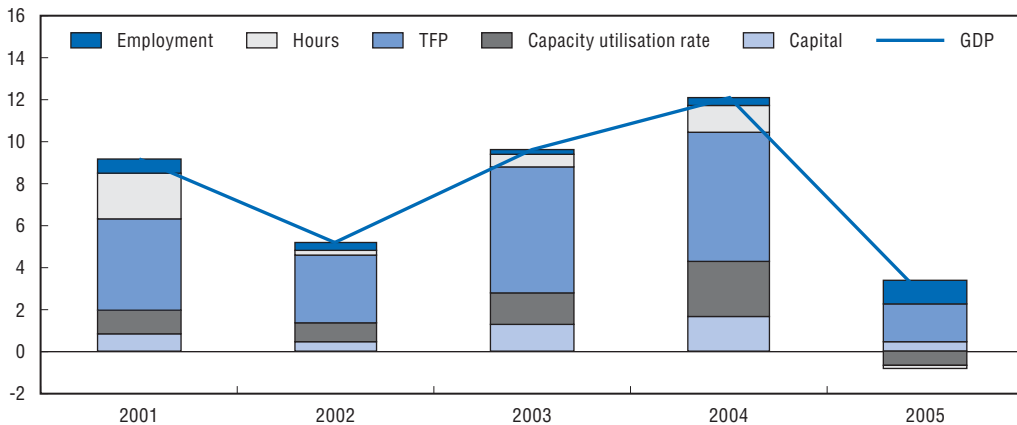
While rigidities on the demand side seem not to be particularly binding,³¹ labour supply has proved to be slow to react to favourable labour market conditions: despite a slight decrease in the working-age population, the participation rate has stagnated at a relatively low level.³² Therefore, while the employment rate has risen by three percentage points over recent years, as unemployment has fallen, it remains well below the average level of OECD countries (61.5%, as against an OECD average of 66.3%).³³ In particular, working lives are much shorter, owing to Ukraine's early retirement ages (55 for women and 60 for men). Moreover, inter-regional mobility has not increased much in

recent years.³⁴ Given that the natural rate of increase of the population is already negative,³⁵ that female labour-force participation is already relatively high,³⁶ that demographic prospects are unfavourable, and that international migration flows roughly balance,³⁷ the only way to augment labour supply in the medium-to-long run will be to raise the retirement age.


Since 2000, Ukraine has benefited from post-crisis opportunities and benign external developments

The central problem Ukraine faces is that current strong growth is based to a significant extent on factors that have exhausted, or will soon exhaust, their potential. Some of these factors are a legacy of the prolonged and severe economic turmoil of the 1990s. By the time growth resumed in mid-1999, there was an enormous amount of spare capacity in established sectors of industry. This has made it possible to increase output relatively quickly on the basis of limited investment. While investment has grown strongly, it has grown from a very low base, and additions to the capital stock have hitherto made only a limited contribution to growth (Figure 1.5). Restructuring since the crisis has been evident in the strong growth of total factor productivity, which has been by far the most important source of growth since the recovery began in the second half of 1999. The contribution of labour, either extensively, via employment growth, or intensively, via working time, has been limited. This pattern of “recovery growth”, however, cannot continue indefinitely. Capacity utilisation rates in industry are approaching normal levels. They stood around 65% in late 2006, according to the official data (see Table 1.A1.3), but managerial surveys point to far higher rates of capacity utilisation. The National Bank of Ukraine’s conjunctural survey at the end of 2006 shows 71.2% of enterprises reporting that they were operating very close to, or even above, full capacity. The discrepancy probably reflects the fact that a large part of Ukrainian industry’s idle capital stock is obsolete, and some of it will probably never be profitably employed: the Ministry of the Economy reckons that perhaps half of the officially recorded idle capital stock falls into this category, an

Figure 1.5. **Decomposition of GDP growth by factor**
As a percentage of GDP in previous year



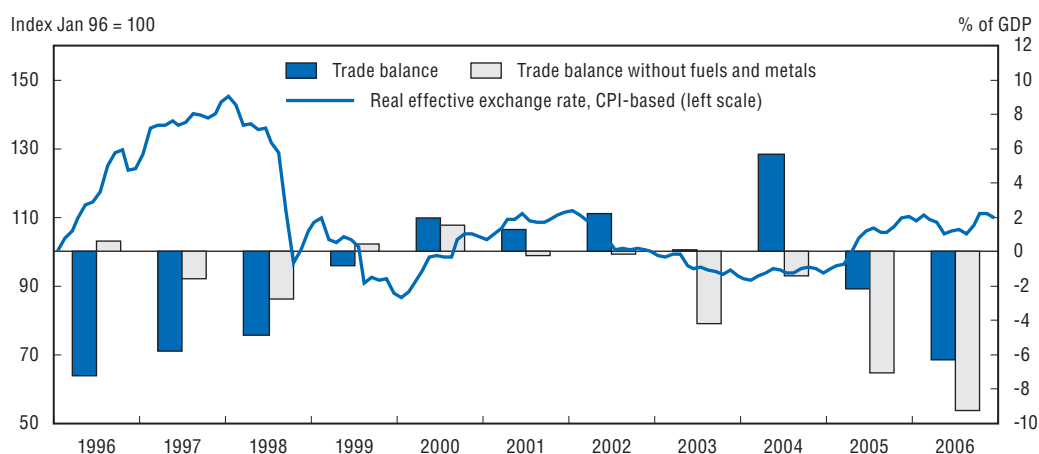
Source: Derived from State Statistics Committee of Ukraine.

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assessment shared by some independent analysts.³⁸ This means that “cheap” opportunities to increase production by better utilising existing resources are rapidly becoming rarer.


Ukraine has also benefited from a relatively competitive exchange rate since the crisis. The improvement in the trade balance following the sharp devaluation of the hryvnia in the aftermath of the 1998 financial crisis was spectacular. Since July 2000, the hryvnia has been effectively pegged to the dollar, and this exchange rate regime has helped to moderate its real appreciation (Figure 1.6), since the dollar has weakened considerably in recent years against both the euro and the rouble. In real terms, the Russian currency has been appreciating particularly strongly against the hryvnia, on the back of the oil-price shock. However, these developments, which should have been very favourable for Ukraine’s external competitiveness, are not reflected in the recent trade balance movements. This appears to be partly a product of very rapid wage growth, which has meant that real appreciation in terms of unit labour costs has been much faster than CPI-based measures. A comparison of emerging economies with respect to dollar wage costs indicates that the latter (Figure 1.7) appear to have reached a level in Ukraine that roughly mirrors the aggregate productivity of the economy.³⁹

Figure 1.6. Real exchange rate dynamics¹



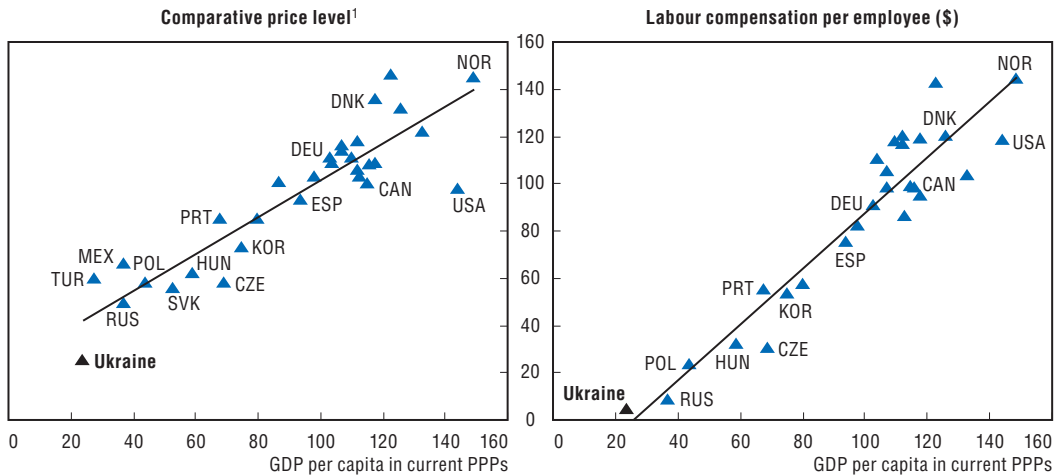
1. An increase means a real appreciation.

Source: IMF, International Financial Statistics database and United Nations, COMTRADE database.

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As noted above, international commodity-price developments have largely benefited Ukrainian exporters, and the terms of trade improved in each successive year from 2001 to 2006. Even the gas-price shock of 2006 was insufficient to disrupt this trend. At the beginning of the year, the price of natural gas imports from Russia – then the second-largest item in Ukraine’s import bill – jumped from \$ 50 to 95/tcm.⁴⁰ The strong rebound in metals prices in the second quarter⁴¹ helped overcome this shock and, for the year as a whole, the terms of trade improved slightly. Growth accelerated sharply in parallel with this positive external development. Clearly, however, Ukraine cannot rely on permanently improving terms of trade. Indeed, it appears highly likely that they will deteriorate in 2007:

Figure 1.7. **Relative GDP per capita and price level/wage**
(2005, OECD=100)



1. Ratio of PPPs for gross domestic product to exchange rates.

Source: OECD, Russian Federal State Statistics Service and State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072421121345>

the country has been hit by a second gas-price shock (a rise to \$ 135/tcm⁴²), with the likelihood of a further increase in 2008, and other commodity prices are unlikely to provide much offsetting relief.

Ukraine has also benefited greatly from strong growth in Russia and other CIS states. To be sure, Ukraine's foreign trade overall has largely been reoriented away from the CIS since 1992, and the role of the Russian Federation as an engine of growth for the region appears to have been substantially reduced.⁴³ Nevertheless, Ukrainian manufacturers in a number of industries that are not particularly competitive in non-CIS markets (e.g., machinery, equipment and vehicles) have recorded rapid growth in exports to Russia and other CIS countries (Table 1.A1.4). In some cases, this reflects the continued importance of pre-existing technical and other linkages among enterprises across the former Soviet space – sometimes, the goods in question are simply not produced elsewhere, while in other sectors trade flows are partly supported by cross-border M&A activity within the CIS. More generally, Ukrainian producers continue to enjoy a cost advantage in those CIS markets where consumers are as yet unwilling or unable to pay higher prices for more sophisticated goods. To some extent, re-spending of Russian oil windfalls has therefore helped offset the rise in energy prices.

The era of cheap energy is coming to an end

Despite the price shocks of the last two years, gas prices for Ukrainian enterprises remain well below West European levels, even after allowing for the higher transit and other costs associated with exports to the EU.⁴⁴ This is a clear indication of how substantial the comparative advantage in terms of cost of inputs used to be: real energy prices within Ukraine actually *declined* in 2000-05. While the PPI rose by 47% over the period, the prices of natural gas, electricity and heat increased by only 22%.⁴⁵ Prior to the price shock of 2006, industrial consumers in Ukraine actually paid less for their gas than their Russian counterparts.⁴⁶ Artificially cheap energy, combined with the favourable terms-of-trade shifts described above, created a dramatic incentive to specialise further in energy-

intensive industries (the higher world energy prices rose, the greater was the impetus provided by low gas and power tariffs). The contribution of highly energy-intensive sectors to the growth of both output and exports since 1999 has indeed been enormous. Altogether, the combined share of the four most energy-intensive major industrial sectors⁴⁷ rose from 31.6% in 2001 to 43.8% in 2006. They also accounted for roughly half of Ukraine's export revenues during 2000-05. The importance of low natural gas prices to this performance is hard to exaggerate: in 2005, gas was estimated to account for 10-15% of production costs in metallurgy, as against around 3-7% in advanced EU members, where the price of gas was around four times higher. In the chemicals sector, gas accounted for about 70% of the cost of mineral fertiliser production and roughly 50% of production costs for other chemical products.⁴⁸ A very large share of the output of these sectors would never have been profitable in the absence of relatively cheap gas.

This is clearly a temporary phenomenon. There is little doubt that Russia will continue to increase prices for gas deliveries to Ukraine, and the changes in the structure of production generated by previous relative-price conditions will prove to be a handicap for future growth. As is well known, Ukraine is one of the most energy-intensive economies in the world: in 2004, the estimated energy intensity of Ukrainian GDP was close to triple the OECD average and higher even than Russia and Belarus.⁴⁹ The energy intensity of production has been falling rapidly since growth resumed in 2000, a reflection of structural change, rising capacity-utilisation rates and increasing energy efficiency in response to rising fuel prices.⁵⁰ However, this progress was partly offset by a composition effect, as the relative weight of energy-intensive industries has grown. The challenge for maintaining export competitiveness is even greater, as the energy intensity of Ukraine's export basket is substantially higher than the already high intensity of final consumption for industry as a whole (around 17% higher in 2004). There are, nevertheless, some positive trends in evidence: the rising share of energy-intensive sectors in total industrial output and their more or less stable share in total exports are largely the product of favourable changes in relative prices. In volume terms, both output and exports grew faster in sectors with below-average energy intensities of production – roughly twice as fast in the case of exports.⁵¹

Further gas-price increases, as well as the need to raise the price of domestic fuel and electricity to sustainable levels, mean that continued strong growth in industry will require substantial investment in energy efficiency. The negative impact on growth will otherwise be potentially huge. Taking into account only the direct effects of higher prices and assuming that energy demand remains highly inelastic in the short run, the IMF estimates the total growth impact of a 10% gas-price shock at about 0.3% of GDP for the first year.⁵² However, simply scaling up this estimate to assess the effects of larger shocks could be misleading: the further the price increase moves the economy from its initial equilibrium, the more substitution effects and efficiency gains omitted from the analysis would come into play. That said, the 60% price shock seen in early 2006 could have cost Ukraine as much as 1.8% of GDP.⁵³ The evidence to date suggests that end-users are responding to this challenge. Many observers believe that the investment recovery of 2006 was in large measure a response to gas-price hikes, and it is certainly true that many of Ukraine's large industrial enterprises have been upgrading their machinery. More telling, however, is the fact that the intensity of total final energy consumption has been falling faster than the intensity of total primary energy supply. This means that the energy transformation sectors (electric power, gas distribution, etc.) have not been raising their efficiency as fast as final consumers. This is hardly surprising, given that these sectors are largely

dominated by state-owned enterprises (SOEs) that are not subject to market disciplines or incentives. Failure to restructure the energy sector, then, could severely handicap the attempts by tradable sectors, in particular, to improve energy efficiency and thus maintain competitiveness in the absence of underpriced fuel supplies.

The contribution of macroeconomic policies to growth

Fiscal consolidation has been good for growth but the size of government remains excessive

The maintenance of fiscal discipline since 1999 has been a major achievement. It has helped restore confidence and support the recovery. The general government deficit averaged less than 1% of GDP in 2000-06, and the combination of strong growth, falling real interest rates and substantial privatisation revenues⁵⁴ contributed to a drastic reduction in public debt, from 61% of GDP at the end of 1999 to 15% at the end of 2006.⁵⁵ However, state-owned enterprises, particularly in the gas, electricity and coal sectors, still do not face hard budget constraints. This represents a significant burden on public finances, particularly for local budgets, entailing either public subsidies or forgone revenues from dividends.⁵⁶ In the energy sector alone, the size of the quasi-fiscal deficit arising from below-cost pricing, weak payment discipline on the part of consumers and other inefficiencies is estimated at more than 3% of GDP, although it has been on a downward path in the recent past.⁵⁷

While the Ukrainian authorities should be credited with maintaining low deficits and a generally conservative fiscal policy since the late 1990s, the degree of fiscal pressure in Ukraine is probably excessive. Rapid increases in public-sector wages⁵⁸ and pensions in 2004-05 pushed the expenditure-to-GDP ratio above 43%, a very high level for a country at Ukraine's level of GDP *per capita*. A sizeable and highly consumption-oriented fiscal loosening in the run-up to the 2004 presidential election was followed immediately after the elections by further increases in transfers to households and consolidation on the revenue side. As a result of the former, public transfers rose from 17.1% of GDP in 2003 to 22.6% in 2005. The main factor underlying this growth was the rise in pension expenditure, which more than doubled in real terms. Yet although the government that took office in early 2005 made good on its predecessors' pre-election spending commitments – particularly as regards the schedule of pension increases⁵⁹ – the magnitude of the fiscal tightening that it executed was impressive, and the cyclically adjusted balance improved dramatically. Revenue consolidation was in fact achieved mainly via the closure of tax loopholes and the abolition of tax privileges, most notably the very generous schemes granted to companies established in Free Economic Zones. Improved customs collections also played a role.⁶⁰

In 2006, fiscal policy returned to a quasi-neutral stance. The fiscal outturn was better than initially forecast, thanks to both inflation and real GDP growth in excess of what had been anticipated. Over-performance on the revenue side was largely the product of continued strong growth in VAT revenues (Table 1.3), which reflected a combination of three factors: rising imports, the imposition of VAT at the full 20% rate on natural gas imports and the accumulation of substantial outstanding claims for VAT refunds.⁶¹ The handling of VAT refunds has been a recurrent and major source of contention between businesspeople and the authorities, and the tax administration has so far made little progress in resolving it (see Chapter 2). On the expenditure side, public investment rose only slightly after having been cut sharply in the consolidation phase of 2005, and it remained at a relatively low level (2.2% of GDP) in comparison with other emerging

Table 1.3. **Fiscal stance: general government, 2003-06**
(% of GDP)

	2003	2004	2005	2006 ¹
Revenues	38.7	37.7	42.2	43.4
Tax revenues	30.9	29.5	34.0	34.8
Corporate profit tax	5.0	4.7	5.3	4.9
Personal income tax	5.1	3.8	3.9	4.3
VAT	4.7	4.8	7.7	9.4
<i>VAT on domestically produced goods</i>	5.0	4.8	5.5	5.7
<i>VAT on imported goods</i>	3.5	3.5	5.2	6.0
<i>VAT refund</i>	-3.9	-3.5	-3.0	-2.8
Excise	2.0	1.9	1.8	1.6
Payroll tax	10.4	11.0	11.3	11.3
Other	3.8	3.2	4.0	3.3
Non tax revenues	7.8	8.2	8.2	8.6
Expenditures	38.8	41.4	43.6	44.4
Current spending	34.5	35.4	39.5	39.8
Interest charges	1.0	0.9	0.8	0.7
Salaries and remunerations	9.6	9.5	9.7	10.3
Goods and services	6.8	5.7	6.4	6.6
Transfers and other	17.1	19.3	22.6	22.2
Capital expenditures	4.3	6.0	4.1	4.6
<i>of which: capital transfers to enterprises</i>	1.3	3.0	2.1	2.3
<i>of which: infrastructure and equipment</i>	2.8	2.8	1.9	2.2
Fiscal balance	-0.1	-3.7	-1.4	-1.0
Consolidated government	-0.2	-3.2	-1.8	-0.6
Social funds, after budgetary transfers	0.1	-0.5	0.3	-0.3
Cyclically adjusted balance²	-0.3	-5.9	-1.2	-1.1

1. Preliminary estimates.

2. Using output gap calculations from Nikolaychuk and Polovn'ov (2005).

Source: Ministry of Finance, State Statistics Committee, IMF, NBU and OECD calculations.

economies. The high share of capital expenditure in the budget (Table 1.3) reflects capital transfers to SOEs, which exceed the amount dedicated to public investment. This further highlights the heavy drain on public finances generated by the SOE sector.⁶²

The government intends to reduce the size of the state over the medium term and is committed to a shift from consumption- to investment-oriented spending. However, the 2007 budget envisages a significant fiscal loosening, with a state budget deficit projected at 2.6% of GDP. Moreover, the fiscal expansion is to be driven by further increases in spending (+19% in nominal terms), making the needed relaxation of fiscal pressure even harder in the future. Two-thirds of the deficit is supposed to be covered by privatisation revenues, but the objective set for privatisation receipts looks extremely ambitious in view of the track record for 2005-06.⁶³ On the revenue side, the main source of concern is the government's plan to revive in some form the fiscal privileges enjoyed by residents of Free Economic Zones; these privileges were abolished in 2005. While the specifics of the new legislation on the zones are still being discussed, it appears that any new tax or customs privileges for zones will be more restrictive than in the past.⁶⁴ However, given Ukraine's unhappy history with special zones,⁶⁵ as well as the inefficiency and widespread corruption of public institutions, it is unlikely that the revival of the zones will prove an efficient way of stimulating the investment that Ukraine needs.

Moving towards a growth-enhancing fiscal framework represents an enormous challenge

The growth-impeding effect of the high tax burden in Ukraine is reinforced by the distortions created by the structure of taxation itself. Despite evident progress in simplifying the corporate and personal income taxes and reducing tax exemptions,⁶⁶ there is still considerable room for improving the design of the tax system while broadening the tax base. Leaving aside tax administration problems, the three major challenges are the reform of the simplified tax system, the reform of the specific VAT regime for agriculture, and the excessive burden of payroll taxes financing the pension system.

The simplified tax system (STS), which aims to facilitate SME development, is not well targeted and leaves the door open to significant abuses. The STS is also – its name notwithstanding – overly complex, involving a number of different tax regimes:

- Enterprises with no more than 50 employees and annual gross turnover of less than 1 m UAH can opt to pay a tax equivalent to 6% of turnover plus VAT or 10% of turnover with an exemption from VAT. They are then exempt from the corporate profit tax and most other taxes. The eligibility criteria for this relatively generous system are too loose, with respect to both the types of activities that may be covered and the size of enterprises involved.⁶⁷
- It is extremely easy for private individuals to register as unincorporated entrepreneurs under the STS, paying only 6% of turnover plus VAT or 10% of turnover with an exemption from VAT on turnover of up to 500 000 UAH per annum, rather than the personal income tax (PIT).
- Individuals may also operate under a fixed tax of 20-200 UAH per month on revenues of up to 119 000 UAH per year. They are then exempt from PIT and VAT.
- Both legal entities and unincorporated entrepreneurs in certain fields may operate under a system of fixed patents.

The current design has led to a substantial erosion of revenues, particularly from VAT, the PIT and the corporate profit tax. Moreover, individuals registered as entrepreneurs are exempt from payroll taxes, despite the fact that they remain eligible for public pensions. The system is thus extremely costly for the Pension Fund and other social funds. It also creates incentives for firms to fragment their operations. That said, there is little doubt about the need for some form of simplified tax regime for small business, particularly given the very difficult conditions in which small entrepreneurs operate in Ukraine; the STS needs substantial reform, but outright abolition would probably be unwise.

VAT privileges have been reduced considerably in recent years, but they remain relatively high for the agriculture sector, which benefits from a specific VAT regime. Like the STS, this regime is overly complex.⁶⁸ It also affects only a limited range of products (milk and meat essentially), which adds to the market distortions it creates, and it is structured so as to benefit a small number of favoured producers. The authorities have been considering a new regime, with a lower VAT rate of 10% (instead of 20%), but this reform has not yet been adopted.

While tax rates for VAT and PIT are broadly in line with those of neighbouring countries, social contributions are extremely high, amounting to around 40% of wages (including pension contributions equal to 33.8% of wages). Employers pay the bulk of this (37.5% of payroll). This creates enormous incentives to under-declare employment and

wages, particularly given the very weak link between pension contributions and benefits. As a result, it further erodes the bases of taxes like the PIT, and it can have a negative effect on employment for those who do not work in the shadow economy.

In February 2007, the government adopted a new tax reform “Concept”, which takes into consideration some of these concerns.⁶⁹ The Concept’s major goals for the period to 2015 include:

- gradually lowering the overall tax burden, while shifting towards greater reliance on indirect, rather than direct, taxes;
- simplifying tax legislation, while harmonising it with EU norms; and
- making the tax system more effective as an instrument for promoting investment, innovation, energy-saving and other activities the authorities wish to promote.

With respect to this last priority, there is a risk that the Concept tries to do too much: Ukraine’s experience of using the tax system to stimulate particular activities or the development of “priority” regions has not been a successful one.⁷⁰ The country would probably be better served by maintaining maximum neutrality between sectors and activities, while keeping tax bases broad, rates low and stable, and exceptions to a minimum. Yet the Concept identifies as the first priority task for 2007 the perfection of tax mechanisms for stimulating the development of special economic zones, priority development areas and “techno parks”. That said, the Concept does call for tax privileges to be explicitly acknowledged as such in public accounts, under a specific “tax expenditure” rubric in the state budget.

Among the Concept’s more specific medium-term goals are the introduction of a real estate tax to finance local authorities, and a further reduction in the rates of both corporate income tax and VAT, currently 25 and 20%, respectively. The real estate tax is a promising idea, although it will take some time to develop and will really only make sense in the context of a broader reform of intergovernmental fiscal relations. In the long run, it should provide a valuable revenue source for local governments while also making the taxation of capital income more neutral, since the absence of such a tax implies an indirect subsidy for housing. The proposal to cut VAT is both problematic and also somewhat surprising, in view of the declared priority of increasing the role of indirect taxation. The implication is that indirect taxes will be raised chiefly via substantial increases in excise rates. However, other countries in the region have found that very rapid increases in excise charges can stimulate large-scale contraband trade. In any case, while the *administration* of VAT needs to be improved, the basic rate is by no means excessive. It is also far from clear that the government should give priority to cutting VAT during a consumption boom. Such a cut would do more to stimulate consumption than investment.⁷¹ If there is a case for cutting the rate of any major taxes at present, it would be for reducing the very high payroll taxes discussed above. However, payroll taxes lie outside the scope of the Concept, and reducing them will in any case require addressing the very difficult issue of financing the pension system over the long term.⁷²

Ensuring the sustainability of the pension system will constitute another major fiscal challenge. The enormous hikes in pension benefits recorded in 2004-05, which brought the minimum pension rapidly into line with the government-defined subsistence minimum,⁷³ radically altered the basic parameters of the system. Between end-2003 and end-2005, the minimum state pension rose by 190% in real terms. Pension fund expenditures rose from 9% of GDP in 2003 to 14% in 2006 (Table 1.4), one of the highest pension expenditure ratios

in the world, even allowing for the possibility that GDP might be significantly under-reported.⁷⁴ The share of pensioners receiving the minimum pension was pushed up to around 95%.⁷⁵ In 2005-06, a number of measures were taken to slow the growth of pension expenditure. The most significant provisions included adjustments to the pension indexation formula and new restrictions on the payment of increments above the minimum pension to certain categories of pensioners. In addition, the convergence of the minimum pension to the subsistence minimum was postponed to end-2006. These changes reduced the system's deficit to 3.6% of GDP and are expected to save around 0.4% of GDP per annum over the medium term.⁷⁶ However, they are only stopgap measures. More far-reaching steps, such as raising retirement ages (currently 55 for women and 60 for men) or extending the minimum contribution period, are not yet even on the agenda.⁷⁷

Table 1.4. **Balance sheet of the pension fund**
(% of GDP)

	2003	2004	2005	2006
Revenues	9.3	10.9	14.9	13.5
Payroll	8.5	9.1	9.7	10.1
Transfers	0.8	1.8	5.2	3.3
<i>of which:</i>				
state budget transfers	0.7	1.7	5.1	3.2
other transfers	0.1	0.0	0.1	0.1
Expenditures	9.1	11.4	14.5	13.8
Balance	0.2	-0.5	0.4	-0.3
Balance without transfers	-0.6	-2.3	-4.8	-3.6

Source: Ministry of Finance.

The dramatic hikes in minimum pensions in 2004-06 effectively derailed the comprehensive reform of the pension system launched in 2003. The aim of the reform is to create a multi-pillar system, similar to those of a number of Central European countries. A fully funded "second pillar", mandatory for persons under 38 years of age, is to be created alongside the existing PAYG system. These are to be supplemented by a voluntary third pillar. The government remains committed to the basic reform plan, but it wishes to balance the budget of the pension fund of Ukraine before beginning to introduce the mandatory funded pillar. It is now clear that the launch of this second pillar will have to be rather later than planned. Moreover, by raising the minimum pension so rapidly, the authorities effectively severed the link between pension contributions and benefits – the strengthening of which was meant to be a key goal of pension reform. The government has adopted a strategy to cover the revenue losses that the PAYG system will suffer when the funded pillar is launched. However, given the deterioration of the demographic situation – the system dependency ratio is set to increase from 92 in 2006 to 140 in 2050 – these measures will be insufficient to cover the long-run deficit, even if nothing is done to reduce the payroll tax burden.

A fixed exchange rate initially facilitated stabilisation but has recently contributed to price volatility

The cornerstone of Ukraine's monetary policy since 2000 has been the maintenance of a more or less stable nominal hryvnia-dollar exchange rate.⁷⁸ The exchange-rate anchor played an important role in stabilising the economy after the 1998 financial crisis⁷⁹ and

helped the country bring inflation down relatively quickly: while prices growth exceeded 20% in 1999 and 2000, inflation was in single digits in 2001, and Ukraine even experienced a period of deflation in 2002. However, while the exchange-rate regime was undoubtedly helpful during the phase of immediate post-crisis stabilisation, it has been less successful in maintaining inflation at a moderate level on a sustainable basis and in reducing price volatility in more recent years, as Ukraine has experienced a series of external shocks.

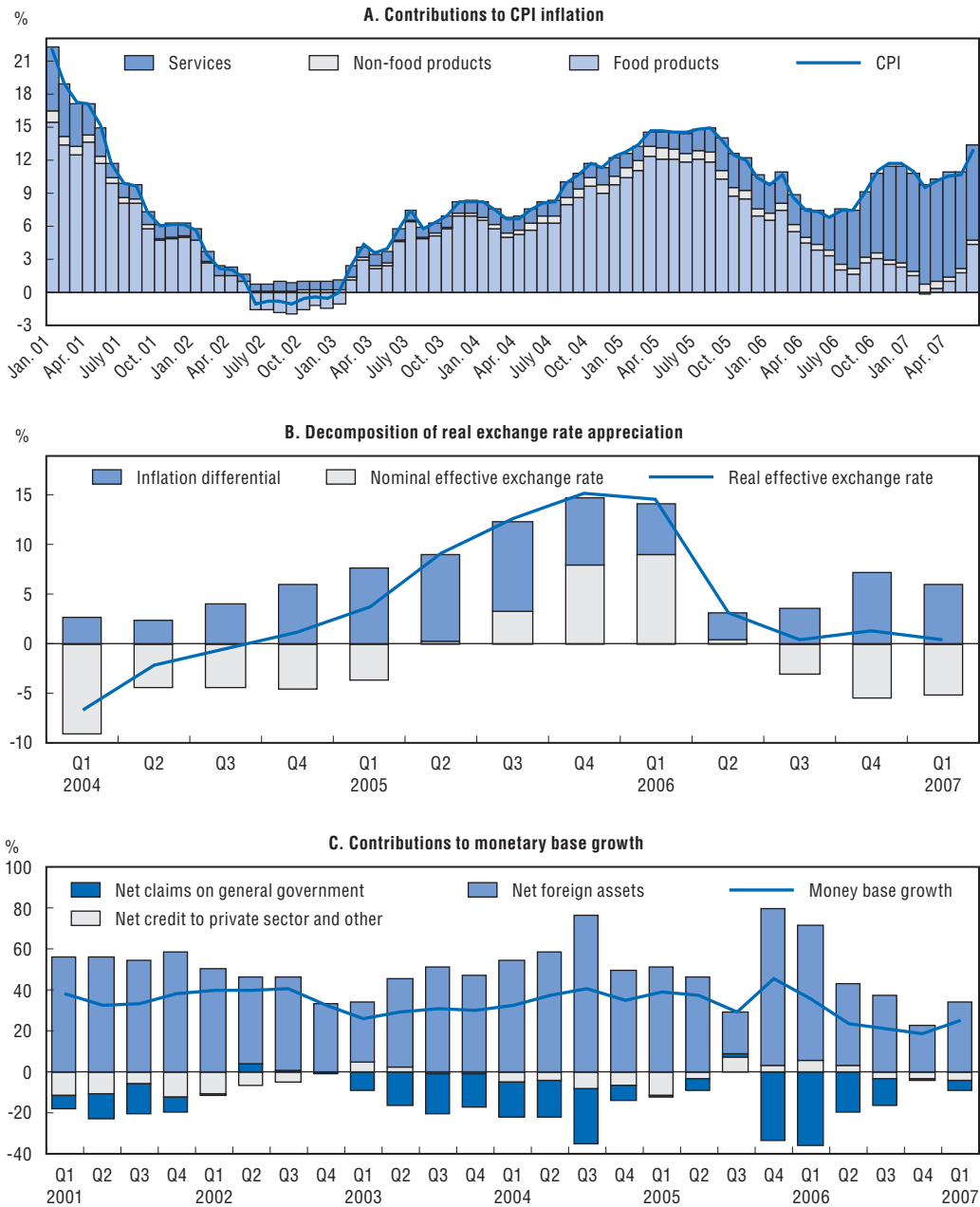
When the terms of trade began to improve significantly in 2003, the National Bank of Ukraine (NBU) continued to give nominal exchange-rate stability priority over price stability. The large foreign exchange inflows arising from the upswing in metal export revenues thus stimulated an acceleration of money-supply growth, while the consumption-oriented fiscal expansion of 2004-05 and the consumer credit boom also added to inflationary pressures. In combination, these factors led to a rapid surge in inflation at the end of 2004, which remained in double digits throughout 2005 (see Figure 1.8A). Thus, the cautious policy of allowing only very gradual nominal appreciation meant that the terms-of-trade driven real appreciation took the form of a larger inflation differential *vis-à-vis* trading partners (Figure 1.8B). However, monetary policy was not entirely passive during this period. The significant realignment of the hryvnia-dollar rate in April 2005, from 5.30 UAH/\$ in 2000 to 5.05 UAH/\$, did lead to an acceleration of real appreciation in the short run, but it also appears to have played an appreciable role in the slowdown in core inflation in early 2006.⁸⁰ Disinflation has also been facilitated by the slowdown in foreign inflows, as the current account has moved from surplus into deficit. In 2006, however, this was offset by sharp energy and utilities price increases, which pushed headline inflation upwards.⁸¹

Under these conditions, money supply growth is essentially determined by NBU interventions on the foreign exchange market and, to a lesser extent, net changes in government deposits at the central bank (Figure 1.8C). The targeting of monetary aggregates has been part of the monetary policy framework in the past but, given the fixed exchange rate and the marginal role played by money-market instruments, the monetary targets outlined in the NBU's annual policy guidelines have regularly been overshoot.⁸² However, the growth of money demand has generally been far faster than anticipated, and this growth has helped contain inflationary pressures. In the first half of 2006, monetary conditions were temporarily tightened as the result of less favourable balance of payment developments, but this was offset to some extent by a reduction in the NBU's refinancing rate⁸³ and the decision to lower reserve requirements. The NBU again became a net purchaser on the foreign exchange markets in the second half of 2006, and the monetary stance clearly eased at a time when inflation and growth were picking up. The excess liquidity in the banking system has simultaneously risen, as reflected in the current level of inter-bank interest rates, which are well below inflation and falling (Figure 1.9).

The accommodating monetary stance has been accompanied by a spectacular and long-lasting credit boom. While the growth of credit to the private sector is understandable given the underdevelopment of the banking sector at the beginning of the decade and the re-monetisation of economic activity once the recovery began, the pace of growth has been exceptionally rapid.⁸⁴ Indeed, the ratio of domestic credit to GDP more than tripled between 2001 and 2006, reaching 45.8%.⁸⁵ However, the fact that lending activities intensified further in 2006, with credit growth accelerating to 70% in nominal terms in December, gives grounds for concern, as does the fact that the growth of borrowing in foreign currency has largely outpaced borrowing in hryvnia (see Figure 1.10). Such

Figure 1.8. **Inflation and monetary aggregates**

Year-on-year percentage change



Source: Derived from National Bank of Ukraine, State Statistics Committee of Ukraine and IMF.


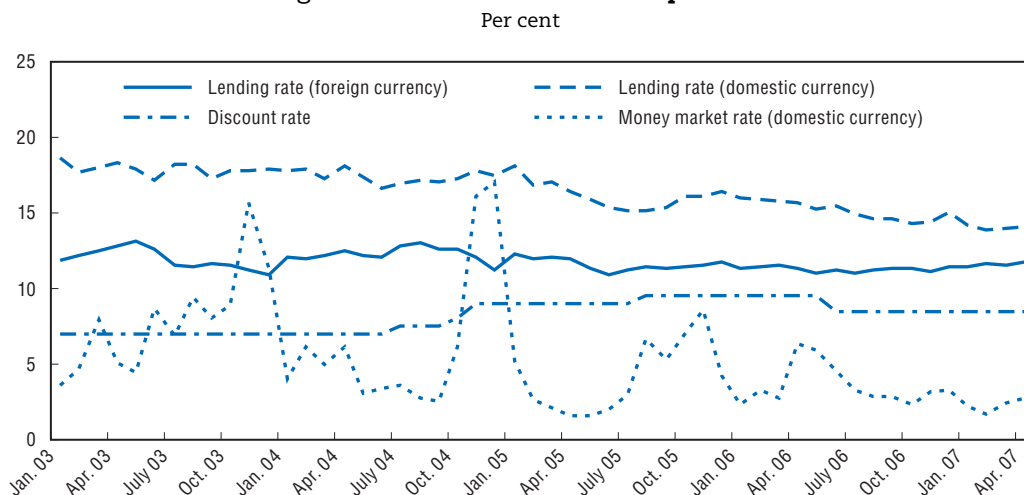

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Figure 1.9. **Interest rate developments**

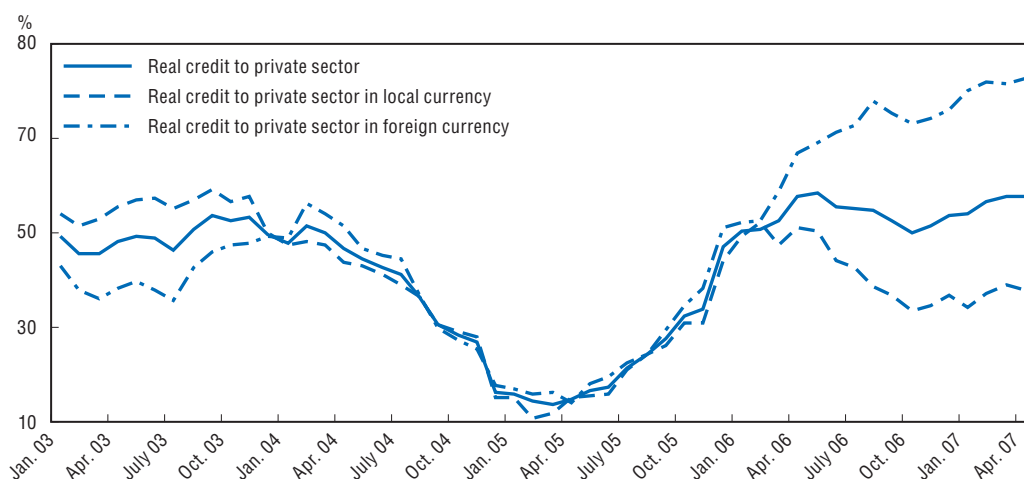
Source: National Bank of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072438205420>


aggressive lending has been supported by the banks' increasing reliance on short-term foreign funding.⁸⁶ In April 2007, the NBU reacted to this trend by tightening the reserve requirements on forex loans, particularly for borrowers with no income in foreign currency. While this response rightly targeted the retail banking segment, such measures – as well as the tightening of banks' capital requirements – have been taken several times in the last two years but have proved insufficient to restrain the credit boom and avert the tendency towards increased dollarisation. In any case, such measures treat the symptoms of the dollarisation problem rather than its root causes, which are largely bound up with the exchange-rate regime.⁸⁷

Figure 1.10. **Real credit growth**

(year-on-year)



Source: National Bank of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072528804110>

Ukraine needs to begin the transition away from a fixed exchange-rate regime

The current exchange-rate regime, combined with more attractive interest rates on foreign currency loans, constitutes a powerful incentive to borrow in dollars. This incentive seems to have been especially strong for households: the share of forex loans as a proportion of total loans to retail borrowers jumped from 39 to 63% during 2003-06, a period of very rapid growth in household borrowing. While the household sector represented only a minor segment of the credit market in the early 2000s, its contribution to the growth of foreign currency debt has been almost equal to that of the corporate sector (Table 1.5). Private companies' appetite for foreign borrowing, though less pronounced, was also strong and the already high share of foreign-currency loans increased substantially over the period.⁸⁸ This rapid dollarisation of lending is indirectly exposing the banking sector to foreign currency risks, since many borrowers have no foreign exchange incomes and do not hedge (see IMF, 2007a). Deposits in foreign currency have also picked up recently, but they cover a diminishing share of foreign loans.⁸⁹ Interest rates on foreign deposits are relatively less attractive, but high levels of political uncertainty and weak institutions have tended to undermine confidence in the domestic currency. Thus, holding dollars is seen as prudent, even though Ukraine has maintained a reasonable degree of macroeconomic stability over a relatively long period and most assessments find the hryvnia close to its equilibrium level, which should attenuate fears of an abrupt devaluation or revaluation.⁹⁰

Table 1.5. **Credits and deposits**
As a percentage of GDP

	1996	2000	2001	2002	2003	2004	2005	2006
Credits								
National currency	5.0	6.2	7.8	10.8	14.8	14.8	18.4	23.1
Foreign currency	1.7	5.3	6.1	7.8	10.6	10.8	14.1	22.7
<i>Households</i>								
National currency	0.2	0.5	0.5	1.0	1.7	2.2	3.5	5.7
Foreign currency	0.0	0.1	0.2	0.6	2.0	2.5	4.6	9.6
<i>Private companies</i>								
National currency	1.6	5.0	6.2	8.6	11.6	11.5	13.9	16.2
Foreign currency	0.9	4.8	5.5	6.8	8.2	7.9	9.1	12.6
Deposits								
National currency	4.4	6.8	8.5	11.4	15.7	15.3	19.8	21.3
Foreign currency	1.9	4.2	4.1	5.3	7.4	8.8	10.3	13.1
<i>Households</i>								
National currency	1.2	2.1	3.3	5.3	7.4	6.7	9.9	11.2
Foreign currency	0.3	1.9	2.3	3.4	5.1	5.7	7.0	9.1
<i>Private companies</i>								
National currency	2.3	3.3	3.7	4.8	6.6	7.5	8.5	9.2
Foreign currency	1.1	1.6	1.3	1.4	1.7	2.2	2.6	3.5

Source: Derived from the National Bank of Ukraine.

While external factors such as energy-price increases have undoubtedly played a role in driving inflation recently, the evident contribution of monetary factors, the persistence of a relatively high price volatility, the pace of credit growth and increasing dollarisation of liabilities all point to the need for a more active monetary policy to manage the level of liquidity in the economy. Any transition to a new monetary policy framework will of

necessity be gradual, given the underdevelopment of financial markets (particularly the market for government securities), the relatively low level of monetisation and the consequent weakness of the interest-rate channel. Yet while the adoption of a fully fledged inflation-targeting regime must therefore take some time, the authorities could begin the transition by allowing greater exchange-rate flexibility. Even if the monetary authorities' concerns about the weakness of monetary transmission mechanisms are well founded,⁹¹ the exchange-rate channel could still be used more effectively to fight inflation. The case for greater exchange-rate flexibility appears to be all the stronger given that:

- Exchange rate pass-through appears to be relatively strong⁹² and inflation seems to have responded quite rapidly to nominal exchange-rate movements in the past.
- The maintenance of the dollar peg, at a time of extremely rapid growth in foreign-currency lending, has increased the economy's vulnerability to exchange-rate shifts and other external shocks. As Ukraine is very much affected by terms-of-trade movements, the likelihood that it might be hit by a sizeable shock is high.
- Existing rigidities in product markets (see Chapter 2), and to a lesser extent on the supply side of the labour market mean that adjustment to shocks would be slow in a fixed-exchange rate regime.
- Interest rates and terms-of-trade fluctuations have moved in opposite directions over the recent past, meaning that the maintenance of nominal exchange-rate stability entails pro-cyclical monetary policy.⁹³

To be sure, building confidence in the hryvnia is not easy for the monetary authorities at a time of political upheaval. The timing and sequence of the transition away from the dollar peg will therefore be crucial. Yet macroeconomic conditions are currently favourable with respect to the start of this transition. First, the hryvnia appears on most assessments to be relatively close to its equilibrium level. Since inflation remains relatively high, delaying the transition might increase the risk of allowing the hryvnia to become over-valued, making the eventual transition to greater exchange-rate flexibility much more difficult. Secondly, monetary pressures stemming from balance of payments dynamics are diminishing. Thirdly, the expenditure side of the national accounts shows that the components of growth are re-balancing somewhat in favour of the supply side. Finally, the issue of accelerating dollarisation needs to be addressed relatively quickly, and there is empirical evidence from other countries suggesting that greater exchange rate volatility would help (see Box 1.2).

Both the NBU and the government are aware of the need to introduce greater exchange-rate flexibility but are reluctant to specify a time-frame for the transition away from the dollar peg. The NBU has been gradually widening its announced fluctuation band for the hryvnia-dollar rate (currently 4.95-5.25 UAH/\$, against 5.00-5.20 UAH/\$ in 2006),⁹⁴ but the bank does not actually permit the hryvnia to move much within the wider band. In early 2007, the NBU council made a preliminary projection of 5.05 UAH/\$ through 2008, suggesting that it did not anticipate allowing the hryvnia to fluctuate more freely before 2009. One reason for the widespread attachment to the dollar peg in Ukraine is the perception that, in a highly unstable political environment, the exchange rate provides agents with at least one fixed point of reference. The hryvnia-dollar rate has remained stable and predictable throughout the sharp swings in fiscal and other policies of the last few years, and the authorities fear that any move away from it could trigger unexpected responses from households and firms. It follows, then, that the move to a more flexible

Box 1.2. Dollarisation and de-dollarisation experiences: which lessons?

The literature on dollarisation makes a distinction between *currency* substitution, which occurs when foreign currency is partly or entirely used as a unit of account and medium of exchange for day-to-day transactions, and *asset* substitution, which denotes the use of foreign exchange-denominated monetary assets as a store of value and for investment purposes. The literature on currency substitution proceeds on the assumption that high inflation and long-lasting inflationary memories tend to be the major drivers of dollarisation (Ize and Levy-Yeyati, 2003; Savastano, 1996). Weak governmental institutions have also been cited as a major factor reducing confidence in the domestic currency and increasing the demand for foreign currency (Honohan, 2007 or IMF, 2007b).

Although inflation receded around the world in the late 1990s and macroeconomic conditions have been stable for a relatively prolonged period, financial dollarisation – defined as the holding by residents of dollar-denominated assets (deposit dollarisation) and liabilities (loan dollarisation) – has persisted in many emerging economies. In some cases, it has even increased. Recent research has therefore shifted its attention to asset substitution: unlike cash-holding, the composition of interest-bearing financial assets should be much less dependent on the level of inflation, provided that interest rates adjust to equalise real returns across currencies.

The minimum variance portfolio model (MVP) developed by Ize and Levy-Yeyati (1998) has proved one of the most promising approaches in explaining dollarisation, linking it to the relative volatility of inflation and the real exchange rate. The underlying idea is straightforward: for a risk-averse resident investor, the volatility of a dual currency portfolio depends, *inter alia*, on the variance and covariance of inflation and the real exchange rate. Minimising the risk-return profile of that portfolio, assuming an equal mean return on each currency, yields an optimal share of dollarisation: this share is directly related to the volatility of inflation (which increases the risk of holding domestic assets) but inversely related to the volatility of the real exchange rate (which increases the risk of holding foreign currency-denominated assets).¹

Using the portfolio theoretical framework, De Nicolo *et al.* (2005) were able to explain half of the cross country differences in dollarisation shares for a sample of 75 countries (adding institutional indicators as explanatory variables). With a sample of transition economies including Ukraine, Piontkivsky (2003) finds that the volatility of inflation, together with the relative real rates of return on foreign and domestic assets, has an impact on dollarisation, and this impact is unambiguously positive. Finally, it is worth noting that substantial progress in de-dollarisation has been observed more recently in a number of countries that have moved towards inflation targeting, such as Turkey and Peru (see Sahinbeyoglu, 2007, and Armas and Grippa, 2005, respectively). These results tend to support the view that greater exchange-rate flexibility and reduced inflation volatility might facilitate de-dollarisation in Ukraine or, at least, stabilise it.

The literature also emphasizes the high level of inertia associated with dollarisation. Honohan (2007) shows that short-run variations in dollarisation with respect to – limited – exchange rate movements are in fact small, which suggests that the “fear of floating” may be unfounded. Conducting a review on 85 dollarised economies, Reinhardt *et al.* (2003) find that only four of them managed to achieve a large and long-lasting de-dollarisation (defined as a drop by 20 percentage points to a level below 20%). Moreover, two of these “successful” de-dollarisations were obtained by adopting very costly restrictions on foreign deposits (Mexico and Pakistan).² Only in the case of Israel in the 1990s did a sharp reduction of inflation volatility appear to make a significant contribution to the de-dollarisation process (Izquierdo, 2005).

To sum up, the exchange rate regime might play a non-negligible role in explaining dollarisation movements, but in order to sustain a de-dollarisation trend in the long run, supportive prudential regulations, the development of domestic financial instruments and steps to enhance the credibility of institutions and policies all remain crucial elements (Ize and Levy-Yeyati, 2003).

1. The optimal share λ^* of dollarisation is equal to $\lambda^* = \frac{V(\pi) + Cov(\pi, s)}{V(\pi) + V(s) + 2.Cov(\pi, s)}$ where π denotes domestic inflation and s the rate of the real exchange rate depreciation.

2. Bolivia and Peru had bad experiences with such policies.

exchange-rate regime would be much easier to manage if political conditions were more stable and fiscal and structural policies more transparent and predictable.

However, even if the high-level political turbulence of the last three years continues for some time, taking the first steps away from a hard peg, by allowing the hryvnia to move more widely within its fluctuation band, would not damage the credibility of the current monetary regime. Such a move would send an important signal to economic agents wishing to borrow in foreign currency about the risks involved. The fact that the capital account is far from fully liberalised also leaves the NBU some scope for responding to adverse developments.⁹⁵ In the medium term, a successful transition towards full-fledged inflation targeting will involve a number of challenges.⁹⁶ The NBU is actively working on developing many of the needed elements of an inflation-targeting regime: it has already developed a measure of core inflation and done much to strengthen its forecasting and communications capacities. However much remains to be done. The remaining challenges include introducing a wider range of monetary policy instruments, developing the domestic debt market, adopting a transparent communications strategy for the bank and, last but not least, amending the Law on the Central Bank to strengthen the NBU's independence and to give it a clear mandate to pursue price stability. The very large shares of regulated prices and seasonal foodstuffs in the CPI basket constitute a further problem to be addressed in the context of any move to inflation-targeting; to some extent, this may require revising the basket itself – critics argue that it is a poor reflection of the actual consumption patterns of most of the population – but there is a limit to what the NBU can do about the share of regulated prices unless and until central and local governments reduce the role of price regulation in the economy, or at least adopt more transparent and rule-based regimes for regulating prices.

Moving to an investment-led growth path

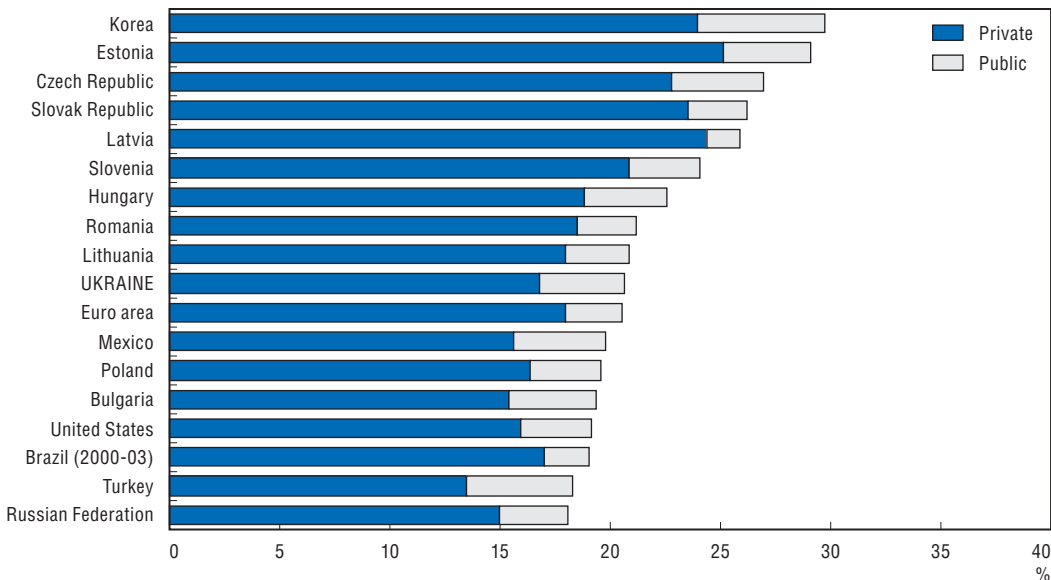
This chapter's analysis of the factors driving growth has shown that most of them are either transitory or, at any rate, likely to provide a much weaker stimulus to growth over the medium-to-long term. Clearly, Ukraine cannot count on indefinitely improving terms of trade, and, indeed, the terms of trade are expected to deteriorate this year. On the supply side, the price of energy (and particularly of imported gas) will continue to rise, regardless of international oil price movements, and capacity utilisation rates have reached normal levels. On the demand side, the rates of growth of household incomes and consumer credit are bound to slow, the former as a result of fiscal policy and the need to bring private-sector pay increases back into line with productivity growth, and the latter because the current boom in consumer credit is largely a catching-up process that will run its course as levels of household debt reach more "normal" levels. Moreover, wage levels are now approximately in line with productivity levels and Ukraine's tradable sectors face growing pressure from foreign competitors.

Nevertheless, it would be a mistake to see this analysis as grounds for pessimism about Ukraine's growth potential. There remain good reasons to think that Ukraine can and should sustain strong growth over the longer term, given appropriate policies and institutions. Most sectors are still far from the international technology frontier, and GDP per capita at PPP exchange rates stands at approximately 25% of the OECD average.⁹⁷ This means that there is still substantial scope for catch-up growth and capital deepening. Moreover, there is still considerable potential for the rapid growth of sectors and activities that were underdeveloped or non-existent under central planning. This accounts for much

of the very fast growth of market services in recent years. There is no reason why this kind of structural shift should not benefit Ukraine for some years to come.

The foregoing implies that continued growth will require more – and more efficient – investment than has been needed during the post-crisis recovery. Fixed investment has been growing rapidly and the total investment rate reached 23.6% of GDP in 2006, up from an average of 20.8% during 2000-05. However, the ratio of *private* investment to GDP – at around 19% – is still significantly lower than that of most fast growing emerging economies (Figure 1.11). Given Ukraine's ageing capital stock and the scope for capital deepening – as well as the constraints on labour supply described above – the current ratio appears to be below what would probably be needed to sustain rapid catch-up over a long period. This points to the need to reduce, and where possible eliminate, structural impediments to investment. Moreover, while foreign direct investment (FDI) in Ukraine is rising,⁹⁸ the stock of FDI per capita is far below the levels observed in Central and Eastern Europe.⁹⁹

Figure 1.11. **Gross fixed capital formation**
(% GDP, average 2000-05)



Source: Derived from IMF, Eurostat, OECD Economic Outlook No. 80 database and national sources.

Capital deepening, however, will be insufficient to ensure continued strong growth. Ukraine's ability to sustain rapidly increasing total factor productivity (TFP) is likely to be even more important. Ensuring robust productivity growth at a time when production factors are being used more intensively will require more efficient resource allocation and the creation of framework conditions conducive to innovation. This represents another key challenge.

Improving framework conditions for business, particularly by strengthening the rule of law and the security of property rights, should be seen as important priorities in this context. Surveys of foreign and domestic entrepreneurs and investors consistently show that unstable institutions, high levels of legal and regulatory uncertainty, and weak property rights are among the most important obstacles to doing business in Ukraine.¹⁰⁰ While it is difficult to quantify the impact of poor framework conditions on investment and

innovation with any precision,¹⁰¹ there is good reason to believe that doubts about the security of property rights constitute the principal barrier to raising private investment rates. Investors in Ukraine's business environment cannot be sufficiently confident of reaping the benefits of a successful investment or innovative activity and must therefore include a healthy risk premium in their assessment of any potential projects. Therefore, only projects with very high pay-offs are attractive.

The impression that institutional and regulatory barriers represent one of the key constraints is reinforced by an examination of other explanations of Ukraine's relatively low private investment rate.¹⁰² There is little reason to think that the principal constraint is financial, given the ample liquidity available, as indicated by the rapid pace of credit growth and falling real interest rates. Borrowing costs can nevertheless be high, but this appears to reflect risk premia rather than tight liquidity.¹⁰³ Nor does human capital availability appear to explain the suboptimal level of investment, as Ukraine does not exhibit exceptionally high returns to education.¹⁰⁴ Until recently, gross national saving was well in excess of gross capital formation, meaning that there were plenty of resources to finance investment. However, the large drop in national savings that followed the shift in fiscal policy towards consumption in 2004-05 suggests that the high tax burden might soon become a much more serious impediment to investment growth. As noted above, recourse to foreign financing does not yet appear to be constrained, but if the current account deficit continues to grow rapidly, the crowding-out effect of government spending will have a more significant negative impact on private investment. In any case, this short review of the potential barriers to investment points to the conclusion that poor framework conditions have constituted, and still constitute, the major obstacle to raising the investment rate. As Hausmann *et al.* (2005) argue, where policy makers face a wide array of problems and lack the capacity to tackle them all at once, they should focus on what appear to be the most binding constraints, for relaxing them is likely to yield the biggest payoff in terms of performance.¹⁰⁵ The first part of Chapter 2 therefore addresses the problems with Ukraine's investment environment.

A healthier institutional and legal framework for doing business, however, should be seen as a necessary but not sufficient condition for sustaining high growth rates over the medium-to-long term. Stimulating robust productivity growth and increased innovation will also require a profound reform of product markets. Barriers to entry and exit are substantial in Ukraine and need to be drastically reduced in order to allow a more efficient allocation of resources and, above all, to enable the process of creative destruction to unfold.¹⁰⁶ Chapter 2 therefore examines in depth the challenge of reforming product-market regulation. Among the range of barriers to entry, specific attention is devoted to anti-competitive barriers. These are a particularly severe problem for small businesses. More generally, increasing the level of competition in product markets is critical to boosting TFP growth¹⁰⁷ and can help raise the *efficiency* – and not merely the *level* – of investment. Chapter 3 therefore focuses specifically on the expected productivity benefits of stronger competition. Competition is here understood as both competition among domestic firms and openness to foreign players. The chapter therefore also examines the potential contribution of increased FDI to TFP growth, both directly, via the diffusion of foreign technology and expertise, and indirectly, via the potentially large spillover effects on domestic firms and sectors.¹⁰⁸ Finally, it draws attention to the complementarities that exist among regulatory reform, stronger competition and privatisation, highlighting the potential benefits to be gained if reforms in these spheres are pursued in tandem.¹⁰⁹

Notes

1. It should be borne in mind that the size of the initial GDP drop is probably overestimated by official data, given the difficulty measuring the shadow economy: whereas managers under central planning faced incentives to *over-report* production, once the transition began, they faced very powerful incentives to *under-report*. However, there is no doubt that the contraction was much more severe in Ukraine than in Central and Eastern European countries.
2. 1992 in Poland and 1994 in Hungary.
3. The hryvnia replaced the “karbovanets” (“coupon”), a temporary currency used in Ukraine during the period immediately following independence and the country’s exit from the rouble zone.
4. Based on an absolute poverty line defined as consumption expenditure of 1 813 UAH or less, at 2003 prices, the level deemed necessary to meet minimum human needs; see World Bank (2007). The State Statistics Committee’s measure of the proportion of the population with incomes below the officially defined subsistence minimum is consistently far higher, peaking at above 80% at the end of the 1990s.
5. Command GDP is defined as follows: $\text{command GDP} = \text{TDDV} + \text{XGSV} * (\text{PXGS} / \text{PMGS}) - \text{MGSV}$, where TDDV is real domestic demand, XGSV and MGSV are, respectively, export and import volumes, and PXGS and PMGS are the export and import deflators. For further discussion of the command GDP indicator, see Kohli (2003) and OECD (2003:37-8) for details.
6. In 2006, the share of social transfers accounted for 39% of disposable income, while the share of wages and salaries was 43%. At the same time, the official data point to a steady reduction in the share of profit income for self-employed persons and other independent workers.
7. See below for a description of the consumption orientation of fiscal policy in 2004-05.
8. The gross national savings rate decreased from almost 30% in 2004 to 22% in 2006.
9. Households’ gross savings rate rose from 10% in 2002 to 11.4% in 2006.
10. This effect would seem not to have been very great, since the ratio of the minimum wage to the average wage nevertheless fell.
11. Which rose from 9.8% of GDP in 2000 to 27.4% in November 2006.
12. National accounts data on fixed capital formation. If deflated by an index of fixed capital investment, which was much less dynamic than GDP deflator, real investment rose by 17.5% in real terms over the same period.
13. Financing from own funds decreased from 69% to 57% over the same period.
14. See Chapter 2 for details, especially Table 2.3.
15. Market services accounted for 90% of this increase. The share of the energy and power sector declined by 2 percentage points over the period.
16. Real growth averaged 21% per annum in 2000-05, more than doubling the sector’s share in value added.
17. See Bolashev (2007) for details on the real estate boom in Ukraine.
18. The data refer to medium and large enterprises only.
19. Export prices for fertilisers rose by only 5% in 2006, against 20% in 2005 and 31% in 2004.
20. As a percentage of industrial products sold.
21. Shumylo (2007) reaches a similar conclusion.
22. See Figure 1.A1.1. Metals exports represent about 17.4% of GDP.
23. The drop was particularly sharp for mineral and oil products.
24. Approximately 3% of GDP.
25. And despite the fact that terms-of-trade improved slightly in 2006.
26. Nevertheless, the wage share in GDP rose markedly, from a low of 42% in 2000 to 47% in 2005.
27. Public-sector wages currently average around 750 UAH per month, well below the economy-wide average of 1 040 UAH.
28. The minimum wage was increased by 28% in 2004 and 40% in 2005 (CASE, 2007).

29. At around 31%. For the economy as a whole, the ratio is larger, at around 35%.
30. Hiring and firing rates rose respectively from 20% to 28% and 25 to 30% of total employment.
31. Wage rigidities in general do not appear to be very strong, as real wages adjusted very rapidly to the shock of the financial crisis. Moreover, the level of trade union activity is very low and has decreased dramatically over the last six years, despite the rather high rate of coverage of collective bargaining (see Chernyshev, 2006).
32. Approximately 62% for the population aged 15-70.
33. For the population aged 15-64. See Figure 1.A1.2.
34. The gross rate of migration flows within Ukraine is stable at 1.5%.
35. The natural decrease in population has averaged 350 000 per year over the last five years.
36. Close to 80% for women aged 25-49. Participation rates are falling sharply above retirement age.
37. Around 7.8 m Ukrainians are estimated to have left the country during 1989-2004, as against the estimated total (legal and illegal) immigration of around 7 m. While emigrants appear to have been more likely to possess tertiary education than were new arrivals, departures accounted for only around 3-5% of those with complete tertiary qualifications and these were partly offset by new arrivals. The overall impact of this "brain drain" on Ukraine's economy thus appears to have been limited. Emigration has not led to the skill shortages that many had feared. See Mansoor and Quillin (2006).
38. It is worth noting, for example, that the country's steel industry association reported capacity utilisation at 92-95% in 2004, as against an official estimates ranging from 59 to 72% for metallurgy.
39. See Chapter 3 for a more detailed discussion of external competitiveness.
40. Ukraine did gain some offsetting relief, as transit tariffs for Russian gas exports to third markets rose from \$ 1.09 tcm/100 km to \$ 1.61.
41. In 2006, prices for hot-rolled coil steel in the CIS rose by 10.6%. See Figure 1.A1.1.
42. The transit tariff, by contrast, remains unchanged.
43. See Shiells et al. (2005).
44. In early 2007, Ukrainian import prices were still somewhat below half the German-border price for Russian gas exported to the West; see Lysenko and Vinhas de Souza (2007) and Pirani (2007).
45. See IEA (2006:45). Russian gas prices are not the whole of the story; there is still a substantial element of subsidy with respect to domestic energy provision (see Annex 1.A3).
46. Who also benefited from under-pricing of gas; see OECD (2004) and (2006).
47. Metallurgy, chemicals and petrochemicals, the production of non-metallic mineral products, and the production of coke and petroleum products. In 2004, their combined share of total energy consumption in industry was around 60%.
48. Segura et al. (2006); and Lysenko and Vinhas de Souza (2007).
49. See Figure 1.A3.1.
50. See Annex 1.A3 for details. The data may exaggerate the decline in the energy-intensity of production, as some of the decrease may reflect the legalisation of shadow activities.
51. It is impossible to give precise estimates, in view of the difficulties with trade data described above and the poor quality of data on energy use. Nevertheless, there is little doubt about the overall picture: less energy-intensive sectors have undoubtedly enjoyed faster growth of production and export volumes.
52. IMF (2007b:13).
53. See World Bank (2005a) for a somewhat larger estimate: the Bank anticipated that the gas-price shock could cost Ukraine up to 4% of GDP in the first year of the shock and 3% in the second.
54. 3.1% of GDP in 2004 and 5.1% of GDP in 2005.
55. Data from the Ministry of Finance of Ukraine, including both direct and guaranteed debt. The corresponding figures for direct state debt alone are 48.2% and 12.3% respectively.

56. In 2007, for state-owned enterprises the requirement to transfer profits will be cut from 50% to 15%.
57. See IMF (2007b). The financial situation of Naftogaz Ukrainy, the state-owned gas monopoly, is likely to deteriorate further as domestic gas prices continue to adjust with a lag to import price rises.
58. As noted above, it is difficult to argue with the need to increase public-sector pay, given its very low level. However, the abrupt manner in which the hikes were adopted dramatically increased the public-sector wage bill in the absence of any significant steps to begin streamlining Ukraine's very large and inefficient public sector.
59. Before the 2004 presidential election, the government promised to raise the minimum pension to the level of the subsistence minimum for unemployable workers. As a result, pensions rose by 155% in just over a year and the link between contributions and benefits was almost completely broken, as over 80% of pensioners now receive the minimum pension (over 90% in 2005). See World Bank (2006a) and Sigma Bleyzer (2006).
60. While the fiscal privileges in the zones were unwarranted and contributed to both corruption and market distortions, the manner of their abolition created problems of its own, since those legitimate investors, domestic and foreign, who had made significant investments in the zones, saw the government unilaterally revising their conditions of business *ex post*. This, moreover, was part of a broader problem with the instability of the tax system, which is addressed in Chapter 2.
61. Outstanding claims for VAT refunds reached roughly 7 bln UAH in the first three quarters of 2006 (1.3% of GDP).
62. According to IMF estimates, subsidies and capital transfers to state-owned enterprises amount to 4% of GDP.
63. 0.1% of GDP in 2006. The target for 2007 is 10 bn UAH or around 1.6% of anticipated GDP.
64. Part from the customs-free regime, two types of instruments aimed at providing incentives for investment/innovation are under examination in the draft law: tax investment credits (which could be limited to 2 years) and interest-rate subsidies for loans.
65. See World Bank (2005b) for details.
66. A flat personal income tax of 13% was adopted in 2004. The rate was increased to 15% in January 2007. The corporate profit tax was reduced from 30 to 25% in conjunction with a simplification of the tax itself.
67. Both size criteria are too high: the upper turnover threshold amounts to 50 times the average annual wage and the system can benefit firms with up to 50 employees; for details, see World Bank (2006a).
68. See World Bank (2006a:36-39) for details.
69. "Kontseptsiya" (2007).
70. Ukraine is hardly unique in this respect; many developing and developed countries have made extensive use of tax breaks and privileges to promote particularly policy goals, with results that in general tend to be unimpressive.
71. In terms of competitiveness, too, there may be an argument for cutting direct taxes on producers rather than VAT; see Gianella and Tompson (2005).
72. The authorities are also considering plans to combine the various social charges into a single tax in order to reduce the burden of administration. This might be accompanied by some redistribution of the burden of payroll taxes between employers and employees.
73. According to the law on mandatory state pension insurance, the minimum old-age pension for men and women with contribution histories of at least 25 and 20 years, respectively, is equal to the legally defined subsistence minimum for unemployable individuals. In early 2007, this amounted to 380 UAH per month.
74. In 2004, the average for the EU25 (excluding Greece) was 10.6%, ranging from 6.6% in the United Kingdom to 14.2% in Italy (European Commission, 2006). However, precise comparisons with Ukraine are difficult owing to differences as to what counts as a "pension" in different countries (e.g., whether or not disability benefits count as "pensions").
75. The replacement ratio of the minimum pension also jumped sharply, from around 18% of the average wage to roughly 41% in two years.

76. World Bank (2006a:80).
77. The minimum contribution period to qualify for a minimum pension is 20 years for women and 25 for men. Persons with shorter contribution histories are entitled to the minimum pension less a *pro rata* deduction, provided they have contributed for at least five years.
78. The nominal hryvnia-dollar rate has been adjusted in stages, from 5.44 UAH/\$ in 2000 to 5.05 UAH/\$ in 2005, but these adjustments have in fact been limited.
79. The currency fell by 38% against the dollar between August and December 1998 and by a further 34% in 1999.
80. There is no official measure of core inflation, but the NBU does calculate such estimates.
81. In 2006, tariffs for paid services increased by almost 50%.
82. M2 grew at an annual rate of 42% on average over the period 2002-06. While M2 growth slowed in 2006, it remained at relatively high levels (36% at the end of 2006 yoy). It is also worth noting that the policy guidelines for 2007 no longer refer explicitly to a target for money-supply growth. There is a forecast range for the growth of hryvnia M2. See NBU (2006a).
83. Refinancing operations were relatively important in the second quarter (approximately 5.5 bln UAH).
84. On average, credit to the economy grew at 42% in real terms over the period 2001-06.
85. A level that is comparable to those observed in some more advanced transition economies.
86. This is particularly true of foreign banks. This does at least imply that the overall foreign-currency risk of the banking system has not deteriorated in the way that it might appear to have done.
87. Dushkevych and Zelenyuk (2007).
88. The share of foreign loans reached 44% at the end of 2006.
89. Approximately 57% at the end of 2006.
90. See IMF (2007b). While many agents might fear devaluation, exporters fear any sharp appreciation of the hryvnia, as do households holding their savings in dollars.
91. See the arguments advanced by Petryk and Nikolaychuk (2006).
92. Approximately 0.4 on NBU estimates.
93. See Calvo and Reinhart (2000) for an explanation of this phenomenon.
94. The band was set at 5.27-5.31 for 2005.
95. There is still a tax on forex transactions, amounting to 1%. The NBU has argued in favour of its abolition for some time but there are currently no plans to eliminate it.
96. See IMF (2007b).
97. Ukraine's GDP per capita (at PPP exchange rates) is estimated at USD 6 965 in 2005.
98. 4.5% of GDP in 2006, as against 4.4% in 2005 (if the exceptional revenues for the privatisation of Kryvorizhstal are excluded) and 2.6% in 2004.
99. See Chapter 3 for details.
100. See Chapter 2 for details.
101. However, for an attempt to quantify the impact of poor institutions on performance in Ukraine, see Tiffin (2006).
102. The discussion here loosely follows the line of argument advanced by Hausmann *et al.* (2005) concerning the diagnosis of binding constraints.
103. The cost of credit also reflects weaknesses in the banking system, but Ukraine's banking system is reasonably well developed by comparison with those of most of its neighbours. Moreover, many of the banking system's weaknesses reflect the same institutional problems that afflict the economy as a whole. Better framework conditions would facilitate more efficient intermediation.
104. Gorodnichenko and Sabirianova (2004).
105. Such an approach might be suboptimal given the existence of possible second-best interactions (addressing one distortion might increase the negative impact of a related second distortion), but

given limited time, information and political/administrative capacity, a focus on the most binding constraints offers better prospects than a strategy focusing on targeting the biggest distortions.

106. For details, see Chapter 2. See also WEF (2006) and World Bank (2006b).

107. Aghion et al. (2002); OECD (2006).

108. Savvides and Zachariadis (2005).

109. Policy complementarities arise when the returns generated by two or more reforms in tandem exceed the sum of those that would be realised if they were each pursued separately.

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ANNEX 1.A1

Macroeconomic data

Table 1.A1.1. **Balance of payments**

As a percentage of GDP

	2000	2001	2002	2003	2004	2005	2006
Current account	4.7	3.7	7.5	5.8	10.6	2.9	-1.5
Goods and services	5.0	1.6	4.4	2.6	7.7	0.8	-2.9
Export	62.4	55.5	55.1	57.8	63.6	51.5	47.2
Import	-57.4	-53.9	-50.7	-55.2	-56.0	-50.7	-50.1
Goods	2.5	0.5	1.7	1.0	5.8	-1.3	-4.9
Export	50.3	45.0	44.0	47.4	51.5	40.7	36.6
Import	-47.8	-44.4	-42.4	-46.3	-45.8	-42.0	-41.5
Services	2.5	1.1	2.7	1.5	1.9	2.1	2.0
Export	12.2	10.5	11.0	10.4	12.1	10.9	10.6
Import	-9.6	-9.4	-8.3	-8.9	-10.2	-8.8	-8.6
Investment income and compensation of employees	-3.0	-1.8	-1.4	-1.2	-1.0	-1.1	-1.6
Current transfers	2.7	3.8	4.5	4.4	4.0	3.3	3.0
Capital and financial account	-3.0	1.1	-2.9	0.2	-7.2	9.0	3.1
Capital account	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Investment	-3.0	1.1	-3.0	0.2	-7.2	9.1	3.1
<i>Direct investment</i>	1.9	2.0	1.6	2.8	2.6	8.7	5.0
Abroad	0.0	-0.1	0.0	0.0	0.0	-0.3	0.1
In Ukraine	1.9	2.1	1.6	2.8	2.6	9.1	4.9
<i>Portfolio and other investment</i>	-4.9	-0.9	-4.6	-2.6	-9.8	0.3	-1.9
Liabilities	-3.4	1.8	-2.8	-0.7	9.2	9.5	12.6
Assets	-1.4	-2.7	-1.8	-1.9	-19.0	-9.2	-14.5
Reserves assets	-1.3	-4.2	-2.5	-4.1	-3.4	-12.1	-1.9
Errors and omissions	-0.5	-0.6	-2.1	-1.9	-0.1	0.2	0.3
Balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Derived from the National Bank of Ukraine.

Table 1.A1.2. Industrial production growth
Annual percentage change

	Weight 2003-2005	2003	2004	2005	2006
Industry	100	15.8	12.5	3.1	6.2
Mining industry	7.8	5.5	4.1	4.4	5.8
Manufacturing	74.7	18.2	14.6	3.0	6.3
Food industry and processing of agricultural products	16.4	20.0	12.4	13.7	10.0
Light industry	1.2	4.0	13.6	0.3	-1.9
Production of wood and wood products	0.8	23.6	25.5	19.5	13.9
Cellulose and paper, printing and publishing	2.5	25.7	25.9	12.7	10.3
Production of coke and refinery products	8.6	8.7	3.4	-13.4	-12.1
Chemical and petrochemical	6.3	16.8	14.4	9.8	3.2
Production of other non-metallic mineral products	2.7	17.9	19.3	14.3	12.8
Metallurgy and metal processing	21.8	14.3	12.0	-1.5	8.9
Machine building	12.8	35.8	28.0	7.1	11.8
Production and distribution of electricity, gas and water	17.5	4.7	-1.1	2.9	6.7

Source: State Statistics Committee of Ukraine.

Table 1.A1.3. Capacity utilisation rate
Percentage

	2002	2003	2004	2005	2006
Extractive industry	64.0	70.6	78.3	74.9	76.5
Food and tobacco	48.4	56.0	68.1	61.6	59.8
Textile industry	33.9	39.4	63.2	55.4	52.9
Production of clothing and furs	66.6	76.0	69.0	72.6	73.4
Production of leather and leather goods	49.3	50.4	61.4	56.9	57.8
Wood and wood products	60.2	61.2	70.6	65.0	66.7
Production of paper and cardboard	64.2	68.9	76.0	79.1	73.8
Publishing and typography	67.6	70.4	75.1	71.2	72.4
Production of coke and oil refining	66.4	70.6	76.2	68.4	67.3
Chemical industry	46.5	53.2	63.1	65.3	62.5
Production of rubber and plastics	46.9	63.0	68.8	62.2	61.3
Production of other non-metal mineral products	47.6	55.6	72.9	71.3	71.5
Metallurgy	53.1	58.7	67.0	68.2	69.6
Metal-working	48.1	49.0	62.4	58.2	59.0
Production of machinery and equipment	41.2	43.8	58.6	55.9	57.7
Production of electrical and electronic equipment	45.8	50.0	62.2	58.7	54.1
Production of transport equipment	40.6	47.0	58.7	55.2	50.8
Other manufacturing	46.4	50.3	69.0	67.6	70.5
Secondary processing	46.4	47.0	66.7	62.4	60.8
Production of electricity, gas and water	65.1	59.9	71.4	69.4	67.1
Industry, total	49.3	55.5	67.5	63.7	63.2

Source: State Statistics Committee of Ukraine.

Table 1.A1.4. Exports of goods
US\$ million

	CIS				Europe				Others			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Food products and raw materials for their production	1 323	1 615	1 910	1 649	799	866	964	1 280	610	992	1 433	1 784
<i>Percentage change</i>	47.7	22.1	18.3	-13.7	-3.1	8.4	11.4	32.8	-8.7	62.6	44.5	24.5
Mineral products	183	305	514	450	2 555	2 958	2 984	2 226	555	804	892	790
<i>Percentage change</i>	23.6	66.7	68.5	-12.5	56.4	15.8	0.9	-25.4	81.4	44.9	10.9	-11.4
Products of chemical industry and related branches	707	896	1 222	1 552	821	1 218	1 055	1 424	983	1 365	1 607	1 621
<i>Percentage change</i>	17.4	26.7	36.4	27.0	42.6	48.3	-13.4	35.0	53.6	38.9	17.7	0.9
Timber and woodwork	302	352	425	582	336	439	460	483	80	119	103	134
<i>Percentage change</i>	29.6	16.6	20.7	36.9	19.1	30.6	4.7	5.0	50.9	48.8	-13.4	30.1
Industrial goods	161	215	276	365	835	943	864	877	92	127	100	59
<i>Percentage change</i>	22.9	33.5	28.4	32.2	30.5	12.9	-8.4	1.5	-14.0	38.0	-21.3	-41.0
Ferrous and non-ferrous metals and products made of them	1 551	2 366	3 062	3 935	2 200	3 415	3 391	4 773	4 750	7 270	7 594	7 712
<i>Percentage change</i>	82.5	52.5	29.4	28.5	34.1	55.2	-0.7	40.8	2.5	53.1	4.5	1.6
Machinery and equipment, transportation facilities, instruments	1 688	2 596	3 093	3 885	1 329	1 596	839	1 033	621	1 468	707	645
<i>Percentage change</i>	20.1	53.8	19.1	25.6	97.4	20.0	-47.4	23.1	12.5	136.4	-51.8	-8.8
Others ¹	624	700	730	578	281	329	336	533	353	478	463	579
<i>Percentage change</i>	-2.5	12.2	4.3	-20.8	14.2	17.1	2.1	58.6	23.0	35.4	-3.1	25.1
Total exports	6 539	9 045	11 232	12 996	9 156	11 764	10 893	12 629	8 044	12 623	12 899	13 324
<i>Percentage change</i>	33.3	38.3	24.2	15.7	40.5	28.5	-7.4	15.9	11.0	56.9	2.2	3.3

1. Including informal trade.

Source: State Statistics Committee of Ukraine.

Table 1.A1.5. Imports of goods
US\$ million

	CIS				Europe				Others			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Food products and raw materials for their production	679	441	632	668	694	736	1 086	1 382	801	732	966	1 116
<i>Percentage change</i>	244.7	-35.1	43.3	5.7	54.3	6.1	47.6	27.3	71.5	-8.6	32.0	15.5
Mineral products	7 140	9 237	9 645	10 400	306	415	266	635	315	375	572	565
<i>Percentage change</i>	11.1	29.4	4.4	7.8	115.5	35.6	-35.8	138.7	-14.6	19.0	52.5	-1.2
Products of chemical industry and related branches	644	893	1 268	1 497	1 792	2 246	2 982	3 806	508	696	1 012	1 369
<i>Percentage change</i>	38.8	38.7	42.0	18.1	34.9	25.4	32.7	27.6	19.2	37.0	45.4	35.3
Timber and woodwork	198	261	357	404	700	637	786	959	51	44	61	75
<i>Percentage change</i>	-1.0	31.8	36.8	13.2	32.2	91.0	32.5	22.0	34.2	-13.7	38.6	23.0
Industrial goods	209	277	366	447	707	868	991	1 097	299	282	845	829
<i>Percentage change</i>	21.5	32.5	32.1	22.1	25.1	22.7	14.3	10.7	56.5	-5.7	199.6	-1.9
Ferrous and non-ferrous metals and products made of them	632	976	1 359	1 845	447	542	765	1 059	118	235	345	423
<i>Percentage change</i>	43.0	54.4	39.2	35.8	40.4	21.3	41.1	38.4	131.4	99.2	46.8	22.6
Machinery and equipment, transportation facilities, instruments	1 379	2 063	2 382	3 082	3 190	4 118	5 278	7 263	1 147	1 604	2 392	3 352
<i>Percentage change</i>	34.9	49.6	15.5	29.4	49.2	29.1	28.2	37.6	83.5	39.8	49.1	40.1
Others ¹	433	743	620	686	330	262	387	265	502	1 008	796	919
<i>Percentage change</i>	2.6	71.6	-16.6	10.6	17.9	-20.6	47.7	-31.5	-27.6	100.8	-21.0	15.5
Total imports	11 314	14 891	16 629	19 029	8 166	9 824	12 541	16 466	3 741	4 976	6 989	8 648
<i>Percentage change</i>	21.0	31.6	11.7	14.4	42.0	20.3	27.7	31.3	30.8	33.0	40.5	23.7

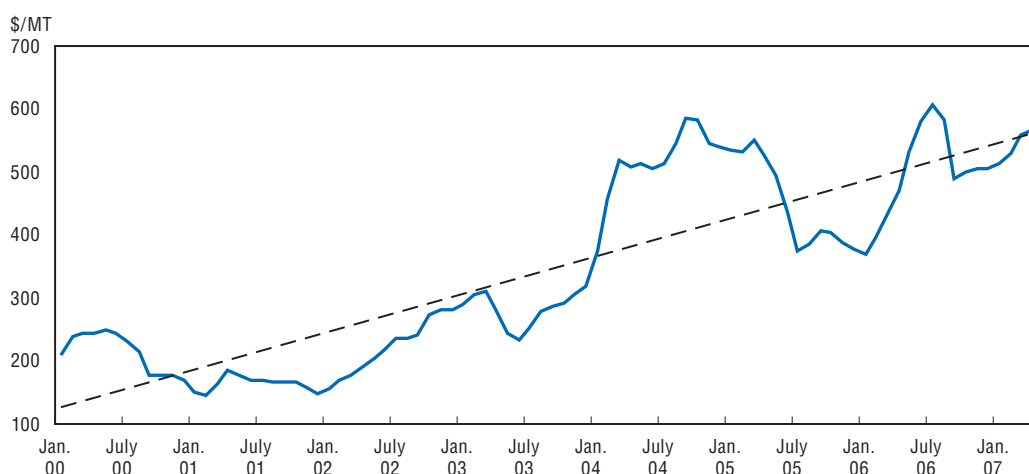
1. Including informal trade.

Source: State Statistics Committee of Ukraine.

Table 1.A1.6. Production and consumption of selected energy products

	2000	2001	2002	2003	2004	2005
Crude petroleum and gas condensate (millions of tons)						
Production	3.7	3.7	3.7	4.0	4.3	4.4
Consumption	9.4	16.9	21.9	22.9	22.9	19.2
Natural gas (billions of m³)						
Production	17.9	18.4	18.7	19.3	20.4	20.8
Consumption	68.4	65.8	65.5	72.2	72.2	72.6
Coal (millions of tons)						
Production	62.4	61.7	59.5	59.8	59.4	60.4
Consumption	63.3	64.2	62.9	66.9	65.9	63.8
Electricity (billions of KWh)						
Production	171.4	173	173.7	180.4	182.2	186.1
Consumption	136.4	135.8	137.1	143.4	149.6	152.9

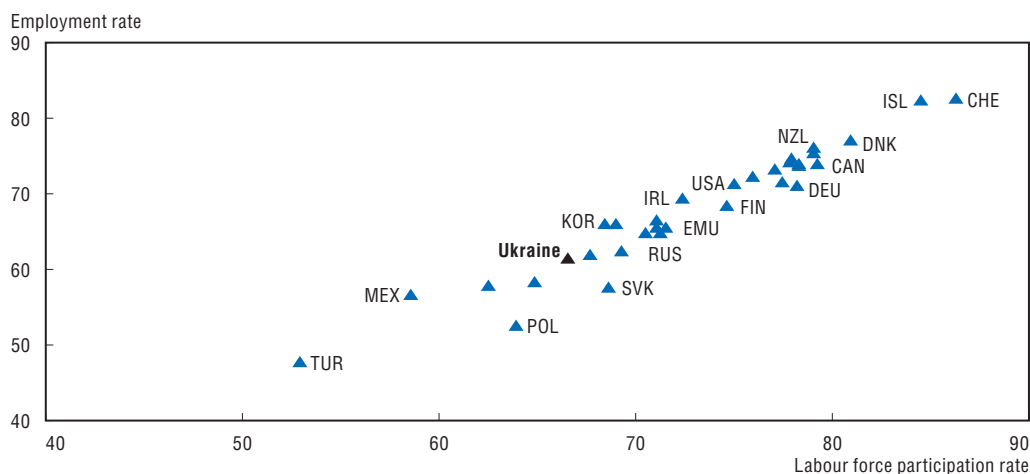
Source: State Statistics Committee of Ukraine.

Figure 1.A1.1. **Steel prices for Hot-Rolled Coil from the CIS**

Source: Derived from Datastream.


StatLink  <http://dx.doi.org/10.1787/072537103235>Figure 1.A1.2. **Labour force participation rates**

As a percentage of working age population, 2005



Note: 'Working-age' is defined as 15 to 64. This definition does not correspond to that which is commonly used in the United States (16 years and above) or New Zealand (15 years and above).

Source: OECD Economic Outlook No. 80 database and national statistical institutes.

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ANNEX 1.A2

Policy reform and agriculture

Ukraine's agricultural endowments are considerable. The country has around 30 m ha of arable land, of which over half consists of highly productive black *chernozem* soils. Its Black Sea ports are ice-free year-round and it is close to key export markets in the Middle East, North Africa and the EU. Ukraine's farm sector has the potential to contribute significantly to global supplies of selected commodities, particularly grains and oilseeds, and to make play an important role in sustaining strong economic growth. Yet it is far from realising its production and export potential. The agricultural sector has struggled throughout the post-independence period, and numerous structural and institutional barriers to more efficient production remain. Experts believe that, given appropriate policies and institutions, grain yields could rise from the current average of 2.4 tonnes/ha to 4-5 tonnes, produced at internationally competitive prices. This would enable Ukraine to increase grain production from the 2001-05 average of 36 million tonnes to a range of 60-75 million tonnes. This would, *ceteris paribus*, allow exports to increase from an average of about 8 million tonnes in recent years to 35-45 million tonnes per annum.¹ Yet the sector's long-term prospects in the absence of further reforms are uncertain.

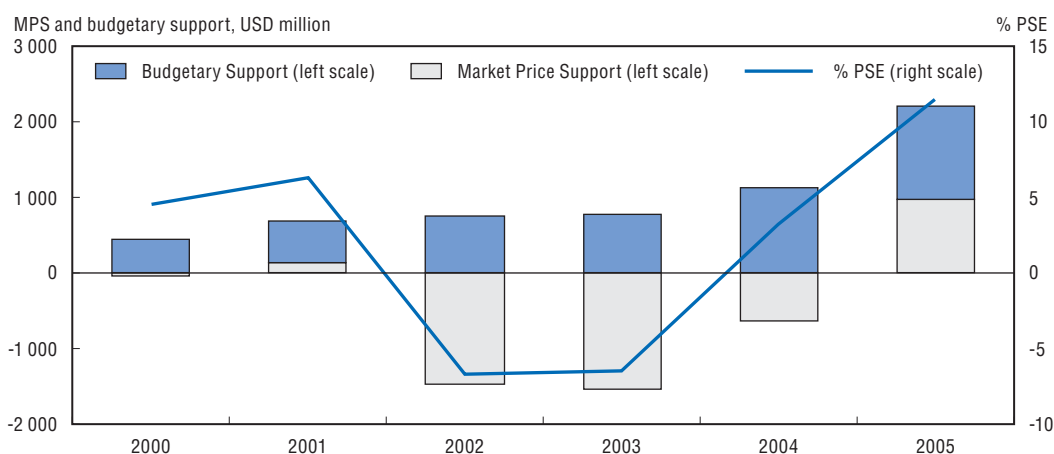
The evolution of agricultural policy

Ukraine's farm sector is still dominated by large collective enterprises, essentially former state and collective farms that have acquired new legal forms since the transition began. Since 1999, such collectives have, at least in principle, been based on private land ownership, with participating households entitled to leave the enterprise with their land and asset shares without the approval of the general assembly of the members, and corporate farms are supposed to sign formal lease contracts with the rural households whose land they work. However, the 2001 Land Code subjected agricultural land sales to a moratorium, which has twice been extended and which is currently due to expire at the end of 2007.² Moreover, until the end of 2014, individuals and legal entities are not allowed to purchase agricultural land if they own in excess of 100 ha or would own more than that amount as a result of the purchase. Such provisions cannot but impede the reallocation of land to more efficient owners, as well as the development of mortgage lending as a source of financing investment in agriculture. Moreover, incentives to evade the moratorium have given rise to shadow markets, in which agents' rights are badly specified and poorly protected.


The Ukrainian authorities have gradually dismantled many policies involving credit allocation, price fixing and agricultural input supplies, but border protection against

selected agro-food imports remains high. The level of support to agricultural producers, as measured by the ratio of transfers from taxpayers and consumers to gross farm revenues, is relatively low, averaging around 3% in 2003-05, as compared with an OECD average of 30%. Substantial budgetary support for the sector serves to offset price and trade regulations that are harmful to producers' interests (Figure 1.A1.1). However, the average figure conceals the distortions created by the differentiation of policies across commodities: ratios of prices received by farmers to those received in world markets range from 1.79 for poultry and 1.57 for sugar to 0.84 for oilseeds. These variations largely reflect policies geared in some instances to protecting domestic producers and in others to holding down domestic prices by taxing exports. They are also the product of infrastructural and institutional weaknesses in agricultural markets, such as local milk monopsonies. In addition, growing budgetary transfers are dominated by input subsidies and output payments, rather than growth-enhancing investments in the development of rural infrastructure, extension services, food safety and quality systems, and rural development. As a result, budgetary transfers to the sector have no significant impact on producer welfare: only about 20% of transfers actually end up in farmers' pockets, with the rest being captured by input suppliers, food processors and other agents.³

Figure 1.A2.1. **Producer Support Estimate (PSE) level and composition over time**



Source: OECD PSE/CSE databases 2006.

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Abrupt policy reversals driven by short-term considerations are a persistent and detrimental feature of agricultural policies. For example, a new licensing system for grain exports and grain export quotas was introduced in 2006 as a precaution against a lower-than-expected grain harvest. In June 2007, just as these measures were set to expire, further restrictions were introduced in response to drought conditions in the country. Such interventions create a climate of uncertainty about future grain deliveries from Ukraine and increase risks for producers as well as for input suppliers, credit institutions and grain traders, causing the latter to charge higher margins and thereby reducing the efficiency of the agricultural sector. Moreover, the evidence suggests that food consumers gained little if any relief from the quotas. The main beneficiaries of the scheme appear to have been flour millers and feed producers, whose profit margins increased as a result of lower grain

prices on domestic markets, and those traders able to secure quotas, which were administered in a fairly non-transparent fashion.

Output performance and structural change

Despite various inconsistencies, reforms undertaken at the end of the 1990s, supported by the economic recovery that began in 1999, accelerated farm restructuring and improved the sector's performance. Nevertheless, the sector has lagged the rest of the economy: gross value added in agriculture grew by an average of just 3.6% per year during 2001-06. Thus, although gross agricultural output halved in the 1990s, it had recovered no more than about 70% of its pre-independence level by 2006.

The results of farm restructuring are not easy to assess, as land use statistics are incomplete and often confusing. However, rural households have shown an increasing propensity to exercise their rights of ownership to farm land: the share of household plots in total agricultural land usage increased from 14% in 1998 to 33% in 2004. While the number of households engaged in such activity remained fairly stable at 5.5 m, their average size more than doubled to 2.5 ha in 2004, as many of them added land shares withdrawn from former collectives to their traditional plots. Most households, however, continue to lease their land to large-scale farms and some to independent private farms. The number of independent private farms has stabilised at around 42 000, but their average size has increased to about 80 ha and their share in total agricultural land usage from 3 to 8%. The share of various forms of large collective farms thus fell from 83% in 1998 to 59% in 2004.⁴ Their total number increased, but the average size fell to below 1 400 ha. In short, it appears that the land plots withdrawn from large collective farming enterprises have served chiefly to expand small-scale private plot agriculture and, to a lesser extent, existing private farms.

The sector of large collective agricultural enterprises is itself increasingly stratified. A new subsector of relatively efficient and competitive farms has emerged, accounting for about one-fifth of the total number of large farms, around one-sixth of total farm employment and almost half of total sales by the large-scale sector. This stratum is still not strong enough to become a real engine for sustainable agricultural growth. The remaining four-fifths of large farms broadly fall into two subgroups: those operating at a level that just about allows them to break even and those that are unable to invest and pay just minimal wages, often in kind. The latter group survives in large measure due to tax exemptions, debt rescheduling, and weak land market mechanisms.⁵

The challenges ahead

As Ukrainian agriculture becomes increasingly diversified, Ukrainian policy makers face five distinct but closely interlinked challenges:

- *Connecting small-scale producers with markets.* Many of the small household producers could develop into more efficient, commercially oriented farmers, given adequate advisory services and better access to finance, marketing infrastructure and rural services.
- *Creating a market in agricultural land.* The current moratorium on the purchase/sale of farm land impedes the efficient reallocation of land resources and contributes to a process of fragmentation that is unlikely to be efficient in the long run and gives rise to informal shadow markets in farm land.

- *Improving economic and social infrastructure in rural areas.* A mix of public and private funding will be needed to improve basic infrastructure, such as roads and local utilities, as well as to create better storage facilities and other, more “commercial” infrastructure.
- *Reforming domestic food safety standards.* Some progress has been made in this area but much remains to be done. Bringing sanitary and phytosanitary rules and services into line with international standards will facilitate market access for Ukrainian exporters.
- *Improving the governance of agricultural policy making and implementation processes.* Policy shifts are too often driven by short-term considerations rather than long-term objectives. The restrictions on grain exports imposed in 2006-07 are a case in point. Disciplined policies, focused on long-term goals, would provide a more stable framework for domestic and foreign agents, reduce risk and encourage investment.

Notes

1. See Von Cramon-Taudabel *et al.* (2006). Actual exports would probably be smaller, due to the anticipated growth of demand for feed grains in the livestock sector and for biofuel production.
2. Supporters of the moratorium argue that the necessary legislative framework for a land market must be created first – Ukraine has no law on land valuation, land registration or a land cadastre. However, nothing has been done to address these gaps in the legislation while the moratorium has been in force.
3. See OECD (2007).
4. Lerman *et al.* (2007).
5. See Von Cramon-Taudabel *et al.* (2006) for details.

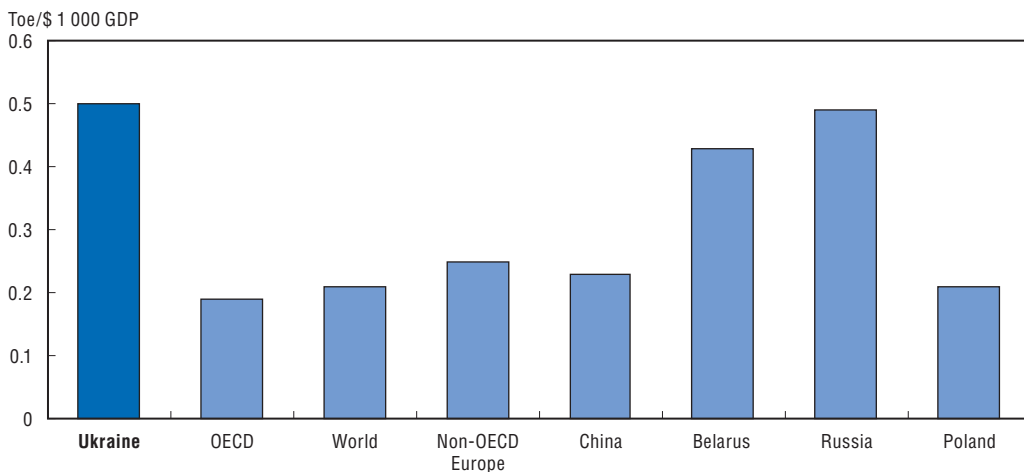
ANNEX 1.A3

Energy consumption in Ukraine


In 2004, Ukraine consumed almost 2.4 times more energy per unit of output than the world average and roughly triple the average for the OECD area (Figure 1.A3.1).¹ This situation is particularly problematic given that net imports account for about 45% of primary energy supply, including more than three-quarters of the country's supplies of crude oil and natural gas: almost all of the handful of countries with higher energy intensities than Ukraine are significant oil producers. Not surprisingly, increasing energy efficiency is among the government's key long-term goals, for both environmental and economic reasons.² It will be essential for sustaining growth and maintaining competitiveness over the long term. To some extent, Ukraine's high ratios of energy consumption to output are a product of factors such as geography, climate, the structure of industrial production and the energy inefficiency of the industrial plant and infrastructure created during the Soviet period.³ These factors were compounded during the 1990s by the sharp fall in GDP. Output fell far faster than energy consumption – even plants operating at a fraction of their normal capacity require heat and light if they are to remain open at all – and energy-intensive sectors like metallurgy weathered the transition recession better than most, thanks largely to the continued availability of comparatively cheap energy. As a

Figure 1.A3.1. **Energy intensity of GDP, 2004**

US\$ at 2000 PPP exchange rates



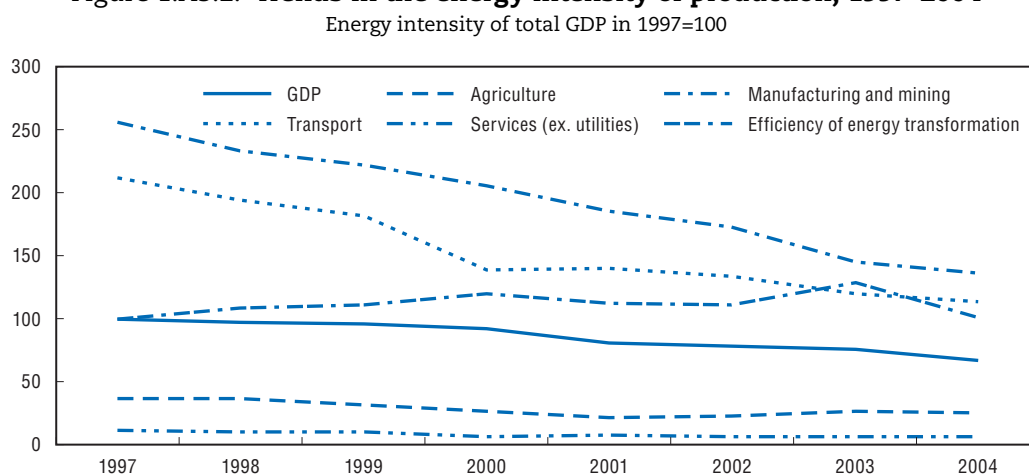
Source: International Energy Agency.

StatLink  <http://dx.doi.org/10.1787/072618782587>

result, their share in total output rose as the economy contracted. The energy intensity of GDP thus grew as output fell, peaking in 1996-97 at around 133% of its 1992 level.


The growth of recent years has, therefore, tended to reduce the energy intensity of GDP, with the rate of decline accelerating to 6.1% per year in 2000-04, as the economic recovery gathered steam (Figure 1.A3.2). Rising capacity utilisation rates have accounted for some of the improvement, but structural change has also played a role. The growing role of services in the economy means that an increasing share of gross value added is generated by less energy-intensive activities; services in Ukraine typically consume less than 20% as much energy per unit of output as industry. At the same time, every major industrial sector has become more energy efficient: total final consumption of energy per (real) unit of output in industry in 2004 was down almost 40% on 1999, the year industrial output began to recover from the transition recession. At least some of the apparent reduction in energy intensity is likely to reflect the legalisation of some previously unrecorded activity, particularly in trade and services, sectors in which shadow activity has tended to be concentrated and which have relatively low levels of energy intensity. Thus, while fast services growth is undoubtedly making Ukraine's economic structure less energy-intensive, the structure of GDP has probably not changed as much as the official data suggest.⁴

Figure 1.A3.2. **Trends in the energy intensity of production, 1997-2004**



Note: GDP intensity includes both intermediate and final consumption by producers of goods and services but excludes household consumption. Sectoral indices include only final consumption for each sector. The efficiency of intermediate consumption is measured as units of intermediate fuel consumption per unit of final consumption.

Source: International Energy Agency, State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072620533621>

As noted in Chapter 1, the increasing energy efficiency of Ukrainian industry has partly been offset by changes in the composition of industrial production: the share of the most energy-intensive sectors in total industrial output has tended to rise since the recovery began, but this composition effect has been more than outweighed by the declining energy intensity of those very sectors over time and by the rapid growth of services and other less energy-intensive sectors. Moreover, the growing share of energy-intensive sectors in industrial production reflects changes in relative prices: the growth of real output in the three largest energy-intensive sectors, though strong, slightly lagged the growth of total industrial output during 2000-06. With the exception of non-metallic

mineral products, the fastest-growing industrial sectors (food-processing, wood, pulp and paper, and machine-building) all had energy intensities well below the average for industry as a whole – albeit still well above the intensities of most comparable sectors in other countries.

Structural change will probably continue to help Ukraine reduce the energy intensity of GDP for some time to come. The government's energy strategy anticipates that almost two-fifths of the reduction in energy intensity to be achieved by 2030 will come from the shift in the production structure away from its current reliance on heavy industry and towards a greater services share. However, this will not of itself resolve the competitiveness challenge facing the tradables' sectors. They will still need to increase energy efficiency substantially.

To date, the major disappointment has been in the energy sector itself: the efficiency of transformation – the production of electricity, heat and other secondary energy sources from coal, gas and other primary inputs – stagnated during the early 2000s (Figure 1.A3.2).⁵ The intensity of final consumption has fallen faster than the intensity of primary supply, a reflection of the fact that the efficiency of energy transformation has been improving less rapidly than the efficiency of final energy consumption. This reflects the lack of restructuring of much of Ukraine's energy and utilities sector. Privatisation of energy sector assets has hitherto been limited: as of April 2007, only oil refining and distribution were predominantly in private hands. State or municipal enterprises still dominated the coal, gas, electric power and heat sectors, although the authorities had announced plans for further privatisations in the power and coal sectors.

A number of factors stand in the way of improving energy efficiency in Ukraine more quickly.⁶ Chief among them is the fact that many energy prices and tariffs still do not cover full long-term costs of energy supply. While the price of Russian gas has been the main focus of attention in recent years, most domestic energy sources also appear to be seriously underpriced. IEA (2006:46) estimates that, as of June 2006, coal prices in Ukraine had yet to reach levels sufficient to cover operating costs; natural gas and electricity tariffs for industry were barely sufficient to cover operational costs and expenditures on maintenance and repair, leaving little or nothing for financing badly needed capital investment in these sectors.⁷ Quite apart from the question of Russian pricing policies, this situation is clearly unsustainable: the burden of budgetary subsidies is enormous, particularly for local budgets, but even they are not sufficient to obviate the need to “finance” a good deal of subsidised energy consumption via underinvestment: failure to pay economic tariffs for fuel and electricity means that these sectors have effectively been running down their own capital stock. It is therefore clear that, regardless of the future direction of oil and gas prices, Ukrainian producers and households alike will be facing further substantial rises in the cost of energy in the years to come.

While the list of energy challenges facing Ukraine is long and complex, the fundamental concerns are simply stated. First, increasing energy efficiency will require allowing domestic energy prices fully to reflect long-run marginal costs. Secondly, if cost-reflective pricing is to attract the investment that Ukraine's energy sector needs, the sector must be restructured in order to create conditions that allow investors to cover their costs and make a reasonable return, confident that the regulatory and institutional framework is stable, transparent and predictable. That will require not only the privatisation of many of

the state's remaining energy-sector assets but also the creation of new legal and regulatory frameworks to govern sectors like power generation.⁸

Notes

1. IEA (2006:115-117). The comparison is based on energy consumed (tonnes of oil equivalent) per thousand US dollars produced (converted at purchasing-power parity exchange rates). In Ukraine and other emerging markets, these estimates may be exaggerated owing to the existence of large shadow economies, since the shadow sector's energy consumption is recorded, even though its output is not.
2. The government aims to reduce the energy intensity of GDP by 50% by 2030; this would still leave Ukraine with energy intensity above the world average for 2004. See "Energy Strategy" (2006).
3. High levels of energy intensity are part of a much larger problem concerning the resource intensity of production overall in Ukraine: as Shumylo (2007) points out, production in Ukraine has become much more materials- and resource-intensive in recent years. During 1999-2006, intermediate consumption roughly doubled, while gross output increased by 85% and gross value added by 67%.
4. While estimates of the size of the shadow economy vary widely, many suggest that the unrecorded share of total activity has been declining in recent years; see, for example, Ministry of Economy (2007).
5. One should keep in mind the uncertainty concerning estimates of total final consumption when interpreting these data; see IEA (2006:61-62 and 80-1) on problems with Ukrainian energy data and the efficiency of transformation, respectively.
6. For an analysis of the full range of issues involved, see IEA (2006:115-58). See also the government's own assessment in "Energy Strategy" (2006).
7. Household consumption is even more heavily subsidised: heating tariffs do not cover operational costs, and neither gas nor electricity tariffs cover operational costs, maintenance and repair.
8. These challenges are addressed at length in IEA (2006).

Chapter 2

Reducing barriers to growth: the role of institutional and regulatory reform

This chapter addresses the most important structural barriers to growth and investment that must be overcome if Ukraine's current growth momentum is to be sustained over the long term. It focuses on two aspects of economic governance in Ukraine. The first concerns the basic institutions of Ukraine's market economy and the framework conditions for business. These remain a major impediment to sustained growth, in so far as they deter investment. The issues here have primarily to do with the instability, unpredictability and opacity of a great deal of public policy. The second set of issues concerns the specific regulatory and institutional barriers to entry, exit and restructuring, which constitute a related but nevertheless distinct problem. One of the striking features of central planning was the extent to which it simply arrested the Schumpeterian processes of creative destruction that drive innovation and structural change in market economies. Unleashing these processes via the creation of efficient mechanisms for entry, exit and reallocation was thus a first-order concern for all transition economies. However, a great deal of Ukrainian government policy since independence has actually served to impede these processes. It is therefore difficult to exaggerate the importance of reducing the barriers to entry, exit and reallocation in Ukraine, which are largely the product of excessive and often ill-administered regulation.

In exploring these issues, the chapter presents a systematic assessment of product-market regulation (PMR) in Ukraine, as well as the main findings of an empirical study of entry and exit in Ukraine. The overriding conclusions that emerge from these two lines of analysis are as follows:

- The overall burden of regulation in Ukraine is extremely heavy by OECD standards. Barriers to business development appear to be more of a problem than barriers to entry. Regulatory process is also identified as a particularly serious issue for Ukraine.
- Exit mechanisms in Ukraine function poorly: the empirical evidence suggests that Ukraine has too little exit overall and that the link between productivity and exit is very weak. The survival chances of entering firms appear to suffer from the existence of a large population of low-productivity incumbents that seem to be shielded from the rigours of the market.

These findings highlight the potential contribution of competition-friendly regulatory reform to Ukraine's long-term economic prospects. This is all the more important given the complementarities that exist among different elements of regulatory reform. Realising the full benefits of reform may thus require the creation of a broad, coherent and systematic framework for the conduct of regulatory policy, an area where policy-making in Ukraine has often been fragmented and poorly coordinated.

Framework conditions for entrepreneurship

Ukraine's business environment is exceptionally difficult. In 2006, the country ranked 128th out of 175 countries on the World Bank's "Ease of Doing Business" indicator, and it fell ten places in 2006, to rank 78th out of 125, on the World Economic Forum's Global Competitiveness Index.¹ The latter ranking reflects the extent to which Ukraine's perceived strengths with respect to such factors as human capital and macroeconomic stability are offset by poor framework conditions for business: Ukraine ranks 104th in the WEF index of the quality of institutions. Moreover, five of the seven most problematic features for doing business identified in the WEF's executive opinion survey in Ukraine concerned the poor functioning of public institutions.² These findings coincide with other external assessments of governance in Ukraine (Table 2.1)³ and with the results of numerous surveys of local entrepreneurs, investors and experts.⁴ Survey data do show some improvement in assessments of the business environment in early 2005, but these had begun to deteriorate again a year later. Since rapid, dramatic improvement in institutions tends to be extremely rare, it is likely that assessments in early 2005 reflected expectations aroused by the "Orange Revolution" and that by 2006 these expectations had been tempered somewhat.

Table 2.1. **Governance indicators, 1996-2006**

Percentile ranks¹

Indicators	Ukraine			Poland	Russia	Sweden
	1996	2000	2006	2006	2006	2006
Voice and Accountability	38.7	36.1	45.7	76.9	24.0	96.6
Political Stability	37.8	30.9	37.0	54.3	23.6	86.1
Government Effectiveness	25.1	21.0	33.2	69.2	37.9	96.7
Regulatory Quality	23.8	11.2	32.7	69.3	33.7	92.7
Rule of Law	28.3	26.2	27.1	59.0	19.0	96.7
Control of Corruption	26.7	14.0	27.7	60.2	24.3	97.6

1. A higher score denotes a better rank.

Source: World Bank Governance Research Indicator Country Snapshots (2007).

The impact of weak institutions on Ukraine's economic performance is extremely difficult to assess with any degree of precision, but several recent studies are suggestive. Tiffin (2006) provides an econometric assessment of the extent to which institutional weaknesses account for Ukraine's low efficiency, measured in terms of the relationship between capital employed per worker and output per worker. Drawing on the experiences of other countries, he concludes that, given the size of the gap between Ukraine's current level of output and its long-term potential, market-friendly institutional reforms could, if successfully implemented, raise Ukraine's long-run growth rate to perhaps 8.5% per year. Recent work pointing to the importance of institutional quality for attracting foreign direct

investment (FDI) to transition economies also suggests that poor institutions are costly to Ukraine, particularly in view of its other attractions as a potential FDI destination.⁵

The weaknesses of Ukraine's business environment are many and varied, and it is not possible to consider them all in detail here. However, the problems most frequently cited by entrepreneurs can broadly be grouped into three categories: policy uncertainty, legal uncertainty and regulatory uncertainty. In short, the behaviour of public institutions is regarded as being neither stable nor predictable, with the high level of unpredictability stemming in many cases from a lack of transparency. These factors, in turn, fuel widespread corruption and undermine property rights.

Policy instability is a major source of frustration for business in Ukraine

In the 2006 WEF survey, Ukrainian executives ranked policy instability second and government instability fourth on the list of the most problematic factors for doing business.⁶ In other surveys, entrepreneurs point to the instability and unpredictability of government policy in specific fields, such as tax policy – for many businesses, frequent changes to the tax system are more of a problem than the level of taxation itself. To a significant extent, policy instability is the product of the political upheavals of the last three years. Ukraine experienced two fiercely contested national elections and four changes of government in under two years during 2004-06, and early 2007 saw renewed constitutional crisis. These political struggles have brought in their wake sharp swings in fiscal policy,⁷ as well as abrupt changes in structural policy, such as the “re-privatisation” campaign of early 2005 and the abolition of fiscal and customs privileges for special zones in the same year.⁸ “Re-privatisation” concerned the new government's promise to re-nationalise assets found to have been privatised in violation of the law with a view to subsequently re-privatising them. In the end, only one major “re-privatisation” took place: the 2004 privatisation of the steel concern Kryvorizhstal was overturned and the company was subsequently sold to Mittal Steel for \$ 4.8 bn, almost six times the 2004 privatisation price. However, months of official statements suggesting that there might be many more such cases had an unsettling effect on business confidence after the “Orange Revolution”. While passage of the legislation needed to prepare for WTO accession demonstrated that the major political forces could work together, this has proved the exception rather than the rule. High politics has largely revolved around the contest over presidential powers, leaving urgent economic issues unaddressed. The re-balancing of executive power from the presidency to the cabinet and parliament in 2006, far from resolving the situation, left many constitutional questions unanswered. This has complicated economic policy making since the constitutional changes took effect.

It is a commonplace in Ukraine that the business community is now accustomed to high levels of political uncertainty, and it is certainly true that the continuous political turbulence that has followed the 2006 parliamentary elections has failed to break the economy's momentum. Nevertheless, the investment boom-and-bust of 2004-05 and the speed with which investment recovered once the government had allayed fears about extensive re-privatisation demonstrate the sensitivity of business sentiment to swings in government policy. Moreover, although the existence of a truly competitive political system should be good for economic policy and performance over the long run,⁹ political instability and constitutional uncertainty will impose significant medium-term costs if they prevent the government from tackling needed structural reforms. It is already making the transition to a new monetary policy framework more difficult: as noted in Chapter 1,

the NBU's reluctance to allow greater exchange-rate flexibility partly reflects its belief that the dollar peg provides agents with a fixed point of reference in an otherwise very unstable policy environment.

In any case, intense electoral competition is by no means the only source of policy instability, which also has structural roots unrelated to the current political conjuncture. Policy-making tends to be rather fragmented and uncoordinated, largely because the executive itself is fragmented: despite efforts to rationalise it, Ukraine's central executive in April 2007 comprised 18 ministries, 11 state committees, 27 "central organs of executive power with special status" and 20 other agencies and institutions. Although high-level decision making is concentrated in the Secretariat of the Cabinet of Ministers (SCMU), the SCMU's capacity to see that its orders and instructions are fulfilled is limited. There are only weak strategic or management frameworks for policy making, so policy is often highly reactive, responding to short-term developments rather than focusing on the disciplined pursuit of long-term goals.¹⁰ Lack of clarity with respect to the attribution of functions and responsibilities reduces both transparency and accountability in the policy process. Ministries and other state bodies often appear to approach policy problems with very narrow terms of reference and frequently fail to co-ordinate their activities with one another.¹¹ Fragmentation, opacity and weak lines of accountability also tend to favour the "capture" of state institutions by powerful special interests.¹² All these problems have been aggravated by the constitutional uncertainty of the last two years: ultimate lines of authority and accountability are both contested and unclear, further reducing the prospects for inter-institutional co-ordination and integrated policy making.¹³

The problems with Ukraine's policy process are by no means confined to top-level decision making. The weaknesses described above are compounded by the state's still limited administrative capacities. Public bureaucracies in Ukraine are large, inefficient, often unresponsive to either citizens or elected politicians, and riddled with corruption. A recent OECD-EU assessment of seven aspects of Ukraine's governance system found that they continue "to operate according to inherited modes of organisation, practice and thinking" derived from both the Soviet past and the turbulent 1990s.¹⁴ As a result, the politics-administration nexus remains extremely vague and the civil service does not yet function as a professional corps. Regulations concerning both its scope and such issues as the status of civil servants, including recruitment, appraisal and advancement, are vague, while remuneration arrangements are extremely complex, leaving a good deal of scope for arbitrariness in determining total remuneration.¹⁵ These factors allow for a high degree of arbitrariness and informality in the running of the service, which in turn enhances the significance of personal and political ties.

This state of affairs not only constrains the ability of policy makers to implement their initiatives, it imposes direct costs on citizens and entrepreneurs in their day-to-day interactions with public officials. While recent assessments find evidence of impressive progress in some specific areas, such as public expenditure management, relatively little has been done to advance broader administrative or civil service reforms, and it is not clear how far such reforms can be pursued until there is greater clarity with respect to constitutional issues now being contested.¹⁶ In some instances, even relatively uncontroversial administrative reform measures appear to have been blocked on account of high-level political conflict. Even where there has been progress in recent years, enormous gaps remain in the legal framework. In 2005, for example, Ukraine finally created a system of administrative courts – an essential step if the bureaucracy is to be

made accountable to the public – but it has yet to adopt a general law on administrative procedures. The courts thus lack the very legal instrument on which they are meant to rely. The problem is not merely that there is no consensus supporting reform of public administration; it is the tendency of many political groupings to *prefer* opacity and low accountability in policy making, as well as a politicised civil service.¹⁷ Depoliticising the service and defining more clearly the basic competencies and operational procedures of the institutions involved in policy making, administration and public service provision would reduce politicians' discretion at a time when the incentives to manipulate public administration for partisan aims are enormous.

The investment climate also suffers from a high degree of legal confusion and uncertainty

The second major source of uncertainty concerns the high degree of legal confusion that characterises the contracting environment. The country has two basic legal codes governing commercial affairs, the Civil Code and the Commercial Code, both of which entered into force at the beginning of 2004. The Commercial Code largely reflects Soviet legal traditions, and therefore, approaches many issues in a manner more characteristic of administrative than civil law. It tends to be particularly heavy-handed in its regulation of contractual relations, which is both very prescriptive and highly formalistic: the former quality limits freedom of contract, while the latter makes it relatively easy to void a contract on the basis of a minor technical deficiency. The Civil Code, despite some well known weaknesses,¹⁸ is generally better suited to the needs of a market economy, although it, too, imposes quite rigid formal requirements on contracts.¹⁹ However, the main problem is that the two codes overlap – and often contradict each other – in many areas.²⁰ For example, they differ over the kinds of joint-stock companies envisaged under Ukrainian law, over the liability of parent companies for their subsidiaries,²¹ and over the basic classification of types of securities permitted in Ukraine, as well as the provisions governing their circulation. There is also a good deal of overlap with respect to the regulation of property rights, with the Commercial Code preserving a number of ill-defined forms of property right, such as “operational management” and “commercial authority”, which have disappeared from the Civil Code. These relics of the Soviet legal system tend to create opportunities for insider managers to engage in rent seeking.²² The contradictions between the two codes cannot be resolved in court, because neither takes legal precedence over the other: judges are effectively free to decide which body of law to apply when considering cases.

The confusion created by the presence of two basic codes is compounded by the absence in many spheres of the specialised legislation that might provide greater clarity. The most serious lacuna concerns the law on joint-stock companies (JSCs), successive drafts of which have been stalled in parliament for years. Ukraine also needs a framework law on limited liability companies, the other major organisational-legal framework employed in the country. At present, the basic company law is a much-amended 1990 law that is chiefly concerned with defining the range of permitted legal forms that business entities may take and stipulating how such entities may be formed or liquidated. It says relatively little about their governance. This leaves a large number of corporate governance issues unregulated – adoption of a JSC law is widely seen as the single most important step that needs to be taken to strengthen corporate governance in Ukraine.²³ In some areas, provisions found in one or both codes address issues that would normally fall within the

purview of a JSC law, but their coverage is neither complete nor entirely consistent – one reason why Ukraine ranks among the worst jurisdictions in the world when it comes to the protection of shareholders' rights.²⁴

Taken together with poor administration and enforcement of the law, the kind of incomplete and confused legislative framework described here creates enormous opportunities for judicial corruption and the abuse of legal processes. The courts are indeed widely perceived as being both open to political influence and very corrupt (though no more corrupt than most other public institutions²⁵), and managerial surveys show that fewer than 20% of small- and medium-sized firms in Ukraine believe that the judicial system is capable of effectively upholding their contractual rights.²⁶ Such judgements may be overly pessimistic, but even the *perception* that the judiciary is weak and corruptible imposes economic costs to the extent that it affects investment and other business decisions. Thus Akimova and Schwödiauer (2003) find that trust in the courts has a positive impact on the sales and productivity performance of small and medium enterprises (SMEs): greater faith in the court system implies greater confidence about property rights and a greater willingness to engage in arm's-length transactions with other parties. Both these factors should favour business restructuring and development. Greater confidence in arm's length transactions should also facilitate the emergence of business networks that are open and market-oriented.²⁷

High levels of regulatory uncertainty add to the regulatory burden, particularly for SMEs

Private business in Ukraine is over-regulated. Firms are subject to too many rules and procedures, many of which no longer serve any legitimate governmental purpose, if indeed they ever did. Regulations and regulatory procedures also tend to be more complicated than they need to be. The WEF executive opinion survey ranks Ukraine 98th in terms of the burden of regulatory compliance. The results of the EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS) for 2005 suggest that the situation in Ukraine is improving over time but that the cost of regulations and red tape in Ukraine, in terms of both management time and informal payments to officials, was well above average for CIS states and far greater than the average for the Europe/Central Asia region as a whole.²⁸ Construction permits can involve 50 distinct steps and take up to 750 days, while registering property in 2006 involved ten procedures, taking an estimated 93 days on average.

Excessive red tape, however, is only part of the problem. Surveys of entrepreneurs show that businesspeople continue to face major problems as a result of the instability of the regulatory frameworks they confront and inconsistency in the interpretation and administration of regulations, particularly at local level.²⁹ Altogether, the combination of excessive regulation, frequent rule changes and inconsistent application make it extraordinarily difficult for private businesses to be certain of remaining on the right side of the law. This makes for yet more risk and uncertainty in connection with the regulatory burden. Moreover, such a situation leaves considerable discretion in the hands of officials dealing directly with businesses and thus creates opportunities for corruption. The review of product-market regulation presented below reinforces these concerns: while some formal regulatory frameworks have been substantially improved, implementation of the new arrangements has been patchy, and the application of regulations often remains arbitrary and unpredictable. It is hardly surprising, therefore, that a 2006 ICS survey found

that “further deregulation” was followed very closely by “effective government application and enforcement of those laws and regulations that already exist” when respondents were asked to name the most important step the government could take to improve business conditions.³⁰ First and foremost, this might extend to the 2003 Law on the Fundamentals of State Regulatory Policy, which is well regarded by experts and by the business community but which has never been fully or consistently implemented.³¹

Problems of regulatory uncertainty are perhaps most acute with respect to the range and frequency of on-site inspections to which businesses are subjected. The State Committee for Regulatory Policy and Entrepreneurship estimates that the average business undergoes 14 inspections per year, involving multiple visits from tax, environmental, occupational safety, fire safety and sanitation inspectors – and this represents a significant reduction from previous years. Fifty-seven percent of firms inspected report finding the inspection procedures complex, unclear and often opaque. This is not merely a question of failure to disclose procedures to businesspeople: in many spheres, *no written procedures exist* concerning such issues as the duration of inspections and the grounds on which they may be initiated. In some instances, an inspector can shut down a business indefinitely over a regulatory violation, without recourse to the courts.³² This situation is clearly inefficient and expensive for the state as well as for business, since little has been done to target inspections effectively.³³ It also creates obvious opportunities for bureaucratic rent-seeking. Survey evidence suggests that around 20% of inspections do result in unofficial payments to inspectors – a level typical of most CIS states and considerably higher than in Central Europe’s more advanced transition economies.³⁴ It is precisely this that accounts for much of the resistance to change. A long-awaited law on inspections finally reached the statute books in April 2007 and is to enter into force in the autumn. Once it does, it will require further changes in the laws governing the police, the tax inspectorate and other agencies in order to have full effect.

Tax administration is another sphere in which complex rules and broad scope for bureaucratic discretion can create high levels of regulatory uncertainty. As noted in Chapter 1, although most tax rates are fairly competitive, the overall tax burden is quite heavy if payroll taxes are taken into account. Yet many in the business community regard tax administration as an equally serious problem, owing to confusion about the detail of tax regulations, frequent (and sometimes retroactive) changes to them, and arbitrary behaviour on the part of tax inspectors.³⁵ In 2006, the IFC estimated that Ukraine had the second most cumbersome tax system in the world, with an average of 2 185 hours per year needed to undergo all the procedures necessary to pay some 84 taxes, duties and other mandatory charges.³⁶ The system for issuing official tax clarifications works poorly and until 2006 there was no single database of court decisions that could serve as a guide to jurists, lawyers and tax accountants.³⁷

Securing reimbursement of VAT has been a thorny problem for companies in Ukraine, particularly for those in export-oriented sectors. The tax inspectorate’s concern with fictitious exports and other avoidance schemes means that legitimate exporters often face extremely long delays and must fight very hard to obtain reimbursement. Reimbursement may be denied if there appears to be a “break” in the VAT chain – i.e. if some agent in a taxpayer’s chain of suppliers is deemed not to have paid VAT – and tax or customs officials sometimes try to compel agents to adjust the values in tax declarations so as to reduce the amount of tax credit to which they are entitled. Even court decisions are sometimes insufficient to secure refunds. The irony is that this drive to prevent VAT fraud actually

creates incentives for agents to devise ever more elaborate schemes simply in order to avoid being overtaxed. Since the authorities are not liable for late refunds, agents gain no compensation when securing them long after they are due. Moreover, the authorities have recently revised the VAT reimbursement process so as to rule out the notion of “arrears” on VAT refunds as a legal concept, thereby undermining the monitoring of the timeliness with which claims are processed and giving the tax administration new incentives to delay them. Finally, there have been widespread complaints of official favouritism with respect to decisions concerning VAT refunds.

Corruption both contributes to, and results from, other weaknesses in framework conditions

In view of what has been said, it is hardly surprising that endemic corruption remains a problem in Ukraine. While measuring corruption accurately is notoriously difficult, there is a widespread consensus that it remains at very high, albeit declining, levels. Transparency International’s 2006 “Corruption Perceptions Index” (CPI) ranks Ukraine 99th out of 163 countries.³⁸ Though poor, this ranking is far better than it was in 2004, when Ukraine ranked 122nd among the 145 countries then rated. Of course, this improvement may reflect nothing more than outside perceptions of the “Orange Revolution” and its aftermath. However, a good deal of survey data suggests that corruption in Ukraine really has been falling in recent years. The 2005 BEEPS data point to a decline in the frequency and size of “unofficial payments” in almost all spheres of activity, with the troubling exception of the courts.³⁹ Surveys of Ukrainian households and firms likewise point to some improvement in 2005. These same surveys also show corruption rising again in 2006-07, albeit not to the levels of 2004.⁴⁰

Yet while there clearly appears to have been some improvement in the last 2-3 years, much remains to be done. The BEEPS data, unlike the CPI, point to higher levels of corruption in Ukraine than the CIS average. Surveys of ordinary citizens also point to higher levels of corruption in Ukraine than in neighbouring countries like Russia and Romania.⁴¹ Strikingly, citizens perceive more or less all public institutions – including the police and the judiciary – as about equally corrupt, with the exception of the military and, perhaps surprisingly, the registry and permit services, which are seen as less corrupt.⁴² Private business is also perceived to be very corrupt. Yet as OECD (2005) observes, anti-corruption policies still need to be institutionalised: the country’s anti-corruption efforts are characterised by a wide array of legal instruments and strategic documents, but there is a lack of efficient coordination, implementation and enforcement of anti-corruption initiatives. Ukrainian legislation also needs to be brought into line with international standards.⁴³ Instead of highly publicised campaigns against corruption in specific spheres, Ukraine needs to tackle the roots of corruption in public bureaucracies, which are to be found chiefly in high levels of bureaucratic discretion and opacity, together with low levels of accountability.

Clearly, securing property rights in such an environment is not easy. In addition to the constant risk of bureaucratic rent-seeking, Ukrainian entrepreneurs are increasingly concerned about the kind of predatory take-overs known colloquially as *reiderstvo* or “raiding” – the use of a combination of legal processes, corruption and, on occasion, threats and intimidation to engineer hostile takeovers. The defects of Ukrainian legislation combined with the weakness of the court system make this relatively easy.⁴⁴ While cries of *reiderstvo* are sometimes used by enterprise insiders to denounce perfectly legitimate

takeover attempts, the problem appears to be widespread and the authorities are finding it difficult to curb. These quasi-judicial, quasi-criminal operations often involve the acquisition of small stakes in the target firm by individuals or front companies, which then launch a campaign of nuisance litigation against the target, frequently exploiting gaps or inconsistencies in the law. One reason that returns to investment are so high is that any assessment of a potential project has to build in a large risk premium, reflecting the fear that the fruits of a successful investment may not in the end be appropriated by the investor. Nor are informal payments a guarantee against bureaucratic or private predators: the vast majority of firms continue to attach a very high value to the maintenance of informal relationships with senior officials in central, regional and municipal governments, as well as in the police and tax inspectorate, but the IER survey shows a dramatic *increase* in uncertainty about whether bribes paid will actually secure delivery of the agreed “services”.

Reducing barriers to entry, exit and reallocation: the role of product-market reform

A large and growing body of cross-national empirical work suggests that creative destruction remains critical to economic progress: higher firm turnover (i.e. higher entry and exit) is growth-enhancing.⁴⁵ Moreover, as noted above, eliminating, or at least minimising, barriers to entry, exit and reallocation of resources is critical in transition economies.⁴⁶ Because the restructuring of large SOEs is fraught with difficulty and often subject to considerable delay, reducing barriers to *entry* is particularly important: the entry of new enterprises and the growth of new activities has been a crucial engine of transformation in the more successful transition economies. Ukraine still has much to do on this score. Its small business sector is relatively underdeveloped and, on some indicators, it appears to be losing ground relative to the rest of the economy. While the official data are difficult to interpret, it seems clear that small business is developing far less robustly in Ukraine than in the transition countries of Central Europe or even in Russia.⁴⁷ The economy – particularly the industrial sector – is still dominated by the heavy industries that Ukraine inherited from the Soviet Union. Some of these sectors have been restructuring successfully, but their continuing dominance is one reason why so much policy since 1992 has been oriented towards averting rather than facilitating structural change. Efforts to protect established enterprises and sectors – in essence, impediments to exit – have helped retard the development of new activities. While such pressures are not difficult to understand, given the fear of the costs of transition in the short term, from a long-run perspective, policies that inhibit entry and exit can only be regarded as perverse. While there has recently been some progress in making entry easier, impediments to entry, exit and restructuring remain substantial.

Regulatory reform can make a significant contribution to resolving these problems, by reducing barriers to entry and removing obstacles to firms' growth once they have entered the market. Recent empirical work on product-market regulation (PMR) highlights the extent to which restrictive regulations impede market entry and slow the diffusion of new technologies and practices across firms and sectors.⁴⁸ Competition-enhancing PMR reform can help raise productivity growth through a number of channels, including the direct impact of competition on both market efficiency and technical efficiency,⁴⁹ as well as its indirect impact via the role of competition in spurring innovation.⁵⁰ Finally, Alesina et al. (2003) find that reforms which liberalise entry are likely to spur fixed investment in some

sectors. Regulatory reform thus has a role to play in addressing a host of economic challenges identified in this report: reducing impediments to entry and business development, stimulating competition, raising the investment rate and attracting FDI.

The regulatory framework in Ukraine: a comparison with OECD countries

With these considerations in mind, the OECD Secretariat in early 2007 undertook an assessment of Ukraine against the product market regulation (PMR) indicators developed by the OECD Economics Department in recent years.⁵¹ The indicators are based on detailed questionnaires concerning regulatory policy, which are submitted by the Secretariat to participating governments. This makes it possible to benchmark Ukraine's regulatory policies against those of OECD members, and to draw more easily on the experience of OECD members in identifying those areas in which regulatory reform might be most profitable. The questionnaires are divided into three broad groups: domestic barriers to entrepreneurship, state control and barriers to trade and investment. This permits an assessment of both inward- and outward-oriented policies. (Annex 2.A1 describes the PMR review process in more detail and presents the full results for Ukraine.)

Before examining specific indicators, it is worth highlighting four broad conclusions that emerge from the PMR review of Ukraine:

- The level of overall product-market regulation is higher than that of any OECD country in 2003 (Figure 2.1).⁵² It should be noted, moreover, that many of the poorer performers in the OECD's 2003 PMR assessment have since undertaken regulatory reforms: Poland, for example, has adopted legislation to reduce substantially the administrative burdens on start-ups and has taken steps to reduce uncertainty about the application of tax regulations.
- The burden of product-market regulation is well above the OECD average with respect to all three major components of the aggregate indicator: state control, barriers to entrepreneurship and barriers to trade and investment (Table 2.2). However, it should also be noted that Ukraine does relatively well on a number of the sixteen individual indicators, particularly in areas where reforms have recently been enacted. The level of sector-specific regulation is also comparatively low, as Ukraine has adopted a fairly liberal stance with respect to a number of industries that are often heavily regulated elsewhere.

Figure 2.1. **Aggregate product-market regulation indicator**

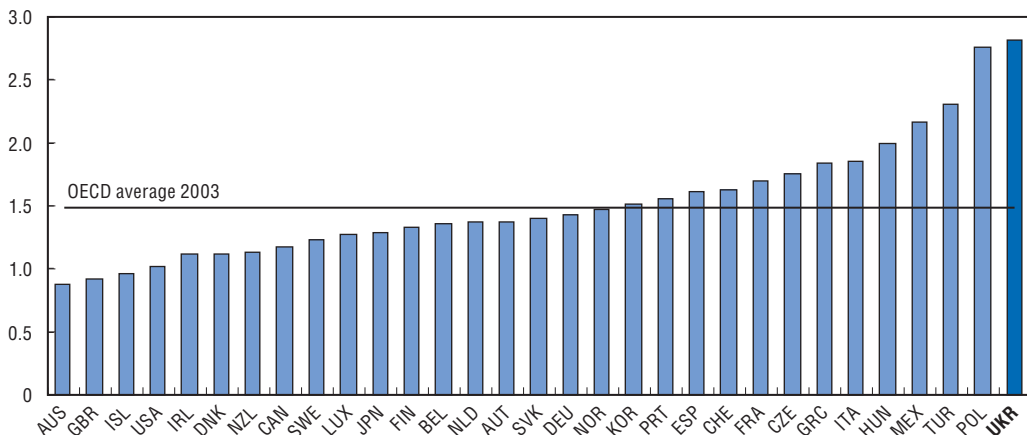


Table 2.2. **Summary indicators of product-market regulation**

	OECD			Ukraine	Brazil
	Average	Low	High		
Product-market regulation	1.5	0.9	2.8	2.8	1.9
State control	2.1	0.6	3.6	2.7	2.5
Barriers to entrepreneurship	1.5	0.8	2.5	2.4	1.3
Barriers to trade and investment	1.0	0.3	2.4	3.3	1.9

- Overall, barriers to business growth appear to be more constraining than barriers to entry.
- Regulatory *process* is in some respects as much of a problem as the substance of regulation. Ukraine scores rather poorly on indicators concerned with such issues as the formulation of regulatory policy and effective communication with the business community.⁵³

The problem of poor regulatory process reflects in part a failure to define with clarity the various roles that the state is expected to play in the economic life of the country or to differentiate between them in ways that avoid undesirable conflicts of interest, particularly where commercial activities and the state's ownership function overlap with its regulatory and policy-making functions. Developing a clearer, more coherent understanding of the state's role in a market economy thus represents one of the most basic challenges of regulatory reform.

Analysis of the specific PMR indicators provides a much richer picture, albeit one consonant with these general conclusions. However, when interpreting the detailed results of the PMR review, it should be borne in mind that the questionnaires represent an assessment of formal regulatory policy settings: they do not provide any information about the way in which these policies are implemented. In the case of Ukraine, this is a particularly important point in view of the institutional weaknesses described above. In many instances, formal regulatory policies appear to have improved substantially, but the implementation of those policies remains incomplete and inconsistent.

Conditions for start-ups are easier, but barriers to entry for foreigners remain very high

One area where Ukraine ranks relatively well concerns the procedures for starting a new business. Ukraine is well below the OECD average on the start-up indicator for new companies and only slightly above it on the indicator for sole proprietors (Figures 2.A1.9 and 2.A1.10). This would appear to reflect recent efforts to improve conditions for entry. Moreover, other evidence suggests that, despite incomplete implementation, new legislation aimed at creating a "one-stop shop" registration process for new businesses really has had a marked positive effect.⁵⁴ In a significant minority of cases (around 25% for legal persons and 30% for private entrepreneurs) registration still takes longer than the law envisages, though officials attribute many of the delays to failure on the part of applicants to prepare the necessary documentation ahead of time.⁵⁵ Broader questions of entry are addressed below, but it is important to note in this context that, despite the recent changes, start-up procedures remain costlier and more time-consuming in Ukraine than in most of the region. The simplification of registration procedures has

reduced the gap significantly but it has not closed it. The remaining problems concern the many post-registration procedures a new business must go through before starting to operate.⁵⁶

The situation facing would-be foreign entrants is somewhat more complex. On the whole, Ukraine's economy is in many respects quite open, and this is reflected in the PMR indicator for barriers to foreign ownership (Figure 2.A1.14). This shows Ukraine close to the OECD average in terms of restrictions on foreign acquisitions in "sensitive" sectors – though the indicator fails to pick up quite serious restrictions on foreign investors' acquisition of land.⁵⁷ Regulatory barriers, however, are another matter (Figure 2.A1.17). The principle of national treatment in respect of regulatory policy is not enshrined in law, and foreign companies do not, as a rule, have the right to seek redress through the competition authority, trade policy bodies or regulatory agencies. Ukrainian legislation does not require regulators to use internationally harmonised standards and certification procedures whenever possible and appropriate. While the authorities have in recent years laid great stress on the need to bring primary and secondary legislation into line with international (and, in particular, EU) norms, local standardisation and certification requirements, many of them left over from the Soviet era, continue to be applied. This complicates both foreign trade and investment, since it greatly adds to the cost of introducing (via imports or local production) products that are new to the Ukrainian market, even if these have been certified elsewhere. This problem is compounded by the overlapping jurisdictions of various regulatory bodies, which mean that the very same goods and services may be subject to inspection and certification on precisely the same grounds by a number of different agencies. Progress in reducing the redundancy in certification and standardisation has been limited, owing largely to resistance from the regulatory bodies involved.⁵⁸ Finally, it should be noted that Ukraine has not engaged in mutual recognition agreements with any other countries.

Overregulation impedes business growth and development

While market entry in Ukraine has recently become somewhat easier, the regulatory impediments to growing businesses of whatever size remain extremely onerous. As noted above, the sheer complexity of regulation – much of it unnecessary – is difficult to exaggerate. The authorities are well aware of this and, in an effort to address the problem, they undertook a "quick deregulation initiative" in 2005. This involved a review of 9 340 national regulations, of which 5 184 were found to violate the law on regulatory policy. Some 4 940 were amended or repealed.⁵⁹ In addition, no fewer than 66 presidential decrees were found to be in violation of the law. Unfortunately, phase 2 of the initiative, which was to be focused on sectoral legislation, never took place, despite having been authorised by the president, and the process of issuing new regulations carried on unabated. In any case, it is impossible to judge the impact of such an exercise in terms of the number of rules abolished: critics argue that the vast majority of the regulations that were scrapped were no longer being applied anyway, and the review was not accompanied by any systematic assessment of the quality of the regulations that remained.⁶⁰

Particularly problematic in this context is the regulatory burden associated with licensing and permits: on this indicator, Ukraine ranks alongside the most heavily regulated OECD members (Figure 2.A1.7). One of the biggest complaints of entrepreneurs in Ukraine concerns the pervasive system of permits, which businesses have to obtain and renew regularly in order to engage in almost any form of commercial activity.⁶¹ This is, of

course, a barrier to market entry – ordinarily, an entrepreneur starting a new business must secure a large number of different permits before he can start operating – but it is not limited to start-ups, since the vast majority of permits must be renewed at regular intervals. It therefore marks an impediment to the development of any business. The situation with respect to permits (but not licences) has recently improved markedly. A law on the permit system was adopted in late 2005, in an effort to engineer a radical reduction in the number of permits issued by central, regional and local authorities. In order to ensure that the law's effect was not limited to a one-off reduction in the number of permits, it introduced new restrictions on the ability of state agencies and municipalities to create new permits. Yet even in the wake of this undoubtedly important reform, Ukraine still compares very poorly to the great majority of OECD members when it comes to licensing and permits. In fact, the situation is probably somewhat worse than it appears, since the implementation of the new law on permits is still far from complete: a number of other statutes have yet to be brought into line with the law on the permit system, and many state and municipal agencies simply continue to administer permit systems in contravention of the law. Nevertheless, even partial implementation of the law does appear to have had a palpable positive effect: a 2006 IFC survey found that the average time spent on obtaining permits had fallen by around 30%.

The next logical step in this sphere is meant to be a new law on licensing, which was submitted to parliament in the first half of 2007. The present law identifies 69 types of activity that may be subject to licensing requirements, despite the fact that it does not cover the activities most commonly subject to licensing regimes in other countries, such as financial services and telecommunications; these are dealt with in separate legislation. At present, Ukrainian law does not even contain any criteria stipulating when licensing regimes may be allowed; there is only a general statement that they should not be used to restrict competition. The need here is not only for less regulation – far too many activities are subject to licensing regimes, and new regimes are being created all the time – but also for better regulation – compliance with the terms of licences is often monitored poorly or not at all. Where licenses are deemed to be necessary, there need to be effective monitoring and enforcement mechanisms if they are to fulfil their purpose.

In this context, it is also important to highlight the large number of regulations that simply raise transaction costs and thereby reduce the efficiency of product markets. Business surveys consistently draw attention to the extraordinarily complex and cumbersome rules governing the execution and registration of transactions involving land. These are particularly burdensome for non-residents, but even Ukrainian individuals and entities find it time-consuming and costly to purchase or lease real property: in the World Bank's "Doing Business" indicators, Ukraine ranks 133rd with respect to the registration of rights to real property.⁶² However, on a day-to-day basis, the mandatory notarisation requirement applied to many routine transactions is likely to be even costlier to many firms. For example, the requirement that all lease agreements with terms of over one year be notarised imposes a fee equal to 1% of the value of the transaction on the contracting parties. Mandatory notarisation of a company charter likewise costs 1% of the authorised capital, which can be a substantial amount. The notarisation requirements, moreover, are symptomatic of a much larger body of rules and regulations that impose hidden charges on, and put unnecessary obstacles in the way of, perfectly ordinary transactions. The vestiges of the country's currency-control regime mean that any activities involving foreign currency cost more and take longer, and the overregulation of ordinary financial activities

means that even domestic transactions, like purchases of securities and inter-company loans, are more difficult to execute.⁶³ Overregulation in these and other spheres does little to make the investment climate more orderly or transparent and serves mainly to distort markets, encourage shadow activity and create opportunities for official corruption.

Regulatory process remains a problem

As noted above, Ukraine's 2003 Law on the Fundamentals of Regulatory Policy is impressive on paper but has not yet been fully implemented. This weakness is reflected in a number of PMR indicators concerned with the process, rather than the substance, of regulation. Ukraine's poor score on the simplification and communication indicator (Figure 2.A1.8), for example, largely reflects the lack of an integrated, explicit strategy of regulatory reform. There is no government-wide programme aimed at reducing administrative burdens on enterprises and citizens, nor does the central government even have a comprehensive picture of what these are, since it lacks a complete count of all the licences and permits required. The failure to establish systematic procedures for providing information about the enforcement or operation of regulations affects both domestic and foreign investors, who have complained about the difficulty of obtaining timely, authoritative clarifications of the meanings of particular regulations from the State Tax Administration and other bodies.⁶⁴ Lack of information on the application and enforcement of regulations puts entrepreneurs at a particular disadvantage, given that they also lack an automatic right of non-judicial appeal in the event of adverse regulatory enforcement decisions. In short, they can fall foul of the regulator for lack of information and then be unable to appeal the decision unless they choose to litigate. Here again, the problem of regulatory uncertainty looms large – and creates opportunities for bureaucratic rent-seeking.

In other fields, it is implementation of regulatory policies that is the problem. Thus, while the framework law on regulatory policy made regulatory impact assessments (RIAs) a general requirement for all new regulatory acts, the Council of Entrepreneurs attached to the Cabinet of Ministers of Ukraine concluded in 2006 that many regulatory acts were still being promulgated without RIAs and that many of the RIAs being prepared were of poor quality and did not conform to the methodological guidelines for such assessments. Similarly, the formal requirement that regulators assess alternative policy instruments (regulatory and non-regulatory) before adopting new regulations is often breached – not least because no guidance on using alternatives to traditional regulation has ever been issued. Questions of implementation, transparency and policy process are, of course, closely interlinked, since a lack of transparency will tend to reduce the likelihood that regulatory policy processes will be observed when officials or politicians would find it more convenient to ignore them.

Excessive state ownership adds to the impediments to efficient exit

The state remains an extremely important player in the economy, not only through regulation and the provision of public goods and services, but also via its ownership of substantial productive assets. Ukraine's state-owned enterprise (SOE) sector remains fairly large, a fact that is reflected in the very high scores shown for the PMR indicators on the size and scope of the public sector (Figures 2.A1.2 and 2.A1.3).⁶⁵ Overall, the private sector accounts for only about 65% of GDP. On the official data, roughly 48% of the country's capital stock was in the hands of the state or municipal authorities at the end of 2005, with

a further 10-11% in mixed public-private ownership. Wholly private entities appear to have controlled around 41% of the capital stock.⁶⁶ The latter figures reflect the extent to which the state's remaining industrial holdings are concentrated in capital-intensive sectors, such as the defence-industrial complex, heavy machine-building, the power sector and public utilities. In many cases, continued state ownership of such assets creates conflicts of interest for the authorities (particularly where the state's role as regulator is in tension with its role as owner) and serves to distort competition.⁶⁷ Moreover, the weak corporate governance of most SOEs means that many, perhaps most, such enterprises are easy targets for rent-seeking by insider-managers or well connected outsiders, be they private businessmen or officials involved in overseeing the enterprises.

The size of the SOE sector serves to limit exit and restructuring – and, in consequence, new entry. As noted in Chapter 1, the large population of state-owned enterprises remains a drain on the budget (Table 1.3), and well over half those transfers are subsidies to SOEs or transfers to ministries and other bodies administering subsidy programmes.⁶⁸ Yet although the problems associated with the continued existence of such a large population of SOEs are widely recognised, privatisation has effectively been stalled for the last few years. The only major privatisation deal recorded in 2005 was the re-privatisation of the steel concern Kryvorizhstal, and there were no really large deals in 2006 – total privatisation income amounted to just 0.1% of GDP. Several major sales had been planned for the year but all were postponed. This is nothing new: privatisation plans are legislated annually but in recent years they have generally not been fulfilled.

Overall, barriers to exit may be even more significant than restrictions on entry

Continued support for inefficient SOEs is part of a larger problem with exit, which – perhaps surprisingly – appears on many indicators to be as difficult as entry in Ukraine. Barriers to exit impede the efficient reallocation of resources among firms and sectors and reduce the incentives for firms to restructure. In the end, of course, they constitute barriers to entry as well, since they prevent the release of production factors that might otherwise be available to new entrants. Relative both to its peers in the region and to OECD members, Ukraine fares much worse on indicators of ease of exit than it does with respect to entry. According to the World Bank, the closure of a business in Ukraine typically costs 42% of the value of the estate, as against an average of 14.3% for transition countries as a group and 7.1% for OECD members. The process leaves an average rate of recovery for creditors of just 8.7%. And while it is generally faster than the transition country average (2.9 years rather than an average of 3.5 for the region), it is still very slow compared to the OECD average (1.4 years). These difficulties appear to reflect a combination of defects in bankruptcy procedures – both problems with the legislation and problems with its administration – and the tendency of the tax authorities to view any form of exit as an attempt at tax evasion.⁶⁹ The tax service can tie an enterprise up for years in audits and inspections before allowing its principals to wind it up. It is symptomatic of this situation that the fees paid to intermediaries in Ukraine to wind up businesses are often far higher than those paid for starting them up, because the queues are longer and the procedures more complex.

Ukraine's current bankruptcy law, which entered into force in 2000, represents a marked improvement on its predecessor, particularly with respect to debt-restructuring procedures, the priority ordering of creditors, the protection of creditors' rights in the event of liquidation, and third-party fulfilment of debtor liabilities.⁷⁰ The law also provides

additional mechanisms to limit opportunities for insiders to “gamble on resurrection”⁷¹ or to strip assets from companies that are in trouble.⁷² Apart from the quality of jurisprudence (many judges still lack the expertise needed to handle bankruptcy cases), the main problems that remain concern the bankruptcy of entities in which the state holds 25% or more of the equity. Since November 2001, there has been a moratorium on the mandatory disposal of the assets of such entities, whether inside or outside of bankruptcy proceedings.⁷³ In theory, the moratorium is to apply only until a suitable mechanism for handling such asset disposal is devised, but no such mechanism has been created. As a result, creditors of enterprises where the state holds a blocking stake are limited in their right to recover debts via bankruptcy. This is not a merely theoretical problem: Leonov and Zhuk (2005) report that 25 companies with state shareholdings in excess of 25% went bankrupt in the first half of 2002 alone.

If a bankruptcy case ends in liquidation, the proceeds are used to satisfy the claims of creditors according to a modified version of the absolute priority rule employed in many western jurisdictions. However, the Ukrainian law gives taxes, duties and any claims of the central authorities monitoring state reserves priority over the claims of other unsecured creditors. The moratorium and the priority ordering are important issues even in cases that are unlikely to result in the winding up of the debtor firm, because the calculations of all the participants in a bankruptcy process are shaped from the outset by an awareness of their expected returns in the event of liquidation.

Implicit and explicit subsidies, though declining, persist on a large scale

Pressure to restructure or wind up many inefficient firms, in both state and private sectors, is in any case limited by the widespread, albeit declining, availability of explicit or implicit subsidies to favoured enterprises. It is difficult to assess with precision the degree of subsidy extended to particular economic sectors. Clear and comprehensive data on tax expenditures are not presented in the fiscal accounts (although the government’s new tax reform Concept proposes to remedy this), and the extent of implicit subsidies arising from price regulation is even harder to gauge, given the extent to which they are extended at the expense of major infrastructure sectors rather than the state budget itself. Nevertheless it is possible to gain a rough sense of the sums involved. Direct budgetary support is, of course, the most transparent form of assistance. According to the Ministry of Finance, direct support from the state budget to industry amounted to just under 5.8 bn UAH in 2006 and is projected to rise to almost 10.7 bn in 2007 – around 1.7% of anticipated GDP. The vast bulk of this (around 75% in 2006 and 85% in 2007) consists of support for the coal industry, with the power sector accounting for most of the rest (1.1 bn UAH in both years). Support for other sectors is to rise from around 272 m UAH in 2006 to just over 505 m this year. OECD (2007) estimates budgetary support for agriculture at 6.2 bn UAH, if both tax expenditure and direct subsidies are included. Tax expenditures are, of course, notoriously difficult to pin down, but a recent World Bank (2006a) assessment estimates the ratio of tax expenditures to GDP in 2005 at 3.2%, down from 7.6% in 2002.⁷⁴ This is not an exceptionally large figure by the standards of some OECD members – tax expenditures take place on a very large scale in many more developed countries.⁷⁵ The problem is the instability, apparent arbitrariness and distorsive effects of many of the tax privileges that have been granted in Ukraine. The implicit, quasi-fiscal subsidies extended to the rest of the economy via the mis-pricing of energy are a more serious problem (Annex 1.A3). These have been estimated at a minimum of 4.3% of GDP in 2005.⁷⁶

The abolition in 2005 of tax and customs privileges for Ukraine's Free Economic Zones (SEZs) marked an important step in curtailing inefficient tax expenditures. By 2004, roughly 10% of the territory of the country fell into designated SEZs or Priority Development Areas (TPRs). According to the Ministry of Finance, the total cost of tax breaks, exemptions and other privileges in respect of taxes, duties and other charges reached 4.7 bn UAH (about 1.4% of GDP) that year, up from 1.9 bn the year before.⁷⁷ In fact, the figure would be substantially higher if it were possible to account for shadow activity and intra-corporate transfer pricing. Yet that same year, the total revenue, including payments to social funds, generated by projects benefiting from SEZ/TPR terms⁷⁸ amounted to only 1.2 bn UAH, just over 26% of the value of the revenues foregone. During 1997-2005, the ministry estimates the tax expenditures on SEZs and TPRs at 10.5 bn UAH, over 90% of which was incurred during 2002-05. Against this, the total revenues generated by SEZ/TPR projects, including payroll taxes, amounted to only 5.5 bn UAH. Such spectacular fiscal privileges, for such a meagre return, might make sense if it were assumed that the activity in question would not have taken place at all in the absence of a special fiscal regime, but much, if not most, of the business in the zones consisted of ongoing activity by established players in relatively mature sectors.

The figures outlined above do not, of course, provide a basis for assessing the total subsidy provided to any particular sector, because explicit and implicit subsidies are often cross-cutting. Many sectors (particularly energy and agriculture) receive extensive support that serves in large measure to offset the costs of other policies, such as price and trade regulation, that inflict losses on them. What the above figures do illustrate, however, is the scope of the distortions created by wide-ranging state intervention in support of particular groups or sectors.

Empirical analysis confirms that the exit mechanism in Ukraine works poorly

Empirical analysis of entry and exit confirms the impression that Ukraine has particular problems with exit. Census-type, firm-level data for Ukraine show overall firm turnover rates in manufacturing (entry plus exit) to be rather low by OECD standards – about 10% in 2002-05, as against rates of 15-20% typically found in mature market economies.⁷⁹ As is evident from the data in Table 2.3 (row a), the level of exit is particularly low. Entry is now less of an issue than it was: a comparison of firm-level data for Hungary, Romania, Russia and Ukraine shows extremely low levels of entry in Ukraine in the early 1990s, but entry rates rise sharply after 1995, reaching levels roughly comparable to Russia's. When weighted by share of output, entry in Ukraine compares reasonably well to Hungary and Romania, as well as Russia (Table 2.3, row b). Moreover, entering firms in Ukraine are significantly more productive than incumbents – around 40% more productive on average, for the entire period from 1992 through 2005 (Table 2.3, row c).⁸⁰ This means that entry has been particularly good for aggregate productivity; it may also reflect entrants' awareness of the difficult conditions in which they will operate – they will need to be exceptionally efficient to have a reasonable chance to survive and grow.⁸¹ This may be one reason why two-year survival rates in Ukrainian manufacturing – above 80% in the most recent period – are close to the highest rates found in developed OECD economies.⁸²

The exit data suggest that one of the difficulties entrants face is that competitive conditions are by no means equal and that the selection of firms for exit is only weakly linked to performance. Exit rates in Ukraine are lower than in any of the other countries under study across the entire 1992-2003 period, and a number of indicators suggest that

Table 2.3. **Entry, exit and labour productivity differences**

	1992-1995		1995-1998		1998-2001		2002-2005	
	Entry	Exit	Entry	Exit	Entry	Exit	Entry	Exit
(a) Entry/exit: share of firms ¹	1.67	2.34	6.34	2.77	6.34	3.66	6.65	3.70
(b) Entry/exit: share of output ¹	0.90	1.10	2.97	2.10	3.36	1.22	1.98	2.12
(c) Entry-incumbent labour productivity difference ²		18.9		54.9		76.9		10.6
(d) Exit-survivor labour productivity difference ³		-43.1		-39.8		-28		-30.8
(e) Labour productivity deviation-exit correlation ⁴		-0.09		-0.10		-0.03		-0.07

1. The entry rates are averages for the second and third years in each four-year period, and the exit rates are the averages of the second, third and fourth years in each four-year period.
2. Percentage differences between the unweighted average labour productivity of first-year entrants and that of incumbents. The reported numbers are averages for the second and third years in each four-year period.
3. Percentage differences between the unweighted average labour productivity of firms exiting in the next year and that of survivors. The reported numbers are averages for the first, second and third years in each four-year period.
4. Correlations between firms' deviations from sector labour productivity and exit in the following year. Entrant labour productivity is measured in the second year.

Source: Brown and Earle (2007).

exit mechanisms in Ukraine are doing a poor job of ensuring that it is the less productive firms that exit the market. As one would expect, exiting firms are much less productive than survivors on average (Table 2.3, row d). However, the negative correlation between exit and productivity is weak in Ukraine, and there is no evidence to suggest that it is increasing over time (Table 2.3, row e). In Russia and Romania, the correlation tends to be about three times as strong as in Ukraine, and it is somewhat stronger in Hungary as well. More disturbing still is the fact that exiting new private firms are significantly *more* productive than surviving old firms (defined as those existing prior to the transition or ever having been state-owned), though they are somewhat less productive than surviving entrants (Table 2.A3.1). This sort of “unnatural selection” for survival or exit is particularly evident in the production of machinery and equipment, electrical and optical apparatus, pulp and paper, and publishing and printing.

These results suggest that there is too much exit of new private firms in Ukraine, and too little exit of older firms. The fate of new entrants seems to be less clearly linked to productivity than it ought to be. This may be one reason why Ukraine also exhibits exceptionally high – and rising – labour productivity dispersion within sectors throughout the transition period (Table 2.A3.2).⁸³ By 2005, Ukraine had an unusually large share of firms with labour productivity more than 50% below the sectoral mean (37.2%) and yet the smallest share of output produced by such firms (2.6%). This points to the existence of a very large population of small, unproductive firms that are neither being selected for exit nor compelled by competitive pressures to raise their productivity in order to survive.

Notes

1. See WEF (2006).
2. Specifically, tax regulation, policy instability, corruption, government instability and the inefficiency of public bureaucracies.
3. See also SIGMA (2006).
4. See, for examples, IER (2006), UCIPR et al. (2005); World Bank-EBRD (2005); and ICS (2006).

5. See, for example, Kinoshita and Campos (2003); and Kostevc *et al.* (2007). The issue of inward FDI into Ukraine is examined in more detail in Chapter 3.
6. See also the rising significance of political instability as a constraint on investment in IER (2006). That said, the most important factors cited, by a wide margin, were low profitability and the cost of capital.
7. See Chapter 1 for details.
8. Policy may yet swing back the other way: the government in early 2007 was at work on plans to revive special zones as a key economic policy instrument.
9. For a strong statement of the case for democracy's growth-enhancing potential, see Feng (2003). Fidrmuc (2001) makes the case for the economic benefits of liberalisation in transition economies in particular. See also Polterovich and Popov (2005), who conclude that in new democracies, the economic benefits of democratic politics depend in large measure on the strength of the rule of law.
10. This is true of much recent agricultural policy. See Annex 1.A2.
11. See SIGMA (2006) for a detailed discussion of these issues.
12. Hellman *et al.* (2000); World Bank (2001).
13. See SIGMA (2007).
14. SIGMA (2006). The seven aspects were: policy capacities, civil service, administrative legal framework, public expenditure management, public procurement, public internal financial control and external audit.
15. There can, of course, be advantages to decentralised responsibility for pay in some institutional environments. Such arrangements require, *inter alia*, credible regulation and monitoring of staff (to prevent malfeasance), clear lines of authority, a culture of rule-observance, and an understanding of officials' roles and duties in terms of the offices they hold rather than their personal connections. These are lacking in Ukraine, where performance-related pay and flexible recruitment often tend to facilitate pork-barrel politics and patronage.
16. On administrative and civil service reform in Ukraine, see Segura *et al.* (2005), and SIGMA (2006).
17. See SIGMA (2006:11-12) and SIGMA (2007).
18. On the weaknesses in the Civil Code, see Shishkin and Drobyshev (2006); EBA (2006); OECD (2006a); and OECD (2004b).
19. It also effectively precludes the conclusion of contracts via fax or electronic mail: a valid domestic or international contract must have the imprint of a corporate seal on a signed original. Strikingly, this is a recent innovation: it was not a requirement prior to the Code's entry into force in 2004.
20. For details on the contradictions and tensions between the two codes, see Shishkin and Drobyshev (2006); EBA (2006); and OECD (2004b).
21. Critics argue that the Commercial Code effectively nullifies limited liability in respect of subsidiaries.
22. "Operational management" and "commercial authority" are ill defined legal concepts that allow managers almost total freedom to operate enterprises for their own benefit, even to the point of alienating assets, but without imposing the kind of burdens implied by trusteeships or other well structured agency relationships. By contrast, it should be noted that a claim to collateral is not understood as a property right. This has implications for the protection of secured creditors' rights both before and during bankruptcy.
23. IFC (2004:3).
24. See WEF (2006:404, 417) on the protection of property rights in general and the rights of minority shareholders in particular.
25. See the survey results in Transparency (2004) and in WEF (2006:375, 407).
26. See IER (2006) and Transparency (2004).
27. On the contrast between closed (survival-oriented) and open (entrepreneurial) networks, see Huber and Wörgötter (1998); and Stark *et al.* (2006).

28. See World Bank (2005) for details. Ukraine's relative position was particularly poor with respect to the frequency and duration of fire, occupational safety and health inspections, and (not surprisingly in view of this), the frequency of informal payments to those conducting such inspections.
29. For data on these perceptions, see World Bank (2005); WEF (2006:408); and IER (2006:2).
30. See ICS (2006). A survey of business associations' representatives identified more or less the same priorities: see UCIPR *et al.* (2005:10-11).
31. See Balcerowicz and Ustenko (2006) for details of this and other measures adopted in 2005 with a view to bringing regulatory practices into line with the requirements of the law.
32. This is most often true in fire and sanitation inspections. Tax inspectors cannot close a business, although they can take other actions (freezing accounts, seizing assets, etc) that have the same effect.
33. This is despite the fact that legislation adopted as long ago as 1991 limits fire inspections of businesses that take out fire insurance and provides for a link between consumer-safety inspections and actual consumer complaints.
34. IFC (2005). See also World Bank (2005), which presents a breakdown by type of inspection (though tax inspections are omitted). The BEEPS data suggest that the incidence of bribery in Ukraine is particularly high, relative to other east European and CIS countries, in connection with various sorts of health and safety inspections.
35. See the survey results in WEF (2006:374), where tax regulation ranks first among executives' complaints but tax rates only fifth. See also World Bank (2005, 2006b); EBA (2006:63ff); and IER (2006).
36. IFC (2006). Only Brazil ranked below Ukraine, with a staggering 2 600 hours.
37. EBA (2006:64-5).
38. On a par with Georgia, Mali, Mongolia and Mozambique.
39. Overall, the BEEPS data suggest that the burden of corruption has fallen, with the ratio of bribes paid to total sales falling from over 2% to around 1.5%. See also SIGMA (2006:16).
40. For households, see the results reported in Transparency (2004, 2005, 2006a); on enterprises, see the managerial surveys reported in IER (2006) and Kuziakiv (2007). See also WEF (2006:375), which, on the basis of its executive opinion survey, ranks Ukraine 107th in terms of official corruption and a dismal 119th with respect to the ethical behaviour of firms.
41. The Transparency International "Global Corruption Barometer" is based on sample surveys of the population rather than investor perceptions; see Transparency (2004, 2005, 2006a).
42. The data for most countries show a good deal of variation in assessments of the level of corruption of different institutions.
43. As embodied in such instruments as the Council of Europe's Criminal Law Convention on Corruption, the United Nation's Convention on Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.
44. The contradictions between the civil and commercial code described above often create opportunities for raiders to exploit.
45. See the overview of the Schumpeterian approach in Aghion and Howitt (2006).
46. The Soviet economy was an economy without exit. Plants were rarely closed, the service lives of machinery were far too long, and little or no attention was paid to obsolescence. Lack of exit, in turn, impeded entry and structural change, since it meant that established sectors, even in decline, continued to soak up investment and other resources that might have been more efficiently deployed elsewhere.
47. See Annex 2.A2 for details. On Russia, see OECD (2004a). As the annex explains, data on small businesses are highly problematic and the actual situation is probably better than the official statistics suggest. Nevertheless, the growth and productivity performance of small businesses since 2000 looks decidedly unimpressive compared to what has been observed in neighbouring countries.
48. See Conway *et al.* (2006), especially on the diffusion of information and communications technology and the location decisions of multinational enterprises. See also Lewis (2004) for the

results of a large body of micro-level studies of industries in 13 countries conducted by the McKinsey Global Institute.

49. Nicoletti and Scarpetta (2003); Conway *et al.* (2005).
50. Aghion *et al.* (2001, 2005).
51. The indicators for Ukraine were calculated based on the regulatory policies in place at end-March 2007. In some cases, policy settings have changed since then.
52. Ukraine's ranking on the aggregate PMR indicator is in part a reflection of its exceptionally low score, relative to all OECD members, on the indicator for regulatory barriers to trade (Figure 2.A1.17). However, it would be a mistake to assume that the outcome shown in Figure 2.1 is merely a statistical artefact: if Ukraine's regulatory barriers score were reduced to the level of Germany or Denmark, its overall PMR ranking would leave it just ahead of Poland (2003) but still behind Turkey (2003). Ukraine scores poorly even on aggregate indicators that zero-weight the regulatory barriers indicator.
53. Many of these process issues are addressed in OECD (2006b).
54. A major survey of entrepreneurs showed that they were broadly satisfied with the new arrangements; see "Derzhavna" (2006). Between 2005 and 2006, Ukraine rose 21 places on the "start-up" indicator of the World Bank's "Doing Business" data base, which is based on assessments of the actual time and cost involved, rather than the formal rules.
55. See the survey data in ICS (2006) and "Derzhavna" (2006).
56. Including registration with the tax inspectorate, the various social insurance funds and other public bodies.
57. See EBA (2006:31-8).
58. Perhaps the most striking example here has been resistance to implementation of the 2005 food safety law, which sought to put an end to triple control of all food imports – by the veterinary and sanitation inspectorates (separately), as well as by the standards body, the State Committee for Technical Regulation and Consumer Policy.
59. The corresponding figures for local regulations reviewed were 5 386, 1 750 and 1 358, respectively. See "Shchodo" (2006).
60. Balcerowicz and Ustenko (2006:20-1).
61. At the end of 2005, there were around 1 200 specific activities for which permits were required.
62. In 2006, registering real property involved 10 distinct procedures and took an estimated average of 93 days, costing 3.4% of the value of the property. See EBA (2006:28-41) for details of the obstacles facing non-residents; see also OECD (2004b:27-28).
63. See OECD (2006a) for details.
64. See EBA (2006:64-65); and Balcerowicz and Ustenko (2006:31).
65. Figure 2.A1.4 shows that Ukraine actually ranks somewhat below the OECD average on other methods of direct control: the state owns a great deal, but it does not seek to exercise special rights over formerly state-owned enterprises via golden shares and other such mechanisms.
66. Based on Ukrstat data cited in *Ekspert* 48 (11-17 December) 2006 and data from the State Property Fund. This estimate is somewhat rough and ready, given the quality of data on the capital stock, but the figure is unlikely to have changed much since 2005, given the lack of privatisation and the slow rate of renewal of fixed assets. These estimates probably also reflect the presence on municipality balance sheets of a great deal of socio-cultural infrastructure transferred from enterprises to local authorities in advance of the privatisation of the former. See Friedman *et al.* (1997).
67. These issues will be discussed at greater length in Chapter 3.
68. World Bank (2006a:41).
69. This attitude is not without foundation, given the large role played by shell companies and so-called "one-day firms" in many tax avoidance schemes.
70. There are, however, many aspects of the law's provisions that, while broadly positive, are imprecise and therefore difficult to apply in practice; see EBA (2006:52-3)

71. If secured creditors are certain of recovering collateral, they can lend to a failing enterprise with confidence. Incumbent managers in trouble therefore borrow against assets. Managers, equity holders and “late” secured creditors thus form a coalition that may keep the enterprise afloat longer than otherwise, running up larger debts and leaving other creditors little or nothing when the firm fails.
72. Where companies are restructured in the context of bankruptcy proceedings, the law provides for the invalidation of obligations undertaken within six months of the approval of restructuring that involve shareholders selling their stakes or affect the priority of creditors in the event that proceedings end in liquidation.
73. In 2004, the moratorium was made retroactive to the beginning of 2000 with respect to bankruptcy cases involving mining enterprises (including coal pits, ore mines, open-cast mines, digging fields, ore-dressing plants, and coal-mining enterprises) in which the state held at least a 25% stake. Cases initiated after 1 January 2000 had to be withdrawn.
74. The sharpest reduction in tax expenditures came in 2004. It resulted from a number of factors, including: a drastic reduction in the VAT exemption on medicines (this alone cut tax expenditures on VAT by close to 1% of GDP), a similar limitation of the VAT exemption in publishing, the elimination of a number of exemptions from excise taxes, and a general tightening of the State Tax Administration’s attitude towards the application of exemptions. (In addition, there were some changes to the criteria used in estimating tax expenditures, but they were not the primary factor.)
75. Comprehensive data are not available, because many countries do not account for tax expenditures systematically; however, the US Government Accountability Office estimates the sum of tax expenditure outlay estimates at around 7.5% of GDP for 2004 (GAO, 2005), while the Australian Treasury gives a figure of about 4% for 2005 (Treasury, 2005).
76. The figure could run as high as 9.8% of GDP, depending on the “market” price of gas used: the lower estimates use the average price of independent gas traders in Ukraine as the benchmark, whereas the higher use the regional market price. See World Bank (2006a:63).
77. This dramatic jump reinforces the sense that a dramatic pick-up in SEZ activity in 2004, which appears to have involved a good deal of shadow activity, may underlie some of the anomalies in the national accounts described in Chapter 1.
78. Not all activity physically located in the zones benefited from fiscal privileges.
79. Scarpetta *et al.* (2002) provide estimates for leading OECD economies for the early 1990s.
80. This is a striking result, albeit one also observed in Russia. The average productivity of entrants is generally lower than that of incumbents. Entrants are usually more productive than weak firms in a given sector but they may still be, initially at least, less productive than the average firm.
81. In Russia, too, the higher productivity of entrants may reflect the higher hurdles to be surmounted.
82. See Scarpetta *et al.* (2002) for estimates of survival rates in the major OECD countries.
83. Estimates for 18 NACE two-digit manufacturing sectors show that the productivity difference between firms in the 10th and 90th percentiles in 2005 had reached an average of 4.03, and in only one sector was this figure below 3.5. In neighbouring Hungary, by contrast, the corresponding figures for all sectors but one were below 3.

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ANNEX 2.A1

Product-market regulation in Ukraine

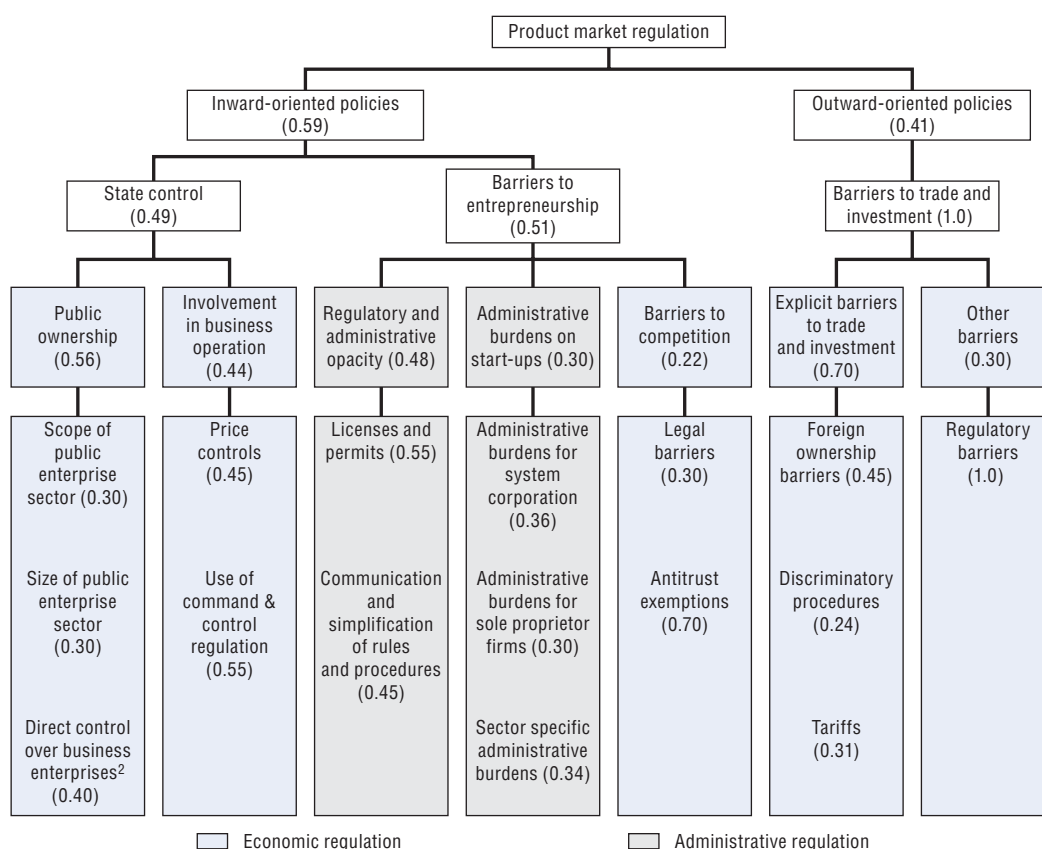
As noted in the chapter, product-market competition is a key driver of productivity growth in OECD countries.¹ To gauge the extent of restrictions on competition in product markets and identify weaknesses in regulatory frameworks, the OECD Economics Department has constructed a set of quantitative indicators of product-market regulation (PMR). PMR assessments are systematically done for all member economies, and they have been conducted for a small but increasing number of non-members as well. They provide a basis for assessing countries' performance in a comparative context. The ability to benchmark current regulation and future policy choices in this manner is an important element of the OECD "peer review" of economic policies and has proven useful in encouraging countries to implement structural reforms that can enhance economic performance.

Overview of the PMR system

The PMR indicator system has a pyramidal shape, with 16-low-level indicators at the base, three intermediate-level aggregate indicators in the middle and one overall indicator of the degree of product-market regulation at the apex (Figure 2.A1.1). The low-level indicators capture specific aspects of the regulatory regime, summarising information on government responses to more than 140 questions concerned with economy-wide or industry-specific regulatory provisions. They reflect regulatory policy settings as of end-March 2007; in some instances, changes have been adopted since then but it has not been possible to recalculate the indicators. The intermediate-level aggregate indicators and the overall PMR indicator are constructed as weighted averages of their constituent lower-level indicators.² The low-level and intermediate indicators are divided into two main groups: those concerned with inward-oriented policies, comprising state control and barriers to entrepreneurship; and those focusing on outward-oriented policies, comprising barriers to trade and investment.

The 16 low-level indicators in the PMR system cover a wide range of product market policies. This annex provides a brief description of each low-level indicator, the benchmarking of Ukraine against OECD members with respect to that indicator and, where necessary, commentary on the interpretation of the results for Ukraine. (The OECD data reflect the most recent PMR exercise, conducted in 2003.) First, however, it is necessary to comment briefly on what the PMR indicators do and do not cover.

- The indicators are designed to reflect regulations that have the potential to reduce the intensity of competition in areas of the product market where technology and market

Figure 2.A1.1. The PMR indicator system¹

1. The numbers in brackets indicate the weight given to each lower-level indicator in the calculation of the higher-level indicators immediately above it. The weights were derived by applying principal components analysis to the set of indicators in each of the main regulatory domains (state control, barriers to entrepreneurship, barriers to trade and investment, economic regulation and administrative regulation). The same approach was used to derive the weights used to calculate the indicators of inward and outward-oriented policies and the overall PMR indicators. The principal components analysis was based on the original 1998 data.
2. Two indicators from the 1998 version of the PMR indicators (“Special voting rights” and “Control of public enterprise by legislative bodies”) have been combined into this indicator.

Source: OECD, Conway, P., V. Janod and G. Nicoletti (2005).

conditions make competition viable; they are, therefore, of greater direct relevance to some sectors than others. However, some of the indicators capture aspects of regulatory institutions and procedures that, if deficient, may reduce the overall quality of regulation: these are likely to be relevant to virtually all sectors.

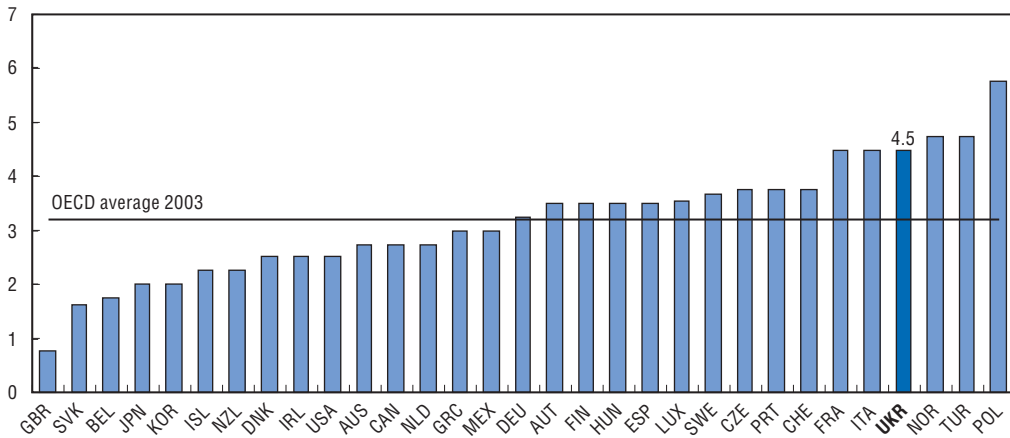
- As noted in Chapter 2, the indicators are based on explicit policy settings and thus reflect formal regulation only. “Informal” regulatory practices, such as administrative guidance or self-disciplinary measures of professional associations, are captured to only a very limited extent in the PMR indicators system. Similarly, the way in which regulations are applied by enforcement authorities, which can have an enormous impact on competition in a given market, is also only reflected to a very limited degree in the PMR indicators.
- The indicators are designed to facilitate broad comparisons among OECD members and to some extent their construction reflects norms, practices and institutional characteristics more typical of OECD members. In some cases, therefore, individual

indicators may have a tendency to generate surprisingly favourable or unfavourable scores for emerging economies.

Results of the PMR assessment of Ukraine

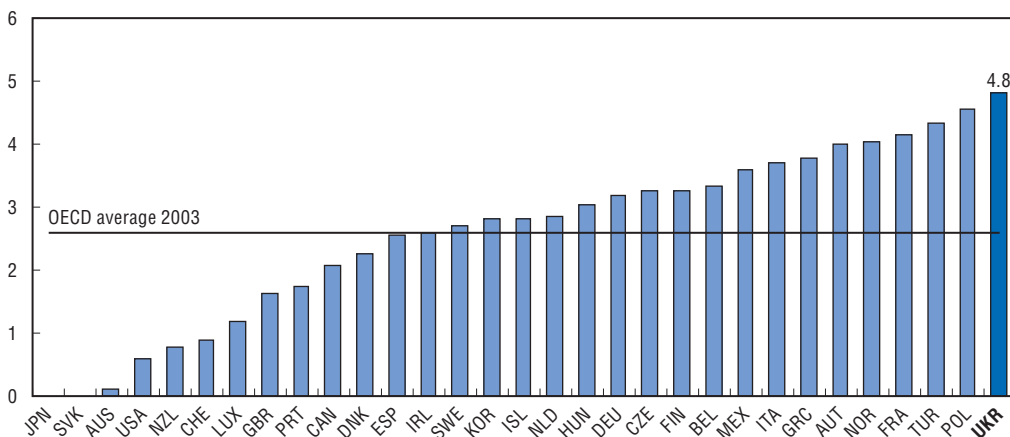
The *scope of public enterprise* indicator measures the pervasiveness of state ownership across business sectors. It reflects the proportion of major sectors in which the state holds an equity stake in at least one firm.

Figure 2.A1.2. **Scope of public enterprise**



The indicator for the *size of public enterprise* reflects the overall size of the state-owned enterprise (SOE) sector relative to the size of the economy as a whole.

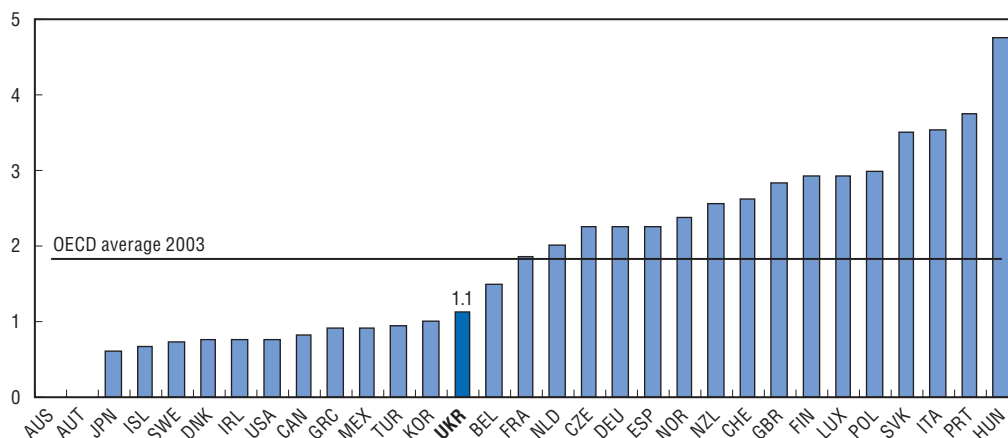
Figure 2.A1.3. **Size of public enterprise**



Direct control over business enterprises measures the existence of government special voting rights in privately owned firms, constraints on the sale of state-owned equity stakes, and the extent to which legislative bodies control the strategic choices of public enterprises. Ukraine's low score on this indicator is in part a product of its high score on the scope and size of the public sector: the authorities prefer to exercise control via ownership

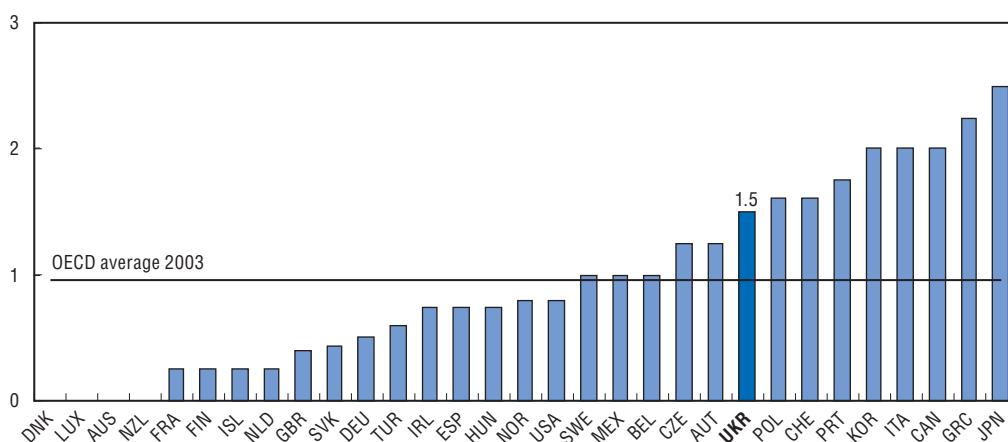
stakes rather than the assertion of special rights (such as golden shares, which do not exist in Ukraine). Moreover, the role of the legislative branch is relatively limited: the SOE sector is overseen by the executive.

Figure 2.A1.4. **Direct control over business enterprises**



The *price controls* indicator reflects the extent of price controls in specific sectors. Ukraine's results in this instance are greatly affected by the construction of the indicator. The indicator looks at a range of sectors commonly subject to price regulation in the OECD area. Air travel, road freight and telecommunications – three areas in which Ukraine does not regulate prices – constitute three-quarters of the indicator. Retail distribution, where price regulation in Ukraine is relatively extensive, accounts for just one-quarter of the indicator score.

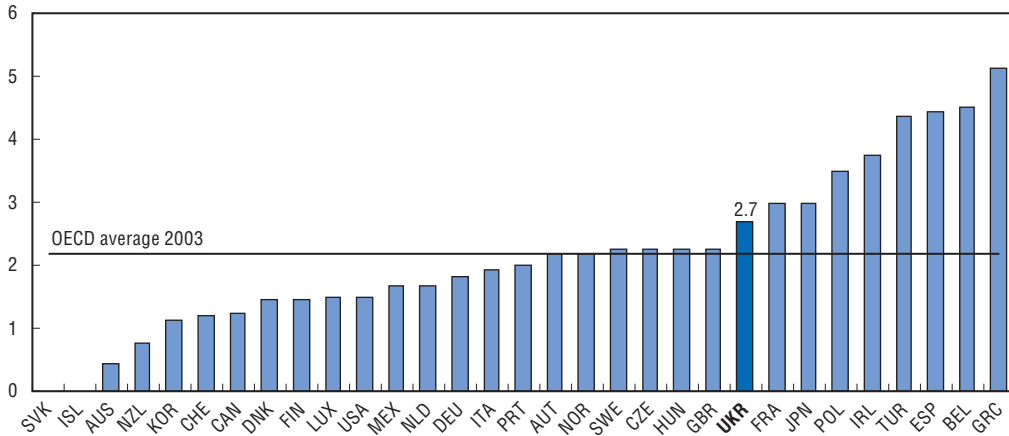
Figure 2.A1.5. **Price controls**



The *command and control regulation* indicator measures the extent to which the authorities use coercive (as opposed to incentive-based) regulation, both in general and in specific service sectors. Ukraine's rough average conceals a high degree of variation in the policy settings that underlie this indicator, which range from its very liberal policies vis-à-

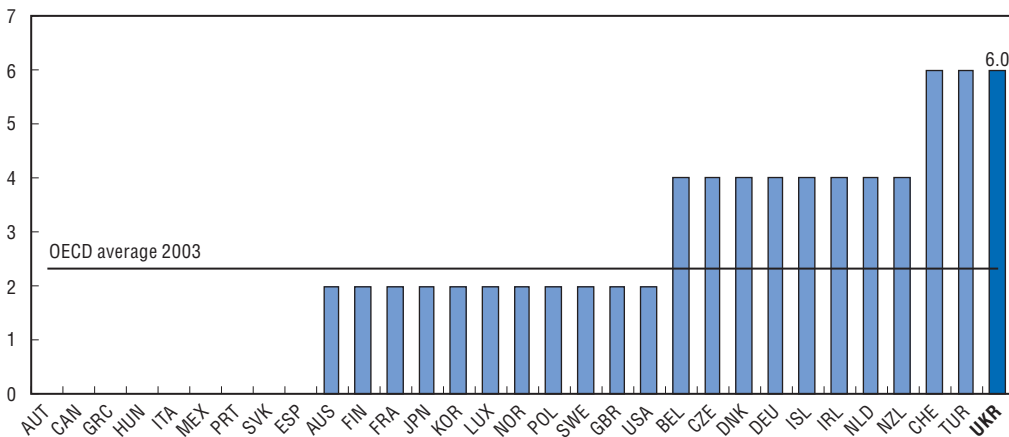
vis road freight and air travel, which are marketised sectors, to a much greater reliance on command and control in regulating the railways, which remain a vertically integrated state-owned monopoly.

Figure 2.A1.6. **Command and control regulation**



The licenses and permits indicator reflects the presence or absence of such devices as “one-stop shops” and “silence is consent” rules for getting information on, and issuing, licenses and permits. Ukraine’s score reflects the heavy burden of licences and permits that remains even in the wake of the adoption of a new, more liberal law on the permit system in 2005.

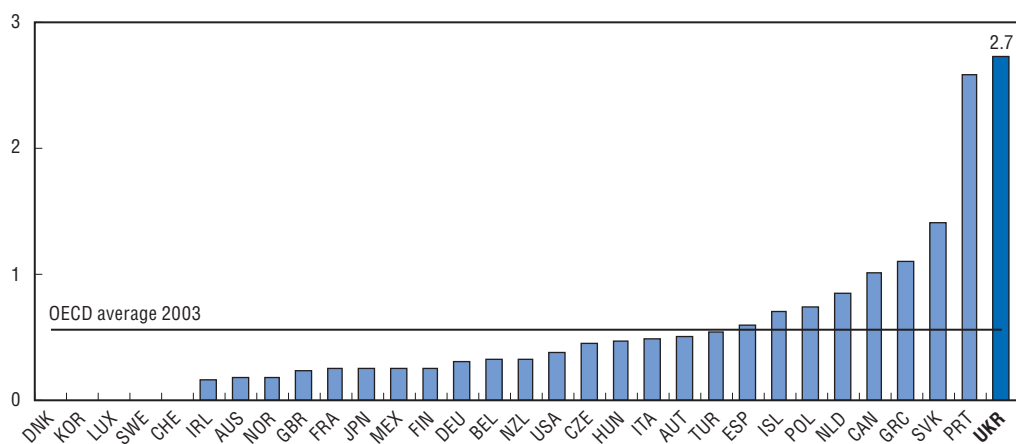
Figure 2.A1.7. **Licenses and permits**



Communication and simplification of rules and procedures refers to aspects of the government’s communication strategy and efforts to reduce/simplify the administrative

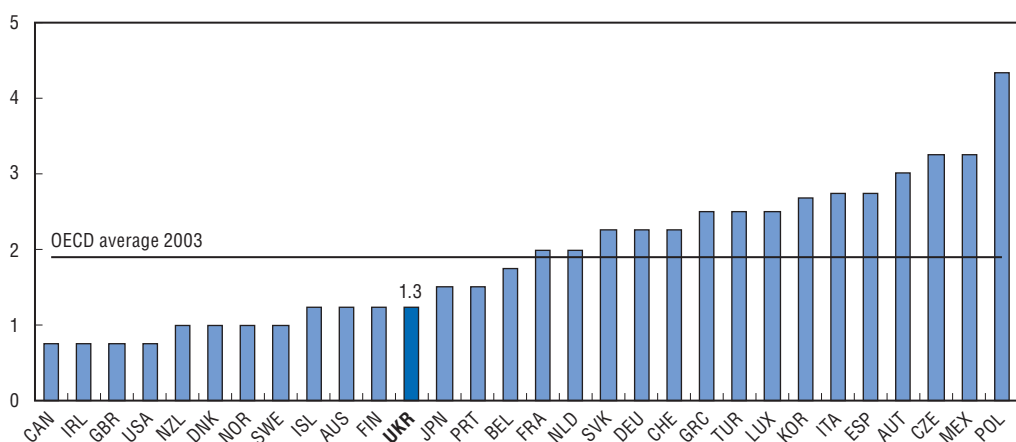
burden of interacting with government. The reasons for Ukraine's poor performance on this indicator are discussed in Chapter 2.

Figure 2.A1.8. **Communication and simplification**



The *start-up: corporations* indicator reflects the number of mandatory procedures involved in the creation of new companies, as well as the number of agencies involved and the total cost of start-up procedures in both time and money. Costs have been converted at PPP exchange rates.³ Ukraine's indicator score reflects the substantial progress it has recently made in this area.

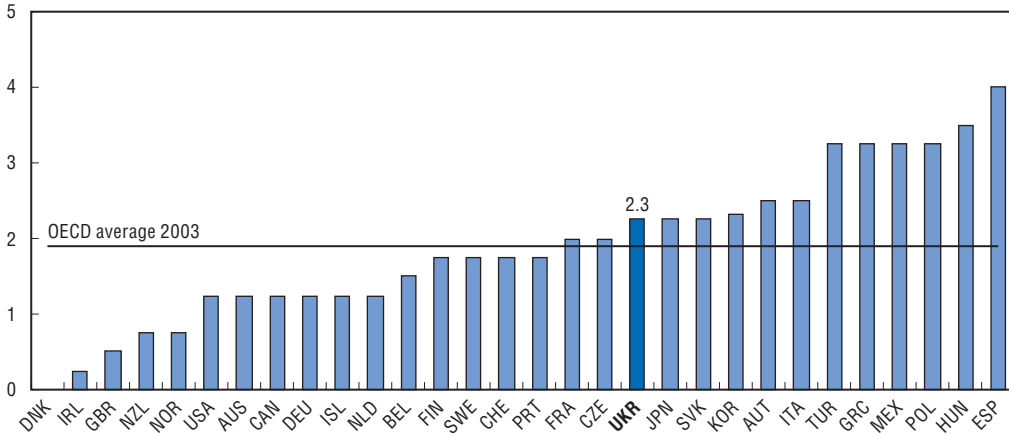
Figure 2.A1.9. **Start-up: corporations**



Start-ups: sole proprietors is constructed in a more or less identical fashion to the indicator for new companies but is concerned with unincorporated small businesses.

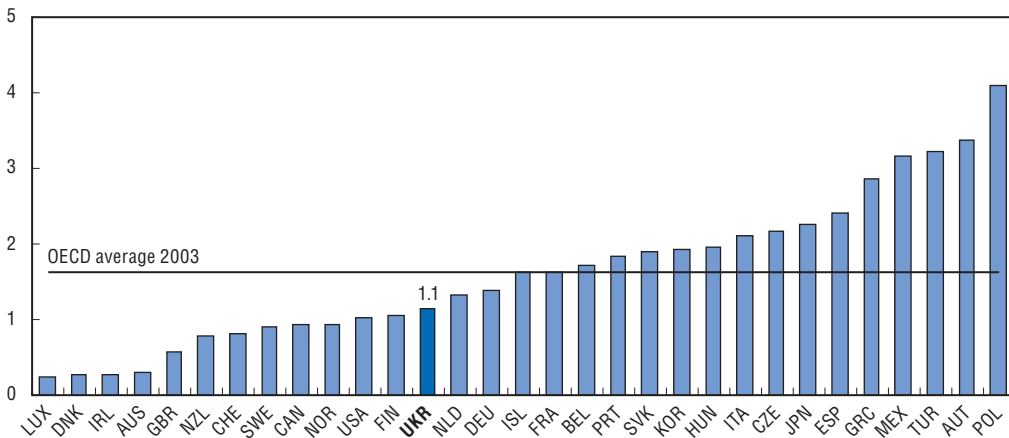
Again, costs have been converted at PPP exchange rates. Here, too, Ukraine’s score reflects recent improvements in the regulatory framework.

Figure 2.A1.10. **Start-up: sole proprietors**



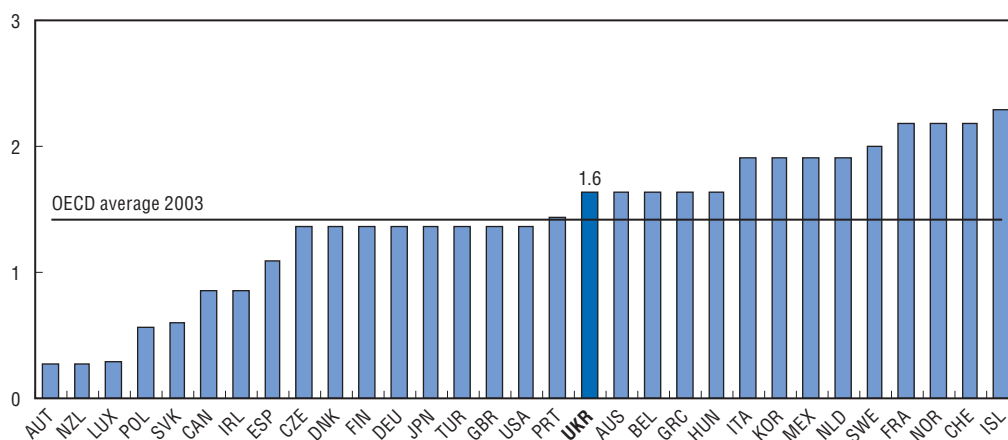
The *sector-specific administrative burdens* indicator reflects administrative burdens in the road transport and retail distribution sectors, two sectors that are commonly subject to rather heavy, competition-limiting regulation in OECD members. Ukraine scores just about the OECD average on regulation of retail distribution, but its policy settings in respect of road transport are exceptionally liberal.

Figure 2.A1.11. **Sector-specific administrative burdens**



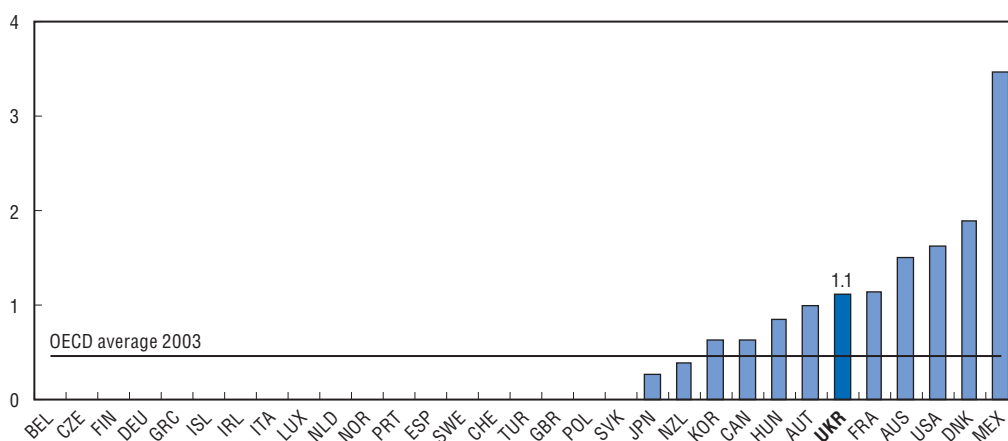
The *legal barriers* indicator refers specifically to the scope of explicit legal limitations on the number of competitors allowed in a wide range of business sectors or subsectors.

Figure 2.A1.12. **Legal barriers to entry**



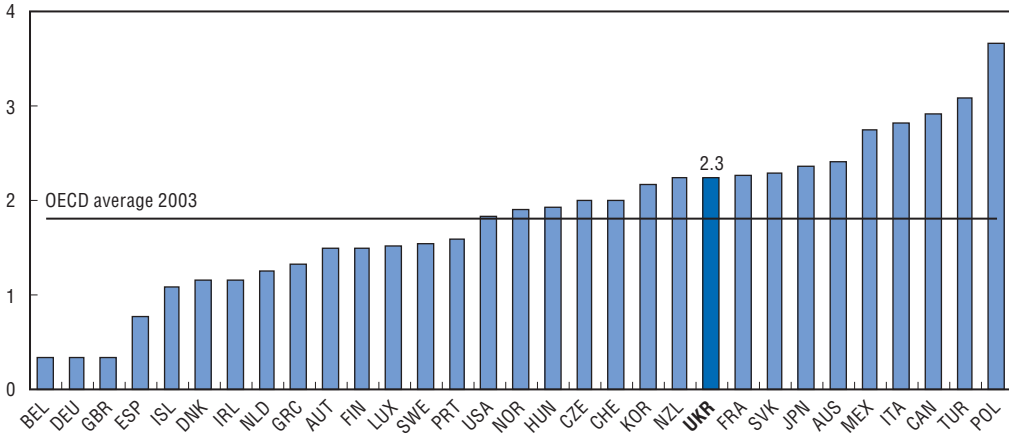
The indicator for *antitrust exemptions* measures the scope of exemptions to competition law that are either extended to public enterprises or authorised by government authority. In Ukraine's case, the above-average score simply reflects the power of the government to override decisions of the competition authority (see Chapter 3).

Figure 2.A1.13. **Antitrust exemptions**



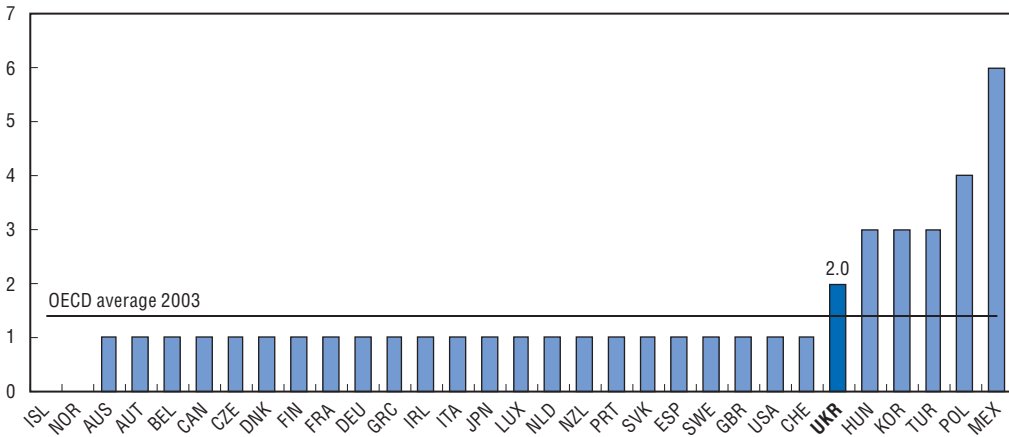
Ukraine ranks close to the OECD average on the *ownership barriers* indicator. Its score reflects legal restrictions on foreign acquisition of equity in public and private firms in the telecommunications and airlines sectors.

Figure 2.A1.14. **Barriers to foreign ownership**



Tariffs reflects the (simple) average of a country's most-favoured-nation tariffs.

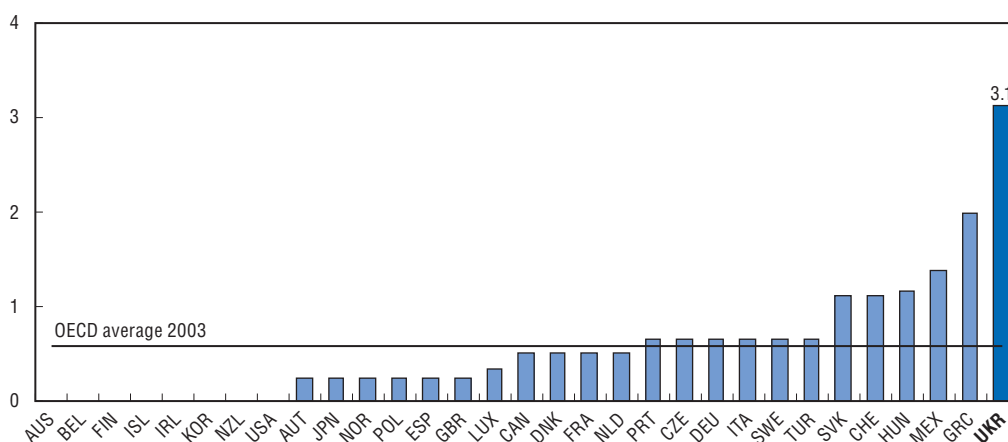
Figure 2.A1.15. **Tariffs**



The *discriminatory procedures* indicator reflects the extent of discrimination against foreign firms at the procedural level. It does not cover restrictions on foreign ownership, which are captured by *barriers to foreign ownership*. In Ukraine's case, the high score reflects

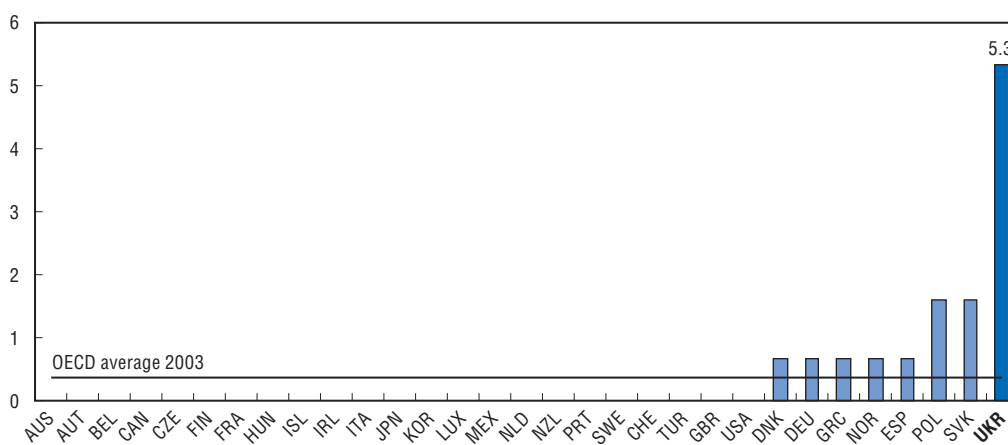
the failure to enshrine the principle of national treatment in legislation and the limited right of redress available to foreign companies.

Figure 2.A1.16. **Discriminatory procedures**



Finally, the indicator for *regulatory barriers* reflects other barriers to international trade, such as international harmonisation of standards and regulatory norms or mutual recognition agreements. Ukraine's very poor score on this indicator is a reflection of the lack of mutual recognition agreements with other countries and the absence of provisions encouraging regulators to use internationally harmonised standards and certification procedures.

Figure 2.A1.17. **Regulatory barriers to trade**



Notes

1. See OECD (2002), Nicoletti and Scarpetta (2003); Conway *et al.* (2005); and Conway *et al.* (2006) for empirical evidence on the links between the intensity of competition in product markets and productivity performance.
2. See Conway *et al.* (2005) for more detailed information on the content of the regulatory questionnaires, the methodology used to construct the low-level indicators and the aggregation of the summary indicators.
3. The results, therefore, differ from other published OECD assessments. Given the gap between the hryvnia's market exchange rate and purchasing-power parity, however, a meaningful comparison requires the use of PPP exchange rates for all countries.

ANNEX 2.A2

The small business sector and the simplified tax system

It is exceptionally difficult to assess the state of the small business sector in Ukraine. In part, this reflects the difficulties that statistical agencies face in tracking small business activity in many transition economies. However, it also reflects the fact that most official data published on the small business sector have hitherto covered only companies – i.e. small enterprises (companies and other types of registered legal person). The large number of individuals registered as entrepreneurs without the formation of any legal entity are not included in these statistics; they are monitored chiefly by the State Tax Administration.¹ Combining the available data on these two segments of the small business sector, in addition to those covering households engaged in private-plot agriculture, suggests that small business employment is far greater than it would appear at first glance and that most small business employees are not in the small enterprise sector (Table 2.A2.1).

Table 2.A2.1. **Small business employment**

Thousands of persons, unless indicated otherwise

Employed in	2001	2002	2003	2004	2005	2006 ¹
Small incorporated companies	1 818.7	1 932.1	2 052.2	1 978.8	1 890.4	1 969.0
Unincorporated small businesses ²	2 335.0	2 629.8	3 080.1	3 165.3	3 282.9	3 282.9
Household agriculture	140.0	121.9	117.7	119.2	104.3	105.6
All small business	4 293.7	4 683.8	5 250.0	5 263.3	5 277.6	5 357.5
Growth (%)		9.1	12.1	0.3	0.3	1.5
Share of total employment (%)	21.5	23.3	26.0	25.9	25.5	n.a.

1. Ukrstat estimates as of September 2006.

2. The data refers to individual entrepreneurs and workers hired by individuals.

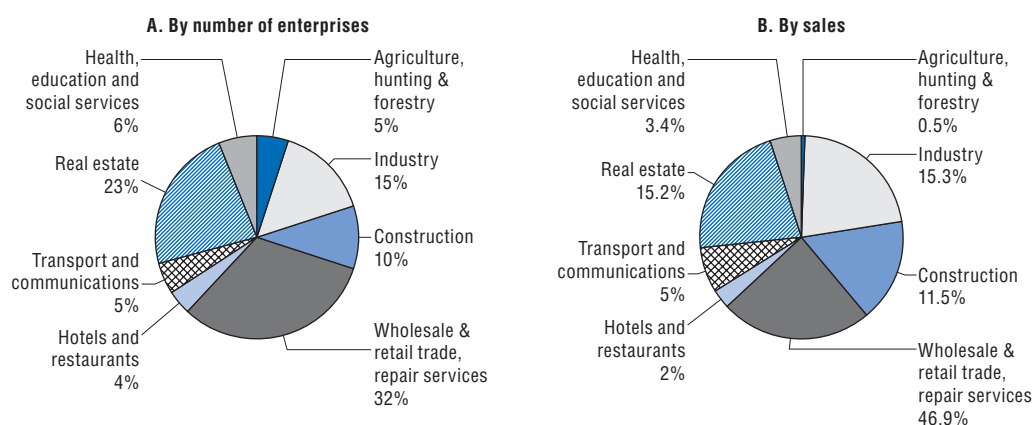
Source: Ukrstat, State Tax Administration.

This, however, must be set against the inflation of the employment numbers for the unincorporated small business sector: while many of those registered are genuinely small entrepreneurs, a very large proportion are believed to be salaried employees who register as small entrepreneurs and pretend to operate as independent contractors in order to secure the benefits of the simplified tax system (STS). It is impossible to estimate the scale of such tax evasion strategies with any precision. However, it is noteworthy that the average unincorporated small business in Ukraine employs only about 1.6 persons, and this figure has been falling, slowly but steadily, over the last six years; in Russia, by contrast, the average urban unincorporated small business in 2004 employed around


4.5 people and the average number of employees was rising.² The fact that so many Ukrainians registered as individual entrepreneurs appear to work entirely alone reinforces the perception that many are not actually self-employed entrepreneurs at all but are seeking to exploit the benefits of the STS. A similar phenomenon may be observed in the small companies sector: the average number of employees in small companies fell from around 8 in 2000 to 6.4 in 2006.³ It is difficult to see why the number of employees per small company should be falling so consistently, apart from the incentives for companies with close to the 10- or 50-employee mark either to fragment businesses or under-report employment in order to remain eligible for the STS.⁴

Small companies tend to be concentrated in services, particularly trade and catering (Figure 2.A2.1) and account for just 2.3% of industrial production. Their largest contributions to industrial output are in textiles, wood and paper, the three major sectors in which they accounted for over 10% of output.⁵ The State Tax Administration reports that individual entrepreneurs are likewise concentrated in retail and wholesale trade and repair services, hospitality and catering, passenger transport, real estate and agriculture. However, it does not release data pertaining to the number of individual entrepreneurs engaged in these activities or their turnover.

Figure 2.A2.1. **Structure of small enterprise sector, 2005**
% of total



Source: State Committee for Statistics of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072632770482>

It is extremely difficult to assess output trends in the small business sector. There are virtually no publicly available data on the output of the unincorporated sector, and even the data on the small corporate sector are patchy. On the official data, the small companies sector in 2005 accounted for just about 5.5% of total output, down from 8.1% in 2000. This declining trend contrasts starkly with the experience of neighbouring Russia.⁶ Since small companies' share of total employment actually rose slightly over the period, this implies that the productivity of small companies relative to the rest of the economy fell by around 20%. Such an outcome is particularly surprising in view of the evidence that small businesses were hit harder by the 1998 financial crisis than larger entities and would thus have been expected to grow faster as domestic demand recovered.⁷ This may be a further indirect indication of the scale of shadow activity in the small business sector. Such an impression is reinforced by the official data on financial outcomes. Despite the

concentration of small businesses in booming, consumption-oriented sectors like retail trade, the officially reported consolidated financial result for small businesses in all sectors except health, education and social services was *negative* in 2004-05. This suggests large-scale concealment of profits.

Notes

1. A great deal of activity that in other countries would be carried out by small companies is in fact done by small entrepreneurs who do not form any legal entity, preferring to operate under one of the simplified tax regimes for individuals.
2. Based on data in Rosstat (2005).
3. The corresponding figure for Russia in 2004 was 9.1.
4. These are the two employment thresholds that can affect a company's status with respect to the STS.
5. No comparable data are available for the sector's weight in construction or services.
6. See OECD (2004a).
7. Small businesses generally face harder budget constraints than large enterprises. Moreover, they are largely dependent on household consumption, so the downward wage adjustment after the crisis would have hit them hard.

ANNEX 2.A3

*Labour productivity at firm level*Table 2.A3.1. **Labour productivity difference between entry cohorts and old firms**

Sector	Age 0-2, exits by age 3	Age 0-2, too early to know	Age 0-2, survives to age 3	Age 3-5, exits by age 6	Age 3-5, too early to know	Age 3-5, survives to age 6	Age 6 years +
Food and beverages	-44.5	0.3	-7.5	-41.1	-21.1	-6.3	-32.8
Textiles	75.2	46.2	75.8	35.5	54.9	48.9	10.8
Clothing and furs	41.3	50.9	70.6	50.9	69.7	38.1	7.9
Leather and leather goods	41.5	29.9	85.5	63.5	18.9	78.0	2.8
Wood and wood products	118.9	107.8	116.1	55.0	86.2	44.1	-8.4
Pulp and paper	90.8	103.6	150.7	91.3	135.6	86.7	43.7
Publishing and printing	123.8	117.9	119.9	29.1	123.9	91.0	63.2
Chemicals	77.6	64.1	55.1	19.7	62.1	54.6	31.1
Rubber and plastics	93.8	90.5	135.4	30.4	114.7	75.3	20.1
Other non-metallic mineral products	-10.5	-21.0	31.0	-4.4	11.8	11.5	-21.7
Basic metals	-28.6	-71.9	-36.2	-54.1	-57.4	4.8	-40.1
Fabricated metal products	31.6	14.4	59.0	32.6	16.4	73.8	20.5
Machinery and equipment	108.7	97.4	112.4	51.1	98.2	79.1	44.5
Electrical machinery and apparatus	94.6	99.2	80.1	63.9	58.7	95.1	61.5
Radio and TV equipment and apparatus	135.0	129.2	193.9	17.0	211.0	122.7	96.2
Medical and optical instruments, timepieces	151.6	144.7	166.9	57.9	152.1	124.8	74.0
Motor vehicles and trailers	30.3	30.4	75.6	114.1	40.3	40.3	22.7
Other transport equipment	-19.1	69.0	42.8	4.9	23.1	62.6	31.4
Average	61.8	61.3	84.8	34.3	66.6	62.5	23.7

Note: Each row contains a set of coefficients from an OLS regression also including year effects. They represent unweighted per cent differences in labour productivity between each entry cohort and old firms. Old firms are those existing prior to the transition or ever having had some state ownership. The “too early to know” category is present because it is not known as of the last year covered in the dataset whether the firm survives to the particular age or not.

Source: Brown and Earle (2007).

Table 2.A3.2. **Labour productivity dispersion in Ukraine**

Sector	1989		1992		1995		2000		2005	
	SD	10-90	SD	10-90	SD	10-90	SD	10-90	SD	10-90
Food and beverages	0.77	1.94	0.81	2.07	0.96	2.47	1.76	4.24	1.86	4.57
Textiles	0.65	1.38	0.66	1.53	1.01	2.47	1.94	4.88	1.71	3.97
Clothing and furs	0.54	1.36	0.45	1.12	0.99	2.39	1.72	4.21	1.46	3.53
Leather and leather goods	0.29	0.79	0.57	1.25	1.02	2.69	2.05	5.15	1.79	4.32
Wood and wood products	0.30	0.75	0.57	1.46	0.93	2.35	1.74	4.44	1.62	3.95
Pulp and paper	0.43	1.10	0.70	1.79	1.19	2.69	1.84	4.46	1.67	3.93
Publishing and printing	0.28	0.46	0.42	1.00	0.56	1.21	1.39	3.27	1.37	3.27
Chemicals	0.61	1.62	0.76	1.80	1.01	2.34	1.69	4.22	1.55	3.82
Rubber and plastics	0.51	1.36	0.78	2.01	1.06	2.64	1.75	4.29	1.56	3.78
Other non-metallic mineral products	0.43	1.14	0.66	1.60	0.94	2.39	1.68	3.94	1.59	3.89
Basic metals	0.59	1.58	1.06	2.71	1.34	3.85	2.04	4.83	1.88	4.60
Fabricated metal products	0.41	0.88	0.75	1.86	1.02	2.56	1.72	4.24	1.54	3.77
Machinery and equipment	0.37	0.95	0.62	1.54	0.86	2.07	1.68	4.18	1.55	3.63
Electrical machinery and apparatus	0.52	1.27	0.79	1.91	1.19	3.03	1.79	4.50	1.56	3.88
Radio and TV equipment and apparatus	0.36	1.07	0.68	1.67	0.89	2.28	2.24	5.54	1.96	4.80
Medical and optical instruments, timepieces	0.37	0.87	0.49	1.23	0.95	2.20	1.92	4.56	1.87	4.62
Motor vehicles and trailers	0.33	0.74	0.57	1.67	0.86	2.47	1.59	4.17	1.72	4.39
Other transport equipment	0.34	1.00	0.65	1.61	0.80	2.18	1.77	4.03	1.76	3.88
Average	0.45	1.12	0.67	1.66	0.98	2.46	1.79	4.40	1.67	4.03

Note: SD refers to standard deviation of labour productivity, and 10-90 refers to the percentage difference in labour productivity between the firm at the 90th percentile in the distribution and the firm at the 10th percentile.

Source: Brown and Earle (2007).

Chapter 3

Raising the competitiveness of the economy

This chapter explores the challenge Ukraine faces in maintaining and enhancing its competitiveness over the long term. It begins with an analysis of some indicators of current competitiveness and the trends underlying recent developments. Two major conclusions emerge from this first section:

- Although Ukraine's current international specialisation compares relatively favourably with its overall productivity level, it is rather narrowly based – Ukraine has revealed comparative advantages in only a limited number of sectors.
- While productivity growth has been particularly impressive in recent years, Ukrainian producers will come under increasing pressure in the years to come from rapidly rising energy and labour costs, and the tendency towards real appreciation vis-à-vis Asian countries whose currencies are currently dollar-linked. At the same time, it will become increasingly difficult to maintain strong productivity growth, particularly given that opportunities for relatively easy productivity gains via labour-shedding and increased capacity utilisation are becoming rarer.

The analysis therefore turns to the question of what Ukraine can do to facilitate continued rapid convergence, focusing in particular on the potential role that enhanced competition could play in strengthening competitiveness. The evidence strongly suggests that, in Ukraine as elsewhere, competition stimulates better firm performance; but competition in many markets in Ukraine is still too weak, owing to both structural factors and, in many spheres, anti-competitive regulation and weak institutions. Finally, it is argued that increased FDI inflows and renewed privatisation could both help Ukraine maintain strong productivity growth. The chapter presents the results of a study of the effect of privatisation on multifactor productivity in Ukraine, using panel data for the vast majority of initially state-owned manufacturing firms. This analysis confirms the substantial benefits of privatisation – whether to domestic or foreign owners – for productivity growth in Ukraine, benefits that are found to increase over time. Moreover, the chapter points to evidence of substantial complementarities between competition and privatisation: as a rule, private firms respond more readily to enhanced competition than do their state-owned rivals, and privatisation generates greater benefits when combined with robust competition.

Ukrainian competitiveness: an assessment

“Competitiveness” is a broad concept, used in many ways and in many contexts. When applied to countries, it often denotes the ability to trade and integrate in global markets. In that sense, it involves having a sufficient number/range of industries that are able to compete successfully against foreign producers on both external and domestic markets.¹ This understanding of competitiveness concerns not only firms’ productivity, but also the quality of their output and their ability to differentiate products. At times, “competitiveness” is also used in a much broader sense, to refer to the large number of factors, institutions and policies of a country that can spur its firms’ dynamism. These include the legal and regulatory framework, the education and innovation systems, and other conditions favouring or impeding entrepreneurship. This broader definition is typically the one that, implicitly or explicitly, underlies the kind of competitiveness assessments issued by the World Economic Forum or various national competitiveness bodies.

Throughout this chapter, competitiveness will refer essentially to the first, narrower concept, excluding any analysis of the policy inputs that could have an impact on whether, to what extent and at what cost firms are able to become more competitive – those issues have largely been addressed in the previous chapter. Three indicators of competitiveness will be examined in turn: the quality and differentiation of production and exports, the ability to generate fast productivity growth, and trade performance. In the short run, exchange-rate movements and related shifts in labour-cost competitiveness are, of course, important factors for explaining a country’s performance, but they will be examined here on a medium-to-long-term perspective: the undervaluation of a currency with respect to fundamentals may be helpful in the short run, but is not necessarily a sustainable source of competitive advantage. Over the long run, real appreciation in a catching-up economy is inevitable,² and, to the extent that it goes together with rising living standards, desirable. This discussion therefore aims to determine which Ukrainian sectors already appear to demonstrate a degree of international competitiveness, together with fast productivity gains, and to identify the challenges that must be addressed if they and/or other Ukrainian sectors are to grow more competitive in the future.

Ukraine’s export structure is highly specialised

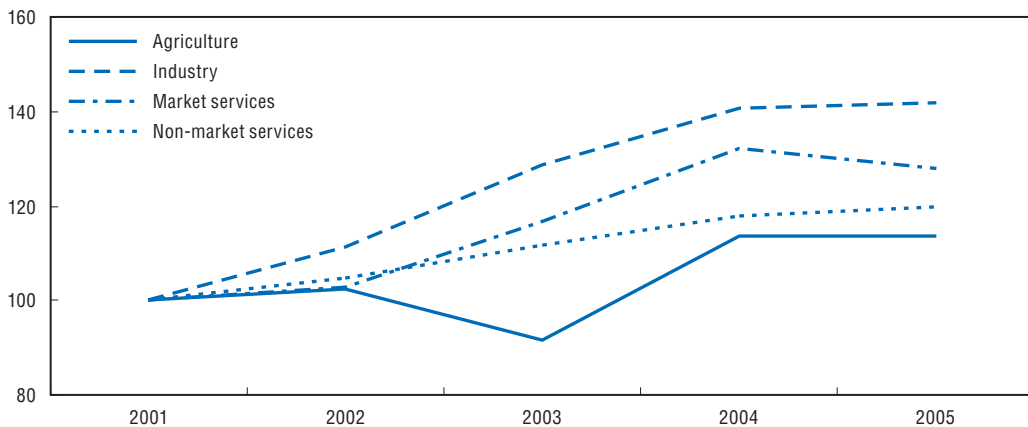
As noted in Chapter 1, the structure of Ukrainian industrial production and exports is highly concentrated and consists predominantly of goods with a low degree of processing. Moreover, the trend in recent years has been towards still greater concentration of exports: the three largest categories of exports – food products, minerals and metals – accounted for approximately 65% of total export revenues in 2006, up from 59% in 2000 (Table 3.A1.1). This reflects a combination of factors:

- Artificially low gas prices favoured further specialisation in energy-intensive industries, particularly steel and chemicals.


- Export prices for steel products more than doubled between 2001 and 2006 in dollar terms. In volume terms, however, exports of iron and steel grew modestly, at an average rate of 2% per year during 2003-06.³
- The development of new industries has been impeded by poor framework conditions for entrepreneurship, the absence of a level competitive playing field and – last, but certainly not least – the very low penetration of export-oriented FDI. Of course, low FDI is at least partly a consequence of poor framework conditions. Given a better business environment, the low level of wages and the relatively high skill level of the workforce would constitute a particularly attractive factor for FDI and the development of more labour-intensive industries.
- Ukraine retains a strong comparative advantage in agriculture and food. While the performance of its agro-industries has been remarkable, the lack of restructuring in the farm sector itself has translated into very slow productivity gains there (Figure 3.1 and Annex 2.A2). However, WTO accession is likely to intensify pressures for agricultural restructuring, which may also be facilitated by the involvement of the country's relatively dynamic agro-industrial sectors. The latter would benefit from greater upstream efficiency and could, as in Poland, become import catalysts of market-oriented restructuring in the farm sector.⁴

Figure 3.1. **Labour productivity index by sector**

Index 2001=100



Source: Derived from State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072646730285>

The analysis of revealed comparative advantages (RCA) at a more disaggregated level confirms that only a few Ukrainian manufacturing sectors have reached a degree of international competitiveness that would enable them to export on a significant scale. Apart from energy intensive-sectors (iron and steel, inorganic chemicals and fertilisers) and mineral products, Ukraine's major RCAs lie in cereals, vegetable fats, and cork and wood. The only industry in the machine-building sector where Ukraine enjoys a significant RCA is the production of railway vehicles and equipment, exports of which have grown strongly since 2000.⁵ Otherwise, Ukraine exhibits a limited degree of specialisation in only a handful of sectors. The structure of RCAs has not evolved much over the last decade,

except for cereals, the export performance of which has been relatively volatile. On the other hand, the country has substantial revealed comparative disadvantages in investment goods, telecommunications equipment, consumer goods, cars, pharmaceuticals and, of course, hydrocarbons. These comparative disadvantages are also far more pronounced today than a decade ago, reflecting the growing demand for more sophisticated goods.

Table 3.1. Revealed comparative advantages

SITC, rev 3	RCA								Export share	
	1996	2000	2001	2002	2003	2004	2005	2006	2006	Cumul.
67 Iron and steel	27.3	33.3	29.7	28.4	29.7	31.8	33.5	34.9	38.5	38.5
04 Cereals and cereal preparations	3.8	-0.1	2.6	5.5	-0.5	2.1	4.1	3.6	3.9	42.4
79 Other transport equipment (railway vehicles and equipment, ...)	2.1	1.3	1.6	2.3	2.8	4.6	3.2	3.3	3.9	46.3
28 Metalliferous ores and metal scrap	4.5	5.9	3.7	3.5	1.9	2.5	2.7	2.6	3.9	50.1
42 Fixed vegetable fats and oils, crude, refined or fractionated	1.0	1.5	1.1	1.6	2.1	1.3	1.3	2.2	2.4	52.6
56 Fertilizers	3.9	2.8	2.1	2.0	2.3	2.1	2.5	2.1	2.6	55.2
52 Inorganic chemicals	2.1	1.6	1.5	1.0	1.4	1.3	1.5	1.5	2.0	57.1
24 Cork and wood	-0.1	1.2	1.1	1.2	1.3	1.2	1.1	1.1	1.1	58.3
84 Articles of apparel and clothing accessories	1.6	2.4	2.6	2.3	1.9	1.6	0.9	1.0	1.8	60.0
35 Electric current	0.1	0.6	0.4	0.4	0.5	0.4	0.5	0.7	0.7	60.8
51 Organic chemicals	2.4	0.2	0.4	0.6	0.7	0.5	0.5	0.7	1.8	62.6
02 Dairy products and birds' eggs	1.1	0.9	1.5	0.6	0.9	1.2	1.4	0.7	0.9	63.4
68 Non-ferrous metals	0.6	2.9	2.3	1.5	0.6	0.1	0.2	0.6	2.2	65.6
22 Oil-seeds and oleaginous fruits	1.4	1.2	0.7	0.0	0.9	0.4	0.2	0.6	0.7	66.3
61 Leather, leather manufactures and dressed fur skins	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.5	0.7	67.0
11 Beverages	0.5	-0.1	0.1	0.1	0.1	0.5	0.8	0.5	0.9	68.0

Source: United Nations, Commodity Trade Statistics Database (COMTRADE).

While Ukraine substantially reoriented its trade away from CIS markets in the 1990s, the geographic structure of exports has remained relatively stable since 2000: Europe and CIS countries each account for around a third of Ukrainian exports (with a 20% share for Russia), and Asia for a quarter. The high commodity concentration of exports, however, coincides with a pronounced regional specialisation. Ferrous metals loom larger in Ukrainian exports to Asia (and Africa); machinery, equipment and food products in exports to CIS countries; minerals, textiles and leather in exports to Europe; and, finally, chemical products in exports to America (see Table 3.A1.1). The export performance of the machine-building industries in CIS markets reflects a quality/price trade off: Ukrainian producers continue to enjoy a cost advantage in those markets. On the import side, domestic producers face growing pressure from Asian countries, especially in light industry: Asia more than doubled its market share in Ukraine between 2001 and 2005, with China's share rising from 1.2 to 5.0% (Table 3.A1.2).

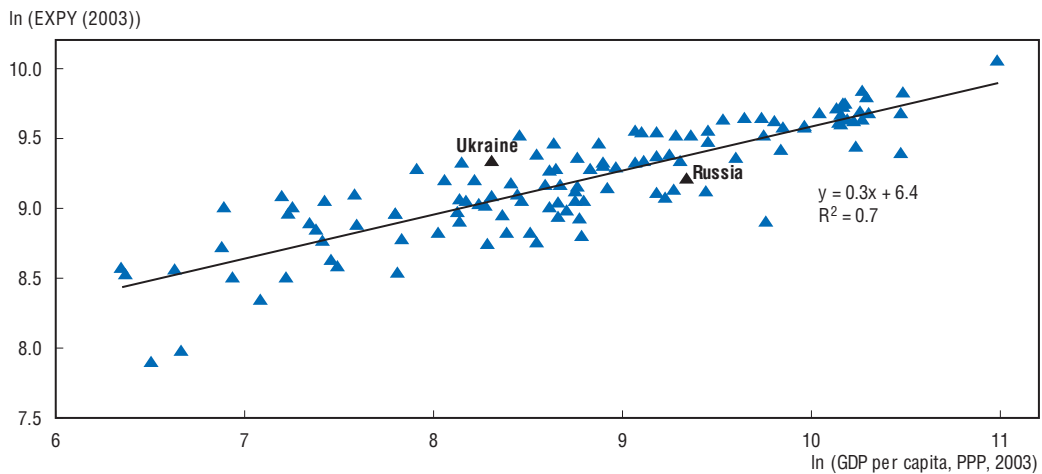
Given its distance from the technological frontier in most sectors, Ukraine's specialisation in the production of relatively low value added goods is hardly surprising. A more relevant question is whether or not the current structure of the export basket is in line with the aggregate level of productivity of the economy. It is possible to make such an assessment, using an indicator of the theoretical productivity level associated with a country's specialisation pattern developed by Hausmann, Hwang and Rodrik (2005). They

Table 3.2. Revealed comparative disadvantages

SITC, rev 3	RCA								Import share	
	1996	2000	2001	2002	2003	2004	2005	2006	2006	Cumul.
34 Gas, natural and manufactured	-32.5	-22.7	-20.2	-19.9	-11.7	-11.1	-9.5	-10.5	10.6	10.6
33 Petroleum, petroleum products and related materials	-8.6	-14.2	-11.7	-9.7	-9.8	-11.3	-9.7	-10.4	15.4	26.1
78 Road vehicles (including air-cushion vehicles)	-0.8	-1.9	-2.9	-4.5	-6.7	-6.8	-7.2	-9.1	10.5	36.6
54 Medicinal and pharmaceutical products	-1.1	-1.8	-2.1	-2.5	-2.5	-2.5	-2.8	-2.9	3.2	39.7
72 Machinery specialized for particular industries	-1.4	-1.5	-1.5	-2.5	-2.2	-2.4	-2.4	-2.8	3.9	43.6
74 General industrial machinery and equipment and machine parts	-0.7	-0.6	-0.5	-0.9	-1.3	-1.2	-1.8	-1.9	4.2	47.8
76 Telecommunications and sound-recording and reproducing apparatus and equipment	-0.5	-0.9	-1.3	-1.1	-0.8	-1.6	-2.6	-1.8	2.3	50.1
57 Plastics in primary forms	-0.3	-1.1	-0.9	-1.0	-1.1	-1.3	-1.7	-1.7	2.5	52.6
32 Coal, coke and briquettes	-2.5	-1.1	-0.9	-0.8	-1.2	-1.2	-1.1	-1.5	2.2	54.8
65 Textile yarn, fabrics, made-up articles and related products	-1.7	-2.4	-2.4	-2.2	-1.9	-1.9	-1.8	-1.4	2.0	56.8
89 Miscellaneous manufactured articles, n.e.s.	-0.9	-0.8	-0.8	-1.0	-0.7	-0.9	-1.3	-1.2	1.9	58.7
55 Essential oils and resinoids and perfume materials; toilet, polishing and cleansing preparations	-0.3	-0.6	-0.7	-1.0	-1.0	-0.6	-1.3	-1.2	1.5	60.2
77 Electrical machinery, apparatus and appliances and electrical parts thereof	0.1	-0.1	-0.7	-0.3	0.0	-0.7	-1.3	-1.1	3.9	64.1
03 Fish (not marine mammals), crustaceans, molluscs and aquatic invertebrates, and preparations thereof	-0.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.7	-0.9	1.0	65.1
64 Paper, paperboard and articles thereof	-0.9	-0.9	-1.2	-2.1	-1.8	-1.2	-1.2	-0.9	2.2	67.3
66 Non-metallic mineral manufactures	0.3	-0.2	-0.4	-0.4	-0.2	-0.5	-0.7	-0.9	1.8	69.1
71 Power-generating machinery and equipment	-1.3	-1.3	-0.6	0.3	-0.6	-1.6	-0.7	-0.9	2.3	71.4
87 Professional, scientific and controlling instruments and apparatus	-0.4	-0.7	-0.8	-0.5	-0.1	0.5	-0.6	-0.8	1.1	72.6
58 Plastics in non-primary forms	-0.2	-0.9	-0.9	-0.9	-1.0	-1.0	-0.8	-0.7	1.2	73.8
69 Manufactures of metals	-0.3	-0.2	2.2	3.2	0.4	0.6	-0.4	-0.6	2.2	76.0

Source: United Nations, Commodity Trade Statistics Database (COMTRADE).

begin with a measure of the revealed sophistication of each product, which is the weighted average GDP per capita of all the countries that export the good. The weight corresponds to the revealed comparative advantage of each country in that good. This measure of sophistication for each product is then used to measure the sophistication of a country's entire export basket – an indicator called EXPY (Figure 3.2). EXPY represents the “theoretical” income level associated with a country's export structure. It is, of course, positively correlated with actual income – i.e. rich countries tend to specialise in rich-country goods. More importantly, the authors find that fast-growing emerging market economies (EMEs) tend to have EXPYs that are well *above* what one would expect given their actual level of per capita income. In other words, successful EMEs manage to penetrate export markets dominated by wealthier countries. In 2003, Ukraine ranked relatively well on EXPY, suggesting that its export structure has been conducive to growth and will probably remain so for some time yet.

Figure 3.2. Relationship between *per capita* GDP and EXPY, 2003

Source: Hausmann, Hwang and Rodrik (2005).

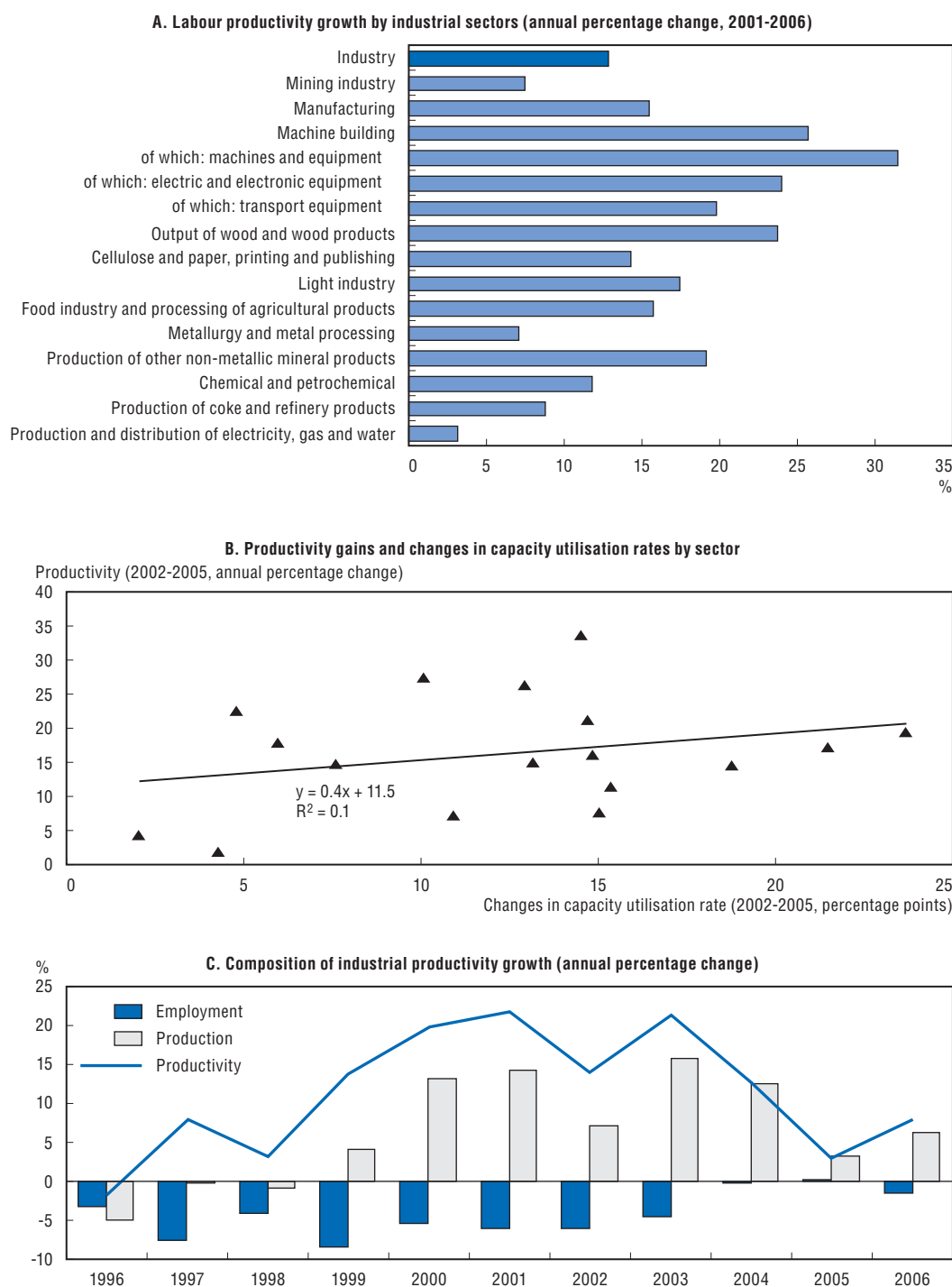
Productivity gains, though impressive, partly reflect the lag in industrial restructuring...

While the structure of exports appears to correspond reasonably well to Ukraine's current level of income, maintaining, if not increasing, productivity growth will be a challenge. As both nominal wages and energy prices are likely to continue to grow at a rapid pace, very strong productivity gains will be needed to match cost increases, especially given the current exchange-rate regime. As already noted in Chapter 1, productivity growth in industry following the 1998 financial crisis was relatively healthy until 2004 but slowed in 2005-06. Performance in manufacturing has been particularly impressive, with labour productivity growing by an average of 12.5% over 2001-06, despite the slowdown towards the end of the period. As expected, productivity growth has been significantly faster in industry than in services, especially non-market services (see Figure 3.1).

Productivity levels and trends probably also differ substantially among industrial sectors, but it is impossible to be precise, given the lack of data on value added or total employment by industrial sector. In their absence, labour productivity is computed using output rather than value added and employing a proxy for total employment which nevertheless covers roughly 84% of the total.⁶ While this may lead to a slight upward bias in the estimates of productivity growth,⁷ the following conclusions nevertheless certainly hold:

- Productivity gains have been particularly strong in machine-building and wood products, where Ukraine has exhibited comparative advantages, while lagging in mining, metallurgy, and electricity production and distribution. In general, however, most manufacturing sectors have recorded healthy performance, which is hardly surprising in a phase of global recovery (Figure 3.3A).
- These results in part reflect the more intensive use of production capacities: productivity gains have been somewhat stronger in industries that had more room to increase capacity utilisation (Figure 3.3B).
- Continued intensive labour-shedding, at least until 2003, contributed significantly to the rise in productivity (Figure 3.3C). This was undoubtedly a direct consequence of more

Figure 3.3. Productivity dynamics



Source: Derived from State Statistics Committee of Ukraine.

StatLink  <http://dx.doi.org/10.1787/072770872761>

active restructuring of firms, at a time when Ukraine was “catching up” on reforms in the transition process. While the speed of job reallocation between sectors and the pace of job creation were slower in Ukraine until the late 1990s,⁸ the rate of labour turnover increased markedly during 2000-06. Since 2004, industrial employment has stabilised and productivity growth has slowed, which suggests that this phase of relatively “easy” restructuring is over.

- Labour-shedding has been particularly intense in the sectors which were most exposed to foreign competition: machine-building and, above all, light industry. In the latter, production has been increasing at a very modest pace, and productivity gains stem chiefly from falling employment.

These findings on the role of labour-shedding are reinforced by a comparative analysis of the relationship between firms’ deviations from average labour productivity in their sectors and their employment share change. This measures the degree to which employment reallocation is productivity-enhancing. The results in Table 3.3 show that the relationship across the entire period is far stronger in Ukraine and Russia than Romania and particularly Hungary. In part, of course, the fact that labour reallocation has been more productivity-enhancing in Russia and Ukraine probably reflects the inefficiencies and structural distortions that existed in those countries at the start of the transition: misallocation of labour was less of a problem in Hungary than in most transition countries, and it was generally worse in former Soviet republics than in Central Europe.⁹

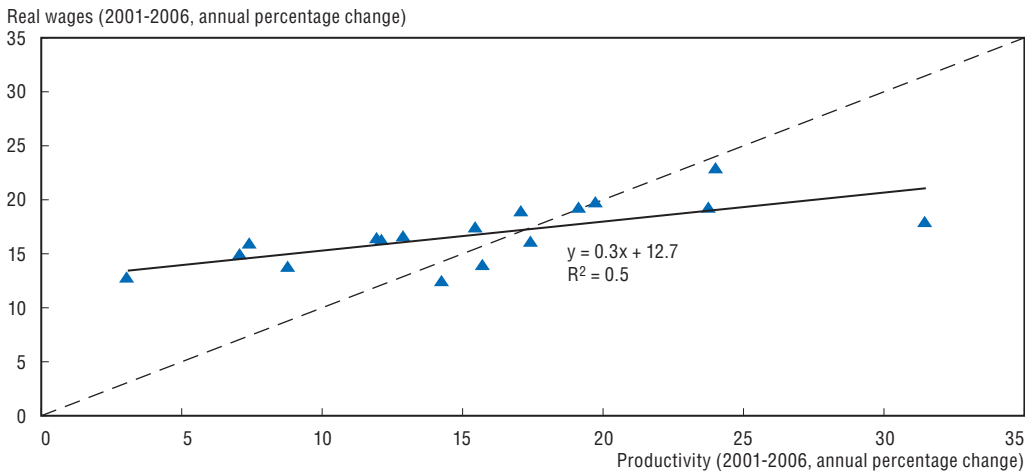
Table 3.3. Correlation between labour productivity deviation and employment share change

	1992-1995	1995-1998	1998-2001	2000-2003
Hungary	0.013	0.040	0.009	0.020
Romania	0.055	0.048	0.040	0.048
Russia	0.113	0.136	0.113	0.105
Ukraine	0.092	0.134	0.083	0.095


Note: These are correlations between the firms’ deviations from sector labour productivity in the initial year and employment share changes between that and the next year. Entrant labour productivity is measured in the second year. The averages across the first two two-year periods within each four-year period are reported (i.e., for 1992-95, it is the average of 1992-93 and 1993-94).

Source: Brown and Earle (2007a).

The very dynamic productivity gains observed in recent years did not translate into unit labour cost competitiveness gains, as real wage growth during 2001-06 roughly matched the rate of growth of labour productivity (around 15.5% per year on average in manufacturing).¹⁰ The choice of reference period is not necessarily neutral here, however, since wages adjusted rapidly downwards in the wake of the 1998 financial crisis. Over a longer time horizon, productivity gains have outpaced real wage growth by a significant margin, and unit labour costs, measured in a synthetic “euro-dollar” currency, fell by almost 20% over a decade.¹¹ To a certain extent, recent wage acceleration probably represents a post-crisis “catch-up” phase; as pointed out in Chapter 1, international comparisons of wage and productivity levels suggest that the two are now in line. Moreover, there are only a handful of sectors in which wages grew at a significantly faster pace than productivity during 2001-06, namely mining and metallurgy (Figure 3.4). In these sectors, this certainly reflects the rents generated by positive terms-of-trade shifts, which have been shared between employees and employers. On the other hand, the largest

Figure 3.4. **Productivity and real wage growth by industries**

Source: State Statistics Committee of Ukraine, OECD calculations.

StatLink  <http://dx.doi.org/10.1787/072778376817>

positive gaps between productivity and wages have been observed in the fastest-growing sectors – machine-building and, to a lesser extent, wood products. These sectors are also those where foreign competition exerts the strongest pressure on costs.

This relatively favourable picture with respect to the evolution of cost competitiveness is confirmed when Ukraine is benchmarked against its neighbour, Russia. Such a comparison makes sense, since the two countries began the transition with comparable industrial structures (apart from Russia's hydrocarbon wealth), similar institutions and similar levels of technology. Moreover, Russia is Ukraine's biggest trade partner. Ahrend, de Rosa and Tompson (2006) provide a detailed analysis of Ukraine's and Russia's productivity and competitiveness indicators for the period to 2004. Their conclusions may be summarised as follows:

- While Ukraine's aggregate level of productivity was lagging significantly at the beginning of the decade, it has been catching up fast and has experienced much more favourable developments with respect to cost competitiveness.
- The initial large difference in *output per employee* in nominal terms has been closed in most industrial sectors. A significant gap, however, persists in the fuel industry – a direct consequence of Russia's far greater resource wealth – and in the electricity sector.
- The gap in terms of *value added per employee* is still substantial, even if fuel and electricity are excluded, which may in part reflect cheaper energy bills for Russian manufacturers.¹²

... and did not automatically translate into better trade performance

A rigorous assessment of Ukraine's external competitiveness requires an examination of the evolution of relative costs and performance *vis-à-vis* all trade partners. Competitiveness *vis-à-vis* Russia improved fast and so did exports to Russia,¹³ but an analysis of global trade performance yields a much more mixed picture: the non-mineral trade surplus fell from 14.9% in 2004 to just 2.8% in 2006 (Table 3.4). As noted in Chapter 1, the quality of trade data makes any analysis of recent trade developments more difficult. However, while it is likely that the magnitude of the shift in the trade balance is smaller than it appears, there is no doubt about the reality of the recent pronounced deterioration

Table 3.4. **Evolution of the non-mineral trade balance**

As a percentage of GDP

	2002	2003	2004	2005	2006
Europe	-1.7	-2.5	-0.9	-5.3	-5.1
Asia	9.1	6.3	7.9	4.0	1.7
CIS	4.4	4.4	4.7	4.5	3.7
America	0.2	0.0	1.7	0.6	0.9
Total	13.2	10.0	14.9	6.0	2.8

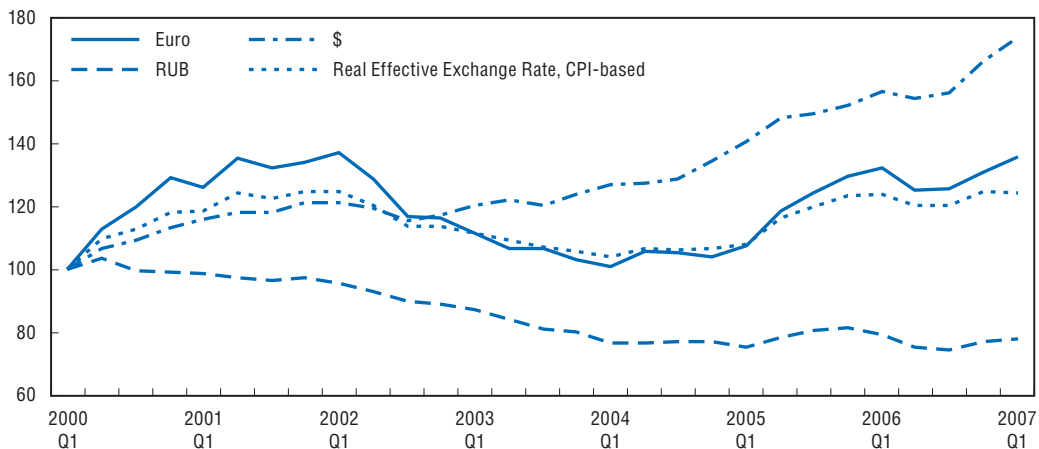
Source: Derived from State Statistics Committee.

of external accounts. Moreover, external balances have moved into deficit despite a favourable terms-of-trade shock, indicating that Ukrainian producers are struggling to compete on both external and domestic markets. The disappearance of the non-fuel trade surplus vis-à-vis Asian partners and the continued growth of the trade deficit vis-à-vis European countries would suggest that Ukrainian producers have been losing ground with respect to competitors from these zones.¹⁴

These regional developments partly reflect the evolution of bilateral exchange rates. While the hryvnia depreciated substantially in real terms against the rouble, which was pushed upwards by huge terms-of-trade gains,¹⁵ it has been appreciating steadily against the dollar and thus against many dollar-linked Asian currencies (Figure 3.5). This trend is thus likely to have contributed to the rapid growth of imports from Asia. The appreciation vis-à-vis the euro has been more gradual and in line with the overall appreciation of the real effective exchange rate (REER). While the REER had not yet returned to its pre-crisis level by the end of 2006, it is nevertheless worth noting that the speed of real appreciation, which averaged almost 3% per year during 2000-06, is close to what would seem to be the upper bound of estimates for the Balassa-Samuelson effect in transition economies.¹⁶ Indeed, recent work points to a much weaker Balassa-Samuelson effect – around 1% per year, according to Égert (2005).

Figure 3.5. **Real exchange rates**¹

Index Q1 2000=100



1. An increase means a real appreciation.

Source: Derived from IMF, International Financial Statistics.


StatLink  <http://dx.doi.org/10.1787/072805470013>

Table 3.5. **Price elasticities of exports and imports with respect to the real exchange rate**

	Exports	Imports
Agricultural products	0.45	0.97*
Chemicals	0.69**	0.59**
Manufactured goods	0.31*	0.81**
Iron and steel	0.25	n. a.
Machinery and equipment	0.90**	0.54*
Other manufactured goods	0.56	0.45
Total	0.51**	0.77**

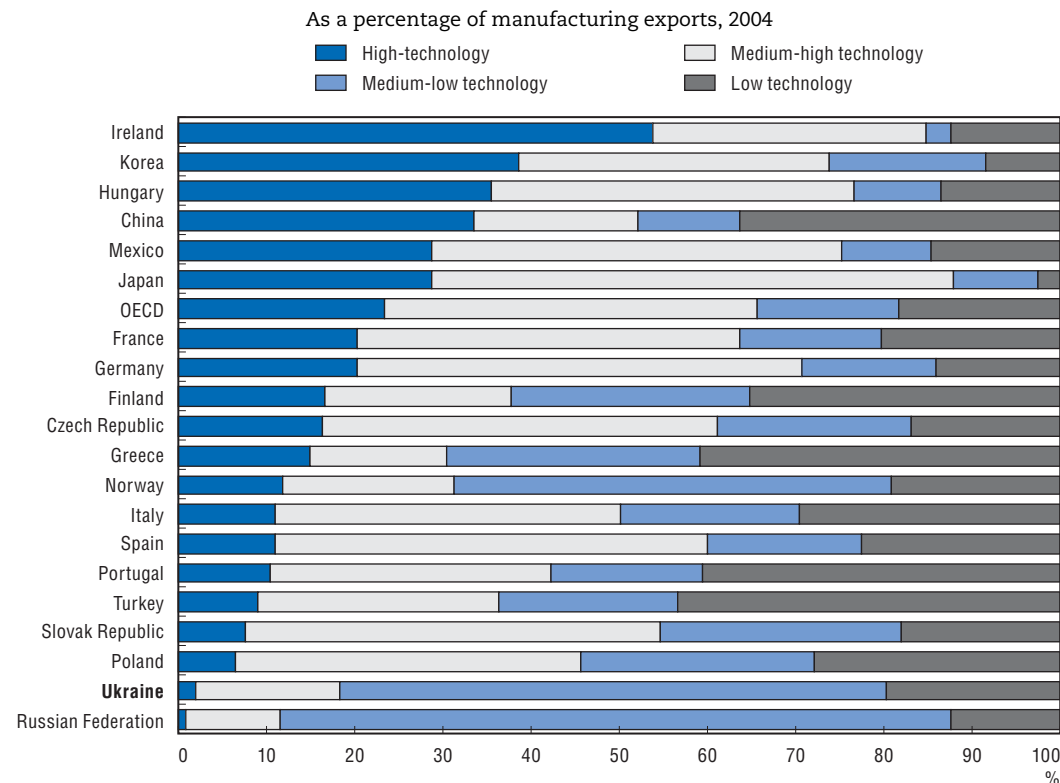
* significant at 10%.

** significant at 5%.

Source: United Nations, COMTRADE database and OECD calculations.

One way to assess more precisely the role played by real exchange rate fluctuations on trade performance is to estimate the price elasticities of export and import volumes. In view of the difficulties presented by Ukrainian trade data,¹⁷ the export data used here are those of Ukraine's trade partners. Table 3.5 presents the results of estimations of standard trade equations, relating imports and exports to bilateral exchange rate movements, using panel data. Separate estimates are presented for different sectors in order to control for the absence of price deflators.¹⁸ The results, though not always very precise, seem to point to relatively standard values for price elasticities. Not surprisingly, the sensitivity of metal

Figure 3.6. **Share of high and medium-high technology in manufacturing exports to OECD countries**



Source: OECD, STAN Bilateral Trade Database 2006/1 and OECD calculations based on OECD ITCS database.

StatLink <http://dx.doi.org/10.1787/072808468601>

products is much lower than that of machinery, chemicals or agriculture products. These estimations thus indicate that the strong performance of exports to Russia and the rapid deterioration of the trade balance *vis-à-vis* Asian countries are partly explained by cost-competitiveness developments.

Beyond the cost competitiveness issue, the quality factor is also important. When it comes to more sophisticated goods, Ukrainian manufacturers struggle to compete with European producers.¹⁹ The level of intra-industry trade with Europe, Ukraine's main "non-hydrocarbons" trading partner, is very low.²⁰ At present, the share of high value added goods in manufacturing exports to OECD economies is below 2% (Figure 3.6). Moreover, the share of low and middle-low technology products in Ukraine's export basket is much larger than for Central and Eastern European economies, although it is smaller than that of Russia. Over the medium-to-long run, climbing the value added chain will require a significant change in the pattern of specialisation – especially given the dramatic changes in energy prices.

Accelerating productivity convergence

Strengthening competition improves the performance of Ukrainian firms...

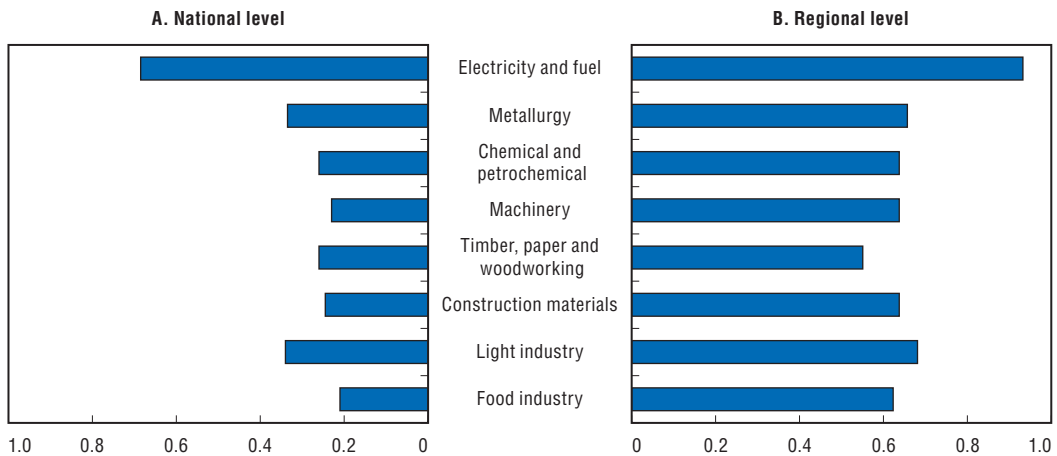
As noted in Chapter 2, closing the productivity gap between Ukraine and the more advanced economies will require increasing economic and technical efficiency – that is, the efficiency of resource allocation and the efficiency of production.²¹ Strengthening competition can contribute a great deal to the achievement of both these ends. Robust competition in product markets improves firm performance.²² It serves to stimulate both capital deepening and technical progress.²³ For transition countries, fostering competition has presented a particularly daunting challenge, not only because soft budget constraints and the suppression of competition were integral to the socialist system but also because the industrial structures bequeathed to the transition countries by central planners were often highly concentrated. Yet successful, competition-oriented reform has been rewarded: where post-communist reformers were more successful in fostering competition, performance has tended to improve.²⁴ In the case of Russia, in particular, recent studies have found a positive correlation between competition and total factor productivity growth.²⁵

The potential benefits of increasing competition are likely to be even larger in Ukraine than in most OECD members or in many neighbouring countries, because competition in Ukrainian markets, though increasing in recent years, is relatively weak overall. To a significant extent, this reflects the large number of important Ukrainian sectors that are highly concentrated and characterised by a substantial degree of monopoly or by oligopolistic competition.²⁶ The country's competition authority, the Anti-Monopoly Committee of Ukraine (AMCU), estimates that firms operating in sectors characterised by the structural pre-conditions for competition – that is, by the absence of monopoly or the concentration of substantial market power in the hands of one or a few firms – generated only around 55% of total sales in 2004, against roughly 45% of sales arising in situations of monopoly, market dominance or oligopolistic competition.²⁷ In many cases, the less competitive markets are in heavy industrial and infrastructure sectors, where high levels of capital intensity constitute barriers to entry.²⁸ The Committee notes that this assessment is based solely on market structure; it omits regulatory and other interventions in product markets that reduce or eliminate competition where it might otherwise be


expected to develop.²⁹ As will be seen below, these additional impediments to competition are considerable. The AMCU's estimates correspond fairly well to the results of managerial surveys concerning the level and intensity of competition in particular markets.³⁰

They also find confirmation in the Herfindahl-Hirschmann indexes (HHIs) shown in Figure 3.7. Calculated on the basis of a 5-digit classification, the indexes show very high degrees of market concentration overall. Indeed, they are higher than the comparable indicators for Russia in every major sector. Concentration levels have tended to rise in key export sectors in recent years, including metallurgy, chemicals, machine-building and food, while they have declined modestly in the construction materials and light industries. Figure 3.7 also shows that competition is much weaker at regional level, which suggests a high degree of segmentation between regional markets. This segmentation, which owes much to the actions of sub-national governments, is particularly evident in the gap between national- and regional-level HHIs for the food industry, a sector in which regional and municipal authorities are particularly prone to intervene.

Figure 3.7. **Herfindahl-Hirschmann concentration indexes, 2005**



Source: OECD calculations using the register of Ukrainian enterprises, 2000-2005.

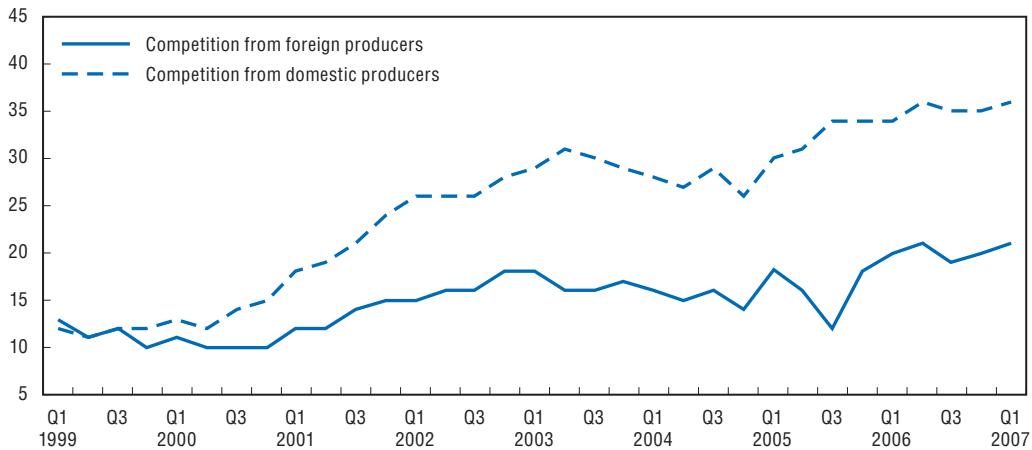
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While the concentration measured by HHIs has not decreased significantly over the last five years, managerial surveys suggest that pressure from domestic and foreign competitors increased steadily in the early 2000s, although foreign competition appears to remain a negligible factor for most domestic firms (Figure 3.8).³¹ This result is not as paradoxical as it might appear. The strength of competition depends not only on the degree of market concentration or the development and enforcement of competition law, but also on trade policy, the creation of an effective bankruptcy mechanism, privatisation and sectoral regulatory policies – in other words, on the whole complex of policies and institutions that allow the threat of competition to emerge. Thus, although both the legal instruments and the institutions concerned with competition policy have been improving (Box 3.1), the increasing intensity of competition probably owes more to privatisation, liberalisation and stabilisation than to competition policy *per se*.³²

There has been only limited empirical work on the relationship between competition and enterprise performance in Ukraine, apart from a few cross-national studies in which it has been included.³³ This section therefore presents the findings of an econometric

Figure 3.8. **Managerial assessments of competitive pressure**

Share of enterprises reporting competitive pressure as a constraint on growth



Source: Scientific and Technical Complex for Statistical Research.

Table 3.6. **Labour productivity regressions**

Dependent variable	Manufacturing industries			Market services
	All manufacturing	Export oriented	Import competing	
Real labour productivity growth				
<i>HHI</i>	-0.18*** (-7.23)	-0.28*** (-5.32)	-0.29*** (-5.22)	-0.15* (-1.94)
<i>Import penetration</i>	-0.00 (-0.08)	0.11** (2.01)	0.11* (1.83)	
<i>Distance to frontier</i> ¹	-0.01*** (-3.29)	0.01* (1.85)	0.05*** (4.31)	0.07*** (4.55)
<i>HHI * distance to frontier</i>	0.01 (1.16)	0.01 (0.58)	-0.04* (-1.78)	-0.05* (-1.96)
Year dummies	yes	yes	yes	yes
Number of observations	102 215	30 315	22 889	14 438
Number of firms	39 248	16 493	11 388	8 813

Fixed effects estimations.

t-statistics in parenthesis.

* significant at 10% level; ** significant at 5% level; *** significant at 1% level.

1. Distance to frontier is computed as the difference between the highest productivity in the sector and firm's productivity.

Source: OECD calculations using the register of Ukrainian enterprises, 2000-05.

analysis of the impact of competition on labour productivity gains based on enterprise-level data drawn from the official register of industrial enterprises for 2000-05. The analysis explicitly takes into account the impact of foreign trade operations and competition from foreign producers via the introduction of the import penetration ratio into the regression. The following conclusions emerge (see Table 3.6):

- Concentration, measured by the 5-digit HHIs, has a negative and highly significant impact on labour productivity growth.
- These results are robust for manufacturing as a whole, and there is evidence that the effect is stronger when import- or export-competing industries are considered separately.

- For market services, the effect is found to be weaker (and less significant) but still sizeable.
- Import competition has a positive impact on domestic firms' productivity. The effect is stronger in sectors where foreign penetration is lower, which may suggest that the initial opening to imports has a particularly strong effect in stimulating local firms to raise productivity.³⁴

... but reducing anti-competitive barriers will require a multi-faceted approach

In view of these results, it is unfortunate that successive Ukrainian governments have been so reluctant to take the steps needed to ensure robust competition in product markets. Throughout the transition period, they have continued to adhere to a wide range of practices aimed at supporting existing economic sectors and protecting incumbent firms. To be sure, competition law is now much improved and, on paper at least, it is broadly in line with international norms (Box 3.1), but anti-competitive policies and practices are still widespread.³⁵ The barriers to exit outlined in Chapter 2 serve in large measure to suppress competition and thus to delay rather than to facilitate needed structural change. This cannot but impede any attempt to enhance Ukraine's competitiveness over the long term, since the most potentially competitive firms and sectors are handicapped by the cost of supporting less efficient rivals. Broadly speaking, weak competition in product markets reflects not only economic barriers, but the interaction between market structures, regulatory practices and weak institutions.

Market structures largely define the terrain on which competition law is applied. Given the presence of so many sectors with relatively high degrees of concentration, it is not surprising that roughly half the AMCU's caseload concerns alleged or actual abuse of dominant position. During 2000-05, the Committee pursued around 7 300 such cases, with the number of dominance cases per annum rising about 2.4-fold over the period. Most of these concerned monopoly pricing or attempts to restrict supply to particular customers or markets. As the economy has matured and Ukrainian industrial organisation has become more complex, the importance of collusion has grown, but dominance cases are still the most common.

The AMCU in 2000-05 also pursued 3 500 cases against public authorities engaged in actions that reduced, distorted or eliminated competition in particular markets – fully one-quarter of the Committee's caseload over the period. The great majority of these cases were in markets where the structural preconditions for competition existed. This provides some indication of the extent to which the actions of central, regional and municipal authorities serve to protect incumbents and restrict entry. Such actions often involve the deliberate administration of various regulatory regimes – ranging from sanitation and fire-safety to standardisation and certification – in such a way as to restrict competition or prevent entry. Such anti-competitive regulatory practice (which is illegal under the Law on Regulatory Policy) underscores the link between competition issues and the kind of regulatory reform discussed in Chapter 2. The AMCU reckons that, if formal and informal barriers between regional and local markets are taken into account, then the proportion of sales generated in markets where the conditions for robust competition prevail stands as low as 30%: in many regions, competition is restricted not only in such spheres as housing and utilities, which are still dominated by SOEs and municipal enterprises, but also in food and food-processing, retail trade, transport and construction. This view is confirmed to some extent by the very high regional HHIs presented above. Yet the AMCU data tell only

Box 3.1. Anti-monopoly law and the role of the AMCU

The legislative basis for anti-monopoly policy in Ukraine is the law “On the Protection of Economic Competition”, which was adopted in 2001 to replace the much-amended 1992 law “On Limiting Monopolisation and Preventing Unfair Competition in Entrepreneurial Activity”. The 2001 competition law, which entered into force in 2002 and was further amended in 2005 and 2006, brings Ukraine somewhat closer to international – and, in particular, EU – norms in the field of competition law. The earlier law focused very much on issues of dominant position, discrimination and unfair competition; it said little about such matters as collusion, merger control and state aid, all of which receive much more detailed treatment in the new legislation. The new law also allows the AMCU to identify cases of joint dominance and to use economic evidence, rather than merely formal legal criteria, to identify cartels and groups of related entities.

Primary responsibility for developing and administering competition law lies with the Anti-Monopoly Committee of Ukraine (AMCU), which is responsible for monitoring the application of competition law; preventing, detecting and punishing violations of the same; monitoring economic concentration; and promoting fair competition.¹ In principle, the AMCU has considerable independent regulatory and enforcement power, and also has the right to review the competition implications of primary and secondary legislation, as well as the specific decisions of executive-branch bodies. However, while the AMCU can give mandatory instructions to other state bodies to desist from activities that violate competition law, the Committee itself can be – and sometimes is – overruled by the government. The cabinet’s *carte blanche* when it comes to authorising exceptions to competition rules underscores the priority that industrial policy seems to enjoy over competition policy in Ukraine.

Some areas of the amended 2001 law still need further revision – the materiality thresholds triggering merger clearance, for example, are low and often force companies to seek prior AMCU approval of actions that have no bearing on competition in Ukraine, and Ukrainian merger control rules still view virtually any local activity of any of the parties to a merger as sufficient grounds to claim jurisdiction over it. This is, by international standards, an overly broad understanding of the relationship between transaction and jurisdiction. However, the more serious problems concern the application of the legislation that exists, given the limited human and financial resources at the disposal of the AMCU and the weaknesses of the court system. The latter problem is compounded both by the lack of judges really conversant in competition issues and by the existence of provisions of the Commercial Code (see Chapter 2) that contradict the competition law. While the AMCU has tended to operate on the basis of the 2001 law and its subsequent amendments, judges are free to apply the provisions of the Code.

1. It is also responsible for such issues as coordinating public procurement. This has generated some criticism in Ukraine, although it is not unique to that country. Competition authorities in OECD countries likewise have enforcement interests concerning the collusion and corruption dimensions of procurement, and a few OECD competition agencies are also charged with handling procurement process appeals. In the Ukrainian case, however, the question is whether the AMCU is adequately resourced to handle the full range of procurement issues, in addition to its core functions.

Source: AMCU (2006); OECD (2006b); Svechkar (2006); Stotyka (2004); Akimova and Shcherbakov (2002).

part of the story: much of the anti-competitive behaviour of state and municipal institutions is perfectly legal and is therefore not reflected in AMCU enforcement statistics. Implicit and explicit subsidies to selected companies and sectors (particularly SOEs) distort

competition, as do many other initiatives taken in the name of local or national “industrial policies” that effectively privilege “priority” sectors at the expense of others.³⁶

Finally, the problems outlined above are compounded by the weakness of institutions in Ukraine. The weakness of the rule of law in general, and of the court system in particular, means that entrepreneurs are hesitant to rely on law to seek redress in the event of unfair competition. Weak protection of intellectual property rights means that violation of patents and trademarks is widespread and often remarkably flagrant. Weak corporate governance also affects conditions for competition: cases of dominance and oligopoly pose particular problems where beneficial ownership of firms is hidden. Even where connections between companies are widely known to the business community and/or the general public, it can be difficult to prove in court that they are related entities. More generally, agents recognise that the ability of rivals to tap “administrative resources” – i.e. to draw on the implicit or explicit favour of state bodies – can enable them to violate competition rules with impunity. Official favouritism is a widely recognised problem: an IFC managerial survey in 2003 found that 61% of respondents regarded unequal conditions of competition as a serious or very serious problem for their businesses. This awareness creates incentives to accumulate administrative resources of one’s own: firms that do not develop the necessary relationships with key public officials will suffer for it, so even managers who might prefer (and profit from) fair, transparent, rules-based competition must play this game.³⁷ These considerations underscore the relevance for Ukraine of recent cross-national research on the impact of competition policies on growth, which finds that the quality of institutions may matter more than the specific features of competition law or the design of competition agencies.³⁸

Successful restructuring of network sectors could increase competition

Competition in Ukraine suffers as a result of the relatively large share of output that is generated in highly monopolised and largely unrestructured network industries. In 2006, more than 2 300 companies were classified as “natural monopolies”,³⁹ most notably in sectors such as gas, electricity, heat and other municipal utilities, as well as rail transport and telecommunications. Around ten of these were national-level players, with the rest dominating specific regional or local markets. To these one might add a few important but rather less natural monopolies, such as RosUkrEnerg, the controversial Swiss-registered company that in 2006 became a monopoly supplier of Russian and Central Asian natural gas to Ukraine, and its domestic arm Ukgaz-Energ, a 50/50 joint venture of RosUkrEnerg and Naftogaz Ukrainy.⁴⁰ Despite the large role played by such companies in the economy, monopolies regulation in Ukraine is almost uniformly weak. While some progress has been made in developing the capacities of the National Electricity Regulatory Commission and in taking the first steps to restructure rail transport, tariff-setting for regulated monopolies tends to be opaque and highly politicised. This is particularly true at local level, where the public authorities setting tariffs lack the necessary expertise and, in many cases, appear to be heavily influenced by the companies they regulate.⁴¹ The result of inconsistent and fragmented tariff regulation is that monopoly suppliers in some spheres are required to undercharge, providing implicit subsidies to some or all of their consumers, while in other sectors, there is evidence of spectacular profits being earned by regulated industries. The financial problems of Naftogaz Ukrainy exemplify the former problem, while the latter underlies the AMCU’s estimate of profit rates in cargo transport at 42-48% in the

early 2000s.⁴² In either case, the result is inefficient spending and the distortion of competition.

Ultimately, the condition of Ukraine's network industries must be seen as a major obstacle to be overcome if Ukraine wishes to enhance efficiency and international competitiveness, for a number of reasons:

- The kind of cross-subsidies and other distortions described above cannot but distort competition in other sectors. To take the most obvious example, mis-priced energy biases competitive conditions in favour of less energy-efficient firms and sectors.
- The external competitiveness of tradable sectors depends to no small extent on the efficiency of the non-tradable sectors on which they rely for services and other inputs.⁴³ That is one reason why the weakness of the energy transformation sectors described in Chapter 1 matters so much.
- The efficiency of infrastructure sectors also represents a consideration for potential foreign investors. Ukraine's human capital and proximity to the EU enhance its attractions as an outsourcing location for EU producers (intra-industry trade is already important in textiles and electronics), but its poor infrastructure and weak logistics capabilities are still seen as drawbacks.⁴⁴
- Certain utilities subsectors are now, in principle, open to private-sector providers. However, very low regulated tariffs, combined with subsidies for communally owned services providers, are often used by local authorities to prevent entry by private firms and thus to prevent real contestability of local markets.⁴⁵
- Opacity, lack of competition and convoluted regulatory arrangements create opportunities for rent-seeking and outright corruption, particularly in sectors like natural gas, which has long been notorious as a field in which insiders used "grey" (and sometimes not-so-grey) schemes to enrich themselves.
- Ukraine has ambitions to develop both electricity exports and international rail freight transit. Yet the commercial potential of these and other network sectors will never be fully realised in the absence of restructuring.

Despite the huge potential gains from thoroughgoing restructuring, the reform of network industries has lagged in Ukraine. Few independent sectoral regulators have been created,⁴⁶ and commercial and regulatory functions in most network sectors remain closely integrated, which can create significant conflicts of interest. As noted in Chapter 2, the outlook for further restructuring of the power sector – arguably the most advanced, in terms of reform – is anything but clear. Virtually nothing has been done to liberalise the gas sector or other utilities. However, Ukgaz-Energo has increasingly occupied an anomalous and under-regulated position in Ukraine's gas market. Among other things, Ukgaz-Energo has been allowed to market gas to industrial consumers at unregulated prices, but this hardly amounts to liberalisation: the company is a *de facto* monopolist and it has sold gas at unregulated prices far in excess of the initial quotas defined by the regulator. The result is a great deal of arbitrariness in gas pricing, as well as competition-distorting subsidies.⁴⁷

A restructuring plan for the railways has been adopted, but it envisages little more than rationalising the management of the state-owned vertically integrated rail monopolist, Ukrzaliznytsa, and effecting a structural separation between the state's regulatory functions, which will remain with the Ministry of Transport and Communications, and the commercial functions of Ukrzaliznytsa.⁴⁸ Despite much

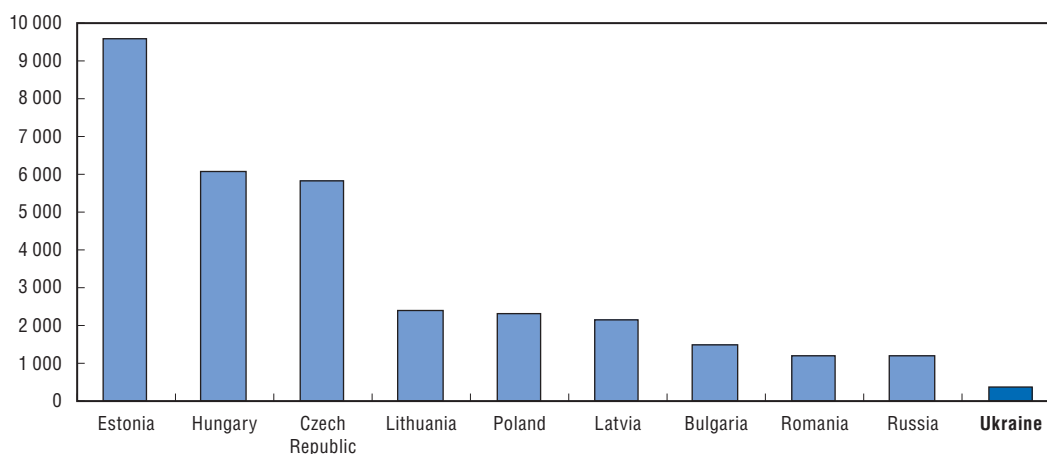
discussion of the issue, no decision has yet been taken on the creation of a rail regulator.⁴⁹ As a result, third-party access to the network continues to depend essentially on the monopolist's goodwill, and the tariff structure for rail transport remains extremely complex. It appears to involve considerable elements of cross-subsidy.⁵⁰ The telecommunications sector is rather more marketised, but the regulator, which is still relatively new, has exhibited an apparent willingness to favour the state monopolist, Ukrtelekom.⁵¹

Opening the economy to FDI would help accelerate convergence

In addition to increased domestic competition, greater external openness could also play a critical role in improving competitiveness and fostering diversification. This is particularly true in the case of Ukraine, given the importance of large-scale, capital-intensive industries in its economic structure.⁵² A large body of literature has emphasised the positive impact of FDI and foreign-performed R&D on domestic total factor productivity via the import of technology, know-how and managerial expertise.⁵³ Moreover, the potentially growth-enhancing effects of FDI-induced spillovers seem to be greater in emerging economies,⁵⁴ provided that other structural barriers do not impede this process.⁵⁵ In the case of Ukraine, Lutz and Talavera (2004) reach the same conclusion: FDI significantly increases both the labour productivity and export performance of Ukrainian manufacturers. Their empirical results also show evidence of positive spillover effects on domestic firms in some industries. The latter effect is apparently stronger for large firms.⁵⁶

The relatively low level of the current FDI stock thus suggests that Ukraine is missing a major opportunity to facilitate industrial modernisation and accelerate productivity growth: despite the massive inflow generated by the privatisation of Kryvorizhstal in 2005,⁵⁷ the stock of FDI per capita reached only 372 USD in 2005, just over 16% of the corresponding figure for neighbouring Poland (Figure 3.9). FDI in Ukraine is concentrated in the food and metal industries among tradable sectors and in wholesale and retail trade and banking among non-tradables.⁵⁸ The contribution of foreign investment to gross fixed

Figure 3.9. FDI inward stock
US\$ per capita, 2005



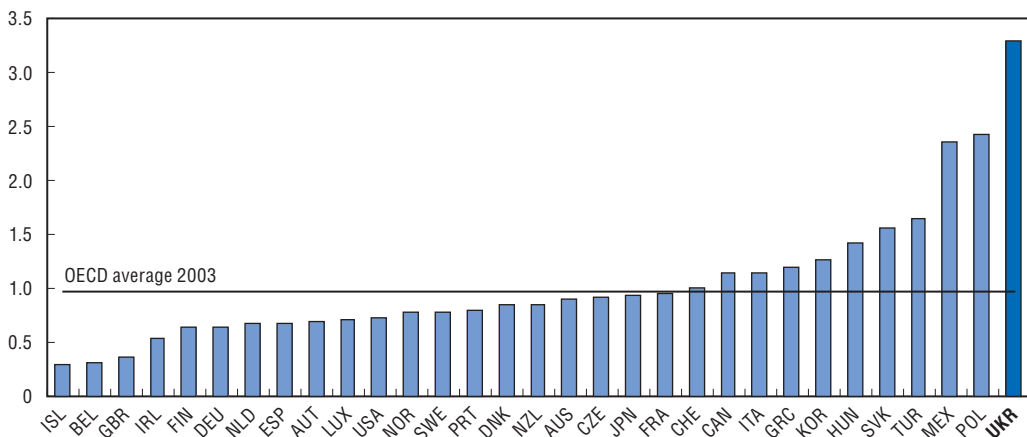
Source: Derived from IMF, IFS database.

StatLink  <http://dx.doi.org/10.1787/072862254204>

capital formation is thus rather modest: it represented only 5% of total investment financing in 2005. By contrast, the contribution of FDI to gross fixed capital formation averaged 26% in the Czech Republic during 2000-05; the corresponding figures for Hungary and Poland were 22 and 18%, respectively. The potential of Ukraine to attract FDI should be far greater than that, especially given its human capital endowments and the comparative advantages conferred by relatively low wages, proximity to EU markets and the size of the domestic market.

Ukraine's failure to attract more FDI principally reflects the unhealthy business climate described in Chapter 2 and the exceptionally high regulatory barriers to trade and investment (Figure 3.10). As shown by the PMR benchmarking exercise, Ukraine's economy does not appear to be exceptionally restrictive on foreign ownership (though the PMR indicators fail to pick up restrictions on the purchase and leasing of land), but foreign investors face a very difficult regulatory environment and potentially serious discrimination, particularly if they seek redress in response to adverse regulatory decisions.⁵⁹ However, one should not exaggerate the degree of discrimination: these problems are symptomatic of the overall institutional framework encountered by all firms, foreign and domestic. Recent empirical work suggests that institutions like the rule of law and the quality of bureaucracy are among the most important determinants of FDI location, together with labour costs and market size.⁶⁰ Using a unique and detailed data set on institutions, Bénassy-Quéré *et al.* (2005) find that a large range of institutional indicators, most of which relate to the efficiency of the public administration, have a significant influence on FDI inflows. These include the security of property rights, the level of corruption, the contracting environment, the tax system, and the transparency and the efficiency of the judicial system.

Figure 3.10. **Barriers to trade and investment**



Improving the institutional framework should thus greatly enhance Ukraine's FDI attraction, especially given its market size: agglomeration economies appear to be a major determinant of FDI location in transition countries.⁶¹ However, special economic zones should not be considered even as a second-best solution to this problem: the (re-)creation of special zones would risk introducing yet more market distortions (especially if zone residents enjoyed renewed tax and customs privileges), while postponing the

comprehensive reforms needed to tackle the broader issue. Indeed, special zones, by providing a means of attracting some foreign investment when the overall business climate is poor, may reduce pressure on the government to improve framework conditions for *all* investors.⁶² Unfortunately, as noted in Chapter 1, the authorities continue to favour the use of tax and regulatory privileges to stimulate innovation, energy efficiency, investment and other “priority” activities, sectors and regions. This approach is apparent not only in proposals to restore fiscal privileges to free economic zones but also in the government’s draft law on stimulating innovation, which provides for subsidised credits, customs privileges and tax breaks to spur innovative activities. The first priority should be to sustain macroeconomic stability and strengthen framework conditions for doing business – policies that will not only facilitate innovation and FDI but will enhance overall economic performance. Indeed, where sound institutions and healthy framework conditions for entrepreneurship are lacking, targeted interventions are less likely to succeed and more likely to generate waste and potentially costly distortions. Whether the issue is FDI, innovation or regional development, it will be important to get the basics right first. Only then would it make sense to consider interventions and programmes aimed at correcting specific bottlenecks and other market failures.

Reducing barriers to trade can also stimulate competition and growth: the empirical analysis reported in Table 3.6 clearly points to the positive impact of import penetration on productivity growth. The trade regime in Ukraine is already relatively liberal, however, which suggests that further trade liberalisation probably matters less than greater openness to FDI. Nevertheless, Ukraine made decisive steps towards WTO membership in 2006, and by year-end it had concluded bilateral market-access protocols with all but two of the 50 countries in the working group. It has also made great progress in harmonising its domestic legislation with WTO norms and standards: 33 bills amending various WTO-sensitive aspects of domestic law were adopted late 2006/early 2007, finally allowing Ukraine to report full closure on that front.⁶³ Several recent studies conclude that the direct effect of WTO accession – i.e. the impact of tariffs changes and improved access to foreign markets – is likely to be positive but limited, and most of the welfare gains arising from WTO membership are expected to result from the reduction in formal and informal barriers to foreign investment, the strengthening of property rights and the overhaul of technical regulation.⁶⁴ With respect to direct effects, export-oriented industries will benefit most (particularly steel and chemicals), as well as sectors that consume a high share of intermediate goods imports.⁶⁵ The agriculture and food industries might face some loss of market share to imports, but this would represent a gain for Ukrainian consumers and could provide a much-needed spur to restructuring in Ukraine’s agricultural sector, which is potentially quite competitive but in need of further reform. Agriculture might also benefit from the more stable agricultural and trade policy framework that WTO membership would entail.

Privatisation enhances efficiency and productivity growth

The size of the state has been identified in this report as another key barrier to growth: the overall fiscal burden is too heavy, substantial public subsidies introduce distortions between sectors and excessive state ownership hampers the process of restructuring and reallocation of resources.⁶⁶ In these circumstances, the loss of privatisation momentum is unfortunate: after peaking in 2005 at 5.1% of GDP, privatisation receipts in 2006 were minimal (0.1%). Early 2007 saw signs of increased privatisation activity, but it is not clear

where this might lead. The government's medium-term fiscal plan contains ambitious targets for privatisation income, equivalent to roughly 10 bn UAH (around 1.9% of estimated 2006 GDP) per year over 2007-09, and the authorities have expressed an interest in selling large parts of the fixed-line telephone monopolist Ukrtelekom, a number of regional energy companies (so-called *oblenergos*) and the Odessa Portside Plant, which is among the country's largest producers of ammonia and nitrogen fertilisers. It is far from clear how these plans will work out in practice. Actual privatisation activity remains highly non-transparent,⁶⁷ and political turmoil has raised questions about whether or when the next big privatisations will take place.⁶⁸ The most recent major privatisation – the long-delayed sale of 76% of Luganskteplovoz, a producer of locomotives and trams, for \$ 57.9 m in March 2007 – was a fairly opaque process that resulted in a sale price that was just 0.17% above the starting price for the stake. The president has ordered an investigation of the sale, which is now being challenged in the courts.⁶⁹

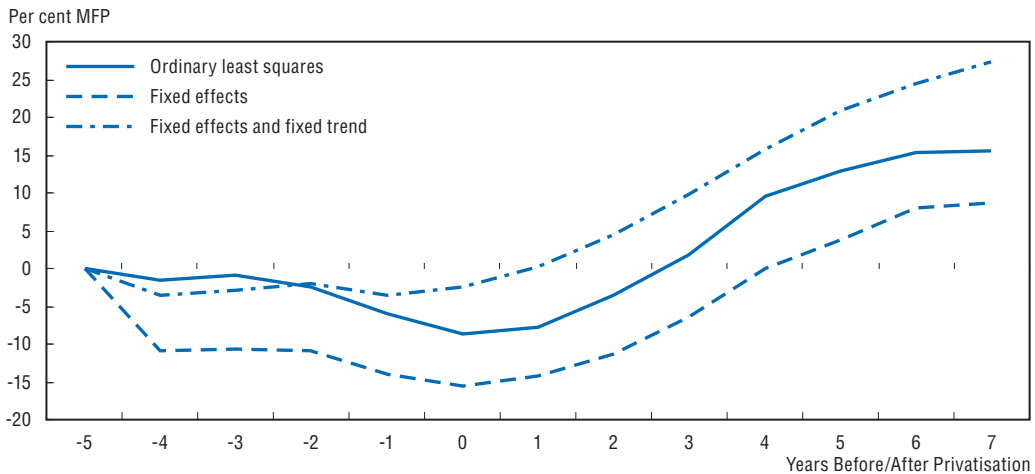
The management of the State Property Fund has in recent years been unenthusiastic about the privatisation of large enterprises and has to some extent shifted its focus from privatisation to the management of state property. This appears to have generated some fiscal benefits, as the consolidated budget's income from dividends on state-owned shares and transfers of SOE profits jumped from 0.37% of GDP in 2004 to 1.0% in 2005.⁷⁰ However, there is little indication that this outcome has been connected with either improved SOE performance or a reduction in budgetary support for SOEs. On the contrary, the financial weakness of some of the major SOEs – above all, Naftogaz Ukrainy – implies substantial quasi-fiscal obligations for the budget. While Naftogaz's net foreign liabilities, which exceed 2.5% of GDP, are not subject to explicit state guarantees, there is little doubt that the state will be obliged to support the company, not least via forbearance in respect of tax arrears equal to 1% of GDP.⁷¹ More generally, the governance of SOEs in Ukraine remains highly problematic: they tend to be subject to a high degree of political/bureaucratic interference, they are often pressured (if not required) to sell their output at artificially low prices, and most do not face strong incentives to behave in a commercially efficient manner.⁷² Indeed, many of the largest are local or national monopolies, and a large fraction relies chiefly or wholly on sales to state or municipal authorities.

In these circumstances, the mounting evidence that privatisation in Ukraine has improved enterprise productivity and efficiency is hardly surprising.⁷³ The defects of Ukrainian privatisation processes cannot be denied and account for much of the criticism of privatisation within the country, but they should not deflect attention from empirical work pointing to the positive impact of privatisation on sales growth and profitability.⁷⁴ Using panel data on Ukrainian firms for 1996-2000, Andreyeva (2003) estimates a production function using random-effects and instrumental variable estimators. She finds evidence that firm performance improves significantly with privatisation, particularly when it results in the concentration of ownership in the hands of a dominant shareholder. A large study conducted in 2004 on behalf of the State Property Fund found that privatised enterprises reduced wage arrears faster, innovated more, invested more efficiently and increased productivity and output more rapidly than did state-owned enterprises.⁷⁵ According to Zelenyuk and Zheka (2006), better performance is partly the product of better corporate governance of private companies, which leads in turn to greater technical efficiency. Interestingly, Grygorenko and Lutz (2007) find that there is a non-trivial positive relationship between state ownership and enterprise performance in enterprises that are majority privately owned but that the relationship between state ownership and

performance is strongly *negative* where the state share exceeds 50%.⁷⁶ This suggests that privatised firms in which the state still holds shares may yet profit from explicit or implicit subsidies and/or regulatory forbearance on the part of the authorities.

While these and other studies converge in their conclusion that privatisation has positive effects on firm performance, quantifying those effects is still on the research agenda. Using a rich longitudinal database on Ukrainian manufacturing firms, Brown and Earle (2007b) provide an assessment of the productivity effects of privatisation over time. The long time series, which extends from 1989 until 2005, enables them to include several years of pre-privatisation data and to control for potential selection bias in the privatisation process. For privatisation to domestic owners, they find that total factor productivity increased between 10 and 25%, depending on the specification used, during the seven years following privatisation. They find the effect of foreign privatisation to be even stronger, but the estimates are less robust owing to the sample size.⁷⁷ Positive effects appear within a year of privatisation and continue increasing thereafter (Figure 3.11). Given that the privatisation process was still relatively intense in the late 1990s and even the early 2000s, this implies that the contribution of privatisation to aggregate manufacturing productivity growth in recent years has been substantial – the cumulative contribution reaches 20 to 40%, according to the specification used.

Figure 3.11. **Multifactor productivity impact of privatisation**



Source: Brown and Earle (2007b).

Despite widespread fears that privatisation would lead to job losses, Brown, Earle and Vakhitov (2006) find that privatisation reduces worker separations (both quits and dismissals) substantially. This comes at a price, however: privatisation is also associated with lower wage levels – ironically, with the largest wage losses coming in worker-controlled firms. Outsider-controlled firms enjoy wage gains. Of course, privatisation has been associated with labour-shedding – employment in Ukrainian industry has fallen by almost half since the transition began, and privatised enterprises account for a large part of the reduction. However, it appears that privatisation and restructuring offer better prospects for preserving more jobs over the medium-to-long term.

These findings clearly point to the potential benefits of further privatisation. However, in some specific sectors or market segments characterised by a substantial degree of natural monopoly, privatisation entails the need to develop new forms of economically efficient regulation, as well as preliminary steps to ensure the development of real competition.⁷⁸ This problem is particularly acute for electricity generation. For instance, the privatisation of the *oblenergog*, while probably desirable in the long run, looks highly problematic in the absence of any clear plans for restructuring the power sector.⁷⁹ The government unbundled electricity dispatch, generation and distribution at a fairly early stage, but assets have since been “re-bundled” into a large state-owned holding company, and the wholesale power market is so heavily regulated and so distorted by cross-subsidy mechanisms that it is probably best understood as a quasi-market. Thus, while there is a general expectation that many generating assets⁸⁰ will be privatised in due course, there is no consensus as to when or how they will be sold, and little work has yet been done on the institutions and regulatory framework needed to govern a power sector in which private entrepreneurship and market forces really operate. In this particular case, premature privatisation could actually complicate power-sector reform.⁸¹ The urgency of such reform is in any case difficult to exaggerate, given rapidly rising fuel prices, the low efficiency of energy transformation described in Chapter 1 and the extremely poor productivity record of the power sector (Figure 3.3A).

It is clear, then, that ownership change does not necessarily achieve much if undertaken without due attention to market structure. However, there is more to the competition-privatisation relationship than simply a pitfall to be avoided in some sectors. There are also potentially beneficial synergies: theory suggests that the benefits of privatisation are likely to be greater if combined with regulatory and other reforms aimed at strengthening competition, and a large and growing body of empirical research suggests that this is indeed the case. Research in developed market economies, developing countries and economies in transition finds that private enterprises generally respond more readily to increasing competitive pressures than do SOEs, and the gains from privatisation tend to be greater where privatised enterprises are subject to competition.⁸² Effective private ownership and competition are thus mutually reinforcing devices for disciplining managers and giving them incentives to restructure. In a weak institutional environment, moreover, the complementarity between the two may be all the greater, since competition can sometimes help offset other institutional weaknesses.⁸³

Notes

1. See Enright (2006).
2. In the Balassa-Samuelson framework, the real exchange rate appreciates in parallel with productivity gains (see Rogoff, 1996).
3. Exports of semi-finished products have been much more dynamic (growing by 16% per year on average), but they represent only one-sixth of total steel products exports.
4. There is some evidence that this has begun to occur; see Lorentz (2006).
5. These exports have overwhelmingly been to Russia, where rapidly rising demand for rolling stock has outstripped the ability of domestic producers to keep up.
6. Data on the breakdown of employment by branch of industry exclude employees of small business and unincorporated entrepreneurs.

7. During 1999-2006, gross output grew by roughly 85%, while gross value added rose by around 67%. The gap between output and value added appears to have been relatively constant during 1999-2003 but widened noticeably in 2004-06. See Shumylo (2007).
8. See, *e.g.*, Brown and Earle (2004).
9. Ernst *et al.* (1995) compare the USSR, China, Poland, Hungary and the Czech Republic with respect to three indicators of readiness for the market transition – structural misdevelopment, institutional preparedness for a market economy, and macroeconomic disequilibrium – concluded that the Soviet economy was by far the least prepared on all three dimensions.
10. Real wages grew by 17.4% per year if CPI-deflated and around 15% if PPI-deflated.
11. See the comparison of Russian and Ukrainian wage and productivity trends in Ahrend, de Rosa and Tompson (2006). They use a fictional currency unit constructed as a basket composed in equal measure of euros and US dollars. This yields a meaningful measure for the international price competitiveness of Russian and Ukrainian industrial sectors that has the added advantage of being largely independent of swings in the euro-dollar exchange rate.
12. Data on value added per employee are not available by sector; this finding is based on data for all industry in Russia and Ukraine, as well as for Russian industry excluding fuel and electricity.
13. With the exception of food products, which were affected by a Russian ban on meat and dairy imports from Ukraine, imposed in 2006.
14. The rise in the share of Asian countries in Ukrainian imports is particularly impressive given the initially much lower level of import penetration for these countries.
15. Three times greater than those observed in Ukraine (OECD, 2006a).
16. The Balassa-Samuelson framework (Balassa, 1964 and Samuelson, 1964) gives a theoretical foundation for explaining medium-to-long run deviation of exchange rates from the Purchasing Power Parity (PPP) condition in emerging economies. Since productivity gains in manufacturing are generally higher in transition economies than in developed ones, some real appreciation is part of the catching-up process. An economy like Ukraine's could therefore be regarded as suffering from excessively rapid real appreciation if it diverged from the Balassa-Samuelson trajectory to an unusually large extent, with negative consequences for growth and/or employment. For a more detailed discussion of the Balassa-Samuelson effect in transition, see Gianella (2006:24).
17. See Box 1.1.
18. See Annex 3.A2 for details of these estimations.
19. This is true of investment and consumer goods, of course, but also of more complex chemical products.
20. Pindyuk (2006). Given Ukraine's dependence on oil and gas imports, Russia's share in Ukraine's import bill is the largest – about one-third – but Ukraine's non-hydrocarbons imports are essentially from Europe (more than 40% of imports, mostly food products, investment and consumer goods). Asia's share reached 13% in 2005.
21. Both forms of efficiency are important: a monopoly, for example, may be technically efficient (operating at, rather than below, its production function) but not allocatively efficient. Allocative efficiency is best served by robust competition.
22. See, *e.g.*, Aghion and Griffith (2005); or Conway *et al.*, (2006).
23. Nicoletti and Scarpetta (2005).
24. See, *e.g.*, EBRD (2002); Carlin *et al.* (2001); Vagliasindi (2001).
25. See OECD (2006a) and Aghion and Bessonova (2006).
26. See, *e.g.*, AMCU (2006); IERPC (2003, 2006); NTK (2006); Stotyka (2004); and Akimova and Shcherbakov (2002).
27. See AMCU (2006) for details. The committee estimates that 9% of sales were in monopoly-dominated sectors and a further 35-36% in sectors characterised by market dominance or oligopolistic competition.
28. Examples include mining (apart from coal and peat), coke production, mobile and terrestrial telephony, brewing, tobacco and motor fuels, as well as some subsectors of chemicals and machine-building.
29. AMCU (2006), esp. at Table 3 and Figure 3.

30. According to NTK (2006), 52% of managers described competition on the markets in which they were operating as “substantial”; 34% called it “moderate” and 14% “weak” or “non-existent”.
31. See, in particular, NTK (2006) and IERPC (2006). Note, however, that IERPC (2006) sees some evidence that the degree of competitive pressure either stabilised or even fell slightly after 2004.
32. See the overview in Stotyka (2004).
33. For one important exception, see Akimova and Shcherbakov (2002), who focus exclusively on technical efficiency (x-efficiency). It should be noted that they fail to find strong evidence of the benefits of competition for technical efficiency in Ukraine, but their analysis does not take account of import competition; as will be seen, the impact of trade openness in some Ukrainian sectors is critical. See also Chernenko (2004) for the evidence presented by the AMCU to the OECD’s 2004 Global Forum on Competition, and Blue Ribbon (2006:47-8). IERPC (2003) looks closely at a few key sectors but stops short of an empirical analysis of the impact of competition on performance.
34. It may also simply reflect the *outcome* of competition: where local firms respond rapidly and effectively to import competition, they are more likely to retain market share.
35. See IERPC (2003) for an excellent overview.
36. The Free Economic Zones and Priority Development Areas are arguably a case in point, but perhaps the most egregious recent instance was the “economic experiment” conducted in ferrous metallurgy during 1999-2002. Participating metallurgical enterprises (comprising virtually the entire sector) enjoyed exemption from a number of taxes and fees, as well as write-offs of tax arrears and penalties and a profit tax rate of 9% (later raised to 15%) in lieu of the normal 30% rate. Altogether, this is estimated to have cost the budget in excess of 2.5 bn UAH per annum. Eremenko and Lisenkova (2005) observe that the benefits to producers were partly offset by anti-dumping actions abroad.
37. See the survey data in IERPC (2006:5) on the importance of cultivating informal relationships with municipal, provincial and central government officials.
38. See Voigt (2006).
39. In Ukraine, the term “natural monopolies” generally does not bear the meaning it would in any western economics text (minimum efficient scale of production equal to or greater than the size of the market). Rather, it refers specifically to a number of infrastructure monopolies – above all, transmission and distribution of electricity, pipeline transport, rail transport, air traffic control, water supply and supply of some specialised port and airport services. See “About natural monopolies” (2005).
40. See IEA (2006), Chapter 6, for details.
41. According to AMCU officials, in fields such as water supply, there are tens of thousands of tariff-setting “regulators” in Ukraine.
42. Critics argue that such profit rates are in part the result of deliberate efforts to restrict the number of cars on the rails for transporting particularly lucrative freight, like oil products.
43. On the growing evidence that services liberalisation can benefit manufacturing sectors, see Arnold *et al.* (2007); Nicoletti and Scarpetta (2003); Conway *et al.* (2006).
44. Gazizullin (2006a:4).
45. Blue Ribbon (2006:48). It should be noted that fundamental utilities reform will also necessitate changes in forms of social support for vulnerable groups, who will otherwise be hit hard by the sharp increases in utilities tariffs that will be needed to attract investment to these sectors.
46. The oldest and most important is the National Electricity Regulatory Commission, created in 2000; in 2005, the National Commission for Communications Regulation began operating.
47. “Vnutrennii rynok” (2007); Dubien (2007).
48. “Kontseptsiya Derzhavnoi” (2006).
49. Business complaints about rising rail tariffs led not to the creation of a specialist rail regulatory but to the involvement of the Ministry of the Economy, alongside the Ministry of Transport and Communications, in setting rail tariffs.
50. It is, in fact, difficult to be certain, in view of the complexity of the tariff schedules, which often involve large numbers of tariffs for a single commodity, depending on weight, distance, timing, etc.

51. The award of GSM licences to Ukrtelekom may have been prompted by a desire to enhance its value ahead of privatisation.
52. Concentration in such sectors as metallurgy, where the international players are very large, may be more or less inevitable – a degree of consolidation may even be desirable – and need not interfere with competition, provided that markets remain open to international competition.
53. Guellec and Van Pottelsberghe de la Potterie (2001); Hemmings (2005).
54. Ewe-Ghee (2001); Savvides and Zachariadis (2005). Lipsey (2007) makes the important point that the positive impact of FDI inflows appears to be greatest in economies that have opened up to FDI after having been largely or completely closed to it. Ukraine, like all transition economies, is clearly such a case.
55. OECD (2004); Yudaeva *et al.* (2002).
56. Lutz, Talavera and Park (2006).
57. Mittal Steel paid USD 4.8 bn, which was equivalent to 5.5 % of GDP.
58. The development of the banking sector, in particular, demonstrates the potential benefits to be derived from opening important service sectors to foreign investors. Foreign-owned banks' share of total assets reached around 30% by end-2006, up from 15% in 2004; see Dushkevych and Zelenyuk (2007).
59. As mentioned in Chapter 2, the principle of national treatment in respect of regulatory policy is not required by law.
60. See especially Kinoshita and Campos (2003); Lipsey (2007); and Kostevc *et al.* (2007). See also the findings of Bevan and Estrin (2000); Bevan *et al.* (2004); Merlevede and Schoors (2004, 2005); and Anghel (2006). All point, in varying degrees, to a significant role for institutional quality in determining FDI location.
61. Kinoshita and Campos (2003) find agglomeration effects and institutional quality to be the two most important factors in determining FDI flows.
62. See Davis (2005).
63. The legislation in question concerns, *inter alia*, intellectual property, export duties on agricultural products, insurance and banking activities, export duties on scrap metal, and aspects of the tax, customs and regulatory regimes.
64. See Shnyrkov *et al.* (2006); Ministry of Economy (2005); "Overall Impact" (2005); and Pavel *et al.* (2004).
65. Ukraine's textile and leather industry will benefit from tariff reductions for this reason (Pavel *et al.*, 2004). In the non-tradable sector, hotels and restaurants are also likely to profit from WTO accession.
66. The restructuring of SOEs themselves is hampered by the protective legislation on bankruptcy procedures described in Chapter 2 and, in the case of many privatisations, by potentially constraining social clauses, concerning job preservation and other conditions pertaining to the post-privatisation management of the company.
67. The second Kryvorizhstal sale remains an exceptional case in this respect.
68. On 14 May, the government suspended the privatisations of stakes in Ukrtelekom and the Odessa Portside Plant, citing the ongoing political crisis. On 22 May, a court ruling blocked an attempt to sell even a 1% stake in Ukrtelekom in order to test the market.
69. It has been alleged that eligible bidders were excluded from the auction and that the two firms admitted to participate ultimately represented the same beneficial owner.
70. It fell back to 0.6% in 2006. This is a problem for SOEs, as it reflects in part the fact that profit transfer requirements are neither predictable nor stable; the government changes them frequently.
71. See IMF (2007:19) for details.
72. Leonov and Zhuk (2005); IMF (2007).
73. Akimova and Schwödiauer (2003) are the main exception to this rule: they do not report a strong result for private vs. state ownership; however, their study focuses on the structure of ownership of privatised enterprises (insider, outsider Ukrainian, foreign, residual state) rather than on privatisation *per se*.

74. It would, of course, be a mistake to conclude that privatisation processes are not important: the manner in which privatisations are conducted can affect the extent to which, and the speed at which, the benefits of privatisation are realised.
75. See Dubrovskiy *et al.* (2004), especially the conclusions presented at pp. 141ff.
76. Pivovarsky (2003) also finds that majority state ownership has a statistically significant negative effect on total factor productivity. The coefficient for state ownership under 50% is negative but not significant.
77. The effect is found to be twice as high in the short run, but also weakening in the long-run for some specifications of the empirical model used.
78. Paskhaver and Verkhovodova (2006).
79. See Gazizullin (2006) and IEA (2006) for details.
80. Excluding nuclear and hydro.
81. See Tompson (2004) on how premature partial privatisation in Russia created ownership structures that ultimately made electricity reform more difficult.
82. On the complementarities between privatisation and competition, see Megginson and Netter (2001); Commander *et al.* (1999); and the work surveyed in Nellis (1998). In an enterprise-level study covering Bulgaria, Romania and Poland, Angelucci *et al.* (2002) find that competitive pressure has stronger effects on the productivity of privatised firms, as do Earle and Estrin (2003) in Russia. On Mexico, see La Porta and Lopez-de-Silanes (1997).
83. See Commander *et al.* (1999:10). Where shareholder and creditor monitoring is weak and ownership is dispersed, robust product-market competition can increase the external pressure for more efficient management, by increasing the sensitivity of profits to unit costs, while at the same time reducing agency losses within the firm, by compelling managers to pay more attention to profit maximisation.

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ANNEX 3.A1

Foreign trade data

Table 3.A1.1. Exports of goods
As a percentage of total goods exported to

	CIS				Europe				Asia				Total			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Food products and raw materials for their production	20.2	17.9	17.0	12.7	8.7	7.4	8.8	10.1	8.3	8.8	11.4	16.3	11.5	10.4	12.3	12.1
Mineral products	2.8	3.4	4.6	3.5	27.9	25.1	27.4	17.6	6.1	5.7	8.0	6.9	13.9	12.2	12.5	8.9
Products of chemical industry and related branches	10.8	9.9	10.9	11.9	9.0	10.4	9.7	11.3	8.0	10.0	10.9	13.0	10.6	10.4	11.1	11.8
Timber and woodwork	4.6	3.9	3.8	4.5	3.7	3.7	4.2	3.8	1.4	1.2	1.1	1.5	3.0	2.7	2.8	3.1
Industrial goods	2.5	2.4	2.5	2.8	9.1	8.0	7.9	6.9	0.4	0.4	0.5	0.3	4.6	3.8	3.5	3.3
Ferrous and non-ferrous metals and products made of them	23.7	26.2	27.3	30.3	24.0	29.0	31.1	37.8	67.2	64.1	60.3	53.9	35.8	39.0	40.1	42.2
Machinery and equipment, transportation facilities, instruments	25.8	28.7	27.5	29.9	14.5	13.6	7.7	8.2	5.9	7.9	5.7	5.1	15.3	16.9	13.2	14.3
Others ¹	9.5	7.7	6.5	4.4	3.1	2.8	3.1	4.2	2.6	1.9	2.1	3.1	5.3	4.5	4.4	4.3
Total exports (US\$ millions)	6 539	9 045	11 232	12 996	9 156	11 764	10 893	12 629	5 401	8 035	8 404	8 135	23 739	33 432	35 024	38 949

1. Including informal trade.

Source: State Statistics Committee of Ukraine.

Table 3.A1.2. Imports of goods
As a percentage of total goods imported from

	CIS				Europe				Asia				Total			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Food products and raw materials for their production	6.0	3.0	3.8	3.5	8.5	7.5	8.7	8.4	12.2	10.9	9.1	8.3	9.4	6.4	7.4	7.2
Mineral products	63.1	62.0	58.0	54.7	3.7	4.2	2.1	3.9	2.3	2.3	2.3	3.1	33.4	33.8	29.0	26.3
Products of chemical industry and related branches	5.7	6.0	7.6	7.9	21.9	22.9	23.8	23.1	18.6	21.0	18.0	18.7	12.7	12.9	14.6	15.1
Timber and woodwork	1.8	1.8	2.1	2.1	8.6	6.5	6.3	5.8	1.7	1.3	1.0	1.0	4.1	3.2	3.3	3.3
Industrial goods	1.8	1.9	2.2	2.3	8.7	8.8	7.9	6.7	12.7	9.0	17.8	13.3	5.2	4.8	6.1	5.4
Ferrous and non-ferrous metals and products made of them	5.6	6.6	8.2	9.7	5.5	5.5	6.1	6.4	3.8	7.8	6.6	6.1	5.2	5.9	6.8	7.5
Machinery and equipment, transportation facilities, instruments	12.2	13.9	14.3	16.2	39.1	41.9	42.1	44.1	44.4	47.0	43.3	47.6	24.6	26.2	27.8	31.0
Others ¹	3.8	5.0	3.7	3.6	4.0	2.7	3.1	1.6	4.3	0.8	1.9	1.9	5.4	6.8	5.0	4.2
Total imports (US\$ millions)	11 314	14 891	16 629	19 029	8 166	9 824	12 541	16 466	1 971	2 485	4 526	5 916	23 221	29 691	36 159	44 143

1. Including informal trade.

Source: State Statistics Committee of Ukraine.

ANNEX 3.A2

Trade elasticity estimates

The model

Traditional trade equations are based on the imperfect substitution model between differentiated consumer goods, which means that finite price elasticities can be estimated for the demand and supply of these goods (see Goldstein and Kahn, 1985 or Hooper, Johnson and Marquez, 2000). Empirical studies of trade usually focus on the demand side only, where export and import growth is explained by changes in foreign and domestic demand and by an indicator of competitiveness. If it is assumed that price elasticity on the supply side is infinite, the relationship between quantity of exports (or imports) and relative prices is indeed determined exclusively by the demand equations.¹

Given the absence of long time series for price deflators, the strategy used for these estimations consisted of running regressions on panel data for different sectors from Ukraine's major trading partners. Assuming export and import prices do not differ too much between trading partners, this method allows us to control for the absence of appropriate deflators.² The elasticities of exports with respect to external demand (η_X) and competitiveness (ε_X) are assumed to be constant and symmetrical, as are ε_M and η_M , the elasticities of imports with respect to price competitiveness and final domestic demand.

The trade elasticities are estimated for a range of different sectors (j) using the following equations:

Export volumes

$$\ln(X_{j,Ukraine \rightarrow country(i) t}) = \varepsilon_X \cdot \ln(Compet_{(Ukraine \leftrightarrow i, t)}) + \eta_X \cdot \ln(GDP_{i,t}) + u_i + v_t + \mu_{it} \quad (1)$$

where the indicator of competitiveness $Compet_{(Ukraine \leftrightarrow i)}$ is simply the bilateral real exchange rate between Ukraine and each country (i); (t) is an index for the date; $X_{j,Ukraine \rightarrow country(i) t}$ denotes Ukrainian exports of goods belonging to sector (j) to country (i); and $GDP_{i,t}$ is the real GDP index for the country (i) at date (t). For the error terms, u_i are country-specific effects, v_t are time dummies, and μ_{it} is an error term assumed to be uncorrelated through time.

Import volumes

$$\ln(M_{j,Ukraine \leftarrow country(i) t}) = \varepsilon_M \cdot \ln(Compet_{(Ukraine \leftrightarrow i, t)}) + \eta_M \cdot \ln(FinalD_{Ukraine,t}) + u_i + v_t + \mu_{it} \quad (2)$$

where $M_{j,Ukraine \leftarrow country(i) t}$ denotes Ukrainian imports of (j)-type goods from country (i). As the variable of final demand $FinalD_{Ukraine,t}$ is independent of the country which exports to

Ukraine, this term disappears when time dummies are added. The structure of the error term is assumed to be similar to that for the export equation.

Data

The empirical work has been undertaken using annual data covering 1996-2005 inclusive. Data on bilateral imports and exports for different sectors are available from COMTRADE. It is important to note that imports declared by Ukrainian trade partners have been used for data on Ukrainian exports, rather than the exports declared by Ukraine. The discrepancies between the two indicators are substantial, for reasons explained in Chapter 1, and the use of the export data from Ukraine does not deliver any significant result. Bilateral exchange rates are calculated using consumer-price indexes. Finally, it is worth noting that the 22 countries used to run the regressions cover approximately two thirds of Ukrainian trade.

Notes

1. If supply-price elasticity is not infinite, which is likely to be the case, specific econometric methods need to be used in order to correct for potential simultaneity bias (see Gianella and Chanteloup, 2006).
2. The following countries were considered: Austria, Bulgaria, the Czech Republic, Finland, France, Germany, Hungary, India, Italy, Japan, Korea, Latvia, the Netherlands, Poland, Romania, the Russian Federation, the Slovak Republic, Spain, Sweden, Turkey, the United Kingdom and the United States. Among the major trade partners, China, Turkmenistan and Belarus are missing, due to the lack of available data.

ANNEX 3.A3

Competition and productivity dynamics at the firm level

This annex presents a brief overview of the methodology used to assess the impact of greater competition on labour productivity at firm level. The theoretical framework underlying this analysis is developed in Aghion *et al.* (2005) and Aghion *et al.* (2004). These studies find, first, that reducing barriers to entry, particular to foreign products, has a positive effect on economic performance and, secondly, that the effect is particularly strong for firms and industries that are initially closer to the technology frontier. In contrast, performance in firms and industries that are initially far from the frontier may actually be damaged by liberalisation and greater competition.

Data

The database has been drawn from the official register of industrial enterprises for 2000-05 and contains 350 000 observations. After elimination of observations with missing data or extreme values – as well as observations which correspond for a given year to a migration of a firm from one sector to another – the dataset contains around 180 000 observations, 155 000 in industry and 25 000 in market services (transport, telecommunications, wholesale and retail trade, hotels and restaurants, business services, real estate and finance). In the absence of reliable measures of the capital stock, the productivity variable used in the regressions is labour productivity and not total factor productivity. The real growth of labour productivity is estimated using sales volumes, total employment and, as a deflator, the producer price index at a two-digit level. The NACE classification code is used as the basis for computing Herfindahl- Hirschmann Indexes (HHIs) at five-digit level. The database was supplemented with data on imports and exports at six-digit level of the HS6 classification, converted into ISIC with standard matrix tables.¹ Export-oriented sectors are defined as those for which the share of exports exceeds 30% of sales. The same threshold is used for import-competing industries (these conditions are not mutually exclusive).

The empirical model

The effect of the degree of concentration and of the technology gap between industrial firms on their efficiency gains is estimated according to the following specification:

$$\Delta RLP_{i,t+1} = \beta_1 HHI_{j,t} + \beta_2 (Dist_{i,t}) \times HHI_{j,t} + \beta_3 (Dist_{i,t}) + X_{i,t} \gamma + v_{t+1} + u_i + \varepsilon_{i,t+1} \quad (1)$$

where ΔRLP_{it} is the real labour productivity growth of firm (i) in sector (j) at date (t); HHI_{jt} is the Herfindahl-Hirschman Index of industry j, calculated at the *regional* level at date (t); $(Dist_{it})$ is the firm's distance to the production possibility frontier in sector (j); and X_{it} is

a vector of firms and industry characteristics (essentially the level of employment and the import penetration ratio). Concerning the error components, v_{t+1} are time dummies; u_i are firm-specific effects; and ε_{it+1} is an error term assumed to be uncorrelated through time (typically, “white noise”). Fixed assets, when available, were also included as a control variable to check the robustness of the results: its inclusion did not alter significantly the order of magnitude of the coefficients.²

Notes

1. More details on the construction of the data set are available on request.
2. The coefficient for HHI was only slightly lower.

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