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Belarus: Window of Opportunity to Enhance Competitiveness and Sustain Economic Growth

A Country Economic Memorandum for the Republic of Belarus

MAIN REPORT

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CURRENCY AND EQUIVALENT UNITS

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ACRONYMS AND ABBREVIATIONS

AMS	Aggregate Measure of Support
ARCS	Administrative and Regulatory Cost Surveys
BCM	Billion Cubic Meters
BEC	Broad Economic Categories
BEEPS	Business Environment and Enterprise Performance Survey
BoP	Balance of Payments
BYR	Belarusian Rubel
CEE	Central and Eastern Europe
CEE	Committee on Energy Efficiency
CEEBS	Central and Eastern European Countries and Baltic States
CEECs	Central and Eastern European Countries
CEM	Country Economic Memorandum
CIS	Commonwealth of Independent States
CMEA	Council for Mutual Economic Assistance
CODB	Cost of Doing Business
CPI	Consumer Price Index
CSE	Consumer Subsidy Equivalent
DEMP	Changes in Employment
DEX	Changes in Export
DN	De Novo Firm
DQAF	Data Quality Assessment Framework
DOTS	Direction of Trade Statistics
DSL	Changes in Sales per Worker
DX	Exports Diversification Index
EBRD	European Bank of Reconstruction and Development
ECA	Europe and Central Asia
EMP	Employment
ESI	Export Specialization Index
EU	European Union
EWS	Early Warning System Survey
EXP	Exports to Sales Ratio
FDI	Foreign Direct Investment
FEZ	Free Economic Zone
FSAP	Belarus Financial Sector Assessment Program
FSOE	Former State-owned Enterprise
FSU	Former Soviet Union
GCF	Gross Capital Formation
GNI	Gross National Income
GDP	Gross Domestic Product
GOB	Government of Belarus
G-L	Grubel-Lloyd Index

GSP	Generalized System of Preferences
HH	Households
HS	Harmonized System (for tariffs)
IFS	International Financial Statistics
IIT	Intra-industry Trade
IMF	International Monetary Fund
IPM	Institute of Privatization and Management
ISO	International Organization for Standardization
ITT	Internal Terms of Trade
JSC	Joint Stock Company
JV	Joint Venture
KAM	Knowledge Assessment Methodology
MCM	Million Cubic Meters
MFA	Ministry of Foreign Affairs
MFN	Most Favored Nation
MMTOE	Million Metric Tons of Oil Equivalent
MOF	Ministry of Finance
MSA	Ministry of Statistics and Analysis
NBB	National Bank of Belarus
NBK	National Bank of Kazakhstan
NBL	National Bank of Lithuania
NBP	National Bank of Poland
NBU	National Bank of Ukraine
NPL	Non-performing Loan
NTBs	Non-Tariff Barriers
OECD	Organization for Economic Cooperation and Development
PCA	Partnership and Cooperation Agreement
PER	Public Expenditure Review
PPI	Producer Price Index
PPP	Purchasing Power Parity
PS	Profit to Sales ratio
PR	Property Restructuring
PSE	Producer Subsidy Equivalent
R&D	Research and Development
RCA	Revealed Comparative Advantage
RIME	Research Institute of the Belarusian Ministry of Economy
ROSC	Report on the Observance of Standards and Codes
ROW	Rest of the World
SDDS	Special Data Dissemination Standard
SBC	Soft Budget Constraints
SE	Small Enterprises
SL	Sales per Worker
SME	Small and Medium Enterprises
SNA	System of National Accounts
SPF	Social Protection Fund
SOE	State-Owned Enterprise
SR	Strategic Restructuring
T&D	Transmission and Distribution
TFP	Total Factor Productivity
TOE	Tons of Oil Equivalent
TOT	Terms of Trade

TRIPS	Trade-Related Aspects of Intellectual Property Rights
ULC	Unit Labor Costs
UNCTAD	United Nations Conference on Trade and Development
USSR	Union of Soviet Socialist Republics
VAT	Value Added Tax
WART	Weighted Average Retail Tariff
WBI	World Bank Indicators
WDI	World Development Indicators
WITS/COMTRADE	World Integrated Trade Solution/United Nations Statistical Division
WTO	World Trade Organization

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CHAPTER 1

MACROECONOMIC FRAMEWORK FOR GROWTH: RECENT TRENDS AND RISKS

1.1 This chapter presents an overview of macroeconomic developments in Belarus since 1996, including the sources and structure of the country's economic growth. It also analyzes the role of the government's macroeconomic policies in supporting growth, including the provision of state support to the real sector, as well as employment and wage benefits from the recent economic expansion. Special attention is paid to the risks for future growth associated with Belarus' macroeconomic performance.

A. MACROECONOMIC OVERVIEW OF GROWTH PERFORMANCE

1.2 **The Belarusian economy has experienced steady and sizable growth since 1996.** Following an estimated decline of close to 40 percent during the period 1992-95, GDP growth resumed in 1996.¹ During 1996-2004, GDP grew by 77.4 percent, at 6.6 percent on average per annum. Annual growth rates fluctuated between 2.6 and 11.4 percent (Table 1.1). Rates of GDP growth in 1999-2002, in the aftermath of the Russia crisis, were relatively moderate, but growth accelerated in 2003 to 7 percent and further to 11 percent in 2004.

Table 1.1: Belarus: Basic Macroeconomic Indicators, 1996-2004

	1996	1997	1998	1999	2000	2001	2002	2003	2004
GDP (nominal, US\$ m)*	14,328	13,845	14,522	11,158	13,055	12,313	14,557	17,755	22,880
GDP per capita (current US\$)*	1,413	1,372	1,445	1,114	1,307	1,237	1,471	1,803	2,335
GDP per capita PPP (current international US\$)	3,360	3,831	4,215	4,430	4,802	5,163	5,542	6,065	6,906
<i>% changes over the previous year:</i>									
GDP	2.8	11.4	8.4	3.4	5.8	4.7	5.0	7.0	11.0
Industrial output	3.5	18.8	12.4	10.3	7.8	5.9	4.5	7.1	15.6
Agricultural output	2.4	-4.9	-0.7	-8.3	9.3	1.8	0.7	6.6	12.9
Consumer prices	52.7	63.8	73.0	293.7	168.6	61.1	42.6	28.4	18.1
Real wages	5.1	14.3	18.0	7.3	12.0	29.6	7.9	3.2	16.8
Unemployment rate, %**	4	2.8	2.3	2.1	2.1	2.3	3.0	3.1	1.9
Poverty incidence (national definition)	38.6	32.1	33.0	46.7	41.9	28.9	30.5	27.1	17.8
Gini (income concentration)	25.4	25.8	28.3	26.9	27.0	27.8	27.2	25.4	25.4
General government balance, %GDP	-1.6	-0.7	-1.0	-2.0	-0.1	-1.9	-1.8	-1.4	0.0
Merchandise trade balance, % GDP	-8.0	-10.2	-10.3	-5.1	-6.8	-6.6	-6.3	-7.1	-9.0
Current account balance, %GDP	-3.6	-6.2	-7.0	-1.7	-2.6	-3.2	-2.1	-2.4	-4.6
FDI, net (BoP, current US\$ m)	104.5	349.5	200.9	443.2	118.6	95.5	453.3	170.3	168.1
FDI per capita, net (BoP, current US\$)	10.3	34.6	20.0	44.2	11.9	9.6	45.8	17.3	17.2
Gross official reserves (in months of imports of goods and services)	0.7	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6
Population, m	10.14	10.09	10.05	10.0	9.99	9.95	9.90	9.85	9.80

* At average official exchange rate.

** Officially registered.

Sources: MSA, NBB, MOF, IMF, WDI.

¹ For a detailed description of Belarus' initial conditions and initial recovery and growth, see Bakanova et al., 2004.

Box 1.1: Quality of Belarusian Statistics

Belarusian official statistics are often met with significant skepticism based on the assumption that the close monitoring of targets for output and growth creates incentives to inflate the data at all levels. This seems to be too simplistic view.

Given Belarus' specifics as a highly concentrated and regulated economy, the statistics is rather rich and the reporting requirements are high, fairly abundant and strictly monitored. Administrative punishment is equally severe for unmet targeted indicators and data distortions. At the same time, the quality of personnel in government agencies responsible for statistics is high and the government has a good track record in implementing the recommendations of technical assistance missions on statistics. Belarus subscribed to the SDDS on December 22, 2004.

In 2004, the IMF assessed the quality of the six major macroeconomic datasets (National Accounts, CPI, PPI, Financial, Monetary and Balance of Payments statistics) using the Data Quality Assessment Framework (DQAF) and prepared the Report on the Observance of Standards and Codes (ROSC) data module. The Report concluded that the quality of Belarus' macroeconomic statistics has improved significantly in many areas during the last few years, but that further progress is to be made. In particular, the following points are worth mentioning:

- **Prerequisites of quality.** The legal framework for statistical activity has been established. Staff resources at all three major agencies (Ministry of Statistics and Analysis, Ministry of Finance, and the National Bank of Belarus) are mostly adequate.
- **Assurances of integrity.** All three agencies demonstrate professionalism, and all provide guidelines on ethical conduct for their staff.
- **Methodological soundness.** All datasets are in the stages of meeting internationally accepted methodological guidelines but could come closer in certain areas. Some work is under way, especially that related to the implementation of international classifications.
- **Accuracy and reliability.** In general, datasets receive high marks for their accuracy and reliability. Belarus' statistical system has generally comprehensive and timely sources of data. The measures taken in assessing and validating source data, intermediate data, and statistical outputs appear appropriate.

However, there is a concern about the accuracy and reliability of the actual data produced, particularly for GDP and for industrial and agricultural production. To erase this concern, it was recommended to all the data agencies to enhance their data assessment and validation procedures, finding ways to increase users' confidence in the accuracy and reliability of official statistics.

In January 2005, the more recent IMF mission on National Accounts Statistics concluded the following:

- The Ministry of Statistics and Analysis (MSA) has implemented or is in the process of implementing most of the recommendations of the 2004 ROSC mission.
- The MSA does its best to improve the production of data on a continuous basis and adheres to the international and best recommended standards.
- In general, sound techniques and procedures are applied for the compilation of the national accounts and only a few additional refinements would further improve the estimates. The latter refers to the improvement in the calculations of the volume indices of intermediate consumption and the volume index of retail trade.
- The estimates of the economic activities of the informal sector could be improved.
- Regarding the GDP growth rates, the methods and procedures applied by the MSA are in accordance with international standards and the GDP data are consistent with the source data.
- The switch to the new industrial production index starting from 2006 and its incorporation in GDP calculations is strongly encouraged.

Sources: IMF (2005a and 2005b).

1.3 Although the official data on Belarusian growth are often met with considerable skepticism,² our comparison of the official growth data with alternative growth estimates, based on business surveys, has revealed a fairly high correlation in the identified growth trends. This supports the argument that economic growth in Belarus has been real and not merely a statistical phenomenon.³ (See also Box 1.1 on other statistical issues.)

1.4 **Economic growth in Belarus has been rather broad-based.** It has been driven primarily by improvements in labor productivity and increases in both energy efficiency and capacity utilization (see Chapters 2 and 7 for details). Fiscal and external adjustments were significant and helped to improve the macroeconomic conditions for growth. In contrast to some other CIS countries, where growth and exports remain concentrated in the extracting sectors with limited employment opportunities, the growth structure in Belarus has been much more beneficial for labor. As is shown later in this report, growth in labor-intensive sectors, backed by government wage and income policies, helped to ensure that the benefits from the recent growth were fairly broadly shared by the population.⁴ Poverty rates declined substantially, while inequality remained stable and moderate. The poverty headcount ratio (national definition) fell from 38.6 percent of the population in 1996 and 46.7 percent in 1999 to 17.8 percent in 2004, while inequality, which was moderate by regional standards during the entire period of economic growth, decreased further after 2001. This decline in poverty is, however, in line with a broader trend in poverty reduction that took place recently in the transition economies. A recent World Bank study (2005b) concluded that more than 40 million people moved out of poverty during 1998-2003 in the ECA region. This remarkable achievement is the result of a unique constellation of factors – rapid “catch-up” growth in the CIS accompanied by reductions in inequality in some countries.

Table 1.2: Selected Trade and Debt Ratios Using Official and Alternative Exchange Rates, 1996-2004 (% of GDP)

	Merchandise trade balance/GDP, %		Balance of trade in goods and services/GDP, %		Current Account Balance/GDP, %		External debt** outstanding/GDP, %	
	Off. Rate	Alt.rate	Off. Rate	Alt.rate	Off. Rate	Alt.rate	Off. Rate	Alt.rate
1996	-8.0	-9.3	-4.0	-4.7	-3.6	-4.2	6.7	7.8
1997	-10.2	-12.3	-6.2	-7.5	-6.2	-7.5	7.0	8.5
1998	-10.3	-23.2	-7.0	-15.8	-7.0	-15.7	7.0	15.6
1999	-5.1	-9.1	-2.3	-4.1	-1.7	-3.1	7.9	14.2
2000	-6.8	-9.0	-3.4	-4.6	-2.6	-3.5	6.2	8.3
2001	-6.6	-6.5	-4.1	-4.1	-3.2	-3.2	6.2	6.1
2002	-6.3	-6.2	-3.3	-3.3	-2.1	-2.1	5.6	5.5
2003	-7.1	-7.1	-3.8	-3.8	-2.4	-2.4	4.2	4.2
2004	-9.0	-9.0	-5.9	-5.9	-4.6	-4.6	3.2	3.2

* The alternative rate is calculated as 0.3*official NBB rate+0.7*parallel market rate (in all cases, period averages were used).

** Medium- and long-term debt only.

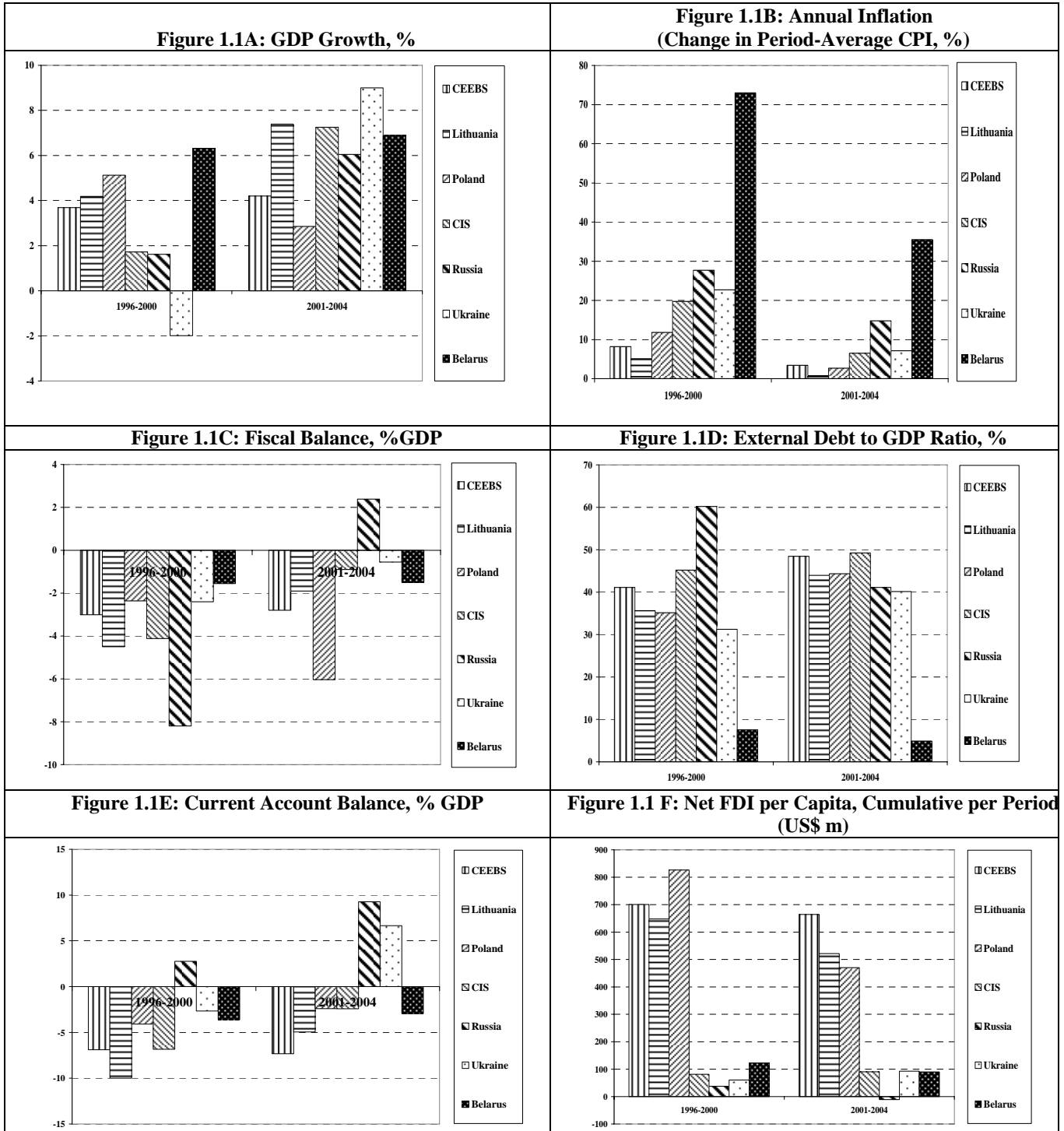
Source: World Bank staff calculations.

² See IMF (2005c) for the summary of statistical measurement issues and sources of potential upward bias in reported national accounts. However, the conclusion is that “the overall size of statistical measurement biases remains to be quantified, but appears not to fundamentally alter the picture conveyed by official national accounts statistics pointing to strong output growth in recent years” (p.4).

³ See Chapter 2 for details.

⁴ This is confirmed by findings from the recent Poverty Assessment by the World Bank (2004a), which concluded that poverty reduction in Belarus was significant and that this has been almost entirely due to economic growth, shared broadly across sectors, regions, and population groups.

Figure 1.1: Belarus: Macroeconomic Performance in Comparative Perspective



Source: World Bank ECA regional database.

1.5 We distinguish between the two periods of growth, 1996-2000 and from 2001 onwards.⁵ Both external and internal environments differ substantially among these two periods, influencing Belarus' growth patterns (as shown below in this chapter). Belarus' performance vis-à-vis other transition economies has also been somewhat different during the two periods (Figure 1.1A-F). For a number of indicators (GDP growth, debt and deficit), Belarus ranks favorably in relation to its comparators. However, its relative strength became less prominent during the second period and even disappeared in some instances. Thus, before 2001 in terms of economic growth Belarus outperformed both the Central Eastern European and Baltic countries (CEEBS) and the CIS, but during the second period (2001-04), the CIS as a group had a stronger performance than Belarus and the difference in growth rates between Belarus and the CEEBS decreased. In addition, Belarus' relatively strong debt and trade indicators in the late 1990s should be treated with caution: the use of the official exchange rate at the time of the multiple exchange rate system distorted the data. The application of the alternative exchange rate⁶ revealed that during the first period of growth Belarus had much more serious problems with its balance of payments than is usually recognized (Table 1.2). In 1998 the current account deficit amounted to almost 16 percent of GDP, while the official numbers show only 7 percent. However, both measures show a strong post-1999 recovery in all main indicators of external vulnerability, indicating a strong external adjustment (Figure 1.1D).⁷

1.6 The macroeconomic performance during the years of economic growth has been rather mixed (Table 1.1). Belarus has managed to maintain moderate budget deficits and debt levels. However, such indicators as inflation, FDI inflow, and the current account balance were weak. Inflation in Belarus, which is being reduced substantially lately, remained significantly higher during both periods than in other transition economies, including neighboring countries. The current account position is still precarious, given the low level of reserves, the inability to attract a sizable amount of FDI, and the limited access to international financing.

1.7 Progress in structural reforms has been slow and inconsistent. In general, Belarus is lagging behind most of the transition economies in various aspects of the transition (Figure 1.2). Across nine broad reform areas, most of the progress attained relates to price and trade liberalization. However, it is indicative that among all transition economies Belarus with its rating of 2.5 remains the least advanced country in this area.⁸ After the initial liberalization, which took place in the early years of independence, little progress was made during 1996-2000. During the second period (2001-03), some further progress was achieved: the number of goods and services subject to price regulation was reduced, cost-recovery in utility tariffs by population increased, while the level of cross-subsidization was lowered substantially. However, even in this area there is still considerable room for further liberalization. Moreover, some worrisome signs of policy reversal appeared in 2004 -- the number of goods subject to price regulation increased, cost-recovery in utilities declined, and arrears for utilities began to accumulate again (Table 1.3 and Figure 1.3).

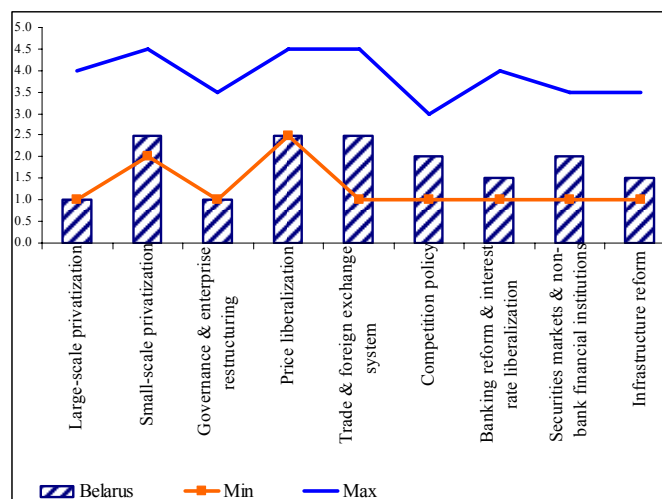
⁵ The first year of economic growth, 1996 is somewhat transitional. Strictly speaking, 2000-01 should also be considered as a transitional sub-period to another pattern of growth. For simplicity of analysis, we include 2000 in the first growth period and 2001 in the second one.

⁶ The alternative rate is estimated based on the official and parallel market average exchange rates, with the weights of 30 percent and 70 percent, respectively.

⁷ It is worth noting that there was another significant deterioration in both the current account and the trade balance in 2004. Both still remain stronger than in 1997-98.

⁸ Out of 27 transition economies, only Belarus, Turkmenistan and Uzbekistan had such a low rating in this area.

Figure 1.2: Belarus Transition Indicators, 2004



Source: EBRD Transition Report 2004.

Table 1.3: Price Regulation in Belarus, 2000-04

	2000	2001	2002	2003	2004
Number of positions (goods and services) for which prices are regulated (either fixed or ceiling prices are used)	66	66	62	59	61
Share of goods/services with regulated prices in CPI basket, %	27	25	24	21	24
Number of positions (goods and services) for which margins are regulated (either profitability or trade margin is restricted)	8	7	7	8	8
Number of enterprises which are on the list of monopolists/ and which require government clearance for their price increases	312	300	265	205	197
Number of export commodities for which minimum export prices are used	12	12	12	10	11

Source: Ministry of Economy.

Figure 1.3: Cross-Subsidization and Cost Recovery in the Utility Sector (for services provided to households), 2000-04

Figure 1.3A: Financing Structure in the Utility Sector, % of total

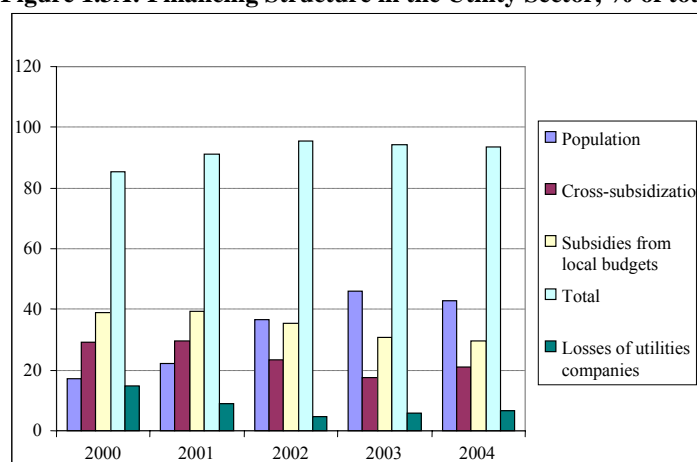
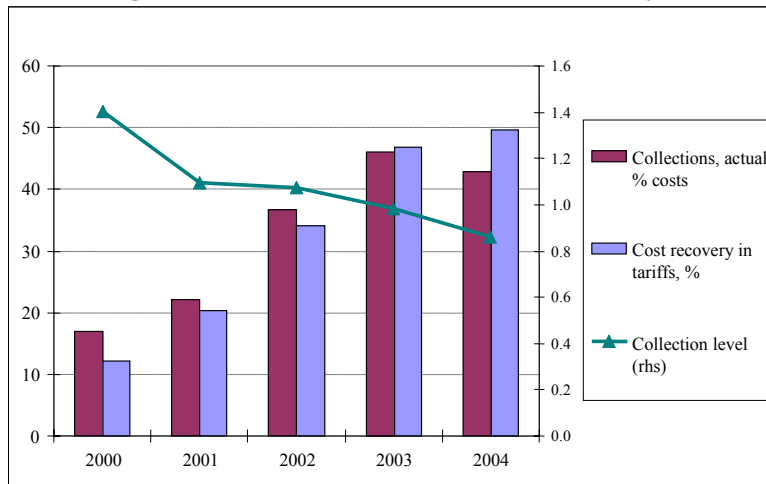


Figure 1.3B: Actual and Estimated Cost Recovery, %



Source: Ministry of Economy.

1.8 Small-scale privatization has yet to be completed, while large-scale privatization has been minimal and has practically stalled recently. Even those corporations that have been either partially or completely privatized are usually subject to a high degree of administrative control. The “golden share” provisions are excessive and they are exercised in relation to a number of privatized enterprises (Box 1.2). As documented in recent global studies⁹ and in Chapter 5 of this report, small private businesses and individual entrepreneurs in Belarus face one of the most hostile business environments among the European transition economies. Not surprisingly, the share of the private sector in GDP is about 25 percent – the lowest among all transition economies¹⁰ -- and the FDI inflow is much lower than needed and predicted given Belarus’ strategic geographical location, privileged access to the Russian market, educated and skilled labor force, and relatively good infrastructure.

1.9 Overall, the Belarusian economy has a number of features that make it quite different from its neighbors in both the CIS and CEEBS. These features include: (i) the dominance of traditional firms (state-owned or partially privatized) in production and exports; (ii) the high degree of government interventions in enterprise operations, including the preservation of some elements of central government planning of output, wages, and employment; (iii) the high level of the tax burden and the major budget redistribution of funds aimed at supporting traditional firms and employment; and (iv) the high dependence on trade with Russia and along with the slow pace of geographic diversification of exports.

1.10 This combination of factors has supported continual predictions by economic analysts of immediate economic decline and macroeconomic instability in Belarus. Yet Belarus has to date managed to defy these expectations. Moreover, the recent history of economic growth and relative stability has provided a degree of credibility regarding the chosen economic strategy within the country and has provided support for the government’s rejection of the rapid market reform strategy of neighboring countries, which was labeled as being socially disruptive.

⁹ World Bank (2004c and 2005b).

¹⁰ EBRD (2004). Only for Turkmenistan is the value of the indicator the same. According to the national classification of ownership, the MSA figure for 2003 was 52.1 percent. Upon the IMF’s request, the MSA computed the share of private ownership in GDP in 2003 (where genuinely private and JSC companies with less than 50 percent of state capital were taken into consideration) and arrived at 40.7 percent. However, none of these estimates allows for cross-country comparisons and even for inter-temporal comparisons for Belarus only.

Box 1.2: “Golden Share” Rule in Belarus

Presidential Decree No. 125 of March 1, 2004, "On the Special Right ("Golden Share") of the State to Participate in the Management of Business Entities", has replaced the previous Decree of 1997. According to the new Decree, the "golden share" may be introduced in the following situations: wage arrears in excess of three months; serious weakness in the financial performance of a business entity over a six month period; a need to address the defense and security concerns of the state; and the need to protect the economic interests of the state. This is fairly broad justification: in international practice the introduction of the golden share is normally justified only by national security concerns.

In the case of Belarus the “golden share” mechanism is perceived by the international community as one of the major impediments to private investments. Meanwhile, two important issues are often missing in the discussion on the golden share mechanism in Belarus:

- The golden share can be introduced only in business entities that were created on the basis of state property. In other words, it cannot be introduced in *de novo* firms. Thus, by law, greenfield FDI is fully protected from this mechanism.
- The golden share mechanism has to date largely played a signaling role, representing a potential rather than an operational threat. It has not been widely used. As of April 1, 2005, it was in effect at 5 JSC with Republican property (a refrigerator company, two shoe manufacturing companies, a confectionary company, and a textile company) and five JSC with municipal property (two retail trade companies, a textile company, a dairy company, and a machinery company). Moreover, even when introduced, the rule may not be exercised, as, for example, has been the case with the confectionary factory.

However, the recent case of Mozyr NPZ plus Ltd. – a private company that is not a former SOE, where the golden share was introduced through the decision of the regional government in early 2005 – casts serious doubts on the strict adherence to the Decree. Moreover, it highlights a broader problem, which is a degree of exposure of any business in Belarus to local government harassment.

The golden share should be abolished or, at minimum, the existing legislation should be modified in line with the international experience. The golden share provision in Belarus is perceived by the rest of the world as an embodiment of the state’s interventionist policy toward the real sector. While it is seldom used, its existence sends an excessively strong negative signal to potential investors, who tend to view Belarus’ investment climate as too unpredictable and risky. Overall, the rule’s costs are too high in terms of damaging the country’s investment image.

At the same time, the Belarusian government actually does not need this mechanism. It can and does exercise its powers without resorting to the golden share. It is indicative that it was not introduced at any of the largest firms that may be considered of strategic importance. Most Belarusian enterprises, while not being affected by the golden share, are still restricted in their decision making by various administrative controls and are pressed to meet output and wage targets. Thus, the major development challenge for the country is not just to eliminate/restrict the golden share mechanism, but to improve the business environment for all companies, domestic and foreign, public and private.

Source: World Bank Staff analysis based on information from the Ministry of Economy and the IMF.

1.11 **The Belarusian experience is somewhat at odds with the standard transition paradigm**, and the relative stability of the Belarusian economy has even been called a “puzzle.”¹¹ Belarus has now experienced nine years of an unbroken growth record, and an impressive decline in poverty rates, supported by rapid growth in real wages and pensions and low unemployment rates. At the same time, growth has not been backed by sound and consistent macroeconomic policies, advanced structural and institutional reforms, and a thriving private sector. Despite some liberalization undertaken in the course of reforms, the economy remains highly regulated and under predominant state control. A comprehensive assessment of this puzzle represents both an intellectual challenge and a high relevance for Bank policy

¹¹ Fischer and Sahay (2000); Havrylyshyn and Wolf (1999).

dialogue with the government. Box 1.3 presents several conclusions regarding Belarus' "unusual" track record in the 1990s, suggested by the earlier regional study by the World Bank.

Box 1.3: Belarus' Recovery and Growth Experience: Important Earlier Lessons from Transition

In the light of the partial and poorly implemented reforms seen in many CIS countries, the slow pace of restructuring in Belarus can be seen as enabling it to avoid some key mistakes of the early transition.

First, while continued state ownership did little to promote more efficient operational or strategic decision-making at the enterprise level, it did deter the large-scale asset stripping, tunneling, and tax evasion that have damaged growth in the 1990s in other CIS countries. Nevertheless, the rapid decentralization and even fragmentation of power in other CIS countries at the start of transition might have precluded such a policy option.

Second, the capacity of the Belarusian state to maintain high levels of tax collection highlights the importance of these taxes in smoothing the initial output decline. The strength of fiscal revenues has maintained the ability to support declining sectors and socially oriented expenditures. Belarus will need to maintain its ability to collect taxes if it chooses to accelerate economic reforms. Though it may be tempting to explain this fiscal performance as a result of the authoritarian state, similar political regimes have not guaranteed similar outcomes in Turkmenistan or Uzbekistan.

Third, the preservation of traditional economic linkages could smooth transitional shocks. Other CIS countries saw their exports to Russia collapse while their energy imports became far more expensive, leading to a massive terms-of-trade shock. While Central European transition economies were redirecting their exports to the EU, backed by FDI inflows, CIS countries had nowhere to go but Russia. Belarus continued to earn export and service revenues by maintaining close economic ties with Russia, thus softening the initial trade shocks.

In summary, as is also emphasized later in this report, *although its growth strategy has been subject to considerable risks that raise serious concerns about its longer term sustainability Belarus has—perhaps inadvertently—avoided some problems, associated with rapid economic liberalization.* The ability of the state to prevent the collapse of its institutional capacity early in transition appears to have prevented the Belarusian economy from experiencing the rapid decline observed elsewhere in the CIS. Yet such an outcome was not guaranteed by the slow pace of economic reform, but rather by dependence on Russia, whose willingness to subsidize, directly and indirectly, Belarus' inaction was a function of the geostrategic importance of the country. Such an option was not necessarily available to other CIS countries.

Source: World Bank, *Transition: The First Ten Years* (2002b), p 47.

1.12 The peculiarities of the pre-reform industrial structure and the short-term effects of both state ownership and administrative controls contributed to the Belarusian recovery and growth (including its recent acceleration) for the following reasons:

- Belarus inherited several unique USSR economic assets in the manufacturing sector (e.g., in the automobile and tractor industries), which proved to be more competitive in the Russian market than the rest of the USSR industry. At the time of strong Russian growth, these firms have been facing a strong export demand. Moreover, Belarus inherited significant manufacturing capacity in the chemical and oil processing industries, which proved to be highly competitive in the European markets.
- In contrast to many large manufacturing enterprises in other FSU republics, many enterprises in Belarus lost a smaller share of their original productive capacity during the early transition period. This was due to a lower incidence of asset stripping and capital flight in Belarus (because of slow privatization and much stronger administrative controls). Also, special political relations with Russia helped many firms to acquire some Russian orders and to keep operating even in the most difficult periods of low demand in the early 1990s.

- Many leading Belarusian exporters are traditional SOEs that enjoy soft budget constraints. Profit maximization is not an overwhelming priority for these enterprises. Some of them, as claimed, continue exporting even when their export turns out to be unprofitable.
- The government of Belarus encourages import-substitution activities by imposing non-tariff import restrictions, which act as an additional channel of state support for local industries. These non-tariff restrictions are most significant for consumer goods. Such restrictions tend to reduce the impact of government demand stimulus on total import demand in the economy.
- It is known that administrative interventions could be efficient for a limited period for solving specific well-defined production problems and some of Belarus' recent successes are clearly due to their broad usage. For instance, a strong administrative control over the energy sector's performance led to smaller quasi-fiscal deficits and a smaller accumulation of energy debts, which contributed considerably to keeping the overall public debt at quite a low level, as well as to maintaining overall macroeconomic stabilization.

1.13 **Access to a considerable amount of economic rents** has been another source of relative economic stability in Belarus. These rents are quite efficiently taxed by the state¹² and broadly distributed in the economy to subsidize non-viable enterprises, push up domestic demand, and provide some degree of employment guarantees to households. The primary sources of such rents relate to the following:

- The activities of several large enterprises in the sector of primary resources and basic commodities (oil processing, fertilizers). These enterprises benefited recently from strong prices on global commodity markets. Belarus on average benefits from higher global oil prices because of its major oil processing capacity.
- Privileged access to the Russian market, especially in the machinery sector, which is labor intensive and has major backward linkages to the rest of the local economy. In the past, successful exporters were subject to additional taxation through the multiple exchange rate regime (see Chapter 4).
- Privileged access to the underpriced Russian energy supply. A significant portion of the benefits related to cheap energy were not passed on to energy consumers but were centralized by the government (see Chapter 7).

1.14 **The integration process with Russia** has been important for economic recovery in Belarus in two fundamental ways. First, it provided direct demand support. In the second half of the 1990s preferential access to the Russian market helped Belarus to keep some of the key production capacities of its manufacturing operations.¹³ A more recent economic recovery in Russia led to a considerable expansion in traditional Belarusian exports, including labor-intensive items in the machinery and equipment sector (trucks, tractors, television sets, etc.). Second, the integration process was a primary driver for recent policy adjustments, including several major reform steps such as the unification of the exchange rate and the phasing out of direct NBB financing of the budget deficit.

B. ROLE OF ECONOMIC POLICIES IN GROWTH PERFORMANCE: TWO PHASES AND TWO GROWTH MODELS

1.15 **Belarus relied on two quite different growth models during its ongoing growth episode.** During the first phase in 1996-2000, the growth model was primarily influenced by the following:

¹² Our estimates in Chapter 2 suggest that the oil processing sector has been facing an effective tax rate that exceeds 80 percent of the value added it generates.

¹³ See Chapter 4 for more details.

- The expansionist monetary policy which helped to keep the real value of the Belarusian rubel (BYR) low
- The policy of multiple exchange rates which was used as an instrument of hidden targeted support for some exporters and as a tool of taxation for others
- The strict policy of wage and price controls which helped to keep production costs low and to support the cost advantages of traditional exports
- The encouragement of barter transactions with Russia, which in combination with multiple exchange rates generated a considerable resource transfer to Belarusian exporters
- The active political re-integration with Russia, which resulted in improved market access, ensured the preservation of preferential gas import prices as well as the tolerance of energy arrears, and which also helped to improve capacity utilization in oil refineries and to secure a debt write-off in 1996.

1.16 **This growth model had serious limitations and could not be sustained.** First, it required the preservation of low (relative to Russia and other neighbors) wages, which gradually became an acute political problem. After the unification of the exchange rate in 2000, the government fundamentally modified its wage policy and introduced targets for growth in dollar wages as one of its top policy priorities, undermining one of the pillars of the previous growth model. Second, high inflation and excessive government interventions in price and exchange rate mechanisms made it difficult for enterprises in the real sector to initiate any longer-term restructuring. The level of industrial investments was depressed. Third, in an environment in which the main comparative advantage in the major market was based on low production costs – which were seen by enterprises largely as a result of government policies but not as the effect of their own efforts – the incentives for enterprises for modernization and restructuring were further weakened. Fourth, macroeconomic stabilization in Russia after 1998 led to a rapid evaporation of barter and thus removed another source of earlier Belarusian growth. Finally, more recent economic expansion in Russia, with its impressive growth in real household incomes, raised the quality requirements for imports, which created much stronger competitive pressures on Belarusian producers than ever before.

1.17 **Macroeconomic policies in Belarus during the first phase were anti-stabilizing in their nature.** Loose monetary policy with subsidized credits to some sectors of the economy (agriculture, housing, and manufacturing) stimulated aggregate demand and domestic consumption, but resulted in high inflation, negative interest rates and a reduction in savings, thus depleting domestic sources for investments. The exchange rate policy was characterized by a multiple exchange rate system with an overvalued official exchange rate, foreign exchange rationing and surrender requirements as a tax on exporters. At its maximum in 1998, the gap between market and official exchange rates reached 200 percent. This policy stimulated import substitution, ensured a certain level of “strategic imports” (energy, food, medicines), and provided hidden support for selected exporters. At the same time, it worsened conditions for exports in general, thus holding back economy-wide productivity growth. This also led to the development of parallel currency markets, significant real depreciation, depleting hard currency reserves, and growth in barter and rent-seeking activities. The fiscal policy was based on the very high government centralization of resources and their re-distribution through fiscal and quasi-fiscal channels. Explicit general government expenditures accounted for about half of GDP, while their true level was considerably higher.¹⁴

1.18 At the same time, these economic policies resulted in a substantial decline in key relative prices in Belarus vis-à-vis Russia, creating a significant temporary price advantage for local exporters, which appears to be fundamental in explaining Belarusian growth at that time (see Chapter 2). Another

¹⁴ World Bank (2003b).

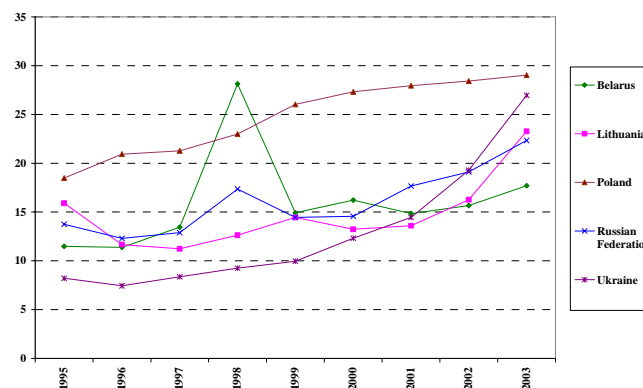
important positive outcome of the above growth model was the preservation of considerable operational capacity in industry, which could be better utilized as soon as external conditions improved.¹⁵

1.19 **The change in external and domestic conditions resulted in a gradual (in 2000-01) transition to a new growth model in Belarus**, which, despite all its remaining problems discussed elsewhere in this report has been fundamentally much healthier, as it is based on less market-distortive policies. Its main features are the following:

- Improved macro policies: a unified exchange rate, a stricter monetary policy, considerable fiscal and quasi-fiscal adjustment, and lower inflation
- An energy and utility policy that aimed at attaining full cost recovery in tariffs and strict payment discipline
- New wage and income policies that stimulated domestic demand
- The phasing out of barter, which inter alia helped somewhat to accelerate export diversification out of the Russian market
- The maintenance of its political and administrative effort to preserve the Belarusian traditional niche at the Russian market.

1.20 **The second period is characterized by several positive developments, first of all in the area of macroeconomic management.** The exchange rate was unified in September 2000. The NBB regained formal independence in June 2000.¹⁶ The monetary policy was tightened and the NBB started to pursue a policy of positive interest rates. The costs of credit in Belarus have been increasing gradually and real lending interest rates have exceeded those in all neighboring countries except Ukraine. Domestic credit to the economy has been growing from 14.8 percent of GDP in 2001 to 17.8 percent in 2003, which is still below the levels of the neighboring countries (Figure 1.4).

Figure 1.4: Domestic Credit and Real Lending Rates in Belarus and Neighboring Countries
Figure 1.4A: Domestic Credit/GDP, %

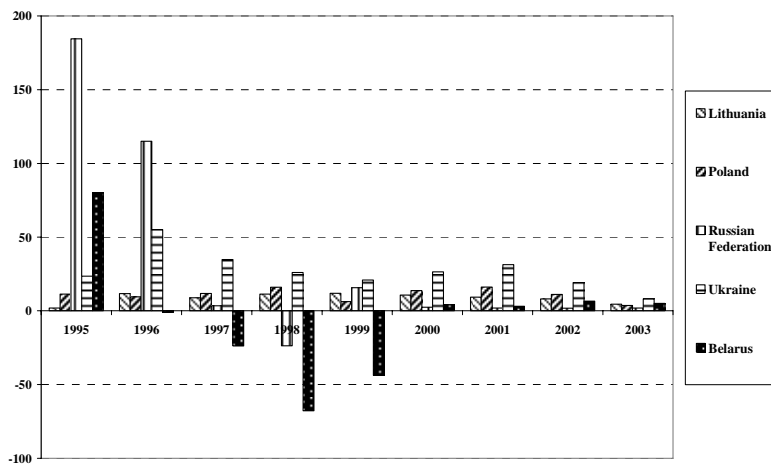


Source: World Bank staff calculations based on IFS data.

¹⁵ Large declines in manufacturing capacity were quite common for the CIS countries during the transitional recession, with enterprises being closed down and equipment sold as scrap.

¹⁶ By Presidential Decree, the former decision which subordinated the NBB to the government was canceled.

Figure 1.4 B: Real Lending Rates,%



Sources: World Bank Staff calculations based on IFS data.

1.21 **The Government initiated significant improvements in the area of fiscal management.** The World Bank (2003b) and the IMF (2004) acknowledged the progress made in Belarus in some important areas of fiscal management, including the steps taken toward budget consolidation, the increase in budget coverage, improvements in the methodology of budgeting and reporting, etc. (Box 1.4). At the same time, a number of fiscal weaknesses still remain. The overall size of the government budget remains very large compared to those of other countries in the region, with negative implications for the health of the corporate sector and for competitiveness. Although considerably reduced in some sectors (e.g., energy), quasi-fiscal activities continue to be common (e.g., state support via directed credits from the banking sector and tax exemptions). Government interventions in credit allocation remain extremely high. The trends in the pension system are unsustainable and present a major contingent liability.

Box 1.4: Improvements in the Area of Fiscal Management

Belarus has made noticeable progress in reforming fiscal management in the direction of greater sustainability and transparency.

- A comprehensive legal and administrative framework for fiscal management has been introduced. The Budget Systems Law provides for an explicit commitment to an open and transparent budget process and the government is currently working on the Budget Code and a Special Part of the Tax Code.
- The government undertook important steps toward further budget consolidation by incorporating into the budget major remaining off-budget funds (Social Protection Fund from 2004, and sectoral innovation funds from 2005).
- Treasury coverage has been significantly expanded - regional budget accounts were incorporated into the treasury system during 2000-02 and local budget accounts have been gradually incorporated as well. SPF accounts were transferred to the Treasury in 2004, and innovation funds were transferred in 2005.
- Budget deficit financing by the NBB ceased as of 2004.
- Budget classification has been improved substantially.

Sources: World Bank (2003b), IMF (2004), MOF.

1.22 **Fiscal stabilization progressed, and after 2000 fiscal adjustment was fairly impressive, although it remained almost unnoticed.** The official levels of the budget deficit (both cash and accrual) have always been fairly low in Belarus. However, the data are not particularly informative since quasi-fiscal (hidden) deficits are not taken into account. The indicator of actuarial deficit provides more

accurate estimates for the broad trend in the accumulation of the public sector's liabilities.¹⁷ The size of the actuarial deficit in Belarus declined from 11 percent of GDP in 2000 to 1 percent in 2004.¹⁸ This was driven by the reduction in external debt flows, the phasing out of quasi-fiscal activities in the energy sector and a decline in the quasi-fiscal activities of the National Bank (Table 1.4).

Table 1.4: Belarus: Actuarial, Conventional, and Hidden Deficits

(Annual Flows and as a Percent of GDP)

	2000	2001	2002	2003	2004
External Debt, BYR bln	474.1	297.4	395.1	77.8	75.6
as % of GDP	5.2	1.7	1.5	0.2	0.2
Domestic Debt, BYR bln	241.2	656.0	352.9	751.4	672.0
as % of GDP	2.6	3.8	1.4	2.1	1.4
Reserve Money, BYR bln	221.1	439.8	270.6	570.6	707.1
as % of GDP	2.4	2.6	1.0	1.6	1.4
Energy Sector External Arrears, BYR bln	197.1	198.5	(162.8)	49.5	(364.6)
as % of GDP	2.2	1.2	(0.6)	0.1	(0.7)
Budget Arrears, BYR bln	62.0	182.9	(17.4)	(73.9)	53.7
as % of GDP	0.7	1.1	(0.1)	(0.2)	0.1
A. Total Increase in Liabilities, BYR bln	1,195.5	1,774.6	838.4	1,375.4	1,143.8
as % of GDP	13.1	10.3	3.2	3.8	2.3
Privatization Proceeds, BYR bln	7.3	12.5	427.0	36.0	39.7
as % of GDP	0.1	0.1	1.6	0.1	0.1
Loss in Gross Reserves of NBB, BYR bln					
	(185.8)	(163.9)	(351.3)	(187.1)	(630.6)
as % of GDP	(2.0)	(1.0)	(1.3)	(0.5)	(1.3)
B. Total Loss of Assets, BYR bln	(178.0)	(151.4)	75.7	(151.1)	(590.9)
as % of GDP	(1.9)	(0.9)	0.3	(0.4)	(1.2)
C. PSB (Actuarial Deficit) = A + B	1,017.5	1,623.2	914.0	1,224.3	552.9
as % of GDP	11.1	9.5	3.5	3.3	1.1
Budget Deficit (accrual), % GDP	1.0	3.1	1.9	1.1	0.0
Hidden deficit, % GDP	10.1	6.4	1.6	2.2	1.1
<i>Memorandum Items</i>					
Conventional Budget Deficit (cash), % GDP	0.1	1.9	1.8	1.4	0.0
GDP, BYR bln	9,134	17,173	26,138	36,565	49,445
Exchange rate, (period average)	933	1,383	1,784	2,075	2,164

Source: World Bank staff estimates based on MoF, NBB, Ministry of Economy, MSA, and IMF data.

1.23 Improved macroeconomic policies resulted in lower inflation and gradual de-dollarization.

Inflation (CPI-based) in Belarus remained the highest in the region and fell from three-digit numbers in 2000 to 18.1 percent in 2004.¹⁹ The reduction in inflation was due to the policy of positive real interest rates, pushed by the NBB, as well as the unification of the exchange rate and the related stabilization of

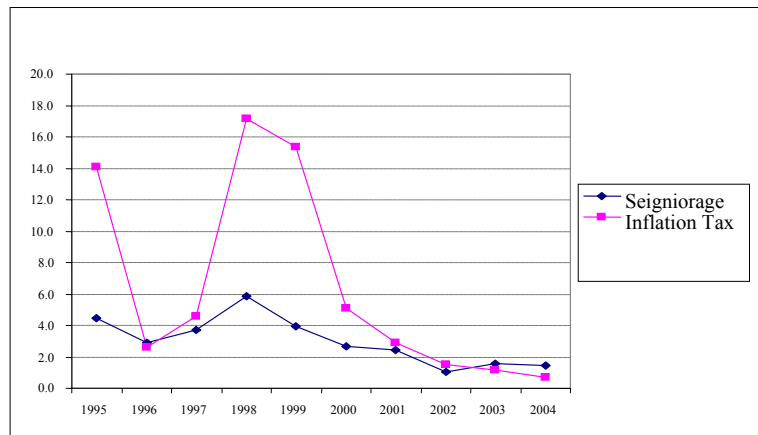
¹⁷ For definitions and cross-country comparisons, see Freinkman et al. (2003).

¹⁸ Owing to the data limitations, we estimate the hidden deficit on the basis of an incomplete list of quasi-fiscal operations. Still, we believe that our aggregates reflect the actual scale of the macroeconomic adjustment that took place in 2000-04.

¹⁹ The persistence of high inflation rates during the second growth episode was to a large extent due to the supply shocks and, in particular, to the adjustments in utility prices. For example, according to the IMF, in 2002, when these adjustments were particularly strong, more than a third of the overall CPI increase of 35 percent (e-o-p) was caused by the combined impact of deregulations and other supply shocks. Monetary authorities managed to accommodate these shocks to minimize the output effects arising from the tariff adjustment (IMF, 2003).

the market for foreign exchange. In addition, during 2004 a slowdown in inflation was supported by the cessation of NBB direct financing of the budget deficit. A tighter monetary policy also resulted in the reduction in both seigniorage and the inflation tax (Figure 1.5). The decline in the burden of the inflation tax on the real sector and households was most significant – from about 16 percent of GDP in 1998-99 to less than 1 percent in 2004.

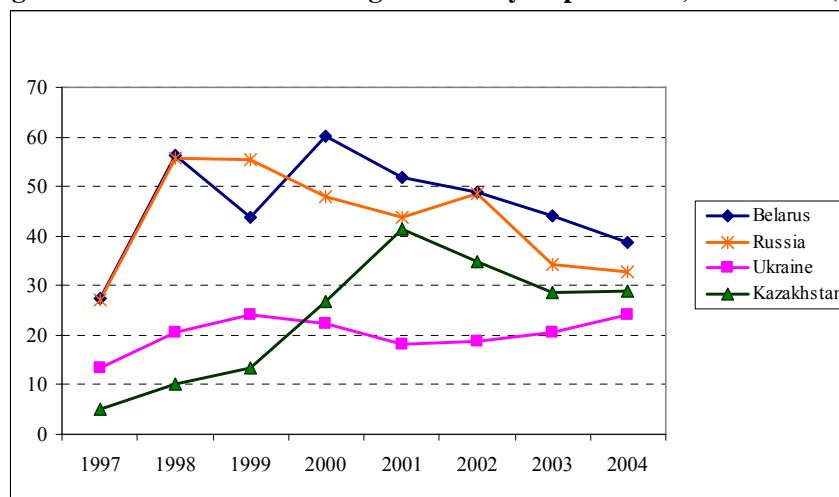
Figure 1.5: Seigniorage and Inflation Tax in Belarus, 1995-2004 (of%, GDP)



Source: World Bank Staff estimates.

1.24 More responsible monetary and foreign exchange policies led to a growth in money demand and to a reduction in the level of dollarization (Figure 1.6). Dollarization declined by one-third relative to its peak of 60 percent in 2000. However, it still remains higher than in most CIS countries.

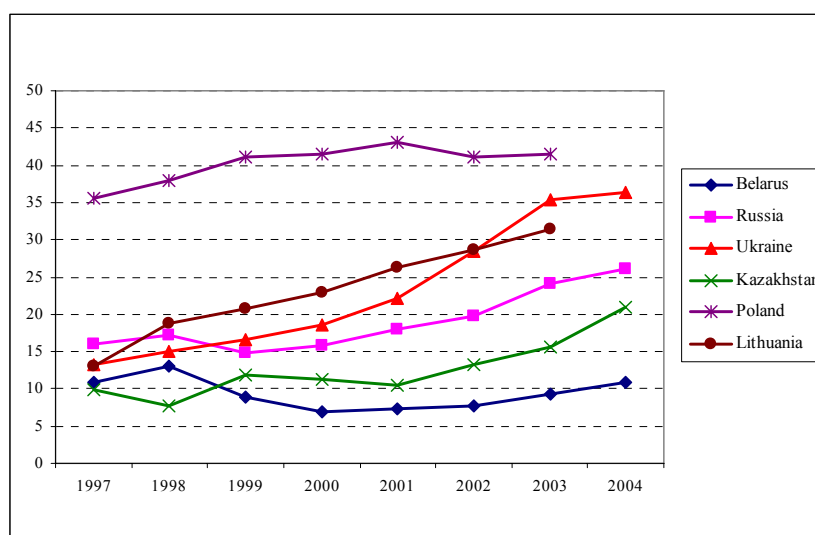
Figure 1.6: Dollarization: Foreign Currency Deposits/M3, 1997-2004 (%)



Sources: NBB, NBU, NBK, IFS.

1.25 The level of monetization has been growing gradually from 2000 but still is very low, at about 11 percent in 2004 (Figure 1.7). This differs substantially from several other countries in the region, which started from approximately the same level of monetization but progressed much further than Belarus. For example, the level of monetization in Ukraine in 1997 was 13.3 percent of GDP and it increased to 36.4 percent in 2004. The highest level of monetization in Belarus (13 percent GDP in 1998) has not yet been reached again after its sharp decline in 1999-2000.

Figure 1.7: Monetization (M2/GDP), 1997-2004 (%)



Source: World Bank Staff calculations on IFS data.

1.26 While the change in macroeconomic policies undertaken in Belarus in 2000-01 was aimed at some restoration of macroeconomic discipline, it simultaneously emphasized the accelerating growth in real wages, thus leading to a significant erosion of the earlier cost advantages. The domestic price parity with Russia was restored in 2000. In 2001 the average wage in Belarus reached its highest level to date relative to Russia (80 percent). This coincided with a major slowdown in growth in Belarus in 2000-02. Changes in the macroeconomic environment and the related evolution in incentives forced exporters to gradually adjust their strategy and move to a market niche with higher quality and price levels. A new acceleration of growth took place in 2003, in part in response to strong Russian growth at that time (which was associated with the strengthening of the Russian ruble and the rapid growth in Russian real wages). However, as we show in the following chapters, the most recent growth episode in Belarus (2003-04) differs qualitatively from the growth of the late 1990s because it is supported more strongly by both real improvements in performance at the micro level and investments in upgrading the existing export capacity.

1.27 Overall, the distinguishing feature of the second growth model is related to the expanded opportunities and the improvements in incentives at the enterprise level for investment and stronger performance. The level of investments in industry (without energy) increased from 4.4 percent of GDP in 1996 to 5.4 percent in 2000 and to 5.7 percent in 2003.

C. STRUCTURE AND SOURCES OF GROWTH (SNA VIEW)

1.28 By period, the rate of growth of different components of aggregate demand varied, but the highest rates of growth during both periods were in domestic household consumption. The rates of

growth in public consumption slowed down substantially during the second phase, while the rates of growth in gross capital formation more than doubled and the rates of growth in imports of goods and services increased almost four fold (Table 1.5). The differences in the dynamics of particular components of aggregate expenditures reflect the different roles they play during the two periods of economic growth.

Table 1.5: GDP Growth, Average Annual Growth Rates, 1996-2004 (%)

	1996-2000	2001-04	1996-2004
Gross domestic product	6.3	6.9	6.6
Total consumption of goods and services	8.3	9.4	8.8
Household consumption	9.7	12.4	10.9
Public consumption	4.5	0.9	2.9
General government	4.8	1.0	3.1
Consumption of public organizations	3.0	0.4	1.8
Gross capital formation	5.1	12.1	8.2
Gross fixed capital formation	5.0	10.9	7.6
Exports of goods and services	9.0	10.7	9.7
Imports of goods and services	3.0	12.4	7.1

Source: World Bank staff calculations on MSA data.

1.29 **The drivers of growth have been changing over time, but the role of domestic/private consumption has been the most significant.** Table 1.6 presents the breakdown of economic growth by expenditure category during the two periods of growth. Domestic demand was the major driver of growth during both growth phases (Figure 1.8). It is worth mentioning that statistical discrepancy was rather high and negative during the first phase, indicating considerable under-estimation of imports, and thus even a smaller contribution of net exports.

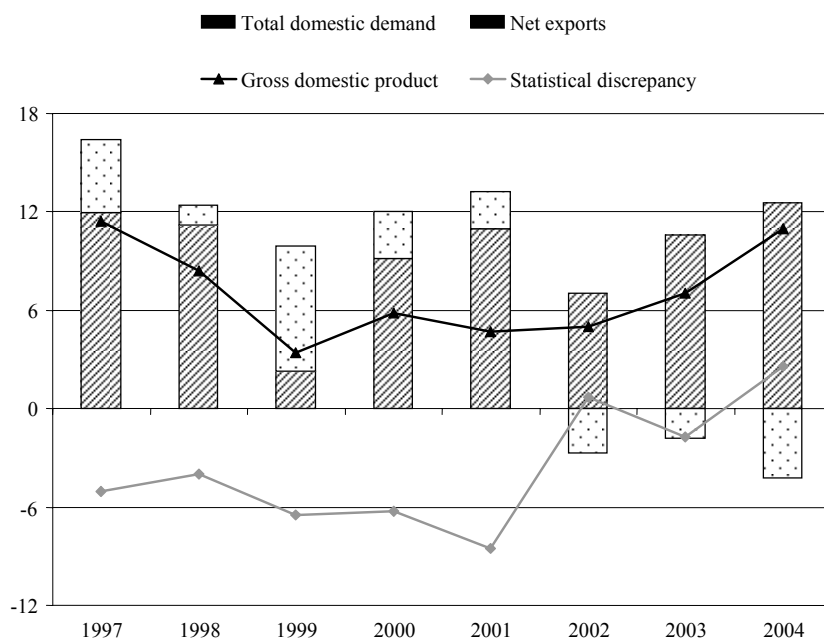
Table 1.6: Contribution to GDP Growth by Period: Expenditure-Side View, 1996-2004
(Annual Average for the Period, %)

	1996-2000	2001-04	1996-2004
Total consumption of goods and services	6.7	7.1	6.8
Household consumption	5.7	6.9	6.1
Public consumption	1.0	0.2	0.7
General government	1.3	0.2	0.6
Consumption of public organizations	0.1	0.0	0.0
Gross capital formation	0.8	3.0	2.1
Gross fixed capital formation	1.3	2.6	1.8
Changes in inventories	(1.5)	0.4	(0.0)
Net exports	4.4	(1.6)	1.2
Exports of goods and services	6.0	7.1	6.6
Imports of goods and services	(1.5)	(8.7)	(5.4)
Statistical discrepancy	(5.2)	(1.9)	(3.7)
Net exports and statistical discrepancy	(0.7)	(3.5)	(2.4)
Total domestic demand	7.5	10.2	8.8
Total domestic demand - Imports	6.0	1.5	3.5

Note: Because the 1996 data are incomplete, this causes some inconsistencies between Tables 1.5 and 1.6.

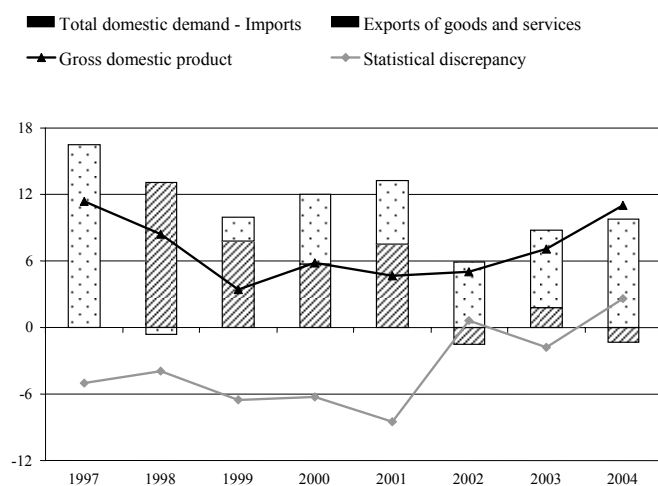
Source: World Bank staff calculations based on MSA data.

Figure 1.8: Contribution to GDP Growth, Expenditure-Side View, 1997-2004
1.8 A. Breakdown of Demand Growth (Percent contribution)



Source: World Bank staff calculations on MSA data.

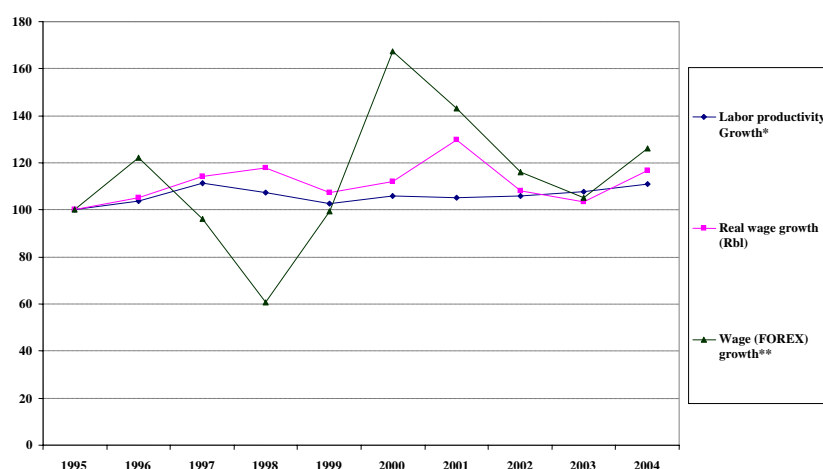
Figure 1.8 B. Breakdown of Demand Growth (Percent contribution)



Source: World Bank staff calculations on MSA data.

1.30 Within domestic demand, household consumption was the major contributor to growth. The consumption growth, in turn, has been driven by increases in the real purchasing power of households as a result of increases in real wages and other incomes. Productivity growth while strong was not sufficient to match this real income expansion (Figure 1.9).

Figure 1.9: Labor Productivity and Wage Growth, 1995-2004



*Labor productivity here is measured as GDP per employee.

**Forex based wage is estimated through a currency basket that consists (50:50) of US\$ and euros.

Source: World Bank staff calculations.

1.31 **Rapid growth in real incomes has also led to substantial growth in consumer imports**, especially during the second phase. Consumer imports in 2004 almost doubled as compared with 2000. However, the share of imported goods in household (HH) consumption of goods and services fell from 16.4 percent in 2000 to 13.1 percent in 2004.²⁰ Official data on consumer imports are somewhat higher, but they also support the conclusion of a declining share of consumer imports in private consumption (Table 1.7).

Table 1.7: Consumer Goods Imports in Household Consumption in Belarus, 2000-04

US\$ m	2000	2001	2002	2003	2004
<i>Imports, total</i>					
WITS, COMTRADE	8,492.4	8,286.4	9,092.3	11,558.0	15,443.8
Ministry of Statistics	8,646.2	8,286.4	9,092.3	11,558.0	16,345.5
NBB (FOB prices)	7,524.6	8,140.8	8,879.0	11,328.5	15,982.5
<i>Consumer goods imports</i>					
WITS, COMTRADE/BEC	878.1	1,181.2	1,021.5	1,300.4	1,649.0
Ministry of Statistics	1,560.9	1,908.3	2,437.4
Exchange rate, BYR/US\$	933.5	1,382.7	1,783.6	2,075.0	2,163.7
HH consumption, BYR bn	5,011.9	9,531.2	15,113.8	20,331.8	27,157.4
HH consumption, US\$ m	5,369.1	6,892.9	8,473.6	9,798.5	12,551.2
Consumption goods imports/HH consumption, % (BEC)	16.4	17.1	12.1	13.3	13.1
Consumption goods imports/HH consumption, % (MSA)	18.4	19.5	19.4

Sources: MSA, NBB, WITS/COMTRADE, World Bank staff estimates.

1.32 In general, as noted above, while average growth in HH consumption during both periods was high and rather similar (9.7 and 12.4 percent, respectively), average growth in imports of goods and services increased from 3 percent during 1996-2000 to 12.4 percent in 2001-04. However, the analysis of trade developments (Chapter 4) suggests that the overall growth in imports was driven not by consumer imports but by intermediary goods. The government also used various administrative instruments to slow down an increase in consumer imports. At the same time, in the second period, higher import growth was

²⁰ See Chapter 4 for a detailed explanation of these estimates.

balanced somewhat by the increased exports of goods (especially, refinery products) and services, thus partially cushioning the negative impact of the expansion in consumption on the external balance.

1.33 The role of gross capital formation (GCF) was moderate during the first period of growth, but it increased during the second period. After 2001, GCF contributed substantially to economic growth, mostly because of the growth in fixed capital investments. While the first growth phase had been based primarily on an increase in the utilization of idle and under-utilized production capacities, the more recent period exhibits signs of more investment-based growth. This issue is further elaborated in Chapter 2.

1.34 From the view of national accounts, net exports contributed positively to growth during the first period and negatively during the second period. However, this observation underestimates the actual role of exports in the recent growth. As SNA data suggest, net exports have been the second major contributor to growth during 1996-2000, but economic growth after 2000 has not been export driven. Despite a strong export expansion, imports have been growing at an even higher rate, so that the contribution of net exports to GDP growth has been negative. However, this should not be interpreted as a low contribution of export-oriented sectors to growth. In fact, most of the overall growth in industry was generated by exports, and during 2001-2004 the growth in manufacturing exports by far exceeded the growth in industrial output (63.2 versus 37 percent, respectively).

1.35 It is worth highlighting two specific channels through which export expansion contributed to the growth in domestic demand/consumption and thus indirectly to overall GDP growth. First, export expansion created room for additional import financing, while some of these imported inputs were used for the additional production of goods and services to meet domestic demand. Second, exporters appear to be a major source of the financing of growth in domestic demand. A large share of export proceeds was used on taxes, wages, and other domestic spending. Overall, while statistically the contribution of net exports to GDP growth was negative during 2001-04, one could claim that, when accounting for indirect effects, Belarus would not be able to sustain its high growth rates without of the strong export growth.²¹

1.36 The role of workers' remittances is likely to be more significant than is usually acknowledged. And balance of payments remittances that are higher than reported could be a primary source of financing additional consumer imports. While at least 400,000 Belarusians are estimated to have been working abroad (mostly in Russia), the reported flow of remittances is modest (US\$285 million or 1.2 percent of GDP in 2004). The recent analysis of remittances generated by Armenian workers in Russia suggests that the average annual cash transfer made by these workers is about US\$2,500 (Roberts, 2004). For Belarus the same per capita capacity for remittances would result in an annual flow of US\$1 billion, which is more than twice the above official estimates. This suggests that about 2.5 percent of GDP in remittances may remain unreported, and this income could primarily be used for financing additional consumer imports through the shuttle trade and other informal trade channels, as well as being a source of additional foreign cash holdings by residents.

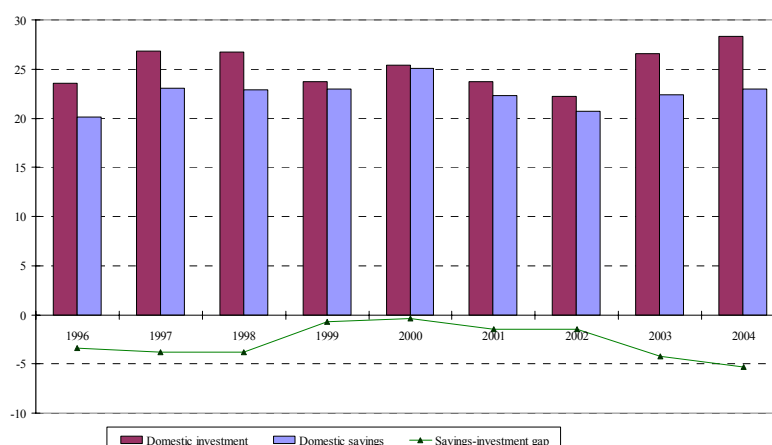
1.37 During the second period of growth the domestic savings-investment gap began to widen. Belarus inherited a high level of both national savings and investment rates. In 1992, national savings accounted for almost 36 percent of GDP, and national investments accounted for almost 32 percent. Both ratios fell considerably during the transition. The decline in savings was much more pronounced (by more than 40 percent in real terms in 1992-96), which resulted in the emergence of the domestic savings-investment gap (3.4 percent of GDP in 1996). The gap declined considerably in 1999-2000 but then began to widen again (Figure 1.10). The gap reached 4.2 percent of GDP in 2003 and the preliminary data for 2004 suggest its further widening to over 5 percent of GDP.

1.38 FDI has been playing a modest role in bridging the gap. While the domestic savings-investment gap is fairly common during transition, in Belarus it failed to attract sizable amounts of FDI to

²¹ It is worth noting that Russia has been showing a somewhat similar pattern of growth since 2002: a strong overall export growth but a modest (albeit positive) contribution of net exports to GDP growth (Ahrend, 2004b).

finance the gap and had to rely on other less advantageous forms of foreign savings. The country's cumulative FDI per capita for the period 1989-2003 was US\$200, as compared to the CEEBS average of US\$2,112 and the CIS average of US\$292.²² In more advanced transition economies (including Hungary, Poland, and the Baltic states), FDI was largely responsible for financing the current account deficit and boosting export growth. FDI has also represented an important source of foreign exchange reserves. Overall, in the transition period FDI has been an important determinant of both short-term and long-term growth prospects.

Figure 1.10: Domestic Savings, Investment and the Gap, 1996-2004 (% GDP)



Source: MSA.

1.39 **The pattern of changes in the structure of nominal GDP by sector in Belarus is similar to that in other transition economies but the magnitude of these changes is somewhat different.** As in other transition economies, especially those considered as over-industrialized, the share of industry in Belarus' GDP fell while the share of services increased (Table 1.8). The reduction in the share of agriculture has also been in line with the developments in other CEEBSs. At the same time, the reduction in the share of industry in GDP during 1996-04 was relatively small (only 1.6 p.p.) and the increase in the share of services relatively moderate (5.3 p.p.). Moreover, in 2000-04 these trends were reversed – the share of industry actually increased while the share of services declined. However, it is worth noting that changes in the nominal GDP structure are not the most informative in the environment of changing relative prices.

Table 1.8: GDP by Sector, 1996-2004 (in % of nominal GDP at factor costs)

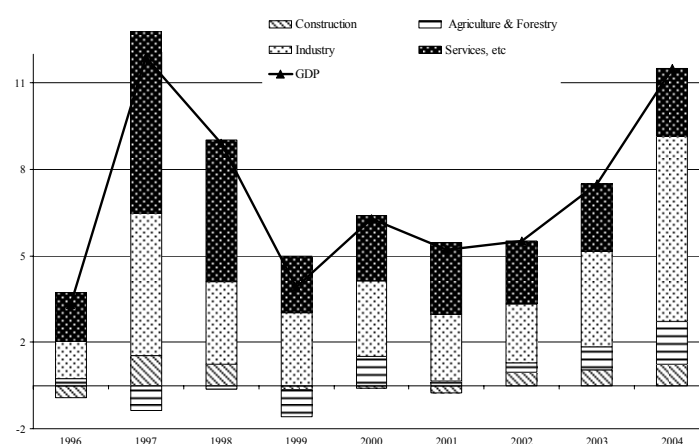
	1996	1997	1998	1999	2000	2001	2002	2003	2004	1996-2000 change	2001-2004 change	1996-2004 change
Industry	32.8	34.3	33.4	31.9	31.0	29.9	29.6	30.8	31.2	-1.80	1.30	-1.60
Agriculture and forestry	17.0	15.4	13.9	14.6	14.2	11.9	11.8	10.2	11.0	-2.80	-0.90	-6.00
Construction	5.3	6.3	6.7	6.7	7.5	6.7	6.8	7.2	7.6	2.20	0.90	2.30
Services, etc.	44.9	44.0	46.0	46.8	47.3	51.5	51.9	51.8	50.2	2.40	-1.30	5.30
Total	100	100	100	100	100	100	100	100	100			

Source: MSA.

²² EBRD (2004).

1.40 **Industry continues to contribute most to economic growth, while the importance of the service sector's contribution fell somewhat during the second growth period.** In both phases, industry contributed to about 50 percent of economic growth on average (Figure 1.11). The second major contributor was services, accounting for about 47 percent of economic growth during 1996-2004. However, the role of services in GDP growth has been declining since 2002. This is a most unusual pattern that reflects the specifics of the Belarusian growth structure, which relies heavily on traditional manufacturing. Within the services sector the largest contributors were trade and catering. The contribution of agriculture and forestry to GDP growth was negative during 1996-99 but became positive from 2000 onwards. However, it remained rather moderate (especially, as compared with the resources that it absorbs) (see Chapter 6) and it fluctuated in response to variations in weather conditions.

Figure 1.11: Contribution to GDP Growth, Production-Side View, 1996-2004 (in %)



Source: World Bank staff calculations based on MSA data.

1.41 **The growth of wages and employment benefits was high.** The average real wage grew at a much higher rate of 12 percent a year than the GDP. The average real wage for 2003 was 146 percent higher than that in 1995, while the GDP was only 59.8 percent higher. The economy-wide wage bill increased by 142 percent in real terms. The share of wages in GDP grew steadily from 42.8 percent in 1995 to 46.7 percent in 2002 before declining to 43.7 percent in 2003. These numbers confirm that labor received major benefits from the recent growth: 53 percent of the total GDP increase between 1995 and 2003 was derived from growth in labor earnings, with about the same impact of wages on GDP registered in both sub-periods (1996-00 and 2000-03).²³ Moreover, the second period showed a slight acceleration in the rate of wage bill growth – both in the aggregate and for all sectors except agriculture and industry.

1.42 The sectoral breakdown of the above indicators is presented in Table 1.9. There was a major labor restructuring resulting in an employment shift from agriculture to services, construction, and transport. Total employment in agriculture and forestry declined by 40 percent. In fact, such restructuring was unparalleled in the CIS countries²⁴ and had positive longer-term growth and poverty implications, since agriculture in the CIS tends to be a low-productivity sector with large hidden unemployment. Labor

²³ To ensure the statistical consistency of this calculation, both GDP and the wage bill have been deflated with the GDP deflator.

²⁴ Four other CIS countries registered falling employment in agriculture: Moldova (-24 percent), Russia (-21 percent), Uzbekistan (-24 percent), and Armenia (-9 percent). However, Belarus far exceeds those countries in labor shedding in the sector.

shedding in Belarusian agriculture took place at a time when agriculture had the lowest wages and the lowest wage bill growth among all economic sectors.²⁵

Table 1.9: Wages and Employment, 1995-2003

Indicator	Monthly Wage		Employment/Contingent		Wage Bill: Real Growth	
	2003 (thousand BYR)	Real Growth 1995-2003 (%)	2003 (000)	Real Growth 1995-2003 (%)	1995-2003 (%)	
Labor force	--	--	6,142	5	--	
Total employment	251	146	4,339	-1.6	142	
Non-employed labor force	--	--	1,802	25.2	--	
Agriculture and Forestry	145	125.5	521	-40	35.3	
Industry	277	137.8	1,159	-4.7	126.6	
Construction	311	119.7	321	6.3	133.5	
Transport and Communications	285	126.8	329	6	140.4	
Services and other	248	149.1	2,010	17.4	192.4	
<u>Including:</u>						
Credit, Finance and Insurance	467	114.8	58	25	168.4	
Public Administration	374	132.6	136	35.9	216	
Health and Social Security	224	159.6	325	13.3	194	
Education, Culture and Arts	242	172.8	541	10.8	202.4	
<u>Memo:</u> Registered unemployment	--	--	136.1	3.9	--	
	Annual Average Rates (Percent)					
	Employment			Real Wage Bill		
	2000/95	2003/00	2003/95	2000/95	2003/00	2003/95
Labor force	0.5	0.8	0.6	--	--	--
Total employment	0.1	-0.8	-0.2	11.4	12.1	11.7
Non-employed labor force	1.7	4.8	2.9	--	--	--
Agriculture and Forestry	-5.4	-7.4	-6.2	5.3	1.4	3.8
Industry	0.2	-1.9	-0.6	12.6	7.7	10.8
Construction	0.6	1	0.8	10	13.2	11.2
Transport and Communications	0.5	1.1	0.7	9.3	15.6	11.6
Services and other	2.4	1.4	2	13	16.7	14.4
<u>Including:</u>						
Credit, Finance and Insurance	4.7	-0.2	2.8	13.8	12.1	13.1
Public Administration	6.4	0	3.9	14	18	15.5
Health and Social Security	2.6	-0.1	1.6	11.9	18.8	14.4
Education, Culture and Arts	2.2	-0.2	1.3	13.1	17.8	14.8

Sources: MSA, World Bank staff estimates.

²⁵ As in most transition and developing countries, the accuracy of wage estimates in agriculture is lower than elsewhere owing to the occurrence of in-kind payments and proprietor's surplus. Under these conditions, the better way to single out labor share in output would be to calculate the labor surplus rather than wages. No such data are available for Belarus, however.

1.43 As the data show, real wages have grown in all sectors and wage growth was more or less equally distributed among the sectors. The cross-sectoral variation in wages remains low. Excluding agriculture, the gap between sectors with the highest and lowest average wage (finance, and education and culture, respectively) was 127 percent, which is quite moderate by CIS standards. For example, the gap between the same sectors in Armenia was more than 400 percent.²⁶

1.44 The highest wage growth for the entire period was recorded in the lowest-paying divisions of the public sector (health, and education and culture). However, health and education continue to pay the lowest wages, with the exception of agriculture. The largest sector of the economy – industry (which employs over a quarter of labor) – showed a growth in real wages that was close to average.

1.45 The largest increases in employment occurred in high-paying sectors such as finance and public administration, which also exhibited the fastest growth in wage bills. However, these sectors are still very small, employing 1.3 and 3.1 percent of workers, respectively. This uniformity of wage growth in Belarus points to the preservation of significant centrally established restrictions on wage setting in the enterprise sector.

1.46 The equitable character of wage growth in Belarus is a bit unusual for the CIS. In many CIS countries, including, for example, Russia and Armenia, overall economic expansion and wage bill growth had a rather narrow basis in selected sectors and did not lead to a sizable increase in the real wage bill in the largest sectors of the economy.

1.47 Overall, economic growth in Belarus was associated with fairly stable employment and a growing share of people in the labor force who either did not choose to work or who worked abroad.²⁷ Total employment in the economy has declined by 1.6 percent, while the labor force has increased by 5.0 percent. As a result, the domestically non-employed labor force has surged by one-quarter. Official unemployment was very small (only 2.2 percent of the labor force in 2003) and stable. By period, except for transport and communications, employment growth rates were lower during 2001-03 than during 1996-2000. In the second period, five sectors showed a decline in the number of workers: agriculture, industry, finance, health, and education, but only agricultural employment declined during the first period.

1.48 On the aggregate, the wage and employment features of economic growth in Belarus helped to reduce the incidence of poverty and to increase the average standard of living. They have also been an important factor in sustaining growth over the period. Low poverty incidence and low income differentiation helped strengthen the domestic demand and also helped shape it so that it is relatively easy for local producers to meet.

D. ROLE OF STATE SUPPORT

1.49 **The complicated and pervasive system of state support to the real sector is a fundamental feature of the Belarus economic model.** The government has been pursuing an activist industrial policy, under which most large enterprises have been in a position to negotiate with the government a case-by-case package of incentives and benefits to support their rehabilitation and development programs. This has resulted in a system of state support that is too costly and too segmented and is non-transparent, with too many programs and beneficiaries. In spite of various attempts of the government in recent years to streamline, quantify and access its effectiveness, little change has been achieved.

²⁶ World Bank (2002a).

²⁷ Although the precise number of Belarus workers abroad is not known, the Ministry of Labor estimates that about 400,000 Belarusians have been working abroad, mostly in Russia. This may account for a considerable share of people included in the non-employed labor force.

1.50 **The current system has a major distortive effect on enterprise incentives.** The coexistence of a high nominal tax burden and massive tax benefits and subsidies for those enterprises that are either less efficient or well-connected undermines competition and stimulus for productivity improvements.

1.51 **The main forms of state support to the enterprise sector are the following:** budget subsidies and loans, tax exemptions, tax credits (including the restructuring of tax arrears), government guarantees on commercial credits, directed credit programs administered by the NBB, capital subsidies and grants, etc. A separate type of subsidy relates to annual bank recapitalization, which helps the state banks to deal with the financial consequences of directed lending. Owing to the fragmented nature of the data available, it is difficult to provide accurate aggregate estimates of state support. The government has not yet established a comprehensive monitoring system and tends to considerably underestimate the total volumes of public funds that are made available to the enterprise sector through various subsidy and grant channels.

1.52 Table 1.10 presents our estimates for the incidence of subsidies in the Belarusian economy. The table contains two different indicators of the aggregate state support: (i) the total (gross) financial flow to the enterprise sector, which is the amount of funds allocated through various government decisions; and (ii) the net resource transfer to the enterprise sector (net subsidy). The latter amount is smaller, reflecting the fact that a substantial portion of government assistance is provided in the form of highly concessional directed credits, including tax credits.²⁸ Given that the level of repayments of such credits remains relatively high, the net subsidy is indeed smaller than the gross level of government interventions.²⁹

1.53 **Both measures show no significant decline in the incidence of state subsidies in Belarus.** The total annual amount of funds that the government allocates to the real sector (including state-owned banks) is still about 10 percent of GDP. In 2001-04, the estimated annual net subsidy amounted on average to 6 percent of GDP. This is somewhat lower than that prior to 2001 but is still excessively high. It is comparable with total national public spending on education (6.3 percent of GDP in 2004). Agriculture remains the sector that is the most heavily subsidized (see Chapter 6).

1.54 Moreover, the above estimates reflect only the level of producer subsidies and do not account for the existing subsidies to consumers (mostly in utilities and transportation) or for directed credits on housing construction that are also aimed at households. Consumer subsidies amounted to an additional 1.9 percent of GDP in 2004, which is a decline from 2.9 percent of GDP in 1999, owing to increases in cost recovery in these sectors. The housing credits on average amounted to about 1 percent of GDP in 2000-04.

1.55 **During 2000-04, some positive changes took place in relation to state support via tax benefits.** This was partially due to the pressure from Russia in the course of negotiations on equalizing conditions for businesses in the two countries.³⁰ This resulted in a gradual reduction in the amount of individual tax exemptions and benefits (from 2.1 percent of GDP in 2000 to 0.5 percent of GDP in 2004) and the replacement of the exemptions and benefits with the restructuring of tax credits and tax arrears. In addition, the accumulation of tax arrears has slowed down considerably. Hence, the overall state support through tax expenditures was reduced from 3.0 percent of GDP in 2001 to 1.3 percent of GDP in 2004. Yet in 2004 the total value of the tax benefits received by the enterprise sector was estimated at 5.8

²⁸ In most cases, less than half of such credits were granted at the NBB refinance rate, while the rest were granted at rates that were between one-quarter and one-half of the NBB refinance rate.

²⁹ We estimated the implicit subsidy in such programs using a difference in interest rates between those available under commercial borrowing and those established under the directed credit programs.

³⁰ By Presidential Edict #11 from April 19, 2002 individual tax exemptions were abolished and the procedure for obtaining state support via tax benefits was streamlined.

percent of the total tax revenues of the enlarged government (excluding the personal income tax), down from 12.7 percent in 2000.

Table 1.10: Incidence of State Support, 1999-2004 (current BYR billion and percent of GDP)

	1999*	2000	2001	2002	2003	2004
1. Total tax benefits	74.1	273.8	442.4	570.2	729.5	648.4
%GDP	2.4	3.0	2.6	2.2	2.0	1.3
- Individual tax exemptions	55.1	190.2	173.5	201.0	171.2	252.2
%GDP	1.8	2.1	1.0	0.8	0.5	0.5
- Tax credits	2.1	30.4	83.6	143.7	244.5	214.6
%GDP	0.1	0.3	0.5	0.5	0.7	0.4
- Tax restructuring	7.5	6.1	34.1	71.2	225.8	273.8
%GDP	0.2	0.1	0.2	0.3	0.6	0.6
- Tax arrears, including Social Protection Fund	9.4	47.1	151.2	154.3	88.0	-92.2
%GDP	0.3	0.5	0.9	0.6	0.2	-0.2
2. Budget subsidies, incl from EBFs	195.2	547.0	898.1	1050.7	1811.7	2493.0
%GDP	6.5	6.0	5.2	4.0	5.0	5.0
A. Producer subsidies	109.3	287.3	425.3	468.5	1034.5	1558.9
B. Consumer subsidies	85.9	259.7	472.8	582.2	777.2	934.1
3. Total investment grants, including from EBFs	53.7	160.5	297.3	409.6	634.8	802.7
%GDP	1.8	1.8	1.7	1.6	1.7	1.6
4. Total budget credits, including from EBFs	4.4	57.0	202.5	344.0	380.6	309.6
%GDP	0.1	0.6	1.2	1.3	1.0	0.6
5. Banking sector recommended credits**	28.0	258.2	443.3	433.1	847.6	1,636.7
%GDP	0.9	2.8	2.6	1.7	2.3	3.3
A. Producer credit		140.8	232.9	185.6	516.0	1,069.4
B. Consumer credit (housing)		117.3	210.4	247.4	331.6	567.3
6. Bank recapitalization program		68	27	367	561	517
%GDP		0.7	0.2	1.4	1.5	1.0
7. Budget spending on repayment of guaranteed credits (called guarantees)			6.8	99.5	9.3	10.4
%GDP			0.0	0.4	0.0	0.0
Total flows, as % of GDP (w/o consumer subsidies)	8.9	10.8	9.5	9.4	10.6	9.9
Resource transfer (net subsidies and grants), % GDP	7.8	7.4	5.9	6.4	6.4	5.2
<i>Memo:</i> Credits issued with government guarantees, stock at the end of the year			181.7	132.9	270.8	631.8
%GDP			1.1	0.5	0.7	1.3

*Only partial data were available for 1999. **Allocated under decisions of the President and Council of Ministers.

Source: World Bank staff estimates based on MOF, NBB, Ministry of Economy, MSA, and IMF data.

1.56 However, the above reduction was compensated by an increase in subsidization through other channels, including the growth in banking sector's recommended lending and budget subsidies to agriculture. The costs of bank recapitalization in 2002-04 were also much higher than in the earlier period.

1.57 **The current system of support has a major negative impact on credit markets.** The total amount of credit allocated through direct government interventions in 2001-04 (NBB directed credit programs, budget loans, and credits issued with government guarantees), amounted on average to about a quarter of all of the annual commercial bank credit in the economy. This crowds out proper commercial

credit and makes borrowing much more expensive for those that cannot participate in government programs, including small private firms.

1.58 In general, the system of state support lacks consistency, transparency and strategic vision. It is both widely dispersed among numerous recipients and highly concentrated (“picking-up winners”). In 2004, as reported by the Ministry of Economy, state support in the amount of about BYR 1.9 trillion has been provided to 3,651 enterprises in the real sector. In 2004, 74 different presidential and governmental decisions on granting state support were issued (a reduction from 133 decisions in 2003). Some enterprises have been able to receive state support through different programs and from different sources (the budget, off-budget funds, the banking sector, etc.), and many of the largest firms have been receiving state assistance annually. This further undermines the transparency and accountability of the system. The provision of individual state support clearly favors large enterprises (both SOEs and former SOEs). This creates additional disadvantages for new private entry, including firms with foreign capital.

1.59 The system of government support to the real sector requires a comprehensive reform. The first step should be to undertake a thorough inventory of all subsidization programs (both explicit and implicit) and to concentrate all information in one agency (possibly in the form of a registry or database). At the moment, the aggregate estimates of the state support that the government has been using are considerably lower than the estimates in Table 1.10. For example, the Ministry of Economy reported that total support in 2004 was below 4 percent of GDP, which is about 60 percent less than in more realistic estimates presented in the table. The reason for such a downward bias relates to the fact that the government analysis tends to ignore some important programs, including bank recapitalization and spending from the innovation funds and other off-budget sectoral funds. This undermines the efficiency of the government analysis and generates an underestimation of the scale of the problem.

1.60 A strategic analysis of the existing system should be undertaken to address several key questions of government policy in this area. What is the actual amount of net resource transfers to various sectors of the economy via all types of state support programs? Is this amount affordable for the economy at present and in the near future? What are the expected outcomes of these interventions? What indicators should be used to measure these outcomes? Are these outcomes the best achievable through the currently used instruments and channels? Are these instruments in conformity with the international rules (WTO in the first instance)?

1.61 An analysis of the mechanisms and the scope of state support is crucial to assessing the efficiency of resource allocation in the economy, and to understanding the nature and sustainability of economic growth in Belarus. It is also an important part of the integration agenda for Belarus (WTO accession talks, CIS integration initiatives, etc.). The favorable external environment of the last several years helped the government to keep state support at the fairly high level. While some forms and mechanisms of subsidization were modified, no real pressure emerged to streamline the system and make substantial cuts in the aggregate level of subsidization. Worrying trends in the liquidity of the banking sector in the autumn of 2004 should be considered as an indication that the system may be reaching its affordable limits.

1.62 The priority directions for reforming the existing system of state support could be summarized as follows:

- Reducing the scope of state support and introducing an annual ceiling for aggregate support and medium-term targets for its reduction
- Phasing out implicit forms of subsidization, which still remain outside of the state budget, such as tax expenditure

- Improving the accounting and reporting of state support, including through its more comprehensive reflection in budget reports
- Replacing budget subsidies with non-distorting types of government development spending in the real sector – expenditures on training, R&D and other forms of innovation support, export promotion, infrastructure, the financing of social and environmental liabilities of enterprises, etc.
- Introducing competitive mechanisms for the allocation of budget support, including through matching grant mechanisms to encourage enterprise spending on, for example, particular areas of R&D, export promotion, and staff training.

1.63 Overall, a simultaneous reduction in the scope of state support and the level of the tax burden could bring about substantial welfare gains and should be considered as a priority policy objective.

E. CONCLUSIONS: MAJOR MACROECONOMIC RISKS OF THE CURRENT GROWTH STRATEGY

1.64 There are serious risks associated with the continuation of the current growth strategy. A summary of major weaknesses of the current macroeconomic position, based on a Flow of Funds analysis of the recent period of economic growth, is provided in Box 1.5. Similar serious risks and other important risks are also highlighted in this section.

Box 1.5: Some Weaknesses of the Existing Macroeconomic Framework as Highlighted in the Flows-of-Funds Analysis

- A high level of redistribution through the enlarged government budget indicates a heavy tax burden and excessive government interventions.
- Government spending is disproportionately concentrated in the financing of social spending and housing investments, while less funding is available for public investment in infrastructure.
- The level of subsidization remains high, especially in agriculture.
- The high share of intermediary product in gross output indicates an under-developed service sector, as well as a relatively low level of value added in industry.
- The profit/wage ratio is low, which hampers both savings and investments in the real sector.
- The financial sector remains under-developed, even in relation to the modest savings level.

Source: World Bank staff analysis.

1.65 **Low international reserves.** While Belarus' debt and debt service indicators remain remarkably low,³¹ the extremely low level of reserves in the context of a de facto pegged exchange rate poses a severe macroeconomic risk. This is especially the case with a continued moderate current account deficit to be financed without significant FDI and no access to international capital markets. Under these circumstances, a negative external shock (e.g., the drying up of financing from Russia, a loss of competitiveness, or a weaker demand in key markets) would imply a disorderly balance of payments adjustment (through either depreciation or the rationing of imports, or both) and potentially significant output costs. A similar negative shock could also emerge from a sudden turnaround of relatively fragile expectations on inflation and the exchange rate within Belarus that would cause the demand for foreign exchange to expand and the trigger significant pressures on the exchange rate. Box 1.6 presents the results of simulating the potential effects of such a shock on economic performance.

³¹ However, the structure of external debt becomes a concern. In 2004, about 74 percent of total debt was short-term obligations (up from 53 percent in 2001). The short-term debt was four times higher than international reserves in 2004.

1.66 **The high concentration of non-oil product exports in a single and rather unstable market such as Russia.** The Belarusian economy's success is very dependent on external markets, but its primary market is too oil-dependent and thus potentially unstable. To date, the economy has demonstrated only a limited capacity for export diversification (Chapter 4). A crisis in exports to Russia could thus cause a major problem because the economy does not have sufficient flexibility for the reorganization and redirection of trade. An erosion of the current Belarusian comparative advantage in Russian markets may occur either because of unexpected political shifts or because of economic reasons. In particular, a major potential threat could come from a future higher pace of restructuring in the Russian (mostly private) corporate sector relative to the restructuring rate that Belarusian SOEs could afford. A related risk to competitiveness may derive from the continued government pressure to increase wages without allowing for a significant adjustment in employment. Russia's WTO accession is likely to lead to a gradual erosion in the implicit preferential treatment of Belarusian goods by Russia, and would also accelerate a need to address the existing asymmetry in Russia-Belarus trade relations (such as implicit subsidies for Belarusian exporters and trade restrictions on Russian exports to Belarus).

Box 1.6: Balance of Payments Vulnerability

A stress-test scenario was constructed to examine the effects of a 30 percent drop in Belarusian exports to Russia in 2006 (relative to the baseline projection).

The immediate effect of the shock would be a significant worsening of the current account deficit to around 7 percent of GDP. Assuming that Belarus' access to external financing would remain constrained, while existing foreign reserves equivalent to 0.6 months of imports prior to the shock would provide only a meager cushion, this would leave few choices for dealing with the shock. Although such a shock could easily fully deplete the stock of foreign reserves available (and still leave a significant unfinanced gap), it is assumed that the authorities would not allow this to happen. Instead, an absolute minimum level of foreign reserves equivalent to 0.3 months of imports would be maintained. The remaining financing gap would have to be closed by a combination of building-up external arrears (estimated to reach 2.4 percent of GDP in 2006) and imposing further restrictions on import growth. It is expected that import restrictions are likely to become a serious constraint for the real sector, slowing down economic growth.

The medium-term effects of the shock would be lower export and import growth when compared with the baseline and the building-up of external arrears that may persist for few years after the shock. Although external debt ratios would remain relatively low, there would likely be an increase in the relative dependence on short-term credits as most of the external financing available would come in the form of shorter maturities. Given the already high level of short-term debt and reserves even lower than in the baseline, the economy would become much more vulnerable to yet another shock. The likelihood of a disorderly adjustment would increase, resulting in slowing down of economic growth, and reversals in the recent years' favorable tendencies in the demand for rubles, thus leading to higher inflation.

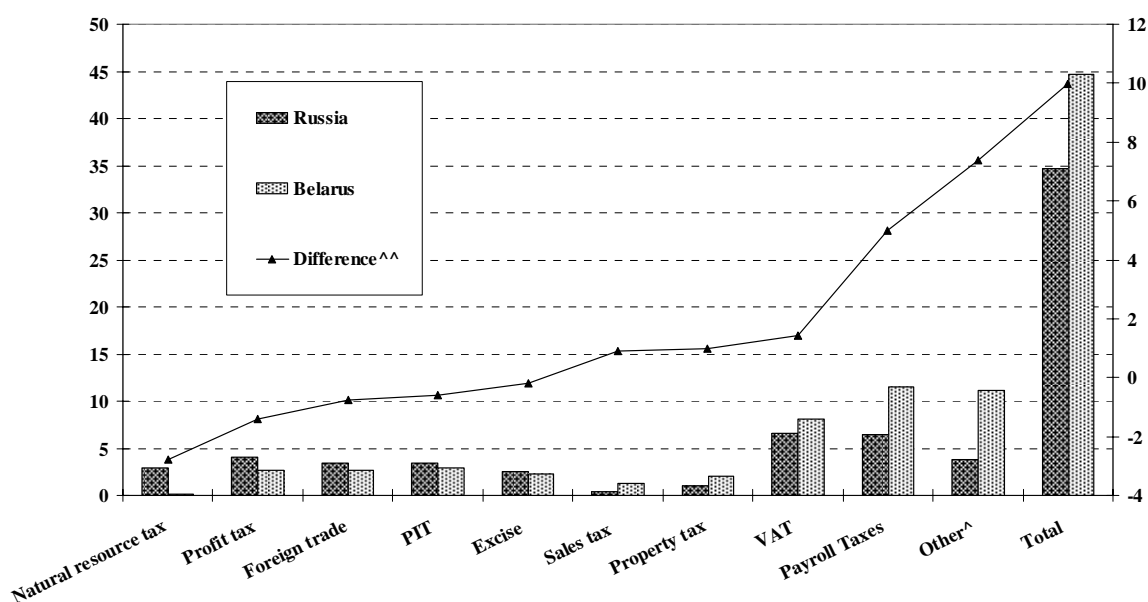
Source: IMF staff analysis.

1.67 **The large size of the government.** An important part of the success of Belarusian growth derives from the strong government capacity for revenue collection, including for taxing various economic rents and using these revenues in a way that is supportive of expansion in domestic demand. In the existing growth model, the high level of government spending plays a central role. Thus, deterioration in the government's ability to extract these rents and/or redistribute them at the existing level of efficiency could hurt domestic demand, output, and budget revenues, thus triggering a spiral of declining output and revenue levels.

1.68 **The tax burden is substantially higher than in neighboring countries.** This puts Belarusian producers at a competitive disadvantage. For example, in 2003 the total explicit tax burden in Belarus

amounted to 44.7 percent of GDP compared to 34.7 percent in Russia (Figure 1.12). This difference was largely a result of two groups of taxes: payroll taxes (they are 5 p.p. higher in Belarus than in Russia) and “other taxes” which include turnover taxes and taxes to extrabudgetary funds (they are 7.4 p.p. higher in Belarus). Another main difference in the tax structure relates to a natural resource tax, which plays a much more prominent role in Russia (but this is compensated by a higher sales tax, property tax and VAT in Belarus). This also points to the inefficiencies in the tax structure in Belarus, which relies too much on the taxes that are known to have the most distortive effect on incentives in the real sector.³² These inefficiencies in taxation further aggravate the impact of the high tax burden on enterprises. The Program of Socio-economic Development for 2001-05 stipulates a reduction in the level of resource centralization by the state from 47.7 percent in 2000 to 45 percent, and a reduction in the tax burden (excluding taxes to the SPF) from 32.7 to 30.1 percent during the same period. However, cross-country comparisons suggest that progress in this area has been insufficient and that the targets are not ambitious enough.

Figure 1.12: Tax Burden in Belarus and in the Russian Federation, 2003 (% of GDP)



^ Includes turnover taxes and EBFs. ^^ Between Belarus and Russia.

Source: WB Staff calculations based on data from the MoFs (Republic of Belarus and Russian Federation).

1.69 **The high concentration of the output and tax base** further aggravates the above-mentioned risks. The Belarusian economy is dominated by large SOEs: output, exports and tax proceeds are very concentrated (see also Chapter 2). One hundred industrial enterprises (less than 5 percent of the total number) produced 59 percent of the industrial output in 2003 and their share increased to 68 percent in 2004. The concentration of production implies a heavy concentration of the tax base. The one hundred largest taxpayers contributed 27 percent of total tax proceeds in 2003, and the preliminary data for 2004 suggest that this share increased to one-third (Table 1.11). Both budget revenues and foreign exchange proceeds depend heavily on the operations of a limited number of exporters, which in turn are highly

³² Turnover taxes were largely eliminated in most transition economies.

dependent on business conditions at the single or limited number of external markets. This multiplies the vulnerability of the system.

Table 1.11: Tax Concentration in Belarus: Shares of 10, 50 and 100 Taxpayers in Total Proceeds of Consolidated Budget, 1999-2003 (%)

	1999	2000	2001	2002	2003
10	13.6	13.3	14.1	13.4	12.5
50	24.6	25.2	24.9	24.5	22.6
100	29.4	30.1	29.6	29.2	27.0

Source: Ministry for Taxes and Contributions.

1.70 **State support to the economy remains extensive and pervasive and is far from being effective** in spite of various attempts by the government to streamline, quantify and access its effectiveness. While some forms and mechanisms of subsidization were modified, no serious pressure emerged for streamlining the system and making substantial cuts in the aggregate level of subsidization. Worrisome trends in the liquidity of the banking sector in the second part of 2004 are an indication that the situation in this area requires immediate attention. A simultaneous reduction in the scope of state support and the tax burden could bring about substantial welfare gains and should be considered as a priority policy objective.

1.71 **The weak financial sector.** Vulnerabilities in the banking sector largely relate to the high incidence of directed lending and more generally to excessive government intervention in banks' decisions on credit allocation. The banking loan portfolio is rather fragile. Any erosion in the competitiveness of the real sector would lead to a rapid worsening in the share of non-performing loans, which would require government intervention to prop up the banking system. In the past three years, government spending on bank recapitalization amounted on average to 1.3 percent of GDP per annum. However, the experience of CEE countries in the 1990s suggests that the fiscal costs of a full-scale banking crisis could be much higher than this.³³ The recent analysis undertaken under the FSAP (2004) suggests that the key systemic vulnerability for the banking sector is linked to the government's ability to continue to provide support to the state banks, in the form of both liquidity and equity. As loans to priority sectors or enterprises are often provided on the basis of government recommendations, an inadequate assessment of the capacity for repayment could exist, especially when there is an explicit government guarantee. As long as the government remains in a position to promptly honor its guarantees when they are called upon, and/or to recapitalize the systemically important banks, the system is exposed to credit, market, or liquidity shocks only to a limited extent. Deterioration in the government's fiscal position would limit the possibility of providing further such support to banks, which could potentially lead to a systemic financial crisis.

1.72 The FSAP team conducted various stress tests to analyze the degree of vulnerability of commercial banks in Belarus. The stress tests found that Belarusian banks are vulnerable to credit and liquidity shocks and that the special features of the economy (a large share of loss-making enterprises, a large share of foreign-currency-denominated loans, and a large share of assets with long-term maturities) could substantially amplify the impact of these shocks. The analysis showed that the banks would be able to withstand a separate credit risk shock. The banks, as well, were found to be sufficiently capitalized to withstand the direct effects of a substantial volatility in either the exchange rate or the interest rate. However, simultaneous shocks to the credit quality, the exchange rate, and the interest rate would have a substantial impact on the capital position of banks, especially the six largest banks which account for 85 percent of total banking assets in Belarus. The combined shock would reduce the capital adequacy ratio of

³³ The total public costs of bank restructuring in Hungary amounted to about 13 percent of GDP, while similar costs in both Bulgaria and the Czech Republic exceeded 20 percent of GDP (Tang et al., 2000).

these banks by a factor of two. A capital injection of approximately BYR610 billion (about 1.4 percent of GDP) would be required to restore the capital adequacy of these banks.

1.73 **The current demographic trends represent the major long-term risk for Belarus.** Belarus has a population that is of an older age and that has been shrinking since 1994. Existing demographic forecasts show a significant increase in the share of the elderly population of from 21 to 28 percent between 1995 and 2025 and a deterioration of the ratio of the working age population to elderly of from 2.7:1 in 1995 to 2:1 in 2020 and to around 1.5:1 in 2040. This trend will continue to build pressures on the pension system. This poses an even greater challenge for a shift to a different growth model that would be less labor-intensive. The demographic problems could become especially difficult if Russia (which is facing similar demographic problems) would switch, as many expect, to a much more proactive immigration policy.

1.74 **Developments in the pension system represent a major fiscal risk.** The combination of demographic trends and government social policies generate significant fiscal pressures on the country's pension system. At the moment the old age pension benefits are relatively high, on average about 43-44 percent of the average wage. The existing pension system is not capable of supporting this level of benefits in the future. This is because of growing demographic pressures, which are aggravated by a need to reduce the level of payroll taxation that is increasingly damaging the country's competitiveness. As estimated by the IMF, without reforms the Pension Fund deficit would grow rapidly and reach 1.8 percent of GDP by 2008.³⁴ Thus, the pension system requires a comprehensive reform, which would include a rise in the retirement age, adjustments to the existing system of pension indexation, a strengthening of the incentives for a delayed retirement, the removal of the Pension Fund's responsibility for financing non-pension benefits, and the introduction of a supplementary non-government social insurance.

1.75 **In sum, Belarus faces the choice of maintaining its current growth strategy and gradually losing steam, or facilitating sustainable growth by reorienting policies toward ensuring a stable macroeconomic environment and lowering the size of the government.** While the recent growth performance appears to have reduced the urgency of making this choice, Belarus' small open economy lacks the flexibility to withstand large shocks, and relies on external markets too closely to leave much room for complacency. In addition, the beneficial effects of even wide-ranging and well-sequenced structural reforms will become available with a significant lag, which implies a need to launch such reforms at an early date, while the economy is still stable and generates growth. Further delay would imply the loss of an opportunity to launch reforms at a minimal cost, since the benign external environment may change.

³⁴ IMF (2003b).

CHAPTER 2

INDUSTRIAL PERFORMANCE: PRODUCTIVITY, COMPETITIVENESS, AND MEDIUM-TERM RISKS

2.1 Industry is the critical sector of the Belarusian economy. Its performance largely defines overall economic trends in the country, while its importance exceeds by far the nominal share of the sector in output (30 percent of GDP) and employment (26 percent of jobs). More accurate measures of industry's role relate to the sector's contribution to the consolidated budget revenues (52 percent in 2003) and to exports of goods and services (53 percent). The industrial contribution to the recent GDP growth also exceeded its GDP share: in 1996-2000, more than 51 percent of the overall GDP growth was generated by industry, and this share amounted to about 42 percent in 2001-03 (see Chapter 1). Moreover, the country's elite has a strong self-perception of the Belarusian economy as one with longer-term comparative advantages in manufacturing.

Table 2.1: Industrial Structure, Shares of Selected Sub-sectors in Total Industrial Output, 1990-2003 (Percent of total)

	1990	1995	2000	2003
Total Industry	100	100	100	100
of which:				
Mining	2.1	5.5	4.8	6.3
Manufacturing	97.9	94.5	95.2	93.7
Shares of individual sub-sectors:				
Electric power	2.6	13.8	7.1	7.3
Fuel industry	4.6	4.3	16.2	16.7
Ferrous metallurgy	0.9	2.4	2.9	3.5
Chemical and petrochemical	9.0	14.3	12.5	12.1
Machinery and metalworking	34.2	23.3	20.5	21.8
Logging, woodworking, pulp and paper	4.4	5.3	5.0	5.4
Construction materials	3.7	5.1	3.4	4.1
Light industry	17.2	8.0	8.4	6.3
Textile	10.4	4.4	4.2	2.9
Clothing	4.7	1.3	2.1	2.0
Leather, fur and footwear	2.1	2.3	2.1	1.4
Food industry	14.9	17.0	17.3	17.2
Food processing	5.6	6.8	8.9	8.1
Meat and dairy	9.0	10.0	8.0	8.5
Fishery	0.2	0.2	0.4	0.6

Source: MSA.

A. PECULIARITIES OF THE INDUSTRIAL STRUCTURE

2.2 The following specific features of the industrial structure are critical to an understanding of the recent trends in industrial performance as well as the prospects for future overall economic growth.

2.3 **The limited availability of local energy sources and other primary resources.** Belarus does not have any significant primary resources, except for potash fertilizers. The country is heavily dependent on energy imports (almost exclusively from Russia). The share of net energy imports in overall energy consumption amounted to 87 percent in 2003.

2.4 **Traditional manufacturing is the core of the existing industrial structure.** The country's historical specialization in the FSU was in various types of machinery (including trucks, tractors, mainframe computers, television sets, refrigerators, and other consumer durables), chemicals and refinery products, garments and processed foods. This traditional industrial structure has remained surprisingly unchanged, given the transitional shocks of the last 15 years (Table 2.1).³⁵ In contrast to most economies in transition, Belarus continued to operate practically all of the inherited medium and large enterprises, while new entry was limited.

2.5 **High industrial concentration.** The industrial structure is dominated by giant firms. In 2004, the ten largest companies produced 36 percent of the total industrial output, while the 50 largest produced 59 percent. And this level of concentration had changed very little since the Soviet era. Companies with more than 1,000 employees contribute over two-thirds of the total industrial production and employ about 73 percent of the industrial labor (Table 2.2). Their output share has remained practically unchanged since 1991. The 20 largest exporters are a source of more than half of the percent of all exports, and more than 80 percent of non-CIS exports.

**Table 2.2: Distribution of Industrial Enterprises by Size
(Percent of total)**

	Shares of enterprises of different size							
	< 100 employees				> 1001 employees			
	1991	1998	2000	2004	1991	1998	2000	2004
Number of enterprises	42.7	43.2	38.8	40.6	12.7	7.9	8.2	7.6
Output in producer prices	2.6	4.2	2.9	2.5	66.5	63.7	65.5	68.9
Industrial employment	2.6	5.7	5.1	3.6	70.7	58.0	58.0	72.8

Note: Individual entrepreneurs with no legal entity are not included in officially published data. According to the MSA, the inclusion of such enterprises will result in a higher share of enterprises with less than 100 employees in total output and employment, about 7 and 11 percent, respectively, in 2004.

Source: MSA.

2.6 At the same time, less than 6 percent of industrial labor is employed by companies that have less than 100 employees. Their combined share in industrial output is less than 3 percent, which is practically the same level as that in 1991. Even in the relatively more competitive sectors (machinery, wood processing, construction materials), the largest five to six firms generate 25 percent or more of the total

³⁵ The main changes in the industrial structure occurred before 1995 and included a sharp decline in the textile and garment industry, as well as in machinery, which were the sectors that were most affected by both demand contraction and stronger competition with non-FSU imports. At the same time, in the course of the 1990s, the shares of the power, fuel and petrochemical sectors increased.

sectoral output. In contrast to the experience of other economies in transition (World Bank, 2002b), growth in the Belarusian industry was not driven by the expansion of SMEs and new entry in general.

2.7 Export orientation. Belarusian industry is highly regionally integrated. Traditional Soviet era ties with Russian customers and suppliers are especially close. This is largely a reflection of the fact that the large traditional enterprises continue to dominate a relatively small but open economy. Fifty-three percent of the total industrial output was exported in 2003. Exports to Russia made up 60 percent of total manufacturing exports. Taking into account the local production of industrial inputs for exporters, about two-thirds of Belarusian industry works for external markets. Table 2.3 presents the data on export dependence (including dependence on exports to Russia) for a number of leading export products.

Table 2.3: Share of Exports to Russia in Total National Output (q) and in Total Exports (s) for Specific Industrial Products, 1996-2003 (%)

Product Description		1996	1999	2001	2003
Trucks	q	53.4	82.1	91.1	74.9
	s	76.3	87.2	87.9	75.1
Tractors	q	18.3	42.7	49.7	42.4
	s	24.6	54.4	60.1	47.1
TV Sets	q	45.5	58.8	65.6	77.4
	s	92.7	98.0	99.4	98.1
Refrigerators and freezers	q	57.3	56.2	47.9	69.6
	s	79.7	71.6	61.4	79.3
Stoves and ranges	q	57.4	72.0	77.4	77.4
	s	82.7	87.0	87.0	86.2
Iron and steel	q	18.0	19.7	14.5	33.9
	s	22.6	21.2	16.7	40.3
Footwear	q	10.3	9.8	34.9	36.9
	s	89.8	89.3	97.3	96.5
Synthetic filament yarn	q	20.0	35.8	30.3	30.3
	s	45.4	73.1	62.2	51.0
New pneumatic tires, of rubber	q	70.6	75.2	70.0	67.4
	s	85.0	85.7	86.7	79.8
Ethylene	q	27.7	42.4	61.1	44.6
	s	41.5	64.7	73.8	50.6
Mineral or chemical fertilizers	q	29.6	22.6	16.3	7.6
	s	44.8	42.8	27.1	14.0
Beer	q	17.9	18.3	21.3	13.4
	s	98.7	99.7	98.8	99.4
Pork	q	2.2	7.1	23.4	11.2
	s	99.0	99.9	100.0	100.0

Source: MSA.

2.8 Predominance of state ownership. The pace of privatization in Belarusian industry has been slow. In 2004 only 18 enterprises held in republican ownership were privatized (Figure 2.1). The current government strategy has been focused on the corporatization of medium and large enterprises, with partial

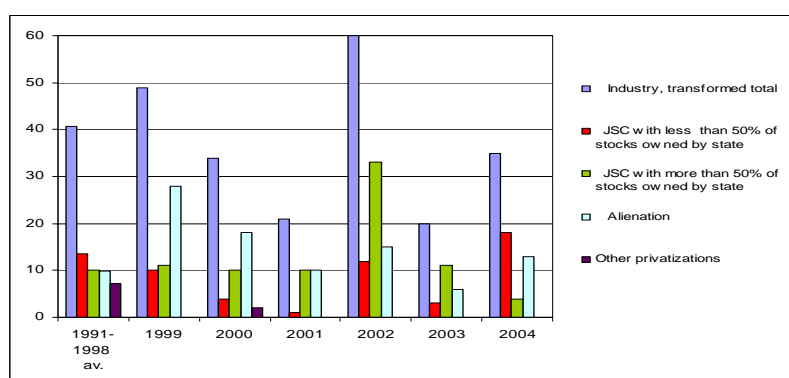
privatization while preserving state control.³⁶ While about two-thirds of all industrial enterprises could be considered private or mostly private, these are mostly small firms with a combined share in total output that was less than 20 percent in 2004. The state remains in full control of 34 percent of enterprises, which produce about 82 percent of output and employ 74 percent of labor (Table 2.4). About one-fourth of these firms (8.8 percent of the total number) are the largest Belarusian enterprises, in which some privatization has taken place, but in which only a small minority of shares has been divested, while the state has kept the controlling stake. The dominance of SOEs largely explains the prevailing low profit margins in the sector.

Table 2.4: Ownership Structure in Industry in 2004 (%)

	Number of enterprises	Output	Employment
Total industry	100	100	100
1. State ownership	25.1	37.0	41.5
- republican	9.7	34.0	35.9
- municipal	15.4	3.0	5.6
2. Mixed ownership, w/o foreign participation	8.8	44.6	32.1
3. Private ownership	66.1	18.4	26.4
- o/w with foreign participation	4.9	6.4	6.0

Source: MSA.

Figure 2.1: Privatization and Corporatization of Enterprises Held in Republican Ownership, Annual Number of Enterprises, 1991-2004

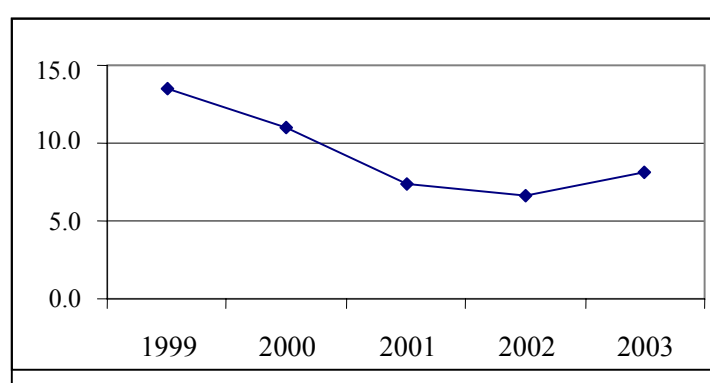


Source: Ministry of Economy.

³⁶ The state owns more than 50 percent of shares in about half of the more than 800 joint stock companies (JSCs) that emerged in the course of the corporatization process.

2.9 **Low profitability.** The level of profitability remains depressed, which is a reflection of several factors: (i) soft budget constraints and a high share of loss-making enterprises; (ii) a wage and employment policy that inflates labor costs; and (iii) an excessive tax burden with a number of turnover taxes. The average profit margin in industry declined from 17.1 percent in 1999 to 10.5 percent in 2002. The average probability increased somewhat in 2003-04 to 15.3 percent, but it remains low. The policy of targeted wage increases and informal restrictions on labor shedding results in rather a low profit/wage ratio, which on average has been below 10 percent (Figure 2.2). This reduces the investment opportunities of the enterprise sector and undermines its longer-term competitiveness. In comparison, the profit/wage ratio in Russian industry amounted to about 50 percent in 2002-03.

Figure 2.2: Profit/Wage Ratio in Industry, 1999-2003 (%)



Source: World Bank staff estimates based on MSA data.

2.10 **High tax burden.** As mentioned in Chapter 1, the Belarusian economy is characterized by the high overall tax burden. Moreover, this tax burden is more or less unevenly distributed across the economy with industry being especially heavily taxed. Table 2.5 shows that in 2002-03 taxes amounted to about 60 percent of the value added created in industry. This represents a modest decline of 10 percentage points relative to 2000, despite various government decisions aimed at a reduction in the tax pressure. The current taxation burden remains excessively high and represents an additional risk for industrial competitiveness. Industry is, on average, over-taxed even on a net basis (i.e., even due to subsidies and tax exemptions).

2.11 As discussed above, the problem of the Belarusian taxation system relates not to the rates of regular business taxes (which are reasonable) but to the high incidence of turnover taxes³⁷ and high payroll taxes. These factors do not merely push up the overall taxation burden; they also make its structure distorted and excessively proportional to sale values instead of measures of profitability and value added. As seen from Table 2.5, the tax burden expressed as a percentage of sales shows a high degree of inter-temporal stability. Moreover, the tax/sales ratio shows much less cross-sectoral variation than the tax-to-value added ratio. The latter indicates a cross-sectoral inequality in taxation – sectors with low profit margins (such as machinery and food processing) are especially heavily taxed under the current system. Moreover, since the application of both taxes and subsidies is highly discretionary, it is likely that effective taxation varies considerably among individual sub-sectors.

³⁷ About 30 percent of all taxes paid by industry in 2002-03 were turnover based.

Table 2.5: Tax Burden by Industrial Sub-Sector, 2000-03 (%)

	Taxes as a % of sales					Taxes as a % of value added				
	2000	2001	2002	2003	Change 2000-03	2000	2001	2002	2003	Change 2000-03
National Economy	14.7	14.9	15.3	15.8	1.1	33.1	31.7	28.8	29.0	-4.0
Industry	16.8	16.7	16.7	17.0	0.2	70.0	67.4	60.1	58.9	-11.1
Power industry	16.8	18.7	19.6	18.7	1.9	68.1	55.4	72.3	62.5	-5.7
Fuel industry	20.2	18.4	21.1	20.1	-0.1	89.2	78.6	73.8	86.0	-3.2
Ferrous metallurgy	14.5	13.9	11.4	12.0	-2.5	61.3	78.8	45.1	40.4	-20.9
Non-ferrous metallurgy	17.5	15.4	20.1	18.4	0.9	71.2	50.7	61.3	40.9	-30.3
Chemical and petrochemical industry	15.6	13.8	13.9	15.5	-0.1	49.9	47.4	44.9	44.8	-5.1
Machinery and metalworking	18.2	17.7	17.4	18.1	-0.1	80.4	81.4	63.7	65.5	-14.8
Timber, woodworking, pulp and paper	20.1	19.4	19.5	20.2	0.1	69.6	60.1	55.4	48.1	-21.5
Construction materials	18.0	21.6	20.3	19.6	1.6	59.0	53.4	46.2	41.1	-17.9
Light Industry	17.2	17.2	17.4	17.6	0.4	61.0	65.7	58.8	48.7	-12.3
Food industry	13.9	14.0	13.2	13.2	-0.7	92.3	92.9	71.8	71.1	-21.3
Other	15.3	16.6	15.6	15.4	0.1	52.1	50.4	41.1	44.0	-8.1
<u>Memo: Total taxes b/</u>	<u>26.5</u>	<u>26.3</u>	<u>26.8</u>	<u>27.3</u>	<u>0.9</u>	<u>59.7</u>	<u>55.9</u>	<u>50.4</u>	<u>50.3</u>	<u>-9.6</u>

^{a/} Producer taxes, excluding PIT, excises, and tax penalties.

^{b/} Actually paid, including PIT, excises and other taxes paid by consumers.

Source: Volchok (2005).

2.12 In addition to regular taxes, the industry is subject to additional quasi-fiscal taxation that includes, for example:

- Spending on maintaining social assets (1.4 percent of GDP in 2003³⁸)
- Cross-subsidizing households and other consumers in the power sector (2003 total costs amounted to 0.13 percent of GDP³⁹)
- Supplying agricultural farms with inputs (motor fuels, fertilizers) at subsidized prices.

³⁸ This number relates to the whole economy, not just industry. However, it is believed that industrial enterprises finance the main share of this total. In addition to the direct costs, the excessive social liabilities of enterprises in Belarus are believed to reduce their flexibility and adjustment potential.

³⁹ This does not reflect the remaining cross-subsidization in heating and other utilities. It is worth noting the considerable decline in the burden of cross-subsidization in electricity, which exceeded 0.4 percent of GDP in 2000.

B. INDUSTRIAL PERFORMANCE

2.13 According to official statistics, the period since 1996 has been quite successful for industrial development in Belarus. The average rate of industrial growth for 1996-2003 amounted to 8.7 percent (Table 2.6). A high rate of industrial output growth in 2004 (by 15.6 percent) resulted in an increase in the average growth figure for the period 1996-2004 to 9.4 percent. Since 2001 industrial performance has improved further and become more balanced. In particular, the relationship between growth in productivity, wages and investment has become much less distorted. Moreover, industrial growth has been accompanied by noticeable improvements in efficiency, as seen in the positive dynamics of both labor productivity and unit energy consumption.

Table 2.6: Summary Indicators of Industrial Development, 1996-2003

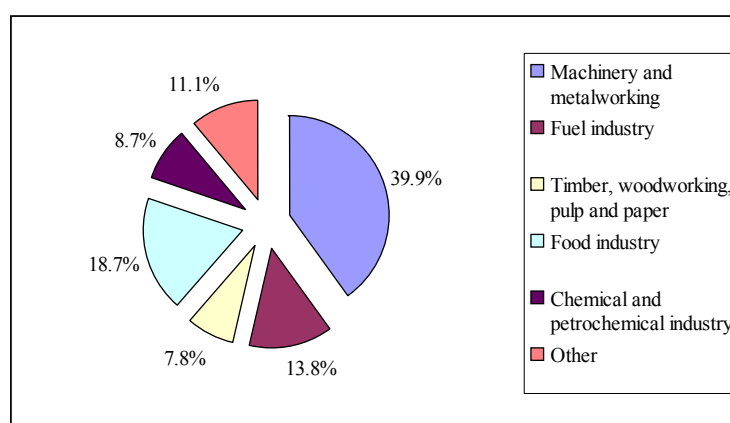
	1996-2003	1996-2000	2001-03
Average growth rate	8.7	10.4	5.8
Average growth in productivity	7.3	6.4	8.8
Average profitability for the period	13.1	14.2	11.1
Growth in average real wage	12.1	13.5	9.8
Average investment growth	7.1	4.4	11.7
Average change in unit energy consumption	-5.9	-6.4	-5.1
Memo:			
End period industrial employment, 1995=100	89.8	97.8	89.8
End period unit energy consumption, 1995=100	61.6	72.0	61.6

Note: Data on energy consumption refer to the overall energy consumption in the economy.

Source: World Bank staff estimates based on MSA data.

2.14 After 1999 industrial growth become concentrated in machinery and food processing. These two sectors contributed about 60 percent to total industrial growth in 1999-2003. Further significant contributions were made by the oil processing, chemicals, and wood processing sub-sectors (Figure 2.3).

Figure 2.3: Sectoral Contributions to Industrial Growth, 1999-2003 (%)



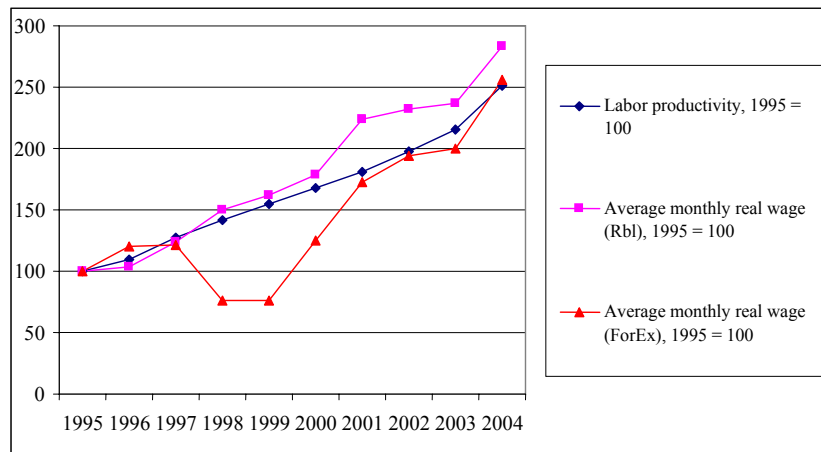
Source: World Bank staff estimates based on MSA data.

2.15 Despite continued labor shedding in the machinery sector, it remains by far the largest industrial sub-sector by employment. Together with food processing, these two sub-sectors employed about half of the total industrial labor in 2003. A strong expansion in such labor-intensive sectors, accompanied by strong real wage growth, had a profound impact on the overall trend in the recovery of household incomes.

2.16 In addition to a relatively high share of total labor concentrated in the fast-growing sectors, two more factors helped to ensure that the benefits of recent growth were broadly shared:

- The wage policy encouraged a relatively high share of labor in the total value added. Until 2002, the real industrial wage grew more rapidly than productivity (Figure 2.4).⁴⁰
- The income policy emphasized restrictions on income differentiation within the real sector, including explicit and quite low limits on the wage differential between management and floor labor.

Figure 2.4: Wages and Productivity in Industry, 1995-2004 (1995=100)



Source: World Bank staff estimates based on MSA data.

2.17 In turn, the high growth in real incomes with a limited increase in income inequality fueled a growth in domestic demand that became an important additional factor in sustaining growth in the period after 1999.

C. ALTERNATIVE INDICATORS OF GROWTH

2.18 The official data on Belarusian growth are often met with considerable skepticism. The skeptics usually point to the weaknesses in the existing index of industrial production, as well as to the administrative pressure on state controlled enterprises (which are expected to meet output targets) which may create incentives to distort statistical reporting.⁴¹

2.19 This section uses the alternative survey data⁴² to explore the question of the broader reliability of the official growth estimates. To what extent do the official data reflect at least the overall trend in

⁴⁰ However, as seen from Figure 2.5, in 1996-99, real wage growth measured in foreign exchange was much slower than measured in constant rubels. As discussed below in this chapter, this played a critical role for maintaining the competitiveness of Belarusian industry in Russia, its core market.

⁴¹ See IMF (2005c).

⁴² These results are based on Gotovsky and Zheltkov (2004).

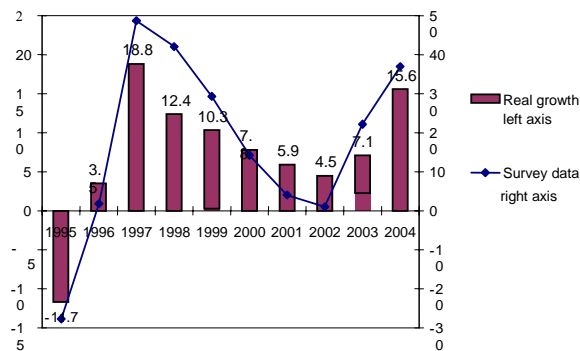
industrial dynamics? Do the alternative data support the claim that Belarusian industry has been going through an extended period of economic expansion?

2.20 The alternative dataset is based on the quarterly mailed-in survey of business conditions that has been undertaken by the Research Institute of the Belarusian Ministry of Economy since April 1994.⁴³ The main block of the survey contains 15 qualitative questions on economic dynamics, which are formulated in line with the standard European methodology.⁴⁴ The survey sample includes 904 industrial enterprises (more than 40 percent of their overall number). The average quarterly return amounts to about 300 filled questionnaires. In contrast to the established European practice, however, the survey in Belarus is not a part of the regular state system of statistical monitoring. Enterprises participate in the survey on an entirely voluntary basis. It would be worth incorporating this kind of survey into the Belarus state statistical system and thus expand the availability of such information for policymakers and experts.

2.21 In summary, the comparison of the survey results with the official growth data suggests a fairly high correlation in identified growth trends. While the official growth data are likely to be somewhat biased, they appear to reflect the direction/sign of economic dynamics reasonably well. This means that there are substantial reasons to believe that economic growth in Belarus is real and is not just a “paper phenomenon generated by statistical manipulations.”

2.22 The integral measure of growth in the alternative survey is the balance between positive answers (those who report that their output increased in the latest period) and negative answers (those who experienced a decline in output). Figure 2.5 presents both the official and the alternative growth measures. Their comparison reveals a strong correlation in the time series. Both measures point to: (i) a drastic change in economic dynamics from 1995 to 1996; (ii) years of high growth in 1997-99; (iii) a visible slowdown in 2000-02; and (iv) new growth acceleration in 2003. At the same time, it is worth mentioning that the alternative measure suggests significantly lower growth in 2001-02 (less than 2 percent compared to about 5 percent in the official data).

Figure 2.5: Trends in Industrial Output According to Official and Survey Data



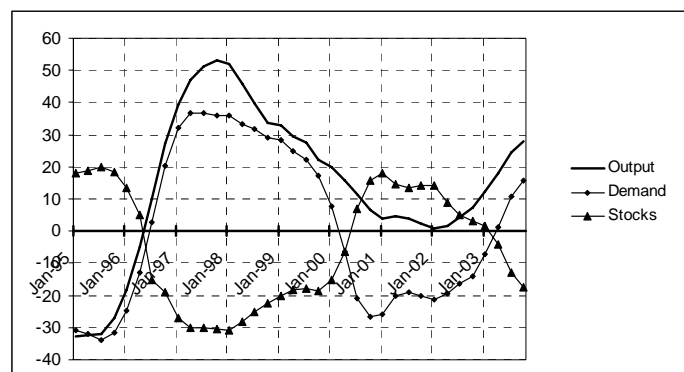
Source: Gotovsky and Zheltkov (2004).

⁴³ A somewhat similar industrial survey, but with a stronger focus on the enterprises’ financial performance, was also run by the National Bank of Belarus since 2000. For the time period for which both survey results are available, their results regarding main trends in industrial performance are broadly consistent.

⁴⁴ The questionnaire was developed with methodological support from the OECD Department of Statistics. It is similar to the questionnaires used in Russia and Ukraine, which provides for comparability of the respective survey results.

2.23 Another important data-related issue concerns to the economic nature of growth in Belarus. To what extent was the observed growth driven by changes in economic fundamentals (such as the strengthening of demand)? Or, alternatively, could output growth be primarily a result of administrative pressure, which, instead of leading to growth in sales and earnings, led mostly to accumulation of inventories and waste of inputs? Figure 2.6 suggests that the dynamics of output and demand were strongly correlated (i.e., that industrial output in Belarus has been reacting to actual changes in demand, not just to government pressures to produce more). The only significant deviation relates to the period 2000-02, when output continued to expand despite a noticeable compression in demand. This inconsistency between output and demand led to a considerable inventory accumulation during that period.

Figure 2.6: Changes in Output, Demand and Inventories According to Survey Data (balance of answers)



Source: Gotovsky and Zheltkov (2004).

2.24 A comparative analysis of similar business surveys in Russia, Ukraine, and Belarus provides additional confidence in the alternative growth data.⁴⁵ Enterprises in both Russia and Ukraine operate in a much more liberal economic environment than in Belarus. They do not face any significant administrative pressure to inflate output, which in Belarus could, as one may claim, distort even the replies provided to the non-official survey. The comparison of the survey data from the three countries, however, reveals a number of similarities in managers' responses.

2.25 In particular, according to the surveys, enterprise managers in these three countries share perceptions of the common regional market and face largely similar growth barriers. Their responses to growth challenges show similarity as well, despite significant differences in the national business environments. There is no evidence that responses obtained in the Belarusian survey differ in their quality because of, for example, either potential differences in the qualifications of respondents or differences in their incentive frameworks. In particular, in all three countries the following is seen:

- There is a similar strong correlation between the output and demand indicators.
- Management's satisfaction with its company's output level is dominated by attained capacity utilization.
- The leading growth constraints relate to a shortage of working capital, taxation, insufficient demand, and customer non-payments. At the same time there is little concern about shortages either of equipment or skilled labor.

⁴⁵ Russian surveys are conducted by the Institute of Economic Transition (Moscow), while those in Ukraine are conducted by the Statistical Research Institute (Kiev).

D. GROWTH DRIVERS

2.26 Our combined analysis of survey results in Russia, Ukraine, and Belarus also helps to clarify the role of external factors, including the role of development in Russia, in triggering and sustaining industrial growth in Belarus. Combining this analysis with other findings, including those on trade performance in Chapter 4, we conclude that the role of external markets was critical in triggering the initial growth in Belarus in the second half of the 1990s. However, more recently the interaction between external and domestic factors has been more complicated. It is clear that the role of domestic demand has become more important in sustaining growth after 2000. Overall, growth in Belarus for the entire period 1996-2004 cannot be explained by external factors alone.

2.27 Table 2.7 shows cross-sectoral differences in growth rates depending on the dominant markets of each industrial sub-sector. The industry is divided into four groups of sub-sectors: (i) domestically oriented; (ii) mostly domestically oriented with a large share of CIS exports; (iii) mostly oriented toward CIS markets; and (iv) mostly oriented toward non-CIS markets. The table 2.7 suggests a major convergence in growth rates among various sectors after 2000 (except for power generation in group 1). However, in the second part of the 1990s the growth rates were highly uneven – the sectors that are mostly CIS oriented over-performed compared to the rest of the economy.

Table 2.7: Indices of Total Output by Industrial Sectors, 1996-2003
(In percent to the previous year)

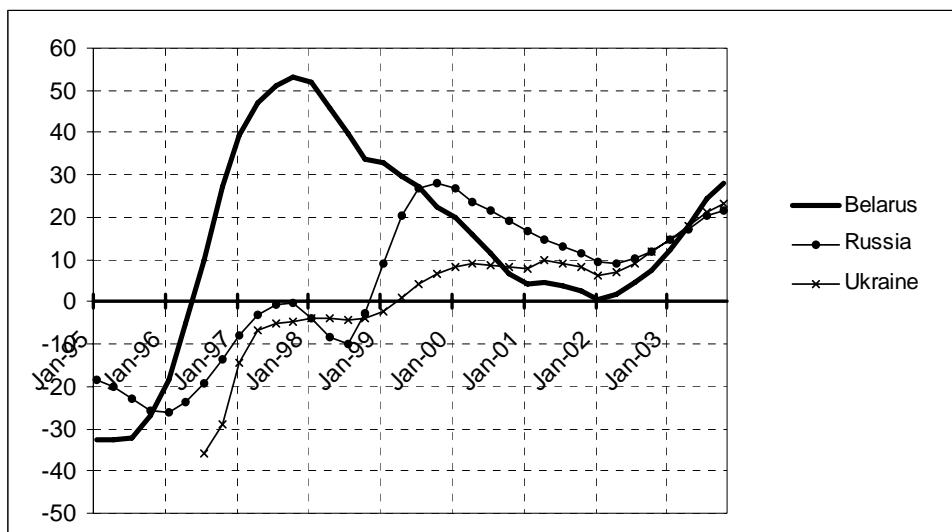
	1996	1997	1998	1999	2000	2001	2002	2003	1995- 2000	2000 -03	1995- 2003
Industry, total	103.5	118.8	112.4	110.3	107.8	105.9	104.5	107.1	164.3	118.5	194.8
<u>Oriented toward Internal Market:</u>											
Electric Power	98	106	93	105	97	99	103	100.9	98.4	102.9	101.2
<u>Oriented toward Internal Market with a significant CIS Market Share:</u>											
Food	103.3	122.1	118.2	111.6	105.5	109.2	104.5	108.0	175.5	123.2	216.2
Building Materials	105	121	119	114	107	110	104	107	184.4	122.4	225.7
Oriented toward CIS Market:											
Machinery and Metalworking	105.9	127.5	118.5	114.7	111.2	108.2	104.4	107.1	204.1	121.0	247.0
Light Logging, Woodworking, Pulp and Paper	102	126	116	116	115	111	106	108	198.9	127.1	252.7
Oriented toward Non-CIS Market:											
Fuel	112	127	123	111	105	100.9	98	104	203.9	102.8	209.7
Ferrous Metallurgy	114	135	122	116	106	107	106	107	230.9	121.4	280.2
Chemical and Petrochemical	106.9	118.0	107.9	104.5	109.8	105.6	106.2	107.3	156.2	120.3	187.9
	95	99	100.6	102	115	105	111	107	111.0	124.7	138.4
	123	135	115	100	110	107	106	106	210.1	120.2	252.5
	107	119	108	107	103	106	99.97	108	151.6	114.4	173.5

Source: Gotovsky and Zheltkov (2004).

2.28 Figure 2.7 presents the comparable dynamics of industrial growth in Russia, Ukraine, and Belarus, generated from the managers' responses to similar enterprise surveys in the three countries. It shows a

strong correlation ($r=0.815$) for industrial dynamics in Russia and Ukraine. At the same time, correlation between growth in Belarus and growth in Russia is much weaker ($r=0.321$), while the correlation between Belarus and Ukraine is negative ($r=-0.372$). The major difference relates to the period 1996-98, when Belarusian industry experienced a fairly strong growth while in Ukraine and Russia the balance of responses remained mostly negative, which at best indicates a slowdown in decline, but not a recovery. Similarly, the evolution of industrial demand in the three countries does not show any significant correlation for the entire period of 1996-2004.

Figure 2.7: Industrial Growth in Belarus, Russia, and Ukraine (balance of answers)



Source: Gotovsky and Zheltkov (2004).

2.29 Overall, the comparative analysis suggests that the Russia/CIS⁴⁶ demand could be considered a driver for Belarusian industrial growth only in particular periods (such as 1997-first half of 1998, and 2002-03), but not for the entire period of 1996-2004. Belarus appears to employ other growth factors that are somehow independent of Russian economic dynamics. Moreover, the economic expansion in Belarus in 1996-99 took place against the broadly depressed situation in its main export market in Russia and without much diversification into other more dynamic markets. Such a growth episode should be seen as something unusual, and deserves a more detailed explanation.

2.30 The explanation of this early growth puzzle suggested by this report links it to a simultaneous effect of two groups of factors:

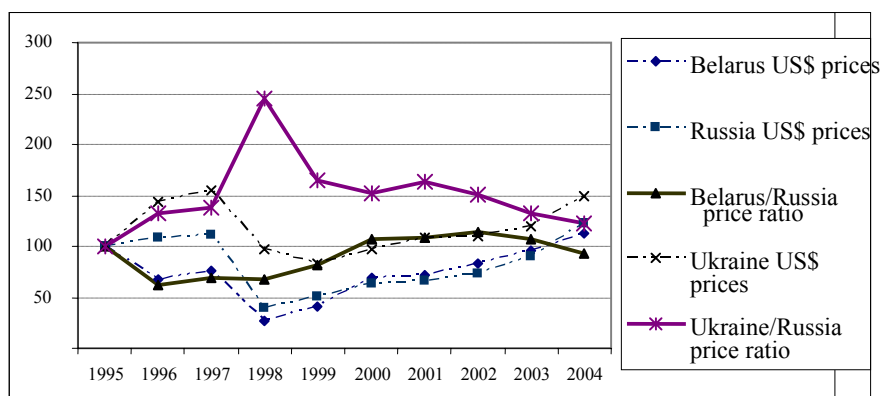
- An active political re-integration with Russia, which resulted in improved market access, as discussed in Chapter 4
- A change in government policies through the real depreciation of the rubel and an expansion in interest rates and other implicit subsidies that were (on a net basis) beneficial for at least a part of the leading exporters.⁴⁷

⁴⁶ Russia and Ukraine accounted for 96 percent of the total Belarusian export to the CIS in 2003-04.

⁴⁷ For example, domestic credit doubled in 1998, from 18 to 35 percent of GDP.

2.31 As shown in Chapter 1, the government policy of the late 1990s was destabilizing and led to an acceleration of inflation and significant real depreciation. At the same time, it resulted in a substantial decline in the price level of Belarusian producers relative to those in Russia (Figure 2.8). For the period 1996-99, the average producer price ratio for Belarusian and Russian markets was at about 60 percent of its level in both 1995 and 2000. This price advantage appears to be fundamental in explaining Belarusian growth at that time. In a situation of continued stagnation in the Russian economy, Russian consumers had a strong preference for familiar low-cost, low-quality Belarusian goods. It is worth noting, however, that these price advantages were not based on an advantage in productivity, but primarily on wages.

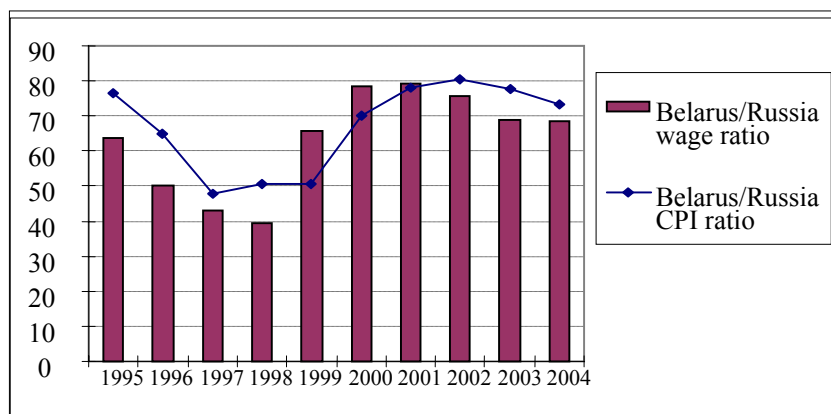
Figure 2.8: Dynamics of Relative Producer Prices in Belarus, Ukraine, and Russia, 1995-2004 (December 1995 = 100%)



Source: Gotovsky and Zheltkov (2004).

2.32 Soft macroeconomic policies in the second part of the 1990s were complemented by massive government interventions aimed at slowing down nominal growth in both wages and domestic prices. These wage and price controls further consolidated the cost/price advantages of Belarusian producers in CIS markets. At its low point in 1998, the average wage in Belarus amounted to only 30 percent of that in Russia (Figure 2.9).

Figure 2.9: Relative Consumer Prices and Wages in Belarus and Russia (Annual Average, Russia = 100%)



Source: Gotovsky and Zheltkov (2004).

2.33 There were two important effects of such a government policy for the enterprise sector. First, it led to the formation of a specific export strategy. In the environment of government-imposed cost control and low investments, it appears quite logical for exporters to concentrate their efforts in the market niche of low quality, low price goods, namely, to move to the niche that is traditional for low and low-medium income developing countries. Indeed, in the second part of the 1990s the prevailing average wages, estimated at the market exchange rate, were comparable to industrial wages in China. This export strategy collapsed as soon as the government exercised pressure toward a considerable real wage growth.

2.34 The second effect proved to be much more sustainable. It relates to securing a considerable share of the large Russian market and thus establishing a first-mover competitive advantage. When Russia started to grow after the 1998 crisis, the Belarusian industry was well positioned to benefit from this growth. In the environment of the growing Russian market it was easier for established Belarusian exporters to defend their market share and their expand export volumes relative to the barriers that a new entry from other countries to this market had been facing. In other words, the scale of the cost and market advantages accumulated before 2000 was sufficiently large to support further export growth to Russia in 2000-04 (see also Box 2.1).

Box 2.1: Minsk Tractor Plant: A Typical Story of Transitional Survival

The trends in the performance of the Minsk Tractor Plant (MTZ) are a good illustration of the environment in which the largest Belarusian industrial companies have been operating. The MTZ is one of the largest and best known companies in the country. In 1990 it produced about 100,000 tractors a year, or about a quarter of the entire USSR production. It was apparently one of the best Soviet plants of this type, and even before 1991 the MTZ exported a noticeable share in its tractors outside of the FSU (mostly to Eastern European and developing countries). The company was severely hit by a demand shock of the early 1990s, when the demand for agricultural machinery in the FSU dried up almost entirely. Nevertheless, in the first part of the 1990s, the MTZ performed better than similar FSU companies because of two primary factors: (i) the existence of its established customer base outside of the CIS; and (ii) some Russian orders within the CIS bilateral agreements (tractors-for-energy deals). By 1995 production had declined four fold (in the rest of the CIS, where 11 major tractor plants were operating, the total output declined by a factor of 10), but the company preserved most of its operational capacity.

The process of re-integration with Russia (and the associated expansion of barter agreements) and the more recent Russian growth have been most beneficial to the MTZ. Exports to Russia increased from 6,300 tractors in 1995 to 9,700 in 1998 and 13,600 in 2004. The overall production of tractors increased by about 50 percent in 1995-2004 and reached about 35,000 units a year. (During the same period the production of tractors in Russia declined by an additional 200 percent.) Almost 30 percent of the output was exported to the non-CIS market, with sales to 66 countries overall. In 2002 the MTZ employed about 20,000 workers, two-thirds of its pre-transition labor force.

The MTZ has been affected by government policies in a number of ways. On the one hand, it has clearly been a major beneficiary of stronger bilateral cooperation with Russia, which provided a critical level of demand support. On the other hand, the company has been taxed heavily through both export proceeds surrender requirements and requirements to supply tractors to local farms at low regulated prices. However, the company managed to receive partial compensation for the latter losses through government subsidies, including through various tax benefits. The net effect of all these distortive interventions to date has been positive for the company in the sense that it has survived the transition much more successfully than all of its competitors in the FSU. In 2002 its share in total CIS tractor production amounted to about 60 percent, whereas it was only about 25 percent in 1990. The company remains fully state-owned, without any clear prospects for privatization.

Source: World Bank staff analysis.

2.35 In summary, the early growth was triggered by the simultaneous effect of three factors – privileged access to the Russian market, temporary cost advantages, and subsidies to exporters. The effect of these factors was significant largely because of the low capacity utilization in 1995. In the years of early

growth, capacity utilization in industry grew rapidly from 37 percent in 1995 to 53 percent in 1999 (Table 2.8).⁴⁸

Table 2.8: Capacity Utilization in Industry, 1995-2003 (%)

	1995	1999	2001	2003
Industry, total	37.2	52.9	47.7	49.5
<i>of which:</i>				
fuel	30.9	40.1	57.8	54.2
ferrous metallurgy	55.5	88.1	91.3	93.9
chemical and petrochemical	44.1	63.2	68	67.6
machinery and metalworking	26.3	41.2	47.7	52.6
logging, woodworking, pulp and paper	49.1	70.5	80.3	88.8
construction materials	42.3	57.9	72.4	80.7
light	40.1	53	44.3	44.9
food	42.8	54.7	48.3	55.6

Source: Ministry of Economy.

2.36 All of these factors, which have gradually been declining, are still effective and have helped sustain growth in recent years. In the more recent period, growth received further support from additional factors such as the following:

- **A drastically improved external environment.** This reflects primarily the growth in oil prices, which benefited Belarus directly (expansion in oil processing exports), and especially indirectly, accelerating Russian growth and Russian demand. This also includes a number of secondary factors, such as improved external prices for metals and fertilizers (both relatively important export items for Belarus) and the rise in the volume of Russian remittances. Specific protectionist measures recently adopted by Russia have also proved to be beneficial to Belarusian exporters.
- **The strengthening of domestic demand.** The government budget and wage policies became an important source of a steadily rising domestic demand. The existing trade regime helped to limit growth in consumer imports and ensure that domestic producers, especially in the consumer sector, became the main beneficiaries of the growth in domestic demand.
- **An accelerated restructuring of domestic enterprises,** driven by competitive pressures at both external and internal markets and facilitated by certain domestic macroeconomic stabilization. With all caveats the enterprise sector was able to generate productivity and export growth.

2.37 The role of improvements in the global economic environment remains generally underappreciated in the discussions on the sources of recent economic growth in Belarus. In fact, a number of developing economies have experienced a significant improvement in their economic performance relative to the period of 1999-2002. After the 1999 financial crisis, these countries experience an acceleration in growth, driven by stronger export and trade trends (helped by commodity price increases). The point is that while Belarus currently has been benefiting from the positive global economic developments, a potential global slowdown is likely to be as important for Belarus as for many other small developing middle income economies. In the future such global market parameters as commodity prices, the real value of the dollar, U.S. deficits, and the prevailing international interest rates will become increasingly important for Belarus' economic prospects.

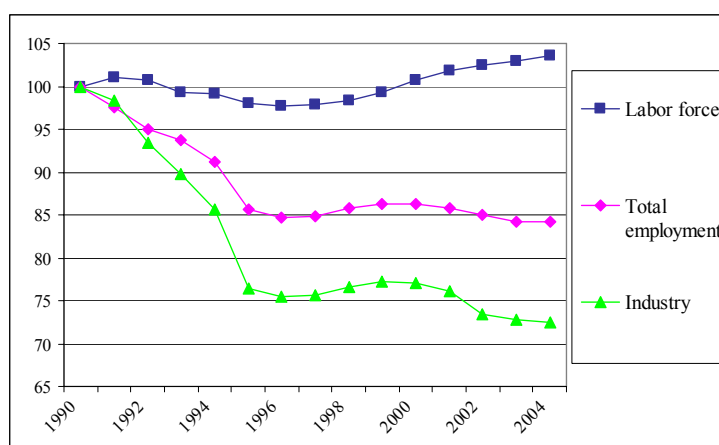
⁴⁸ In most industries (except food and light) growth in capacity utilization continued after 1999. However, the rate of this growth has slowed down (excluding energy). As shown below in this chapter, industrial growth is receiving stronger support from growth in investments and relatively less support from improvements in capacity utilization.

2.38 In our view, the above provides sufficient evidence that the Belarusian puzzle has a fairly conventional economic explanation. Belarus had and still has significant comparative advantages in its main export market. However, this poses a question that is central to this report: How stable are these advantages and how large is the risk that they may be eroded quickly? The rest of this chapter provides some analysis that is relevant to this question. The chapter concludes with a matrix of the main risks for the existing growth model.

E. EMPLOYMENT AND PRODUCTIVITY TRENDS

2.39 The ongoing economic growth in Belarus has not been accompanied by a parallel growth in employment. In fact, the total registered employment in 2004 remained somewhat lower than its 1996 level, when the economy started to recover after the crisis in the early 1990s. Relative to its pre-transition level in 1990, the economy lost about 16 percent of jobs by 2004, while the decline in industrial employment in 1990-2004 amounted to 28 percent (Figure 2. 10). Moreover, in 2000-03, the economy was still losing jobs (at an average rate of 1 percent a year). The tendency toward reduction in the number of jobs in industry maintained in 2004. In addition, the number of reported working hours did not increase.

Figure 2.10: Labor Market Trends in Belarus, 1990-2004



Source: World Bank staff estimates based on MSA data.

2.40 Employment dynamics in the early period of transition in Belarus were not so different from the trends in other transition economies. While the Belarusian economy experienced less reform (including privatization, shifts in the industrial structure, changes in the direction of trade, and the associated real sector restructuring such as, social asset divestiture), broad changes in employment in the 1990s showed some similarity to those in other countries in transition, as can be seen in the following:

- Job losses early in transition were considerable but still were smaller than the decline in output, and, thus productivity had initially deteriorated
- Employment structures showed a shift from industry to services
- Within the industry labor re-allocated from the sub-sectors that experienced negative price and demand shocks (machinery, textiles and garments) to those that benefited from the initial macroeconomic liberalization (such as energy and metallurgy).

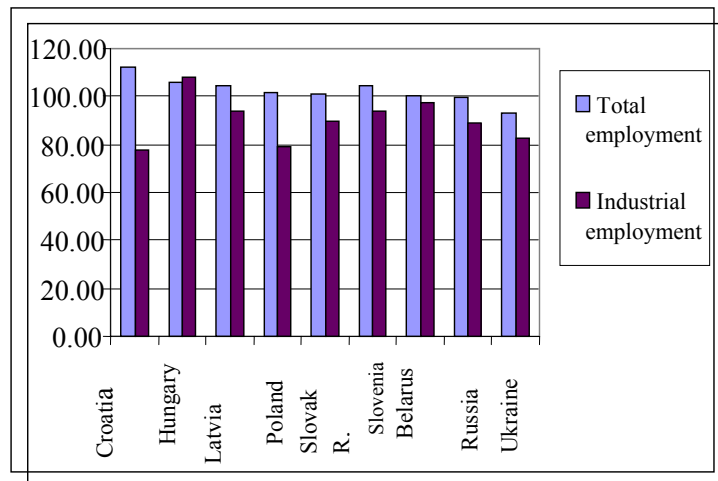
2.41 The CEE experience to date with respect to employment has varied considerably. For the 1989-2002 period, total job losses ranged from 10 percent (the Czech Republic) to more than 30 percent

(Bulgaria, Estonia). In manufacturing the job loss was in general more significant and more uniform (it amounted on average to about 40 percent), with even the best performing countries (such as the Czech Republic) losing about 30 percent of their pre-reform manufacturing employment.⁴⁹

2.42 Against this background the actual scale of employment contraction in Belarus appears to be within the range observed elsewhere in transition.⁵⁰ Similarly, the Belarus experience of growth without job creation has not been uncommon in the CEE (Figure 2.11). At the same time, the employment developments in Belarus differ considerably from those of its neighbors in the following aspects:

- Despite the loss of about 800,000 jobs since 1990, the level of registered unemployment remains low (about 100,000 unemployed or 2 percent of the labor force).⁵¹ This is explained primarily by labor migration. As estimated by the Ministry of Labor and Social Policy, at least 400,000 Belarusians have been working abroad, mostly in Russia. The Union Treaty provides Belarusian citizens with a better access to the Russian labor market than the rest of the CIS. Declining population and participation levels, as well as an increase in informal employment, helps explain the gap between actual job loss and low unemployment levels.
- Changes in the employment structure in Belarus after 1995 have been much smaller than in other transition economies. The most remarkable feature of labor trends in Belarus is the preservation of high employment in industry. The active reallocation of labor from industry to services was very pronounced in other transition economies through the entire 1990s, but in Belarus this process practically stopped in 1995. Industrial employment in 2003 was only 4 percent below the 1995 level, while in Russia, Ukraine and Kazakhstan this decline amounted to 15-25 percent. The share of labor employed in industry is still about 27 percent in Belarus, while it declined (from the same initial level of above 30 percent) to about 20 percent in both Russia and Ukraine.

Figure 2.11: Employment Growth in Selected Transition Economies, 2002 Levels Relative to the Lowest Point in 1994-96, (Employment Minimum =100)



Source: Staff estimates based on Economic Survey of Europe, 2004, No.1.

⁴⁹ Economic Survey of Europe, 2004, No. 1.

⁵⁰ It is worth noting that in this area Belarus has been closer to date to the countries that managed to avoid a major contraction of their labor market. In addition to the Czech Republic, this group includes the Slovak Republic, Slovenia, and Romania.

⁵¹ Registered unemployment exceeded 8 percent in practically all CEE economies in 2002, while in some countries (Poland, Croatia) it was closer to 20 percent.

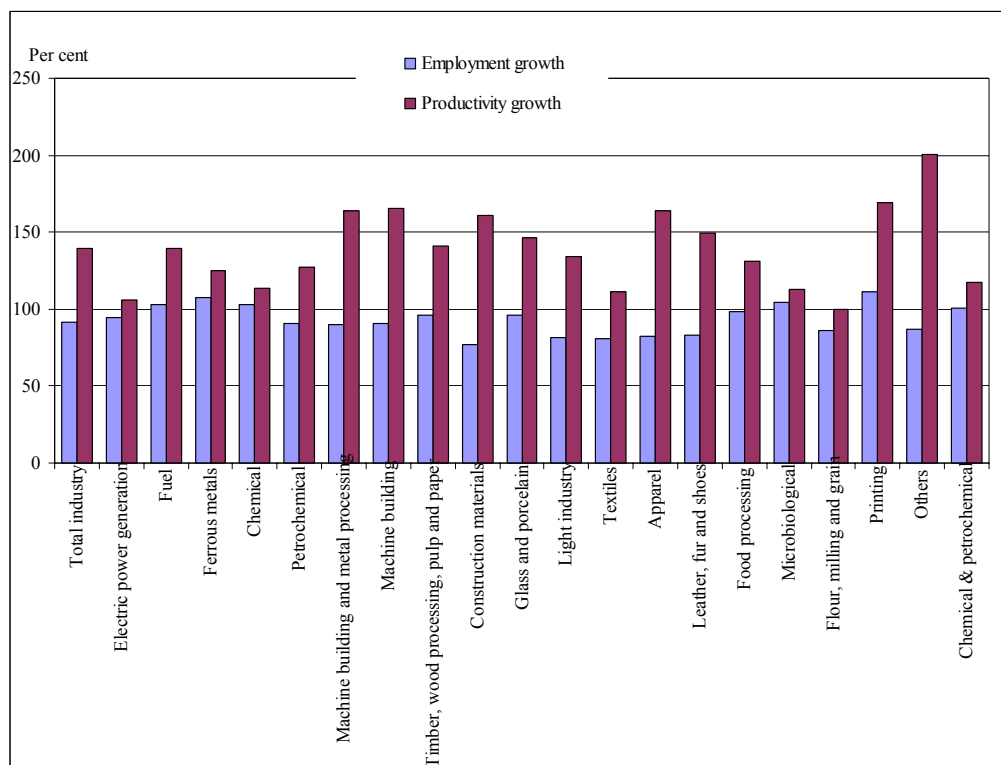
2.43 The comparison between employment contraction in Belarusian industry and employment contraction in CEE countries, where industrial restructuring has been largely completed, may indicate that in Belarus the industrial sector is still characterized by considerable job hoarding to a magnitude of 15 percent of pre-transition employment in the sector (i.e., up to 250,000 employees). Recent growth helped utilize some of this excess labor, but it still falls short of its full utilization. This potential over-employment represents about 6 percent of current national employment. This is significant, but is not of an unbearable magnitude for a potential future labor adjustment that may be required. If industrial restructuring is accelerated and this amount of industrial labor indeed becomes redundant within the sector, most of it could be absorbed by the service and SME sectors if proper enabling policies are in place.

2.44 Trends in employment and productivity within the industrial sector of Belarus since the early transition show patterns that are broadly similar to those in Russia, its main trade partner. As in Russia (Ahrend, 2004b), three distinct stages could be identified in the evolution of productivity trends in Belarus:

- Before 1996, during the period of industrial decline, the restructuring of Belarusian enterprises was predominantly passive and was mostly driven by short-term survival strategies. This included, inter alia, attempts to reduce employment as output fell. However, the employment decline was lower than output contraction, and industrial productivity declined by about 20 percent. In Russia this period continued until 1998, the year of the financial crisis.
- In the period of early growth in 1997-99, the Belarusian economy underwent more expansion than true restructuring. Enterprises benefited from low labor and other input costs associated with real depreciation, and from low capacity utilization. This period showed modest recovery in industrial employment (about 4 percent), while labor productivity increased by more than 45 percent. In Russia this period occurred during 1999-2001.
- It appears that after 2000 the average restructuring effort within Belarusian industry has increased. The easy gains from early growth were exhausted, real costs increased considerably, and parallel enterprise restructuring in Russia began to apply competitive pressure on Belarusian companies. This initiated a new round of job cuts and other restructuring efforts such as additional investments in energy savings. Industrial employment declined by an additional 8.5 percent in 2000-03, while labor productivity increased by an additional 40 percent. In Russia this period has been ongoing since 2002.

2.45 Overall, Belarusian industry demonstrated a significant, steady, and broad improvement in productivity (Figure 2.12). Industrial productivity practically doubled during the period 1996-2003. All output growth in the sector derived from productivity improvements (Table 2.9). At the same time, at the sub-sectoral level performance varied, and the variation in employment, productivity and wage trends was considerable. As can be seen from Figure 2.12, the sub-sectors that apparently faced the strongest competitive pressures (machinery, construction materials, and apparel) became the leaders in productivity improvement in 1999-2003. They over-performed compared to the sectors that are more resource-dependent, such as fuel, chemicals, and metals.

Figure 2.12: Employment and Productivity Growth by Industrial Sub-sector, 1999-2003 (%)



Source: World Bank staff estimates based on MSA data.

2.46 To what extent can the observed inter-sectoral variation in wages and employment be explained by differences in efficiency? This is an important question, one which could shed light on the severity of the remaining barriers to labor mobility in the economy and to economic resource reallocation in general.

Table 2.9: Decomposition of Growth in Industrial Output: Contributions of Employment and Productivity Factors to Sectoral Growth, 1997-2003 (%)

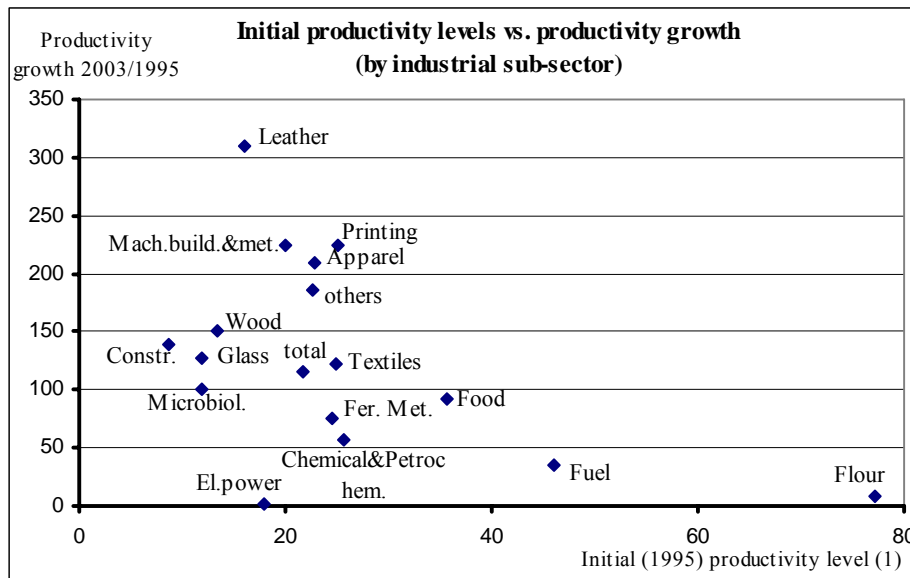
1997-99		2000-03		1997-2003	
Employment Growth	Productivity Growth	Employment Growth	Productivity Growth	Employment Growth	Productivity Growth
103.9	141.6	91.4	139.8	94.9	197.9

Source: World Bank staff estimates.

2.47 At a relatively aggregated level (16 industrial sub-sectors) it appears that despite the well-known administrative interference in enterprises' decisions on firing, hiring, and wage setting, there has been considerable room in Belarus for labor mobility in response to market signals. Labor generally moved from the less productive to the more productive sub-sectors, while the wage differential has been able to facilitate such reallocation by sending signals to market participants that are broadly consistent with differences in sector productivity.

2.48 In particular, since 1995 there has been a positive correlation between growth in sectoral employment and output. Employment declines were on average higher in sectors with a higher share of loss-making enterprises. Wages grew more rapidly in sub-sectors with higher profitability. There was also a significant negative correlation between the higher initial productivity in 1995 and the consequent growth in productivity, which indicates a cross-sectoral productivity convergence (Figure 2.13). The cross-sectoral variation in labor productivity, measured by a standard coefficient of variation, declined by about 50 percent between 1995 and 1999.

Figure 2.13: Productivity Trends in Various Industrial Sub-sectors, 1995-2003 (%)



Source: World Bank staff estimates based on MSA data.

2.49 A major exemption to these general trends relates to the power sector, where flat output dynamics was accompanied by a significant increase in employment relative to 1990 despite a major amount of investments over the last ten years. This is to a large extent explained by the government's priority policy to increase technical efficiency in the sector, which provided it with additional access to funding for modernization. At the same time, the power sector remains considerably over-staffed. Although since 1990 the volumes of power generation have declined by about 50 percent, employment in the sub-sector has increased by 50 percent, indicating a decline in productivity that exceeds 125 percent.

F. TRENDS IN UNIT LABOR COSTS

2.50 While growth in productivity is an important characteristic of industrial growth in Belarus, the analysis of the country's industrial competitiveness should also take the following into account: (i) parallel changes in the level of real wages and other components of labor costs such as payroll taxation, i.e., trends in unit labor costs (ULC); and (ii) developments in neighboring countries that have experienced somewhat similar trends in both productivity and wage growth.

2.51 We estimated the ULC for Belarusian industry in a format that is fully comparable to the recent analysis by Ahrend (2004b) for Russia. This helps in evaluating the dynamics of recent labor costs against trends prevailing in Belarus' major market. In particular, to reduce the effects related to real exchange rate movements, we follow Ahrend's approach of measuring wages in Belarus in a hypothetical currency unit

that is a 50:50 currency basket of U.S. dollar and euro. This has the additional advantage of being largely independent of recent swings in the euro-dollar exchange rates.

2.52 Table 2.10 provides ULC estimates for the period 1997-2003 by industrial sub-sector. It shows that the average ULC declined by about 100 percent in 1997-99, but then fully recovered by 2001, driven by a policy of accelerated real wage growth and by real currency appreciation. The average ULC remained broadly unchanged in 2001-03 because of the high productivity growth in this period, which largely matched the strong wage growth during the period.

Table 2.10: Developments in Unit Labor Costs by Industry 1995-2003 (1997=1)

Industrial Sector	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total industry	1.05	1.16	1.00	0.56	0.51	0.78	1.00	1.03	0.97
Electric power generation	0.92	1.04	1.00	0.57	0.57	1.03	1.74	1.76	1.60
Fuel	0.80	1.03	1.00	0.57	0.56	0.84	1.31	1.47	1.41
Ferrous metals	0.95	1.25	1.00	0.61	0.51	0.90	1.25	1.09	1.12
Chemical	1.02	1.20	1.00	0.62	0.61	0.99	1.25	1.42	1.41
Petrochemical	1.23	1.08	1.00	0.63	0.60	0.91	1.10	1.31	0.99
Machine building and metal processing	1.17	1.25	1.00	0.53	0.47	0.69	0.81	0.81	0.76
Timber, wood processing, pulp and paper	1.19	1.22	1.00	0.54	0.48	0.67	0.81	0.85	0.81
Construction materials	1.08	1.20	1.00	0.54	0.51	0.74	0.93	0.95	0.91
Glass and porcelain	1.20	1.34	1.00	0.54	0.56	0.86	1.04	1.11	1.02
Textiles	1.09	1.12	1.00	0.55	0.50	0.78	1.02	1.03	0.92
Apparel	1.12	1.17	1.00	0.55	0.54	0.77	0.90	0.89	0.81
Leather, fur and shoes	1.15	1.27	1.00	0.48	0.38	0.57	0.61	0.62	0.54
Food processing	0.97	1.15	1.00	0.55	0.47	0.70	0.95	1.04	0.96
Publishing	1.14	1.37	1.00	0.47	0.41	0.51	0.55	0.58	0.53

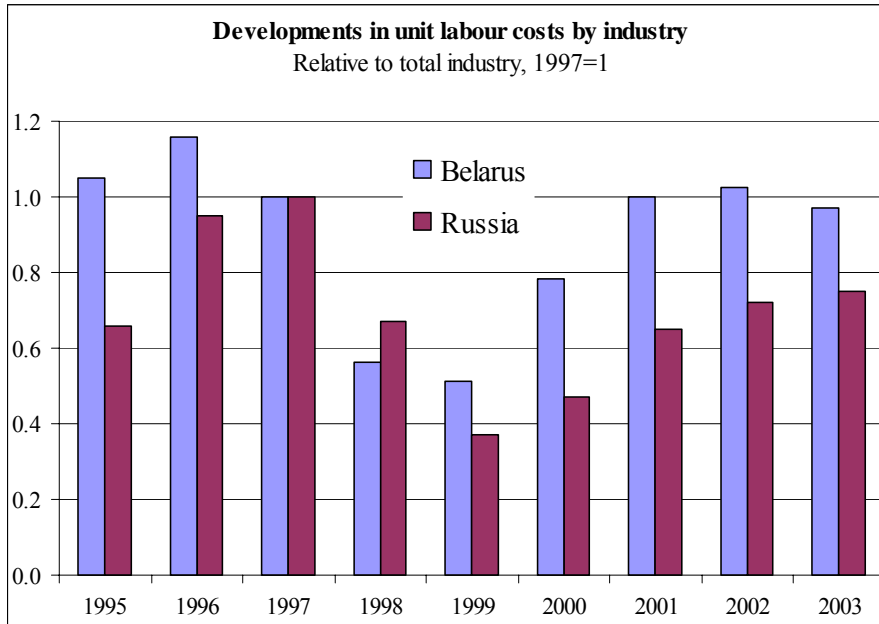
Source: World Bank staff estimates.

2.53 The post-1999 ULC recovery has been highly uneven across sub-sectors. It was strongest in the power, fuel, and chemicals sectors. In contrast, in the machinery, leather, apparel, and wood and timber sectors (i.e., sectors that export primarily to Russia) the ULC recovery was much weaker, and the current labor cost level remained significantly below its 1997 level.

2.54 Figure 2.14 presents the results of comparisons of ULC dynamics in Belarus and Russia. In Russia, ULC have fallen sharply since 1997. Despite a considerable recent wage growth, ULC in 2003 were still roughly 25 percent below the 1997 level. The post-crisis growth in ULC in Belarus was much more rapid and much stronger than in Russia. As a result, when compared to 1997, the relative labor costs in 2003 in Belarusian industry were at least 20 percent higher than in Russia. This indicates a considerable erosion of the major competitive advantage of the Belarusian economy. The deterioration of the Belarusian position relative to Russian competitors was most significant in the food processing and construction materials sub-sectors.⁵²

⁵² The erosion in industrial competitiveness in Belarus has been even higher relative to the CEE economies, where in most cases overall growth in unit labor costs in 1998-2003, according to the World Bank database, did not exceed 15-30 percent. Moreover, for such neighboring countries as Latvia and Lithuania, this growth was even smaller --

Figure 2.14: Developments in Unit Labor Costs in Industry, Belarus and Russia, 1995-2003



Source: World Bank staff estimates; Ahrend (2004b).

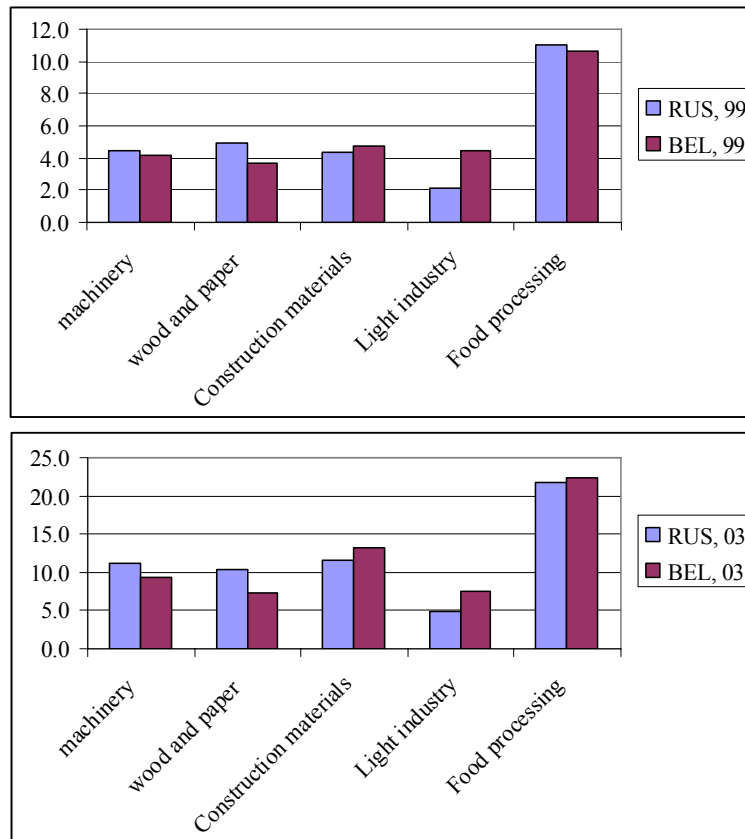
2.55 In fact, the actual deterioration of the competitive position in Belarus relative to Russia has been even more significant than the above data may suggest if one takes into account the difference in the dynamics of payroll taxation in the two countries. Russia introduced a considerable reduction in the average rate of payroll taxation in 2001, which led to a decline in the effective rate by about 8 p.p., from more than 40 percent on average in 1997-2000 to 32.7 percent in 2002 (World Bank, 2005c). In Belarus, in 1999-2003, the effective rate of payroll taxation in industry remained quite stable at an average level of about 36 percent of reported wages. This brings the overall decline in Russian ULC relative to the Belarusian ULC to almost 30 percent. Moreover, in the short term the factor of payroll taxation will become even more important as a driver of the relative labor cost differential in the two countries. This is because in early 2005 Russia introduced a new drastic reduction in the average statutory payroll taxation rate of 8 p.p.

2.56 Figure 2.15 presents the results of a direct comparison of labor productivity in Belarus and Russia for five industrial sub-sectors that are most exposed to competition in the Russian market. The comparison shows that Belarus has higher productivity in light industry and in construction materials, while Russia has higher productivity in machinery and in the wood and paper sub-sectors; the productivity level in food processing is close. Except for light industry, these cross-country differences increased somewhat between 1999 and 2003. At the same time both countries show a strong and broad increase in US\$-based labor productivity, helped by a significant real appreciation of national currencies. What follows from this comparison is that when one accounts for labor productivity on its own, there is no evidence that Belarus is losing its competitiveness in Russia. This means that the above indicated trends in ULC are driven

less than 10 percent. (It is worth noting, however, that the latter estimates are not fully comparable with those for Belarus because of the difference in methodology.)

primarily by differences in real wage growth. This points once again to the importance of wage policy in Belarus as a factor that in the last four to five years has been seriously undermining the country's international competitiveness.

Figure 2.15: Labor Productivity in Selected Industrial Sub-sectors in Belarus and Russia, 1999 and 2003 (in current US\$)



Source: World Bank staff estimates based on data from MSA and Rosstat.

2.57 The above analysis suggests that the continuation of the current policy of rapid wage growth will in the future hold more risks relative to the period 2000-04 because a significant portion of the earlier cost advantage has been eroded.

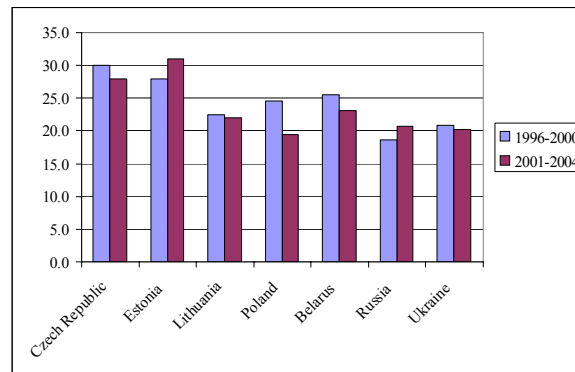
G. INVESTMENT AND FINANCIAL PERFORMANCE

2.58 The analysis of investment performance is an important factor in assessing the sustainability of recent growth. The level of fixed capital investments (without stock accumulation) in Belarus, which has recently been in the range of 22-23 percent of GDP, does not appear low by regional standards (Figure 2.16). However, the country's investment structure is quite unbalanced with a relatively low share (about 30 percent) of total investments going into industry. At the same time, investments are heavily concentrated in the housing and utility sector (30-35 percent of the total) and in transportation (10-15 percent). The latter are important investment areas,⁵³ but investments in these sectors cannot compensate for under-investment in industry, which at the moment is a critical sector for sustaining Belarusian export

⁵³ At the same time, the existing level of government subsidies to housing construction is excessive and cannot be justified from either a fiscal policy or a social policy perspective.

competitiveness. Industry's investment needs in order to renew and modernize its capital stock are quite high -- in 2004 the degree of the depreciation of fixed capital in industry was estimated at 62.2 percent.

Figure 2.16: Fixed Capital Investments in Selected Transition Economies, Average Annual Levels, as % of GDP

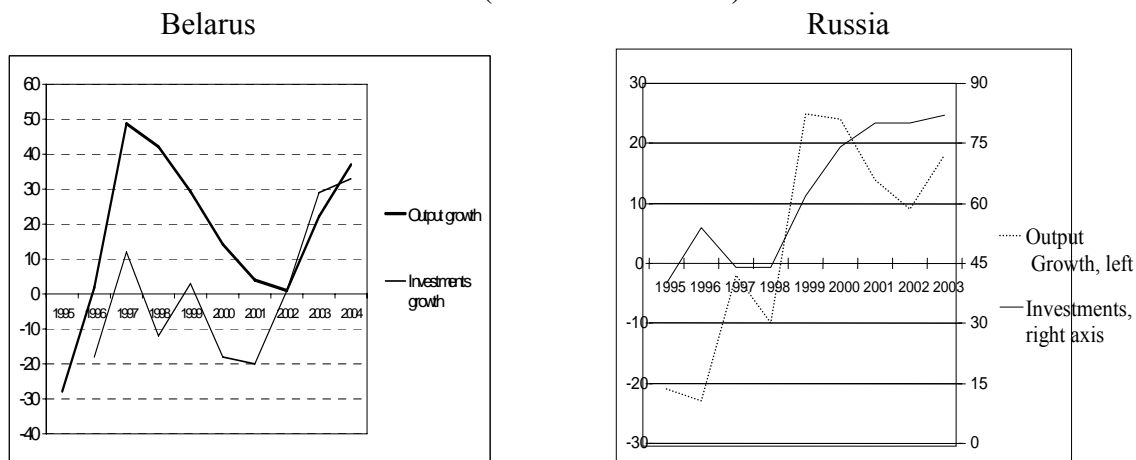


Sources: World Bank; MSA.

2.59 At the same time, the macroeconomic environment and incentive framework in Belarus, despite high rates of economic growth, has not been supportive of enterprise-level investments. High inflation and excessive discretionary government intervention (including through a highly segmented policy of state support) have created an environment of unpredictability that rendered the development of any investment strategy too risky.

2.60 Thus, it is not surprising that the industrial survey results show a considerable gap between the growth rates in output and investments (Figure 2.17). With the exception of 1997, prior to 2002 the balance of answers on investments remained negative. Such a gap appears to be rather unusual. For comparison, Figure 2.17 also presents similar results for Russia, where the industrial growth that started in 1999 was from the very beginning accompanied by a growth in enterprises' investments. A significant intensification of the investment process in Belarus was observed only in 2003, when the traditional cost advantages of exporters began to evaporate and the competitive pressures became more serious. This ultimately created incentives for modernization and investment.

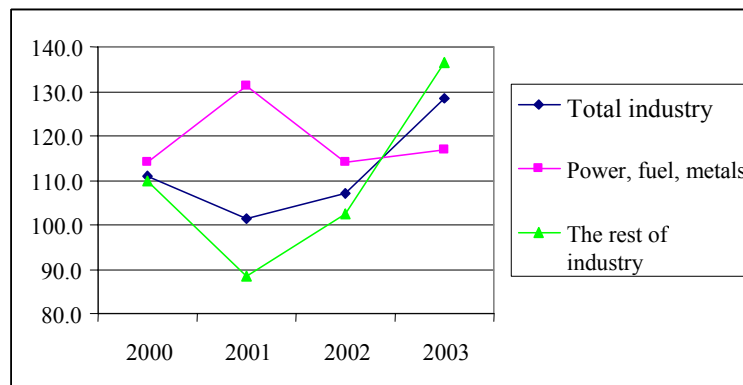
Figure 2.17: Changes in Output and Investments in Industry in Belarus and Russia (Balance of Answers)



Source: Gotovsky and Zheltkov (2004).

2.61 However, these survey results on the low enterprise investment activity before 2003 are inconsistent with the official investment reports, which show a significant increase in industrial investments in both 2000 and 2002 (Figure 2.18). How can these two sets of data be reconciled? In our view, the answer relates to a high concentration of investments in industry: 30 percent of the total investments in the sector in 2000 were made in the power, fuel, and metallurgy sub-sectors, which together account for less than 3 percent of the total number of industrial firms in Belarus. In 2002 the investment share of these sectors increased to 40 percent. The majority of the investment growth prior to 2003 occurred in these sub-sectors and did not affect the main part of industry.

Figure 2.18: Investment Growth in Industry, 2000-03 (% of previous year)



Source: World Bank staff estimates based on MSA data.

2.62 It is worth noting that the bulk of industrial firms (about 97 percent of their total number, which employ about 93 percent of industrial labor) has been responsible for a modest amount of investments – on average less than 4 percent of GDP in 1999-2003. This share in fact declined between 2000 and 2002. This observation appears to be consistent with the prevailing negative perceptions of managers about trends in their investment activity. A typical Belarusian enterprise, outside of the energy and metallurgy sectors, was likely to be affected by considerable under-investments and did not experience any noticeable improvements in investment levels before 2003. It is worth mentioning that the investment level in industry has been low despite the massive state credit and fiscal support aimed at enhancing investment performance.

2.63 Table 2.11 provides additional evidence of the intensification and broadening of investment activity in industry in 2003, especially in food, light industry, chemicals and timber. It also suggests that in all of the CIS-oriented export sectors except timber the 2003 relative level of investments in Belarusian industry exceeded that in Russia.

2.64 However, the recent increase in industrial investment cannot be interpreted as indicating that the investment level reached levels sufficient to retain a competitive edge, including in the Russian market. Russia may not be a good benchmark, as it is considered an economy with a depressed level of investments (Ahrend 2004b). The CEE countries that were the main beneficiaries of FDI inflows, such as Estonia and the Czech and Slovak Republics, demonstrate investment levels that are at least 20 percent above those in Belarus. Because of the differences in the investment structures, this translates into an even higher gap in the level of industrial investments.

2.65 As mentioned in Chapter 1, the depressed level of FDI represents a serious disadvantage for Belarus. It not only reduces the overall level of investments in the country at each particular moment of time, but, more important, deprives the economy of major dynamic benefits. FDI usually pushes up productivity in the host country by providing access to modern technology, management, and training. This access is particularly important for transition economies, where additional efforts are needed to bring the quality of production up to international standards. The recent paper by Sabirianova, Svejnar and Terrel (2005) has shown that a large portion of all productivity gains in Czech industry was coming from foreign-owned firms. The Czech Republic had opened up markets extensively to FDI early in transition.

Table 2.11: Investment/Output Ratio in Industry, 1999-2003 (%)

	1999	2000	2001	2002	2003	Memo: Russia, 2003
Industry	4.7	5.2	5.2	5.7	7.1	8.9
Power industry	7	7.4	7.9	9.7	11.9	10.5
Fuel industry	6.9	4.4	6.2	8.9	9.9	25.8
Ferrous metallurgy	9.1	11.4	15.5	9.3	4.9	4.9
Non-ferrous metallurgy	9.4	4.5	5	3.4	4.5	9.9
Chemical and petrochemical industry	6.9	7.7	5.7	6.1	8.4	6.9
Machinery and metalworking	4.1	6.5	4.4	4.6	4.4	4.0
Timber, woodworking, pulp and paper	3.9	3.5	4.6	4.1	5.9	7.9
Construction materials	4.2	6.4	6.3	8.2	8.7	5.1
Light Industry	1.7	2.4	2.1	1.6	3	2.8
Food industry	3.3	2.9	3.6	4.3	7.3	6.4

Sources: World Bank staff calculations based on MSA data, Rosstat.

2.66 The weak investment performance in industry, in our view, reflects a core weakness of the Belarusian economic model. It is partially driven by the weak financial situation in the sector. At a more fundamental level, there seems to be a major incentive bottleneck for the strengthening of real sector investments in an environment of prevailing state ownership in large industry (which is known worldwide for its propensity to under-invest) and high costs of entry for the new private sector. The prevailing incentive framework for management is excessively focused on attaining short-term growth targets and addressing the social priorities of the government. This leaves too little financial room for investments and longer-term restructuring efforts.

2.67 Investment financing in Belarusian industry is clearly weak. Because profit margins are low, own enterprise funding is limited. At the same time, commercial credit is generally less accessible and more expensive than in neighboring countries (see Chapter 1). Moreover, government interference in credit allocation puts those firms that are unable to participate for any reason in the directed credit programs in an especially difficult situation. Most of the investment financing (95 percent on average during 2001-04) has come from domestic sources. Given the realities of the macroeconomic framework, it would be difficult to raise the current investment level in Belarus without an expansion in foreign financing. Attracting FDI is crucial not only for the usual technological and market diversification reasons, but also for the current financing needs.

2.68 The analysis of cross-sectoral (within the industry) variations in performance suggests that government interventions create significant barriers to the efficient allocation of finances and investments. In particular, the analysis reveals the following correlations between individual performance indicators at the level of the industrial sub-sectors:

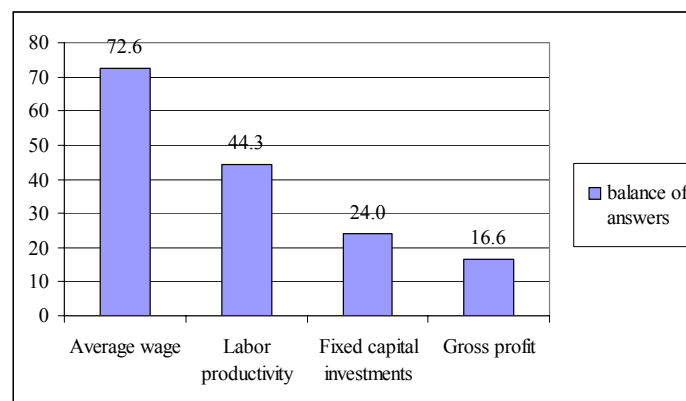
- There is a positive correlation between real investment growth and output growth
- However, the correlation between investment growth and profitability is negative, indicating that less profitable sectors were able to finance more investments

- Moreover, the correlation between credit and output growth was negative as well, suggesting that credit allocation was biased toward the less financially successful sectors.

2.69 Combining the above findings with the analysis in the previous sections suggest that capital markets in Belarus remain much more over-regulated and distorted than the labor market.

2.70 Figure 2.19 illustrates an important structural imbalance in the Belarusian growth model, which reflects a reversed and generally unsustainable relationship among main performance indicators at the micro level. As follows from the 2004 industrial enterprise survey, recent growth in investments has been more widespread than growth in profits, confirming the gap between financial and investment performance. At the same time, productivity growth has by far outpaced growth in investments, but in turn it has been less common than growth in wages. It is clear that the economy cannot sustain this growth structure for an extended period, because in the long term wage growth should be backed by adequate productivity improvements, which have to be based on sufficient growth in investments and profits (to finance these investments).

Figure 2.19: Managers' Answers about Recent Changes in the Performance of Their Enterprises
(balance between those who reported an increase and a decline)



Source: IPM (2004).

2.71 Major adjustments in the growth structure at the micro level will be necessary to change the current growth proportions. An important pre-condition for such a change is reduced government interference in credit/capital allocation.

2.72 Low profitability represents an important source of vulnerability for Belarusian industry. Low profitability is a basic indicator of a low rate of return on investments, which, other factors being equal, drives down the investment attractiveness of the country. Table 2.12 presents two measures of profitability in the sector: the measure used in the standard MSA reports (based on the profit/costs ratio) and another measure that corresponds to an established international tradition (based on the profit/sales ratio). The table points to several conclusions, such as the following:

- Profitability levels are in general low. Moreover, average profitability declined considerably in 1999-2002 despite a robust growth during the same period. This is not entirely unexpected given that the prevailing incentive framework for large enterprises makes them more interested in attaining output targets and less concerned about profit maximizing
- If measured according to the international methodology, profitability is even lower than what is presented in the official reports. However, this alternative measure shows a less volatile dynamics of the profit margin
- There are two different groups of industrial sub-sectors with fairly different levels of profitability. The first group is quite healthy financially and has profit margins above 15 percent. These are capital intensive, more resource-dependent sectors with primary markets outside the CIS. The

second group includes sub-sectors that experience financial difficulties and have their margins below 10 percent. These are labor-intensive sectors, which face major competitive pressures in both domestic and CIS markets

- Profitability in industry has recently increased somewhat. While this increase is broad-based to date, it has been rather limited in the second group of sub-sectors.

Table 2.12: Profitability and Gross Profit Margin, 1999-2004 (%)

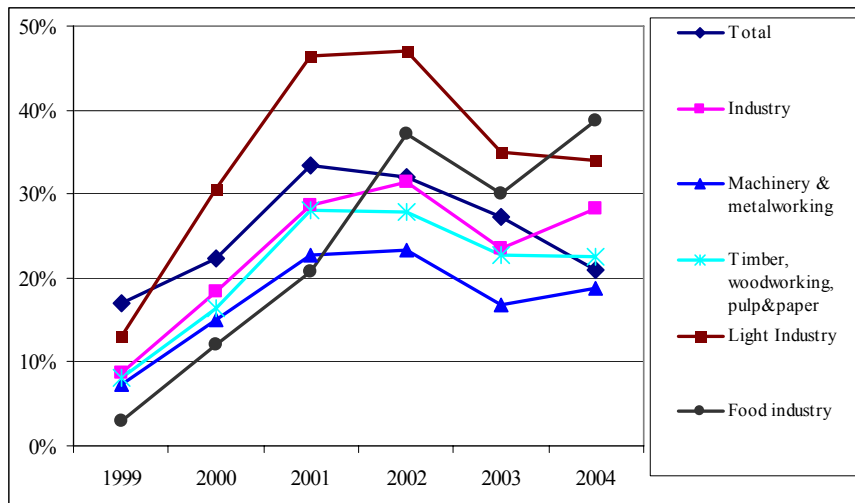
	Profitability a/							Gross Profit Margin b/						
	1999	2000	2001	2002	2003	2004	Change 1999-2004	1999	2000	2001	2002	2003	2004	Change 1999-2004
Industry	17.1	15.8	10.9	10.5	12	15.3	-1.8	13	10.7	7.8	7.6	8.6	10.9	-2.1
Power industry	3.9	2.2	6	3	8.8	12.6	8.7	6.8	4.3	14.8	7.7	6.8	9.5	2.7
Fuel industry	46.3	64	33.8	34.5	29.7	30.8	-15.5	26.7	32.8	21.3	21.8	19.4	20.1	-6.6
Ferrous metallurgy	13.5	22.5	5.6	17.8	24	36.1	22.6	11.1	16.2	4.6	13.3	16.8	23.5	12.4
Non-ferrous metallurgy	41.5	24	17.3	18.2	28.9	24.1	-17.4	26.2	15.7	11.8	12.9	18	16.4	-9.9
Chemical and petrochemical industry	24.9	22.8	11.8	11	14.8	24.2	-0.7	18.7	15.8	8.9	8.5	11.1	17.2	-1.5
Machinery and metalworking	14.4	12.2	11.5	9.6	9.5	11.4	-3	9.6	8.4	7.9	6.8	6.8	8.3	-1.3
Timber, woodworking, pulp and paper	17.7	11.4	8.7	10.5	11	11.3	-6.4	13.3	8.1	6.4	7.6	7.9	8.3	-5
Construction materials	8.1	5.2	4.6	7.3	9.7	10.8	2.7	18.7	15.8	8.9	8.5	6.9	7.8	-10.9
Light Industry	22.6	14.3	6.1	4.6	4.3	5.4	-17.2	16.3	10	4.6	3.5	3.4	4.2	-12.1
Food industry	13.4	9.2	8.1	5.5	6	6.3	-7.1	9.6	6.2	5.5	3.8	4.2	4.5	-5.1
Other	10.7	12.2	6.3	5.6	6.5	7.8	-2.9	8.8	8.7	4.8	4.2	5	5.9	-2.9

^{a/} Gross profit to costs ratio, ^{b/} Gross profit to sales ratio.

Source: Volchok (2005).

2.73 Low average profitability reflects the fact that a significant portion of industry is loss-making. Figure 2.20 presents a trend in the share of loss-making enterprises in several sub-sectors. For the industry as a whole, the share was highest in 2001 at a level of 31.4 percent. Some noticeable improvements have occurred since then, yet the share of loss-makers in 2003 (23.5 percent) was significantly higher than in 1999 (8.8 percent). Moreover, these statistics underestimate the incidence of losses, because they define a loss-maker on the basis of the value of profit before tax, while the common international practice for this purpose is to use the “profit after taxes” criterion. The latter naturally would show a higher share of loss-makers. The authorities switched to the international definition in 2004.

Figure 2.20: Share of Loss-making Enterprises, 1999-2004 (%)

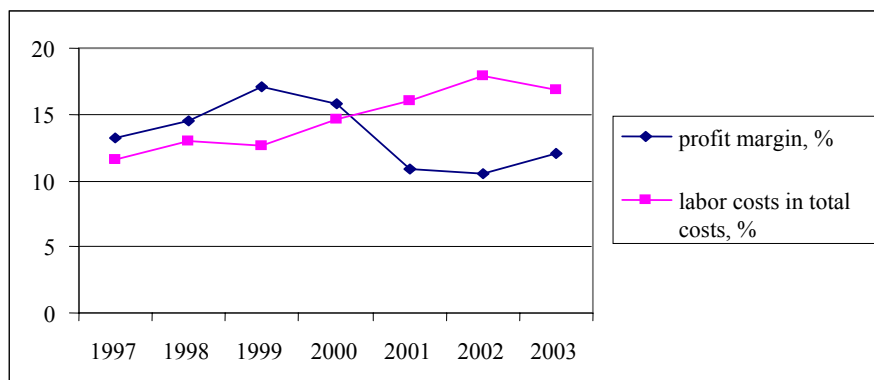


Source: MSA.

2.74 In addition to growing external competition, another driver of declining profitability relates to excessive wage growth. The share of total labor costs (wages and payroll taxes) in total production costs increased by more than 50 percent in 1997-2002. This is another reflection of the fact that wage growth by far outpaced productivity improvements. Figure 2.21 shows a clear negative correlation between changes in profitability and labor costs.

2.75 The analysis of other financial indicators confirms the above trends. The dynamics in liquidity and asset turnover ratios, as well as trends in enterprise areas, support the notion that the financial performance of industry improved in 2003-04. But this improvement was insufficiently significant to bring about a real change in the current risk profile of the sector.

Figure 2.21: Profitability and Labor Costs in Industry, 1997-2003



Source: World Bank staff estimates based on MSA data.

2.76 Overall, industry remains in a much more vulnerable financial situation than in 1999-2000. Moreover, the financial situation in two sub-sectors (light industry and food processing) is of special concern. These are the sub-sectors in which about a quarter of total industrial labor is employed and are the sub-sectors most exposed to competition, including competition from domestic new entry. As seen

from the aggregated data, these industries are likely to accumulate a significant portion of non-competitive enterprises, which may need much more radical restructuring (including the use of bankruptcy mechanisms) than has been undertaken to date. At the same time, as indicated above, food processing is affected by heavy tax pressure that is inconsistent with the sector's financial weakness.

H. COMPARATIVE ADVANTAGES OF BELARUSIAN INDUSTRY: THE RESULTS OF THE COMPETITIVENESS SURVEY

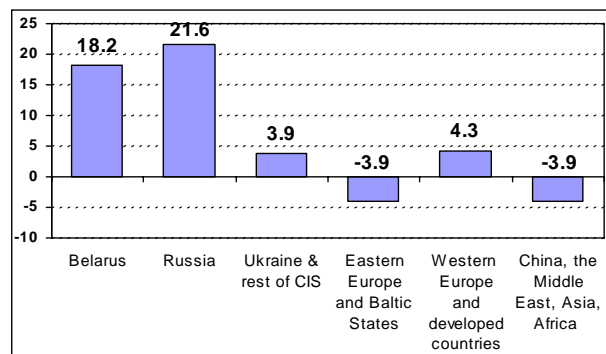
2.77 The survey of industrial competitiveness was undertaken by the Research Institute of the Belarusian Ministry of Economy (RIME) in the second half of 2004 as part of the CEM preparation. The main objective of the survey was to study the perceptions of enterprise managers regarding: (i) the competitive advantages of their products in different markets; (ii) the factors that drive the competitiveness of Belarusian enterprises; and (iii) cross-sectoral differences in competitiveness.

2.78 In all, 231 enterprises from eight main industrial sub-sectors located in all regions of Belarus participated in the mail-in survey. Out of the country's top 100 enterprises, 25 were included in the sample. A more detailed description of the survey methodology and results are presented in Gotovsky et al. (2005).

2.79 The survey results confirm the fact that Russia has been a dominating export market in Belarus: for about 50 percent of firms in the sample, a significant portion of their total sales goes to Russia. Russia is by far the most important external market. The second most important market is Western Europe, where about 9 percent of respondents direct a significant part of their sales. As discussed in Chapter 4, while the overall volumes of exports to Russia and to non-CIS countries are comparable, the number of exporters to Russia is much more numerous than the exporters to non-CIS markets. Non-CIS export is heavily concentrated in a limited number of large companies, while a relatively large portion of the export to Russia has been generated by small and medium size firms that remain incapable of penetrating other export markets.

2.80 Belarusian firms have recently been fairly successful in the Russian market. In 2003-04 Russia was the fastest growing market for Belarusian industry (for all sectors except light industry and chemicals). Figure 2.22 presents comparative estimates of sale dynamics in different markets. These results may underestimate the scale of the recent export expansion in Russia, because smaller enterprises were under-represented in the sample, while, according to the survey a major growth in exports to Russia took place in those sub-sectors with smaller average firms (such as the construction materials and food industries). Combining these results with our earlier analysis of unit labor costs once again points to the vulnerability of recent high export growth rates: export growth rates to Russia were highest in the sub-sectors that exhibited the largest loss in competitiveness relative to Russian producers.

**Figure 2.22: Changes in Sales in Different Markets
(balance of answers as % of total number of respondents)**



Source: Gotovsky, Khamchukov and Kovalevskaya (2005).

2.81 Overall, most respondents believe that their products are competitive domestically and to some extent in Russia. However, with respect to other markets, the balance of responses is either close to zero (which points to an absence of competitive advantage) or negative. Table 2.13 summarizes managers' perceptions regarding the competitive advantages of their products. The most interesting findings are the following:

- The respondents believe that their main competitive advantages relate to quality and low costs. However, their quality is lower relative to the products of their European competitors, while the costs are higher relative to producers from the developing world. Only about one-third of respondents have obtained the certification of the ISO 9000 series
- Belarusian firms consider their weak marketing capacity to be a strong comparative disadvantage in all markets
- The respondents also believe that their firms have insufficient access to state procurement. It is worth noting that they do not feel that intergovernmental agreements with Russia provide them with any competitive advantage in Russia's market.

2.82 Among the main determinants of their competitiveness, the respondents emphasized the role of cost factors, primarily those associated with low wages and low profit margins in Belarusian industry. The availability of high-skilled labor in Belarus is seen as significant only in relation to the markets of the CIS and developing countries. Technological advantages are important only in the CIS markets outside of Russia. In addition, as could be expected, the respondents pointed to three factors that seriously undermine their competitiveness in all markets, namely: (i) the higher costs of inputs and energy; (ii) the high cost of borrowing; and (iii) the higher tax burden.

Table 2.13: Competitive Advantages in Industry by Markets
(balance of answers as % of total number of respondents who marked the specific market)

	Belarus	Russia	Ukraine and other CIS	Eastern Europe and Baltic States	Western Europe and developed countries	China, Middle East, Asia, Africa
1. Low price level in comparison with competitors	34.1	7.1	17.5	12.2	17.9	-38.1
2. More high quality, nicely designed, product ergonomics	38.0	39.4	33.0	-5.6	-15.4	11.9
3. Wider variety of products or/ or else a constantly renewable assortment	14.9	7.1	10.3	-18.9	-21.8	-38.1
4. Relatively low expenditures during product operation	18.8	22.4	26.8	8.9	-5.1	9.5
5. More developed sales and service network	-11.1	-32.4	-24.7	-42.2	-48.7	-40.5
6. More active advertising, participation in exhibitions, fairs, web site	1.0	-11.8	-11.3	-34.4	-38.5	-40.5
7. Use of more convenient payments scheme for consumers	26.0	2.9	-6.2	-21.1	-17.9	-28.6
8. Participation in supply programs in the context of inter-states agreements	-26.9	-42.4	-43.3	-51.1	-50.0	-47.6
9. Other competitive advantages of the product	-3.8	-4.7	1.0	-6.7	-5.1	-4.8

Source: Gotovsky, Khamchukov and Kovalevskaya (2005).

2.83 The primary existing competitive advantages of Belarusian industry in Russia and (to a lesser extent) elsewhere in the CIS relate to cost factors as well as higher labor and management skills. However, it should be noted that the existing cost/price advantage appears to erode rather quickly. The comparison of the responses from similar 2004 and 2002 surveys suggests a drastic decline in the perceived importance of this advantage relative to competitors from the CIS and Russia (Table 2.14). At the same time, the role of quality-based advantages has increased somewhat. For the non-CIS markets, the relative

importance of competitive advantages has been evolving in the opposite direction: the role of quality-based advantages declining, while cost-based factors are becoming more prominent.

Table 2.14: Dynamics of Competitive Advantage in Industry, 2002 and 2004
(as % of total number of respondents who marked the specific market)

	Quality	Price
Belarus		
2002	55.2	44.2
2004	57.7	55.8
Russia and the CIS		
2002	48.0	70.0
2004 ¹	56.4	40.1
Outside of the CIS		
2002	62.9	37.1
2004 ²	31.4	41.9

¹ Answers are consolidated for two markets: Russia and Ukraine/rest of CIS.

² Answers are consolidated for four markets: Eastern Europe, Western Europe/other developed economies, and developing countries.

Source: Gotovsky, Khamchukov and Kovalevskaya (2005).

2.84 The survey returns do not provide evidence that Belarusian exporters have been losing their market shares in Russia (except for light industry – textiles, garments, footwear). However, the survey data are somewhat worrisome concerning the current level of competitiveness in Russia, especially in the food processing and machinery sub-sectors – two sectors with high employment. This may be interpreted as a problem for further export expansion in Russia. Export growth has been strong recently, but sustaining this rate of export expansion could be difficult for exporters within the prevailing set of business conditions.

2.85 Among various factors that hinder improvements in their competitiveness, respondents emphasized the high costs of market penetration (for all markets except the domestic market) and difficulties in finding local partners/intermediaries. This again highlights the weak existing marketing capabilities in the sector (Table 2.15). Relative to the EU, the Russian market remains much more accessible for Belarusian firms because of the differences in both standard requirements and the severity of import restrictions. However, import restrictions in Ukraine and the rest of the CIS (non-Russian) appear to be as binding as in the new EU member countries.

2.86 The analysis at the sub-sectoral level points to two groups of industrial sub-sectors that at the moment have a stronger competitive position and thus have more stable medium-term prospects:

- Sub-sectors that are involved in the processing of primary commodities (oil and wood processing), which remain cost-competitive with a fully acceptable quality product
- Sub-sectors that are capable of sustaining quality-based competition in their main markets (non-ferrous metallurgy, leading firms in machinery and construction materials), which is partially based on recent improvements in their marketing capabilities.

Table 2.15: Factors that Hinder Growth in Competitiveness
(as % of total number of respondents who marked the specific factor-market pair)

	Belarus	Russia	Ukraine and other CIS	Eastern Europe and Baltic States	Western Europe and developed countries	China, Middle East, Asia, Africa
1. Trade restrictions (tariffs, quotas, etc.)	–	10.8	17.7	19.0	22.1	10.4
2. Strict technical requirements (standards, sanitary requirements, etc.)	5.6	4.8	4.8	17.3	24.7	7.4
3. Difficulties in locating local intermediaries and other partners	18.2	27.3	16.9	21.2	21.2	15.6
4. Technical inability to make products that are competitive in this market	13.0	14.3	5.6	18.2	26.0	9.5
5. Unacceptable payment terms	13.4	16.0	9.5	7.4	6.1	4.3
6. High competition, high costs of market entry	11.3	29.9	17.7	29.4	34.6	21.6
7. Other	3.9	3	2.6	1.3	1.3	2.6

Source: Gotovsky, Khamchukov and Kovalevskaya (2005).

2.87 The position of other sectors (food processing, textiles and garments, chemicals) appears to be rather weak. Their dominating strategy continues to rely on low costs, while they have a very strong need to strengthen their management and marketing capacities. The recent significant growth in food processing could be explained by the rapid growth in household incomes in both Belarus and Russia, which led to a substantial expansion of its main markets. However, the sub-sector may find it difficult to preserve its market share in the medium term.

2.88 The survey respondents estimated that on average about half of their industrial capacity is fully competitive. This share varies from 40 percent in food processing to 87 percent in metallurgy. Given the current level of capacity utilization (about two-thirds), this suggests that Belarusian industry has considerable reserves for further growth even without major investments in capacity expansion. Based on the survey data, such additional growth in industrial output could be estimated at 25 percent relative to its level as of the middle of 2004. But if the economy is growing at a rate of 8 percent, this capacity reserve would be fully exhausted in about three years.

I. MAIN RISKS OF THE PREVAILING GROWTH STRATEGY

2.89 The following matrix summarizes the analysis in this chapter and Chapter 3 and 4 by identifying the main vulnerabilities of the existing industrial growth strategy in Belarus.

Growth factors	Risks	Indicators
I. Domestic factors		
1. Preservation of inherited industrial base and infrastructure	<ul style="list-style-type: none"> - Domestic savings are insufficient for modernization of the existing industrial base - Profits are low, which limits opportunities for investment and modernization - Poor investment image of the country limits new entry, including foreign, which deprives the economy of many benefits related to innovation and flexibility 	<ul style="list-style-type: none"> - Depreciation of fixed capital is high, including in export-oriented sectors - Investment-savings gap is considerable and widening - Low level of FDI - Declining share of capital and high-skilled labor intensive goods in exports - Low profitability
2. Advancing macroeconomic stabilization	<ul style="list-style-type: none"> - Low international reserves in the context of no access to international capital markets could cause balance of payments problems - High concentration of both taxes and export proceeds – the economy is too dependent on the operations of a limited number of exporters, which in turn makes their markets heavily concentrated - Limited new entry makes the economy inflexible. - The viability of the banking sector is undermined by the high incidence of direct lending - The pension system is incapable of supporting the current level of benefits in the future 	<ul style="list-style-type: none"> - Low forex reserves - High concentration of exports and taxes - Projected deficit of the Social Protection Fund
3. Fiscal, wage and employment policies aimed at growth in domestic demand	<ul style="list-style-type: none"> - Excessive labor cost growth undermines competitiveness - An income policy aimed at artificially low income differentiation may facilitate the emigration of entrepreneurial and educated youth 	<ul style="list-style-type: none"> - ULC growth is high - Share of labor costs in total production costs is growing - The trends in the pension system are unsustainable - Strong interest in emigration among youth; brain drain
4. Subsidies to leading domestic exporters	<ul style="list-style-type: none"> - The current level of subsidization is just too high. It creates too many risks for both fiscal and banking systems - Too many recipients of state support, which undermines incentives for restructuring and innovation - Belarus will have to reduce its level of subsidization as part of its own WTO accession process. The latter could not be postponed for too long because of associated costs related to potential economic isolation - Russia may be reluctant to support the existing asymmetry in trade regimes 	<ul style="list-style-type: none"> - High level of subsidies as percent of GDP - High share of large industrial enterprises that receive state support - High tax burden - Increasing pressure on the banking system
5. Restriction on imports, especially of consumer goods	<ul style="list-style-type: none"> - Intensive use of non-tariff instruments to discourage consumer import, some of which violate the Customs Union agreement - The different tax treatment for domestic and imported goods is not compatible with WTO rules - Non-reforming the trade regime poses a risk of deepening the country's international isolation 	<ul style="list-style-type: none"> - Share of consumer imports in both private consumption and total imports is low

II. Russia-related factors

- | | | |
|---|---|--|
| 6. Cost and other market advantages in the Russian market | <ul style="list-style-type: none">- Costs are driven up by the wage policy, higher taxes than in Russia, more expensive credit, and the high costs of doing business- The Russian economy is too oil-dependent and thus is fundamentally risky as a primary export market- The economy shows difficulty in accelerating export diversification – it would be a problem to re-direct exports to other markets if necessary | <ul style="list-style-type: none">- Unit labor costs in Belarusian industry have been growing faster than in Russia- Increased competitive pressures in Russian market, including from Russian producers- The values of trade diversification indices are low- Indicators of costs of doing business show that Belarusian business faces considerable disadvantages |
| 7. Preferential access to the Russian market | <ul style="list-style-type: none">- Russia's WTO accession would make its trade regime and policies much more transparent and level- Failure to finalize the currency union with Russia and other integration initiatives | <ul style="list-style-type: none">- Belarusian share of the Russian market for its key export products is declining- Ukraine is catching up in its machinery exports to Russia |
| 8. Russian energy subsidies and other transfers | <ul style="list-style-type: none">- Excessive energy dependency on Russia- Russian domestic and export prices for gas and power are expected to grow- Discussion of gas prices creates political tensions that might affect further economic integration | <ul style="list-style-type: none">- Growth in import prices of gas- Reduction in Russian energy subsidies |

III. Other external factors

- | | | |
|---|--|--|
| 9. Benefits from the favorable external environment | <ul style="list-style-type: none">- Oil and other commodity prices will not remain high forever- The external market position of Belarus is rather fragile – it depends too much on a limited number of large exporters, which in turn depend too much on a single market- If the Belarusian economy fails to restructure, it will lose its market share in Russia and elsewhere | <ul style="list-style-type: none">- Terms-of-Trade index has been favorable for Belarus and especially for Russia- Share of largest exporters and main export goods is too high- Export diversification is too low |
|---|--|--|
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CHAPTER 3

ENTERPRISE RESTRUCTURING IN INDUSTRY: DO THEY DO IT DIFFERENTLY IN BELARUS⁵⁴

3.1 This chapter summarizes the findings of a new survey of Belarusian enterprises, focused on industrial performance and restructuring (see Box 3.1 on this survey's methodology). It builds on work undertaken by the Institute of Privatization and Management (IPM) between 2000 and 2004, including the earlier surveys. However, this analysis contains much more detailed information about performance and restructuring, and for the first time for Belarus covers simultaneously new private firms (de novo firms, for DNs), as well as state-owned firms (SOEs) and privatized former state-owned firms (FSOEs).

Box 3.1: Methodology of the Survey

The analysis is based on the enterprise survey conducted in 2004, but it builds on two previous enterprise surveys by the IPM undertaken in 2000 and 2003 and both covering 222 firms, 119 of them SOEs and 103 FSOEs. The current survey is somewhat larger. It covers 402 industrial enterprises out of an estimated total of about 2,300 industrial enterprises in Belarus. In terms of ownership structure, 23.1 percent of the sample were SOEs, 48 percent FSOEs and 28.9 percent DNs. SOEs are enterprises whose legal status is defined as a "unitary state-owned enterprise," while FSOEs are enterprises whose legal status is other than that of a unitary state-owned enterprise and which indicated that they had been established in the process of privatization. This category includes enterprises bought from the government and joint stock companies in which the government still owns a stake, including a majority stake. In our analysis we also attempt to distinguish between state and privately controlled enterprises in this FSOE category. All other enterprises were included in the new private enterprise category.

The sample is not simply random because the firm size distribution in the Belarusian industrial sector is highly skewed -- 42.6 percent of firms employ fewer than 100 people, produce 2.7 percent of industrial output and provide only 1.2 percent of industrial employment. Hence, the use of a random sample would lead to excessive concentration on small firms and would risk missing the large SOEs and FSOEs in metallurgy, machine building, fuel, chemicals and petrochemicals. Thus, the methodology employed was structured random sampling to ensure adequate representation of the largest firms of particular interest. This leads to some sectoral biases relative to the population of firms. Some 17 percent of firms in the sample are in the energy, fuel and chemical/petrochemical industry as against only 6.5 percent in the population. However, these three sectors produce 42 percent of industrial output. Construction materials are also overrepresented -- 12 percent in the sample compared with 5.8 percent in the population. This overrepresentation necessarily leads to under-representation of the remaining industries. Thus, 26 percent of firms in the sample are in machinery and metalworking, as against 29 percent of the population; 11 percent are in forestry, wood, paper and pulp as against 15.5 percent; 18 percent are in light industry, as against 21.2 percent; and 16 percent are in food, as against 22.1 percent.

⁵⁴ The material in this chapter has benefited from the background report of the team led by Igor Pelipas and Sergei Pukovich from the Institute of Privatization and Management (IPM). The team also administered the enterprise survey that constitutes the basis for the analysis in the chapter.

3.2 A primary objective of this chapter is to analyze changes in the performance of Belarusian firms in terms of conventional quantitative indicators such as profitability, sales growth, and international competitiveness, as reflected, for example, in factor productivity and export growth. In addition, given the issues of transition, the chapter explores the refocusing of exports from the former Soviet markets to Western markets and analyzes the extent of firms' restructuring to fit the new incentives and constraints of the market economy. In this analysis, we have four specific objectives:

- To evaluate the extent of improved performance and restructuring, particularly with reference to other transition economies at comparable stages of development
- To understand the relationship between the changes in quantifiable performance indicators and the variety of restructuring activities
- To compare enterprise performance in different ownership groups, including, as separate categories, privatized enterprises and newly created firms
- To explain the findings in terms of the economic and business environment that could provide some impetus to policy reform.

3.3 As discussed in previous chapters, in Belarus the government reacted to the economic declines of the early transition by introducing policies aimed at strengthening its role in the economy. From 1996, the government has reversed some of the earlier reforms and also slowed down further privatization, liberalization and institutional reforms. Economic policy has been aimed at increasing growth through managing aggregate demand, concentrating public resources in specific sectors and firms, and preserving of significant government control over enterprises' day-to-day operations. The issue is whether this policy environment has been conducive to fundamental improvements in enterprise performance.

3.4 In terms of privatization, early privatization occurred in some of the most efficient enterprises and was motivated by management's desire to escape government interference. By the end of 1995 this bottom-up privatization had run its course and from that point the process was managed on a case-by-case basis from the top. Thus, in our survey's sample, the state share in joint stock companies (JSCs) privatized before 1996 averages 29 percent versus 83 percent in those established from 1996 onwards. 55 Managers in state-owned firms gradually gave up their aspirations to privatize their firms and learned to work in the new environment, and thus there were almost no privatizations of sound enterprises after 2000. However, from the late 1990s there was a trend to privatize firms that were performing badly in a commercial or financial sense.

3.5 The chapter consists of four sections. Section A briefly summarizes the hypotheses to be explored and the approaches to the performance measurement in the transition context. The following two sections present the survey findings with regard to enterprise performance and restructuring and the results of testing our hypotheses about the determinants of different enterprise behavior. The final section brings together the results of the analysis and provides policy conclusions.

⁵⁵ Although the figures refer to the sample from the 2004 survey, they are instructive enough. No similar data (with breakdown for before and after the 1996 privatization) are available for the entire population. For the whole period under consideration (since 1991), according to the Ministry of Economy, as of January 1, 2005, out of 618 JSCs created on the basis of SOEs, the government holdings in the amount of more than 50 percent of shares were registered at 369 companies (60 percent of the total), out of which 303 (50 percent of the total) are JSCs with the residual state holdings exceeding 75 percent.

A. HYPOTHESES AND MEASUREMENT OF PERFORMANCE

3.6 The existing research literature can be summarized by two primary hypotheses about enterprise behavior in transition (Annex 3.1 presents more details on the lessons from the literature, Annex 3.2 provides details on the specification of the hypotheses, and Annex 3.3 gives details on the results of the survey.). The primary hypotheses are the following:

Hypothesis 1: Private firms will perform “better” than state-owned firms.

Hypothesis 2: De Novo (DN) firms will perform better than either privatized or state-owned firms.

3.7 In situations where firms have changed ownership, the above can be rephrased as, “that privatized firms will perform better than state-owned firms.” The basic argument is that relative to state-owned firms private firms have superior corporate governance and better managerial incentives. The period of time in question is relevant here -- newly privatized firms may need time to improve their performance.

3.8 At the same time, there are a number of reasons for expecting better performance from new firms. The selection process that determines the foundation of new firms will probably ensure that more market focused and entrepreneurial people will lead them from the outset, addressing many managerial problems. Perhaps most important, new firms should not face the problems of restructuring to the new market environment that is at the heart of the transition problem for SOEs and FSOEs. Being created from scratch, they will not inherit the enormous list of structural problems - over-manning, underinvestment, poor quality control, weak marketing and financial control and all the other difficulties - which will beset SOEs and FSOEs. On the other hand, they will probably start fairly small and may find difficulties in achieving growth if they require external funding. The resulting absence of economies of scale may (at least initially) offset some of their organizational advantages. It may also make it hard for them to compete in export markets.

3.9 To analyze enterprise performance in Belarus, we need to define the variables of interest and specify the hypotheses for empirical work. We first discuss the conventional measures of enterprise performance before considering another crucial variable in the transition context, namely, restructuring.

3.10 For firms in developed market economies there are three broad approaches to measuring performance. The first, it is efficiency, best proxied by total factor productivity (TFP) or labor productivity (SL). The second is profitability, measured by profits and usually normalized by some measure of firm size such as assets (profit to assets ratio) or profit to sales ratio (PS). The third is a measure of financial performance such as Tobin’s Q (book to asset ratio). It is hard to use these in the transition context because they require more data than are usually available. For example, TFP can only be measured if there are good measures of capital input, a variable that was notoriously poorly measured under planning. Profits are also not good indicators of performance in periods of rapid price change as occurs when prices have recently been liberalized. Moreover, company information about profitability is often unreliable. The absence of a capital market precludes the use of financial measures altogether. Hence, studies of performance in transition have tended to rely on labor productivity, or have been forced to consider other indicators of performance better suited to the questions raised by the reform process.

3.11 Transition involves a move from one equilibrium level of output and factor intensity to another based on new market prices. This process can be charted quantitatively (e.g., through sales, employment and investment). The three most commonly used measures of performance in transition economies, in addition to labor productivity, have therefore been sales growth, employment growth (DEMP) and, given the importance of opening up to the global economy in the process, export growth (DEX), especially to western economies (DEX1). In the context of transition, with drops in output in the early years of reform,

sales (including exports) and productivity growth have probably been viewed as the principal indicators of performance.

3.12 Employment growth is more complicated because one might make different predictions about the impact of ownership form on this growth. One might expect that faster output or productivity growth in a given sector in DN firms than that in privatized firms would be a consequence of better management. However, current and former state-owned firms would almost certainly be over-manned. Hence, we would expect employment in such firms to fall, more or less regardless of what was happening to output and sales. In contrast, DNs are likely to have entered the market below optimal scale, and hence will have a positive correlation between output and employment.

3.13 The transition process also involves a number of managerial actions in order to change the way in which firms are organized. Earle and Estrin (1996) introduce a number of broad categories:

- Depoliticization and reorientation of firms away from rent-seeking. Breaking the links between the firm and the state and refocusing the objectives towards profits.
- Long-term restructuring. This entails activities of three types -- unbundling, organizational structure and investment. Since firms under planning were highly vertically integrated, but in ways that make little sense for market incentives, one would expect firm disintegration to be rather common, with numerous spin-offs of workshops, service activities, logistics, etc. The divestiture of social assets would also fall into this category. Changes in organizational structure would be needed to reorient a firm to meet the new demands of the marketplace (for example, creating new divisions to address issues of marketing, sales, finance, exports etc.) Finally, long-term restructuring must involve investment in fixed assets.
- Short-term restructuring. As firms become more responsive to market signals, we expect to see changes in factor inputs and outputs reflecting new relative prices. This almost certainly implies reductions in employment and other earlier under-priced inputs (such as space, electricity, energy, and pollution). As a result of these changes we expect to see increases in labor productivity and energy efficiency.

3.14 Many studies use survey questionnaires to obtain qualitative indicators of progress in transition in these dimensions, as has been done in the Belarus survey. One then has a large vector of qualitative variables about "restructuring" which can be used as an alternative measure of performance of firms. These qualitative indicators must then be aggregated to a single or a few measures of the performance. As with employment, one must also be careful about the hypotheses. De novo firms will not require restructuring. This is because they have been created from scratch to operate in a market environment.

3.15 One must also consider the relationship between restructuring and enterprise performance. In the long run, we would expect the two to be correlated, and we would expect restructuring to "cause" enhanced performance. However, in the short term there may be no positive relationship between restructuring and performance. Restructuring is measured as a qualitative set of indicators of managerial activities across a range of actions that might lead to improved performance. It is necessary to be careful in interpreting results using the restructuring measures, however, for the following reasons:

- Managers' perceptions of what is needed and what needs to be done may be incorrect. Indeed, the worse the managers are, the more likely it is for their judgments to be incorrect regarding the appropriate restructuring activities for improving company performance.
- The amount of restructuring undertaken is correlated with both managerial activity and the scale of the problems to be overcome. Hence, one will observe more "restructuring" in worse firms, but this does not necessarily mean that performance in these firms will be enhanced any more than in other firms.
- Different firms will require different forms of restructuring, and so any aggregate across a set of activities will tend to rank a firm with highly focused narrow restructuring (which is actually

addressing the core strategic problems of the firm) below firms that are undertaking a small amount of restructuring across many areas in an unfocused way.

B. ENTERPRISE PERFORMANCE AND RESTRUCTURING IN BELARUS

3.16 Before proceeding to analyze the differences in performance, we will describe the differences in various characteristics of SOEs, FSOEs and DNs. The section is intended to indicate the richness and quality of the data collected in the survey before proceeding to the more formal hypothesis testing in the next section.

Peculiarities of the Industrial Sector

3.17 The characteristics of Belarusian firms in our sample are summarized in Table 3.1. We find that Belarusian firms are on average rather large, especially the SOEs, but even the DNs in our sample employ on average more than 140 workers. The numbers are large by the standards of comparable surveys of other transition economies at a comparable stage. Thus, Belka et al. (1995) report that SOEs in Poland on average employed 703 workers, FSOEs employed 1,007, if they were majority state owned but only 594 if they were privately held, and DNs employed 111. The comparable figures for Russia are close to those for Belarus, however. For example, Linz and Krueger (1998) report that firms in their Russian sample varied in size between less than 200 and more than 10,000 workers, although 80 percent of the sample were in the range of 2,000 to 5,000 workers. Earle, Estrin and Leshchenko (1996), in their sample of Russian firms in 1994, also find comparable employment levels (the average employment in SOEs was around 3,000). These numbers alone suggest that only a very limited amount of restructuring could have occurred in Belarus firms or employment would probably have declined on average rather more, as has occurred in Poland, Hungary and the Czech Republic (see Estrin, Gelb and Singh, 1995), although differences in the industrial structure may also be relevant.

Table 3.1: Characteristics of the Enterprise Sample

	Sample Average	SOE	FSOE	DN
Employment (2004)	594	1,237	565	146
% Exporting to:				
- Developed economies	25.1			
- Former socialist economies	35.1			
- Russia	70.6			
Share of exports in revenue	25.8	28.7	28.0	19.1
Years of service of general manager	12.1	17.6	12.4	7.4
% Firms with a joint venture	5.5	7.5	6.2	2.6
% Firms which are members of holdings	1.7	-	-	-

Source: IPM (2004).

3.18 This impression is strengthened when we look at exports. Export shares remain quite low for what one might expect to be a small open economy (on average, less than 30 percent of revenue for all categories). It is disappointing, but perhaps not surprising given their size, that DNs export less than 20 percent of their sales and SOEs have the largest export share (28.7 percent). In addition, there has been little progress in integrating into the world economy: only one-quarter of firms export to developed Western economies. Exports to Russia and the former communist bloc still predominate. These figures are comparable to those in Earle, Estrin and Leshchenko (1996) for Russia in 1994, before any substantial restructuring had taken place.

3.19 There is also evidence that managerial turnover has been very limited, which suggests that ownership changes have not been much associated with managerial changes. On average, managers have worked with their firms for more than 12 years, more than half of them in the top post. Unsurprisingly,

managerial turnover is particularly low in SOEs, where the average tenure is nearly 18 years, but it is also low in FSOEs, where managers have worked for the firms on average for 12.4 years, the majority of them in the senior position. Even in new firms turnover is fairly slow, with the average tenure exceeding 7 years.

3.20 It is often argued that restructuring, especially the introduction of new technology and the expansion of foreign trade, will be led through FDI and joint ventures (see, for example, Estrin, Gelb and Singh, 1995). However, there is little possibility of this in Belarus, where only around 5 percent of firms on average are in a joint venture. The comparable figure for Poland in 1994 was 14 percent (Belka et al. 1995). The proportion is slightly higher for SOEs and FSOEs and is lower for DNs, perhaps indicating foreign firms' preference for arrangements with larger enterprises.

Quantitative Indicators of Performance

3.21 The survey contains managers' responses to a number of questions about current and expected enterprise performance, some of which can be compared with the results of the 2000 survey. Box 3.2 compares findings from the 2000 and 2004 surveys.

Box 3.2: Comparing the Results of the 2000 and 2004 Enterprise Restructuring Surveys

Main trends in the survey results could be summarized as follows:

- On average, the attitude of respondents has become more positive. However, managers of both SOEs and FSOEs became less positive in the assessment of the current economic situation.
- The share of enterprises indicating recent growth in output, production capacity, product diversity, exports and investments has increased.
- The share of enterprises indicating a recent decline in employment has substantially decreased.
- The assessment of enterprise prospects did not change much since 2000 and remains highly positive.
- The importance of profits as a source of financing has decreased for both SOEs and FSOEs. In addition, for both these groups the importance of overdue liabilities as a source of financing has increased.
- The importance of subsidies as a source of financing has declined drastically. At the same time, for SOEs the importance of concessions and preferences granted by the government has increased.
- The importance of bank loans has increased for both SOEs and FSOEs.
- The importance of revenues associated with financial restructuring (asset sales and renting out) has increased for SOEs and FSOEs.

Source: IPM (2004).

3.22 We find on average a slight improvement in managers' perceptions of the economic situation, with 22.6 percent of managers in the sample providing a positive assessment of the situation, as against only 18.5 percent in 2000, while 27.3 percent in 2004, as against 37.9 percent in 2000 had a negative perception. However, only a minority of respondents took a positive view of the past: 45.3 percent saw some improvement over the past three years, slightly more than the 37.5 percent in 2000. And there was optimism for the future: 63.9 of managers in 2004 expected improvements in the economic situation over the next three years. However, the 2000 survey also indicated a similar optimism, which as we noted, was not justified (the comparable figure then was 63.7!).

3.23 Overall, the balance of opinion about the current situation is negative in SOEs and FSOEs but positive in DNs (Table 3.2). It seems likely that the overall improvement in opinion is due to the inclusion in the 2004 survey of DN firms. Managers in these enterprises are markedly more positive about the current situation than their counterparts in the current and former SOEs (16.1 and 19.1 percent, respectively).

Table 3.2: Differences in Attitudes among Enterprise Groups, 2000 and 2004

(As % of the sample)

Assessment of the situation	Sample average	Form of ownership			
		State-owned enterprise	Former state-owned enterprise	New private sector	
Assessment of the current situation					
Positive	2004	22.6	16.1	19.1	33.7
	2000	18.5	17.6	19.4	-
Negative	2004	27.3	38.7	30.1	12
	2000	37.9	38.7	36.9	-
Balance	2004	-4.7	-22.6	-11	21.7
	2000	-19.4	-21.1	-17.5	-
Assessment of the situation in the last 2-3 years					
Improvement	2004	45.3	46.2	42	50
	2000	37.5	37.3	37.9	-
Deterioration	2004	31.8	36.6	35.3	22.4
	2000	44.4	44.1	44.7	-
Balance	2004	13.5	9.6	6.7	27.6
	2000	-6.9	-6.8	-6.8	-
Assessment of the enterprise prospects for the next 2-3 years					
Improvement	2004	63.9	62.3	63.2	66.4
	2000	63.7	60.1	67.6	-
Deterioration	2004	11.7	9.7	14	9.5
	2000	11.8	11.8	11.7	-
Balance	2004	52.2	52.6	49.2	56.9
	2000	51.9	48.3	55.9	-

Source: IPM (2004).

3.24 Managers' assessment of growth in the main performance indicators during the last two to three years is reported in Table 3.3. Once again the situation is somewhat mixed and unbalanced. Nearly 60 percent of enterprises reported growth in sales, while only around 40 percent reported growth in exports and 30 percent in profitability. Though approximately half of the firms recorded labor productivity growth, more than three-quarters acknowledged growth in wages and only slightly more than one-third reported growth in investments. However, on the other side of the balance sheet, we do not find evidence of growth in tax arrears or customer liabilities.

3.25 There is considerable variation in performance by ownership type but for the most part not in the manner expected. We find that the incidence of growth in many performance indicators, according to the managers' responses, is in fact higher in SOEs and FSOEs than in DNs. Thus, the incidence of growth in sales, profitability, and investment, and especially exports and labor productivity, is lower in new firms. This runs counter to our expectations from theory and the evidence from other economies where new firms have been more dynamic and faster growing (see, for example, Richter and Schaffer, 1996, on Russia, and Belka et al., 1995, on Poland). However, DNs in Belarus create relatively more jobs and face a better financing situation, with less growth in arrears and liabilities. Moreover, DNs appear to be more

profitable than other firms -- 66.4 percent of firms reported that they made a profit in 2003, and the lowest share of loss-making firms was in DNs (13.8 percent as against 23 percent in the other types of enterprise).

Table 3.3: Percentage of Enterprises Reporting Recent Growth in Main Performance Indicators
(% of the sample)

Indicators	Sample average	Form of ownership		
		SOE	FSOE	DN
Employment	36.8	30.4	33.7	47.3
Sales	59.9	67.4	56.5	59.8
Export	41.3	48.9	46.1	26.8
Profitability	31.7	34.8	32.1	28.6
Labor productivity	51.4	63.0	58.5	29.5
Capital investments	36.8	41.3	38.9	29.5
Average wage	76.6	83.7	77.7	68.8
Arrears in settlements with suppliers	24.2	30.4	29.0	10.7
Customers' liabilities	36.0	40.2	37.8	29.5
Arrears in settlements with the banks	21.7	29.3	23.8	11.6

Source: IPM (2004).

3.26 One can begin to explore the reasons for these findings by investigating the sources of investment financing, reported in Table 3.4. We find that, overall, the most important sources are profits, bank loans and sales/renting out of equipment and premises. The findings mark some turnaround from 2000, when subsidies were much more important (11.4 percent as against 1.7 percent in 2004) and the role of bank loans was markedly lower (35.2 percent as against 55.2 percent in 2004). The level of development of the capital market is low as indicated by the very small weight attached to new share issues (less than 2 percent). The tiny role of foreign investment, below even that observed in a Ukraine survey in 1997 (Estrin and Rosever, 1999), is striking.

Table 3.4: Most Important Sources of Investment Financing for Enterprises
(% of the sample)

Sources of financing	2004				2000		
	Sample average	Form of ownership			Sample average	Form of ownership	
		SOE	FSOE	DN		SOE	FSOE
Profits from sales	86.6	79.6	85.0	94.8	89.5	89.7	89.3
Profits from introduction of new products	33.8	25.8	32.6	42.2	38.4	37.9	38.8
Subsidies	1.7	2.2	2.6	0.0	11.4	10.3	12.6
Sale of stakes, issuance of shares	1.7	n.a.	3.6	0.0	1.8	0	3.9
Sale of equipment, buildings and inventories	14.7	25.8	15.5	4.3	8.2	11.2	4.9
Renting out of equipment and premises	21.4	36.6	22.3	7.8	19.6	22.4	16.5
Overdue liabilities (to the budget, to suppliers, wage arrears, etc.)	11.2	16.1	13.0	4.3	7.3	3.5	11.7
Exemptions and preferences granted by the government (soft loans, customs and tax concessions, etc.)	10.4	19.4	10.9	2.6	12.8	12.1	13.6
Bank loans	55.2	67.7	60.6	36.2	35.2	30.2	40.8
Foreign investments	3.2	2.2	3.6	3.4	-	-	-
Domestic investments	1.5	1.1	1.6	1.7	-	-	-

Note: More than one source could be selected so that the sum does not yield 100.

Source: IPM (2004).

3.27 There are important differences in the sources of investment financing by ownership type. De novo firms rely almost entirely on profits from sales and to a lesser extent on bank loans. However, there is some evidence that they face discrimination from the banks (banks are rated as important sources of finance by only 36.2 percent of DNs as against 67.7 percent of SOEs). Presumably because they have less to restructure or to sell assets, DNs are less able to finance investment through the sale or renting of equipment, etc., and they are much less likely to obtain subsidies or exemptions and government preferences. Finally, DNs also appear to be less able to exploit deficiencies in the property rights system by accruing overdue arrears, for example to the budget, to suppliers, etc.

Table 3.5: Use of Financial Resources by Firm Type, 2004 (% of total)

Description	Sample average	Form of ownership		
		SOE	FSOE	DN
Investments in machines and equipment	25.3	23.9	23.1	30.1
Design, development and introduction of new products	12.6	10.2	10.3	18.1
Expenditures on social needs and bonuses	11.7	12.7	11.3	11.8
Replenishment of the working capital	24.3	24.6	24.1	24.2
Repayment of debts	11.1	9.1	14.6	6.9
Other items	14.9	19.6	16.6	8.8
Total	100.0	100.0	100.0	100.0

Source: IPM (2004).

3.28 Former, and especially current, state ownership yields strong advantages in financing investment in Belarus, with superior access to bank lending, the possibility of selling or leasing unused assets, and a much enhanced ability to obtain government subsidies and to exploit soft budget constraints. The survey provides additional evidence on these issues. Overall, 39 percent of firms still benefit from some form of government support, down from 49 percent in 2000. These forms of support are primarily tax concessions (15.9 percent), the writing off budget arrears (13.7 percent) and targeted budget financing and subsidies (8.2 percent). However, these benefits are enjoyed by more than half of the SOEs (51.6 percent) and 44 percent of the FSOEs, but by only 21.6 percent of the DNs. For example, writing off budget arrears has benefited almost 24 percent of SOEs but only 2.6 percent of new firms. This may help to explain some of the differences in performance outcomes observed in Table 3.3.

3.29 Despite the less favorable business environment for new firms, the survey provides some evidence that, as expected, DNs are more dynamic than current and former state-owned enterprises. This can be seen in particular from their expenditure structure. Table 3.5 suggests that the most important uses of funds in both 2000 and 2004 for the entire sample and for each ownership category were investments and the formation of working capital. Both shares increased between 2000 and 2004, partly at the expense of social expenditures. However, DNs are found to use a higher proportion of their funds on investments and on new product design and development than either SOEs or FSOEs. This is consistent with the findings, mentioned earlier, that DNs are more profitable and create relatively more jobs. At the same time, all three types of firms show similar levels of social expenditures, perhaps because these expenditures are largely mandated.

3.30 One of the important means for SOE restructuring is via the divestiture of social assets owned/financed by the socialist enterprises. Estrin, Schaffer, and Singh (1997) undertook a study of this form of restructuring for Poland and found that while SOEs had restructured only slightly, there was somewhat more restructuring among privatized firms, while de novo firms, given that they did not inherit such structures from the socialist era, had very few social assets. The level of social provision was found to be quite high in Poland in 1993: for example, 34 percent of firms provided child care, 64 percent provided health care, 52 percent provided housing or housing subsidies and 29 percent provided a cafeteria. There was considerable variation by ownership type. For example, 48 percent of privatized firms and 65

percent of SOEs, but only 3 percent of DNs, provided housing or housing subsidies. Table 3.6 reveals that in Belarus the current levels of social provisions are higher than those in Poland in the early 1990s, and that there has been almost no restructuring at all of social assets since the fall of communism in either state-owned or privatized firms. There are some differences between SOEs and FSOEs in the structure of the provision of social assets: for example, SOEs provide on average more canteens and day care centers. But the differences that existed in 1991 between these types of firms remain unchanged in 2004. Thus, the only area in which there has been any significant reduction in enterprise social assets is in day care centers and nurseries, but this has declined considerably in both SOEs and FSOEs. Overall, the provision of social assets by enterprises remains remarkably similar to that in 1991, and there is no evidence that privatization has motivated firms to divest social assets more rapidly than under state ownership.

Table 3.6: Social Assets Owned by Enterprises
(Share of enterprises having social assets, %)

Social infrastructure assets	Form of ownership			
	SOE		FSOE	
	1991	At present	1991	At present
Canteen, café	64.5	63.4	46.1	45.1
Holiday center, recuperation center	22.6	20.4	12.4	11.4
Cultural center, club	26.9	22.6	18.1	17.1
Information and education centers	5.4	3.2	4.7	3.6
Residential houses	47.3	44.1	30.6	32.1
Sport facilities	20.4	21.5	13.5	14.5
Health facilities	43.0	45.2	23.8	23.8
Day care centers, nurseries	47.3	18.3	28.5	11.4

Source: IPM (2004).

Qualitative Indicators of Performance and Restructuring

3.31 The survey provides information about two broad categories of restructuring. The first is property restructuring (PR), which covers management responses about possible changes in financing investment and obtaining incremental funding, including joint ventures, issuance of shares, sale of assets, and splitting of enterprises. The second is strategic restructuring (SR), including cutting employment, introducing new products, improving staff training and discipline, improving product quality and creating new distribution channels. We report the results for the entire sample for each set of restructuring measures in Annex Tables A3.1 and A3.3, respectively, and for the three ownership types in Annex Tables A3.2 and A3.4.

3.32 Commencing with Table A3.1, we note that the average levels of property restructuring are exceptionally low in Belarus. Of the 16 indicators of restructuring, more than 80 percent of firms report that they have taken no measures for half of them, and only for two measures (change in organizational structure and sale of unnecessary assets) do more than half of the firms report having taken some actions. Some 14 years after the start of transition, measures have only been completed in more than 10 percent of firms in the same 2 of the 16 actions. For most of the remaining actions, measures have typically only been completed in 2 or 3 percent of firms. This seems consistent with the evidence on the restructuring of social assets, noted in Table 3.6, which also indicates little or no change.

3.33 It is hard to make cross-country comparisons when the indicators are for different restructuring activities, but these measures seem very low by the standards of Poland as early as 1990 (see Pinto, Belka, and Krajewski, 1993), of Hungary, Poland and the Czech Republic by 1993 (Estrin, Gelb, and Singh, 1995), and of Russia in 1994 (Earle, Estrin and Leshchenko, 1996). For example, in Russia, on a scale of 1 (no activity) to 5 (maximum activity), Russian SOEs in 1994 averaged around 2 in a set of activities approximating to what is called in this survey property restructuring and closer to 2.2 in elements of strategic restructuring. These figures were argued to be low in comparison with Poland even a few years earlier, but they now appear rather high with reference to the data for Belarus in Tables A3.1 and A3.2.

3.34 It is also worrying that there appears little distinction in the raw data among the different ownership types in terms of property restructuring activities, as can be seen in Table A3.2. This is in sharp contrast to Russia, where Earle, Estrin and Leshchenko (1996) found that privatized firms were doing more restructuring than SOEs. In Belarus, if anything, SOEs seem to be slightly more willing to introduce measures of property restructuring than FSOEs, though the levels are very low everywhere. New firms also appear to rarely introduce property-restructuring measures, though the reason may be that they have less need or ability to do so than the other firm types because they do not have the same inheritance from the socialist era.

3.35 We find more evidence of strategic restructuring in Table A3.3, with only 2 measures of the 18 having been commenced by fewer than 50 percent of firms, and 6 measures having been started by more than 90 percent of firms. However, even here completion rates remain frustratingly low: in only 3 measures do more than 10 percent of firms claim to have completed their restructuring. For the remainder, most claim to have started a variety of strategic restructuring activities, although for a sizable minority the actions remain on the intentions list. Earle, Estrin and Leshchenko (1996) argue that many of the components of strategic restructuring in this definition are easier to implement than property restructuring, which may explain the higher levels of implementation. However, in Belarus the completion rates for such basic transition tasks as staff training, new distribution channels, and improved product quality remain disappointingly low despite so many years into the reform period.

3.36 If we turn to differences in restructuring by firm types in Table A3.4, we find a much sharper distinction between DNs and the other enterprise types, and this is almost certainly because the former do not need to restructure in many strategic areas. Thus, when we consider staff cuts, these have been implemented or completed in around 40 percent of SOEs and 32 percent of FSOEs but only 7 percent of DNs, presumably because their labor forces were nearer to desired level from the beginning. Similarly, regarding the improvement of the quality of products, actions have been implemented or completed in 63 percent of SOEs, 75 percent of FSOEs but only 51 percent of DNs. For changes in the remuneration system, the comparable figures are 62 percent, 55 percent and 39 percent. The differences between SOEs and FSOEs are less sharp, but there is some evidence that, contrary to expectations, in many areas SOEs are actually restructuring as much or more than privatized firms. Thus, 50 percent of FSOEs have undertaken no measures to attract new investors as against 40 percent of SOEs, and 35 percent have not changed their employment structure as against 26 percent of SOEs. However, it is necessary to control for other factors through multiple regression methods before this result can be confirmed.

3.37 In summary, the descriptive data suggest a rather weak enterprise performance in Belarus in terms of both the qualitative and the quantitative indicators of restructuring. There is also little evidence in the raw data of differentiation among SOEs, FSOEs and DNs in terms of performance and property restructuring. However, FSOEs and SOEs may be having a greater impact on restructuring the Belarus economy (for example, via exports), perhaps because of their size and sectoral distribution. As expected, DNs appear to require less restructuring, especially strategic restructuring. These results may be due to the unusual business environment in Belarus whereby SOEs and to a lesser extent FSOEs are extensively controlled and supported by direct and indirect government subsidies.

C. ENTERPRISE PERFORMANCE, RESTRUCTURING AND OWNERSHIP: TESTS OF HYPOTHESES

3.38 In this section we use multiple regression methods to investigate whether different ownership forms actually affect enterprise performance and restructuring in the ways predicted when we control for other factors that might influence corporate behavior, including sector, region, size and a variety of other control variables. To recapitulate, if the institutional environment has been developed sufficiently and firms have been privatized in appropriate ways, we expect that privatized firms will perform better than state-owned firms, and that the performance of de novo enterprises will be even better, except in areas as restructuring where DNs have much less to do. We test these hypotheses using versions of equations (1)

and (2) (see Annex 3.2) with a variety of indicators of enterprise performance and restructuring, and a number of different control variables (outlined in detail in Annex 3.2 and Annex 3.3).

Indicators of Enterprise Performance

3.39 The indicators of enterprise performance are broken down into four groups:

- Enterprise productivity. Sales per worker (SL), and profitability (ratio of profits to sales, PS). These are cross-section regressions in levels, for which we use OLS.
- Indicators of export performance. We use the export to sales ratio (EXP) and the recent changes in exports (DEX) and in exports to the West (DEX1). The latter are limited dependent variables (taking the value of unity if exports increased recently and otherwise zero), so we estimate using probit methods.
- Indicators of change in company performance – changes in productivity (DSL) and employment (DEMP). The former is a limited dependent variable (taking the value of unity if sales per worker increased), so the estimation method is probit, but OLS is used for the employment change equation.
- Indicators of restructuring activity -- PR being the unweighted mean of the property restructuring variables and SR the unweighted mean of the strategic restructuring variables. These are estimated using probit. In some specifications PR and SR are also included as independent variables to explore the relationship between enterprise performance and restructuring activity.

Firm Type Variables

3.40 Our hypotheses are focused on the sign and significance of the firm type dummies -- DNs and FSOEs relative to SOEs. We allow the latter to be subdivided further; hence the category of all former state-owned firms, including those with majority state ownership, are henceforth denoted PF, while privatized firms with majority private ownership are denoted PF1. SOEs are the omitted category in the regressions.

Control Variables

3.41 We control for size of firms using employment (EMP) and for sector using industry dummy variables. Industry 1 is machinery and metalworking; 2 is timber, woodworking, pulp and paper; 3 is construction materials; 4 is light industry; and 5 is the food sector. The omitted industry category is “other.” We control for region with a dummy variable GEO for firms locate in Minsk; all other regions are the omitted category.

3.42 Because enterprise performance may be enhanced by close collaboration with a foreign partner, we construct a dummy variable, JV, which takes the value unity if the firm is a joint venture or has set up a joint venture. We control for managerial turnover with a dummy variable, LOS, which takes the value of unity if the manager started working at the enterprise prior to 1996. We expect performance to be enhanced in firms with managers who have served for a shorter number of years.

3.43 There is a huge amount of literature on the impact of insider ownership (see Earle and Estrin, 1996; Djankov and Murrell, 2002). In general, it is argued that relatively low levels of managerial ownership can provide an alignment of incentives between managers and owners and can enhance corporate performance. However, large insider stakes can act to slow both restructuring and improvements in performance. We have no evidence about the extent of managerial ownership in Belarusian firms, but if it were relatively low we would expect the impact of managerial ownership to be benign. We use a dummy variable, MAN, which takes the value of unity if managers are owners of the firm.

3.44 If the institutional environment has been fundamentally reformed, we would expect soft budget constraints to undermine enterprise performance, directing management energies from satisfying

consumer demands to rent seeking. However, in a partially reformed environment, where resources are scarce and capital markets underdeveloped, soft budget constraints represent access to financial resources and hence may enhance the performance of firms that receive them. We employ two dummy variables in our regressions: (i) SBC, which equals unity if the firm reports that any government subsidies are an important source of enterprise funding, and (ii) SBC1, which equals unity if the state has granted the firm any type of either budget or quasi-fiscal support.

3.45 Product market competition can to some extent offset soft budget constraints and force enterprises to improve their competitiveness. We control for this using the dummy variable COMP, which takes the value of unity if managers perceive domestic or foreign competitors as being a considerable or major influence on their choices.

Specification of Equations

3.46 There is an interesting and intuitively appealing relationship structure between the alternative measures of enterprise performance. Thus we find that productivity and profitability are positively correlated, and that firms with higher labor productivity are more likely to have increased their exports to the West. It is not clear whether this is because these firms are more productive, or because they are larger. Productivity growth is strongly correlated with a number of other measures of good performance, including high export shares and growth, including to the West, and restructuring (both PR and SR). Growth in exports to the West is a particularly useful indicator of performance being the only measure correlated with almost all the others – SL, DSL, EXP, DEX and the restructuring variables. However, it is not correlated with profitability or employment growth. Indeed, employment growth is not correlated with any other performance measures, apart from the expected negative correlations with the two restructuring variables. Profitability is a particularly poor indicator of performance in Belarus, being associated with neither productivity nor employment growth, nor any export indicator or type of restructuring.

3.47 We use a variety of specifications in our regression analysis because of collinearity between some of the exogenous variables. In particular, we find that SOEs are significantly larger, and DN's significantly smaller, than FSOEs. For this reason, we report regressions that include and exclude the employment variables to establish that our results are not primarily driven by size differences. New firms are also concentrated in Minsk, and are more likely to have joint ventures, but this does not appear to influence any of our results, so we do not report regressions with these variables omitted. Similarly, SOEs are significantly more likely to face soft budget constraints, but this does not affect our regression results.

3.48 The regression results are reported in Annex Tables A3.5-A3.8. They contain regressions for measures of company performance (SL and PS) in Table A3.5; export performance (EXP, DEX and DEX1) in Table A3.6; growth performance in Table A3.7 (DSL and DEMP); and restructuring (PR and SR) in Table A3.8. Each table contains up to three regressions to address causality and collinearity issues: (i) one excluding employment and restructuring variables, (ii) one excluding only the restructuring variables, and (iii) one with all independent variables included to explore the relationship between restructuring activities and the performance measure in question.

Results

3.49 We commence our testing of the hypotheses by exploring the relationship between productivity and profitability and firm types (Table A3.5). The results are not affected in the SL equation by controlling either for firm size or the restructuring variables. The most general and best fitting specification is in column (3). The inclusion of the restructuring variables to the profit to sales ratio equation leads to a worsening in the fit, so the best fitting PS regression is in column (2).

3.50 The SL equation suggests that industry effects are significant in understanding productivity differences between firms, with enterprises in the timber, woodworking, pulp and paper industry significantly more productive. Moreover, monopoly power yields higher prices, and therefore higher

revenues and sales per worker, since COMP is negatively associated with productivity. Interestingly, we find a positive incentive effect from managerial ownership; though the causality is not unambiguous: managers may have taken ownership stakes in more productive firms. However, no other controls influence productivity: in particular, neither of the two measures of restructuring nor the existence of JVs enhances enterprise productivity levels. When we turn to the central variables of interest, however, the results are perverse. Privatization is found not to improve productivity relative to continued state ownership and de novo firms are not more productive than state-owned ones. Most surprisingly, privatization when it takes the form of majority control being placed in private hands is actually found to be associated with lower productivity than state ownership. This result may perhaps be explained by the policy dating from the late 1990s to privatize more problematic enterprises.

3.51 The profit to sales equation fits somewhat less well than that of productivity. Almost no controls, including restructuring activity, soft budget constraints, size or managerial ownership, influence profitability. However, there are some significant industry effects: machinery and construction materials are less profitable. We find no significant difference between the profitability of former state owned firms as a class, new firms or state-owned firms. However, firms that have been privatized fully (PF1) are more profitable.

3.52 The model explains export shares in Table A3.6 far better than PS or SL in Table A3.5, with goodness of fit in excess of 0.4. The probit regressions for export change and export change to the West also contain considerable significant explanation. Commencing with export shares, column (3) is once again the best fitting form, though we do not identify any strongly significant association between exports and restructuring in any of the equations. The equations suggest that larger firms export more, and exhibit faster growth of exports and more of an increase in their exports to the West. Length of service seems to be a (negative) indicator of managerial quality in that export shares are significantly lower in firms in which managers were appointed before 1996. There are also strong sectoral and regional effects. Being based in Minsk is a significant disadvantage for all three measures of export performance.

3.53 Export shares are higher in machinery and light industry, and export growth was significantly slower in food and construction materials. The sectors that have revealed potential export growth performance in exports to the West are timber, woodworking, pulp and paper, and the food industry. However, the current pattern of exports may not be following the dictates of the market. We find that export shares are positively related to both measures of softness of budget constraint, perhaps indicating that firms may need to be subsidized to maintain high levels of exports. This result holds, even when we control for size of firm. There is also some weaker evidence that firms in receipt of soft budget constraints may be increasing exports to the West faster.

3.54 The firm type effects in Table A3.6 are once again largely contrary to expectations. Once we have controlled for all the other factors, we can find no evidence that privatized or new firms increase exports or exports to the West faster than state-owned firms. However, it is interesting to note that once we control for size, sector, and the other factors of relevance, we identify a positive significant relationship between export shares and new firms.

3.55 Table A3.7 presents indicators of changes in enterprise productivity and employment. The employment growth equation contains few significant determinants. Surprisingly, restructuring is not significantly related to DEMP, nor are size, soft budget constraints or product market competition. There are no effects from managerial quality or the presence of JVs. The only significant control effects are sectoral (light industry and food industries reduced employment less) and via insider ownership. Interestingly, firms with managerial ownership made smaller cuts in employment. This is consistent with the view that insiders act to slow the pace of restructuring. As in several of the previous regressions, there are no differences in employment change according to firm ownership type. However, once again we find that FSOEs in which private owners hold a majority stake, increase employment significantly more than the other types of firms.

3.56 The productivity growth equation is interesting in that we find a significant association between strategic restructuring and productivity growth, while PR is not significant. Moreover, soft budget constraints are again found to have a positive effect, while length of managerial service has a negative effect. Productivity growth has been strongest in construction materials and light industry. Turning to firm type effects, we find no significant difference between FSOEs and SOEs, but DNs display significantly slower productivity growth.

3.57 Finally, we turn in Table A3.8 to restructuring itself as an indicator of enterprise performance. The results are weaker than one might have hoped -- restructuring is not influenced by firm size, joint venture, location, or insider ownership. However, most of the significant relationships that we find conform to expectations. Firms that are operating in more competitive product markets are more likely to restructure; managerial quality (the inverse of length of service) enhances restructuring; and there are some sectoral effects. However, there is one apparently perverse result: namely, a positive rather than a negative association between softness of budget constraints and property restructuring. While, as expected, de novo firms restructure less than SOEs and FSOEs, it is also surprising to identify that the PF1s restructure less than state-owned firms.

D. CONCLUSIONS

3.58 In summary, our equations are based on a specification that has been employed with success in most transition economies, including Poland (Belka et al., 1995) and Russia (Estrin, Earle and Leshchenko, 1996). However, the standard of fit is rather low in Belarus, which indicates that the standard controls used in equations of this sort do not for the most part have the expected impact. As follows from a detailed analysis of the results, variables such as company size, product market competition, joint venture, managerial quality, location, and insider ownership are rarely found to have a significant effect, though when they do it is usually of the predicted sign. This suggests that the determinants of company performance in Belarus, using a wide variety of indicators, are not for the most part those that pertain in market economies or most other transition economies.

3.59 However, we are still able to test our hypotheses about the impact of different firm types on the variety of performance measures. Hypothesis 1 – that privatized firms will perform better than state-owned ones – is rejected in every equation: the coefficient of PF is never significant. However, when we separate out the group of privatized firms that have non-state majority owners, a few significant results emerge but they are inconsistent. Private ownership of former state owned firms is associated with greater profitability and productivity growth but lower productivity levels and less property restructuring.

3.60 The results with respect to soft budget constraints are at first sight perverse. These are found to influence company performance in three areas -- export shares, productivity growth and property restructuring. However, in all three, soft budget constraints are found to improve rather than hinder firm performance.

3.61 The greatest disappointment concerns the results with respect to Hypothesis 2, which is rejected in all the equations, though the transition literature predicts that new firms could be the motor of resource reallocation and growth. For the most part, these are not found to perform differently from state-owned firms. There are four exceptions: exports, which are greater in DNs (when we control for other factors), and productivity growth, property restructuring and strategic restructuring, which are slower in DNs. The latter two might be down because such firms have less need of restructuring.

3.62 Taken together, therefore, our sample suggests that Belarusian firms have made only very limited progress in many of the key elements of enterprise restructuring, including integrating into the world economy through trade and investment and reorganizing companies to make them vibrant components of the market economy. Though we do observe in Chapter 2 that labor productivity has been increasing, this is not associated with the reform-related features that played a major role in such adjustments in other transition economies. Rather, this growth probably derives from increases in external demand that also

reduce the pressure to address the problem of labor hoarding. Capacity utilization rose on average from 68.8 percent to 71.8 percent between 2002 and 2003 in the sample. We will concentrate on three aspects of these difficulties: the failure to integrate sufficiently into the world economy, the effects of soft budget constraints, and the broader institutional environment for privatized and new firms.

3.63 Studies of other transition economies (see, for example, Djankov and Murrell, 2002) suggest that foreign firms could have a very important role to play in enterprise restructuring. Foreign firms can provide new technologies, quick mechanisms for benefiting from the global division of labor, including export growth, capital investments and managerial skills. Even if there are concerns about widespread foreign ownership, liberalizing economies in the Far East such as Vietnam have generated considerable gains from channeling foreign investments through joint ventures. In Belarus we find the levels of FDI and joint ventures to be very low, and in our equations we do not find that membership in a joint venture yields any benefit in terms of improved performance. This suggests that the policy environment is particularly unattractive to potential foreign investors, and that the Belarus authorities have much to learn about how to exploit joint ventures to the benefit of the host firms.

3.64 Contrary to expectations, we find that firms in receipt of direct or indirect subsidy never perform significantly worse and sometimes perform better. One might interpret this result as indicating that soft budget constraints are effective in improving company performance. However, the reverse is true. The Belarus economy has only moved partially in the direction of the market. Firms are financially constrained, and financial instruments other than retained profits or sale of inherited assets are virtually non-existent. In such a situation, resources from any source may under additional conditions help the firms in receipt of them to improve performance. In Belarus, it seems, two such conditions have been in place. The first is the fairly strict supervision over SOE and FSOE performance, which considerably reduced the costs of asset stripping and the related non-appropriate use of subsidies. The second is a selection bias in both privatization (best firms remain non-privatized) and subsidization (best firms, due to their state status, have better access to state support). The only surprising result of this situation is how few of the performance indicators are affected by soft budget constraints. Thus, for example, firms with access to soft government money do not show a higher growth in exports, let alone in exports to the West.

3.65 However, the real major impact of soft budget constraints has to be seen not just on the subsidy recipients themselves, but on the economy-wide business dynamics. Massive subsidization undermines the most basic incentives to compete generated by the market economy. This may explain the limited effect of market incentives in our equations: it is possible that soft budget constraints are allowing firms to ignore profitable opportunities and to fail to react to unprofitable ones, thereby reducing the overall fit and economic explanation of the equations.

3.66 The refutation of Hypotheses 1 and 2 is the strongest indication in the study that the Belarusian institutional environment has not yet taken a form that can encourage the emergence of a market economy. We have found that, for the most part, privatization has no effect on company performance. This could occur because the new owners were inappropriate, and there is some evidence for this in that we find mixed performance effects when we restrict our attention to the subset of private firms with majority private owners. However, the study does not indicate that the problem is insider ownership. Managerial ownership is rarely a significant factor in our equations, and it tends to improve performance. Alternatively, privatization may also have no impact because the new owners are not able to exercise effective corporate governance owing to weaknesses in the enforcement of property rights, restrictions on the operations of product markets and the softness of budget constraints. We have no direct evidence for this, but the long length of service of managers, even in privatized firms, suggests that, unlike the situations in most other transition economies, in Belarus, owners have not been able to change management after privatization. The survey also suggests that private firms face less favorable business conditions and this unevenness distorts the results across ownership classes.

3.67 More generally, the fact that privatization is not found to influence company performance, while soft budget constraints sometimes have a positive effect, cannot be interpreted as evidence against a reform strategy aimed at more privatization and equalization of business conditions. Rather, the institutional environment in Belarus must be so poor that reforms that have been effective in other transition economies have failed to work. An important element of this poor business environment is soft budget constraints, whose pervasiveness and disincentive effects probably provide much of the explanation for the failure of privatization.

3.68 An equal worry for the future path of the economy is the refutation of Hypothesis 2. Our findings that new firms in Belarus rarely show any significant difference in performance from current and former state-owned firms are contrary to almost all of the transition literature, which identifies new firms as the engine of restructuring and growth. The results seem once again likely to be explained by the particular legal, institutional and business environment in which de novo firms operate in Belarus, and suggest that radical reform is needed to free the potential of entrepreneurship.

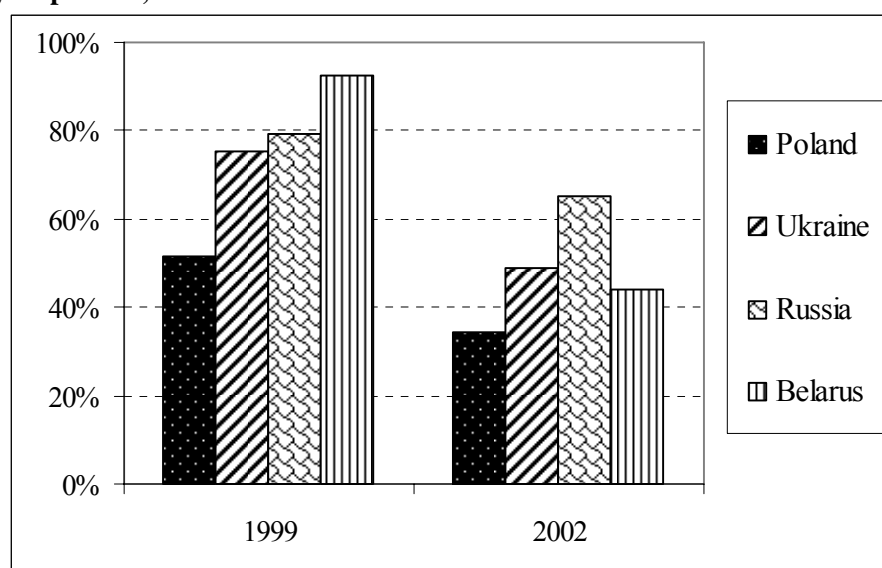
3.69 There has been emerging evidence that the path of institutional development is diverging between the CIS and CEE countries, particularly in the area of property rights and institutions conducive to the emergence and growth of a dynamic de novo sector (see Estrin, Meyer, and Bychkova, 2005). Such institutions include a flexible capital market, a sound commercial code, the enforcement of property rights, a limitation on regulations and bureaucracy—especially for SMEs—and relatively low levels of corruption. The institutional differences with respect to the business and legal environment for new firms seem to be strongly associated with the rate of the creation of new enterprises and therefore with productivity and economic growth. Therefore, the weakness of the de novo sector should be interpreted as a fundamental weakness of the entire development path that the Belarusian economy has been following.

3.70 A comparative analysis of the performance indicators of SOEs, FSOEs and DNs has clearly indicated improvements in the operations of SOEs, which in some areas (such as higher growth of output, expansion of product range, and increases in exports, wages, profits and profitability) are developing more dynamically than the new private sector. Why is this so, and what implications does this situation have for the future of the Belarusian economy?

3.71 There are two major groups of factors that seem to be forcing some restructuring of SOEs (especially during the last two to three years). The first is the strengthening of administrative controls and monitoring over the enterprise sector. While controls are overwhelming, managers have very limited opportunities for asset stripping and their incentives are heavily focused on meeting growth targets. To achieve the administratively set production growth targets and to preserve the status quo, managers of SOEs should undertake certain changes in these enterprises that will contribute to such growth. Because of the open economy, these changes should be appropriate in terms of the market rules existing in Russia or Europe.

3.72 The second group of factors concerns the increased domestic competition with the new private sector and with imports. BEEPS surveys by the World Bank and EBRD have revealed a serious shift towards the acknowledgement of the importance of competition from imports in transition economies in 2002 as compared to 1999. It is interesting to know that the magnitude of these changes in the perceptions of Belarusian entrepreneurs is much stronger than that of their neighbors (Figure 3.1).

Figure 3.1: Percent of Firms in Selected Countries Rating Competition from Imports not Important or only Slightly Important, in 1999 and 2002



Source: World Bank BEEPS database.

3.73 And, finally, to recapitulate the issues raised above, the question is that of whether the empirical results in this chapter are in contradiction with the findings in Chapter 2, where it was shown that industrial output growth was real and most of it stemmed from productivity improvements. Two interrelated but not identical aspects should be considered: an explanation of the current trends, and a vision for the future. With all caveats, restructuring, albeit rather limited, has taken place, including some unbundling. The pressure for this restructuring came from the two sources highlighted in Chapter 1 (administrative pressures and increased competition) and from support by government subsidies, investment grants, soft credits, etc. Moreover, some forms of state support were explicitly linked to enterprise performance, such as tax restructuring (conditional on due payments of current taxes) and tax exemptions (contingent to growth in output). The government has also supported the domestic demand for local industries in the consumer sector by a combination of income policy and import restrictions (Chapters 1 and 4) and the foreign demand by lobbying industrial interests abroad. In the latter case, the government (MFA) exhibits a considerable capacity by regional standards.

3.74 While it is not surprising that SOEs have restructured to a greater extent than DNs (because the latter do not need to restructure or do not need to restructure to a great extent), they also saw more restructuring than FSOEs. This apparent controversy regarding the conventional wisdom might be due to the better access of SOEs to subsidies, as well as the consequence of the “selectivity bias” (when the worst companies were privatized). All in all, the “restructuring,” when undertaken, brought positive results in terms of productivity gains: this is supported by our empirical results, where a positive link has been found between SR and productivity increases. However, the problem is that the overall restructuring has been slow and limited, and some important (basic) restructuring measures are yet to be implemented. As this report argues, accelerating restructuring in the future may be increasingly difficult without serious changes in the institutional and regulatory environments. For this purpose the right set of incentives should be in place, and this is impossible without depoliticization – a completely missing element in the transformation of the industrial sector in Belarus to date.

3.75 Future economic results would depend primarily on the nature of the interaction between the state (former state) and the new private enterprise sectors and also on securing a level playing field for these

sectors. Further developments in the situation will also depend on whether the SOEs will pursue development strategies that are more typical for the private sector or whether the private sector will adjust to the existing economic situation and begins to mimic behavior that is more typical of SOEs.

ANNEX 3.1: LESSONS FROM THE ENTERPRISE RESTRUCTURING ANALYSIS IN TRANSITION

A considerable amount of research has been carried out on the subject of the comparative performance of different enterprise groups in transition (see Megginson and Netter, 2001). The basic argument is that, relative to SOEs, private firms have superior corporate governance via the role of external owners in monitoring managerial performance. Managerial incentives in private firms to operate in ways that improve corporate value are also believed to be stronger because of the following:

- Managerial markets that reward efficiency and punish poor performance
- Managerial payment schemes such as stock option plans that align managerial and owner incentives
- Effective monitoring, often driven through competition in stock exchanges and made highly transparent through stock market prices
- Effective bankruptcy laws that have an impact on private firms but not state-owned firms and that motivate resource reallocation away from inefficient firms. Their absence can lead to “soft budget constraints” that additionally distort managerial incentives.
- The threat of hostile takeovers whereby poorly functioning managers can be replaced through competitive bids by alternative management teams.

However, as Djankov and Murrell (2002) note, transition adds three more factors to the evaluation of the likely impact of privatization. The first factor is the way in which it matters how the firms are privatized. In Western market economies, privatization is almost always awarded to the highest bidder, either via the stock exchange or to a group of strategic owners. The process of transition was associated with some major innovations in privatization methods, including restitution, so-called “small privatization,” management-employee buyouts, vouchers, certificates and other methods of “mass privatization.” Different privatization methods can lead to different owners, governance structures, and managers and thus to different post-privatization performances. For example, it is often argued that management-employee buyouts lead to the entrenchment of the existing managers and are therefore ineffective in terms of enhancing company performance and encouraging restructuring.

The second factor is to whom the firms are privatized, in the sense of the “majority” or dominant owner. For example, if the new owners are workers and managers, it is argued that they are less willing to restructure because their own jobs are at risk and are also less willing to invest because this will dilute their ownership (and therefore their ability to protect their employment and other non-commercial interests). However, it is unclear whether one should hypothesize that insider ownership is better than, worse than or equivalent to state ownership. Earle and Estrin (1996) argue that it should be better, because workers and managers have an incentive to improve efficiency since any improvements are reflected in their own returns. Others argue that insider ownership is associated with non-profit motives to such an extent that the situation will prove as bad as, or worse than, that under state ownership.

Finally, the institutional environment is relevant in determining the impact of privatization. Problems will therefore arise if the institutional environment for the newly privatized firms is too weak to support the improved corporate governance that private ownership is meant to bring. For example, most of the incentives for managers outlined above rely on the operation of either (i) an Anglo-Saxon type of stock exchange, with competing groups of private owners having both the information and the authority to intervene effectively in cases of poor management, or (ii) a German type of independent banking system (or some other form of effective strategic owner such as a foreign firm). Either form of governance relies on some key attributes of a market system. These attributes include the rule of law; a commercial code which, for example, guarantees minority shareholder and debtors’ rights; a bankruptcy code; a clear separation of state and enterprise; accounting standards; transparency in the provision of information; a

liquid stock market; and a commercially sound banking system. Privatization works through sharper incentives for managers, improved corporate governance, and access to private capital markets. However, in an environment in which managers are more easily able to achieve their own objectives through rent seeking, or in which property rights enforcement is so weak that owners cannot prevent management from tunneling out assets (see, for example, Boycko, Shleifer, and Vishny, 1995; McMillan and Woodruff, 2002; Johnson et al., 2000), privatization cannot be guaranteed to improve company performance.

Djankov and Murrell (2002) in their meta-analysis of more than 100 studies of transition find a clear distinction in terms of the impact of privatization between the countries of Central and Eastern Europe and the former Soviet Union. In the former, most studies suggest that privatized firms display better performance than state-owned firms across a variety of measures. However, few studies covering the FSU economies, notably Russia and Ukraine, can identify any significant differences in the performances of state-owned and private firms. Djankov and Murrell suggest two reasons for this. First, privatization in the FSU has typically led to widespread insider ownership that is likely to militate against restructuring and improved performance. Second, the institutional environment was significantly weaker in the FSU, especially with respect to the enforcement of property rights and the development of a legal environment. A particular issue that has recurred in a number of studies was the pervasiveness of soft budget constraints. It is not clear how market incentives and improved capital market disciplines are intended to operate in an environment where firms can exploit the failure to enforce contracts and government subsidies to insure themselves against unfavorable outcomes from the market.

Privatization may improve the corporate governance of former SOEs provided the appropriate institutional arrangements have been set in place. However, former SOEs would face many problems for a number of years in their attempts to restructure and enhance productivity and performance. Thus, there are several reasons to believe that the performance of new firms would be superior:

- SOEs have excessive employment and old capital. It may take years to cut employment to appropriate levels and to invest in new equipment. The latter point depends on the method of privatization and the institutional framework. It is argued that outside owners are in a better position than workers or managers to put in extra money to finance investment.
- Managers are often viewed as the key to improved performance. Changes in ownership only rarely lead to changes in management and often act to entrench existing managers, especially when existing managers acquire ownership rights. This will slow down restructuring because the skills required for successful management in the market economy are quite different to those in the planned economy.
- The “firms” themselves under socialism did not have many of the functions of independent Western enterprises, such as sales, marketing, distribution, supply, finance and investment. These functions typically resided elsewhere in the system (for example, with the central planners or ministries). The restructuring of SOEs is therefore a massive job (see Estrin et al., 1995). In many cases the inherited structures, attitudes and organizational cultures of the old SOEs are so strong that such radical restructuring is impossible or at least very slow to take effect. This may mean that it is easier to satisfy the new demands of the market economy through new organizations (see Kornai, 1990; Estrin, Meyer and Bytchkova, 2005).
- When we consider the structure of supply in the planned economy, and the pattern of demand in the new market economy’s post-price liberalization, we find three major areas of difference:
 - (i) Planned economies are “over-industrialized” and often have large agricultural sectors reflecting residual underdevelopment. The service sector is also under-represented, particularly in key areas that support the market economy (such as logistics or business services). Restructuring therefore requires a shift in the balance of output from industry to

services, and it is not clear whether this is best done by enterprises currently operating primarily in the manufacturing sector. Hence, this type of restructuring will probably rely disproportionately on the entry of new firms.

- (ii) Planned economies do not have a production structure consistent with their comparative advantage at world prices. For most economies this implies a restructuring of output towards exports, and perhaps also a change in trading partners towards the West, primarily the EU. It is possible that this could be done by former SOEs, who might have the advantage of scale, but the sclerosis of institutions suggests that such restructuring would be hard to achieve. Once again, new entry seems a plausible route, although FDI and joint ventures between current and former SOEs and foreign firms may be an alternative way to integrate into the world economy.
- (iii) Planners “solved” the informational problems of planning by allowing only very few firms to operate. Therefore, these firms were gigantic. Hence, when the market was created, market structure was highly imperfect and entry was concentrated in small firms. The weak capital markets and poor property rights that typically prevailed (which meant that entry on a large scale was difficult) exacerbated this tendency. We have seen that this problem remains an issue in Belarus, which still has remarkably few firms, and in which output and employment in the industrial sector are still heavily concentrated in a small number of large firms.

ANNEX 3.2: SPECIFICATION OF HYPOTHESES

Some studies have found it useful to separate the analysis of quantitative performance and qualitative performance (restructuring), and to relate the former to the latter. We follow this approach in our work. We can summarize the discussion in a simple equation,

$$X = f(O, Z), \quad (1)$$

where X is a vector of performance variables that includes measures of quantitative performance (P) and of restructuring (R); O is ownership (three categories: SOE, FSOE and DN); and Z is a vector of control variables that may include restructuring if the performance measures are quantitative. In this situation we therefore explore the relationship:

$$P = F(R, O, Z'). \quad (2)$$

Several control variables (Z) have been employed extensively in the literature to control for other factors that might influence performance:

- Enterprise size: large firms, which can exploit scale economies, may be more productive than smaller ones, especially in the industrial sector. Size can also bring pecuniary benefits: for example, lower input costs or higher prices because of monopoly power.
- Sector: different sectors have different technologies and therefore different capital intensities and factor productivities. They also have different market structures and therefore differences in monopoly power and price-cost margins.
- Region: transition economies can have regionally fragmented markets, so that even for firms in a given sector, regional demand patterns or market structures may vary.
- Other control variables used in this and other studies for the Z vector are the presence of a joint venture, the availability of soft loans, the impact of competition and barter, proxies for managerial quality (e.g., duration of service of the general manager), and insider (managerial) ownership.

ANNEX 3.3: KEY RESULTS OF THE ENTERPRISE RESTRUCTURING SURVEY

Table A3.1: Property Restructuring Measures (% of the sample)

Description of measures	Total sample			
	No measures	Measures are intended	Measures are implemented	Measures have been completed
Change of the organizational structure (closure of some units; establishment of new units)	42.8	14.6	21.4	19.4
Transformation of structural units into independent legal entities	79.8	8.8	3.5	4.3
Sale of unnecessary assets	35.5	20.9	29.7	10.6
Renting out of excessive assets	48.9	10.6	30.2	7.6
Rent or leasing of assets	54.9	15.6	16.1	9.6
Establishment of a subsidiary company	80.6	5.8	2.8	8.3
Establishment of a joint venture	76.3	13.6	2.3	4.3
Sale of subsidiaries, branches or stakes in subsidiaries or branches	93.2	1.8	0.5	1.0
Splitting of the enterprise into 2 or more independent legal entities	88.2	5.5	0.5	2.8
Transformation of the enterprise into holding	90.4	5.3	0.5	1.0
Liability prolongation or writing off	78.8	8.3	6.3	3.3
Debt equity swaps	87.2	5.0	2.8	1.8
Purchase of stakes (shares) or entire enterprises	90.2	3.3	2.3	1.0
Borrowing to pay back the existing debts	72.8	9.6	12.8	2.0
Sale of stakes (shares) of the own enterprise	81.4	8.1	4.3	3.0
Merger (joining up) with another enterprise	87.4	5.8	0.5	2.8

**Table A3.2: Property Restructuring Measures
(by form of ownership, % of the sample)**

Description of measures	SOE				FSOE				DN			
	No measures	Measures are intended	Measures are implemented	Measures have been completed	No measures	Measures are intended	Measures are implemented	Measures have been completed	No measures	Measures are intended	Measures are implemented	Measures have been completed
Change of the organizational structure (closure of some units; establishment of new units)	26.4	19.8	24.2	24.2	41.1	13.2	21.1	23.7	58.6	12.9	19.8	8.6
Transformation of structural units into independent legal entities	73.6	12.1		7.7	78.4	7.4	5.3	5.3	87.1	8.6	3.4	
Sale of unnecessary assets	20.9	23.1	39.6	9.9	32.6	18.4	34.7	10.5	51.7	23.3	13.8	11.2
Renting out of excessive assets	27.5	8.8	49.5	9.9	46.3	9.5	31.6	9.5	69.8	13.8	12.9	2.6
Rent or leasing of assets	58.2	12.1	17.6	5.5	53.2	14.7	16.3	11.6	55.2	19.8	14.7	9.5
Establishment of a subsidiary company	67.0	7.7	2.2	18.7	82.1	4.2	2.6	7.9	88.8	6.9	3.4	0.9
Establishment of a joint venture	75.8	13.2	2.2	4.4	74.2	15.8	1.1	3.7	80.2	10.3	4.3	5.2
Sale of subsidiaries, branches or stakes in subsidiaries or branches	89.0	2.2		1.1	93.7	1.1		1.6	95.7	2.6	1.7	
Splitting of the enterprise into 2 or more independent legal entities	84.6	3.3		4.4	88.4	5.8		3.2	90.5	6.9	1.7	0.9
Transformation of the enterprise into holding	87.9	3.3		1.1	91.6	5.3	0.5	0.5	90.5	6.9	0.9	1.7
Liability prolongation or writing off	65.9	11.0	8.8	7.7	80.0	8.4	5.3	2.6	87.1	6.0	6.0	0.9
Debt equity swaps	84.6	2.2	2.2	4.4	85.8	7.4	2.1	1.1	91.4	3.4	4.3	0.9
Purchase of stakes (shares) or entire enterprises	86.8	3.3	2.2	2.2	90.5	2.1	2.1	1.1	92.2	5.2	2.6	
Borrowing to pay back the existing debts	60.4	12.1	17.6	5.5	72.6	9.5	13.7	0.5	82.8	7.8	7.8	1.7
Sale of stakes (shares) of the own enterprise	83.5	6.6		3.3	72.6	11.6	7.9	4.2	94.0	3.4	1.7	0.9
Merger (joining up) with another enterprise	83.5	3.3	1.1	4.4	87.4	5.3	0.5	3.2	90.5	8.6		0.9

**Table A3.3: Strategic Restructuring Measures
(% of the sample)**

Description of measures	Total sample			
	No measures	Measures are intended	Measures are implemented	Measures have been completed
Staff cuts	54.7	16.2	14.9	11.9
Change of the employment structure	36.3	32.1	22.6	4.7
Introduction of the new forms of goods promotion	12.9	42.0	35.1	6.0
Creation of the new distribution channels	22.9	40.5	26.9	4.0
Attraction of external investors	50.0	34.1	10.4	2.5
Procurement of new equipment	12.2	40.0	36.1	9.2
Introduction of new production technologies	13.9	36.3	37.8	8.2
Improvement of the quality of products / services	5.5	24.1	59.7	8.7
Expansion of the range of products	8.2	23.1	57.0	10.0
Taking unprofitable goods out of production	29.9	20.9	35.3	11.4
Upgrading of the existing products	11.2	24.9	53.2	7.5
Search for new market segments	6.5	39.1	49.3	3.0
Staff training	8.5	24.1	60.7	3.5
Improvement of labor management	8.5	25.1	61.2	2.5
Change of remuneration and motivation schemes	12.7	32.1	45.5	6.7
Strengthening of labor discipline	8.5	13.4	69.2	6.7
Reduction of social expenditures	45.8	17.9	27.6	5.0
Change of staff evaluation system	26.9	32.8	32.1	3.7

Table A3.4: Strategic Restructuring Measures (by form of ownership, % of the sample)

Description of measures	SOE				FSOE				DN			
	No measures	Measures are intended	Measures are implemented	Measures have been completed	No measures	Measures are intended	Measures are implemented	Measures have been completed	No measures	Measures are intended	Measures are implemented	Measures have been completed
Staff cuts	35.5	19.4	21.5	18.3	52.3	13.5	18.7	13.5	74.1	18.1	3.4	4.3
Change of the employment structure	25.8	31.2	28.0	5.4	35.8	30.6	25.4	4.7	45.7	35.3	13.8	4.3
Introduction of the new forms of goods promotion	11.8	36.6	39.8	5.4	13.0	42.5	34.7	5.2	13.8	45.7	31.9	7.8
Creation of the new distribution channels	24.7	36.6	29.0	1.1	21.2	40.9	25.4	5.2	24.1	43.1	27.6	4.3
Attraction of external investors	39.8	41.9	9.7	3.2	50.3	35.2	8.8	2.6	57.8	25.9	13.8	1.7
Procurement of new equipment	10.8	37.6	39.8	5.4	8.8	42.5	36.8	10.4	19.0	37.9	31.9	10.3
Introduction of new production technologies	7.5	37.6	44.1	3.2	14.5	34.2	40.9	7.3	18.1	38.8	27.6	13.8
Improvement of the quality of products / services	4.3	26.9	60.2	3.2	3.6	20.7	68.4	6.2	9.5	27.6	44.8	17.2
Expansion of the range of products	5.4	19.4	63.4	8.6	6.2	22.8	63.2	6.2	13.8	26.7	41.4	17.2
Taking unprofitable goods out of production	21.5	28.0	38.7	7.5	25.9	18.1	42.0	11.4	43.1	19.8	21.6	14.7
Upgrading of the existing products	8.6	26.9	55.9	3.2	11.4	20.2	59.1	6.2	12.9	31.0	41.4	12.9
Search for new market segments	5.4	35.5	51.6	2.2	5.2	37.8	52.3	3.1	9.5	44.0	42.2	3.4
Staff training	5.4	17.2	69.9	1.1	6.7	21.8	66.8	1.6	13.8	33.6	43.1	8.6
Improvement of labor management	5.4	20.4	66.7	1.1	5.7	23.8	66.8	1.6	15.5	31.0	47.4	5.2
Change of remuneration and motivation schemes	9.7	22.6	55.9	6.5	12.4	29.5	46.6	8.3	15.5	44.0	35.3	4.3
Strengthening of labor discipline	4.3	8.6	72.0	10.8	4.7	7.8	80.8	4.7	18.1	26.7	47.4	6.9
Reduction of social expenditures	40.9	12.9	33.3	5.4	42.5	18.1	29.5	6.2	55.2	21.6	19.8	2.6
Change of staff evaluation system	22.6	31.2	34.4	4.3	22.8	35.8	34.2	2.1	37.1	29.3	26.7	6.0

List of variables used in the regression analysis

SL	Sales per worker (productivity proxy)
DSL	Changes in Sales per worker (changes in productivity proxy)
EXP	Export to sales ratio
DEX	Recent changes in Export
DEX1	Recent changes in Export to the West
PS	Profitability (profit to sales)
DEMP	Changes in Employment
PR	Property restructuring
SR	Strategic restructuring
DN	De novo
PF	FSOE with majority state ownership
PF1	FSOE with majority private ownership
MAN	Ownership of the firm by managers
IND1	Machinery and metalworking industry
IND2	Timber, woodworking, pulp and paper industry
IND3	Construction materials industry
IND4	Light industry
IND5	Food processing industry
GEO	Regional dummy: firms located in Minsk
LOS	Length of service (managerial turnover)
JV	Joint venture
SBC	Soft budget constraints (important)
SBC1	Soft budget constraints (present)
COMP	Competition
EMP	Employment

Table A3.5: Performance Equations: Productivity and Profitability Levels

	Productivity (SL)			Profitability (PS)		
	(1)	(2)	(3)	(1)	(2)	(3)
DN	0.022	0.017	0.033	-0.107	-0.061	-0.044
	0.203	0.154	0.245	-0.986	-0.519	-0.32
PF	0.106	0.104	0.178	-0.113	-0.143	-0.122
	0.811	0.786	1.197	-0.876	-1.068	-0.792
PF1	-0.205*	-0.207*	-0.254**	0.182	0.261**	0.252*
	-1.828	-1.83	-2.008	1.598	2.202	1.858
MAN	0.194**	0.195**	0.173*	0.029	0.033	0.003
	2.154	2.152	1.813	0.347	0.381	0.034
IND1	0.136	0.136	0.146	-0.178*	-0.182*	-0.111
	1.428	1.423	1.412	-1.881	-1.917	-1.066
IND2	0.143*	0.142*	0.182**	-0.124	-0.1	-0.022
	1.823	1.811	2.185	-1.562	-1.245	-0.256
IND3	-0.034	-0.034	-0.04	-0.129	-0.136*	-0.11
	-0.427	-0.433	-0.463	-1.633	-1.681	-1.228
IND4	-0.006	-0.006	-0.016	-0.135	-0.088	-0.001
	-0.069	-0.068	-0.171	-1.565	-1.016	-0.014
IND5	0.038	0.038	0.037	-0.077	-0.081	-0.031
	0.453	0.444	0.405	-0.931	-0.959	-0.333
GEO	-0.045	-0.046	-0.079	-0.013	-0.04	-0.105
	-0.565	-0.568	-0.885	-0.161	-0.489	-1.119
LOS	0.045	0.043	0.025	-0.077	-0.078	-0.109
	0.591	0.548	0.292	-1.037	-1.013	-1.276
JV	-0.012	-0.012	-0.032	0.065	0.042	0.006
	-0.174	-0.162	-0.397	0.933	0.588	0.078
SBC	-0.052	-0.05	-0.093	0.003	0.023	0.049
	-0.663	-0.637	-1.032	0.033	0.291	0.54
SBC1	-0.095	-0.093	-0.068	0.052	0.035	0.055
	-1.187	-1.152	-0.749	0.655	0.438	0.597
COMP	-0.158**	-0.158**	-0.192**	-0.038	-0.058	-0.032
	-2.28	-2.26	-2.509	-0.567	-0.84	-0.414
EMP		-0.013	-0.049		0.108	-0.082
		-0.159	-0.538		1.329	-0.882
PR			-0.017			-0.117
			-195			-1.326
SR			0.012			0.045
			0.142			0.513
R2	0.102	0.102	0.131	0.071	0.099	0.078

Figures below the estimated coefficients are t statistics. * Denotes significance at 10% level, ** at 5% level and *** at 1% level.

Table A3.6: Performance Equations: Export Levels and Recent Export Growth

	Exports (EXP)			Change in Exports (DEX)		Change in Exports to the West (DEX1)	
	(1)	(2)	(3)	(1)	(2)	(1)	(2)
DN	0.162*	0.26***	0.341***	0.284	0.302	0.707	0.225
	1.806	2.683	3.118	0.927	0.869	1.429	0.368
PF	0.081	0.106	0.174	-0.019	-0.096	0.041	-0.493
	0.747	0.946	1.408	-0.051	-0.217	0.08	-0.784
PF1	0.019	0.071	0.046	0.471	0.543	-0.674	-6.596
	0.203	0.712	0.411	1.285	1.271	-0.88	0
MAN	0.067	0.07	0.055	-0.127	-0.143	-0.018	0.313
	0.96	0.993	0.746	-0.52	-0.55	-0.043	0.606
IND1	0.267***	0.292***	0.253***	0.049	-0.011	0.813	0.513
	3.263	3.593	2.89	0.189	-0.039	1.385	0.733
IND2	0.047	0.077	0.09	-0.635*	-0.557	1.431**	1.369*
	0.695	1.135	1.268	-1.85	-1.411	2.133	1.775
IND3	-0.054	-0.03	-0.039	-0.725**	-0.749*	-4.757	-4.935
	-0.786	-0.444	-0.53	-1.979	-1.952	0	0
IND4	0.278***	0.231***	0.233***	-0.339	-0.45	0.612	0.385
	3.759	3.156	2.951	-1.179	-1.431	0.874	0.467
IND5	-0.019	-0.004	0.007	-0.914***	-0.98***	1.367**	1.244
	-0.277	-0.053	0.091	-2.796	-2.715	2.095	1.622
GEO	-0.275***	-0.251***	-0.266***	-0.761***	-0.722***	-0.694*	-0.527
	-4.154	-3.654	-3.513	-3.65	-3.016	-1.878	-1.23
LOS	-0.204***	-0.163**	-0.222***	-0.232	-0.328	-0.253	-0.414
	-3.25	-2.531	-3.187	-1.145	-1.475	-0.765	-1.056
JV	0.014	-0.013	-0.039	-0.449	-0.236	-0.052	0.134
	0.233	-0.224	-0.611	-1.586	-0.718	-0.122	0.232
SBC	0.144*	0.129*	0.102	0.297	0.283	0.344	0.472
	1.769	1.953	1.352	0.831	0.656	0.85	0.937
SBC1	0.17**	0.114*	0.15**	0.246	0.19	.622*	0.617
	2.555	1.678	2.025	1.117	0.764	1.695	1.351
COMP	0.082	0.111*	0.071	0.121	0.043	0.133	0.065
	1.445	1.93	1.134	0.618	0.2	0.402	0.166
EMP		0.257***	0.23***	0.000***	0**	0.000**	0
		3.785	3.036	2.736	2.156	2.455	1.075
PR			-0.091		-0.219		0.514
			-1.22		-0.257		0.428
SR			0.097		0.931*		0.629
			1.376		1.948		0.72
R2	0.37	0.41	0.414				

Figures below the estimated coefficients are t statistics. * Denotes significance at 10% level, ** at 5% level and *** at 1% level.

Table A3.7: Performance Equations: Productivity and Employment Growth

	Productivity Growth (DSL)		Employment Growth (DEMP)		
	(1)	(2)	(1)	(2)	(3)
DN	-0.66**	-0.569*	0.074	0.092	0.103
	-2.256	-1.711	0.73	0.873	0.861
PF	-0.116	-0.037	0.053	0.062	0.026
	-0.317	-0.088	0.437	0.5	0.184
PF1	-0.252	-0.445	0.27**	0.277**	0.325***
	-0.718	-1.089	2.533	2.579	2.68
MAN	-0.213	-0.277	-0.141*	-0.142*	-0.144*
	-0.921	-1.115	-1.754	-1.764	-1.692
IND1	0.173	0.068	-0.094	-0.095	-0.078
	0.642	0.215	-1.108	-1.113	-0.838
IND2	0.173	0.32	-0.008	-0.006	-0.027
	0.529	0.837	-0.111	-0.084	-0.343
IND3	0.665**	0.668*	0.03	0.031	0.035
	1.982	1.865	0.405	0.426	0.426
IND4	0.931***	0.719**	-0.18**	-0.181	-0.157*
	3.289	2.24	-2.33	-2.338	-1.86
IND5	0.431	0.502	-0.146*	-0.144	-0.142*
	1.419	1.483	-1.948	-1.917	-1.742
GEO	-0.115	-0.106	0.031	0.032	0.046
	-0.562	-0.449	0.415	0.427	0.564
LOS	-.340*	-0.274	0.065	0.073	0.085
	-1.732	-1.239	0.939	1.041	1.118
JV	-0.107	-0.379	-0.01	-0.013	-0.026
	-0.392	-1.183	-0.161	-0.198	-0.361
SBC	0.357	-0.068	-0.041	-0.047	-0.046
	1.058	-0.175	-0.578	-0.653	-0.566
SBC1	0.576***	0.706***	-0.066	-0.072	-0.079
	2.716	2.814	-0.898	-0.977	-0.96
COMP	0.236	0.127	-0.018	-0.02	0.027
	1.285	0.608	-0.287	-0.321	0.392
EMP	0	0		0.047	0.069
	0.831	0.698		0.635	0.827
PR		-0.32			0.041
		-0.407			0.516
SR		1.209***			-0.046
		2.704			-0.592
R2			0.129	0.13	0.146

Figures below the estimated coefficients are t statistics. * Denotes significance at 10 percent level, ** at 5 percent level and *** at 1 percent level.

Table A3.8: Performance Equations: Property and Strategic Restructuring

	Property (PR)			Strategic (SR)		
	(1)	(2)	(3)	(1)	(2)	(3)
DN	-0.206**	-0.156	-0.24	-0.318***	-0.29***	-0.368
	-2.142	-1.498	-0.643	-3.385	-2.78	-1.257
PF	0.147	0.118	0.126	0.024	-0.005	-0.005
	1.263	0.954	0.292	0.205	-0.038	-0.012
PF1	-0.255**	-0.202*	-0.304	-0.149	-0.096	-0.138
	-2.539	-1.868	-0.701	-1.463	-0.873	-0.387
MAN	-0.1	-0.098	-0.141	-0.115	-0.1	-0.132
	-1.365	-1.284	-0.475	-1.581	-1.3	-0.6
IND1	-0.12	-0.121	-0.194	-0.012	-0.001	-0.004
	-1.467	-1.447	-0.571	-0.144	-0.015	-0.015
IND2	-0.02	-0.009	-0.039	0.06	0.083	0.175
	-0.283	-0.122	-0.09	0.877	1.166	0.533
IND3	-0.039	-0.025	-0.077	0.046	0.059	0.119
	-0.55	-0.343	-0.174	0.661	0.804	0.374
IND4	0.052	0.044	0.096	0.223***	0.217***	0.363
	0.704	0.595	0.272	3.028	2.87	1.302
IND5	0	0.012	0.048	0.085	0.085	0.155
	0	0.159	0.124	1.199	1.152	0.519
GEO	-0.046	-0.05	-0.067	-0.002	0.007	0.007
	-0.662	-0.687	-0.254	-0.033	0.101	0.034
LOS	-0.131**	-0.116*	-0.187	-0.103	-0.111	-0.144
	-1.985	-1.697	-0.75	-1.604	-1.628	-0.749
JV	0.065	0.042	0.085	0.032	0.004	0.008
	1.056	0.654	0.252	0.509	0.066	0.03
SBC	0.152**	0.156**	0.235	0.089	0.094	0.2
	2.244	2.155	0.662	1.34	1.328	0.613
SBC2	0.096	0.073	0.125	0.09	0.068	0.089
	1.356	0.996	0.45	1.293	0.921	0.419
COMP	0.098*	0.098	0.157	0.137**	0.137**	0.187
	1.656	1.586	0.649	2.328	2.208	1.022
EMP		0.128*	0		0.091	0
		1.714	0.58		1.276	0.579
R2	0.233	0.247		0.227	0.222	

Figures below the estimated coefficients are t statistics. * Denotes significance at 10 percent level, ** at 5 percent level and *** at 1 percent level.

CHAPTER 4

TRADE AND GROWTH

4.1 Belarus is a small open economy with a merchandise trade turnover to GDP ratio of 111 percent on average for the period 1996-2004 (and 123 percent on average for 2001-04). This chapter describes Belarus' external trade developments and gives special attention to the recent changes in the geographic and commodity structure of trade, to the role played by price and non-price factors in trade growth, and to the factor intensity of trade. To better understand Belarus' trade performance, the analysis is based on comparisons with neighboring countries. The chapter also looks at the main features of Belarus' trade regime and reviews the status of the country's WTO negotiation process.

A. OVERVIEW OF TRADE PERFORMANCE

4.2 **Trade performance in the early years of independence.** Belarus inherited an extensive and diversified industrial base and an educated labor force from the USSR. As a consequence of its industrial structure (Belarus was an assembly line for the entire USSR), in the Soviet era, Belarus was highly dependent on trade in general and on inter-republican trade in particular. For Belarus, total and intra-republican trade as a percentage of GNP was the highest among the former USSR republics and above that of the Central and Eastern European CMEA members.⁵⁶ Prior to independence, Belarus specialized in the production and export of chemicals, automotive and agricultural machinery and equipment, machine tools, and some agricultural products (flax, potatoes, and meat).

4.3 Under the USSR, the geographical and commodity patterns of Belarus' trade were highly distorted. In the USSR the Russian Federation was the focal trading partner, serving as the major export market and the most important sourcing market, especially for energy resources.

4.4 An analysis of trade in the CIS area during the first years of independence is complicated by the limited reliability of the available data.⁵⁷ Belarus' exports and imports contracted substantially during 1992-93 owing to a number of factors (the breakup of production links, macroeconomic instability, an adverse shock related to a sharp increase in the relative prices of energy and raw materials, etc.), but they began to recover in 1994-95. This early recovery was driven largely by the BYR depreciation and reintegration with Russia.⁵⁸

4.5 **Since 1996, Belarus' trade performance has been mixed.** During the first period of growth (1996-2000) trade volumes fluctuated considerably. However, growth in exports was stronger on average than in imports, which led to improvements in trade and current account balances. During the second period, expansion in both exports and imports was quite strong, and

⁵⁶ Michalopoulos and Tarr (1995).

⁵⁷ See Belkindas and Ivanova (1996) for an overview of the problems of foreign trade statistics in the CIS after the breakup of the USSR.

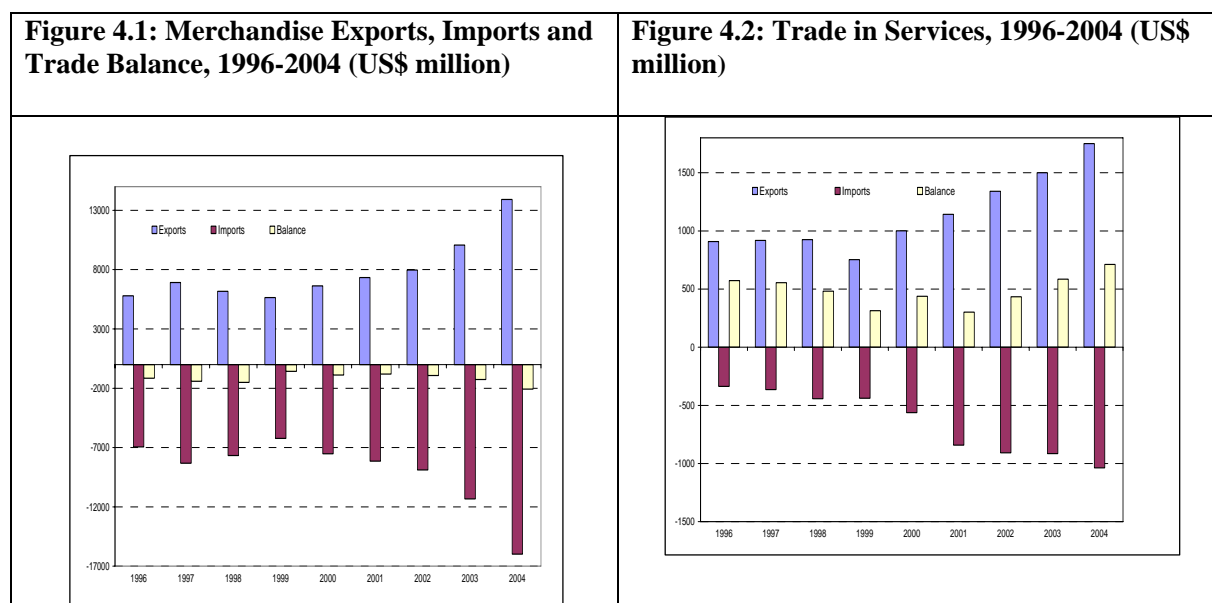
⁵⁸ For more on initial conditions and on Belarus' trade in the early years of independence, see Bakanova and Vinhas De Souza (2002) and Bakanova et al. (2004). An analysis of the role played by trade with Russia is presented in Section C of this chapter.

trade and current account deficits as a percent of GDP were relatively stable. The hike in imports in 2004 led to a sharp deterioration in the trade and current account deficits, to 9 and 4.6 percent of GDP (Table 4.1 and Figure 4.1).

Table 4.1: Merchandise Trade Dynamics, 1996-2004

US\$ million	1996	2000	2004	2004/2000
Exports, f.o.b.	5,790	6,641	13,917	
Exports index, 1996=100	100	115	240	210
Imports, f.o.b.	6,939	7,525	15,983	
Imports index, 1996=100	100	108	230	212
Trade balance	-1149	-884	-2,066	
Trade balance index, 1996=100	100	77	180	234
<i>Memorandum items</i>				
Trade balance, % GDP	-8.0	-6.8	-9.0	-2.3
Current account, % GDP	-3.6	-2.6	-4.6	-2.0

Source: NBB.



Source: NBB.

Source: NBB.

4.6 Belarus runs a strong positive balance in trade in services, which compensates in part for its negative balance in trade in merchandise goods. Exports of services were fairly stable during 1996-98 and even contracted in 1999, largely because of the reduction in demand from Russia after the Russian crisis. Since 2000, growth rates for both exports and imports of services have been high, and the surplus in trade in services amounted to 3.1 percent of GDP in 2004, a 60 percent increase in nominal terms as compared to 2000 (Figure 4.2).

4.7 Given Belarus' strategic location between the EU and Russia, it is not surprising that transport services are the most important category, accounting for about 60 percent of total

exports of services. Exports of transport services more than doubled during the period 1996-2004 and amounted to 4.4 percent of GDP in 2004 (as compared with 3.3 percent in 1996). To date, Belarus has been fairly successful in exploiting its location advantages: its export proceeds from transportation services (excluding the pipelines) as reflected in its balance of payments, grew in 1999-2003 at a rate that was 1.6 times higher than the growth in the non-energy trade between Russia and the EU. Within the category of transport services, the most important services are pipeline, railway and cargo services. Pipeline transport services accounted for 36 percent of total transport services in Belarus in 2004 as compared to over 50 percent in Ukraine.

4.8 In this section we will concentrate on merchandise trade only. The policy issues related to trade in services are discussed later in this chapter as part of the analysis of Belarus' WTO accession process.

4.9 **Belarus' trade performance in a comparative perspective.** A better understanding of Belarus' trade performance could be obtained by its comparison with other countries in the region (Table 4.2). A simple indicator of openness (merchandise trade turnover in relation to GDP) suggests that Belarus is a more open economy than neighboring countries, including Lithuania, which is smaller in terms of both size and population.

Table 4.2: Indicators of Trade Performance: Belarus and Selected European Countries

All data for 2003 in US\$ million unless otherwise stated	Belarus	Ukraine	Russia	Poland	Lithuania	Germany	EU-15
Export of goods per capita, US\$	1022.7	490.9	947.7	1597.2	2217.2	9122.8	7622.0
Export of goods, ratio to GDP, percent	56.7	47.9	31.4	29.1	42.0	31.4	27.6
Import of goods per capita, US\$	1150.2	480.2	530.4	1747.1	2710.6	7285.7	5794.3
Import of goods, ratio to GDP, percent	63.8	46.9	17.5	31.8	51.4	25.1	21.0
Trade balance, ratio to GDP, percent	-7.1	1.05	13.8	-2.7	-9.4	6.3	6.6
Openness, percent	120.5	94.8	48.9	61.0	93.5	56.4	48.6
Export of goods growth, percent, average for 1996-2003	8.2	6.2	6.1	12.0	12.2	5.4	4.3
Import of goods growth, percent, average for 1996-2003	7.3	2.3	1.6	9.7	11.7	4.1	1.1
Share of manufacturing (groups 5-8 excluding 68, using the SITC revision 3) exports in export of goods, percent*	61.8	67.3	21.2	81.2	62.9	84.0	80.6
Share of CIS in export of goods, percent	54.6	27.5	14.1	6.7	17.0	2.5	1.8
Net FDI per capita, cumulative for 1996-2003, US\$	193.6	117.0	18.0	1181.9	1015.6	-290.2	-1852.6
Net FDI, ratio to GDP, percent, average for 1996-2003	1.8	1.8	0.1	3.4	3.9	-0.001	-1.1

* 2002 for Ukraine.

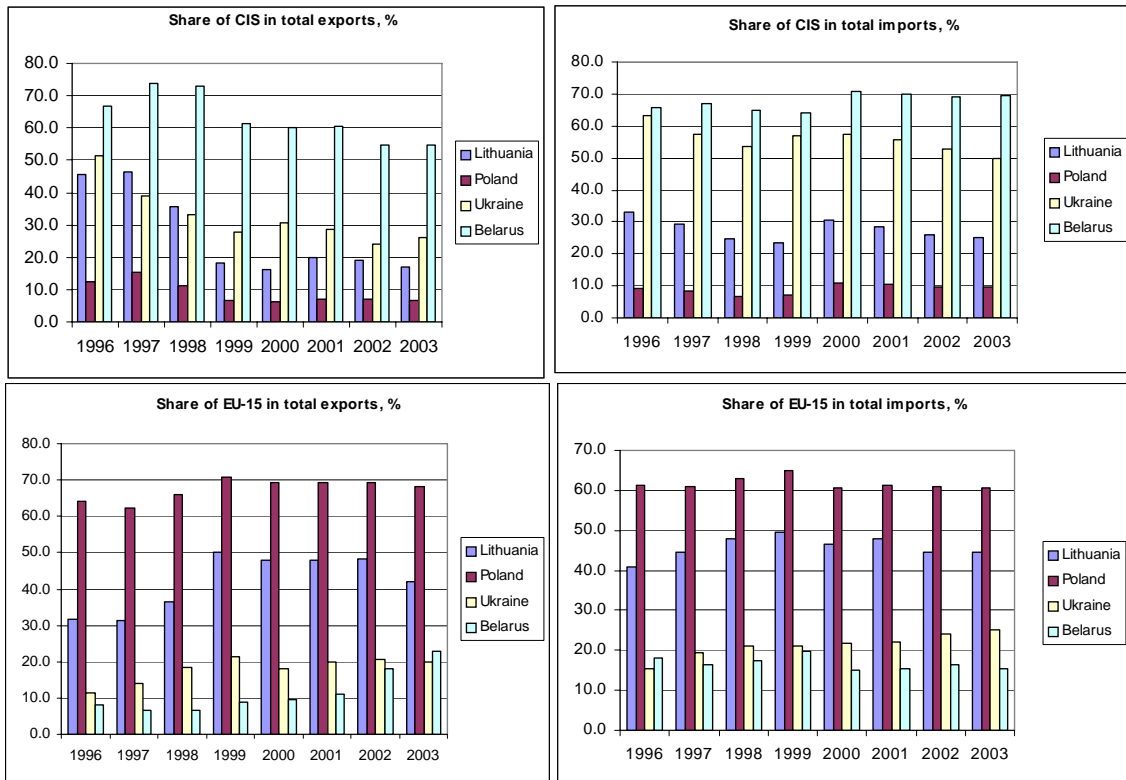
Sources: WITS/COMTRADE, DOTS, IFS, WDI, NBB, and World Bank staff calculations.

4.10 While for some indicators for the period under consideration Belarus outperformed its CIS neighbors (Russia and Ukraine), comparisons with Poland and Lithuania are less favorable. Thus, exports per capita and net FDI per capita, and rates of exports growth are much lower in Belarus than in its western neighbors. In terms of trade deficit, only Lithuania has a larger deficit (in relation to GDP) but, however, unlike Belarus, Lithuania has better opportunities to finance the difficult with a much stronger FDI inflow. The share of manufacturing exports in total exports for Belarus is high but is somewhat lower than in Lithuania and Ukraine and significantly lower than in Poland. The most striking difference relates to the share of CIS countries in Belarusian exports, which indicates a much slower path of foreign trade diversification and much stronger remaining ties with the FSU and, in particular, with Russia.

4.11 **Belarus retained quite a high share of CIS trade, but trade diversification outside of the CIS market has been ongoing.** Thus, the share of CIS exports fell from two-thirds of total exports in 1996 to

52.4 percent in 2004 (Figure 4.3). However, trade reorientation in Belarus is taking place at a much slower pace than in other transitional economies, with the share of CIS in total exports being almost twice as high as that in Ukraine (26 percent), not to mention Lithuania (17 percent) and Poland (7 percent).

Figure 4.3: Trade Reorientation: Belarus and Neighboring Countries, 1996-2003



Sources: WITS/COMTRADE, DOTS, CISSTAT.

4.12 For Belarus, Russia remains by far the major trading partner. Russia's share in Belarus' total exports fell from 65 percent in 1998 to 47 percent in 2004 (i.e., still accounting for about half of total exports and about 90 percent of CIS exports)(Table 4.3). Russia's share in Belarus' imports, which increased from 55 percent in 1998 to 68 percent in 2004, is even larger (Table 4.4). Another important trading partner of Belarus' in the CIS is Ukraine. However, exports to Ukraine declined in both absolute and relative terms in 2001-04, and are now below 4 percent of the total.

4.13 Both the EU-15 and the new EU members are Belarus' important non-CIS trading partners. The share of the EU-15 in Belarus' exports has been growing constantly and accounted for 24 percent of total exports in 2004 (as compared to 6.8 percent in 1998 and 11.0 percent in 2001) (Table 4.3). This growth has accelerated recently. However, this pickup in exports to the EU should be treated with caution: most of the growth occurred at the expense of a sharp increase in exports of oil products, from US\$545 million in 1998 to almost 3.6 billion in 2004. The total share of refinery products in Belarus' total exports increased from 7.7 percent to 26.2 percent during this period. This was largely due to the very high growth in exports of refinery products to the United Kingdom, Germany and the Netherlands. For example, refinery products accounted for 94.4 percent of Belarus' total exports to the United Kingdom in 2004 as compared to 12.8 percent in 1998.

Table 4.3: Geographical Structure of Merchandise Exports, 1998-2004 (%)

	1998	2000	2001	2002	2003	2004	2004/2000 % change	2004-2000 change
Total	100	100	100	100	100	100	88	
CIS	73.0	60.1	60.3	54.7	54.8	53.1	65.6	-7.0
Ukraine	5.5	7.6	5.7	3.4	3.5	3.9	-3.6	-3.7
Russia	65.2	50.7	53.2	49.6	49.3	47.0	73.9	-3.7
Others of CIS	2.3	1.8	1.5	1.7	2.1	2.1	126.6	0.4
ROW	27.0	39.9	39.7	45.3	45.2	46.9	120.6	7.0
EU - 15	6.8	9.4	11.0	18.0	22.9	24.0	378.4	14.6
Germany	2.8	3.2	3.2	4.3	4.2	3.7	117.0	0.5
Great Britain	0.5	1.3	3.0	6.2	9.4	8.3	1096.7	7.0
Italy	1.0	1.0	1.1	1.6	1.4	1.0	88.0	0.0
New member countries - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia	2.4	6.4	6.6	6.5	3.5	2.4	-30.2	-4.0
Lithuania	2.2	4.8	3.7	3.2	2.7	2.6	2.2	-2.2
Poland	2.6	3.8	3.3	3.4	4.4	5.3	163.3	1.5
China	1.4	1.9	1.9	2.7	1.6	2.2	121.3	0.3
USA	1.5	1.4	1.0	1.1	1.0	1.2	64.0	-0.2
Brazil	0.8	0.9	1.0	1.1	1.1	1.1	122.2	0.2

Source: World Bank staff calculations based on MSA and WITS/COMTRADE data.

Table 4.4: Geographical Structure of Merchandise Imports, 1998-2004 (%)

	1998	2000	2001	2002	2003	2004	2004/2000 % change	2004-2000 change
Total	100	100	100	100	100	100	92.5	
CIS	65.0	70.8	70.0	69.2	69.3	72.2	96.3	1.4
Ukraine	8.7	4.0	3.3	3.2	3.1	3.3	60.0	-0.7
Russia	54.6	65.3	65.6	65.1	65.4	68.2	100.8	2.8
Others of CIS	1.7	1.5	1.0	0.9	0.7	0.7	-5.2	-0.7
ROW	35.0	29.2	30.0	30.8	30.7	27.8	83.3	-1.4
EU - 15	17.5	15.2	15.3	16.3	15.4	13.7	73.8	-1.5
Germany	8.9	6.9	7.3	7.6	7.1	6.6	84.0	-0.3
Great Britain	1.4	1.3	0.7	0.7	0.7	0.8	20.7	-0.5
Italy	2.1	1.9	2.0	2.4	2.5	1.8	84.8	-0.1
New member countries - 10	8.8	6.3	5.7	5.5	6.4	6.1	86.5	-0.2
Latvia	0.7	0.3	0.4	0.4	0.4	0.5	186.2	0.2
Lithuania	2.4	0.8	1.3	1.2	1.3	1.1	154.5	0.3
Poland	3.3	2.5	2.4	2.4	3.0	2.9	120.1	0.4
China	0.5	0.6	0.5	0.5	0.6	1.0	233.5	0.4
USA	1.5	1.6	1.6	1.1	1.3	1.2	41.0	-0.4
Brazil	0.6	0.5	0.7	1.1	0.8	0.6	129.2	0.1

Source: World Bank staff calculations based on MSA and WITS/COMTRADE data.

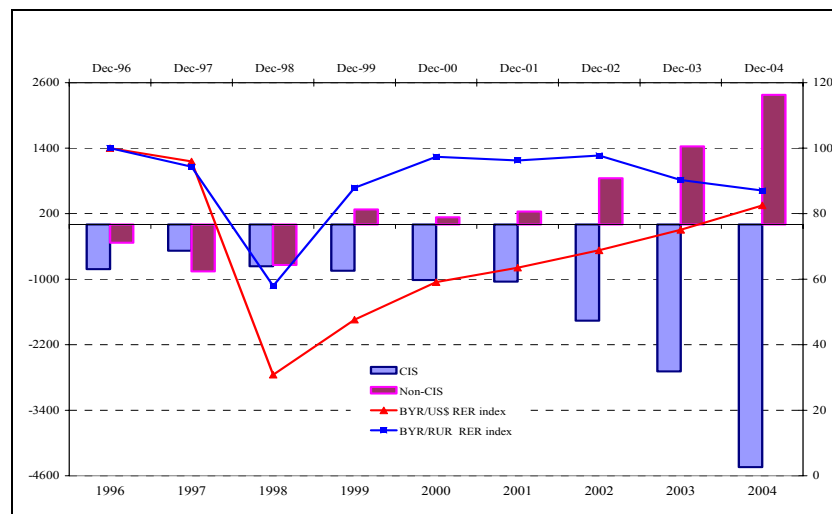
4.14 Overall, given its location, the importance of the EU as Belarus' trade partner remains very moderate and trade with the EU is significantly lower, not only compared to new EU members, but also compared to other European CIS countries. In 2001, the ratios of actual to projected volumes of trade with the EU ("realization ratios") were 1.4 for Moldova, 1.1 for the Russian Federation, 1.0 for Ukraine, but only 0.6 for Belarus.⁵⁹ Although trade restrictions from both sides contributed to this outcome, the major cause is related to the slow pace of the restructuring of the Belarusian economy.

4.15 **Since 2000, the impact of movements in real exchange rates on Belarusian trade is the opposite of what might be expected.** A sharp BYR depreciation vis-à-vis the currencies of major trading partners in 1997-98, as anticipated, led to an improvement in the trade balance. However, since end-2000, bilateral real BYR/RUR

⁵⁹ Freinkman, Polyakov, and Revenco (2004).

and BYR/US\$ exchange rates have been moving in opposite directions and their impact has become different from what might be expected. By the end of 2004, as compared to 2000, the BYR appreciated in real terms vis-à-vis the US dollar by 23.4 p.p. During this period, the balance of trade with non-CIS countries not only remained positive, but the surplus increased dramatically (from US\$133 million to US\$2,375 million). At the same time, the BYR depreciated (mostly in 2003-04) by 10.3 p.p. vis-à-vis the RUR. However, the balance of trade with the CIS did not improve but deteriorated substantially (from US\$1,017 million to US\$4,441 million), which also led to the overall worsening of the trade balance (Figure 4.4a).

Figure 4.4a: Trade Balance by Export Markets (US\$ million) and Bilateral Real Exchange Rates Indices (1996=100), 1996-2004



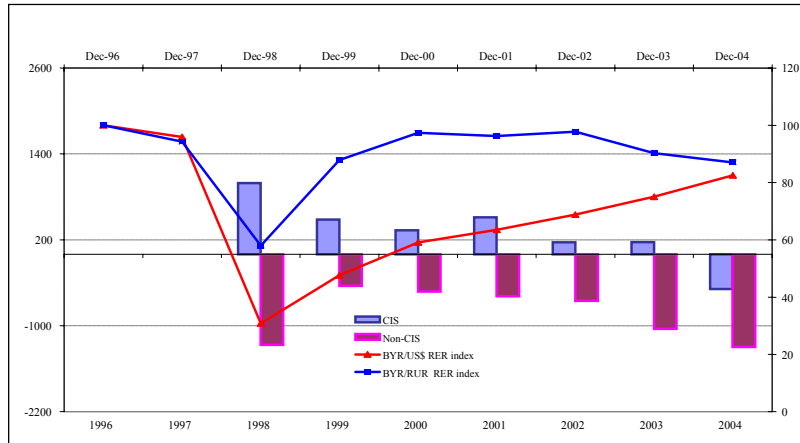
Source: World Bank staff calculations based on IMF, NBB, and WITS/COMTRADE data.

4.16 However, the above discrepancy between trade and real exchange movements could be partially explained if one looks at trade aggregates that exclude trade in energy resources.⁶⁰ Belarusian trade in energy is somewhat less sensitive to real exchange rate movements. Figure 4.4b reveals that, as expected, real BYR appreciation vis-à-vis the US dollar in 2000-04 has been associated with the deterioration in the balance of non-energy trade with non-CIS countries: the deficit widened from US\$523 million in 2000 to US\$1,297 million in 2004. However, the impact of real BYR depreciation vis-à-vis the RUR on trade with Russia was less straightforward: the 2002 surplus of US\$165 million increased only marginally in 2003, but it suddenly turned into a deficit of US\$488 million in 2004. There are three possible explanations for such an unexpected outcome. First, it might be an indication of the lower sensitivity of Belarus' trade with the CIS to market signals, as well as a higher importance of other factors. Second, this could be a one-off effect related to the changes in the principle of VAT taxation in trade with Russia (from origin to destination) from January 1, 2005. In anticipation of this change, imports from Russia in the fourth quarter of 2004 rocketed by two-thirds, as compared to the corresponding period in 2003, while exports increased by less than 30 percent. This resulted in a trade deficit that was almost 2.5 times higher than in the fourth quarter of 2003.⁶¹ Third, it is still possible that the growth in the deficit of non-energy trade with Russia despite the depreciation of the Belarusian currency may signal deterioration in the competitiveness of Belarusian exporters. Stronger evidence that this indeed may be occurring is presented in Chapter 2 on the basis of a comparative analysis of unit labor costs in industry. Future developments in this area will have to be monitored closely.

⁶⁰ Energy resources are HS 2709, 2710, 2711.

⁶¹ Here we are talking about total imports from and exports to Russia due to the inability to deduct energy trade from total trade on a quarterly basis.

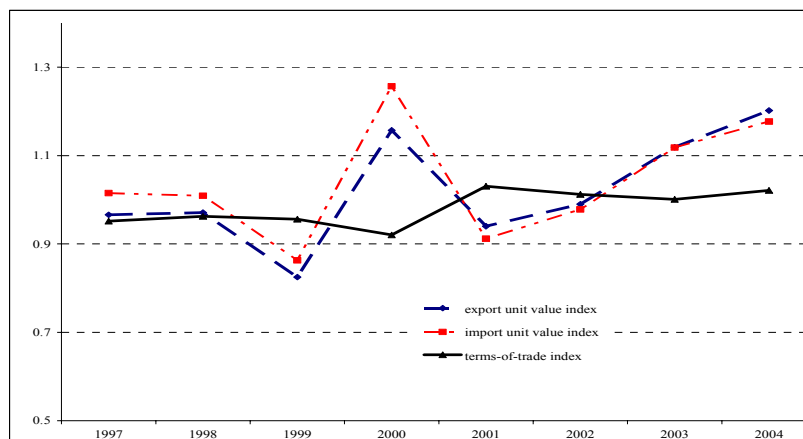
Figure 4.4b: Trade Balance Net of Energy Resources by Export Markets (US\$ million) and Bilateral Real Exchange Rates Indices (1996=100), 1996-2004



Source: World Bank staff calculations based on IMF, NBB, and WITS/COMTRADE data.

4.17 **Belarus has benefited from the improvements in its Terms of Trade (TOT) since 2000.** Fluctuations in TOT have been driven largely by the price dynamics for gas, oil and oil refinery products. As is shown later in this chapter, Belarus' imports are dominated by energy resources, so that average import unit values are largely affected by the dynamics of energy (first of all, oil and gas) prices. At the same time, Belarus is able to compensate for an increase in the prices of imported oil by increasing the export values of refinery products. Net changes in TOT then depend on movements in relative prices for crude oil and refinery products. Figure 4.5 shows that export and import unit values in Belarus have been strongly correlated and also illustrates a fairly significant average improvement in TOT in 2001-04 relative to the earlier period. As compared to 1997, in 2004 TOT were more favorable for Belarus by 7 p.p. TOT improvements were even more significant, by 10 p.p., relative to a bottom point of 2000, when a hike in crude oil prices was well in excess of the respective adjustments in the prices of refinery products.

Figure 4.5: Terms of Trade Index, 1997-2004

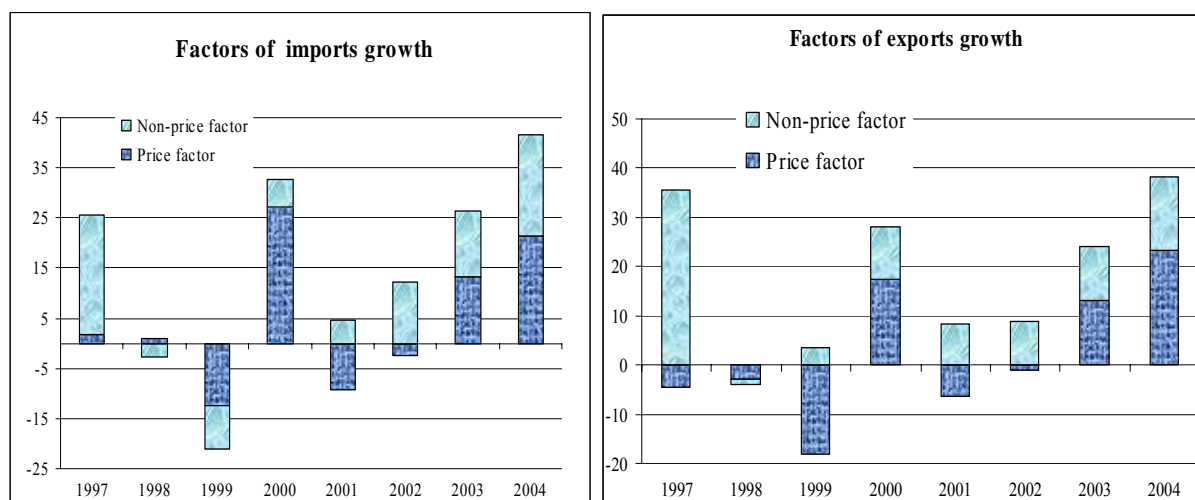


Source: World Bank staff estimates based on MSA and NBB data.

4.18 **Improvements in TOT, while not explaining the overall growth dynamics in Belarus, clearly provided essential income and growth support to the economy in the recent past.** That is, the combined export and import price dynamics has been favorable for growth in Belarus. This is an important finding, because the traditional analysis of developments in Belarusian trade tends to be too closely focused on the negative trends associated with growth in the import prices of gas and other energy sources, while the positive effect of export price dynamics remains unappreciated.

4.19 **The impact of the price factor on overall export growth has been significant, especially in 2000 and 2003-04.** Figure 4.6 presents a decomposition of growth in export and import volumes into the contribution of price and non-price factors. It is interesting to note that the largest contribution of the non-price factor (an increase in physical volumes) to both export and import growth was observed in 1997 – the year of the highest economic growth in Belarus. This was due to a sharp increase in export volumes to Russia, driven by an increase in demand due to the initial recovery of the economy, the acceleration of the Belarus-Russia integration process, and relative price changes. In general, all growth of exports during 1997-99 was due to the increase in the physical volumes of trade, which was high enough to compensate for the adverse effects of the price factor. Figure 4.6 also suggests that since 2001 a different pattern has emerged -- a contribution of the non-price factor has been positive in each year and growing, while the contribution of the price factor has been growing at an even higher rate (although from the negative value in 2001). As a result, for the entire period 2001-04 the contributions of both price and non-price factors to export growth were positive and significant, with the non-price factor being responsible for almost two-thirds (63 percent) of total export growth and the rest being attributed to price effects.

Figure 4.6: Price and Non-price Factors of Growth in Exports and Imports, 1997-2004 (%)



Source: World Bank staff estimates based on MSA and NBB data.

4.20 **The commodity structure of trade was relatively stable and was mostly affected by the increase in the share of mineral products.** On the exports side, other notable changes in the commodity structure included the decline in the share of vehicles, textiles and apparel (Table 4.5). On the imports side, the share of oil and oil products, and machinery and equipment increased and the share of agricultural products and chemicals fell (Table 4.6).

Table 4.5: Commodity Structure of Merchandise Exports in 1998 – 2004 (%)

	HS code	1998	2000	2001	2002	2003	2004	2004 / 2000 % change	2004-2000 change
Total		100	100	100	100	100	100	87.6	
Agricultural produce	01-15	4.8	3.7	4.7	3.8	4.5	4.7	-97.6	1.0
Food	16-24	3.9	3.2	3.4	4.0	3.8	3.8	121.1	0.6
Mineral products	25-27	8.4	20.2	18.2	20.8	22.6	27.4	154.7	7.2
Chemicals	28-38	12.4	11.0	11.4	10.1	9.9	9.2	57.2	-1.8
Wood and pulp&paper	44-49	3.9	4.3	4.2	4.2	4.4	4.1	81.5	-0.1
Textile and apparel	50-63	11.6	10.6	10.4	9.1	8.4	6.9	22.3	-3.7
Ferrous mats and ferroproducts	72-73	8.1	6.1	6.3	6.4	6.9	7.6	133.4	1.5
Non-ferrous metals	74-83	1.0	1.1	1.3	1.7	1.4	1.1	90.8	0.0
Machinery and equipment	84-85	12.7	10.9	12.0	11.5	11.4	10.3	77.3	-0.6
Vehicles	86-89	15.6	13.1	13.0	11.7	10.8	10.7	53.4	-2.4
Other		17.4	15.9	15.1	16.6	16.0	14.1	67.0	-1.7

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table 4.6: Commodity Structure of Merchandise Imports in 1998-2004 (%)

	HS code	1998	2000	2001	2002	2003	2004	2004 / 2000 % change	2004-2000 change
Total		100	100	100	100	100	100	92.5	
Agricultural produce	01-15	5.6	7.5	5.8	4.5	4.3	4.4	12.5	-3.1
Food	16-24	5.8	5.0	7.4	6.5	5.9	5.0	90.8	0.0
Mineral products	25-27	24.7	31.2	27.5	26.3	26.9	28.2	74.1	-3.0
Gas	2711	9.6	6.7	7.0	6.2	6.2	6.0	72.2	-0.7
Oil and oil products	2709, 2710	10.7	21.7	17.8	17.6	18.6	20.9	85.2	-0.8
Chemicals	28-38	9.9	9.5	8.6	7.9	7.5	7.0	41.5	-2.5
Wood and pulp&paper	44-49	2.7	3.2	3.2	3.4	3.1	2.7	60.8	-0.5
Textile and apparel	50-63	4.6	4.3	4.5	4.1	3.9	3.4	49.2	-1.0
Ferrous mats and ferroproducts	72-73	9.9	8.4	8.3	7.8	9.0	10.3	134.4	1.8
Non-ferrous metals	74-83	2.6	2.9	3.2	3.3	2.9	3.4	121.0	0.4
Machinery and equipment	84-85	16.3	13.3	14.3	14.9	16.1	16.9	145.1	3.6
Vehicles	86-89	6.0	3.4	6.4	4.2	3.1	3.2	79.4	-0.2
Other		11.8	11.3	10.8	17.1	17.3	15.7	168.8	4.5

Source: World Bank Staff calculations on WITS/COMTRADE data.

4.21 In 2004, mineral products accounted for 27.4 percent of Belarus total exports (and 52.1 percent of exports to non-CIS countries). Other major exports were transport vehicles and machinery (mostly for CIS countries) and chemical products (mostly for non-CIS countries). Together these four sectors accounted for almost 60 percent of total exports. Imports were dominated by mineral products (40.6 percent of imports from Russia and 28.2 percent of total imports), machinery (30.6 percent of non-CIS imports and 12.6 percent of CIS imports), non-ferrous metals (mostly imports from the CIS), and food products. Together these four sectors accounted for 70 percent of Belarus' imports.

4.22 **Exports remain essentially concentrated in products that were traditionally produced and exported by Belarus prior to independence.** At a more disaggregated level, exports are concentrated in 10 commodities, which made up over 50 percent of the total exports in 2004. The major item was oil products which account for almost a quarter of total exports. Oil products were exported mainly to non-CIS markets. Exports of oil products to the United Kingdom alone comprised about 8 percent of total

Belarus exports. Other important exports were potassium fertilizers (5.5 percent), ferrous metals (4.6 percent), trucks (3.9 percent), tractors (2.5 percent), and refrigerators (2.3 percent).

4.23 Belarus was able to respond to an increasing market demand for refinery products and to benefit from their growing prices by not just preserving the capacity inherited from the USSR in the refinery sector (two large oil-processing plants, the Mozyr Refinery Plant in the south and “Naftan” in the north-west) but also by heavily investing in their upgrade and modernization. Naftan was corporatized in 2002, but the state continues to be its major shareholder (a meager portion of shares was sold to the employees and managers of the company). The Mozyr Refinery Plant was corporatized in the early years of independence and became part of the large vertically integrated oil company “Slavneft”⁶² in 1994. Slavneft took an active part in the reconstruction of the Mozyr Refinery by directly investing in it, providing credit guarantees, and ensuring the guaranteed delivery of crude oil to the refinery (not less than 3.5 million tons a year). At the same time, modernization of the sector in general (and especially of “Naftan”) has been undertaken primarily with domestic investments.

4.24 **The imports structure was also relatively stable after 2000** (Table 4.6). Increases in the shares of imports of ferrous products and machinery and equipment and declines in the shares of chemicals and mineral products represent the major recent changes in the import structure. Mineral products continue to represent the major category, accounting for 28 percent of total imports in 2004, out of which 21 percent is the share of oil and oil products. Machinery and equipment is the second largest category of imports (17 percent). The agro-food sector imports made up almost 10 percent, slightly below the share of ferrous metals. At a more disaggregated level, in 2004 imports of 10 commodity groups accounted for 37 percent of total imports. Oil and condensed and natural gas alone comprised 20 percent. Other important items were iron and steel (7.1 percent) and passenger cars (2 percent).

4.25 **An analysis by Broad Economic Categories (BEC) provides additional insights into the structure and trends of Belarus’ merchandise trade.** First, both exports and imports are extremely concentrated and have recently exhibited a clear tendency toward even greater concentration. Thus, according to BEC, Belarus’ major export categories are industrial suppliers, processed (22); motor spirit, processed (321); and capital goods, except for transport equipment (41). Together these three categories accounted for 63.5 percent of total exports in 2004 as compared to 50.8 percent in 1998. Major import categories are industrial suppliers, processed (22); fuels and lubricants, primary (31); and capital goods, except for transport equipment (41). Together these three categories accounted for 70.4 percent of total imports in 2004 as compared to 60.3 percent in 1998.

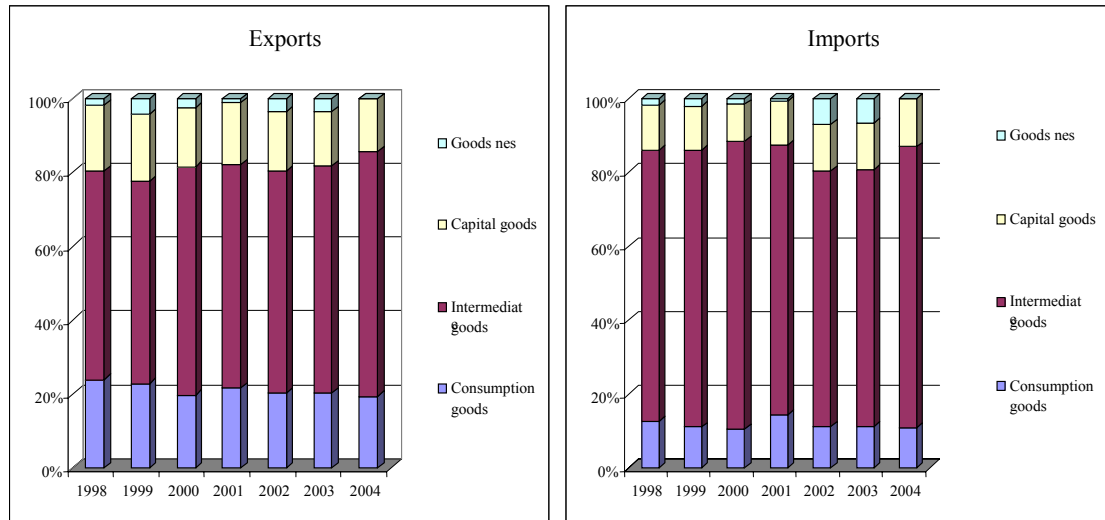
4.26 Second, further consolidation of the BEC data into the three basic SNA classes⁶³ and comparison with neighboring countries (Figures 4.7 and 4.8) reveals a strong bias toward trade in intermediate goods in Belarus. This bias is especially pronounced on the import side. Belarus has a much smaller share (than Poland, Lithuania and Russia) of capital goods and especially of consumer goods. Although, consumer goods imports in 2004 almost doubled compared to 2000, their relative importance in total imports increased only marginally (by 0.4 p.p.). Consumer goods imports remained much lower than expected given the per capita income level of Belarus. Two reasons for this may be: non-tariff restrictions on

⁶² The joint stock company “Slavneft” was created in 1994 by the joint decision of the governments of Russia and Belarus. Slavneft embraces several operating units in both countries that are involved in oil extraction, processing, sale, and geological exploration. In 2002, the governments of Russia and Belarus sold their shares in Slavneft and Slavneft became an entirely private company.

⁶³ See Annex 4.2 for an explanation of the classes. Since 2002, the MSA has produced its own estimates for both merchandise exports and imports by the end-use categories, which approximate the same three SNA expenditure classes. Since the MSA series were too short, our analysis here is based on the WITS/COMTRADE data, which are available from 1998.

consumer imports and non-accounted consumer imports. An additional discussion of both these factors is provided in the trade regime section below.

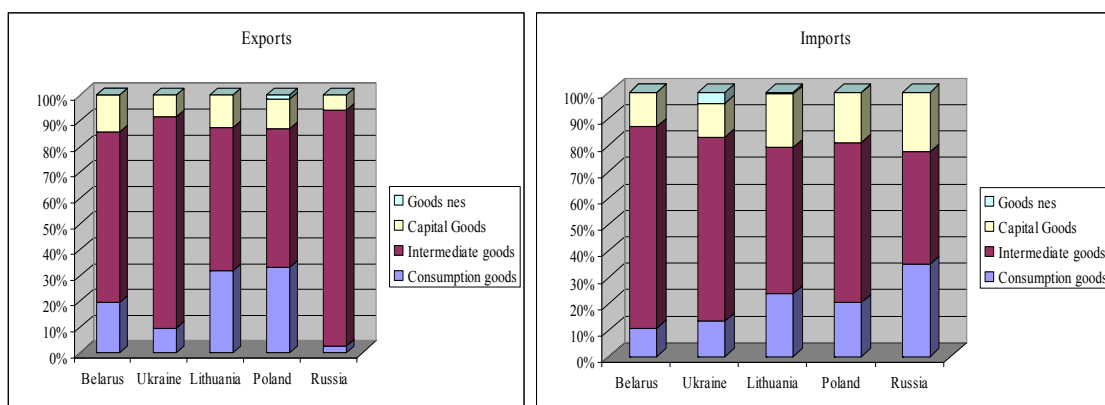
Figure 4.7: Merchandise Exports and Imports by End-Use Categories, 1998-2004 (percent)



Source: World Bank staff calculations based on WITS/COMTRADE data.

4.27 **The shares of both capital-intensive and skilled labor-intensive products in Belarus exports were higher on average than in neighboring countries.**⁶⁴ However, as compared to 1998, the share of these two categories declined while the relative importance of natural resources and unskilled labor exports increased. This indicates deterioration in the export structure. At the same time, new EU members (EU-8) exhibited an opposite trend: namely, an increase in the relative importance of labor-intensive and capital-intensive exports, which are generated by the sectors with greater growth potential and higher wages. Reliance on relatively low value-added exports constrains the possibilities for the economy to generate new jobs, thus holding up both productivity growth and an increase in the standard of living.

Figure 4.8: Merchandise Exports and Imports by End-Use Categories, Belarus and Neighboring Countries*(percent)

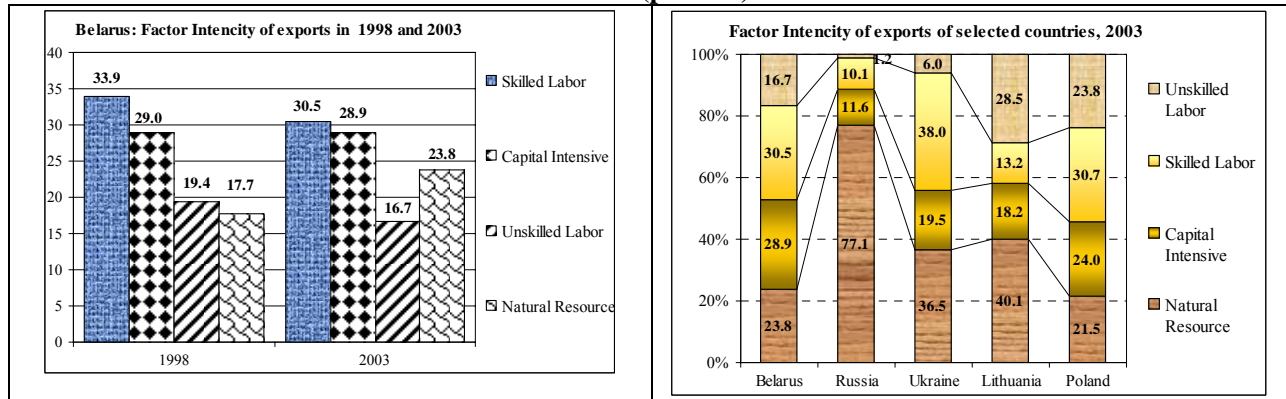


Note: *The latest year available: 2004 for Belarus; 2003 for Lithuania, Poland and Russia; 2002 for Ukraine.
Source: World Bank staff calculations based on WITS/COMTRADE data.

⁶⁴ World Bank (2005a).

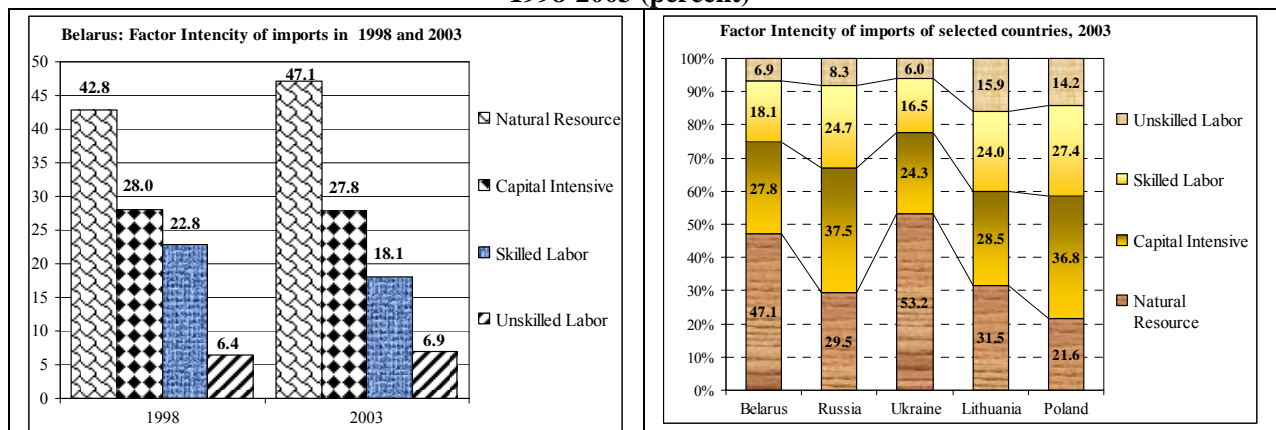
4.28 At the same time, owing to the growing role of oil processing, the factor content of Belarus' imports has been shifting toward more natural resource-intensive goods. This differs substantially from the factor intensity of Polish and Lithuanian imports (Figures 4.9 and 4.10).

Figure 4.9: Factor Intensity of Exports: Dynamics and Comparison with Neighboring Countries, 1998-2003 (percent)



Source: World Bank (2005a).

Figure 4.10: Factor Intensity of Imports: Dynamics and Comparison with Neighboring Countries, 1998-2003 (percent)



Source: World Bank (2005a).

B. EXPORT CONCENTRATION AND SPECIALIZATION, TRADE COMPLEMENTARITY AND INTRA-INDUSTRY TRADE

4.29 **Dependence on one or only few exports – High Export Concentration – renders an economy vulnerable to external shocks**, including those caused by drastic movements in TOT. At the same time, specialization is often associated with economies of scale and hence with higher productivity. Lederman and Maloney (2003) examined empirical relationships between trade structure and economic growth and found, in particular, that export concentration hampers growth (even after one controls for physical and human capital accumulation) while specialization associated with expansion in intra-industry trade has a positive effect on growth.

4.30 Belarus' exports remain highly concentrated, but different markets present somewhat different concentration trends. Table 4.7 and Tables A4.9 and A4.10 in Annex 4.1 present different indicators of

export concentration⁶⁵ for Belarus with a breakdown by export markets. The data suggest several trends. Exports are becoming more concentrated from the point of view of the number of companies involved. In 2003, the 20 largest exporters contributed to 46 and 80 percent of CIS and non-CIS exports, respectively. This undermines Belarus' potential for future export expansion. Country studies of earlier successful export expansions in developing countries show that export booms have usually involved many new firms breaking into foreign markets. It was fairly common for more than half of total export growth during periods of export booms to come from new exporters. If a country is supporting an export boom, then either a higher share of existing firms must become exporters or new firms must be created or both (Roberts and Tybout, 1997).

4.31 At the same time, other conventional measures of export concentration exhibit different dynamics in different export markets. Thus, during 2001-03 exports to the CIS became less concentrated, while exports to non-CIS countries were more concentrated. The non-CIS market is more sophisticated and has higher certification and standardization requirements. The data suggest that the penetration of this market with new products is becoming increasingly difficult for Belarusian producers who in many ways are detached from new technologies and marketing techniques because the transfer of technologies and skills is normally associated with FDI.

Table 4.7: Indices of Export Concentration for Belarus, 2001-03

	2001	2002	2003	2001	2002	2003
Indices of export concentration	Belarus-CIS			Belarus-non-CIS		
Export diversification index	0.496	0.465	0.459	0.714	0.718	0.737
Hirschman index	0.142	0.140	0.140	0.387	0.418	0.447
Share of 5 largest exporters in total exports, %	15.2	16.0	19.6	40.7	41.6	42.7
Share of 10 largest exporters in total exports, %	24.1	25.1	26.6	57.7	55.4	57.6
Share of 20 largest exporters in total exports, %	45.1	44.6	46.1	79.3	78.4	80.7
Number of commodity positions for which export exceeds \$US 5 m*	122	121	128	59	61	64
Number of commodity positions for which export exceeds \$US 10 m*	91	93	105	37	39	45

* According to the 3-digit SITC classification.

Source: MSA and World Bank staff calculations based on WITS/COMTRADE data.

4.32 Table 4.8 compares Belarus' export concentration with that of Lithuania, Poland and Ukraine.⁶⁶ As all three indicators suggest, Belarus' exports are more concentrated than those of Poland and Ukraine. Such a result could be expected: smaller countries tend to have more concentrated exports than larger ones.

⁶⁵ The exports diversification index (DX) is defined as $DX = \sum ([h_i - h_{iw}]) / 2$, where h_i is the share of commodity i in total Belarus exports and h_{iw} is the share of the same commodity in world exports (DX values are normalized to be in range from zero to unity). The hirschman index is defined as $H_j = \sqrt{\sum (x_j / X_j)^2}$ where x_j is country j 's exports of product i and X_j is country j 's total exports (H_j values are normalized to be in a range from zero to unity, with higher numbers corresponding to greater concentration). The number of commodity positions, for which annual exports exceed a certain amount (we took US\$5 million and US\$10 million) is defined using the 3-digit SITC breakdown.

⁶⁶ It should be noted that in Table 4.8 we computed the concentration indices for Belarus' total exports without a breakdown by export markets.

4.33 A comparison with Lithuania, which is smaller than Belarus in terms of both population and economic size, provides an additional insight. While in 1998 Lithuania's exports were more concentrated than those of Belarus, much of the difference had eroded by 2003. In short, even allowing for the differences in the sizes of the economies, Belarusian exports are overly concentrated and the recent trends toward additional concentration appear to be rather disturbing.

Export Specialization.

4.34 To access the country's export potential, various indices of revealed comparative advantages (RCA) are used (see Table 4.11 in Annex 4.1). One commonly employed RCA index is the so-called "Balassa measure," which compares a product's share in the country's exports to its share in world exports.⁶⁷ When the index is calculated for specific markets or partners, it is often called the Export Specialization Index (ESI). We estimated the ESIs for Belarus in relation to different markets (world, CIS, non-CIS, Russian Federation, EU-15, and EU-10⁶⁸) and at different levels of aggregation (2-digit and 3-digit Standard International Trade Classification (SITC)). The results of the calculations are presented in Annex 4.1 (Tables A4.12-A4.15).

Table 4.8: Export Concentration Indicators: Belarus, Lithuania, Ukraine and Poland, 1998-2003

	1998	2000	2002	2003
Belarus				
Number of commodity positions* for which export exceeds \$ 5 million	149	142	139	147
Number of commodity positions* for which export exceeds \$ 10 million	115	108	116	125
Hirschmann Index **	0.218	0.262	0.260	0.268
Diversification Index DX*	0.504	0.551	0.549	0.544
Lithuania				
Number of commodity positions* for which export exceeds \$ 10 million	70	69	84	97
Hirschmann Index **	0.243	0.270	0.252	0.255
Diversification Index DX*	0.532	0.560	0.549	0.551
Ukraine				
Number of commodity positions* for which export exceeds \$ 10 million	150	142	152	..
Hirschmann Index **	0.142	0.144	0.114	..
Diversification Index DX*	0.257	0.257	0.257	..
Poland				
Number of commodity positions* for which export exceeds \$ 10 million	177	175	175	..
Hirschmann Index **	0.046	0.047	0.048	..
Diversification Index DX*	0.185	0.187	0.186	..

*According to the 3-digit SITC classification.

** For 65 items exported, according to the 2-digit SITC classification.

Source: World Bank staff calculations based on WITS/COMTRADE data.

4.35 In both markets, Belarus exhibits strong exports specialization (ESI>2) in petroleum products, manufactured fertilizers, wood and wood products, textile fiber, iron/steel wires and bars, and optical instruments (SITC Code 871). At the same time, export specialization patterns differ from market to market. Thus, in the CIS market, Belarus exhibits strong export specialization (ESI>2) in a number of

⁶⁷ The index for country i good j is $RCA_{ij} = (X_{ij}/X_{it})/(X_{wj}/X_{wt})$, where w =world and t =total for all goods. RCA does not determine the true comparative advantages, but simply compares the composition of the exports of one country to a certain market with the composition of total exports that are absorbed by this market.

⁶⁸ New EU members from May 1, 2004.

agricultural and food products (meat, dairy products, eggs, cereal flour, sugar confectionery), as well as in tractors, transport vehicles (782 and 786), which is not the case with the EU market.

4.36 Table 4.9 shows the number of product groups (at the 2-digit SITC) in which Belarus demonstrates a strong export specialization. Globally, the number of such groups with $ESI > 2$ is modest, and it declined from 12 to 9 in the same period. The number in the CIS market increased somewhat during 1998-2003. As for the EU-15 market, after an increase in 2000-01, the number of such groups has been falling. This is another indication of growing export concentration in the non-CIS market. It is interesting to note, that Ukraine has recently been more successful in diversifying its trade with the EU than with the CIS.⁶⁹

Table 4.9: Export Specialization by Export Market: Number of Product Groups with a Strong RCA (>2)*

	1998	2000	2001	2002	2003
World	12	10	10	10	9
CIS	9	9	10	9	11
EU-15	12	13	13	9	7

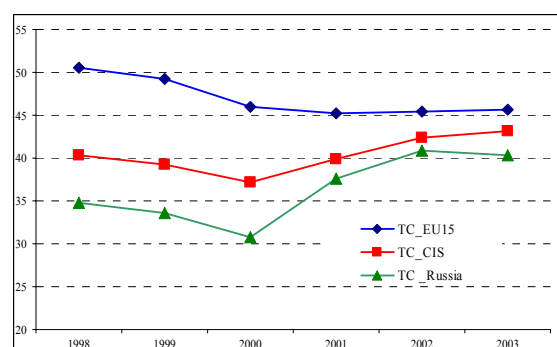
Note: *According to the 2-digit SITC classification out of 64 positions.

Source: World Bank staff estimates.

Complementarity of Trade

4.37 The Trade Complementarity Index⁷⁰ measures the degree to which the import structure of a trade partner matches the export structure of the country in question and thus provides useful information on country trade prospects. We computed trade complementarity indices for Belarus' trade with the EU-15, with the CIS and separately with Russia. Figure 4.11 shows the dynamics of these trade complementarity indices computed at a 3-digit SITC level (denoted as TC_EU-15, TC_CIS and TC_Russia, respectively). In 1998 Belarus had the highest degree of trade complementarity with the EU-15, followed by the CIS and Russia. Trade complementarity indices for both the CIS and Russia fell during 1998-2000 but began to pick up from 2001. By end-2003 they exceeded the 1998 levels by 2.9 p.p. (CIS) and 5.8 p.p. (Russia). At the same time, the trade complementarity index for the EU-15 declined in 1998-2003. These developments led to a considerable convergence in trade complementarity indices for all three markets by end-2003.

Figure 4.11: Trade Complementarity Indices for Belarus, 1998-2003



Source: World Bank staff calculations based on WITS/COMTRADE data.

⁶⁹ World Bank (2004c).

⁷⁰ The index of Trade Complementarity between countries k and j is defined as $TC_{ij} = 100 - \text{sum}([m_{ik} - x_{ij}]/2)$, where x_{ij} is the share of good i of country j global exports, and m_{ik} is the share of good i in all imports of country j . The index is zero when no goods are exported by one country or imported by the other and 100 when the export and import shares exactly match.

4.38 The high value of TC_EU15 for Belarus, on the one hand, could be interpreted as an indication of the export potential of the EU-15 market that is yet to be utilized by Belarusian companies.⁷¹ On the other hand, this estimate is somehow biased upward owing to an exceptionally high share of exports of refinery products to the EU. In market conditions for oil and oil products were to change, Belarus' perspectives in the EU market would deteriorate considerably, unless substantial product diversification was undertaken.

Intra-industry Trade

4.39 It is generally believed that intra-industry trade (IIT) has a positive effect on growth, although less unanimity exists in the interpretation of this effect.⁷² The most widely used indicator of IIT is the Grubel-Lloyd (G-L) index.⁷³ Annex 4.1 displays the results of calculations of G-L indices for Belarus (for total trade, and trade with the CIS, ROW and EU) at the 3-digit SITC data for the period 1998-2003.

4.40 A comparison of the dynamics of G-L indices for Belarus with those for Ukraine and Poland (Table 4.10) reveals that the G-L index for total trade in Belarus is rather high but has declined somewhat since 1998. In 2003 the IIT intensity in Poland exceeded that in Belarus, while the opposite was the case in 1998. This indicates that Belarus underutilizes potential benefits from international trade. Moreover, the high value of the index is due to the high intensity of IIT with the CIS countries (and their dominance in Belarus' external trade). This is a reflection of the fact that Belarus preserved its economic and production links from the Soviet era. The level of IIT with the countries outside of the CIS, while growing, still remains rather low.

Table 4.10: Grubel-Lloyd Indices for Belarus, Ukraine and Poland, 1998-2004

	1998	1999	2000	2001	2002	2003	2004	2002-1998
Belarus **								
Total trade	54.3	48.1	48.2	50.3	51.4	48.9	47.4	-2.9
CIS	53.3	49.1	48.3	48.8	50.1	51.2	50.1	-3.3
ROW	23.0	22.8	24.3	24.7	27.1	25.0	24.3	4.1
o/w: EU15	14.5	17.0	19.0	18.2	18.1	17.6	16.6	3.7
Ukraine*								
Total trade	34.5	35.6	37.9	40.1	38.4	-	-	3.9
CIS	52.9	54.5	52.4	55.7	53.9	-	-	1.0
ROW	30.5	31.8	34.9	36.7	35.6	-	-	5.1
o/w: EU15	20	19.9	21.8	23.6	22.5	-	-	2.5
Poland*								
Total trade	48.4	50.5	55.5	55.8	57.5	-	-	9.1
CIS	17.7	21.8	19.7	17	16.7	-	-	-1.0
ROW	49.4	50.8	56.4	56.4	58.2	-	-	8.8
o/w: EU15	44.1	47.7	52.5	52.7	54.6	-	-	10.5

Note:

* The index is calculated for merchandise trade only (groups 5-8 excluding 68), using the SITC revision 2.

** The index is calculated for merchandise trade only (groups 5-8 excluding 68), using the SITC revision 3.

Source: World Bank staff calculations based on WITS/COMTRADE data.

⁷¹ It is worth noting that as of 2002 Belarus' trade complementarity with both the EC-15 and the CIS was higher than in Ukraine, which indicates a considerable potential for future export expansion in Belarus.

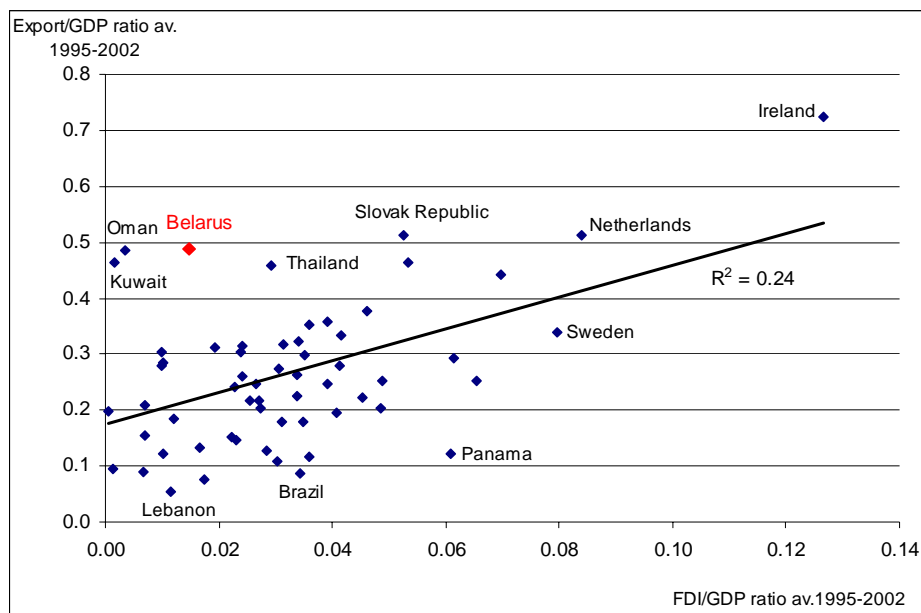
⁷² There is no clarity as to whether the positive impact is via increased productivity (as the conventional literature suggests) or whether it is because the countries with greater IIT also tend to be more diversified (see Krugman, 1979, Lederman and Maloney, 2003).

⁷³ The G-L index, $I = [(\sum_i (X_i + M_i) - \sum_i |X_i - M_i|) / \sum_i (X_i + M_i)] * 100$, where X_i and M_i are, respectively, exports and imports in sector i (Grubel and Lloyd, 1975). The higher the index, the larger the portion of intra-industry trade. The index ranges from 0, meaning complete lack of intra-industry trade, to 100, indicating a fully integrated manufacturing trade.

4.41 International experience suggests that growth in IIT is strongly linked to FDI inflows, so that the underdevelopment of such trade with the EU in Belarus is largely a consequence of the failure to attract sizable FDI from that region. Most empirical studies of foreign investments and trade uncover a complementary relationship between them, which suggests that the effects of FDI on trade are dominated by production linkages and spillover. This is because FDI supports information dissemination between countries, provides a new conduit for managerial and personal informational flows, and thus helps reduce transaction costs for the countries in question (Swenson, 1999).

4.42 In the era of globalization, international trade has been increasingly driven by FDI. Figure 4.12 shows the link between FDI and the export-to-GDP ratio using global data.⁷⁴ It clearly shows that Belarus is the outlier from the global trend and that its current level of export development is disproportionately high relative to the depressed FDI level. This disproportion suggests that without expansion in FDI inflows, Belarus may find it difficult to expand its exports on a sustainable basis.

Figure 4.12: Export-FDI Interlink: A Global View, 1995-2002



Source: WDI.

4.43 In Belarus' trade with the CIS, the following commodity groups made the largest contribution to the G-L index (calculated at 2-digit SITC data): textile yarn/fabric (65), metal manufactures (69), industry special machines (72), industrial equipment (74), electrical equipment (77), and road vehicles (78). Together these 6 (out of 65) commodity groups accounted for 51.4 percent of the G-L value for trade with the CIS in 2003.

4.44 The IIT with the EU-15 is more concentrated than that with the CIS. In 2003 the largest contributors to the G-L for this market were textile yarn/fabric (65), iron and steel (67), metal

⁷⁴ The data cover average levels of both exports and FDI for 1995-2002 for 60 middle income and high income countries. The sample includes all the countries from the WBI database, with population above 2 million and average nominal GDP per capita above US\$1,500 during this period.

manufactures (69), and footwear (85). These four commodity groups accounted for almost 60 percent of the G-L value in trade with the EU-15 in 2003.

C. TRADE WITH RUSSIA: TRENDS, ROLE OF POLITICAL FACTORS, RISKS ⁷⁵

4.45 The integration process with Russia has been important for Belarus in two fundamental ways. First, Russia provided direct demand support for traditional Belarusian exports, including labor-intensive items in the machinery and equipment sector (trucks, tractors, television sets, etc.). Second, the integration process was a primary driver for recent policy adjustments, including several major reform steps, such as the unification of the exchange rate and the phasing out of direct NBB financing of the budget deficit. At the same time, a geographically concentrated export strategy that targets only one country poses significant risks.

Trade Makeup

4.46 As shown above, Russia is by far the largest trade partner for Belarus, and accounts for half of Belarus' total exports and two-thirds of its imports. The share of Belarus' exports to Russia decreased from 54.5 percent in 1999 to 47.0 percent in 2004, which gives the impression that Belarus has been diversifying its exports to the rest of the world. However, if we take out energy products (HS 27) from Belarus exports, the share of exports to Russia has actually increased from 59.0 to 60.9 percent. Therefore, this apparent diversification was actually no more than the effect of higher energy prices and some growth in the export volumes of oil products. Imports from Russia to Belarus in U.S. dollar terms have increased by 62 percent, reflecting price increases for the oil and raw commodities that form the base of Russian exports.

4.47 The trade with Russia has important features that distinguished it from Belarus' trade with rest of the world. First of all, it has completely different commodity structures. On the export side, Belarus' comparative advantage in the Russian market is different from that in other markets, as is ascertained by the respective export specialization indices (see Annex 4.1 for export specialization indices for Belarus in different markets). Therefore, Belarus' export position appears dichotomous -- goods exported to Russia have difficulty in finding their niche elsewhere else.

4.48 The functioning of the entire Belarus economy is highly dependent on trade with Russia. On the export side, Russia offers the market for a large share of many Belarus products (see Table 2.3 in Chapter 2). However, there have been signs in recent years of increasing competitive pressures major Belarus exports are facing in the Russian market, as can be seen in their declining market shares in total Russian consumption (Table 4.11). For example, the shares of Belarus-made TV sets in Russian visual consumption declined from 39.4 percent to 9.4 percent between 1999 and 2002. In the same period trucks declined from 6.2 percent to 4.9 percent, and tractors from 51.0 percent to 46.1 percent. The ratio of exports of shoes to Russian domestic production went down from 31.8 percent in 1998 to 11.3 percent in 2003.

⁷⁵ This section draws on the background paper by Tomashevich and Elsukov (2004).

Table 4.11: Shares of Belarus Exports to Russia in Russian Visual Consumption and Production, 1998-2003 (percent)

	1998	1999	2000	2001	2002	2003
<u>Trucks (w/o tractor trailers) (units)</u>						
Belarus exports	10,296	10,981	8,852	10,988	8,431	8,681
Russian production	141,000	176,000	184,000	173,000	173,000	194,000
Russian visual consumption	n/a	178,400	190,300	182,300	172,600	n/a
Ratio of exports (%):						
over production	7.3	6.2	4.8	6.3	4.9	4.5
over consumption	n/a	6.2	4.6	6.0	4.9	n/a
<u>Tractors (w/ tractor trailers) (units)</u>						
Belarus exports	9,693	13,762	12,657	15,349	15,155	16,204
Russian production	9,800	15,400	19,200	14,200	9,200	8,000
Russian visual consumption	n/a	27,000	32,300	33,700	32,900	n/a
Ratio of exports (%):						
over production	98.9	89.4	65.9	108.1	164.7	202.6
over consumption	n/a	51.0	39.2	45.5	46.1	n/a
<u>TV sets, video displays, video projectors (000)</u>						
Belarus exports	194.5	303.3	365.3	477.4	451.9	534.0
Russian production	329	281	1,116	1,022	1,980	2,336
Russian retail sales						n/a
Russian visual consumption	2,812	2,205	2,679	3,162	3,810	n/a
	n/a	7,689	1,695.9	2,649.2	4,801.2	n/a
Ratio of exports (%):						
over production	59.1	107.9	32.7	46.7	22.8	22.9
over sales	6.9	13.8	14.7	15.1	11.9	n/a
over consumption	n/a	39.4	21.5	18.0	9.4	n/a
<u>Shoes (mil. pairs)</u>						
Belarus exports	7.563	7.140	6.237	5.707	5.190	5.062
Russian production	23.8	29.9	32.9	36.7	42.2	44.7
Ratio of exports over production (%)	31.8	23.9	19.0	15.5	12.3	11.3
<u>Clothing, textiles (mil. units)</u>						
Belarus exports	0.588	0.374	0.695	0.643	0.703	0.879
Russian production	19.3	21.5	26.3	28.3	27.6	n/a
Ratio of exports over production (%)	3.05	1.74	2.64	2.27	2.55	n/a

Source: Rosstat, MSA.

Trade-Related Resource Transfer

4.49 Russia is the source of the greater part of the energy and raw materials consumed by Belarus, which sustain the entire Belarus economy and underpin Belarus' resource-intensive exports to the rest of the world. In addition, trade with Russia played a vital role in supporting Belarus' economy through an imputed resource transfer associated with this trade. The main channels of this transfer were the following:

- Discounted prices for imported Russian energy
- Re-export of Russian commodities by Belarus at higher prices
- Non-market arrangements in bilateral trade (such as barter and inter-government agreements on mutual direct deliveries)
- Unilateral violations by Belarus of the provisions of the Russian-Belarus Customs Union.

4.50 A substantial price differential between Russia exports to Belarus and its exports to countries outside of the CIS point to a massive resource transfer from Russia to Belarus (and, to a lesser extent, to a number of other CIS countries). Table 4.12 presents (partial) estimates of resource transfers through the price channel from Russia to Belarus for selected commodities in 1997-2003. These amounts were estimated as the product of the price differential between Russian exports to Belarus and Russian exports outside of the CIS (corrected for the transport cost differential) and the export quantity. For oil, the transfer was estimated conservatively, since the differential of the transport costs between Belarus and the EU is not entirely clear and varies according to the mode of transport.

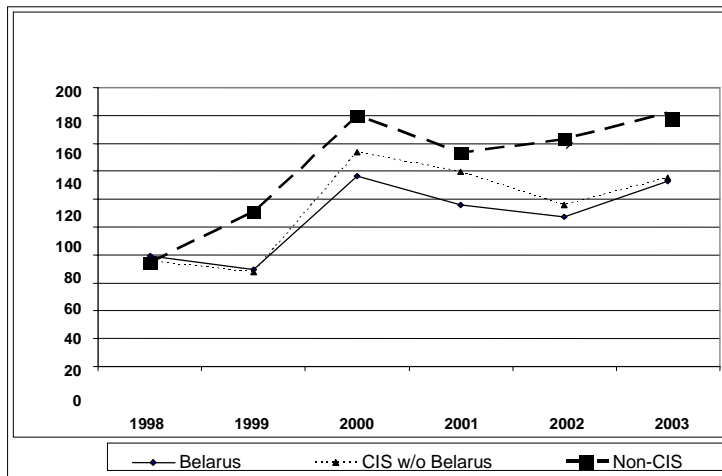
Table 4.12: Resource Transfers from Russia, by Selected Channels, 1997-2003 (US\$ million)

	1997	1998	1999	2000	2001	2002	2003
Import of Russian crude oil	-97.3	-200.9	212.8	285.8	181.1	430.5	398.9
Import of Russian natural gas	635.0	564.8	868.2	836.2	787.2	758.5	740.8
Resource transfer to Belarus through barter arrangements in energy trade, mil. USD	30.7	231.6	64.5	80.0	--	--	--
Total	568.5	595.5	1,145.5	1,202.0	968.2	1,217.7	1,139.7
Total, as percent of GDP	4.1	4.1	10.3	9.2	7.9	8.4	6.4
Total, as percent of GDP at factor cost	4.6	4.5	10.9	11.0	9.0	9.7	7.7
<u>Memo: shares of barter (%) in</u>							
Belarus exports to Russia, goods and services	34.3	n/a	52.4	44.4	30.2	15.9	7.6
Russian exports to Belarus, goods only	45.7	36.7	38.9	26.7	17.8	8.9	4.1

Source: Tomashevich and Elsukov (2004).

4.51 These estimates should be treated as the upper bound, since Russia supplied other CIS countries (Ukraine included) with energy at discounted prices as well, and the low capacity of Russian transport infrastructure (pipelines, seaports, railways) does not allow transporting all exported oil outside of the CIS where international oil prices prevail. However, oil prices offered by Russia to other CIS countries were still higher than those offered to Belarus, which basically enjoyed Russian domestic prices. If we take the prices offered by Russia to other CIS countries as the benchmark, the estimates of resource transfers will be lower (see also Chapter 7). The price of oil exported from Russia to other CIS countries in some years exceeded the price for Belarus by 25 percent, but it converged by 2003 (Figure 4.13). At the same time, the prices of natural gas still differed at least twofold between Belarus and the CIS average in 2003.

Figure 4.13: Russian Export Prices of Oil to Selected Destinations, 1998-2003 (US\$ per ton)



Source: Rosstat.

4.52 Nevertheless, Russian export transport capacities have been improving and there is a clear trend of energy price convergence between the CIS and the rest of the world. Therefore, the estimates in Table 4.12, as opposed to those in Chapter 7, should be considered as an indication of the future adjustment costs that Belarus will ultimately face under the assumption that Russia is able to export all of its energy at international prices. These costs, while much lower than in 1999, will still be considerable – in excess of 6 percent of GDP based on 2003 prices and volumes of exports.⁷⁶

4.53 Barter arrangements in Russia-Belarus trade, while substantial in earlier years, amount to a small share of trade today. In the earlier years of transition, however, barter arrangements were critical for maintaining bilateral trade at a high level, since the market mechanisms needed time to fully develop. Barter arrangements were centered on Russia's deliveries of gas and electric power, which are highly liquid products. Belarus supplied Russia with manufactured goods, which were not easily exportable to other markets.

4.54 In addition to providing a timely demand outlet, barter arrangements facilitated a resource transfer to Belarus via the multiple exchange rate arrangement in place in Belarus until 2000. The market exchange rate of the Belarus rubel to the U.S. dollar until 2000 was much higher than the official rate set by the NBB (see Chapter 1). At the same time, the official rate was used for determining the values of barter transactions. The difference between the market and official exchange rates multiplied by the volume of barter yields the estimates for the value of the resource transfers obtained by Belarus through this channel.

4.55 Another channel of resource transfer from Russia was opened through unilateral violations by Belarus of the Customs Union provisions. For example, in the middle and late 1990s Belarusian importers obtained (on a case-by-case basis) the waivers of import and excise duties and then re-exported to Russia without paying duties at the Russian border. Such schemes were especially profitable for excisable goods (e.g., alcohol, vehicles). While it is not possible to quantify the overall scale of such arrangements, it is believed that they were quite widespread for some time. Such schemes were abolished, however, following the Russian government's protests.

⁷⁶ A caveat is in order: the negative resource transfers from oil imports in 1997-98 were virtual rather than real, since oil was paid for in barter and not in real dollars.

4.56 The existing Customs Union appears non-symmetric in terms of market access. Belarus has been pursuing an aggressive strategy for penetrating the Russian market using its government capacity and exploiting the benefits of the Customs Union. At the same time, Belarus has the second largest number of contingency measures on Russian exports to Belarus among all trade partners (after the EU), while the Russian measures against imports from Belarus are limited to sugar (see also Box 4.2). This can be partially explained by a modest share of imports from Belarus in total Russian imports.

4.57 Overall, the timing of these resource transfers from Russia was very beneficial for Belarus, allowing the country to adjust to the drastically changing terms of trade and external trade arrangements. The volume of this support was unprecedented for the CIS and reflects special political relations that prevailed during the time of President Yeltsyn. Since this support was mostly trade-related (as opposed to direct financial aid), it helped to preserve the level of Russia-Belarus integration at a higher level than elsewhere in the CIS (see Box 4.1). An important feature is that this support was not by and large squandered away by corrupt business/political interests, as was the case in many CIS countries; rather it helped to preserve Belarus' production capacities. As a result, at the height of the output crisis in the CIS, Belarus was much better able than Russia and any other CIS country to preserve its production capacity in manufacturing and also to significantly expand its share of the Russian market. For example, Belarus' production of tractors was 20 percent higher than Russia's in 2000 and more than 100 percent higher in 2002, while it was slightly over 50 percent of Russia's level in 1990.⁷⁷ After the initial transition shock was over, and especially after the 1998 crisis, Russia generated a substantial demand for traditional manufactured goods familiar to Russian consumers and producers since the Soviet era, and Belarus was uniquely positioned to meet such a demand.

4.58 In addition to trade-related support, which has played a leading role, Russia also provided Belarus with more conventional forms of assistance, including preferential loans, debt relief, and FDI from the Russian state-controlled monopoly Gasprom. The debt relief completed by Russia in 1996 amounted to about US\$900 million or 6.3 percent of the annual GDP. Currently, about 20 percent of Belarus' overall long-term and medium-term public external debt is owed to Russia. Gasprom investments in the new pipeline capacity, undertaken mostly in 1997-99, exceeded US\$ 1.1 billion, which was about 45 percent of total FDI in Belarus in the period 1996-2003. In the past Gasprom also showed a fairly high tolerance for gas payment arrears by Belarus.

4.59 One can consider these resource transfers to Belarus, as well as privileged access to Russia's market as the rent derived from special trade and economic relations between the two countries. Another specific feature of the Belarusian model is reflected in the fact that a relatively large share of this rent was redistributed from traders and exporters to the state budget and to public infrastructure investments. In the past, two primary channels of rent redistribution were surrender requirements at the (overvalued) official exchange rate and much higher domestic prices of gas and other energy than import prices. The annual estimates of redistribution through the former channel in 1996-2000 varied from US\$90 million in 1997 to US\$681 million in 1998, or from 0.7 to 5.1 percent of GDP. The domestic gas price exceeded the import price by 40-130 percent in 1996-2004 (see also Chapter 7).

Russia-Belarus Economic and Trade Arrangements

4.60 In 2000 Russia and Belarus formed a common Union State which envisioned a common economic space that would include a free trade area and a Customs Union, monetary union (not yet achieved yet), and eventually a political union (elements of which are in place: the Higher State Council, the Council of Ministers, and Parliament). The bodies of the Union State conduct joint economic programs—the most important of which are infrastructure, energy, and regulatory programs—and

⁷⁷ This is not to say that production in Belarus remained at Soviet levels. In fact, Belarus' production of tractors went down by two-thirds from 1990 to 2003 while Russia's went down by 96 percent. Nevertheless, the contraction of production in Belarus was much smaller than in other CIS countries.

promote interstate cooperation. However, these programs are of limited magnitude and do not affect mutual trade to a great extent.

4.61 Special political relations with Russia and inter-state economic agreements helped many firms in Belarus to obtain Russian orders and to keep operating even in the most difficult periods of low demand in the early and mid-1990s. The agreements on mutual cross-deliveries have been in place since 1993. In recent years the role of these agreements has diminished and the vast majority of energy deliveries from Russia have been paid in cash. Thus, non-cash payments accounted for 80.1 percent of total payments for imported Russian gas in 2001 but accounted for only 12.5 percent in 2004.

4.62 Along with the interstate agreements there have been agreements between subnational governments (regions), and these have gained more prominence in recent years. Belarus' regions have concluded agreements with 70 Russian regions, which indicate that Belarus' Ministry of Foreign Affairs has a good commercial diplomatic capacity for effective export promotion.⁷⁸ Four Russian regions stand out in bilateral trade volumes -- the City of Moscow, Tyumen, St. Petersburg, and the Moscow region. Although direct targets for trade volumes are no longer a part of these agreements, they play an important role in bringing government involvement to facilitate trade and overcome the current acrimonious business environment in both countries.

4.63 The integration process within the Union State has been far from smooth and is still in the early stages.⁷⁹ In fact, the implementation of a number of core agreements signed within the framework of the Union treaty has been on hold for some time. In particular, it was initially agreed to achieve the following integration benchmarks in the course of 2000-02, but they have still not been reached:

- The establishment of joint consortia for gas transit
- The harmonization of regulatory policies in energy, communications, and transport, which would effectively result in the equalization of tariffs in these sectors
- The harmonization of taxation.

4.64 Moreover, the earlier agreement on the introduction of the single currency on January 1, 2005, has not been implemented. These delays have slowed down the pace of bilateral integration considerably.

4.65 Nevertheless, the Union Treaty has already yielded important arrangements fostering mutual trade—most important, a functioning Customs Union. The Customs Union includes three other members as well – Kazakhstan, the Kyrgyz Republic, and Tajikistan -- but the customs border does not exist only between Russia and Belarus. Although the full harmonization of tariffs has not been achieved (about 5 percent of the tariff lines in Russia's and Belarus' tariff schedules still differ), the two countries have abolished the mutual customs border, which allows trade to flow between Belarus and Russia without customs formalities.⁸⁰ However, as mentioned above, the Customs Union is asymmetric -- Belarus restricts a significant number of Russian exports while Russia generally does not respond in kind.

4.66 The absence of a full-fledged customs border erodes the border effect, which is probably the most important factor that distinguishes international and domestic trade and dampens trade flows. As a result, Russian-Belarus trade bears features of both inter-regional trade (no customs border, with some exceptions listed

⁷⁸ This capacity is largely lacking in other CIS countries.

⁷⁹ There are views, however, to the effect that this process lost its steam and does not have any serious prospects.

⁸⁰ Although the customs border has been formally abolished, there are still some remaining administrative barriers in place. Thus, a mandatory statistical declaration with supporting documentation should be filed in Belarus in advance of each trade transaction, which adds time and expense for traders. In addition, a few years ago temporary customs posts were established by Russia on an ad hoc basis in order to combat the re-exportation of some sensitive goods, which violated the articles of the Customs Union. This practice has been discontinued, however.

below) and international trade (different national currencies, and remaining non-tariff barriers listed below). The erosion of the border effect is a powerful factor in boosting bilateral trade. Box 4.1 compares trade dynamics between Russia and Belarus with trade dynamics between Russia and Ukraine to illustrate the scale of trade benefits for Belarus that derive from its special trade relations with Russia.

Box 4.1: Comparative Dynamics of Exports to Russia from Ukraine and Belarus

The table below presents the evolution of exports flows from Belarus and Ukraine to the Russian Federation in the post-Soviet period.

In the Soviet era, both countries had relied on machinery and equipment exports to Russia to the same degree — about one-fifth of total exports. However, while Belarus' share of machinery and equipment exports to Russia in total exports declined by only one-fourth to 15 percent, Ukraine's exports dropped by almost 4 times to 5.6 percent. In the Soviet era, Ukraine's machinery exports to Russia were 2.7 times larger than those of Belarus. In 1999 Belarusian exports were double those of Ukraine. The gap has been closing gradually since 2000, however. The share of machinery and equipment in Belarusian exports to Russia remained quite stable over 1998-2002 and accounted for some 30 percent.

At the same time, this has also meant that Belarus' exports have remained sensitive to economic developments in Russia, while Ukraine has significantly diversified its trade and is less vulnerable to changes in demand in Russia. In 1990 the share of Russia in Belarus' exports accounted for 41.5 percent of the total. After the collapse of the Soviet Union, Belarus' exports share to Russia actually increased, while in Ukraine it declined much below 20 percent.

Comparative Dynamics of Machinery and Metalworking and Equipment Exports to Russia from Ukraine and Belarus, 1990-2002

US\$ million	1990	1996	1999	2000	2001	2002	Change, 1990-2002, %
Ukraine							
Total exports	78,335.9	14,400.8	10,332.7	14,572.6	16,264.7	17,957.1	-77.1
Exports to Russia	42,794.6	5,577.4	2,113.0	3,515.6	3,679.5	3,189.1	-92.5
Share in total exports, %	54.6	38.7	20.4	24.1	22.6	17.8	-36.9
Exports of machines, transport equipment to Russia (SITC 7)	16,766.9*	1,091.3	467.1	696.9	889.3	998.3	
Share in exports to Russia, %	39.2*	19.6	22.1	19.8	24.2	31.3	-20.1
Share in total exports, %	21.4*	7.6	4.5	4.8	5.5	5.6	-15.8
Belarus							
Total exports	32,631.0	5,652.0	5,908.9	7,331.1	7,450.6	8,020.9	-75.4
Exports to Russia	13,557.9	3,024.4	3,222.0	3,715.7	3,962.7	3,977.1	-70.7
Share in total exports, %	41.5	53.5	54.5	50.7	53.2	49.6	8.0
Exports of machines, transport equipment to Russia (SITC 7)	6,303.1*	1,033.3	972.2	1,183.9	1,240.4	1,186.7	
Share in exports to Russia, %	46.5*	34.2	30.2	31.9	31.3	29.8	-35.8
Share in total exports, %	19.3*	18.3	16.5	16.1	16.6	14.8	-4.5

* Estimates, based on inter-republican trade in 1988.

Note: The data for 1990 should be treated with caution, as they depend a lot on the prevailing prices and the exchange rates used for the conversion of inter-republican trade.

Source: World Bank (2004c).

4.67 However, actual trade regulations and practices still suffer from some non-tariff barriers and bureaucratic hassles, which often contradict the signed agreements. Listed below are some measures

regulating Russian imports to Belarus which are out of line with the bilateral agreements and constitute market protection measures.⁸¹

- Quotes on tobacco and seafood imports
- Restrictions on beer imports such as expensive licensing and the minimal consignment requirement, importation through customs warehouses only; the additional payment in the amount of 30 percent of the cost of the glass bottles or other containers
- Licensing of the importation of specific commodities, such as soap, margarine, flour, tires, grouts, and bread and confectionary
- Importation of white sugar through customs warehouses only; white sugar imports produced from sugarcane are let in only if accompanied by special (compensated) permits, with the certificate of origin and certificate of compliance (Box 4.2)
- Special duty stamps required for imports of car fuel.

4.68 The above contingency measures were applied in an ad hoc manner that does not meet WTO rules on antidumping and safeguards. In addition, Belarus initiated several anti-dumping investigations (including exports of metal pipes, confectionery, and asphalt) aimed mainly at Russian exporters. The Russian Ministry of Economic Development and Trade estimated that the 2004 annual loss of Russian exports to Belarus because of the contingency measures exceeded US\$250 million. In particular, exports of beer declined by 60 percent relative to 2002, exports of seafood declined by 20 percent, and exports of sugar almost disappeared (Box 4.2).

Box 4.2: Russia-Belarus Sugar Dispute

In 2004, Russia introduced safeguard measures on the importation of white sugar made from sugarcane from Belarus. Belarus responded in kind by introducing restrictions on the importation of white sugar from both sugarcane and sugar beets from all four of the other members of the Customs Union (Russia, Kazakhstan, the Kyrgyz Republic, and Tajikistan). Thus, both Russia and Belarus violated the Customs Union provisions.

The resulting adjustments in the trade flows in sugar, however, unilaterally benefited Belarus. On the Russian side all sugar exports were restricted, while on the Belarus side only exports of sugar from sugarcane were restricted. As a result, Belarus' sugar exports to Russia in 2004 increased by 44 percent while Russian sugar exports to Belarus declined by 62 percent relative to the 2003 levels. Apparently Belarus increased its domestic consumption of less expensive sugar made from sugarcane, and increased exports to Russia of domestically produced sugar from sugar beets. Overall, Russian sugar export declined from more than US\$11 million in 2001 to US\$325,000 in 2004.

Source: Ministry of Economic Development and Trade of the Russian Federation.

D. TRADE REGIME

4.69 This section analyzes Belarus' trade regime and its implications. It concludes that the Belarus tariff regime is fairly liberal while the overall trade regime remains quite restrictive because of its non-tariff and regulatory barriers. The section also reviews major recent developments in Belarus' WTO accession process.

Import Tariffs

4.70 Belarus, like many to other countries, applies both MFN and full tariffs (which are twice the MFN tariffs) on its imports. About 90 percent of non-CIS imports enjoy MFN treatment. However, 70 percent of imports come from CIS countries with which Belarus has free trade agreements, with a few exemptions. Moreover, two-thirds of all imports come from Russia, with which Belarus has formed a Union State with no customs procedures between the two countries.

⁸¹ As reported by the Russian Ministry of Economic Development and Trade; effective as of April 21, 2005.

4.71 Table 4.13 presents simple average and import weighted average tariffs (averaged over all tariff lines with non-zero imports) applied to different partner groups.⁸² For all tariffs, their maximum and minimum ad valorem rates were assessed for each tariff line.⁸³ There are about 1,600 lines with specific or mixed tariffs in the Belarus import tariff schedule. Such a high reliance on specific and mixed tariffs leads to (economically inefficient) highly differentiated import taxation and adds an extra administrative burden for both traders and customs officers. Moreover, the Belarus government relies heavily on temporary and seasonal changes in basic import tariffs that are valid for a period of 6 to 12 months, as well as on tariff exemptions. This makes the entire tariff structure excessively segmented and user-unfriendly.

Table 4.13. Import-Weighted Average Tariff Rates in Belarus, 1998-2003 (in percent)

		1998	1999	2000	2001	2002	2003
All goods							
All partners (w/o CIS countries)							
simple average	min	13.2	12.9	13.0	11.6	10.6	10.5
	max	13.7	13.5	13.5	11.9	11.1	10.9
weighted average	min	11.1	10.4	10.4	12.0	8.4	9.9
	max	12.6	12.4	11.4	12.6	10.3	11.2
MFN partners							
simple average	min	12.7	12.6	12.8	11.3	10.6	10.4
	max	13.3	13.2	13.3	11.6	11.0	10.9
weighted average	min	10.1	9.9	10.3	9.8	8.4	9.8
	max	12.0	12.0	11.2	10.5	10.3	11.2
Non-agricultural goods							
All partners (w/o CIS countries)							
simple average	min	13.3	12.9	13.2	11.6	10.5	10.4
	max	13.8	13.5	13.7	11.8	10.9	10.8
weighted average	min	11.2	10.3	10.9	12.1	7.9	9.3
	max	12.3	12.3	11.8	12.7	9.9	10.4
MFN partners							
simple average	min	12.8	12.6	13.0	11.3	10.4	10.4
	max	13.4	13.2	13.5	11.6	10.8	10.7
weighted average	min	10.1	9.8	10.7	9.6	7.9	9.2
	max	11.6	11.9	11.6	10.1	9.9	10.3
Agricultural goods							
All partners (w/o CIS countries)							
simple average	min	12.2	12.4	11.7	11.8	11.6	10.9
	max	13.0	13.4	12.6	12.6	12.5	11.7
weighted average	min	10.7	10.6	8.7	11.2	10.9	13.2
	max	14.0	12.5	9.9	12.2	12.1	15.7
MFN partners							
simple average	min	11.8	12.1	11.5	11.5	11.5	10.9
	max	12.7	13.2	12.4	12.3	12.6	11.9
weighted average	min	10.2	10.2	8.7	11.0	10.8	13.3
	max	13.8	12.4	9.9	12.0	12.3	16.1
Implicit tariff rates							
For all imports(w/o CIS)		н/д	н/д	5.7	7.0	8.0	8.8
For MFN imports		н/д	н/д	6.0	7.6	8.9	9.8
Budget losses							
As percent of imports		н/д	н/д	4.8	5.0	0.4	1.0
As percent of GDP		н/д	н/д	0.9	1.0	0.1	0.2

Source: World Bank staff estimates.

4.72 As is seen from the table, the simple average tariff was quite low and declining during the period 1998–2003, with its maximum reduced from 13.7 to 10.9 percent. The weighted average tariff (maximum) also fell from 12.6 to 11.2 percent during the same period. The table does not include rates for CIS imports, which are close to zero. The MFN tariff is somewhat lower and also decreased in 1998-2003. The 1998-2001 tariff schedule was based on the 1997 Resolution of the Council of Ministers “On Customs Tariff of the Republic of Belarus”

⁸² While compiling the table, specific tariffs were converted into their ad valorem equivalents. In the case of mixed tariffs, their ad valorem rates were used.

⁸³ All of the tariffs were estimated at the 6-digit HS level. When any product group had several tariff values at the broader HS level, the minimum and maximum rates were chosen.

with annual amendments. In 2002 the Council of Ministers issued a new resolution on import tariffs that completely revised the 1997 schedule. Import tariff rates were lowered for the majority of products, which is reflected in a significant reduction of average tariffs in that year.

4.73 Table 4.14 compares the basic characteristics of the Belarus tariff schedule with a wide range of transition economies, as well as with the EU. The general characteristics of the Belarus tariff schedules resemble those of Russia and Poland. This is not surprising, since Belarus harmonized 95 percent of its tariff lines with Russia. Belarus' tariff levels and variations appear to be quite low by international standards—at least, they are not higher than those of the eight new EU members before their accession.

**Table 4.14: Basic Characteristics of Tariff Schedules in Belarus and Selected Countries
(for non-agricultural commodities)**

	Year	No. of tariff lines	Simple average	Coefficient of variation	Max	Duty-free lines (percent of tariff lines)	International peaks (percent of tariff lines)	Domestic peaks (percent of tariff lines)
Belarus	2003	8746	10.6-11.0	0.58	30.0	0.3*	16.7**	0.0
Ukraine	2003	8258	6.9	1.0	50.0	19.6	8.5	5.4
EU-15	2002	8305	4.2	0.9	26.0	17.1	0.9	1.5
Armenia	2001	4450	2.3	1.8	10.0	76.8	0.0	23.2
Czechoslovak Customs Union	2001	8201	4.2	0.8	30.1	16.2	0.8	1.8
Hungary	2001	10368	7.0	0.6	78.0	10.3	2.3	1.6
Latvia	1999	8608	2.9	1.8	30.0	21.5	0.0	16.4
Lithuania	2001	8488	2.5	2.2	33.8	79.8	1.4	15.8
Poland	2001	8394	10.1	0.6	119.2	5.0	13.4	1.2
Russia	2001	8716	10.1	0.5	20.0	0.6	10.4	0.0

* Does not account for temporary exemptions from customs duties granted under the Belarus' government decisions for less than one year.

**Accounting for the *ad valorem* equivalent of specific and mixed tariffs.

Notes:

1. Coefficient of variation is a measure of relative variation and is calculated as the ratio of the standard deviation over the mean.
2. Domestic tariff peaks are defined as exceeding three times the overall simple average applied rate.
3. International tariff peaks are defined as exceeding 15 percent.

Sources: World Bank staff estimates; World Bank (2004c).

4.74 The average weighted agricultural tariff exhibited a sharp hike in 2003. However, this hike can be explained by the increase in the tariff equivalent of just a few commodities, such as raw sugar (sub-heading 170111) and meat and edible offal frozen (sub-headings 020714, 020727). The *ad valorem* import tariff for raw cane sugar of just 1 percent in effect in 2002 was replaced in 2003 by the tariff quota, with the specific tariff with the *ad valorem* equivalent exceeding 100 percent. However, the specific tariff was applied for imports exceeding the quota of 420,000 tons. The *ad valorem* import tariff for meat and edible preparations increased from 25 percent in 2002 to 70 percent in 2003. Had the 2003 tariffs for the above-mentioned groups remained at the 2002 level, the average weighted agricultural tariff would have been between 10.7 and 13.3 percent, (i.e., close to the 2002 level). The same is true for the average tariff rates for all goods, which would have remained constant had the import tariff rates for sugar, meat and edible offal remained constant.

4.75 Table 4.15 presents import-weighted tariffs for agriculture and food (Chapters 1-24 less fish and fish products [Chapter 3] of the Harmonized System [HS]). Some agricultural tariffs were considerably higher than the average tariffs, especially for edible preparations; beverages and spirits; edible fruit and

nuts; and meat and meat offal (Chapters 21, 22, 08, and 02, respectively). Nevertheless, these levels of agricultural tariffs, except for a few lines, do not seem excessively high in comparison with international practices.

Table 4.15: Import-Weighted Average Tariff Rates Applied to Agricultural Imports from All MFN Partners in 2003, by HS Chapter (percent)

<i>HS Chapter</i>	<i>Min</i>	<i>Max</i>
LIVE ANIMALS	4.8	4.9
MEAT AND EDIBLE MEAT OFFAL	21.9	22.3
DAIRY PRODUCE; BIRDS' EGGS; NATURAL HONEY; EDIBLE PRODUCTS OF ANIMAL ORIGIN, NOT ELSEWHERE SPECIFIED OR INCLUDED	15.0	15.0
PRODUCTS OF ANIMAL ORIGIN NOT ELSEWHERE SPECIFIED OR INCLUDED	6.7	7.3
LIVE TREES AND OTHER PLANTS; BULBS, ROOTS AND THE LIKE; CUT FLOWERS AND ORNAMENTAL FOLIAGE	11.5	14.4
EDIBLE VEGETABLES AND CERTAIN ROOTS AND TUBERS	14.7	14.7
EDIBLE FRUIT AND NUTS; PEEL OF CITRUS FRUITS OR MELONS	16.5	28.7
COFFEE, TEA, MATE AND SPICES	12.7	12.7
CEREALS	6.1	6.1
PRODUCTS OF THE MILLING INDUSTRY; MALT; STARCHES; INULIN; WHEAT GLUTEN	10.0	10.0
OIL SEEDS AND OLEAGINOUS FRUITS; MISCELLANEOUS GRAINS, SEEDS AND FRUIT; INDUSTRIAL OR MEDICINAL PLANTS; STRAW AND FODDER	5.0	5.0
LACS; GUMS, RESINS AND OTHER VEGETABLE SAPS AND EXTRACTS	5.0	5.0
VEGETABLE PLAITING MATERIALS; VEGETABLE PRODUCTS NOT ELSEWHERE SPECIFIED OR INCLUDED	15.0	15.0
ANIMAL OR VEGETABLE FATS AND OILS AND THEIR CLEAVAGE PRODUCTS; PREPARED EDIBLE FATS; ANIMAL OR VEGETABLE WAXES	12.0	12.5
PREPARATIONS OF MEAT, OF FISH OR OF CRUSTACEANS, MOLLUSCS OR OTHER AQUATIC INVERTEBRATES	16.4	16.9
SUGARS AND SUGAR CONFECTIONERY	85.4	98.2
COCOA AND COCOA PREPARATIONS	5.8	5.8
PREPARATIONS OF CEREALS, FLOUR, STARCH OR MILK; PASTRYCOOKS' PRODUCTS	10.1	10.1
PREPARATIONS OF VEGETABLES, FRUIT, NUTS OR OTHER PARTS OF PLANTS	11.6	15.0
MISCELLANEOUS EDIBLE PREPARATIONS	10.8	32.5
BEVERAGES, SPIRITS AND VINEGAR	26.1	29.7
RESIDUES AND WASTE FROM THE FOOD INDUSTRIES; PREPARED ANIMAL FODDER	6.0	6.0
TOBACCO AND MANUFACTURED TOBACCO SUBSTITUTES	19.4	19.4
Others	10.4	10.4

Source: World Bank staff estimates.

4.76 Owing to the privileges granted to certain importers, and to smuggling, the implicit tariff reflecting the actual collection rate was lower than the average statutory tariff. The collection rate was in the range of 5.7 to 8.8 percent for all non-CIS partners during the period under review. The minimum estimates of budgetary losses from incomplete import tariff collection fluctuated between 0.1 and 1.3

percent of GDP, with a declining trend. This collection gap is not high compared to other CIS countries. It reflects both a lower incidence of smuggling in Belarus and the recent phasing out of individual import duty exemptions.⁸⁴

4.77 In sum, import tariff rates in Belarus have not been too high by international standards. Hence, the Belarus import tariff regime may be deemed quite liberal.

Non-Tariff Barriers (NTBs) and Contingency Measures

4.78 In contrast to tariff barriers, Belarus NTBs appear quite high. The main NTBs include: (i) licenses and quotas; (ii) foreign exchange restrictions; (iii) contingency measures; and (iv) ad hoc administrative restrictions on trade.

4.79 Like many other countries, Belarus applies import licensing for two classes of products: (i) potentially dangerous and environmentally unfriendly products; and (ii) some excisable goods, such as alcohol. Like many other CIS countries, Belarus imposes foreign exchange restrictions and the 30 percent export surrender requirement. Although not extraordinary, these requirements represent restrictions on exporters' activities.

4.80 Belarus applies safeguard measures, such as quotas and anti-dumping duties, on the basis of its safeguard legislation in effect since 2000. The law is in general in conformity with WTO agreements, but its application raises questions. The case presented above of the recent imposition of safeguard measures on raw sugar, had a questionable legitimacy and led to a collapse in Russian sugar exports to Belarus. To exacerbate matters, there are no clear procedures for the application of the contingency measures in the CIS free-trade area. And, in general, external curbs on domestic protectionist pressures in Belarus are quite weak.

4.81 Belarus would be best served if it restrains its application of contingency measures. These should be viewed as extraordinary measures, should be preceded by bilateral negotiations, and should be subject to strict adherence to WTO rules, notwithstanding the fact that Belarus is not a WTO member and, hence, is not formally bound by WTO disciplines.

4.82 **It is believed that a large number of ad hoc administrative restrictions on trade exist in Belarus at both the national and local levels.** These restrictions are primarily aimed at limiting the importation of consumer goods and, as shown above in this chapter, they seem to succeed in keeping the share of consumer imports relatively low. It is beyond the scope of this report to attempt to identify and catalogue all of them, but based on communications with the private sector, several examples are worth highlighting:

- There are recurrent confiscations of imports and transit goods on the basis of small technical errors or ambiguities in the Customs documentation. As a result, several EU freight companies have decided to ship their goods to Russia and Central Asia through the Baltics or Ukraine.
- The Belarus Customs operates in two quite different modes with respect to import clearance. It places much stricter controls on the imports of consumer goods than on industrial inputs. For consumer imports, the minimum indicative prices are the norm, and they are high enough to make a considerable portion of potential import unprofitable.
- For a specific group of consumer imports which are considered products of comparative advantage for the country (television sets, refrigerators), importers must receive special permits from the Ministry of Foreign Affairs.

⁸⁴ However, as shown in Table 4.16, the efficiency of the excise taxation of imports remains low.

- There are region-specific requirements on a mandatory share of domestically produced goods to be stocked in retail outlets (from 20 to 70 percent of the available assortment).⁸⁵
- Regional administrations apply differentiated rates of sales taxes depending on the origin of the goods. Three different rates are commonly applied for local, Russian, and other imported goods. As an example, the rate difference can be as high as 5-15 percent for specific daily products.⁸⁶
- Preferences are established in state procurement in favor of local firms.⁸⁷

4.83 Although not all of these regulations target imports directly, they are in effect trade-restrictive. The government is advised to undertake a review and to cleanse the large regulative array in order to liberalize trade. The existing customs procedures for the control of the customs value of imports, which de facto act as minimal prices on imports, contradict the WTO Customs Valuation Agreement. This issue must be addressed on a priority basis.

4.84 In addition to the formal non-tariff barriers listed above, the most damaging barriers to trade are of an informal nature. They are associated with implementation modalities and practices of existing regulations. Available surveys of the business environment point to implementation problems of NTBs that raise effective trade barriers and sour the business climate. For example, the implementation of customs controls is viewed by businesses as a barrier to trade (see Chapter 5). A high level of informal non-tariff restrictions undermines the benefits of a statutory liberal trade tariff.

4.85 Belarus is in compliance with the WTO Agreements on Technical Barriers to Trade and on Sanitary and Phytosanitary Measures, which stipulate non-discrimination by importers. Belarus has been gradually modifying its standards system to conform to international standards systems and practices. For example, two new laws (the Law on Technical Regulations and Standards and the Law on Conformity Assessments), both passed in 2004, lay the groundwork for the introduction of the modern two-tiered standards system consisting of internationally compatible mandatory technical regulations and voluntary standards. However, movement toward implementing this system has been slow, partly because of financial constraints on the development of technical regulations. At present, Belarus producers and importers have to satisfy more than 18,000 compulsory state standards. The current system is derived from the former Soviet GOST Standards System with its excessive regulation.

4.86 Reforming the standard compliance system is an important element of an export diversification strategy. Standards serve as a catalyst for technical and administrative change, enabling industries to reach their comparative advantage in new markets. Whilst the implementation of EU and international standards will be a key issue in improving access to the EU and other markets, it will also play a key role in improving quality standards for Belarus consumers.

Market Access Issues

4.87 The most important non-tariff barriers that transition economies are facing in the world market are anti-dumping measures.⁸⁸ Box 4.3 presents a list of anti-dumping measures (in force) faced by Belarusian exports. The longest list is presented by the EU, which maintains definitive anti-dumping measures against five Belarusian exports. Although they have a stifling effect, these measures cover less

⁸⁵ See Resolution of the Ministry of Commerce #34 (07/07/2003).

⁸⁶ Starting from 2003, annual Budget Laws (Article 10) provide regional administrations with a right to differentiate local sale taxes depending on the origin of goods. See also Minsk City Council Resolution #141 (11/15/2004), Vitebsk Oblast Council Resolution #100 (12/01/2004), Brest Oblast Council Resolution #104 (11/25/2004), and Grodno Oblast Council Resolution #91 (11/25/2004).

⁸⁷ See, for example, Government Resolutions #652 (05/19/2003), #1629 (03/20/2003), and #1586 (12/14/2004).

⁸⁸ According to Finger, Ng and Wangchuk (2001) anti-dumping initiations against transition economies during 1995-99 accounted for 43 percent of the total anti-dumping initiations worldwide.

than 4 percent of Belarus' non-energy exports to the EU. At the same time, existing estimates of Belarusian losses from applied anti-dumping measures fall in the range of US\$250-300 million annually, out of which about US\$70-100 million⁸⁹ relates to the anti-dumping measures applied to potassium fertilizers. The loss may increase with the latest EU enlargement.⁹⁰ In addition, although the quotas on textiles were phased out from January 1, 2005,⁹¹ the EU continues to apply quotas (albeit increased) for textile imports from some countries which are not the WTO members, including Belarus.

Box 4.3: Anti-Dumping Measures Recently Faced by Belarus

- EU: polyester filament tow; polyester staple fibers; potassium chloride; urea; urea and ammonium nitrate solutions
- India: acrylic fiber
- Turkey: polyester synthetic staple fibers (not processed)
- USA: steel concrete reinforcing bars
- Ukraine: matches; ruberoid; wood fiber stabs; spiral compressor units.

Sources: WTO, MFA of Ukraine.

4.88 To conclude, the Belarus trade regime is characterized by modest tariff rates but rather extensive non-tariff barriers.⁹² At the same time, although Belarus does not enjoy the same preferential access to Western markets as many developing countries, the primary constraints to export expansion and diversification are explained by domestic factors, such as the weak capabilities of the existing enterprise sector and the deficiencies of the business environment, which hamper both restructuring and new private entry, both domestic and foreign.

Export and Investment Regimes

4.89 Belarus' export regime is generally liberal, although export taxes are collected on some commodities and there is licensing outside of safety and security measures. The investment regime and the export promotion measures have yielded mixed results.

4.90 Commodity coverage by quota and/or licensing is determined by ecological, health and cultural measures (for example, industrial waste, precious metals, antiques) and by obligations according to international regulations (for example, textiles, which are subject to EU quotas, or mineral fertilizers, which are subject to EU anti-dumping duties). Also, for some products licensing is imposed to ensure their supply to domestic markets (for example, wastes and scraps of ferrous and non-ferrous metals). Export duties were abolished by the end of 1996 but were reintroduced at the end of 1999 under pressure from Russia, with which Belarus has a common customs territory. Export duties are now applied to some products that are important categories of Russian exports, especially processed oil products, which constitute over 95 percent of all goods subject to export duties in Belarus.

⁸⁹ As reflected in various publications and presentations by the Belarus MFA officials.

⁹⁰ The transition period granted for some products (potassium chloride, in particular) ended in May 2005 but has been extended recently to April 13, 2006 (EC Regulation No.858/2005 of 6 June 2005). However, even the transition arrangements left little scope for an increase in exports to new EU member countries (since it has been conditional on following agreed minimum prices and quotas, reflecting a three-year average export volume in the period preceding the enlargement).

⁹¹ According to the Agreement on Textiles and Clothing of the Uruguay Round.

⁹² This conclusion is in agreement with the IMF's overall trade restrictiveness rating for Belarus. Belarus is assigned rate "8" (on a 1 - 10 scale; the higher the number is the higher is the trade restrictiveness), consisting of a low tariff restrictiveness rate ("2" on a 1-5 scale) and the most restrictive non-tariff barrier rate ("3" on a 1-3 scale).

4.91 Export duties per se are not prohibited by WTO agreements and, from the economic standpoint, are equivalent to import tariffs. However, they may be deemed trade-restrictive measures, albeit subject to interpretations. Hence, it is worth reassessing the potential benefits of these taxes for the Belarusian economy.

4.92 Belarus applies the destination principle of value added taxation. VAT paid on both domestic and imported inputs is subject to reimbursement upon the exportation of finished goods. The available evidence indicates that the VAT refund mechanism causes fewer problems for exporters than in other CIS countries. However, the current tax legislation provides only for a restricted rate of VAT reimbursement by introducing an additional 4 percent turnover tax on exports. Thus, contrary to the tax regimes in other countries, Belarus preserves some value added taxation of its exporters.

4.93 The government conducts export promotion activities in accordance with the National Program of Export Development for 2000-05. In December 2004, the government adopted a resolution on export promotion measures in 2005. This resolution contains a long list of planned activities (see Box 4.4). In addition to being insufficiently specific, the plan envisions such measures as the elaboration of multiple “strategies,” “concepts,” conferences of line ministries’ bodies,” etc., which bear a heavily bureaucratic flavor and may or may not yield results. Other measures, such as raising import tariffs for synthetic fibers, are rather questionable. However, still other measures – such as regulatory harmonization or optimizing commercial diplomacy efforts -- will be quite helpful if properly implemented. Nevertheless, the overall results of this program remain to be seen.

Box 4.4: Selected Directions for Export Promotion for 2005

1. Export market diversification:
 - Creation of country and regional export strategies
 - Standards harmonization
 - Control of harmful substances in live animals and plants in accordance with EC Directives
 - Strategy of CIS market penetration
2. Promotion of exports of products with high R&D input
3. Reduction in energy- and material-intensity of Belarus economy
4. Higher efficiency of Belarus diplomatic efforts
5. Elaboration of Export Development Program for 2006-2010
6. Raising import tariff on synthetic fibers
7. Attracting IFI loans for SME development
8. Program for the development of the service sector
9. Bilateral agreements (with a number of countries) on international road transport
10. Introduction of ISO 9000 in 580 firms and ISO 14000 in 87 firms
11. Internet promotion activities

Source: Government Program of Export Promotion for 2005. Adopted by Government Resolution No. 1690 of December 30, 2004.

4.94 Future export promotion strategies in Belarus should be more streamlined. De Wulf (2001) reviewed the international experience in export promotion and concluded that a good export promotion strategy should strike a balance between offshore objectives (information gathering, market research, trade representation, and trade fairs) and onshore objectives (issues of competitiveness -- quality standards, pricing, supportive services, domestic input supply, development of new business models and practices). The current government strategy is weak on the latter issues. In addition, Belarus does not have an export promotion agency, which could on the one hand act as a coordinator of export promotion efforts and on the other hand foster close relationships and provide services to exporters. Although not every export promotion agency has proved to be an efficient organization, Belarus could benefit from best international practices in the development of export promotion organizations.

4.95 To date, export promotion efforts and commercial diplomacy have yielded positive results mostly in the Russian market (discussed earlier in this Chapter). Trade relations with the EU (outside of the booming exports of oil products) remain constrained, although Belarus enjoys Generalized System of Preferences (GSP).⁹³ In addition, the PCA Agreement with the EU was never ratified and there is no bilateral trade regulation harmonization program in effect today. Nevertheless, a few European firms established partnerships with Belarusian companies, especially on an outward processing basis, which provides easier access to the European market. However, Belarus' export performance in the EU market remains quite modest, considering the country's favorable geographic location and export potential.

4.96 The legislation on foreign investment in Belarus is reasonably good. The Investment Code adopted in 2001 and amended in 2004 is, in general, in conformity with WTO trade-related investment measures. However, as Chapter 5 suggests, the business environment is acrimonious as the legislation is not properly enforced.

4.97 At the same time, Belarus has established six free economic zones (FEZs) with a better investment and business climate and a more lenient taxation regime. As of January 1, 2005, the taxation regime in the FEZs was unified across all zones, and streamlined, and simplified, which was a step in the right direction. The residents of the FEZs enjoy considerable tax benefits, including a 50 percent reduction in the statutory rates of the VAT, and the profit tax is halved.

4.98 Based on limited evidence, we can conclude that the business environment in the FEZs appears somewhat better than in the rest of the country. However, this is not sufficient to make the FEZs very attractive to foreign investors, given the problems with Belarus' investment image abroad.

Fiscal Aspects of the Trade Regime

4.99 Table 4.16 presents aggregated data on trade taxation in Belarus. The table shows that the share of revenue from foreign trade in total tax receipts stood within a modest range. This provides additional justification for the simplification of the import tariff schedule. While the tariff yields fairly small revenues, it is disproportionately segmented, and the existence of 1,600 tariff lines with specific and mixed tariffs greatly complicates customs administration while increasing the risks of corruption. The ratio between revenues from import tariffs and export taxes fell from 52:1 in 2000 to 6.5:1 in 2001 and further to 2.6:1 in 2004, indicating a very high and increasing, relative importance of export taxation, which is usually found only in commodity-exporting countries.

Table 4.16: Taxation of Trade in Belarus, 2000-04

	2000	2001	2002	2003	2004
Total tax revenue (BYR mill.)	2,433,567.6	4,389,113.3	6,263,380.9	9,373,720.4	12,660,483.7
Total foreign trade revenues (BYR mill.)	141,797.3	299,982.8	523,590.8	957,158.8	1,094,784.9
As percent of total tax revenues	5.8	6.8	8.4	10.2	8.6
Composition of taxes on trade (as percent of total trade revenues):					
Import tariff	90.0	80.7	76.1	66.3	68.4
Export tax	1.7	12.4	18.0	27.1	26.6
Other taxes on trade	8.2	6.9	5.9	6.6	5.0
Share of indirect taxes collected on imports in total collection:					
Excise tax	4.4	3.7	3.9	3.5	3.0
VAT	21.9	25.1	26.5	33.3	32.2

Source: MoF.

⁹³ However, currently the possible withdrawal of GSP rights because of alleged non-respect for labor rights is being considered by the European Commission.

4.100 If the VAT and excises are considered, imports account for one-third of the total VAT collection, which is natural for a small open economy. The low collection of excises on imports (3.5 percent of the total excise collection) raises questions about the efficiency and integrity of customs administration. Excises are levied on alcohol, tobacco, cars, gasoline, and other goods. The import shares of these goods in total consumption are quite high, except for gasoline.

The WTO Accession Process

4.101 Belarus has been involved in the process of WTO accession for more than decade but this process is far from completion. Belarus submitted its application for WTO accession in September 1993 and the Working Party was established a month later. The Memorandum on Trade Regime was submitted in January 1996. The meetings of the Working Party were held in 1997, 1998, 2001, 2003, and 2004. The goods offer has been under negotiation since 1997 and the services offer since 2000. The Factual Summary was drafted in 2004.

4.102 The preliminary analytical assessment of the impact of Belarus' accession to the WTO reveals that Belarus will, on aggregate, benefit from the accession, with GDP rising by 3.4 percent and welfare rising by 1.6 percent (Pavel and Tochitskaya, 2005). The largest gains will come from changes in the domestic tax rates, including a reduction in export tariffs, which will be an export-creating measure.

4.103 Until recently there were significant obstacles to WTO accession for Belarus owing to the many Working Party members' complaints about the non-compliance of Belarus' regulations and trade practices with WTO agreements. However, Belarus made considerable progress in its WTO membership bid last year by introducing a large number of new WTO-compliant legislative measures. This is commendable considering that the Belarus government has acted on its own, with little international support. Progress was also made on several sectoral fronts such as agriculture, standards, and intellectual property rights. Nevertheless, much remains to be done. New laws should be complemented by an adequate regulatory framework, while hundreds of existing regulations should be reviewed and, if necessary, modified. In addition, much more progress is needed in liberalizing and de-monopolizing a number of sectors, including insurance and banking services, and telecommunications. It is also worth noting that the WTO negotiations on market access are still at an early stage. Thus, the full scope of Working Party member demands is not yet clear. A summary of issues related to the WTO-related legislation is provided in Table 4.17.

4.104 Reportedly, agriculture is not likely to be a contentious issue in WTO accession. Belarus and the Working Party have reached a preliminary agreement on historical estimates for the Aggregate Measure of Support (with 1997-99 as a base) and the allowed level of support (US\$500 million for the Amber Box support measures, equivalent to 4.2 percent of the average GDP for that period). The current agricultural import tariffs in Belarus are not too high, with the exception of few commodities.

4.105 Intellectual property rights legislation is reportedly largely TRIPS-compliant. According to the country rating by the International Intellectual Property Rights Organization, enforcement is not ideal but is quite respectable in relation to the comparator countries.

4.106 The banking sector will need to introduce regulations allowing for the establishment of foreign branches in the territory of Belarus. The state-dominated insurance sector will have to be liberalized.

4.107 In the telecommunications sector, the government expressed its commitment to create an adequate legislative and regulatory framework and to fully liberalize the sector by January 1, 2007. The Law on Electric Communications, which is in line with the prevailing international practices, has been submitted for approval. At the current negotiations, Belarus upholds two basic conditions for the market

entry: the 49 percent share of foreign capital in the authorized fund (equity capital) of the registered legal person, providing facilities-based services, in line with the common national practice; and the exclusive rights of the national telecommunications operator for the construction and operation of the network infrastructure for long distance and international telecommunications until January 1, 2007. Since entry into the WTO before that date is unlikely, this position should not be a stumbling block in the negotiations. A more important task is the creation of a regulative framework based on the newly proposed legislation, in accordance with the dynamic time frame envisioned by the government.

Table 4.17: Legislative Issues in WTO Accession

Issue	Corrective action
A. Recently Introduced Legislation	
Law on Import Tariff was not in compliance with GATT Article VII and the Customs Valuation Agreement	New Law on Import Tariff signed in July 2004 and effective as of 2/12/05.
Custom fees were not in compliance with GATT Article VIII (fees for customs processing should be limited to the actual cost of service, while it is currently <i>ad valorem</i>).	Amendments to the Customs Code were adopted on 11/24/04. New Customs Code is currently under review, and it will be in compliance with GATT Article VIII. The Code will eliminate the need for a number of existing laws and regulations.
Non-compliance with the TBT Agreement.	New Laws On Technical Regulations and Standards and On Conformity Assessments were signed 01/05/04.
Non-compliance with the SPS Agreement.	Amendments to the Law on Quality and security of food products for human life and health were adopted on 05/07/2004. Amendments to the Law on Plants have been adopted on 10/29/04.
Non-compliance with GATT Article VI and the Anti-Dumping Agreement	New Law on Anti-Dumping and Safeguards was signed on 11/25/04.
Non-compliance with GATT	Law on Regulating Foreign Trade Activities was signed on 11/25/04.
B. Expected Issues to be Addressed	
Necessity for change in regulations in accordance with aforementioned laws.	<ul style="list-style-type: none"> - Review and revise hundreds of regulations. - The Ministry of Justice aims at amending all necessary legislation by November 1, 2005. - Examples of important regulations that require attention: (i) Edict #7 of 12/4/2000 (deemed trade-restricting by Working Party members); and (ii) The 7-year plan for standards harmonization reform (started in July, 2004). No results yet; the first 46 technical regulations expected to come into force in H1, 2005.
Market access in trade in services – introducing the notion of branches of foreign companies in Belarus.	Revise the Civil Code, related legislation and regulations.
Market access in trade in services – introducing the notion of branches of foreign banks in Belarus. Liberalizing the banking sector.	Revise the Banking Code, related legislation and regulations.
Market access in trade in services – liberalizing and demonopolizing the insurance sector.	Revise the related legislation and regulations.
Market access in trade in services – liberalizing and demonopolizing the telecommunications sector.	Revise the related legislation and regulations.
The existing system of import quotas on alcohol and tobacco is not WTO-compliant	Replace the quotas with non-distortive instruments. Substituting the quotas with a high import tariff of 100 percent or higher, or a high license fee, or tariff-quotas (all of which were suggested by the MFA) is likely to be unacceptable to Working Party members.
A number of regulations granting concessions and preferences to individual enterprises constitute import substitution measures and/or export subsidies that are prohibited under WTO rules.	Review regulations, identify WTO-incompliant measures, and repeal them.

Note: The list of amended legislation and further actions is indicative of WTO accession problems but is by no means exhaustive. A complete WTO action plan would require substantial further work by national and international experts.

4.108 **Belarus is still at an early stage in its WTO accession process**, which could be compared to the stages of Russia and Ukraine three to five years ago. Ukraine's and Russia's experience with WTO accession should serve as a warning to the Belarus' government regarding excessive optimism about the

speed and ease of accession. Ukraine and Russia have been in the process of concluding bilateral market access agreements for several years and the process is still not completed. Belarus has not signed a single bilateral agreement to date, and from this perspective the government does not have sufficient information to properly plan its potential progress in the WTO negotiations.

4.109 Moreover, when compared to Russia and Ukraine, Belarus may face some additional bottlenecks in its future accession negotiations which are likely to be associated with problems concerning the general business environment in the country, such as the high level of subsidies (including export subsidies) and non-tariff barriers (including import restrictions).

4.110 To speed up the harmonization of the legal and regulatory framework in accordance with WTO rules, the Belarus government may benefit from international technical assistance. The Belarus Ministry of Foreign Affairs, which acts as the coordinating ministry on WTO accession, indicated its interest in this issue. One immediate task for such assistance is the external legal examination of the large array of recently introduced laws. Other tasks may include regulatory harmonization with WTO rules in various areas, including standards, financial services, and telecommunications.

E. CONCLUSIONS AND RECOMMENDATIONS

4.111 The main conclusion of this chapter relates to the slow restructuring of Belarus' export patterns. Since Belarus is a small open economy, its growth prospects depend heavily on its export capabilities. The low dynamism of the country's exports points to serious limitations in the existing growth model. The struggle to improve in the export structure and to bring about effective integration into the world economy represents the core of the competitive challenges that Belarus faces.

4.112 The other findings in this chapter with respect to trade performance could be summarized as follows:

- **A strong export performance has been a distinctive feature of the recent growth episode.** In 2000-04 exports more than doubled, backed by an improved demand in Russia and higher oil prices. The contribution of the price factor to overall export growth has been significant recently: in 2001-04 about one-third of total export growth was due to price movements. However, imports grew at a high rate as well so that the trade deficit as a percent of GDP was relatively stable during 2000-03. The hike in imports in 2004 led to a sharp deterioration in the trade deficit to 9 percent of GDP.
- **Belarus' exports remain highly concentrated in terms of export markets, exported products, and the role of leading exporters.** The share of Russia, while it has declined somewhat, still accounts for about half of total exports and about 90 percent of CIS exports. The 20 largest exporters are a source of more than 55 percent of all exports and more than 80 percent of non-CIS exports. 10 main export commodities accounted for over 50 percent of total exports in 2004. These were the products traditionally produced and exported by Belarus prior to independence. Excessive concentration renders the country's trade vulnerable to external shocks.
- **Trade restructuring and diversification are taking place at a much slower pace than in the neighboring countries.** While the EU's share in Belarus' exports has been growing (24 percent of total exports in 2004 as compared to 7 percent in 1998), it is still extremely low if one accounts for the country's location. Moreover, the recent expansion in exports to the EU has a very narrow base. It has occurred primarily at the expense of a sharp increase in exports of oil products.

- **In addition to high concentration, analysis has revealed several serious weaknesses in recent export patterns which, if not addressed, pose a serious risk for future growth.** The number of product groups, in which Belarus exhibits strong export specialization is low, and declined between 1998 and 2003. The factor intensity structure of exports shows the increasing importance of exports of resource—intensive and unskilled labor-intensive exports. Reliance on such commodity groups generally limits the possibility of job-generation and productivity improvements in the economy. The underdeveloped intra-industry trade with the EU reflects the failure to attract European FDI. This further limits opportunities for trade-related productivity gains.
- **There have already been signs of increasing competitive pressures** that the country's exports face in the Russian market as expressed in their declining market shares in total Russian consumption.

4.113 **The integration process with Russia has been important for Belarus in two fundamental ways.** First, Russia provided direct demand support for traditional Belarusian exports, including labor-intensive items in the machinery and equipment sector. Second, the integration process was a primary driver for recent policy adjustments, including several major reform steps such as the unification of the exchange rate and the phasing out of direct NBB financing of the budget deficit.

4.114 **Economic and trade relations with Russia were critical for the early growth in Belarus in the second part of the 1990s.** Thanks to its special relations with Russia, at the height of the output crisis in the CIS, Belarus managed to preserve its production capacity in manufacturing to a much better extent than any other CIS country (Russia included). The Union Treaty has already yielded important arrangements for fostering mutual trade by setting up a functioning Customs Union that led to a practical abolishment of the mutual customs border. At the same time, excessive export concentration in Russia is a reflection of the dichotomous nature of Belarus' export capabilities.

4.115 **Trade with Russia played a vital role in supporting the Belarus economy through a significant resource transfer.** The main channels of this transfer were discounted prices for Russian energy, non-market trade arrangements (such as barter and inter-government agreements on mutual direct deliveries), and the use of unilateral violations by Belarus of the provisions of the Customs Union. The resource transfer from Russia has been significant throughout the post-Soviet period. Belarus (as well as other CIS members) continues to benefit from energy import prices that are much lower than their world market equivalent, but this effect has been steadily declining. Moreover, until recently Belarus received even better energy arrangements than the rest of the CIS. (Compared to the prices of gas imports to Ukraine, in 2000-03 the average annual transfer received by Belarus through lower gas prices amounted to about 2 percent of GDP.)

4.116 **Belarus used rents associated with special relations with Russia quite strategically.** A large portion of these rents was centralized by the government and used for various public programs, including infrastructure investments, enterprise support, and social assistance throughout the economy. In the medium term, however, Belarus will face the unavoidable costs of adjustments that relate to future higher prices for Russian gas and oil. The latter costs, as measured against actual 2003 energy prices and import volumes, exceeded 6 percent of GDP a year.

4.117 **Overall, the Belarus trade regime is characterized by modest import tariff rates but fairly extensive non-tariff barriers.** Average import tariff rates were stable and quite modest during 1998–2003, staying between 10 and 14 percent. Agricultural import tariffs do not seem excessively high, with the exception of sugar. Although sugar is a sensitive commodity in many countries, Belarus' current sugar import tariff seems unreasonably high. The government could be advised to reconsider its rationale. The fiscal importance of import taxation is quite modest which provides justification for simplification of the import tariff schedule, which is currently too segmented.

4.118 **However, informal and regulatory non-tariff barriers undermine the benefits of a statutory liberal tariff regime.** There are a variety of ad hoc administrative regulations on both the national and local levels which are trade-restrictive. The government is advised to undertake a review of the large regulatory array in order to free up international trade. It should also improve its customs valuation practices to get rid of the remnant of import minimum pricing under the disguise of indicative import values.

4.119 **Standards reform should be expedited.** Although the legislative framework is mainly in place, slow reform implementation has not allowed switching from the excessive compulsory regulation inherent in the ex-Soviet GOST system to the modern two-tiered system of internationally compatible mandatory technical regulations and voluntary standards.

4.120 **Belarus' legislation on foreign investment and FEZ arrangements is reasonably good.** However, it has not resulted in sizable foreign investment owing to an acrimonious economy-wide business environment.

4.121 **Belarus' regional integration efforts have been quite successful in the direction of Russia and rather modest in the direction of the EU.** By virtue of its geographic position, Belarus should intensify its trade integration strategy with the EU, the political situation permitting.

4.122 **Belarus has made considerable progress in its WTO membership bid recently by introducing a large amount of new WTO-compliant legislation. Nevertheless, much remains to be done.** Since no single bilateral market access agreement has been signed as yet, Belarus should be considered as being at the early stage of accession. New laws should be complemented by an adequate regulatory framework, while the existing regulations should be reviewed and, if necessary, modified. In addition, much more progress is needed in liberalizing and de-monopolizing a number of sectors, including financial services and telecommunications. In order to expedite the harmonization of the legal and regulatory framework in accordance with WTO rules, the government may benefit from international technical assistance.

4.123 **Key bottlenecks that are likely to present themselves in Belarus' future WTO accession negotiations** would be associated with the general problems in the country's business environment and would include such issues as subsidies and import restrictions.

ANNEX 4.1. TRADE STATISTICS

Table A4.1: Balance of Payments, 1996-2004
(In millions of U.S. dollars)

Items	1996	1997	1998	1999	2000	2001	2002	2003	2004
Current account	-515.9	-859.2	-1 016.5	-193.7	-338.4	-394.4	-311.2	-423.5	-1,042.9
credit	6 907.7	7 974.8	7 245.1	6 557.5	7 843.6	8 706.0	9 610.4	11,990.8	16,191.6
debit	-7 423.6	-8 834.0	-8 261.6	-6 751.2	-8 182.0	-9 100.4	-9 921.6	-12,414.3	-17,234.5
I. Goods and services	-576.4	-853.0	-1 019.2	-255.5	-446.4	-505.7	-481.5	-670.7	-1,353.1
credit	6 698.1	7 837.5	7 097.4	6 399.7	7 640.8	8 476.4	9 305.5	11,572.8	15,666.4
debit	-7 274.5	-8 690.5	-8 116.6	-6 655.2	-8 087.2	-8 982.1	-9 787.0	-12,243.5	-17,019.5
Goods	-1 148.5	-1 407.0	-1 501.1	-570.0	-884.1	-806.7	-914.3	-1,255.6	-2,065.7
credit	5 790.1	6 918.7	6 172.3	5 646.4	6 640.5	7 334.1	7 964.7	10,072.9	13,916.8
debit	-6 938.6	-8 325.7	-7 673.4	-6 216.4	-7 524.6	-8 140.8	-8 879.0	-11,328.5	-15,982.5
Services	572.1	554.0	481.9	314.5	437.7	301.0	432.8	584.9	712.6
credit	908.0	918.8	925.1	753.3	1 000.3	1 142.3	1 340.8	1,499.9	1,749.6
debit	-335.9	-364.8	-443.2	-438.8	-562.6	-841.3	-908.0	-915.0	-1,037.0
II. Income	-30.8	-84.6	-92.9	-42.0	-46.7	-42.8	-28.6	25.1	25.5
credit	74.1	31.2	26.8	20.8	25.7	27.0	44.5	126.3	146.5
debit	-104.9	-115.8	-119.7	-62.8	-72.4	-69.8	-73.1	-101.2	-121.0
III. Current transfers	91.3	78.4	95.6	103.8	154.7	154.1	198.9	222.1	284.7
credit	135.5	106.1	120.9	137.0	177.1	202.6	260.4	291.7	378.7
debit	-44.2	-27.7	-25.3	-33.2	-22.4	-48.5	-61.5	-69.6	-94.0
Capital and financial account	694.0	806.3	844.2	434.2	84.3	399.8	438.2	382.4	736.3
credit	2 044.2	1 339.3	1 664.7	1 457.3	1 307.5	1 597.5	2 371.8	2,975.2	3,960.5
debit	-1 350.2	-533.0	-820.5	-1 023.1	-1 223.2	-1 197.7	-1 933.6	-2,592.8	-3,224.2
I. Capital account	1 006.0	133.2	170.1	54.6	69.4	56.3	52.7	68.9	48.8
credit	1 162.1	248.0	261.3	146.5	125.6	132.3	119.8	133.2	128.3
debit	-156.1	-114.8	-91.2	-91.9	-56.2	-76.0	-67.1	-64.3	-79.5
1. Capital transfers	1 006.0	133.2	170.1	54.6	69.4	56.3	52.7	68.9	48.8
credit	1 162.1	248.0	261.3	146.5	125.6	132.3	119.8	133.2	128.3
debit	-156.1	-114.8	-91.2	-91.9	-56.2	-76.0	-67.1	-64.3	-79.5
II. Financial account	-312.0	673.1	674.1	379.6	14.9	343.5	385.5	313.5	687.5
credit	882.1	1 091.3	1 403.4	1 310.8	1 181.9	1 465.2	2 252.0	2,842.0	3,832.2
debit	-1 194.1	-418.2	-729.3	-931.2	-1 167.0	-1 121.7	-1 866.5	-2,528.5	-3,144.7
1. Direct investment	104.5	349.5	200.9	443.2	118.6	95.5	453.3	170.3	168.1
credit	104.5	351.6	203.2	444.0	118.8	96.2	581.4	755.8	898.0
debit	0	-2.1	-2.3	-0.8	-0.2	-0.7	-128.1	-585.5	-729.9
1.1. Abroad	0	-2.1	-2.3	-0.8	-0.2	-0.3	206.2	-1.5	-1.3
credit	0	0	0	0	0	0.3	207.5	0	0.2
debit	0	-2.1	-2.3	-0.8	-0.2	-0.6	-1.3	-1.5	-1.5
1.2. In reporting economy	104.5	351.6	203.2	444.0	118.8	95.8	247.1	171.8	169.4
credit	104.5	351.6	203.2	444.0	118.8	95.9	373.9	755.8	897.8
debit	0	0	0	0	0	-0.1	-126.8	-584.0	-728.4
2. Portfolio investment	-14.5	-19.8	14.6	-20.6	44.4	-19.9	-9.1	6.1	59.7
credit	3.4	41.8	55.7	36.7	146.3	163.9	162.1	271.7	226.4
debit	-17.9	-61.6	-41.1	-57.3	-101.9	-183.8	-171.2	-265.6	-166.7
2.1. Assets	-17.7	-61.6	28.0	-15.4	-5.7	25.5	-2.4	0.8	3.2

Table A4.1 Continued

	credit	0	0	30.9	4.1	19.7	34.8	13.4	2.1	17.7
Items		1996	1997	1998	1999	2000	2001	2002	2003	2004
	debit	-17.7	-61.6	-2.9	-19.5	-25.4	-9.3	-15.8	-1.3	-14.5
2.2. Liabilities	credit	3.2	41.8	-13.4	-5.2	50.1	-45.4	-6.7	5.3	56.5
	debit	3.4	41.8	24.8	32.6	126.6	129.1	148.7	269.6	208.7
	debit	-0.2	0	-38.2	-37.8	-76.5	-174.5	-155.4	-264.3	-152.2
3. Other investment		-323.4	268.0	404.0	-77.5	-72.5	262.7	42.2	123.3	715.5
	credit	769.8	622.1	1 083.5	791.2	889.9	1 179.1	1 393.1	1,778.6	2,707.3
	debit	-1 093.2	-354.1	-679.5	-868.7	-962.4	-916.4	-1 350.9	-1,655.3	-1,991.8
3.1. Assets	credit	-131.5	49.9	199.4	-36.7	41.7	-139.2	-309.4	-61.0	-145.6
	debit	2.6	65.0	425.0	214.5	221.4	224.2	460.8	638.8	933.1
3.1.1. Trade credits	debit	-134.1	-15.1	-225.6	-251.2	-179.7	-363.4	-770.2	-699.8	-1,078.7
	credit	-93.9	59.6	187.9	-8.8	55.8	-36.5	-121.4	37.5	-269.1
	credit	0	59.6	187.9	0	55.8	0	0	37.5	0
	debit	-93.9	0	0	-8.8	0	-36.5	-121.4	0	-269.1
3.1.2. Loans	credit	0	-4.2	7.1	-7.0	1.6	-21.2	-35.2	12.6	6.0
	debit	0	1.7	12.8	0.2	1.9	0.6	1.8	14.7	15.3
	debit	0	-5.9	-5.7	-7.2	-0.3	-21.8	-37.0	-2.1	-9.3
3.1.3. Currency and deposits	credit	-40.2	-7.4	18.8	-6.1	9.8	-64.6	-145.2	-58.0	134.3
	debit	0	1.5	78.7	213.4	143.9	223.2	444.8	584.3	905.6
	debit	-40.2	-8.9	-59.9	-219.5	-134.1	-287.8	-590.0	-642.3	-771.3
3.1.4. Other assets	credit	2.6	1.9	-14.4	-14.8	-25.5	-16.9	-7.6	-53.1	-16.8
	debit	2.6	2.2	145.6	0.9	19.8	0.4	14.2	2.3	12.2
	debit	0	-0.3	-160.0	-15.7	-45.3	-17.3	-21.8	-55.4	-29.0
3.2. Liabilities	credit	-191.9	218.1	204.6	-40.8	-114.2	401.9	351.6	184.3	861.1
	debit	767.2	557.1	658.5	576.7	668.5	954.9	932.3	1,139.8	1,774.2
	debit	-959.1	-339.0	-453.9	-617.5	-782.7	-553.0	-580.7	-955.5	-913.1
3.2.1. Trade credits	credit	187.1	359.0	-59.7	-5.0	-125.5	-19.1	56.3	96.2	671.9
	debit	187.1	359.0	3.3	0	0	0	56.3	96.2	671.9
	debit	0	0	-63.0	-5.0	-125.5	-19.1	0	0	0
3.2.2. Loans	credit	76.9	76.6	-19.0	-26.8	50.4	321.7	315.0	58.0	187.4
	debit	157.9	155.2	223.4	349.7	496.7	753.1	816.2	920.5	1,018.6
	debit	-81.0	-78.6	-242.4	-376.5	-446.3	-431.4	-501.2	-862.5	-831.2
3.2.3. Currency and deposits	credit	156.2	-81.7	-7.4	-7.1	-44.7	61.5	32.0	78.7	16.2
	debit	156.2	5.1	71.5	5.4	8.7	61.5	38.6	78.7	44.6
	debit	0	-86.8	-78.9	-12.5	-53.4	0	-6.6	0	-28.4
3.2.4. Other liabilities	credit	-612.1	-135.8	290.7	-1.9	5.6	37.8	-51.7	-48.6	-14.4
	debit	266.0	37.8	360.3	221.6	163.1	140.3	21.2	44.4	39.1
	debit	-878.1	-173.6	-69.6	-223.5	-157.5	-102.5	-72.9	-93.0	-53.5
4. Reserve assets	credit	-78.6	75.4	54.6	34.5	-75.6	5.2	-100.9	13.8	-255.8
	debit	4.4	75.8	61.0	38.9	26.9	26.0	115.4	35.9	0.5
	debit	-83.0	-0.4	-6.4	-4.4	-102.5	-20.8	-216.3	-22.1	-256.3
Net errors and omissions		-178.1	52.9	172.3	-240.5	254.1	-5.4	-127.0	41.1	306.6
Total		0	0	0	0	0	0	0	0	0

Source: NBB.

Table A 4.2: Directions of Merchandise Exports, 1997-2004
(In millions of U.S. dollars)

	1997	1998	1999	2000	2001	2002	2003	2004
Total	7,301.2	7,069.7	5,908.9	7,331.0	7,450.6	8,020.9	9,945.6	13,751.7
CIS	5,378.9	5,160.2	3,621.6	4,404.7	4,493.7	4,384.4	5,453.4	7,295.8
Ukraine	425.4	386.9	280.6	559.7	421.8	271.6	343.5	539.8
Russia	4,780.0	4,608.1	3,222.0	3,715.7	3,962.7	3,977.1	4,898.7	6,463.0
Others of CIS	173.5	165.1	119.0	129.3	109.2	135.7	211.2	293.0
ROW	1,922.3	1,909.5	2,287.3	2,926.3	2,956.9	3,636.5	4,492.2	6,455.9
EU - 15	492.6	481.9	526.4	689.4	821.4	1,440.3	2,279.1	3,298.1
Germany	217.3	199.6	215.5	231.7	241.0	347.9	421.2	502.8
Great Britain	30.2	38.2	51.6	95.9	222.9	493.7	938.3	1,147.6
Italy	64.2	73.0	64.8	76.1	85.4	130.1	135.2	143.0
New member countries - 10	571.6	639.4	797.7	1,361.4	1,286.9	1,245.1	1,287.8	1,744.9
Latvia	72.5	171.4	260.4	467.3	492.3	520.1	344.2	326.0
Lithuania	137.8	157.6	174.7	348.8	275.8	256.7	265.0	356.3
Poland	245.8	184.9	208.3	276.8	248.0	273.3	434.2	728.8
China	115.8	99.7	169.5	136.2	143.1	217.4	162.3	301.5
USA	93.2	103.4	80.1	99.3	77.4	91.3	102.5	162.8
Brazil	60.6	58.9	67.5	65.9	76.7	89.4	113.4	146.4

Source: WITS/COMTRADE, MSA.

Table A 4.3: Directions of Merchandise Imports, 1997-2004
(In millions US dollars)

	1997	1998	1999	2000	2001	2002	2003	2004
Total	8,688.8	8,549.3	6,673.7	8,492.4	8,286.4	9,092.3	11,558.0	16,345.5
CIS	5,817.0	5,554.4	4,288.8	6,015.4	5,796.8	6,295.3	8,006.2	11,806.1
Ukraine	967.5	739.9	415.7	340.6	277.4	290.7	362.1	544.9
Russia	4,673.1	4,670.4	3,766.7	5,549.7	5,437.9	5,922.3	7,559.3	11,142.6
Others of CIS	176.4	144.1	106.3	125.2	81.5	82.4	84.9	118.6
ROW	2,871.8	2,994.8	2,384.9	2,477.0	2,489.6	2,797.0	3,551.8	4,539.4
EU - 15	1,431.6	1,492.5	1,321.5	1,290.0	1,271.1	1,482.9	1,776.7	2,242.0
Germany	691.1	757.7	693.0	587.6	604.1	693.1	820.3	1,081.0
Great Britain	99.1	116.9	80.1	106.4	61.4	67.7	79.3	128.4
Italy	157.9	179.0	167.9	162.6	164.1	215.2	283.9	300.5
New member countries - 10	729.2	752.2	487.0	534.6	475.5	495.8	734.8	997.2
Latvia	67.1	56.5	32.2	29.7	36.1	36.1	44.3	85.0
Lithuania	191.9	208.0	102.6	69.0	107.3	109.4	154.2	175.6
Poland	250.0	282.9	212.5	215.8	202.0	221.8	348.5	475.0
China	36.2	41.5	37.8	47.4	41.3	46.5	71.8	158.0
USA	138.1	124.6	129.6	138.7	131.6	103.2	150.2	195.6
Brazil	50.6	52.1	35.9	42.3	60.8	104.5	89.2	97.0

Source: WITS/COMTRADE, MSA.

Table A 4.4: Commodity Structure of Merchandise Exports (%)

	SITC code	1998	1999	2000	2001	2002	2003	2004
Total, US\$ million		7,069.7	5,908.9	7,331.1	7,450.6	8,020.9	9,945.6	13,751.7
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products	(0+1+22+4)	8.5	7.5	6.8	8.0	7.7	8.4	8.3
Agricultural Materials	(2-22-26-27-28)	1.4	1.8	1.6	1.5	2.0	2.1	1.9
Textiles fibers	(26)	1.6	1.7	2.0	2.0	1.7	1.4	1.2
Ores, minerals & metals	(27+28+68)	1.0	0.8	0.8	0.9	1.3	1.0	0.7
Energy	(3)	7.8	9.1	19.8	17.8	20.3	22.0	26.9
Manufacturing	(5 to 8-67-68)	72.5	70.7	62.8	65.3	59.7	57.4	52.9
Iron & steel	(67)	5.4	4.2	3.7	3.7	3.9	4.1	5.0
Other		1.7	4.3	2.5	0.9	3.4	3.4	3.1

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.5: Commodity Structure of Merchandise Imports (%)

	SITC code	1998	1999	2000	2001	2002	2003	2004
Total, US\$ million		8,549.3	6,673.7	8,492.4	8,286.4	9,092.3	11,504.9	16,345.5
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products	(0+1+22+4)	11.1	12.3	12.1	13.0	10.8	9.9	9.1
Agricultural Materials	(2-22-26-27-28)	1.6	1.6	1.5	1.6	1.6	1.4	1.2
Textiles fibers	(26)	0.8	1.0	0.8	0.7	0.6	0.7	0.7
Ores, minerals & metals	(27+28+68)	3.1	3.5	3.6	3.4	3.6	3.6	3.6
Energy	(3)	23.8	22.9	30.4	26.8	25.7	26.4	27.7
Manufacturing	(5 to 8-67-68)	49.5	47.9	43.2	47.1	44.7	45.0	44.7
Iron & steel	(67)	8.4	8.6	6.8	6.7	6.0	6.7	7.6
Other		1.6	2.1	1.5	0.6	7.0	6.3	5.5

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.6: Commodity Structure of Merchandise Exports by BEC (%)

	BE Code	1998	1999	2000	2001	2002	2003	2004
Total, US\$ million		7,069.7	5,908.9	7,326.4	7,450.6	8,020.9	9,945.6	13,329.4
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food and beverages	1	8.2	7.2	6.5	7.7	7.4	8.0	8.3
Primary: Mainly for industry	111	0.1	0.0	0.1	0.1	0.1	0.2	0.0
Primary: Mainly for household consumption	112	1.1	1.5	0.9	0.7	0.5	0.7	0.6
Processed: Mainly for industry	121	0.8	0.4	0.8	1.0	0.8	0.8	0.9
Processed: Mainly for household consumption	122	6.3	5.3	4.8	5.9	6.0	6.3	6.8
Industrial supplies, nes	2	36.4	36.5	34.1	34.9	33.5	33.0	32.4
Primary	21	1.8	1.5	1.5	1.5	2.1	1.7	1.4
Processed	22	34.7	35.0	32.6	33.4	31.3	31.4	31.0
Fuels and lubricants	3	7.6	8.9	19.6	17.3	19.9	21.6	27.3
Primary	31	0.4	0.5	0.9	1.0	1.2	1.5	1.9
Processed: Motor spirit	321	7.1	8.4	18.5	16.2	18.4	19.7	24.7
Processed: Other	322	0.1	0.1	0.2	0.1	0.2	0.4	0.7
Capital goods (except for transport equipment), and parts and accessories thereof	4	12.3	12.4	10.4	11.7	11.3	10.6	9.8
Capital goods (except for transport equipment)	41	9.0	9.9	8.0	9.0	9.0	8.4	7.8
Parts and accessories	42	3.3	2.5	2.4	2.7	2.3	2.2	2.0
Transport equipment and parts and accessories thereof	5	18.0	15.1	13.3	12.9	11.0	10.4	10.4
Passenger motor cars	51	0.6	0.1	0.1	0.0	0.0	0.0	0.0
Other: Industrial	521	8.7	8.3	7.8	7.7	7.1	6.4	6.5
Other: Non-industrial	522	0.4	0.5	0.4	0.4	0.4	0.3	0.2
Parts and accessories	53	8.4	6.2	5.0	4.8	3.6	3.8	3.6
Consumer goods nes	6	15.7	15.6	13.5	14.6	13.5	13.0	11.8
Durable	61	6.1	6.4	5.9	6.6	6.7	6.6	6.1
Semi-durable	62	6.4	6.1	5.0	5.2	4.1	3.8	3.3
Non-durable	63	3.2	3.0	2.7	2.8	2.7	2.7	2.3
Goods nes	7	1.7	4.3	2.5	0.9	3.4	3.3	0.0

Source: World Bank staff estimates based on WITS/COMTRADE data.

Table A 4.7: Commodity Structure of Merchandise Imports by BEC (%)

	BE Code	1998	1999	2000	2001	2002	2003	2004
Total, US\$ million		8,549.3	6,673.7	8,646.2	8,286.4	9,092.3	11,558.0	15,443.8
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food and beverages	1	7.7	8.8	9.3	9.9	8.1	7.5	7.3
Primary: Mainly for industry	111	1.3	2.5	3.3	1.1	0.9	0.7	0.9
Primary: Mainly for household consumption	112	1.1	1.1	0.9	1.1	0.8	0.9	0.8
Processed: Mainly for industry	121	2.1	2.5	2.2	2.4	2.1	1.5	1.3
Processed: Mainly for household consumption	122	3.2	2.8	2.9	5.3	4.3	4.3	4.3
Industrial supplies, nes	2	35.0	38.0	34.4	34.4	33.3	33.7	35.4
Primary	21	3.4	3.9	4.1	3.2	3.5	3.3	3.3
Processed	22	31.6	34.1	30.3	31.2	29.7	30.4	32.1
Fuels and lubricants	3	23.8	22.9	30.4	26.9	25.7	26.3	29.3
Primary	31	19.2	18.3	25.7	23.3	22.6	23.0	27.1
Processed: Motor spirit	321	1.4	1.8	2.5	1.1	1.1	1.4	1.1
Processed: Other	322	3.3	2.9	2.2	2.5	2.1	1.9	1.0
Capital goods (except for transport equipment), and parts and accessories thereof	4	14.9	14.4	12.6	13.6	13.7	14.8	16.7
Capital goods (except for transport equipment)	41	9.5	9.5	8.5	8.9	9.5	10.5	11.2
Parts and accessories	42	5.4	4.9	4.1	4.7	4.2	4.3	5.5
Transport equipment and parts and accessories thereof	5	9.6	7.2	5.5	8.6	6.3	5.3	6.1
Passenger motor cars	51	1.0	0.4	0.3	1.8	0.2	0.2	0.2
Other: Industrial	521	2.7	2.3	1.5	3.0	3.0	2.1	1.9
Other: Non-industrial	522	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Parts and accessories	53	6.0	4.5	3.7	3.8	3.0	3.1	3.9
Consumer goods nes	6	7.2	6.7	6.2	6.1	5.9	5.8	5.3
Durable	61	1.0	0.7	0.6	0.5	0.6	0.6	0.7
Semi-durable	62	1.4	1.3	1.4	1.5	1.5	1.3	1.4
Non-durable	63	4.9	4.7	4.3	4.0	3.8	3.8	3.2
Goods nes	7	1.6	2.1	1.6	0.6	7.0	6.5	0.0

Source: World Bank staff estimates based on WITS/COMTRADE data.

Table A 4.8: Total Exports, without Oil Products, 1998-2004

	1998	1999	2000	2001	2002	2003	2004
Total, US\$ thousand	7,069,724.8	5,908,935.1	7,331,030.1	7,450,625.7	8,020,911.8	9,945,588.4	13,751,699.6
Exports without oil products	6,524,908.3	5,380,342.9	5,895,298.7	6,136,581.2	6,415,886.2	7,795,091.7	10,154,978.3
CIS							
Total exports	5,160,188.6	3,621,620.9	4,404,729.7	4,493,730.0	4,384,404.2	5,434,605.1	7,295,817.6
Exports without oil products	4,819,081.8	3,468,992.2	3,945,226.1	4,252,960.8	4,282,909.1	5,337,581.3	6,936,893.7
<i>Russia</i>							
Total exports	4,608,147.1	3,222,030.6	3,715,696.8	3,962,717.2	3,977,107.1	4,879,857.8	6,462,976.6
Exports without oil products	4,317,793.2	3,173,261.5	3,649,765.5	3,916,999.8	3,956,617.0	4,845,884.7	6,222,220.6
<i>Ukraine</i>							
Total exports	386,903.8	280,609.9	559,727.9	421,818.7	271,581.6	343,520.0	539,809.6
Exports without oil products	346,705.3	185,243.9	187,676.7	252,388.9	209,665.6	302,747.1	451,232.7
<i>Others of CIS</i>							
Total exports	165,137.7	118,980.4	129,305.0	109,194.1	135,715.5	211,227.3	293,031.4
Exports without oil products	154,583.3	110,486.8	107,783.9	83,572.1	116,626.5	188,949.5	263,440.4
ROW							
Total exports	1,909,536.2	2,287,314.2	2,926,300.4	2,956,895.7	3,636,507.6	4,510,983.3	6,455,882.0
Exports without oil products	1,705,826.5	1,911,350.7	1,950,072.6	1,883,620.4	2,132,977.1	2,457,510.4	3,218,084.6
<i>EU - 15</i>							
Total exports	481,923.9	526,371.8	689,449.0	821,448.5	1,440,298.1	2,279,044.2	3,298,117.4
Exports without oil products	461,234.8	498,626.8	560,480.5	543,282.2	645,564.4	800,573.5	907,736.0
<i>Germany</i>							
Total exports	199,585.1	215,496.2	231,726.1	241,044.9	347,941.1	421,183.8	502,848.3
Exports without oil products	195,186.2	214,740.4	231,698.5	233,509.8	265,856.0	315,450.7	364,142.9
<i>Great Britain</i>							
Total exports	38,162.1	51,641.1	95,895.2	222,930.5	493,725.9	938,265.4	1,147,562.7
Exports without oil products	33,275.6	32,834.9	31,266.4	26,328.1	35,667.5	36,075.0	64,196.2
<i>Italy</i>							
Total exports	73,032.8	64,775.8	76,050.5	85,410.8	130,059.4	135,252.0	142,956.7
Exports without oil products	72,083.4	64,282.0	74,859.7	82,826.8	130,059.4	133,982.2	140,952.4
<i>New member countries - 10</i>							
Total exports	639,359.8	797,739.1	1,361,440.6	1,286,872.9	1,245,086.1	1,288,018.2	1,744,902.1
Exports without oil products	457,462.5	463,400.7	518,599.4	506,334.1	555,958.4	732,551.6	938,357.2
<i>Latvia</i>							
Total exports	171,405.1	260,431.1	467,311.3	492,265.9	520,108.8	344,349.7	325,999.9
Exports without oil products	82,686.4	86,177.0	91,285.9	79,370.2	86,744.9	110,526.0	153,700.4
<i>Lithuania</i>							
Total exports	157,566.8	174,653.7	348,777.0	275,803.8	256,736.1	264,981.6	356,277.0
Exports without oil products	138,380.2	123,965.5	139,670.2	158,530.7	177,795.3	240,422.3	283,412.8
<i>Poland</i>							
Total exports	184,918.3	208,326.0	276,753.1	248,001.4	273,280.0	434,171.6	728,753.7
Exports without oil products	136,833.5	162,877.9	207,120.0	165,860.3	193,020.4	243,819.5	357,001.1
China							
Total exports	99,651.4	169,459.3	136,218.0	143,054.2	217,428.6	162,252.2	301,490.8
Exports without oil products	99,651.4	169,459.3	136,218.0	143,054.2	217,428.0	162,250.8	301,490.8
United States							
Total exports	103,351.2	80,107.7	99,286.4	77,429.5	91,315.8	102,468.7	162,830.9
Exports without oil products	103,346.7	80,018.4	99,068.4	76,431.3	86,012.6	102,468.7	153,141.2

Source: WITS/COMTRADE data.

Table A 4.9: Export Diversification Index at 3-digit SITC level

	1998	1999	2000	2001	2002	2003
Total	0.504	0.530	0.551	0.557	0.546	0.536
CIS	0.477	0.502	0.498	0.496	0.465	0.459
Russia	0.458	0.479	0.481	0.481	0.481	0.476
ROW	0.668	0.669	0.697	0.705	0.718	0.715
EU-15	0.769	0.742	0.751	0.773	0.779	0.795

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.10: Hirschman Index (at 3-digit SITC level), 1998-2003

	1998	1999	2000	2001	2002	2003
Total	0.153	0.170	0.221	0.204	0.219	0.228
CIS	0.151	0.149	0.165	0.142	0.140	0.140
Russia	0.153	0.146	0.142	0.141	0.141	0.140
ROW	0.256	0.289	0.361	0.387	0.418	0.447
EU-15	0.216	0.213	0.252	0.364	0.519	0.615

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.11: Revealed Comparative Advantage Indices, 1998-2003
(Total export, 3-digit SITC level)*

SITC code	Product Description	1998	1999	2000	2001	2002	2003
011	Beef, fresh/chilld/frozn	0.78	0.55	0.52	1.77	2.03	2.21
017	Meat/offal presvd n.e.s	1.33	1.72	1.68	2.03	2.44	3.36
022	Milk pr exc buttr/cheese	1.72	1.43	2.97	3.85	3.02	4.73
023	Butter and cheese	8.30	7.86	7.06	10.29	11.06	12.75
024	Cheese and curd	3.23	2.19	2.54	2.93	2.82	3.43
025	Eggs, albumin	18.33	26.80	18.18	15.10	10.42	10.14
037	Fish/shellfish,prep/pres	0.56	0.58	0.71	0.83	1.74	2.10
045	Cereal grains nes	0.41	0.02	0.00	0.94	2.89	5.06
046	Flour/meal wheat/meslin	1.08	0.54	2.94	1.04	0.08	0.20
047	Cereal meal/flour n.e.s	13.22	1.75	1.03	2.42	0.20	5.81
061	Sugar/mollasses/honey	5.82	6.40	6.67	5.65	8.68	8.09
062	Sugar confectionery	5.01	5.12	5.70	4.13	3.64	3.33
073	Chocolate/cocoa preps	1.30	1.35	1.99	2.08	2.18	1.47
091	Margarine/shortening	4.32	3.47	4.40	2.60	0.82	1.10
211	Hide/skin (ex fur) raw	1.13	0.70	0.77	0.95	4.99	2.25
212	Furskins/pieces, raw	4.26	8.70	9.35	6.31	4.12	5.78
245	Fuel wood/wood charcoal	0.97	1.62	1.73	1.67	1.21	2.33
247	Wood in rough/squared	2.92	2.70	2.45	2.95	3.00	2.79
248	Wood simply worked	1.71	2.38	2.44	2.13	2.47	2.73
265	Veg text fibre ex cot/ju	4.26	5.01	3.94	8.68	10.32	7.70
266	Synthetic spinning fibre	17.30	20.43	24.57	25.81	20.00	27.35
273	Stone/sand/gravel	2.15	1.34	1.49	2.14	2.36	1.69
278	Other crude minerals	2.86	1.72	1.43	1.14	1.58	1.73
288	Nf base metal waste nes	0.88	1.24	1.10	1.51	3.30	1.40
322	Briquettes/lignite/peat	1.47	1.56	0.80	0.84	2.43	4.01
334	Heavy petrol/bitum oils	4.64	4.53	6.97	6.75	8.30	9.80
335	Residual petrol. prods	1.48	1.02	1.52	3.17	2.81	3.11
533	Pigments/paints/varnish	2.42	1.66	1.55	2.55	0.79	0.60
562	Manufactured fertilizers	23.80	31.81	27.45	29.17	32.31	29.83
571	Primary ethylene polymer	2.41	2.73	3.01	3.44	2.72	2.55
592	Starches/glues/etc.	2.32	1.83	2.57	2.76	2.16	1.96
611	Leather	1.09	1.23	1.09	1.51	1.34	2.30
613	Furskins tanned/dressed	2.58	3.78	2.24	1.38	3.72	3.31
625	Rubber tyres/treads	5.97	4.28	3.77	3.50	1.93	2.04
634	Veneer/plywood/etc	2.54	2.46	2.53	2.58	2.34	2.08
651	Textile yarn	3.43	4.60	4.13	3.99	3.62	3.71
654	Woven textile fabric nes	5.38	6.92	6.16	5.36	5.72	5.95
657	Special yarns/fabrics	2.94	1.95	2.26	2.69	2.23	2.38
659	Floor coverings etc.	2.38	2.38	3.03	2.84	2.32	1.84
662	Clay/refractory material	2.65	3.20	4.49	5.09	4.79	4.33
672	Primary/prods iron/steel	7.79	9.26	9.49	4.96	4.60	3.70
676	Iron/steel bars/rods/etc	4.70	3.52	3.10	5.02	5.07	5.62
677	Iron/steel railway matl	3.86	2.70	0.02	0.10	0.19	0.81

678	Iron/steel wire	4.81	4.92	5.30	5.46	6.42	6.96
693	Wire prod exc ins electr	13.45	15.26	14.12	12.52	11.90	13.21
697	Base metal h"hold equipms	2.70	3.97	3.91	4.18	4.02	3.81
721	Agric machine ex tractr	2.22	4.33	3.91	3.57	2.40	1.58
722	Tractors	14.71	27.11	21.19	21.79	17.74	14.82
746	Ball/roller bearings	3.95	3.17	2.75	2.43	2.05	1.20
775	Domestic equipment	2.73	3.86	3.90	4.15	4.24	3.92
782	Goods/service vehicles	6.26	6.37	5.50	5.42	4.39	3.84
783	Road motor vehicles nes	3.76	3.38	7.02	6.54	7.17	5.74
786	Trailers/caravans/etc	4.45	4.59	4.14	4.39	3.80	2.53
811	Prefabricated buildings	4.46	3.40	3.53	3.35	2.06	1.28
812	Sanitary/plumb/heat fixt	2.66	1.47	1.63	2.17	1.98	2.17
821	Furniture/stuff furnishg	2.55	2.03	1.81	1.94	1.97	1.82
842	Women/girl clothing wven	1.97	2.08	2.01	2.10	1.71	1.57
844	Women/girl wear knit/cro	2.15	1.28	0.94	1.10	0.72	0.61
851	Footwear	2.44	2.31	1.89	1.68	0.86	0.73
871	Optical instruments nes	1.11	1.18	1.43	3.10	3.53	2.58
891	Arms and ammunition	2.46	0.00	0.01	0.00	0.00	0.00

*Commodities with RCA>2 in any year.

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.12: Export Specialization Indices, 1998-2003
(Exports to CIS, 3-digit SITC level)*

SITC code	Product Description	1998	1999	2000	2001	2002	2003
011	Beef, fresh/chilld/frozn	0.35	0.21	0.33	0.92	1.20	3.10
017	Meat/offal presvd n.e.s	0.23	0.88	0.90	1.76	2.86	5.40
022	Milk pr exc buttr/cheese	1.19	1.44	2.45	4.89	6.07	8.16
023	Butter and cheese	2.14	2.42	2.47	3.79	4.77	3.78
024	Cheese and curd	1.85	2.81	2.26	2.61	2.67	3.33
025	Eggs, albumin	7.53	9.48	8.43	9.01	8.95	7.72
035	Fish,dried/salted/smoked	1.01	1.28	1.49	1.25	1.47	4.52
037	Fish/shellfish,prep/pres	0.63	1.01	1.70	1.23	2.19	2.96
047	Cereal meal/flour n.e.s	3.80	0.89	0.71	2.06	0.27	5.85
061	Sugar/mollasses/honey	1.40	0.87	1.20	0.99	2.80	2.18
062	Sugar confectionery	1.56	2.23	2.06	2.08	3.14	3.80
212	Furskins/pieces, raw	4.04	6.77	5.08	1.62	1.97	3.03
245	Fuel wood/wood charcoal	2.81	8.97	11.43	10.98	4.97	14.95
246	Wood chips/waste	3.61	0.91	0.18	0.62	0.00	0.45
247	Wood in rough/squared	5.52	7.62	6.20	6.91	8.21	7.89
248	Wood simply worked	2.23	2.02	1.35	1.02	0.90	0.53
264	Jute/bast fibre raw/retd	0.46	1.59	2.07	0.03	0.73	0.00
265	Veg text fibre ex cot/ju	3.05	1.86	1.50	5.73	5.21	4.64
266	Synthetic spinning fibre	15.41	15.98	15.63	18.15	17.98	16.05
268	Wool/animal hair	1.90	3.60	1.62	2.53	6.04	2.90
277	Natural abrasives n.e.s.	0.10	0.00	3.95	1.11	0.00	0.00
288	Nf base metal waste nes	1.88	1.52	0.96	0.02	1.46	3.77
322	Briquettes/lignite/peat	2.40	0.45	0.20	0.38	0.70	0.73
334	Heavy petrol/bitum oils	3.34	2.32	4.17	3.10	1.64	1.04
335	Residual petrol. prods	1.15	0.44	1.09	2.56	3.28	3.92
344	Petrol./hydrocarbon gas	0.00	0.01	5.54	8.91	8.98	17.56
515	Organo-inorganic compnds	4.05	2.57	1.69	1.54	2.38	3.29
562	Manufactured fertilizers	12.52	8.22	6.05	5.66	4.48	4.19
571	Primary ethylene polymer	6.48	6.97	7.11	7.92	6.45	4.69
574	Polyacetals/polyesters..	1.98	1.60	1.10	1.33	1.36	2.48
579	Plastic waste/scrap	0.89	0.62	0.76	2.85	4.35	7.25
592	Starches/glues/etc.	1.62	1.69	2.17	2.33	1.70	0.74
611	Leather	1.84	2.47	2.04	2.27	3.06	2.90
621	Materials of rubber	1.41	1.09	1.07	1.82	2.14	1.97
625	Rubber tyres/treads	4.66	4.32	3.28	3.43	2.39	2.55
634	Veneer/plywood/etc	2.53	2.36	2.11	2.15	2.04	1.72
651	Textile yarn	6.73	6.71	6.38	8.01	8.35	7.10
652	Cotton fabrics, woven	2.26	1.48	1.71	1.83	1.51	1.41
654	Woven textile fabric nes	1.82	1.87	1.98	2.16	2.54	2.52
657	Special yarns/fabrics	3.50	2.57	2.48	3.17	2.96	2.79
659	Floor coverings etc.	1.90	2.64	2.45	2.66	2.21	1.79
661	Lime/cement/constr mat'l	2.50	1.99	1.96	1.66	0.89	0.83
662	Clay/refractory material	1.65	2.12	2.51	3.08	3.14	2.92
663	Mineral manufactures nes	1.71	1.49	1.71	1.82	2.40	2.72
664	Glass	2.58	2.33	1.97	3.27	3.09	3.09
672	Primary/prods iron/steel	7.12	8.03	9.49	10.37	1.19	0.28
676	Iron/steel bars/rods/etc	3.52	2.23	1.10	1.69	3.08	5.67
678	Iron/steel wire	4.04	2.93	1.86	3.20	3.20	3.17
682	Copper	0.97	0.68	0.98	0.95	3.21	1.71
683	Nickel	0.36	0.38	0.65	2.46	0.21	1.00
693	Wire prod exc ins electr	8.18	8.97	6.72	7.74	9.39	8.77
694	Nails/screws/nuts/bolts	4.23	0.79	1.06	1.32	1.32	1.69

Table A4.12 Continued

697	Base metal h ^h old equipms	2.64	5.12	4.24	4.30	4.49	3.90
713	Internal combust engines	3.18	2.96	2.59	2.26	2.13	2.68
721	Agric machine ex tractr	0.96	2.51	1.83	1.60	1.24	0.99
722	Tractors	5.63	11.27	10.44	10.95	12.52	10.60
735	Metal machine tool parts	2.15	1.30	2.46	3.86	3.08	3.18
746	Ball/roller bearings	6.46	5.79	4.55	4.14	4.49	3.46
761	Television receivers	1.56	3.22	2.74	3.68	3.33	2.43
771	Elect power transm equip	2.81	2.10	1.55	2.03	2.53	2.84
775	Domestic equipment	1.99	3.67	3.09	3.33	3.70	3.39
782	Goods/service vehicles	8.34	9.09	8.12	7.03	6.15	4.74
783	Road motor vehicles nes	2.23	3.93	5.48	4.19	4.79	4.93
784	Motor veh parts/access	3.41	2.81	2.71	2.90	1.88	2.50
785	Motorcycles/cycles/etc	6.38	9.95	7.80	8.52	6.46	4.23
786	Trailers/caravans/etc	4.31	7.31	5.54	4.96	4.71	4.19
811	Prefabricated buildings	2.08	1.52	2.23	1.64	1.13	0.55
821	Furniture/stuff furnishg	1.77	1.91	1.81	2.10	2.47	2.54
871	Optical instruments nes	3.32	6.17	2.42	4.31	6.81	3.99
873	Meters and counters nes	0.81	2.14	2.12	2.29	1.88	1.68
885	Watches and clocks	1.75	2.69	1.93	1.30	1.28	0.74

*Commodities with ESI>2 in any year.

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.13: Export Specialization Indices, 1998-2003
(Exports to Russia, 3-digit SITC level)*

SITC code	Product Description	1998	1999	2000	2001	2002	2003
017	Meat/offal presvd n.e.s	0.18	0.68	0.80	1.61	2.51	4.88
022	Milk pr exc buttr/cheese	1.03	1.15	2.35	4.67	6.65	7.89
023	Butter and cheese	1.71	1.81	1.92	2.84	3.47	2.66
024	Cheese and curd	1.29	1.92	1.58	1.80	1.79	2.21
025	Eggs, albumin	8.67	9.73	9.69	10.10	9.27	7.78
035	Fish,dried/salted/smoked	0.99	1.34	2.02	1.88	1.68	3.53
037	Fish/shellfish,prep/pres	0.55	0.89	1.51	1.12	1.73	2.32
046	Flour/meal wheat/meslin	0.60	0.49	2.48	2.00	0.86	1.06
047	Cereal meal/flour n.e.s	3.79	0.84	0.99	0.78	0.39	3.10
061	Sugar/mollasses/honey	1.27	0.61	0.82	0.43	2.17	1.66
062	Sugar confectionery	1.35	2.02	1.83	1.97	3.63	4.16
073	Chocolate/cocoa preps	0.47	1.21	1.39	1.47	1.65	2.33
075	Spices	1.05	1.07	2.57	0.13	0.05	0.02
111	Beverage non-alcohol nes	0.54	1.46	1.04	1.47	2.28	1.36
212	Furskins/pieces, raw	3.76	5.53	3.98	1.43	1.48	2.28
245	Fuel wood/wood charcoal	6.97	9.08	9.38	9.51	7.32	11.25
247	Wood in rough/squared	6.06	7.19	6.32	8.78	8.99	8.81
248	Wood simply worked	2.79	2.01	1.95	1.94	1.91	1.87
264	Jute/bast fibre raw/retd	0.38	5.61	7.65	0.02	5.67	0.00
265	Veg text fibre ex cot/ju	4.24	1.71	1.27	5.68	5.19	3.68
266	Synthetic spinning fibre	10.83	10.32	10.85	12.46	12.13	10.62
268	Wool/animal hair	2.01	2.76	1.77	2.74	5.23	2.52
277	Natural abrasives n.e.s.	0.21	0.01	6.48	2.86	0.00	0.00
278	Other crude minerals	1.64	0.48	0.46	0.46	1.07	2.04
282	Ferrous waste/scrap	3.78	0.70	0.68	0.78	0.89	7.20
288	Nf base metal waste nes	3.07	2.16	2.01	1.41	6.49	7.61
321	Coal non-agglomerated	0.00	0.04	0.01	0.00	3.42	0.20
322	Briquettes/lignite/peat	3.70	3.08	0.28	0.32	0.87	0.20
333	Petrol./bitum. oil,crude	0.00	0.00	0.00	0.00	13.50	11.55
334	Heavy petrol/bitum oils	4.58	2.07	2.67	2.01	0.73	1.29
342	Liquid propane/butane	0.68	1.99	5.76	0.00	3.55	0.00
344	Petrol./hydrocarbon gas	0.00	0.02	7.46	11.30	13.00	11.13
515	Organo-inorganic compnds	3.58	1.79	0.93	0.99	0.15	0.31
562	Manufactured fertilizers	10.21	9.67	10.19	8.07	10.41	9.72
571	Primary ethylene polymer	6.57	7.21	8.13	7.97	6.11	3.92
574	Polyacetals/polyesters..	1.85	1.34	1.01	1.16	1.15	2.24
579	Plastic waste/scrap	0.97	3.16	2.34	3.56	3.98	5.51
592	Starches/glues/etc.	1.32	1.35	1.87	2.01	1.56	0.63
611	Leather	2.04	3.04	2.24	2.33	3.12	3.00
621	Materials of rubber	1.42	0.97	1.20	1.81	2.04	1.70
625	Rubber tyres/treads	4.25	3.56	3.30	3.51	2.68	2.77
634	Veneer/plywood/etc	1.95	2.14	2.34	2.32	2.24	1.80
651	Textile yarn	5.57	5.15	5.36	7.22	7.53	6.35
652	Cotton fabrics, woven	2.69	2.04	2.52	2.76	2.09	1.94
654	Woven textile fabric nes	2.35	2.10	2.57	2.45	2.85	2.64
657	Special yarns/fabrics	2.79	2.27	2.53	3.06	2.69	2.60
659	Floor coverings etc.	2.10	3.24	3.32	3.27	2.74	2.16
661	Lime/cement/constr mat'l	2.70	1.86	1.86	1.70	1.20	1.23
662	Clay/refractory material	1.78	2.38	2.78	3.10	2.98	2.70
663	Mineral manufactures nes	1.85	1.56	1.78	1.84	2.27	2.70
664	Glass	2.43	2.02	2.07	3.12	2.45	2.58
667	Pearls/precious stones	0.00	0.00	3.78	7.05	0.00	0.00

Table A4.13 Continued

672	Primary/prods iron/steel	7.56	6.92	9.84	9.37	5.42	2.21
676	Iron/steel bars/rods/etc	3.41	2.07	1.06	1.92	3.66	7.96
677	Iron/steel railway matl	1.97	2.03	0.01	0.29	0.94	3.20
678	Iron/steel wire	5.32	4.07	3.44	4.36	4.75	5.62
682	Copper	1.60	0.94	1.38	1.46	4.08	2.33
683	Nickel	0.98	1.26	2.35	4.73	0.38	2.08
685	Lead	1.65	0.00	0.02	0.06	0.43	2.72
686	Zinc	0.48	0.59	0.14	2.62	0.10	0.13
693	Wire prod exc ins electr	7.22	7.58	6.28	7.34	8.53	8.69
694	Nails/screws/nuts/bolts	4.43	0.81	1.16	1.32	1.18	1.65
697	Base metal h"hold equipms	2.00	4.07	3.41	3.47	3.59	3.28
713	Internal combust engines	3.92	3.49	3.36	2.95	2.37	2.44
718	Power generating equ nes	3.59	2.25	2.66	2.89	2.24	3.51
721	Agric machine ex tractr	1.01	2.72	2.40	2.12	1.59	1.16
722	Tractors	6.52	8.54	7.93	8.85	8.99	7.23
735	Metal machine tool parts	1.74	1.01	2.27	3.60	2.59	2.60
746	Ball/roller bearings	5.70	5.46	4.21	3.76	4.56	3.75
761	Television receivers	1.38	2.77	3.02	3.86	3.50	2.56
771	Elect power transm equip	2.61	2.19	1.96	2.11	2.29	2.75
773	Electrical distrib equip	1.02	2.14	2.31	1.56	1.70	2.17
775	Domestic equipment	1.43	2.60	2.29	2.51	2.85	2.56
782	Goods/service vehicles	6.99	7.34	7.00	6.73	6.22	4.54
783	Road motor vehicles nes	2.54	3.73	5.15	4.10	4.58	4.59
784	Motor veh parts/access	3.96	3.31	3.28	3.14	1.74	2.19
785	Motorcycles/cycles/etc	5.37	7.72	6.35	6.98	5.26	3.20
786	Trailers/caravans/etc	4.83	6.11	5.40	5.10	4.43	3.63
811	Prefabricated buildings	2.04	1.40	2.63	1.57	0.94	0.78
821	Furniture/stuff furnishg	1.57	1.70	1.69	1.95	2.23	2.24
871	Optical instruments nes	3.61	5.60	1.91	3.77	5.48	3.03
873	Meters and counters nes	1.01	2.45	3.37	2.64	2.56	2.43
885	Watches and clocks	1.44	2.26	1.66	1.10	1.04	0.64
931	UN Special Code	0.96	1.21	2.57	0.74	4.91	3.13
971	Gold non-monetary ex ore	0.00	0.00	1.80	2.26	0.00	0.00

* Commodities with ESI>2 in any year.

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.14: Export Specialization Indices, 1998-2003
(Exports to the EU-15, 3-digit SITC level)*

SITC code	Product Description	1998	1999	2000	2001	2002	2003
045	Cereal grains nes	0.00	0.00	0.00	0.00	9.78	0.00
054	Vegetables,frsh/chld/frz	3.47	1.50	2.28	1.84	0.52	1.18
058	Fruit presvd/fruit preps	6.40	2.10	3.31	2.02	0.97	0.67
211	Hide/skin (ex fur) raw	11.87	4.91	4.45	6.53	23.57	8.80
212	Furskins/pieces, raw	0.36	0.01	0.00	13.87	1.18	3.99
247	Wood in rough/squared	5.75	3.20	3.23	3.82	1.45	2.74
248	Wood simply worked	10.37	22.27	19.96	14.63	10.48	7.17
265	Veg text fibre ex cot/ju	0.06	0.00	0.51	3.52	13.21	3.47
266	Synthetic spinning fibre	18.90	17.61	13.55	8.80	5.87	10.28
267	Man-made fibres nes/wast	4.10	1.50	0.51	0.60	0.65	0.35
269	Worn clothing etc	3.52	0.23	0.03	3.14	17.85	8.90
282	Ferrous waste/scrap	5.04	2.61	2.79	2.73	1.93	0.99
288	Nf base metal waste nes	2.29	8.71	7.77	9.82	14.43	4.66
322	Briquettes/lignite/peat	6.68	8.17	3.60	2.83	4.06	9.35
334	Heavy petrol/bitum oils	4.02	3.62	8.78	17.70	28.11	38.95
515	Organo-inorganic compnds	6.22	4.05	5.74	1.44	0.55	0.47
522	Elements/oxides/hal salt	3.10	1.05	0.92	0.75	0.48	0.29
562	Manufactured fertilizers	12.99	15.29	11.29	13.47	5.13	5.26
574	Polyacetals/polyesters..	0.01	2.28	1.03	0.26	0.11	0.15
592	Starches/glues/etc.	4.42	0.23	2.17	2.32	0.96	2.35
611	Leather	4.24	1.54	0.87	2.84	1.34	5.64
634	Veneer/plywood/etc	7.18	7.42	6.79	6.87	3.53	2.07
635	Wood manufactures n.e.s.	5.75	6.90	7.53	5.93	4.43	3.06
651	Textile yarn	6.10	6.62	5.74	4.43	2.82	2.95
652	Cotton fabrics, woven	2.76	3.17	4.12	3.44	1.95	1.59
654	Woven textile fabric nes	10.17	15.84	15.04	13.81	7.32	6.58
658	Made-up textile articles	2.75	2.53	1.80	2.53	1.12	0.45
665	Glassware	2.44	2.24	1.91	1.47	0.69	0.64
672	Primary/prods iron/steel	7.52	6.79	3.28	2.54	2.27	2.82
676	Iron/steel bars/rods/etc	3.18	2.80	6.05	7.02	7.42	6.19
678	Iron/steel wire	23.79	28.47	30.45	20.58	16.21	15.60
693	Wire prod exc ins electr	47.37	46.85	32.40	20.44	11.16	13.59
694	Nails/screws/nuts/bolts	4.57	3.36	3.57	3.44	2.09	1.51
722	Tractors	9.11	5.12	5.73	3.80	2.88	0.92
733	Mtl m-tools w/o mtl-rmvl	1.34	3.42	1.78	0.44	0.31	0.15
775	Domestic equipment	0.02	2.92	3.18	1.73	0.33	0.15
813	Lighting fixtures etc	0.15	0.05	0.24	1.43	3.16	1.84
821	Furniture/stuff furnishg	2.27	3.23	3.00	2.81	1.65	1.06
841	Mens/boys wear, woven	5.87	5.19	4.39	3.09	1.44	1.19
842	Women/girl clothing wven	12.87	11.06	8.57	6.85	3.69	2.94
843	Men/boy wear knit/croch	4.15	4.81	4.25	2.65	1.70	1.69
844	Women/girl wear knit/cro	6.30	3.90	3.95	3.53	2.08	1.11
845	Articles of apparel nes	10.70	9.64	7.45	5.92	3.77	2.40
871	Optical instruments nes	6.45	6.37	5.55	7.91	5.39	2.94
872	Medical/etc instruments	6.24	7.01	5.75	4.79	3.34	2.48
884	Optical fibers	2.47	3.00	2.35	1.52	1.27	0.93

* Commodities with ESI>2 in any year.

Source: World Bank staff calculations based on WITS/COMTRADE data.

Table A 4.15: Export Specialization Indices, 1998-2003
(Exports to the EU-10, 3-digit SITC level)*

SITC code	Product Description	1998	1999	2000	2001	2002	2003
022	Milk pr exc buttr/cheese	3.66	2.21	11.71	10.39	4.50	0.72
036	Crustaceans molluscs etc	4.26	17.29	6.27	5.77	1.60	0.03
037	Fish/shellfish,prep/pres	0.08	0.02	0.04	0.05	1.66	2.69
045	Cereal grains nes	0.79	0.07	0.01	0.31	22.53	63.08
047	Cereal meal/flour n.e.s	4.31	0.70	0.00	0.00	0.00	0.71
058	Fruit presvd/fruit preps	1.52	0.60	1.20	1.11	2.40	1.38
211	Hide/skin (ex fur) raw	0.58	1.24	1.06	1.35	4.52	6.76
212	Furskins/pieces, raw	0.66	0.00	1.79	7.92	4.85	7.49
222	Oil seeds etc - soft oil	2.43	0.02	1.23	6.56	2.39	0.00
223	Oil seeds-not soft oil	2.07	0.45	0.26	0.06	1.43	0.41
245	Fuel wood/wood charcoal	17.44	18.75	7.54	4.21	3.28	6.06
247	Wood in rough/squared	19.64	8.79	7.79	8.14	12.23	10.98
248	Wood simply worked	7.74	4.30	3.12	3.25	4.14	10.15
265	Veg text fibre ex cot/ju	1.51	0.17	0.25	2.09	4.46	2.97
266	Synthetic spinning fibre	86.21	41.21	30.40	29.54	25.93	40.93
273	Stone/sand/gravel	8.07	3.55	2.66	3.60	4.86	4.10
278	Other crude minerals	6.51	5.78	3.10	2.88	3.73	4.55
282	Ferrous waste/scrap	0.77	2.61	3.25	3.60	1.38	1.83
288	Nf base metal waste nes	4.25	0.17	0.62	1.18	0.93	0.72
291	Crude animal mterial nes	2.17	1.69	1.00	1.02	0.63	0.33
322	Briquettes/lignite/peat	1.47	0.93	0.71	1.10	4.66	4.15
333	Petrol./bitum. oil,crude	2.01	1.00	0.84	1.18	0.64	0.83
334	Heavy petrol/bitum oils	10.91	15.28	13.46	16.13	16.54	12.31
335	Residual petrol. prods	3.01	3.78	2.34	4.23	3.40	5.40
342	Liquid propane/butane	0.20	4.12	4.70	2.11	4.47	7.70
344	Petrol./hydrocarbon gas	16.56	6.30	2.03	0.00	1.12	2.37
351	Electric current	0.01	0.00	0.00	0.31	1.20	3.31
512	Alcohols/phenols/derivs	0.49	0.35	0.32	4.77	0.00	5.30
513	Carboxylic acid compound	6.41	2.84	1.67	0.38	0.16	1.31
514	Nitrogen function compds	8.25	3.33	1.55	0.58	0.11	0.01
515	Organo-inorganic compnds	10.61	20.06	14.99	15.41	17.31	15.34
522	Elements/oxides/hal salt	4.31	5.47	2.62	1.64	2.80	4.41
524	Other inorganic chemical	0.53	4.29	0.54	0.04	0.00	0.00
562	Manufactured fertilizers	47.62	48.84	27.85	29.64	34.17	34.76
571	Primary ethylene polymer	3.37	2.12	1.51	2.19	3.18	2.90
574	Polyacetals/polyesters..	2.03	0.77	0.97	0.94	0.72	0.83
592	Starches/glues/etc.	6.52	2.06	2.07	3.16	3.08	4.58
625	Rubber tyres/treads	1.97	2.41	0.86	0.89	0.42	0.60
634	Veneer/plywood/etc	4.43	4.87	3.45	2.23	2.20	2.05
651	Textile yarn	4.65	2.18	1.82	1.81	1.72	2.55
654	Woven textile fabric nes	5.90	4.78	2.70	1.62	1.65	3.74
661	Lime/cement/constr mat"l	3.73	3.62	3.07	2.36	6.31	7.20
672	Primary/prods iron/steel	5.50	4.62	8.97	10.89	12.72	18.25
677	Iron/steel railway matl	0.79	2.13	0.02	0.18	0.49	4.05
678	Iron/steel wire	0.90	1.31	0.66	1.89	2.56	2.37
693	Wire prod exc ins electr	7.28	9.50	7.10	6.81	8.55	12.69
722	Tractors	41.74	31.13	11.23	14.22	13.51	16.41
746	Ball/roller bearings	3.52	1.78	0.85	0.60	0.47	0.38
841	Mens/boys wear, woven	2.50	1.73	0.36	0.46	0.27	0.31
883	Cine fild developed	0.12	0.18	0.00	0.00	0.02	3.89
898	Musical instrms/records	0.04	0.01	0.00	1.01	1.28	2.01

* Commodities with ESI>2 in any year.

Source: World Bank staff calculations based on WITS/COMTRADE data.

ANNEX 4.2.

CLASSIFICATION OF BELARUS EXPORTS AND IMPORTS INTO THE BASIC SNA CLASSES

We have partially rearranged Belarus' trade data by BEC to approximate the three basic SNA classes using the following approach:

I. Capital goods. Sum of the categories:

41 Capital goods (except transport equipment)

521 Transport equipment, industrial

II. Intermediate goods. Sum of the categories:

111 Food and beverages, primary: mainly for industry

121 Food and beverages, processed: mainly for industry

2 Industrial suppliers

3 Fuels and lubricants

42 Parts and accessories of capital goods (except transport equipment)

53 Parts and accessories of transport equipment

III. Consumption goods. Sum of categories:

112 Food and beverages, primary: mainly for household consumption

122 Food and beverages, processed: mainly for household consumption

51 Passenger motor cars

522 Transport equipment, non-industrial

6 Consumer goods

IV. Goods nes (7)

Note: Some goods are of dual use (for example motor spirits and passenger cars). We allocate them among categories on the basis of the prevailing use.

CHAPTER 5

THE BUSINESS ENVIRONMENT FOR ENTERPRISE SECTOR DEVELOPMENT

5.1 This chapter looks at the links between the business environment and the development of the enterprise sector. The business environment is analyzed in terms of a nexus of policies which regulate entry and exit, regulatory institutions, infrastructure and corporate governance legislation, and which together are critical in determining countries' competitiveness and growth prospects (Box 5.1). The chapter looks at both micro-level and macro-level variables such as market structure and competition.

Box 5.1: Business Environment and Growth

Recent developments in economic theory place strong emphasis on the importance of the business climate -- the nexus of policies, institutions, physical infrastructure, human resources, and geographic features which influence the efficiency with which different firms and industries operate -- for a country's evolution of its comparative advantage and growth prospects. Two particular links are worth mentioning. First, the ability to provide the business community with a stable and low-cost business climate -- security, good public services and regulation, and predictability -- is critical for firms' productivity, market structure and contestability. Second, the quality of the business climate is directly linked to the intensity of new market entry. Business environments do not have to be perfect but they have to be "good enough" in a number of crucial dimensions to stimulate a critical mass of new entry. In most cases it is new firms that are responsible for generating and securing new niches in world markets. Sustained economic growth in the longer term is driven by the emergence of new economic activities rather than by the scaling-up of traditional production.

The effects of a poor business climate are felt more heavily in economies which are less dependent on extractive industries. Manufacturing and high-value services tend to be more demanding in terms of the quality of logistics, infrastructure, and regulation. While the combination of macroeconomic instability, crime, a weak and politicized financial system, high transport costs, and predatory local officials will have relatively little influence on the productivity of offshore oil industries, it will be devastating for small-scale and medium-scale manufacturing. Given the structural characteristics of the Belarusian economy, this suggests that improvements in the business environment have to be of special concern for the government of Belarus.

Sources: World Development Report (2005); Eifert, Gelb, and Ramachandran (2005).

5.2 The chapter analyzes the links between the business environment and the structure of the enterprise sector, which is an important historical determinant of business practices. This is followed by an analysis of the links between the business environment and the behavioral determinants of the economic policies. In this broader context, the chapter looks at the regulatory costs of compliance: entry, functioning, and exit. This quantitative analysis is complemented by a qualitative analysis of the business environment.

5.3 The government of Belarus has taken several steps to improve the business climate for entrepreneurs and to increase the role of the private sector in the economy. Since 2001, multiple changes have been introduced in the regulatory regime in the areas of licensing, registration and taxation. In particular, the long-awaited Presidential Decree No. 17 of 16 July 2003 provided for a reduction in the number of licensed spheres⁹⁴ of activities, reducing them from 165 to 48. An important asset of the Belarusian state is a relatively good capacity for timely dispute resolution and a low level of corruption within state institutions.

⁹⁴ The decree identifies licensed spheres without listing separate activities, which offers the possibilities of different interpretations.

5.4 However, recent positive changes have often been neutralized by the introduction of measures that increase the administrative pressures on enterprises. For example, Decree No. 29 of December 12, 2002 lifted some registration restrictions (such as registering at home addresses) and increased a number of possible declared activities; however, it also expanded the list of causes for declining registration, which lengthened the procedure for the verification of a company's founders and the registration process for manufacturers. Another recent Decree (No. 148 of March 24, 2005) improved the regulations regarding the rental costs of market space and VAT payments, but at the same time envisaged the confiscation of goods and the recall of licenses after only two recorded irregularities in a given year.⁹⁵ Such regulatory ambivalence undermines trust in the regulatory environment and renders business unnecessarily more costly and less competitive.

5.5 Belarus is in dire need of regulatory reform. Despite recent improvements, business registration and regulation procedures remain extremely cumbersome. On average, it takes nearly twice as long to register a new business in Belarus as it does in Russia or Poland. Moreover, De Novo (DN) firms are at a disadvantage in competing with state-controlled enterprises. The business environment's tilt toward traditional firms and the high costs of starting a business are serious obstacles to growth. To ensure a sustainable strengthening of the competitiveness of the economy, the government needs to address the existing weaknesses in the regulatory system without delay.

A. STRUCTURAL DETERMINANTS OF THE BUSINESS ENVIRONMENT

5.6 The Belarusian enterprise sector is dominated by large state and semi-state enterprises. The private sector contribution to GDP in Belarus is much smaller than that in other countries in the region (Table 5.1). The output and employment share of small enterprises (SEs)⁹⁶ in the economy is estimated to be in the range of 7–9 percent. According to the MSA, in 2004 the share of SMEs in Belarus' GDP amounted to 8.8 percent. In industry, less than 3 percent of output was produced by enterprises with less than 100 employees⁹⁷ and about 6 percent by enterprises with less than 200 employees, which is far less than in comparable transition economies. Owing to slow restructuring of enterprises, the average employment per industrial enterprise declined very little (less than 7 percent), from 485 in 1996 to 453 in 2003. This is in contrast to other transition economies where the decline in the number of employees per enterprise was much more significant.

Table 5.1: Private Sector Share in GDP, 2000-03 (%)

	2000	2001	2002	2003
Belarus	20	20	25	25
Ukraine	60	60	65	65
Russia	70	70	70	70
Bulgaria	70	70	70	75
Croatia	60	60	60	60
Latvia	65	65	70	70

Source: Transition Report, 2004, EBRD.

5.7 The new enterprise sector the majority of which is in private hands, has emerged and is growing slowly and unevenly. Unlike the situation in most transitional economies where the number of non-state

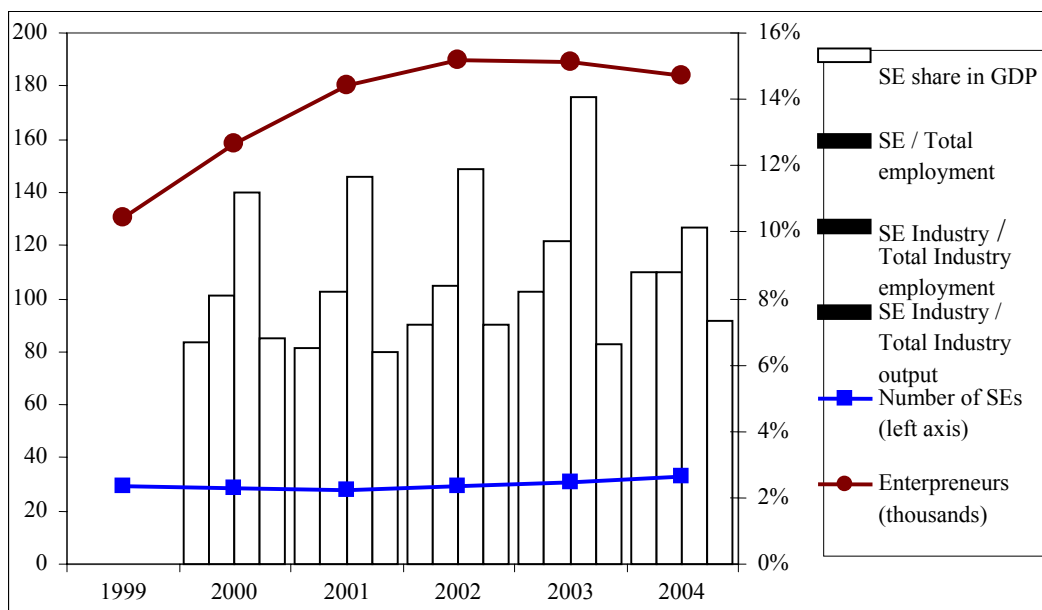
⁹⁵ Entrepreneurs pay somewhere between 4 and 6 penalties a year on average.

⁹⁶ The Law "On State Support of Small Entrepreneurship in Belarus" defines small enterprises (SEs) as those with 100 employees in the industrial sector, 60 - in agriculture, 50 - in construction and wholesale trade, 3 - in retail trade and 25 - in other non-manufacturing sectors.

⁹⁷ Individual entrepreneurs (with no legal entity status) are not included in the above official statistics. The share of enterprises with less than 100 employees (including individual entrepreneurs with no legal entity status) in the total industrial output is estimated at about 7 percent.

small enterprises and their share in total output and employment have steadily increased, in Belarus small enterprise growth has been very uneven. The number of SEs grew steadily in the early transition years and reached a peak around 1999 (when the total number of registered enterprises reached approximately 29,600), but it went into reversal during 2000-01. By end-2001, the number of SEs was down to about 27,800 or 94 percent of the 1999 level. Small enterprise growth resumed in 2002 and by end-2004 the number of SEs reached 32,800 or 110 percent of the 1999 level. However, overall employment in the SE sector fell from 9.6 percent to 8.8 percent of the total (Figure 5.1).

Figure 5.1: Number of Small Enterprises and Their Share in Output and Employment, 1999-2004



Source: MSA (2003, 2004a, 2004d).

5.8 The insignificant size of the SE sector in Belarus is not a result of the high rate of bankruptcies. The universe of SEs seems to be very stable, with very few entries and exits. In 2002 more than 93 percent of SEs was well established businesses,⁹⁸ set up before 2000. As a result, the enterprise sector lacks flexibility and is unable to respond quickly to changing market challenges.

5.9 The number of individual entrepreneurs (not registered as legal entities) expanded fairly rapidly between 1999 and 2002, showing a growth of about 50 percent. However, this growth was largely of a compensatory nature: it reflected a rapid decline in the number of entrepreneurs in the earlier period of 1995-97. Overall, the number of entrepreneurs in 2004 exceeded its 1995 level by only 11 percent.⁹⁹ An unincorporated individual business offers the benefits of a lower regulatory burden, but at the same time it positions individual entrepreneurs in the grey area between the formal and the informal sectors, with its informal costs and harassment. However, the choice of the status of an individual entrepreneur over that of a legal entity can be explained by the excessive regulatory burden faced by new legal entities and also by the tax advantages that individual entrepreneurs enjoy.

5.10 While Belarus' physical infrastructure for business development is developed relative to the rest of the CIS, it tends to lag behind that of the new EU members. The situation in the telecommunications

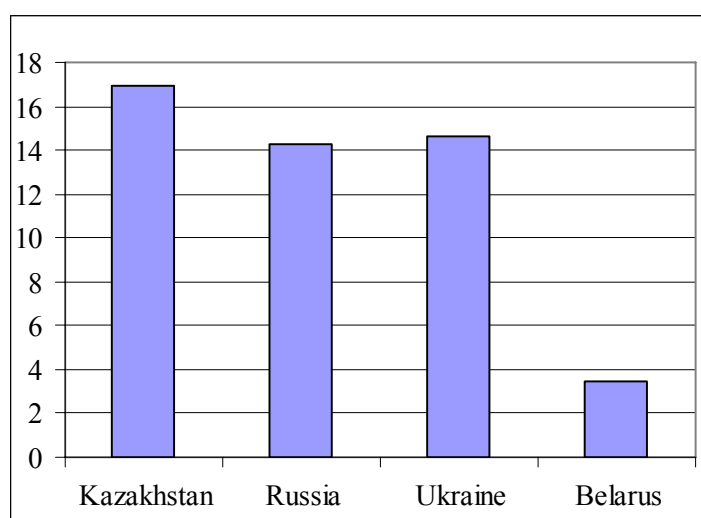
⁹⁸ "Belarusian Business 2003."

⁹⁹ "Belarusian Business 2003", MSA.

sector could be considered as indicative.¹⁰⁰ In Belarus there are currently about 35 telephone subscribers per 100 inhabitants, while in Russia and Ukraine there are 36 and 30, respectively. At the same time, in Estonia 100 percent of households have fixed line phone access and in Poland access is about 65 percent.

5.11 In 2002 the share of households in Belarus with internet access was double that in Russia. In Belarus there were, on average, 8 internet users per 100 inhabitants. By contrast, Poland and Estonia had, on average, 23 and 33 users per 100 inhabitants, respectively. Recent evidence, however, shows a trend toward growing use of the internet in Belarus. From 2002 to 2003, regular internet use jumped by 30 percent. Moreover, the country's lower costs for establishing telecommunications connections bode well for the business environment. It costs nearly three times more to establish a business phone connection in Russia, Ukraine or Moldova (Figure 5.2).

Figure 5.2: Business Telephone Connection Charge as a Share of GDP per Capita, 2002 (%)



Source: International Telecommunications Union (2003).

B. BEHAVIORAL DETERMINANTS OF THE BUSINESS ENVIRONMENT

Business Segmentation and Government Control

5.12 Structural changes in the Belarusian economy, as measured by the number and size of enterprises and their ownership, reflect a socio economic context that is broadly similar to that of a “reformed” centrally planned model that was implemented in its original form in Poland and Hungary in the 1970s. In this model, small non-state (private and cooperative) enterprises were allowed to provide a marginal but necessary supply that could not be provided by large SOEs. However, both historical experience and theoretical analysis suggest that such a model suffers from fundamental macro and micro weaknesses (Box 5.2).

¹⁰⁰ Chapter 7 presents an analysis of the situation in energy sector infrastructure.

Box 5.2: The Main Weaknesses of the Market Socialism of the 1970s and 1980s

The practice of reformed market socialism, as illustrated by the cases of Yugoslavia, Hungary and Poland in the 1970s and 1980s, had several important principles that differentiated it from the traditional Soviet-style model of development. The fundamental guiding idea was to combine the dominance of state ownership with some market coordination. The state was an owner of the bulk of industrial enterprises, with some private ownership allowed to compensate for the lack of competitive production in consumer products and light manufacturing. However, in contrast to the classical centralized system, the methods of enterprise control were decentralized, usually to the enterprise level. Relative to classical socialism, enterprises had considerable discretion in their production and sales decisions. At the same time, the government remained heavily involved in manipulating the prices of certain goods, as well as in credit allocation.

However, historical hindsight regarding the “reformed socialist” experiences, especially of Poland and Hungary, tells us that the model is fundamentally economically unstable. Its main weakness relates to the fact that state-owned enterprises cannot become real profit maximizers and in reality they do not have a hard budget constraint. Without private ownership, enterprises largely remain insufficiently efficient and flexible. In particular, they are not capable of expanding sufficient amounts of non-traditional exports. As a result, the traditional mechanisms of market regulation do not work properly. Instead, there exists a monetary overhang of excessive monetary injections into the state-supported firms. All this leads to a number of macroeconomic vulnerabilities:

- Investment decisions are not based entirely on profit motivation, which leads to excessive credit demand and over-borrowing.
- Over-borrowing brings in non-market credit allocation, inflation, and shortages.
- Export growth is lagging, which leads to a weak current account.
- Credit and other shortages make market socialist economies prone to excessive external borrowing and foreign debt accumulation.

Source: J. Kornai (1992).

5.13 Today the relationship between businesses and the state in Belarus is dominated by the “culture” of this model. All enterprises – state-owned or private, large or small – are heavily regulated and controlled through different methods and policy instruments. The state, as a source of regulations, subsidies, and demand rather than as a force for establishing an enabling business environment, still seems to be a dominating economic force.

5.14 At the same time, the regulatory regime for traditional and DN firms differs considerably. Table 5.2 shows the differences in the regulatory approach to state and semi-state enterprises on the one hand and new private sector firms on the other.

5.15 Such an approach to the regulation of business activities distorts the incentive structure in the enterprise sector and places Belarus among the least favorable countries for business in the region. Domestic and foreign entrepreneurs alike complain about state domination and interference, frequently on an ad hoc basis. The frequency and scale of such concerns is reflected in the Index of Economic Freedom,¹⁰¹ which consistently ranks Belarus’ economic environment as one of the worst among 161 countries for the last 10 years (Table 5.3).

¹⁰¹ The index encompasses 50 different variables, including trade policy, the government’s fiscal burden, state interference, property rights, etc.

Table 5.2: Different Regulatory Regimes for New and Traditional Enterprises

	New Private Sector	Old Enterprises, both State-owned and Privatized
State support	Only about 20 percent of new firms receive any state support. It is largely limited to preferential tax treatment of SMEs.	More than 50 percent of state and about 45 percent of ex-state companies receive state support which includes subsidized loans, restructuring of tax and other arrears, write-offs of debts, other subsidies
Competition	Informal entry barriers; nationalization of supply of high demand services and imports,* market segmentation through explicit administrative measures and costs of informalities.	Increasingly larger lists of monopolists** and/or goods of special (social) importance are subject to additional controls and regulations.
Control instruments	Through regulatory instruments, but implemented differently, for instance through rigorous inspections.	Through regulatory instruments, implemented largely through ownership control over decision making and imposing output, wage and other operational targets.
Business exit	Lengthy bankruptcy processes, with debt recovery of only about 12 percent.	Too big to fail' attitude; massive, but segmented state support to the largest companies.

* A good example is the "transfer" in May 2004 of 30.9 percent of "Mobile Digital Communications" owned by two private stakeholders to the state, making it a major shareholder. Another example is the import of seafood products where de facto there are no private operators.

** For instance, the President's Decree No. 320 of July 2004 establishes a state monopoly on car liability insurance, allowing it to be sold only by state-owned companies or companies that have a more than 50 percent state ownership.

Sources: IPM (2004); World Bank staff analysis.

Table 5.3: Index of Economic Freedom

(Scores: 5 - the worst, 1 – the best)

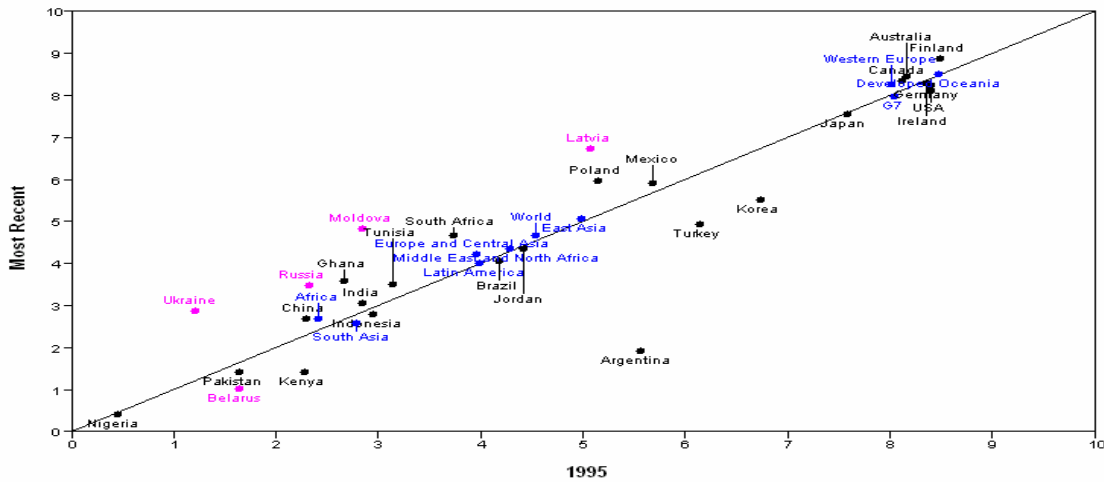
	2005 Ranking	2005 score	2002 score	2000 score	1998 score	1995 score
Belarus	143	3.99	4.21	4.13	4.15	3.7
Estonia	4	1.65	1.73	2.19	2.43	2.4
Latvia	28	2.31	2.49	2.69	2.84	n/a
Poland	41	2.54	2.6	2.84	2.91	3.46
Bulgaria	62	2.74	3.28	3.35	3.6	3.56
Moldova	77	3.06	3.30	3.35	3.48	4.1
Ukraine	88	3.21	3.84	3.75	3.83	4.05
Russia	124	3.56	3.74	3.75	3.54	3.55

Source: 2005 Index of Economic Freedom, Heritage Foundation.

5.16 As indicated by Figure 5.3, the quality of the economic incentives regime¹⁰² in Belarus is low and has deteriorated since 1995 (graphically, Belarus is below the 45 degree line). This represents a rare case of the significant deterioration of ratings in a post-communist country. Moreover, such a decline has come from the lowest base among neighboring countries (Ukraine, Moldova, Russia and Latvia), at the same time that there neighbors improved after 1995 (positioned above the 45 degree line).

¹⁰² The regime includes such variables as gross capital formation, government budget, trade, trade barriers, IP protection, soundness of banks, export, intensity of local competition, interest rate spread, and domestic credit to the private sector.

Figure 5.3: Global View: Economic Incentives Regime

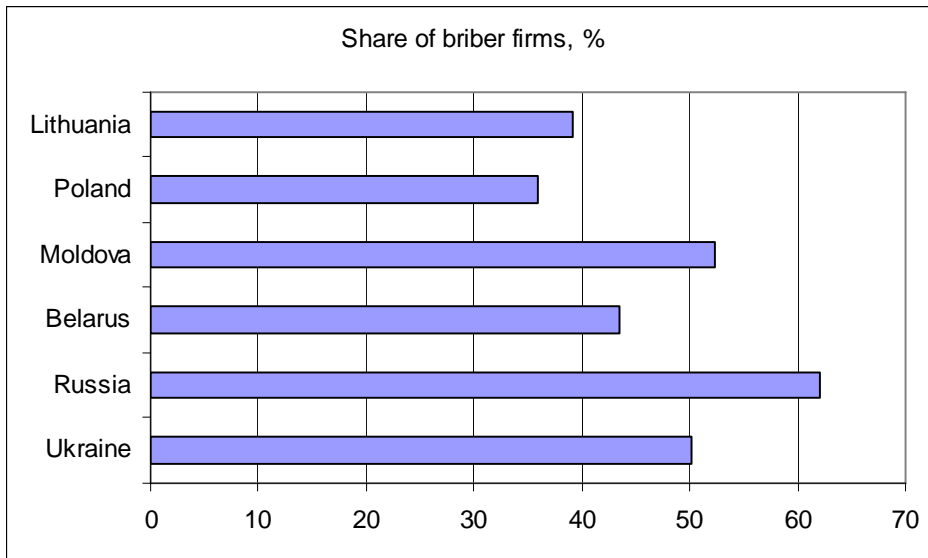


Source: 2005 Knowledge Assessment Methodology (KAM), World Bank Institute, World Bank.

5.17 Another result of the existing economic model is weaker cooperation between small and large enterprises than in other transition economies. As demonstrated by the BEEPS 2002 survey, in Belarus, only about 17 percent of small/private enterprises sell the majority of their product to large enterprises in contrast to 35 percent in Ukraine, 27 percent in Latvia and 38 percent in Russia. Several reinforcing factors may be responsible for this outcome. First, the majority of large enterprises are not restructured, in terms of both the internal production process and the external cooperation links. As a result, they still have an “in house” capacity for auxiliary production, which was usually spun-off in other transition economies as independent small enterprises. Also, they have an established network of suppliers from the Soviet era and no incentives to change them. Second, the environment for private sector development seems to “favor” smaller enterprises. As is demonstrated later in the chapter, the natural growth of enterprises from small to medium is halted at the level of US\$1 million in annual turnover, above which it seems to be impossible for a private firm to operate without strong political backing and connections. Such a regulatory burden reinforces the economy’s dependence on traditional suppliers and markets, and makes the entire industrial structure much less flexible. Consequently, the enterprise sector is divided into two universes with only a small layer of medium-size firms.

5.18 At the same time, it is worth noting that Belarus operates a fairly well-performing system of contract enforcement. Once the firms enter the system, dispute resolution is relatively simple. According to the Cost of Doing Business (CODB) 2005 survey, an average business can expect to go through 28 procedures from the moment the plaintiff files the suit until the actual payment and should expect to wait, on average, 210 days until the court resolution. By contrast, in Russia it takes 29 procedures and 330 days to reach a resolution, and in Ukraine it takes 28 procedures and 269 days, while the regional average is about 410 days. Belarus also outperforms Poland, where the contract enforcement mechanisms are particularly cumbersome and, on average, it takes nearly three years. The court’s ability to mitigate the relationship between private business and the state is more problematic and will be addressed later in this chapter. It is worth mentioning, however, that firms still do not have much trust in the contract enforcement system. This can be seen, for example, from the fact that so many Belarusian firms continue to rely on pre-payments in their operations. According to the BEEPS, in 2002 the average share of prepaid sales amounted to 46 percent in Belarus, which was substantially higher than in Russia (31 percent), Lithuania (21 percent), and Moldova (27 percent), but was very similar to Ukraine (46 percent).

Figure 5.4: Share Firms Involved in Bribing Government Officials, 2002



Source: BEEPS (2002).

5.19 Another potential opportunity for nurturing a supportive business environment is related to the relatively low level of corruption in Belarus. Belarus has a better score in the corruption perception indexes compiled by the World Bank Institute than the average CIS country (Figure 5.4).¹⁰³ Belarus also shows a slightly lower incidence of bribery when compared to Poland. In BEEPS 2002, 25 percent of the sampled Polish firms indicated corruption as a major obstacle to business, while only 17 percent of businesses in Belarus indicated that corruption was an obstacle. While Belarus has a better performance in indicators of administrative corruption, its relative position has somewhat deteriorated since the late 1990s. Of the 24 countries surveyed in the BEEPS 2002, Belarus was one out of only three countries (along with Bosnia-Herzegovina and Russia) that showed a statistically significant increase in the frequency of administrative payments between 1999 and 2002. For Belarus to capitalize on its relative advantage, it needs to ensure that administrative corruption is kept in check.

The Business Environment and Ownership Changes

5.20 Privatization, which in leading transition economies has allowed the “re-population” of national economies with businesses of different sizes and ownerships, has been very slow in Belarus. This is a primary reason for the lack of a critical mass of diversified owners powerful enough to pressure the government to provide a more friendly, transparent and equalizing business environment. Moreover, the existing state of the business climate in Belarus undermines the attractiveness of investments in privatized and DN enterprises, depressing their growth and settling the economy into a low quality equilibrium.

5.21 Since the start of privatization in 1993, Belarus has consistently missed its targets in privatization programs. Small-scale privatization is yet to be completed, while large scale privatization has been minimal. Most of Belarus’ most attractive enterprises remain in state control. As of January 1, 2004, the government held large blocks of shares in 539 open joint stock companies, or 39 percent of all such companies. The state holding in 303 of these enterprises exceeded 50 percent. While the 2004–05

¹⁰³ The perception index is based on the index of the most widely available corruption indices. See Kaufmann, Kraay, and Mastruzzi (2003) for a description.

privatization program listed 95 enterprises, none of them seems to be large or otherwise attractive.¹⁰⁴ As a result, most (in terms of output) industrial enterprises remain in state control either through full or partial ownership.

C. REGULATORY COMPLIANCE COSTS

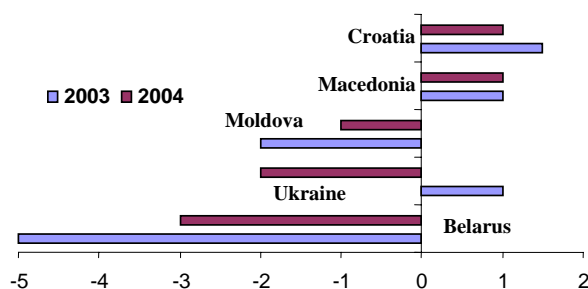
General Perception

5.22 At first glance it seems contradictory that consistently higher profit margins in the small enterprise sector for the last five years attracted a relatively small number of new entrants. Such an inconsistency can be explained by the existing formal and informal regulatory barriers to new entry and, more generally, for doing business in Belarus.

5.23 According to the surveys,¹⁰⁵ the business environment in Belarus deteriorated in the last few years more than in other transition economies (Figure 5.5). Also, compared to other countries in the region, in Belarus entrepreneurs are more pessimistic about the unfriendliness of the business environment and perceive it as deteriorating over time.¹⁰⁶

Figure 5.5: Perception of the Business Environment Evolution

(10-point scale: 5 – great improvement, -5 – serious worsening)



Note: EWS surveys (polling 150 enterprises and conducting 2 focus groups), compatible with (and extractable from) CODBs, were conducted in Belarus and other CEE/FSU countries.

Source: EWS 2003, 2004.

Regulatory Cost of Entry

5.24 The emerging entrepreneurs in Belarus face greater obstacles to business registration than their counterparts in neighboring countries. The latest changes in the registration processes produced mixed results. On average, in 2003 businesses spent 40 days on compliance with statutory procedures, 6 days less than in 2002. However, while re-registration became less lengthy, the time spent on actual first-time registration increased. In addition, registration processes became more costly, reaching on average US\$187 in 2004, compared to US\$165 in 2002. These costs represent 25.3 percent of 2004 gross national income (GNI) per capita. Though they are not particularly high by international standards, they are still higher than in Poland, Russia and Ukraine (20.3, 6.7, and 17.6 percent of GNI per capita, respectively).

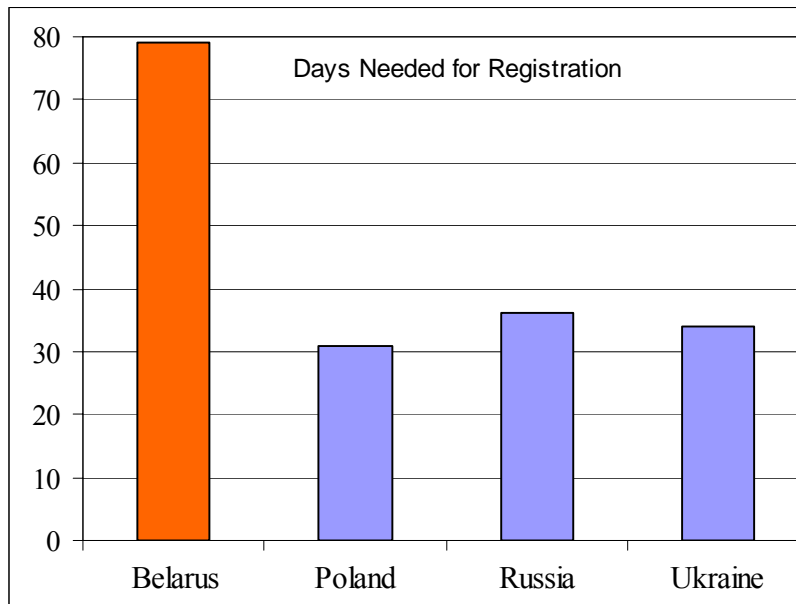
¹⁰⁴ Annual Report of the Belarus State Committee on Securities Market, 2004.

¹⁰⁵ BEEPS, ARCS, CODB, Doing Business, EWS, see Box 5.3.

¹⁰⁶ Early Warning System (EWS) Survey, World Bank, 2002-04.

5.25 In 2004, new entrepreneurs could expect to go through 16 procedures to start a business in Belarus. In Poland and Russia the system of business registration is simpler. On average, it requires 10 procedures in Poland and 9 procedures in Russia to start a new venture. The length of time necessary for registration in Belarus is almost twice as long as in the neighboring countries (see Figure 5.6). To start a new business, an entrepreneur should expect to spend nearly 80 days, compared to roughly a month in Poland, Russia and Ukraine.

Figure 5.6: Average Duration for Business Registration in Selected Countries (days)



Source: EWS 2004.

5.26 While the registration process largely concerns new companies, existing companies are also affected. During the last 10 years, established enterprises had to re-register three times, and in addition re-registration is required every time a change is made in the firm’s founding documents.

5.27 In the licensing regime, despite recent improvements, entrepreneurs stress that the fact the procedures for obtaining business licenses continue to be complex and contradictory and that the amount of paperwork is frustrating. For certain types of business activities such as legal services, it is almost impossible to receive a license.

5.28 While there is little direct evidence of the scale of informal barriers to entry, some behavioral gaps and inefficiencies clearly point to the high incidence of such barriers. For example, according to the BEEPS 2000 survey, 32 percent of Belarus’ small businesses indicated having “no effective competition.” In the follow-up survey, BEEPS 2002, the percentage of firms reporting little competition from outsiders remained at the same level. This is a much greater percentage than in comparator countries (Figure 5.7). Only 3 percent of firms in Poland and 6 percent in Ukraine indicate that they have no effective competition. The numbers suggest the existence of strong informal barriers to new market entry. However, as shown in Chapter 2, competitive pressures in Belarus have strengthened considerably since 2002.

Box 5.3: Business Climate Survey Methodology

BEEPS, CODB, Doing Business, and EWS are main country surveys conducted by the World Bank and its partners in the last 4-5 years. These surveys reflect on the quality of the business environment, capture its ongoing changes, and provide cross-country comparisons.

Business Environment and Enterprise Performance Survey (BEEPS) is a joint survey conducted by the World Bank and the European Bank for Reconstruction and Development. It covers over 4,000 firms in 22 transition countries of Central/Eastern Europe, the former Soviet Union, and Turkey, and examines a wide range of interactions between firms and the state. Based on face-to-face interviews with managers and owners, BEEPS is designed to generate comparative measurements in such areas as the quality of the business environment, state capture, corruption and lobbying, which can then be related to specific firm characteristics and firm performance.

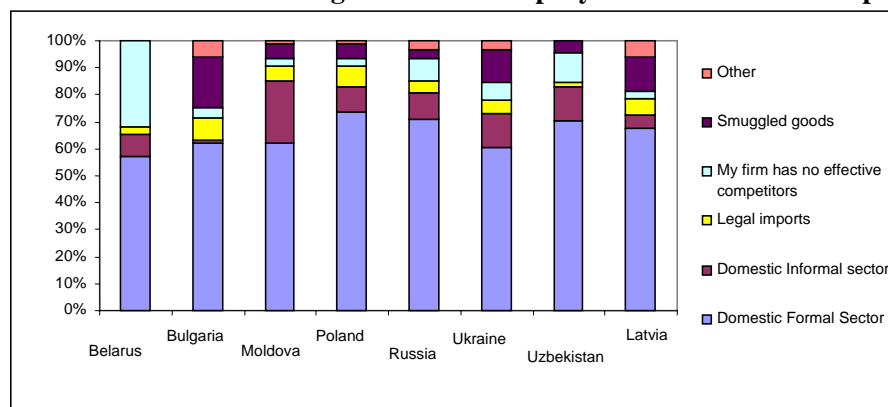
Cost of Doing Business (CODB) is a survey of enterprises that has been conducted by the World Bank to identify and assess administrative barriers, as well as to estimate the costs – both formal and informal - of doing business in a country. The enterprise samples consist of at least 600 enterprises per country, representing all regions and industries. Based on face-to-face interviews with managers and owners and focus groups with entrepreneurs, the survey identifies specific country issues and interprets the results. The CODB methodology has been tested in many countries in Eastern Europe and Central Asia, and is compatible with EWS surveys and FIAS's Administrative and Regulatory Cost Surveys (ARCS).

Doing Business Surveys (Doing Business 2004, Doing Business 2005) assess business regulations and their enforcement in the areas of enterprise entry, operations and exit. Based on interviews with experts and practitioners, the Doing Business is a standardized annual survey of factual information concerning laws and regulations in force. The Doing Business indicators are comparable across 145 economies and measure government regulations and their effect on businesses, especially on small and medium-size firms.

Early Warning System Survey (EWS) is a quick and flexible instrument tracking the quality of the changing business environment and identifying problems or difficulties that may have emerged in the recent past. Based on face-to-face interviews with managers and owners of at least 150 companies, it covers main sectors. It is supported by focus groups of entrepreneurs. Standardized and cross-country comparable, the EWS has been conducted for the last three years in many countries of the ECA region on an annual or a bi-annual basis.

Source: World Bank.

Figure 5.7: From Which of the Following Does Your Company Face the Greatest Competitive Threat?



Source: BEEPS 2000, World Bank.

5.29 Reported differences in the growth of SE sales among individual oblasts of Belarus also suggest the existence of informal market protectionism at the regional level. As an example, SE sales in Minsk city in 2001 increased 217 percent (year to year) compared with 184 percent in Minsk oblast.¹⁰⁷ Similarly, increases in sales in

¹⁰⁷ MSA (2004d).

2002 were reported by 44 percent of Minsk city SEs and only 28 percent of Minsk oblast SEs. Such local differences point to the existence of additional (probably informal) barriers to new entry which remain undetected by traditional business surveys. Shortages of trading places and the level of fees established by local administrations¹⁰⁸ are example of regional policies that diversify conditions for market entry.

5.30 Belarus has one of the weakest legal frameworks for shareholder protection in the region.¹⁰⁹ The Doing Business database (2005), which examines the degree to which investors are protected through disclosure of ownership and financial information, points out that businesses in Belarus are not required to disclose beneficial ownership or even to have an internal audit before the release of financial statements. The ownership and financial information is not publicly available to investors. On the disclosure index, Belarus has a score of 1 (on a scale of 0 to 7, with higher values indicating more disclosure), compared with the regional average of 3.6 (4 in Poland and 3 and Ukraine) and 5.6 for OECD.

5.31 Belarus' low level of attractiveness for FDI points strongly at informalities as a prevailing barrier to new entry. There is a sharp mismatch between the fact that Belarus has, "on paper," one of the most favorable regulatory investment climates¹¹⁰ in the FSU, a relatively large industrial potential and a well-trained workforce, but has a very low level of FDI.¹¹¹ For example, UNCTAD rated Belarus as fifty-sixth among 140 countries in its investment attractiveness yet downgraded Belarus to the rank of 104 as an FDI performer in 2000-02 (Table 5.4). This indicates a major under-utilization of the country's growth potential.

Table 5.4: Inward FDI Performance Index (ratio of FDI global share to GDP global share) and Inward FDI Potential (ranking among 140 countries), 1997-2002

	FDI Performance Index, Rank and Ratio			FDI Potential, Rank and Score in the 0-1 range
	2000-02	1997-99	1995-97	
Belarus	104 0.387	77 0.970	92 0.906	56 0.213
Estonia	21 2.350	16 3.073	24 3.315	38 0.275
Latvia	47 1.377	23 2.661	11 5.099	49 0.234
Poland	56 1.179	45 1.615	45 2.325	44 0.256
Bulgaria	25 2.145	30 2.135	60 1.572	64 0.195
Moldova	15 2.994	48 1.598	36 2.469	110 0.129
Ukraine	89 0.622	96 0.6011	96 0.791	94 0.156
China	50 1.331	43 1.806	20 3.768	39 0.273
Russia	111 0.317	107 0.483	104 0.593	33 0.291

Source: UNCTAD. FDI Performance Index, 1997-2002.

¹⁰⁸ The President's Decree No.148 of March 2005 on the support of entrepreneurship, while establishing maximum rental fees for places in markets, provides for the possibility of increased tariffs at the discretion of local and municipal authorities.

¹⁰⁹ The JSC Law was passed in 1992 and does not represent an exhaustive set of guidelines on the regulation of the control and ownership of enterprises. The new law which is expected to rectify some of the problems has been drafted and is expected to be passed sometime in 2005-06.

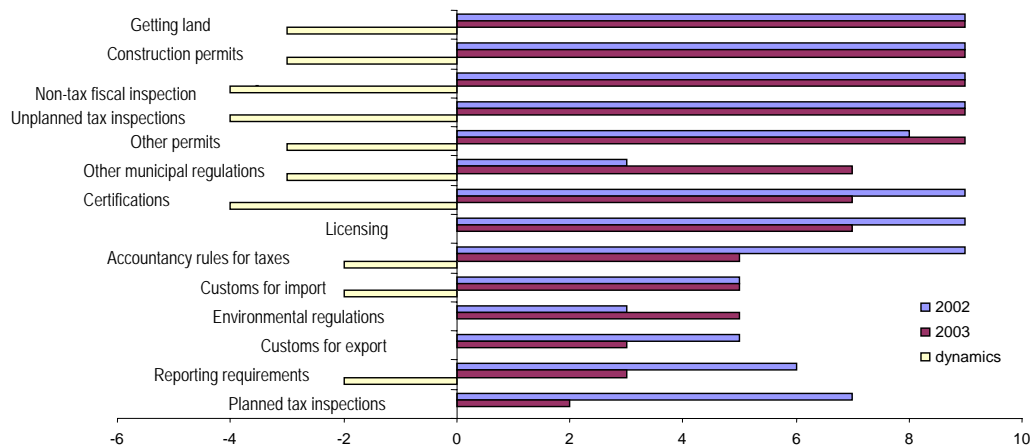
¹¹⁰ Although the latest changes to the Investment Code that came into force at the beginning of 2005 abolished some foreign investors' privileges.

¹¹¹ The FDI annual net inflow in 1998-2004 was consistently lower than 1.5 percent of GDP, except for 1999, owing to the construction of the Yamal-Western Europe pipeline by Gazprom.

Regulatory Costs of Business Operations

5.32 The high costs of overregulation, regulatory uncertainty and informalities affect companies in their daily operations in a multitude of ways (Figure 5.8).

Figure 5.8: Evaluation of the Severity of Problems (10-point scale: 10 is a severe problem and 1 is no problem) and their Dynamics by the Regulatory Area (10-point scale: -/+5 is the largest negative/positive change during the last year)



Source: EWS, 2004.

5.33 Businesses identify permits and the variety of inspections as the most severe administrative barriers in the Belarus business environment that are deteriorating over time.¹¹² Obtaining land and construction permits are at the top of the list of administrative barriers. Comparing with the situation five years ago, participants of the CODB surveys indicate that, overall, the regulatory environment for access to business premises has worsened and securing premises has become more costly and time-consuming. Obtaining land for construction ranks among the most burdensome locally administered processes which affects both starting and expanding businesses.

5.34 Construction permits are equally burdensome to acquire. The time taken to receive such a permit ranges from a half year to a year. Difficulties with receiving construction permits, as they are issued by local administrations, vary considerably depending on the locality. In large cities the process can take up to 1.5 years, whereas in suburbs, small cities or rural areas the time may be much less. Respondents emphasized that because of the lengthy process the regulations relevant to construction permits often changed while the application was being processed, which has led to additional delays.

5.35 The situation regarding preliminary import permits and customs clearance is also quite complicated. The procedures and conditions attached to import transactions became worse in 2003 compared to the situation five years earlier, although less deterioration is reported compared to the situation a year previously (Table 5.5). Among the difficulties that exist in the import process, the businesses list the following (in the order of increasing difficulties): (i) prohibitions on the import of specific goods; (ii) pre-import permits; (iii) certification of imported goods; (iv) customs clearances; and, overall, (v) lack of business confidence.

¹¹² EWS Survey, World Bank, 2004.

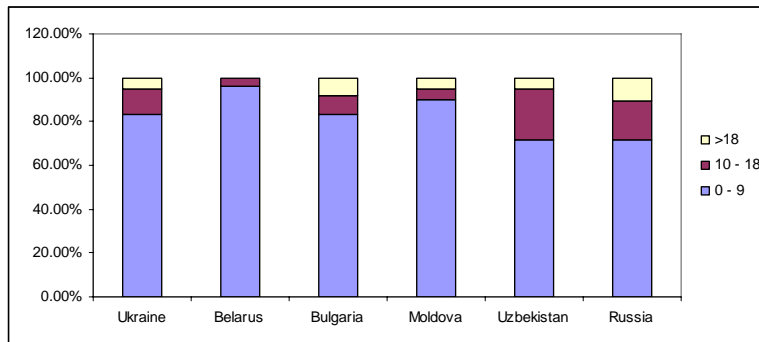
Table 5.5: Changes in Procedures and Conditions Attached to Import Transactions, 2001-03

In comparison with	Worse			Unchanged			Better		
	2003	2002	2001	2003	2002	2001	2003	2002	2001
1 year ago	43%	53%	49%	54%	45%	46%	3%	2%	6%
3 years ago	51%	63%	67%	43%	34%	29%	6%	2%	4%
5 years ago	56%	66%	63%	34%	30%	32%	10%	5%	5%

Source: CODB 2004.

5.36 The process of customs clearance has deteriorated over time. It takes on average 5 days (about 2 days more than three years ago). However, as a separate transaction (after other import-related issues are settled) it compares well with other countries in the region (Figure 5.9).

Figure 5.9: Average Number of Days in 2001 to Clear Imported Goods through Customs, Selected Countries



Source: BEEPS, World Bank and EBRD, 2002.

5.37 Regarding export-related regulations, survey participants feel that the situation has improved in some areas but worsened in others (Table 5.6). It takes slightly less time to clear exports through customs than it did three years ago. Also, unlike the situation in other countries in the region, VAT refund was not seen as a problem by exporters. At the same time, exporters' list of complaints is even longer: in addition to all significant problems faced by importers, exporters complain about fixed state prices and high export duties. Overall, with respect to the customs and foreign trade regulations, according to the BEEPS the situation in Belarus deteriorated considerably between 1999 and 2002: the share of firms that consider these regulations to be either moderate or major obstacles to their businesses increased from 33 to 49 percent. During the same period, the respective shares in Russia declined from 31 to 28 percent, while in Ukraine they declined from 51 to 42 percent.

Table 5.6: Changes in Procedures and Conditions Attached to Export Transactions

In comparison with	Worse			Unchanged			Better		
	2003	2002	2001	2003	2002	2001	2003	2002	2001
1 year ago	33%	46%	56%	65%	51%	40%	2%	4%	5%
3 years ago	44%	60%	66%	53%	35%	29%	3%	5%	6%
5 years ago	47%	66%	68%	45%	27%	25%	8%	7%	8%

Source: CODB 2004.

5.38 Anecdotal evidence which was not registered by quantitative surveys points to emerging signs of deterioration in customs administration. The focus group respondents of the last EWS survey confirmed this trend, reporting a recent sharp deterioration in customs, sanitary inspection, and the police.

5.39 The tax burden (the multitude of taxes, excessive tax inspections, the instability and complexity of the taxation legislation and severe penalties for unintentional mistakes) has long been criticized by the Belarusian business community. For example, eight taxes are imposed on revenues and five on salaries. Different taxes overlap and, in certain cases, the amount of one tax payment is dependent on the amount of another.¹¹³

5.40 For entrepreneurs¹¹⁴ the most serious problems stem from the instability and complexity of the tax legislation and the severe penalties for unintentional mistakes. Taxes are regulated by scores of frequently changing legal acts which often contradict one another. For example, the State Taxation Committee's clarification of the procedure for levying income tax, of March 23, 1999, was amended six times over the next two years.

5.41 A bleak assessment of the tax environment, although it improved slightly over time, was shared by both legal entities and individual entrepreneurs, even though the latter face much simpler taxation procedures (Table 5.7).

**Table 5.7: Assessment of Taxation Problems by the Polled Economic Entities
(5 point scale – 0 = no problems and 5 = very severe problems)**

	Total population			Individual entrepreneurs			Legal entities		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
High tax rates	4.2	4.0	3.7	3.8	3.8	4.0	4.3	4.0	3.7
Inability to foresee how many taxes will be levied in the future	4.0	4.1	3.4	3.4	4.1	3.5	4.1	4.1	3.4
Overly complicated and incomprehensible taxation and accounting procedures	4.3	4.1	3.9	3.7	3.6	3.3	4.4	4.2	4.0
Harsh sanctions for transgressions	4.4	4.3	4.2	4.2	4.2	4.1	4.5	4.4	4.2
Changeable taxation procedures	4.5	4.3	4.2	4.3	4.0	4.1	4.5	4.3	4.3
Arbitrary actions of tax inspectors	3.5	3.4	2.9	3.4	3.3	3.4	3.5	3.5	2.8
Out-of-court transfer of funds from bank accounts of legal entities and extra-judicial confiscation of assets	3.7	3.7	3.0	3.1	3.7	2.9	3.8	3.7	3.0

Source: CoDB Survey, 2004.

5.42 To ensure the timely payment of all taxes, 80 percent of the businesses maintain a staff of three or more accountants. In addition, many of them use outside accountants or consultants to deal solely with

¹¹³ On average, individual entrepreneurs (unincorporated) are subject to 2 taxes whereas legal entities pay 11 taxes.

¹¹⁴ CODBs 2004.

taxes. Even individual entrepreneurs are forced to have in-house accountants to ensure that all taxes are calculated and paid correctly.

5.43 Businessmen focus groups¹¹⁵ rank “Non-tax fiscal inspections” and “Unplanned tax inspections” as major problems. Unplanned tax inspections and non-tax fiscal inspections have become major tools for discretionary law enforcement. The practice of assigning revenue targets to tax offices and tax officials for the collection of fees and penalties creates a perverse enforcement culture. While the situation regarding planned tax inspections improved significantly in 2004 in comparison to 2003, unplanned inspections had increased in number and severity. In addition, inspections by other controlling agencies continue to create major difficulties for businesses.

5.44 In Belarus, price control plays a much more important role in the regulation of business activities of both state enterprises and private businesses than is the case of other transitional economies. Price control increases regulatory costs by imposing additional costs of compliance and by affecting profitability. The CODB survey revealed that a staggering 53 percent in 2001 and 66 percent in 2002 of respondents had been affected by price and margin controls to varying degree. The government uses a variety of tools to achieve price control objectives and frequently changes the mix of price regulation instruments (Table 5.8).

Table 5.8: How Does the State Control Prices for Goods and Services? (% of positive answers), 2001-03

	2001	2002	2003
Through restrictions placed on profitability	48	24	38
Through fixed prices on goods or services	45	50	48
Through ceilings introduced for retail prices	46	38	39
Through the introduction of minimal retail prices	12	13	13

Source: CoDB, 2004.

5.45 Prices are controlled to a large extent in state enterprises (74 percent of the surveyed companies with state participation are affected by price control). In particular, a large number of enterprises are presently included in the national and regional lists of monopolists and the prices for the goods and services they produce are regulated in accordance with the anti-monopoly legislation. However, private firms and small enterprises are also being affected increasingly (Table 5.9).

Table 5.9: Do State Agencies Exert Any Influence on Pricing? 2001-03 (%)

Organizational form	They do		
	2001	2002	2003
Individual entrepreneur	45	29	34
Non-state unitary enterprise	49	60	62
State unitary enterprise	79	86	77
Limited liability company	56	66	63
Additional liability company	59	59	66
Closed joint stock company	75	80	68
Open joint stock company	85	76	76

Source: CoDB, 2004.

¹¹⁵ Conducted during EWS Surveys, 2001-04.

5.46 Administrative wage increases and full employment policies are other important components of government policy that are detrimental to businesses. The activist government labor policies create a serious challenge to the competitiveness of Belarusian enterprises, irrespective of their size and ownership. Using regulatory and discretionary measures and discouraging the rationalization of employment, the government imposes serious constraints on the reduction of employment to levels justified by market conditions.

5.47 Many enterprises report excessive employment. Among large state-owned and privatized companies, more than a quarter claim to have excessive staffing levels (Table 5.10). However, in some small and medium non-state enterprises, employment is excessive as well. The factors that prevent the rationalization of staffing levels are for the most part related to moral suasion, regulatory costs, and direct governmental pressures (Table 5.11).

Table 5.10: How Managers Assess the Current Employment Level of Their Firms (by size of firm) (%)

Staffing level	Excessive	Sufficient	Insufficient	Do not know
Number of employees				
1-10	4	65	30	2
11-50	9	67	22	3
51-100	11	70	17	2
101-500	21	64	11	3
> 500	27	55	14	5

Source: CoDB, 2004.

Table 5.11: Reasons Precluding a Reduction of Staff, 2002-03 (% of positive answers)

	2003	2002
We think that it is not right to dismiss staff	44	24
It will cause problems with the state authorities	14	45
Staff dismissal is a lengthy and expensive process	28	25
It will invite problems with trade unions	-	4.5
Other	12	13.5

Source: CoDB, 2004.

5.48 Two observations can be made on the basis of these data. First, the higher share of large companies claiming excessive employment is another reflection of the fact that large, predominantly state-owned enterprises operate under fairly soft budget constraints.¹¹⁶ A highly pronounced “moral justification of excessive employment” may be merely a way for managers of state and semi-state enterprises “to read the mind” of the government. Second, managers do not see workers’ representation as a significant obstacle to reducing staff levels, which may be explained partly by the fact that workers feel secure in their positions. Surveys also show that enterprises that try to reduce staff despite political signals are exposed to lengthy litigation, which often ends with a decision to reinstate the laid off employees.

¹¹⁶ At the same time, 10 percent of excessive staff in firms with 10 to 100 staff, which are mostly private, shows that the regulatory costs of labor rationalization are high.

5.49 The issue of employment levels has gained particular importance because of the steady administrative wage increase policy. For more than five years enterprises have been under intense pressure from the authorities to raise wages at a rate that on average has been well in excess of any improvements in productivity. This undermines the competitiveness and profitability of enterprises and results in a deterioration in the attractiveness of the country's business climate.

5.50 The difficulties that employers in Belarus face in rationalizing employment levels can be quantified through comparative employment indices. The Bank's Doing Business 2005 database measures the incidence of part-time and fixed-term contracts, working time requirements, minimum wage laws, and the rigidity of local regulations on dismissal and hiring. The measures are compiled into three indices: difficulty of hiring, rigidity of working hours, and difficulty of firing. Each index has an assigned value of between 0 and 100, with higher values representing more rigid regulation. The overall rigidity of the employment index is the average of the three indices.

5.51 For Belarus, the overall rigidity of employment index is 54, compared with Poland at 34, Ukraine at 64, and Russia at 27 (Table 5.12). Firing costs are calculated on the basis of the number of weeks' worth of salary in severance, notification and penalties that must be paid to dismiss a worker. For Belarus, the direct firing costs are lower than the regional average at 21 as opposed to 38.3, but we should account for other non-monetary obstacles to employment termination discussed earlier in this section.

Table 5.12: Hiring and Firing Indicators, 2004, Selected Countries

Indicator	Belarus	Russia	Ukraine	Poland
Overall Rigidity of Employment Index	54	27	64	34
Difficulty of Hiring Index	33	0	33	11
Rigidity of Hours Index	60	60	80	60
Difficulty of Firing Index	70	20	80	30
Firing costs (weeks of wages)	21	17	94	25

Source: Doing Business 2005 database.

Costs of Exit

5.52 As was mentioned above, in Belarus there has been little creation or liquidation of companies, both large and small. The bankruptcy law was adopted in 1991– the first in the FSU republics. Until the end of the 1990s, however, this law was practically unused. Until 2001, bankruptcies were filed mostly against defunct companies, for which there was no other way of formal liquidation owing to accumulated debts. The situation began to change in 2002, when the number of bankruptcy filings increased about fourfold (Table 5.13). Nevertheless, about 90 percent of all bankruptcy cases were of small private companies. According to estimates by the Supreme Economic Court, bankruptcy cases could have been initiated against about half of all existing state enterprises (as about 60 percent of them were considered insolvent); yet only 91 enterprises were in the bankruptcy process at the beginning of 2003.¹¹⁷

¹¹⁷ Vestnik of the Supreme Economic Court of Republic of Belarus, 2003, Issue 8.

Table 5.13: Dynamics of Bankruptcy Cases, 1998-2002

	1998	1999	2000 (est)	2001	2002
Number of bankruptcy cases	56	200	400	265	1165

Source: Vestnik of the Supreme Economic Court of the Republic of Belarus, 2003-04.

5.53 Although the financial cost of exit from business activity in Belarus is relatively small (4 percent of the value of the bankruptcy estate), the completion of bankruptcy procedures comes at a prohibitive time cost (5.8 years) and a very low recovery rate of 11.9 percent (Table 5.14).

Table 5.14: Efficiency of the Bankruptcy Procedures in Transition, 2003-04

	Time (years)		Recovery rate (cents on a dollar)	
	2003	2004	2003	2004
Belarus	2.1	5.8	...	11.9
Russia	1.5	1.5	...	48.4
Bulgaria	3.8	3.3	...	34.2
Latvia	1.2	1.1	...	85
Slovak Republic	4.7	4.7	...	39.6
Ukraine	3.0	2.6	...	25.5
Uzbekistan	3.3	4	...	12.5
Poland	1.5	1.4	...	68.2

Source: *Doing Business in 2004, Doing Business in 2005*, World Bank.

D. QUALITATIVE ANALYSIS OF THE BUSINESS ENVIRONMENT

5.54 As in many other economies in the region, the importance of informalities and the underpinning regulatory culture in the Belarusian economy means that an analysis that is based solely on the “incidence and costs” of the specific regulatory instruments is insufficient. In particular, it should be noted that numerous informalities and regulatory instability create conditions in which regulatory instruments can be, and are, used for purposes other than the declared purposes.

5.55 In Belarus the government has been using its regulatory power to attain a set of strategic objectives that is different from those that were declared and that are customary for market economies. In mature market economies, business regulations have three major functions: (i) the creation of a level playing field for all participants; (ii) the encouragement of entrepreneurship; and (iii) the protection of consumers. To successfully perform these functions, the business environment should: (i) be based on rules that are applied equally to all participating agents; (ii) use only the minimum interventions necessary to achieve its goals; and (iii) be implemented by an efficient and honest administration. In contrast, in Belarus, the administration uses the business environment (its rules, instruments and institutions) as a discretionary tool to: (i) achieve selected social objectives; (ii) maintain the market power of well-connected companies; and (iii) maintain administrative control over business activities in general. At the same time, it is worth noting that changes in the business environment in Belarus are less driven (than in the rest of the CIS) by spontaneous regulatory practices that relate primarily to state capture.

5.56 In Belarus the declared and implemented social purpose of the enterprise sector is more pronounced than in other transition economies. Job security and the availability of inexpensive basic products and services are an important part of the implicit contract between the state and the society. Fulfilling of these social obligations requires a business environment that is conducive to low

unemployment,¹¹⁸ price stability, a supply of broadly available cheap basic goods and services, and stable and broad-based growth in real wages. This social objective requires a highly interventionist government policy. Moreover, changes in the business environment have been introduced from the top down, with the mechanism of public-private consultations being quite weak. The institutional capacity to monitor the quality of the business environment and support business promotion (including attracting FDI attraction), based on the identified deficiencies, remains insufficient.

5.57 Another source of dissatisfaction with the prevailing business environment relates to the fact that it does not support fair competition. Businesses perceive regulatory enforcement as highly uneven and generally unfair. The business regulators (as permitted by ad hoc regulatory practices and their discretionary power of regulatory interpretation) are in a position to offer to selected businesses an arrangement “deal” of reduced competition or even no competition, in their niche markets through customized regulatory applications, tailored interpretations, and “formalized” informalities. In other words, selective use of the regulatory environment appears to create monopolistic rents for individual entrepreneurs that may be shared with the regulator. In this context, the perception that the business environment has deteriorated in recent years,¹¹⁹ despite several positive specific developments, could be interpreted as a growing number of entrepreneurs becoming dissatisfied with the balance between the costs of administrative protection from competition and their gains from this regulatory protection.

5.58 The established practice of the selective use of business regulations initiated in 2004 poses a risk for the government’s effort to adjust its strategy toward a broader involvement of the private sector in the economy, including a more liberal policy toward SMEs. At the same time, the substantial licensing reforms introduced in 2004 may have contributed to a less negative perception of the changes in the quality of the business environment which were reflected in the 2004 survey.

5.59 A new and worrying trend in the business environment relates to increased protectionism and the segmentation of the economic space. Regional governments, facing difficulties in meeting output targets by local enterprises, have been trying to protect these enterprises from external competition. This has resulted in imposing informal trade barriers for goods from other regions of Belarus. Such a policy is highly distortive because it prevents the most competitive enterprises from realizing economies of scale.

5.60 In Belarus, as in other CIS economies, firms with revenues starting from the equivalent of US\$150,000 become a target for the intensified enforcement of regulations and formal and informal payments.¹²⁰ However, unlike their counterparts in other transition economies, Belarusian entrepreneurs report the existence of a second ceiling above which it is impossible for a private firm to operate (irrespective of readiness to pay regulatory costs) without strong political backing and connections. This revenue ceiling was reported at a level of US\$3 million in 2004 but was lowered to US\$1 million in 2003, which point to the fact that, increasingly, smaller companies need political support to survive.

5.61 The anti-private business attitude of the regulatory regime does not mean that state or semi-state companies are less affected by the burden of administrative control. SOEs and incorporated firms with state participation are often subject to more detailed interference, which includes not just supervision over strategic management decisions, but also the monitoring of daily operations through output and wage targets as well as numerous other performance indicators.

¹¹⁸ Full employment is perhaps the strongest “proof” of the superiority of the Belarusian economic model, particularly when compared with neighboring Poland, Lithuania and Ukraine, where unemployment is high.

¹¹⁹ Although in the 2004 EWS survey the perception of deterioration is not as strong as it was in 2003, it is still quite significant.

¹²⁰ Needless to say, however, firms engaged in highly profitable activities such as trade in fuel, tobacco and alcohol, and telecommunications services, attract the attention of officials, irrespective of their size.

5.62 Even in privatized companies, the state can retain or re-introduce a “golden share,” which represents a major risk of the re-emergence of detailed administrative control in most Belarusian firms. The golden share gives the state the authority to appoint its own members to the supervisory board and can exercise a veto power in a wide range of activities, including restructuring, liquidation, changes in charter capital, and the appointment of managers. This contributes to the lack of investment attraction of privatized enterprises, particularly for foreign investors.

5.63 Administrative restrictions on the activities of private firms are enforced by the ad hoc use of business regulations through a number of instruments, such as inspections, re-registration, licensing and permit requirements, etc., conducted by different state institutions. Discretionary interpretation and application of regulations makes it easy, for example, to use the licensing mechanism to delay new market entry rather than to protect consumers. The relative distortive effect of such actions is reflected in the perception of corruptibility (i.e., aggressive actions by regulatory and enforcing institutions to receive incomes through the use of their control position). The focus group discussions rated sanitary inspection and customs as the most corrupt agencies, closely followed by the police.

5.64 The EWS surveys also indicate that the inability of the “courts to protect from unfair state practices” is significant and has been growing in recent years.¹²¹ The judiciary is highly dependent on political powers. There are an increasing number of reports of the unfairness and bias in the courts for both economic and political reasons, the strong dependence of judges on the authorities, and the discrimination of private enterprises in the resolution of disputes. Managers and entrepreneurs also point to the fact that it is almost impossible to win labor disputes in courts -- the judges are biased in favor of employees’ rights. The problems with the judiciary are compounded by frequent changes in the laws and regulations.

5.65 In developed economies the role of the judiciary system in the business environment is placed above the administrative authority. Enterprises have the right to challenge administrative decisions in courts, and court decisions become a very important part of future business regulations. In Belarus, however, the judiciary system appears to have become an extension of administrative control over the economic activities of enterprises irrespective of their ownership and size.

E. CONCLUSIONS

5.66 Over the last few years the government has made some progress in the simplification of business registration and licensing, as well as in the regulation of export activities. The Government is planning to continue streamlining and simplifying the processes for starting a business and is considering the introduction of a “one window” registration process to facilitate new market entry.

5.67 However, these improvements go in tandem with deterioration in other areas of the business environment. The remaining excessive government interventions in the activities of the enterprise sector crowd out the positive impact of the latest reforms. Belarusian business people have strong negative perceptions of the trends in the country’s investment climate. The survey results do not yet show any significant positive outcomes from what the government considers as important shift in its policy direction.

5.68 The existing business environment represents a major risk for the sustainability of the country’s economic growth and undermines the country’s growth prospects through a number of channels. First, the high costs of compliance with administrative regulations mean that a significant amount of resources is

¹²¹ EWS surveys, 2002-04.

diverted from more productive use. Second, the high costs of entry deprive the economy of the major benefits associated with the flexibility and innovation that only new firms could generate. Third, the high incidence of government interference damages Belarus' investment image, poses a risk for its international economic isolation, limits its opportunities for attracting FDI, and more broadly greatly reduces the potential benefits from global integration enjoyed by its neighbors.

5.69 In addition to more fundamental changes in the business environment that would accelerate privatization and provide for a real hardening of budget constraints for state-owned enterprises, the following three areas should be considered as priorities for an immediate reform:

- **Liberalizing the procedures for new entry.** Reducing the time needed for business registration and simplifying the procedures for entry are objectives that the government could accomplish without a fundamental overhaul of the underlying system of regulations.
- **Limiting discretionary administrative interference.** The government needs to change the incentive system for the regulatory agencies to discourage their discretion in enforcing regulatory requirements. Among other things, this means a drastic reduction of “unplanned tax inspections” and similar interventions, which are the most detrimental to the business climate. In addition, entrepreneurs should be offered an independent channel through which they can report to the central administration any irregularities of regulatory interventions.
- **Liberalizing employment and wage regulations.** Enterprises experience problems when they need to rationalize employment, while administrative wage increases clearly undermine their competitiveness. Enterprise managers need greater decision making power regarding labor and wage issues. Combining this policy with a renewed impetus to support new market entry would limit the potential negative effects on overall employment.

5.70 Moreover, the analysis suggests that there may be a serious internal conflict between government's plans to reform the business environment and its reliance on the existing economic model for development. The adopted economic model requires massive administrative interventions at the micro level, which unavoidably raises the costs of doing business in the country and imposes serious limitations on how much the business environment could be improved without dismantling some central components of the existing control system.

5.71 An important lesson that can be drawn from the analysis of the business environment in transition is that its improvement cannot be carried out quickly and solely by the introduction of a package of “good” regulations. A considerable amount of political will to change the prevailing government attitudes to business and enhancement of public-private dialogue are needed, as well as deeper reforms of public administration, the civil service, and the judiciary. In addition, some elements of the business climate such as informal payments are deeply rooted in the broader cultural environment and have proved to be especially slow to change. This, again, supports the premise of the long-term nature of the reform of the business environment.

CHAPTER 6

PERFORMANCE AND PROSPECTS OF THE AGRO-FOOD SECTOR

A. OVERVIEW OF TRENDS IN THE AGRO-FOOD SECTOR

6.1 This chapter reviews the performance of the agricultural and food processing sector since 2000. It analyses the main bottlenecks for future development in the sector and outlines recommendations to support the sustainable development of the sector.

Introduction

6.2 The performance of the agro-food complex, especially since 2000, is an excellent illustration in many respects of the “Belarus puzzle”. On many levels, but particularly in terms of output and productivity growth and trade, there has been significant improvement. At the same time this has apparently been achieved without dismantling the key features of the former Soviet system of command and control. The central questions concern what were the drivers of the impressive performance of the agro-food complex, and whether the sources of the recent growth are sustainable.

6.3 The recent growth in agricultural output and exports can be explained by improvements in competitiveness as a result of a reduction in relative price distortions, and modest structural reforms, supported by exchange-rate adjustments and a doubling of budget expenditures. The household sector has been particularly dynamic and has contributed impressively to the sector’s performance relative to its land resources. However, price levels are still highly distorted, with some prices effectively taxed and others heavily subsidized relative to “world” levels.

6.4 The sustainability of the sector’s performance is open to several questions. The recent growth in state budgetary support is evidently unsustainable from a fiscal perspective as is the buildup of future liabilities that have arisen because of soft financing. While there is further potential for a competitive re-alignment of producer prices, any developments in this direction are effectively capped in the short to medium terms by pervasive inefficiencies in the processing sector.

6.5 To sustain high growth rates in the sector, as outlined in the government program, agriculture exports will need to expand significantly, which would require a major improvement in the sector’s competitiveness. This requirement is reinforced by the need for Belarus to diversify away from virtually exclusive reliance on Russia as its export market. It will have to compete with exports from the EU whose agricultural products are protected by generous export subsidies. Belarus’ ability to match these levels of export subsidies is constrained by its desire to adhere to WTO “Amber Box” subsidy restrictions. Even if it wished to match these subsidies, Belarus’ own fragile fiscal circumstances would militate against this course of action.

6.6 Under these circumstances, the only feasible and sustainable path to ensure greater penetration of export markets would be for Belarus to set in train the conditions that would ensure a competitive agro-food sector that is not reliant on unsustainable subsidies. The suggested sequencing of reform gives priority to the removal of price caps on food products; fixed trading margins and fertilizer subsidies; more effective targeting of support to efficient entities, especially by enforcing a hard budget constraint; a more

aggressive and supportive foreign direct investment (FDI) policy targeted at upgrading the efficiency of the processing sector; and more decisive farm restructuring.

Recent Performance Trends

6.7 In 2004 the volume of agricultural output had grown by 12.9 percent. This was the fifth year of successive growth in the sector. The growth in the volume of agricultural output over the period 2000-04 averaged about 6 percent.

6.8 This outcome was in fact a continuation of a longer-run trend of the superior performance of Belarusian agriculture relative to Russia and Ukraine. Compared to that of its neighbors, Belarusian agricultural output declined less during 1995-99 and grew more rapidly during the first half of the current decade. As a result, Belarus' agricultural output was short of attaining its 1991 volume by only 8 percentage points, while the gap was about four times larger for both Russia and Ukraine (Table 6.1). Nevertheless, since 1990 Belarus has consistently emerged as the least reformed among the transition countries.¹²² Hence, the "Belarus puzzle."

Table 6.1: Average Annual Growth (Decline) in Gross Agricultural Output in Belarus, Russia and Ukraine, 1995-2004 (percent)

	1995-1999	2000-2004
Belarus	-3.2	5.7
Russia	-4.1	3.9
Ukraine	-6.1	5.5

Source: Statistical Committee of the CIS.

6.9 Output growth has been recorded for almost all commodities but it has been especially strong in the crops sector (Table 6.2). The production of livestock products has been driven by a modest increase in milk and meat production. Owing largely to weather factors, the performance of the major crops (grains, potatoes and sugar beet) has been highly variable.

Table 6.2: Production Volume Index for Selected Agricultural Commodities in Belarus (1999=100), 2000-04

	2000	2001	2002	2003	2004
Total agriculture	109	111	112	119	135
Including					
Grains (bunker weight)	133	141	164	149	192
Sugar beet	124	142	97	162	260
Potatoes	116	104	99	115	132
Vegetables	106	109	116	154	156
Milk	95	102	101	99	109
Meat*	90	95	93	93	98
Eggs	97	93	86	83	87

*Sales (live weight).

Source: MSA.

¹²² Rozelle and Swinnen (2004).

6.10 Over the same period, land productivity has grown marginally faster than agricultural output (Table 6.3). The growth in land productivity resulted from a combination of the growth in the volume of agricultural output and administrative measures aimed at the withdrawal of the least fertile lands from agricultural production. Over the past five years the state converted about 10 percent of the marginal arable land into meadows, pastures, forests, and etc. thereby achieving a more concentrated input use on more productive lands.¹²³

Table 6.3: Growth in Output Volume, Land and Labor Productivity, 2000-04

	2000	2001	2002	2003	2004
Agricultural land (in thousand hectares at the beginning of the year)	9,175	9,142	8,993	8,924	8,885
Arable land (thousand hectares at the beginning of the year)	6,140	6,085	5,663	5,558	5,511
Rural labor force (thousand persons)	1,407	1,402	1,404	1,404	n.a.
Average annual employment in agriculture (thousand persons)	625	586	532	489	480
Production volume index (2000=100)	100	102	103	109	123
Agricultural land productivity index (2000=100)	100	102	105	112	127
Arable land productivity index (2000=100)	100	103	112	121	137
Labor productivity index (2000=100)	100	108	122	139	172

Source: MSA.

6.11 With a 15 percent average annual growth, the gains in labor productivity have been impressive. While the rural labor force has remained more or less stable, the numbers of those engaged in agriculture have fallen by almost a quarter of the 2000 levels. As a result, since 2000 the share of agricultural employment in the national economy has declined from 14 percent to 11 percent.

6.12 It is important to note that, in contrast to the government-initiated process for the retirement of arable land, the reduction in agricultural employment was not directly controlled by the state. Like Russia and Ukraine, Belarus faces the demographic challenges of a declining and aging rural population. However, it appears that demographics have played only a partial role in the reduction in agricultural employment as it has declined much more rapidly than the rural labor force.¹²⁴

6.13 Being closely related to primary agriculture, agro-processing has also recorded a sizable output growth. In fact, its performance has been superior to that of primary agriculture. For example, while the output of livestock products has been declining, the growth in the milk and meat branches of the food industry has been positive and has accelerated from 2000.

6.14 The number of processing enterprises has dropped and the level of employment has been more or less stable (Table 6.4). Given these developments, the growth in output has been achieved by better capacity utilization, especially in meat production, and by greater labor productivity. In spite of these improvements, capacity utilization remains chronically low by international standards despite the

¹²³ On a per capita basis, Belarus ranks fourth among the CIS countries in terms of land availability. Belarus has about 0.56 hectares of arable land per capita, which is lower than the ratios in Russia, Ukraine and Kazakhstan. However, this indicator is significantly higher than the EU average of about 0.2 hectares per capita (pre-2004 accession).

¹²⁴ During 1990-95 the rural labor force declined by 11 percent.

relatively small scale of Belarus' agro-processing units. In addition, the capital stock of the sector has been substantially eroded, as is revealed by the exceptionally high levels of depreciation.

Table 6.4: Developments in the Belarusian Food-Processing Sector, 2000-03

	2000	2001	2002	2003
Number of enterprises	475	493	478	461
Employment in food processing (thousand persons)	128	127	127	126
Percent change in the in the volume of food processing output	6.7	10	4.3	5.3
Of which:				
- flavoring industry output	10.6	8.3	7.5	4.3
- meat and dairy output growth	1.6	10.4	1.1	5.0
Capacity utilization in meat processing enterprises (%)	40	41	41	45
Capacity utilization in dairy processing enterprises (%)	54	52	50	55
Depreciation rate of capital stock in the meat and dairy processing sector (%)	46	48	49	50

Source: MSA.

6.15 Belarus is a net food importer and in 2003 the net agriculture and food trade deficit amounted to US\$557 million, or 3.2 percent of GDP. With an improvement in the competitiveness of the agro-food sector in recent years, the value of net imports has decreased rapidly from about 5 percent of GDP in 2000. In the agricultural trade with Russia, Belarus' trade balance was marginally positive in 2003.

6.16 Overall, food and agricultural exports grew 2.7 times faster than imports (Table 6.5). The growth in exports surpassed, by a factor of almost three, growth in the volume of food industry output. Exports have exceeded the growth in the volume of primary production by a factor of about four. In 2004, according to the Ministry of Agriculture and Food, agricultural and food exports grew by a further 60 percent. Looking ahead, the state program envisages a further targeted reduction in food imports – to not more than 10 percent of domestic consumption--while food exports are planned to exceed imports by a factor of three.

Table 6.5: Belarus Food Trade, 2000-03 (US\$ million)

Year	Agriculture and food exports	% of total exports	Agriculture and food imports	% of total imports	Net trade balance	% of GDP
2000	503	6.9	1,116	12.9	-613	-4.8
2001	605	7.5	1,098	13.3	-493	-4.0
2002	635	7.9	1,223	13.5	-588	-4.0
2003	832	8.4	1,389	12	-557	-3.2

Source: MSA.

B. STRUCTURAL CHANGE AND POLICY DEVELOPMENTS

6.17 It is useful to benchmark the assessment of the current policy context against the views presented in the World Bank's most recent study (2000) on the agro-food sector in Belarus.¹²⁵

¹²⁵ World Bank, 2000.

6.18 As far as the primary sector was concerned, the 2000 World Bank study concluded that neither significant internal restructuring had occurred since the previous Bank study was published in 1994¹²⁶ nor had there been any serious attempt to break up traditional post-Soviet farms into more manageable units. The 2000 study noted the apparent exceptional productivity of household plots, which accounted for about 40 percent of output, yet these plots occupied only 14 percent of the land area. At the same time, private farms were of marginal importance and accounted for only 0.8 percent of the land area. In 2000 the number of private farms more or less matched the number of state-controlled farms, which was substantially less than the ratios observed for both Russia and Ukraine. Private farms were considered relatively efficient, but they did not enjoy the same level of subsidization as state-controlled farms.

6.19 State interference in all of the elements of the food chain was extensive. Price controls applied to some 118 “socially important goods.” Rigid procurement quotas operated to inhibit the development of independent retail outlets for food products. External trade in agricultural food products was effectively restricted through the tortuous licensing system and penalizing foreign-exchange surrender requirements on the proceeds of exports.

6.20 The 2000 study concluded that “the overall economic and policy environment remains the major impediment to creating market-based agricultural enterprises.” State interference in decision-making was pervasive and the sector was subject to substantial implicit taxation. Production targets were emphasized over productivity and profitability objectives. The authors of the 2000 report put forward a six-point program for the reform of the agro-food sector, which comprised the following elements:

- Macroeconomic reform, especially the alignment of the exchange rate with economic fundamentals
- Genuine farm restructuring and land reform
- The development of de-monopolized food processing and input-supply industries
- The creation of institutions supportive of the market economy
- A clear division of responsibility between the commercial role of state-controlled farms and their traditional social role in rural areas
- The promotion of private sector development in rural areas as a solution to over-employment and low productivity in agriculture.

6.21 Against this background, the main policy developments since 2000 and the likely trajectory of policy over the medium term are examined.

Agricultural Policy Initiatives since 2000

6.22 Agricultural policy developments over the period 2001-05 have been governed by the government’s Program for the Improvement of the Agro-Industrial Sector of the Republic of Belarus, 2001-05. This program emphasized measures to (i) improve farm productivity, (ii) facilitate the restructuring of farms, and (iii) address the problem of loss-making enterprises. The third element addresses the problem of loss-making state-controlled enterprises by merging them with profitable entities.

6.23 The current program, the State Program for the Revival and Development of Rural Areas, 2005-10, (the State Program) is consistent with the thrust of the 2001-05 Program. The emphasis in the new Program is twofold: the development of rural areas and the creation of a competitive export-oriented agro-food sector. The intent is to liberate the agro-food sector from its traditional requirement to support

¹²⁶ World Bank, 1994.

the social and cultural infrastructure of rural areas and to transfer these obligations to local authorities which should allow the agro-food sector to focus on enhancing its efficiency.

6.24 Like its predecessor, the new Program continues to espouse food security as a central objective of policy for the agro-food sector. This objective provides a powerful motivation for continued substantial state involvement in the production system. Policy is again focused on the enhancement of the productive efficiency of both the primary and the processing sub-sectors through support for physical capital investment, improved investment in land drainage and soil fertility, improved livestock breeding, enhanced training of agricultural producers and increased investment in R&D.

6.25 There are several innovative aspects to this component of the Program that deal with the revival of rural areas. In particular, the proposal to concentrate state infrastructure investment around strategically located “agro towns” has the potential for significant public returns.

6.26 A novel aspect of the Program is the objective of locating productive activity on the most suitable soils and of supporting this objective with suitably differentiated subsidies. The Program also stresses the importance of appropriately motivating enterprise managers by performance-based payments and the establishment of appropriate wage and salary differentials vis-à-vis other employees.

6.27 On the processing side, there is a modest commitment to reduce the number of dairy processing factories from 114 to 58. However, the Program is committed to retain the existing numbers and locations of the beef processing factories. There is recognition of the need to substantially upgrade the technology of the processing sectors.

Price Policy

6.28 Price policy, as it applies to the primary sector, has changed significantly, owing to a reduction in the level of state procurement. Beginning in 2002, state procurement was substantially reduced, from more than 50 percent of the value of agricultural output in 1998 to about 12 percent. However, it remains high for some commodities (for example, in 2003 the share of state orders was 100 percent for flax fiber, 95 percent for sugar beet, and 77 percent for rapeseed).

6.29 Allied to the reduction in state procurement, price policy has changed from a system of fixed procurement prices to “minimum” or “floor” prices. At the producer level, the minimum prices are calculated and announced by the Ministry of Agriculture and Food following the approval of the Ministry of Economy. In contrast to these positive developments in price policy, however, the government has made greater use of price premiums for selected commodities.

6.30 In 2003, when producer price premiums were not paid, the actual prices received by producers were close to the legislated minimum prices. While the state withdrew from purchases, alternative non-monopolistic marketing systems were slow to develop, and consequently a largely undeveloped marketing infrastructure continues to impose an implicit tax on primary producers.

6.31 In 2002 food product prices at the processor level were liberalized. However, in early 2004, in response to the growth in the border prices for food products, price caps on selected “socially important” products were re-introduced. At the end of the same year the list of “socially important” commodities was extended to include beef and pork.

6.32 However, the current price-setting mechanism in food processing is more flexible than in primary agriculture, as agro-processors are free to establish their own prices as long as they remain below the

legislated cap. The cap does not apply to all commodities and agro-processors are free to decide on their output mix and to produce more of a commodity that is not subject to such price controls. These price controls were conceived as an anti-inflationary measure in response to the prevailing adverse external environment and are not supposed to be permanent features.¹²⁷

Structural Changes

6.33 At one level, a widespread restructuring of agricultural enterprises has occurred since 2000. By early 2004 state and collective farms practically ceased to exist in Belarus (Table 6.6).¹²⁸ They were largely replaced by cooperative farms. However, these new entities are still fundamentally under state control and hence the significance of this restructuring is limited. Nonetheless, one of the major positive elements of this restructuring was the transfer of responsibility for the provision and maintenance of social infrastructure from agricultural enterprises to local authorities. According to estimates of the Ministry of Agriculture and Food, the value of financial benefits arising from this transfer amounted to 145 billion BYR in 2004.

Table 6.6: Legal and Organizational Types of Larger Agricultural Enterprises, 2000 and 2003

Organizational types	2000	2003
Kolkhozes	1,720	37
Sovkhozes	463	13
Agricultural production cooperatives	15	1,169
Unitary enterprise	199	591
Joint stock companies of various type	41	331
Total	2,438	2,141

Source: Ministry of Agriculture and Food.

6.34 As of January 1, 2005, 48 enterprises had been sold to private investors and 27 enterprises had also been leased to private farmers. A further 511 loss-making enterprises were merged with other entities. While the latter initiative has undoubtedly reduced the number of loss-making enterprises, it could have done little for the underlying profitability fundamentals, as the managers of the new agglomerates were not empowered to undertake any significant restructuring of these unprofitable businesses. More important, since most of the loss-making entities were merged with profitable entities from entirely different business specializations, there were no evident synergies that could be exploited.

6.35 These structural changes have resulted in a modest redistribution of land from the state to the private sector. The number of private family farms had been declining up to 2001, when the numbers began to increase. Currently they stand at 2,493. From 2000, the average size of private farms doubled by 2003, from 33 to 72 hectares, owing to the relaxation of land-leasing regulations. Correspondingly, as a result of sales, lease and amalgamation with other enterprises, the number of agricultural enterprises declined (Table 6.7).

¹²⁷ The price caps were biased towards livestock products (i.e., milk, beef and pork), the prices of which have risen due to combination of the following: growth in international prices; greater protection of Russian producers against livestock imports as well as the disorganized commencement of the new import quota regime in Russia.

¹²⁸ “Agricultural enterprises” or “Agricultural organizations” comprise all non-private farms including the remaining *Kolkhozes* (collective farms) and *Sovkhozes* (state farms), as distinct from “private farms” and “household plots.”

Table 6.7: Number and Average Size of Agricultural Organizations and Private Farms, 2000-03

	2000	2001	2002	2003
Number of agricultural organizations	2,414	2,400	2,338	2,230
Total land area, thousand hectares	9,231	8,818	8,708	8,661
Average size of land area, hectares	3,824	3,674	3,725	3,884
Number of private farms	2,525	2,397	2,399	2,493
Total land area, thousand hectares	86	93	130	180
Average size of private farms, hectares	33	39	54	72

Source: MSA.

6.36 The emergence of a greater degree of private ownership and more long-term leases has been hindered by the absence of clear property rights. Developments in this sphere will inevitably be exceptionally slow, given the long legacy of absolute state ownership and control over enterprises in Belarus. However, important steps have been taken to develop a comprehensive land valuation and registry system which may facilitate more fundamental restructuring. Private property rights for household plots (up to 1 hectare) can be registered and market transactions are now allowed. The State Committee on Land Resources and Cadastre serves as a “one stop shop” registry for all such land transactions.

6.37 The efficiency of land use under public control remains significantly lower than in the privately operated entities. The private sector accounts for only 17 percent of agricultural land which, when considered in conjunction with its output share, implies either that it is an exceptionally productive sector or that not all its resource use is fully costed. Producers in the private sector, especially the household sector, have close ties with state-controlled entities in terms of inputs and service provision as well as in securing market outlets (Table 6.8).

6.38 At the agro-processor level, a significant portion of the traditional state-owned enterprises were corporatized. In 2003 the share of such enterprises in the food-processing industry was 71 percent by volume of production and 66 percent by level of employment. The increased share of private enterprises was achieved mainly through corporatization of the existing enterprises, as the number of enterprises remained relatively stable.

Table 6.8: Structure of Agricultural Output and Land Holdings by Different Farm Categories, 2000-03 (%)

	2000	2001	2002	2003
Total agricultural output (in current prices)				
Share of agricultural organizations	61	61	57	51
Share of private farms and households	39	39	43	49
Total agricultural land				
Share of agricultural organizations	84	84	83	80
Share of private farms and households	16	16	17	20

Source: MSA.

6.39 The data analysis reveals that a monopolistic element remains strong in the sector: 21 enterprises are defined as monopolies, amounting to nearly 5 percent of all enterprises but contributing nearly 24 percent of output.

Input Supply

6.40 Most of the agricultural inputs are produced domestically. As well as supplying its own indigenous sector, Belarus has a significant export trade in farm machinery and especially in potassium fertilizers. In recent years the production of tractors has outpaced the rate of their supply to agriculture (Table 6.9). Similarly, the domestic consumption of mineral fertilizers has not kept pace with their production.

Table 6.9: Production and Utilization of Agricultural Machinery and Fertilizers in Belarus, 2000-03

	2000	2001	2002	2003
Production				
Mineral fertilizers ('000 tons)	4,056	4,379	4,495	4,953
Tractors	22,470	22,688	24,316	26,665
Utilization				
Application of mineral fertilizers (per 100 ha of arable land)	169	138	146	149
Tractors (per 1000 ha of arable land)	15	15	14	13

Source: MSA.

6.41 Almost all inputs and farm services are still produced and distributed by state-managed enterprises. The notable change has been the restructuring of the input supply industry as the state tried to consolidate the numerous organizations and agencies supplying inputs or performing services for agricultural producers. During 2003-04 the number of such entities was reduced by 341 units, with the number of resultant redundancies amounting to 7,730 jobs (including 3,345 middle management jobs).

6.42 In the majority of the districts in the country, mechanized groups have been set up as regional agro-service enterprises and at processing enterprises. They perform 78 percent of all farm mechanization work and about 10 percent of all transportation services in the country. There is also a commitment to improve the basic quality of the machinery stock by permitting machinery imports in priority areas (for example, cattle raising and dairy production).

Domestic Trade

6.43 Economy-wide, the role of the private sector in domestic retail and wholesale trade has expanded and has reached about a third of the total trade turnover. Likewise, in the agricultural sector, following the reduction in the level of state procurement, the share of the private sector trade turnover has also grown.

6.44 At the same time, greater involvement by the private sector continues to be hampered by the fixing of trading margins, from 10 percent to 24 percent of processor prices. Margins are capped at 10 percent for "socially important" products.

6.45 Administrative restrictions remain common for trade in agricultural and food products. The typical interventions by the national and local governments range from occasional restrictions on inter-regional trade to requirements placed on the representation of domestically produced (or sometimes regionally produced) food items by trade outlets.

Economy-wide Adjustments

6.46 The unification of the exchange rate and Belarus' commitment to join the WTO represent two major developments beyond the scope of agricultural policy that could potentially have a positive impact on agricultural performance. The resolution of the overvalued exchange rate by 2001 was the single most significant positive change for agricultural exporters. Of major importance also has been Belarus'

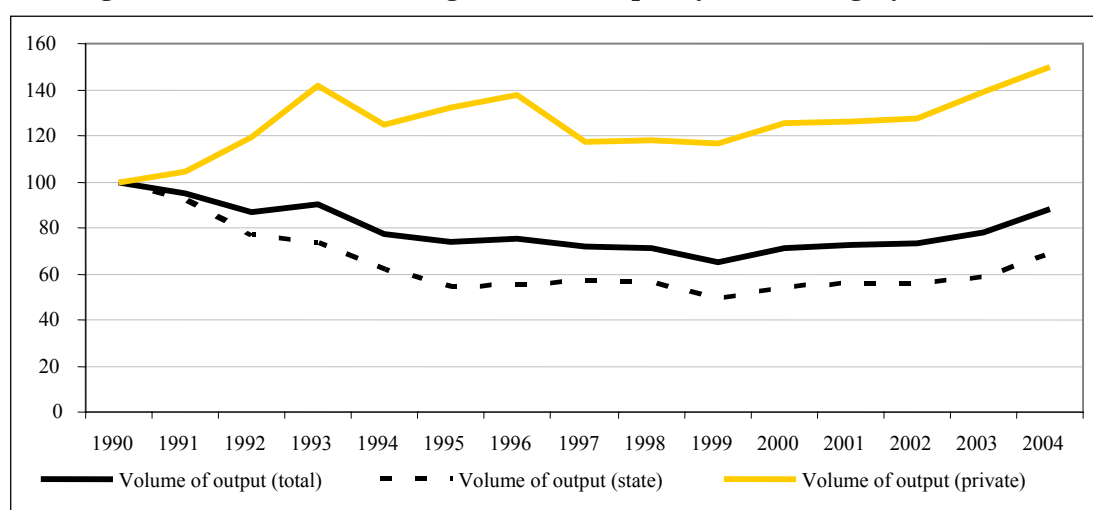
commitment to join the WTO, and in the context of agriculture, the acceptance of reasonably stringent commitments regarding agricultural subsidies.

C. EXPLAINING OUTPUT AND PRODUCTIVITY GROWTH IN AGRICULTURE

6.47 Large gains in productivity growth account for the output growth observed since 2000. The increasing importance of private farms together with strong price incentives for efficiency and productivity gains among agricultural enterprises explain the large productivity gains in Belarus agriculture. These two main sources of productivity growth provided the foundation for the resumption of agricultural growth.

6.48 As indicated earlier, large gains in average land productivity and labor productivity have taken place since 2000 (Table 6.3) which helps to account for the rapid growth in agricultural production (Figure 6.1). Beyond land and labor, productivity gains also appear to have been pervasive across a wide range of agricultural inputs. Improved efficiency in the use of agricultural inputs and the resulting partial productivity gains since 2000 are illustrated by a reduction in the use of many agricultural inputs by agricultural enterprises (Table 6.10). For example, the consumption of electric power and fertilizer by agricultural enterprises has been reduced by a quarter of its 2000 levels. The reduction in petroleum consumption has been even more pronounced. The consumption of diesel fuel has shown the least decline. The reduction in fertilizer applications for individual crops validates the finding of improved efficiency in grain production (a 3 percent reduction), while efficiency gains in sugar beet production show a 19 percent increase. The gains observed in the productivity of individual inputs, including land and labor, suggest significant gains in total factor productivity growth over the period.

Figure 6.1: Volume Index of Agricultural Output by Farm Category, 1990-2004



Source: MSA.

Table 6.10: Use of Selected Inputs in Agricultural Production by Agricultural Enterprises, 2000-03

	2000	2001	2002	2003	2003 as % of 2000
Power (mln kWth)	1,808	n.a.	1,479	1,358	75%
Diesel fuel (thousand tons)	655	579	525	515	79%
Petroleum (thousand tons)	189	147	127	110	58%
Fertilizer (thousand tons of effective matter)	1,022	787	764	755	74%

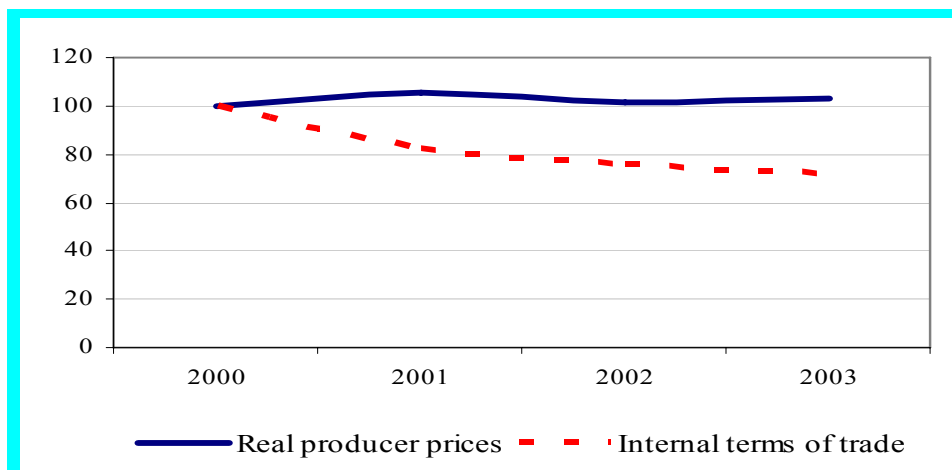
Source: MSA.

6.49 The relaxation of controls on private sector farming and the doubling of private agricultural land have had a dramatic impact on land productivity and agricultural output growth. Although the amount of land operated by private farms doubled between 2000 and 2003, the privately owned share of agricultural land (most of which belongs to the household sector) remains small, reaching only 20 percent in 2003 (Tables 6.7 and 6.8). Despite this small share of land, almost half (49 percent) of the total agricultural output growth since 2000 has come from the private sector (Figure 6.1). With only a small share of agricultural land currently operated by private farmers, this suggests that there remains much potential scope for raising agricultural output further.

6.50 Farm managers of agricultural enterprises were given increased flexibility in the management of their farm operations, which allowed them, for example, to take marginal land out of production and also, increasingly, to shed some labor. Both of these measures helped boost average land and labor productivity. Increasingly, strong price incentives prompted farm managers to take advantage of their increased management flexibility by capturing efficiency gains in the use of farm inputs, and to raise productivity on their farms.

6.51 Since 2000, farm profitability has come under increasing pressure as input prices have risen much more rapidly than output prices. The extent of the price-cost squeeze, or the “internal terms of trade” (ITT) experienced by primary producers, is illustrated by the 30 percent decline in the price of agricultural commodities relative to the price of agricultural inputs. The decline in the ITT provided a strong incentive to private farmers and farm managers to use inputs more efficiently and to capture offsetting efficiency and productivity gains in an attempt to maintain the profitability of their agricultural operation (Figure 6.2).

Figure 6.2: Real Producer Prices and ITT in Belarus Agriculture, 2000-03

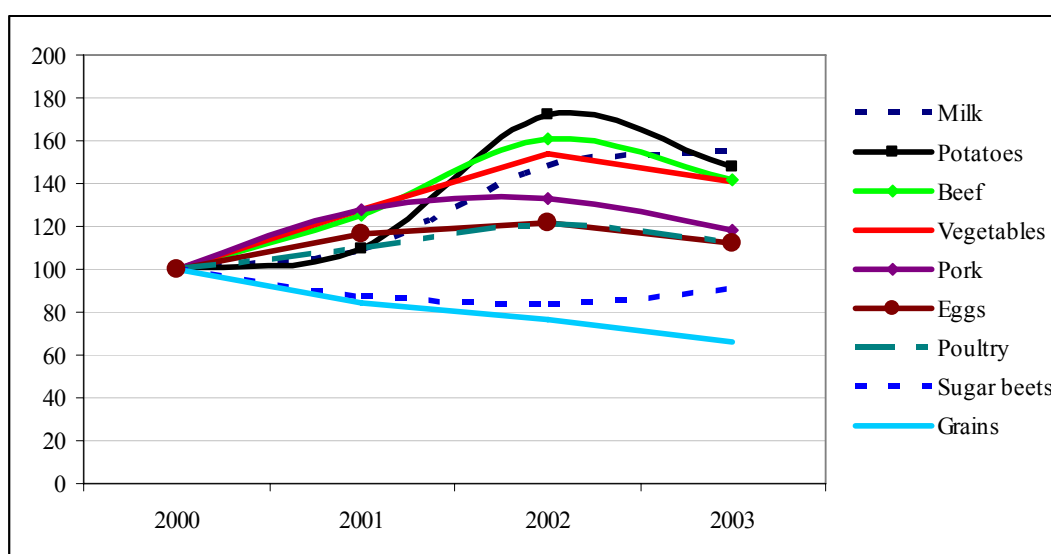


Source: MSA.

6.52 The incentives to improve productivity varied across commodities depending on the severity of the price-cost squeeze prevailing for each commodity. Figure 6.3 indicates that the price-cost squeeze was much more pronounced for import-competing commodities such as grains and sugar beet than for exportable commodities such as milk, potatoes, vegetables and beef. For exportable commodities such as milk and potatoes, output prices actually improved relative to input prices, while for other exportables such as beef and vegetables output prices almost kept pace with increases in input prices. For import-competing commodities, however, input prices increased much more rapidly than commodity prices.

6.53 These commodity-specific movements in the ITT are associated with changes in the levels of profitability of individual commodities produced by agricultural enterprises (Table 6.11). For example, the profitability of milk, potatoes and vegetable production improved over the period: in the case of milk, profitability improved but remained negative (see below). Grain producers managed to maintain their profitability levels in 2001 and 2002 despite a significant price-cost squeeze, which suggests that productivity gains in the grain sector have been particularly large. The 13 percent reduction in fertilizer application together with the 12 percent increase in grain production between 2000 and 2003 are a further indication that such productivity gains may have been realized. In 2003, the profitability of grain production fell dramatically, partly as a result of the price-cost squeeze and partly because of the drought-related drop in output.

Figure 6.3: Real producer Prices for Selected Commodities, 2000-03



Source: MSA.

Table 6.11: Profitability of Sales for Selected Agricultural Commodities by Agricultural Enterprises, 2000-03 (percent)

	2001	2002	2003
Vegetables	32	40	39
Sugar beet	8	-13	15
Potatoes	-1	13	9
Grains	23	22	8
Eggs	-3	4	5
Milk	-25	-10	-1
Pork	-3	1	-3
Beef	-26	-23	-34
Total	-9.3	-5.0	-6.2

Source: MSA.

6.54 Profitability levels rather than changes in output prices explain output growth. Profitability levels resulting from changes in input terms of trade and productivity gains are closely related to the output response. Those commodities for which profitability remained high (such as grain, sugar beet) or improved (such as vegetables, milk, potatoes) witnessed the largest production increases. Those commodities whose profitability remained poor (pork) or deteriorated further (beef) experienced the smallest growth in output, or even a decline in production (for example, eggs). By contrast, changes in output prices, caused in large part by the devaluation of the exchange rate, are unlikely to have explained much, if any, of the supply response in agriculture. Farmgate prices did change significantly between 2000 and 2004, but their movement does not seem to explain the observed changes in agricultural output (Figure 6.3).

6.55 As a result of the devaluation of the exchange rate, the output-price distortions within the agricultural sector were reduced. The unification of the official and the market exchange rates in 2000 resulted in a substantial depreciation of the currency. This devaluation automatically improved the competitiveness of the agricultural sector on the world market, and this helps to explain the growth in agricultural exports and the deceleration in the rate of growth of agricultural imports. The devaluation of the exchange rate also enabled the government to raise farmgate prices in real terms, although the increase was marginal (Figure 6.2).

6.56 The small increase in the average farmgate price in real terms, however, masks significant differences in price movements across commodities. The pass-through of the exchange rate devaluation on farmgate prices was not applied consistently across commodities. In particular, the prices of exportables (milk, beef, vegetables, potatoes) were allowed to increase much faster in real terms than those of importables (grain, sugar beet). The prices of those exportable commodities such as milk, beef, potatoes and vegetables increased significantly in real terms, while those commodities competing with imports such as grain and sugar beet saw their prices decline in real terms (Figure 6.3). In short, relative prices within agriculture changed significantly after the devaluation and became more favorable to export-oriented commodities relative to import-substituting commodities.

6.57 Nevertheless, the aggregate productivity improvements have not been able to offset the worsening ITT for agriculture. Aggregate profitability dynamics indicate that the negative trend in ITT has prevailed over improvements in the efficiency of production and has led to overall financial losses. In these circumstances, future growth in agricultural output is likely to necessitate a continuous (and increasing) access to budgetary support for the purchases of inputs and services for agricultural enterprises and/or further increases in farmgate prices from their presently suppressed levels.

D. THE AGRO-FOOD COMPLEX IS COMPETITIVE, BUT THE SOURCES OF ITS APPARENT COMPETITIVENESS ARE NOT SUSTAINABLE

6.58 Despite significant productivity gains at the farm level, the competitiveness of the agro-food complex rests in part on the cross-subsidization of the processing and marketing industry by the farming sector and, increasingly, the taxpayer. This regime cannot be sustained for long. If we look at the food chain as a whole, farm prices are depressed and are increasingly kept below international prices. Consumers do not benefit from these low farm prices since consumer prices are in line with international levels. The benefits of this taxation of the farm sector accrue to food-processors, but seem to be lost in marketing and processing inefficiencies. At present, the implicit taxation of agricultural producers is the primary factor behind the competitive position of Belarusian products in the Russian food market. Unless processing and marketing inefficiencies are removed, raising farm prices to world market levels is not possible without rendering Belarus' food production uncompetitive.

6.59 Farm prices are depressed below international levels. The extent of the implicit taxation that is inflicted upon primary agriculture through the enforcement of low producer prices is presented in Table 6.12. Belarus' agriculture is being taxed increasingly by commodity prices that are below world market levels. The evidence regarding the profitability of agricultural enterprises indicates that from 2001 agricultural enterprises recorded negative rates of profitability.¹²⁹ In contrast to the poor record of profitability of the farm sector, the processing sector has turned in a consistently positive but low level of profitability. The contrasting profitability of the two sectors is consistent with the cross-subsidization of the upstream segments of the food chain by the farm sector.

Table 6.12: Estimate of the Implicit Tax on Agricultural Producers 2000-03 (percent of output)

	2000	2001	2002	2003
Estimated implicit tax on agricultural producers from lower than international prices (%)	5	-5	-4	-7
Profitability of agricultural production (%)	3	-7	-4	-6
Profitability of food processing (%)	9	8	6	6

Sources: MSA and World Bank staff calculations.

6.60 According to preliminary results, in 2004 the negative profitability was reversed with an average gross margin of 7 percent. The aggregate profitability level for 2004, however, masks the reduction in the number of loss-making enterprises that have been amalgamated with non-agricultural entities as well as the increased levels of budgetary support (see below).

6.61 Belarusian agricultural producers receive much lower farm prices than their Russian counterparts for most agricultural commodities¹³⁰ (Table 6.13). Wheat, rye and sugar beet are the exceptions. Belarusian farm prices for these import-competing commodities have historically benefited from much higher prices compared to Russia or the world market, but the price difference has been coming down significantly over the last four years. For exportable commodities, Belarusian prices are well below Russian levels: 60 percent below in the case of beef, and 40 percent below in the case of milk, pig meat, and poultry. In the case of milk, however, the gap between Belarusian and Russian prices has narrowed considerably since 2000. Convergence toward more competitive prices is occurring, albeit at a relatively slow pace relative to the gap that exists in terms of price levels.

6.62 Farmers also pay more for their inputs. In terms of input prices, Belarusian agricultural producers suffer a competitive disadvantage with respect to tractors, electricity, natural gas and wages since their domestic prices are well above Russian prices (Table 6.14).¹³¹ One clear source of competitive advantage arises with mineral fertilizers (mainly potassium), which are supplied to producers at a substantial discount relative to Russian producers. The trends in the prices of most inputs, including wages, exhibit a clear trend toward convergence with Russian levels, reducing the competitiveness tax imposed on farmers.

¹²⁹ The information on the profitability of the private sector is unavailable.

¹³⁰ As most trade is with Russia, Russian producer prices are the most relevant benchmark against which to assess the competitiveness of the Belarusian sector.

¹³¹ Since Russian energy prices are underpriced it would be incorrect to infer that Belarusian energy prices warrant a reduction.

Table 6.13: Levels of Agricultural Producer Prices in Belarus and Russia for Selected Commodities, 2000-03 (BYR per ton)

Year	2000	2001	2002	2003	Average ratio
Milk					
Belarus	74,000	114,000	194,000	249,000	
Russia	135,446	195,973	292,267	333,711	
Ratio to Russian prices	0.55	0.58	0.66	0.75	0.64
Ratio to World prices	0.59	0.59	0.84	0.89	0.73
Beef and Veal					
Belarus	363,000	647,000	1,035,000	1,119,000	
Russia	885,298	2,064,579	2,610,315	2,590,660	
Ratio to Russian prices	0.41	0.31	0.40	0.43	0.39
Ratio to World prices	0.39	0.59	0.72	0.52	0.56
Pig meat					
Belarus	688,000	1,249,000	1,617,000	1,768,000	
Russia	997,394	2,279,533	2,776,827	2,794,252	
Ratio to Russian prices	0.69	0.55	0.58	0.63	0.61
Ratio to World prices	0.83	0.84	0.94	0.76	0.84
Poultry					
Belarus	718,000	1,115,000	1,536,000	1,742,000	
Russia	1,101,141	2,032,690	2,566,642	3,335,438	
Ratio to Russian prices	0.65	0.55	0.60	0.52	0.58
Ratio to World prices	1.30	1.52	2.05	1.78	1.66
Wheat					
Belarus	113,000	136,000	155,000	178,000	
Russia	66,072	91,461	84,028	162,574	
Ratio to Russian prices	1.71	1.49	1.84	1.09	1.53
Ratio to World prices	1.32	0.91	0.79	0.62	0.91
Rye					
Belarus	87,000	104,000	118,000	118,000	
Russia	63,543	80,751	59,759	93,728	
Ratio to Russian prices	1.37	1.29	1.97	1.26	1.47
Ratio to World prices	1.53	0.89	0.53	0.49	0.86
Sugar Beet					
Belarus	33,000	41,000	49,000	65,000	
Russia	17,158	31,316	42,758	57,585	
Ratio to Russian prices	1.92	1.31	1.15	1.13	1.38
Ratio to World prices	2.96	2.28	2.42	2.54	2.55

Sources: MSA, Rosstat, World Bank staff calculations.

Table 6.14: Selected Agricultural Input Price Levels in Belarus and Russia, 2000-03 (BYR per unit)

	2000	2001	2002	2003
Tractors, unit				
Belarus	9,484	35,808	31,613	31,607
Russia	8,960	14,840	22,215	28,010
Ratio	1.1	2.4	1.4	1.1
Total mineral fertilizers, ton				
Belarus	23,000	66,000	96,000	153,000
Russia	54,071	112,688	184,084	349,827
Ratio	0.4	0.6	0.5	0.4
Electricity, '000 kW				
Belarus	40,000	75,000	80,000	78,000
Russia	11,360	24,766	40,698	63,384
Ratio	3.5	3.0	2.0	1.2
Natural gas, '000 M³				
Belarus	76,000	80,000	92,000	110,000
Russia	13,619	25,387	39,610	64,126
Ratio	5.6	3.2	2.3	1.7
Wages				
Belarus	43,243	78,200	113,000	139,600
Russia	36,036	62,459	100,290	145,905
Ratio	1.2	1.3	1.1	1.0

Source: MSA, Rosstat staff calculations.

6.63 As regards yield indicators, in 2003 Belarus enjoyed a yield advantage relative to Russia in all commodities except milk (Table 6.15). Belarusian milk yields were remarkably constant at about 90 percent of Russian levels. With the exception of cereals and beef, the extent of the yield advantage has, however, lessened somewhat in recent years.¹³²

¹³² Belarus' productivity indicators grew further in 2004: 19 percent for milk, 9 percent and 3 percent for daily weight gains for beef and pork, and about 22 percent for cereals and 34 percent for sugar beet. Not presented, as 2004 data for Russia not available at the time of writing this report.

Table 6.15: Comparative Trends in Partial Productivity Indicators for Selected Commodities, Belarus and Russia

	2000	2001	2002	2003
Milk (kg/cow)				
Belarus	2,154	2,408	2,507	2,611
Russia	2,341	2,551	2,878	2,976
Ratio	0.92	0.94	0.87	0.88
Cattle (daily weight gain, g)				
Belarus	346	383	406	421
Russia	333	361	385	383
Ratio	1.04	1.06	1.05	1.10
Pigs (daily weight gain, g)				
Belarus	373	399	407	400
Russia	187	232	254	256
Ratio	1.99	1.72	1.60	1.56
Cereals (post processing, 100 kg/ha)				
Belarus	19.4	19.9	24.7	24.2
Russia	15.6	19.4	19.6	17.8
Ratio	1.24	1.03	1.26	1.36
Sugar beet (industrial, 100 kg/ha)				
Belarus	292	313	228	275
Russia	188	199	219	228
Ratio	1.55	1.57	1.04	1.21

Sources: MSA. Rosstat staff calculations.

6.64 Consumers do not benefit from low farm prices. The size of the food consumers' subsidy is very small as the prices for the main foodstuffs are broadly competitive or in line with Russian levels (Table 6.16). On the face of it, taking processor and retail prices together does not indicate that there are significant internal inefficiencies in the retail sector. However, government interventions in the form of price caps on processor prices and fixed trading margins disguise the true situation.

Table 6.16: Retail Prices for Selected Foodstuffs, Belarus and Russia, 2000-03 (BYR)

		2000	2001	2002	2003	Average ratio
Beef/kg	Belarus	1,501	2,616	3,356	4,019	0.8
	Russia	1,777	3,362	4,153	4,983	
	Ratio	0.8	0.8	0.8	0.8	
Pork/kg	Belarus	2,359	3,291	3,538	4,103	0.9
	Russia	1,970	3,788	4,635	5,558	
	Ratio	1.2	0.9	0.8	0.7	
Poultry/kg	Belarus	1,728	2,641	3,571	4,295	1
	Russia	1,645	2,721	3,342	4,674	
	Ratio	1.1	1	1.1	0.9	
Butter/kg	Belarus	1,886	3,251	4,596	6,182	1
	Russia	2,330	3,429	4,584	5,931	
	Ratio	0.8	0.9	1	1	
Cheese/kg	Belarus	2,447	4,272	5,623	7,112	0.9
	Russia	2,871	4,927	5,877	7,549	
	Ratio	0.9	0.9	1	0.9	
Sugar/kg	Belarus	571	763	957	1,321	1
	Russia	527	711	1,114	1,237	
	Ratio	1.1	1.1	0.9	1.1	
White bread/kg	Belarus	561	679	881	1,173	1.1
	Russia	411	655	821	1,260	
	Ratio	1.4	1	1.1	0.9	

Source: MSA, Rosstat staff calculations.

6.65 Food processors benefit from low farm prices. Processor output prices in Belarus appear to be aligned with prices in Russia (Table 6.17). The ability of the current price policies to depress most farm prices below world levels enables the processing industry to survive without addressing its internal inefficiencies. Inefficiencies arise in part from the low capacity utilization and the limited economies of scale associated with the small size of the processing operations, both of which are critical determinants of the competitiveness of the food processing industry. Other indicators of inefficiencies in the processing industry are the low and declining level of the gross margin which prevails in the industry despite the heavy cross-subsidization it enjoys from primary producers and the increasing depreciation of the capital stock. (Table 6.4).

Table 6.17: Processor Prices for Selected Foodstuffs, Belarus and Russia, 2001-03 (BYR)

Beef/ton	2001	2002	2003	Average ratio
Belarus	1,261,698	2,302,492	2,673,096	
Russia	2,491,762	2,873,791	3,439,874	
Ratio	0.51	0.80	0.78	0.69
Butter/ton				
Belarus	1,868,510	3,231,506	4,003,680	
Russia	2,727,943	3,467,945	4,626,844	
Ratio	0.68	0.93	0.87	0.83
Cheese/ton				
Belarus	2,381,022	3,581,337	4,423,035	
Russia	3,123,427	3,801,881	4,980,784	
Ratio	0.76	0.94	0.89	0.86
Wheat flour/ton				
Belarus	265,225	298,555	318,665	
Russia	224,755	220,260	477,809	
Ratio	1.18	1.36	0.67	1.067

Sources: MSA, Rosstat staff calculations.

Increased Budgetary Support Substitutes for Lack of Profitability at the Farm Level

6.66 Burdened with depressed farm prices and high input prices, and despite significant productivity gains, farm profitability remains negative for agricultural enterprises as a whole and cannot generate the cash flow it needs to invest in sustained productivity growth. Increasingly, taxpayers through the budget have to subsidize farm operations and investments in farm inputs and productivity-enhancing investments. Large agricultural organizations are the principal clients of the current institutional setup in agriculture and thus are also the principal beneficiaries of budgetary support. In addition to subsidized inputs, credit and periodic debt-write-offs, agricultural enterprises benefit from lower levels of taxation and other budgetary obligations.¹³³ As the private sector (comprising households and private farms) operates largely outside of the sector's institutional framework, it is excluded from most of the support activities. The availability of subsidies to the private sector is largely due to their less-than-perfect targeting.

6.67 A schematic representation of state support to the agro-food sector is depicted in Figure 6.4. The solid lines indicate support measures that have a reasonably transparent explicit cost, while the broken

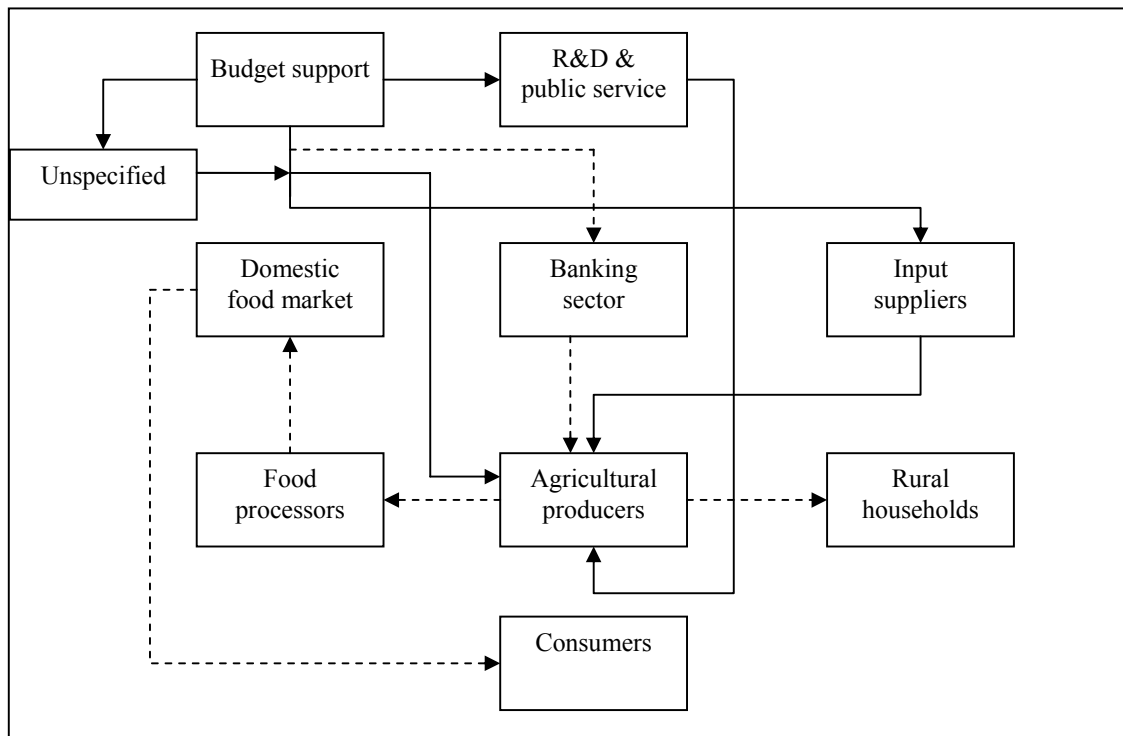
¹³³ According to Gusakov (2004), in 2002 the tax burden on the agricultural enterprises was approximately 2.5 lower than elsewhere in the national economy.

lines depict measures that have implicit costs which, though no less real and no less important, are difficult to quantify with any precision.

6.68 Estimates of the explicit costs of state support since 2000 are given in Table 6.18. Support to the agro-food sector accounts for about 30 percent of all budgetary support to the national economy, between 10 and 12 percent of all consolidated budget expenditure and 3 to 4 percent of GDP.

6.69 Against a background of a decline in both the area of agricultural land and the labor force, the amount of state support has grown even faster on a per hectare and, particularly, on a per worker basis. In 2005 it is anticipated that in U.S. dollar terms the amount of budgetary support will reach about US\$1 billion in total or US\$101 per hectare.¹³⁴ In other words, the level of state support to the agro-food complex more than doubled in real terms between 2000 and 2004.

Figure 6.4: Schematic Depiction of the System of State Support for the Agro-Food Sector in Belarus



Source: Adapted from Babitzky (2004).

¹³⁴ The value of state budgetary support is normally calculated per hectare of land managed by larger agricultural enterprises only (i.e., excluding the land under cultivation by households and private farmers). Since, in one way or another, all farming categories benefit from state budgetary support (albeit to a varying degree) it was decided to present the figure relative to the land area managed by all types of agricultural producers. Another reason for doing so is to permit more consistent international comparisons.

Table 6.18: Agricultural Output, Land Use and State Budgetary Support, 2000-05

	2000	2001	2002	2003	2004	2005
Value of budgetary support (Billion BYR in current prices)	381	642	820	1,528	1,970	2,337*
Budget support as a share of GDP (%)	4	3.8	3	4.3	4	n.a.
Support as a share of gross agricultural output (%)	14	15	13	19	17	n.a.
Support as a share of cash receipts (%)	36	40	44	62	n.a.	n.a.
Budget support per worker (in constant 2000 US\$)	653	771	827	1,425	1,728	n.a.
Budget support per hectare (in constant 2000 US\$)	44	49	49	78	94	110

*Projection, as of May 2, 2005.

Sources: Ministry of Agriculture and Food and Ministry of Finance

6.70 The level of state support is well within internally determined legislative limits.¹³⁵ The government is also committed to a cap on market-distorting levels of support under the WTO of US\$504 million per annum or about US\$57 per hectare (i.e. about half the current level).¹³⁶

6.71 There are two main sources of budgetary funding for the agro-food sector: regular state budgetary allocations and the proceeds of the National Fund for Support of Agricultural Producers, Food and Agricultural Science (the "Support Fund"). The Support Fund has been the single largest source of funding and has accounted for about two-thirds of all funding in the sector for the past five years (Table 6.19).

Table 6.19: Sources of Budgetary Expenditure to the Agro-Food Sector, 2001-05 (billion BYR)

	2001	2002	2003	2004	2005*
National Fund for Support of Agricultural Producers, Food and Agricultural Science	258	307	595	1,180	1,370
Local Fund for Support of Agricultural Producers, Food and Agricultural Science	220	267	374	0	0
Local budgets	121	157	420	605	510
National budget	43	89	139	185	457
Total budgetary expenditure Including	642	820	1,528	1,970	2,337
National level expenditure	301	396	734	1,365	1,827
Local level expenditure	341	424	794	605	510
Local as % of total	53	52	52	31	22

*Projection.

Sources: Ministry of Statistics and Analysis and Ministry of Agriculture and Food.

¹³⁵ The level of state support to agriculture and rural areas in general is limited to 15 percent of consolidated budget expenditure.

¹³⁶ According to the WTO Agreement on Agriculture, the base Aggregate Measure of Support (AMS) is subject to a commitment on its reduction over a specified period. The base AMS excludes subsidies in excess of 10 percent (5 percent for developed countries) of the value of production and also excludes subsidies that are deemed to be non-, or minimally trade distorting. Examples include publicly financed R&D, capital investments and certain input subsidies.

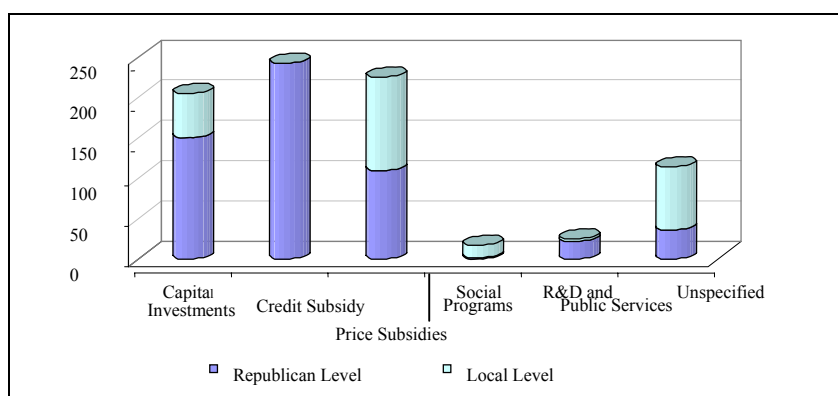
6.72 The level of funding provided through local governments was increasing until 2004 and then reduced markedly as a result of the structural change in favor of centralized funding. The Support Fund is financed by a 2 percent turnover tax levied on all economic sectors. Before 2004, these proceeds were split between the local and national budgets. Since 2004, all Support Fund expenditure has been mediated through the national budget.

6.73 This change in the funding mechanism does not represent a lesser role for local governments in the management of the sector; rather, it reflects the intent of the government to allocate a greater proportion of funding to country-wide programs, which are usually more focused. Historically, the difference between expenditure at the central level and expenditure at the local level has been the type of support supplied at each level. As a rule, budgetary allocations at the central level tended to be spent on special programs with clearly defined beneficiaries, while spending at the local level tended to have a large discretionary element. The Program of Revival and Development of Rural Areas, 2005-10, foresees even greater centralization of agricultural sector expenditure in the future.

6.74 The recent trend toward centrally determined state subsidies helps to ensure greater concentration and specialization in agricultural production, processing and sales. As a consequence of this tendency, the number of beneficiaries of state support is expected to decline as the state tries to concentrate its support among the most viable units. Poultry and pork production are the first two sub-sectors in which the state has managed to concentrate most of the output and sales among fewer large enterprises.¹³⁷

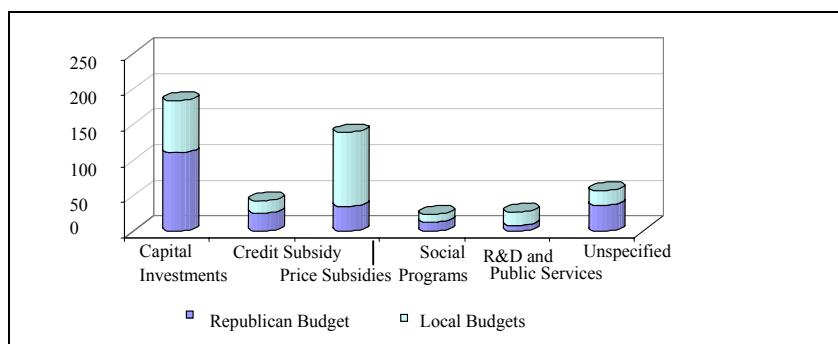
6.75 State support comprises several measures, and their number changes almost every year. New activities are added while other activities are abandoned. The budget finances in excess of 30 different measures. However, because of their similarity, these measures can be grouped into a few categories (Figure 6.5).

Figure 6.5: Sources of State Funding of Support to the Agro-Food Sector in 2004 (top) and 2001 (bottom) (in constant 2001 US\$ millions)



Source: World Bank staff estimates on Ministry of Finance data.

¹³⁷ As of 2003, 5 percent of 1,054 pork enterprises produced 73 percent of all pork and 16 poultry enterprises specialized in poultry meat production producing 94 percent of all poultry.



Source: World Bank staff estimates on Ministry of Finance data.

Credit Subsidies

6.76 Credit subsidies are the largest and the fastest growing component of state support (Table 20). Moreover, they possess a larger number of negative characteristics than other support measures. Apart from creating serious distortions in the banking system and compromising the government's intentions to target support effectively, they also lead to an accumulation of massive future liabilities.

6.77 As of December 1, 2004, the total level of outstanding credit to agriculture from the commercial banks amounted to 1.1 trillion BYR (equivalent to about 16 percent of total commercial bank lending). According to some estimates, more than three-quarters of agricultural lending represents directed credit.¹³⁸ The majority of lending to the agro-food sector is secured by the repayment guarantees of either the central government or the regional governments.

6.78 Some of the credit is extended through direct budgetary loans to agricultural and agro-processing enterprises, but the bulk of all credit subsidies are channeled through Belagroprombank, which is the principal agent of the state in the financing of the sector. It is difficult to estimate the share of such credit that is in arrears, as loans are frequently rolled-over and from time to time some are written off.

Table 6.20: Credit Subsidies, 2001-05

	2001	2002	2003	2004	2005
Discount rate of the National Bank of Belarus rate (percent per annum, end-of-period)	48	38	28	17*	n.a.
Total credit subsidy (billion current rubels)	60	98	213	560	730**
Including					
Interest rate subsidy (Billion current rubels)	14	74	114	91	154**
Debt write-off and other credit subsidies (Billion current rubels)	46	23	99	469	576**

*Third quarter; ** Projections.

Sources: Ministry of Finance and MSA.

6.79 Credit subsidies comprise two main elements: an interest rate subsidy and debt cancellations, where the latter include budgetary loans that are in arrears and equity contributions to Belagroprombank. The interest rate subsidy includes the difference between the actual interest and the discount rate of the National Bank of Belarus (NBB) discount rate plus a margin. It also includes the cost of funds that are used to cover seasonal and other cash-flow emergencies. The sources for such funds are either an NBB credit, which is deposited with Belagroprombank for subsequent on-lending to agricultural producers and

¹³⁸ According to the estimates of the Institute of Privatization and Management, in 2003 about 75 percent of all lending to agriculture was extended through directed credit (more than 50 percent of which was subsidized).

agro-processors, or the sales of government securities. As a rule, these interest costs are accounted and covered by the Support Fund.

Table 6.21: Interest Rates and Level of Lending to the Productive Sectors in Belarus, 2003-04

	Average annual interest rate (%)		Credit outstanding (Billion BRs) as of December 1	
	2003	2004	2003	2004
Industry	33.40	21.10	2,322	3,249
Agriculture	10.60	8.90	602	1,098
Construction	39.40	24.00	81	191
Trade and catering	39.20	24.00	346	623

Source: National Bank of Belarus.

6.80 The level of credit to agriculture has increased significantly, while the growth in the interest rate subsidy has been modest (Table 6.21). This can be explained by the reduction in the NBB discount rate as well as by the reduction in the average level of interest rate subsidy, which was reduced by about a third in 2004. In contrast, debt write-offs grew substantially and this growth is expected to continue in 2005. The main components of capital subsidies to the agro-food sector are therefore difficult to estimate with precision. In terms of short-term credit, some of the repayment deficit can be reflected in costs only in the following year, while the estimate of bad debt is complicated by the frequent extension of repayment terms.

6.81 As of December 2004, about three-quarters of the outstanding lending to the agro-food sector (834 billion rubels) represented long-term commitments that accounted for about 29 percent of all long-term credit in the national economy. The growth in long-term lending was exceptional (approximately 84 percent in 2004 alone) and could not be explained by the value of long-term credit resources provided by the state budget. Therefore, this figure is likely to represent the level of accumulated bad debt which had been frozen or rolled over. Thus, this figure represents a very large amount of potential liabilities to the banking system and the national economy.

6.82 At present credit is effectively being extended to all agricultural enterprises regardless of their credit history and the size of their existing liabilities. This system is clearly favoring the most unprofitable entities and thus the most inefficient agricultural enterprises. This compromises the stated efforts of the government to render public support for the agro-food sector more targeted and transparent and thus more efficient.

E. THE SUSTAINABILITY OF THE SECTOR'S PERFORMANCE

Competitiveness

6.83 Developments in the internal and external competitiveness factors have played a significant role in the performance of the sector in recent years. The exchange rate adjustments that occurred in 1999 and 2000 had a positive impact on the performance of the sector but the predominant factor was the endogenous improvement that occurred in productivity, especially in the grains sector. The exchange rate adjustment facilitated this process rather than driving it. Looking ahead, there is little likelihood that exchange rate adjustments on the scale of those of 1999 and 2000 will be repeated, and therefore this factor is not likely to play a similar role in the medium term. In addition, the significant improvements in productivity that have occurred in response to the developments in the internal terms of trade are not likely to be sustained, and more modest productivity adjustments in line with a much reduced price-cost squeeze are likely to apply in the medium term. In this scenario, short of a significantly enhanced program of structural adjustment, the impressive recent growth in output can only be maintained by

greater budget expenditure. However, the sustainability of budgetary support to the sector at the level of recent years is highly questionable. There are evident internal and external fiscal limits (such as the WTO requirements) to the extent of the subsidization of the farm sector. Budget support is also a highly inefficient way to sustain agricultural growth (the budget had to increase by about 170 percent between 2000 and 2004 to generate a 26 percent increase in agricultural output). The only viable solution is to raise farm prices. However, raising farm prices without reforming the agro-processing industry and the marketing channels to eliminate the existing inefficiencies will render the agro-food complex non-competitive.

Budgetary Support

6.84 Compared with the CIS countries as a whole, Belarus has the highest level of budgetary support per hectare. However, this level is much lower than the level of support in some transition economies and is considerably lower than the agricultural subsidies in most OECD member countries. In 2004, agricultural expenditure per hectare in Belarus was close to half of that in Hungary, slightly over half of that in the Czech Republic, and about one-sixth of the average EU level (Table 6.22).

6.85 Belarus' adherence to the WTO "Amber Box" limit of about US\$57 per hectare will place a cap on support measures that can sustain productivity growth at the farm level. Growth-enhancing public support measures such as agricultural research, education and training, technical advice and consulting, and investment in rural infrastructure and services will not be capped under the WTO, but the government's ability to finance them will depend on its capacity to create fiscal space by reducing the level of farm subsidies and direct support to farms.

Table 6.22: Volumes of Budgetary Support to Agriculture in Selected Countries in 2003

	Support per hectare of agricultural area (US\$)	Agriculture budgetary support as % of GDP
Switzerland	1,913	0.95
Norway	1,681	0.79
European Union (12)	584	0.68
Hungary	203	1.44
United States	193	0.73
Czech Republic	159	0.81
Slovak Republic	135	1.03
Belarus	100	4.3
Poland	37	0.33
Ukraine	20	1.65
Russian Federation	19	0.95
New Zealand	10	0.22

Sources: OECD, FAO.

6.86 As a percentage of GDP, budgetary expenditure on the agricultural and food sector at over 4 percent places Belarus with the highest international share of taxpayer support. Thus, the largest share of the growth achievement of the agro-food sector (51 percent of total growth is attributed to state-agricultural enterprises – the principal beneficiaries of the state support) was realized at a significant cost to the national economy. From a fiscal viewpoint, support to the sector on this scale is clearly not sustainable and it is most likely that scarce public resources could be much more efficiently spent elsewhere in the economy.

The Organization of Production

6.87 The healthy recent trend in the sector's output growth is substantially underpinned by the performance of the household farm sector. However, the growth of household production largely reflects a reversion to subsistence-type agriculture, as the income conditions for rural dwellers have been challenging. Family labor and hidden transfers from the state-controlled farm sector have driven output growth. To grow and become competitive, private sector farms will have to be given incentives as well as the sources of revenue to invest in the form of higher farm prices. As indicated earlier, higher farm prices without reform of the agro-processing industry and marketing channels will render the agro-food complex non-competitive. Hence, without fundamental changes in the price regime, the activity of this sector will not provide a sustainable basis for adequate farm income development in rural areas in the longer term.

Severe Capital Constraints

6.88 The difficult economic climate since the early 1990s has led to a virtual collapse in the capital stock of the state-controlled farm sector. Substantial investment is warranted, but the availability of resources is open to question and the wisdom of their deployment (should such resources become available) is questionable in the absence of fundamental reform across the agro-food spectrum. The processing sector is equally deficient in modernizing capital investment. The medium-term advancement of the food industry and, in particular, its capacity to significantly expand exports is severely constrained as a result. In the absence of a much more positive attitude on the part of the state towards external investment, it is highly unlikely that this capital deficit can be made good.

Measures to Reduce the Number of Loss-Making Entities

6.89 Loss-making entities will arise in any system. The real issue is how they should be handled when they do arise. In recent years the practice of merging a loss-making entity with a profitable entity solves the problem in an accounting sense but gives rise to clear efficiency losses.

F. CONCLUSIONS AND RECOMMENDATIONS

6.90 Since 2000, the most notable changes in the structural adjustment of the Belarusian agro-food sector have had involved the substantial reduction of the state's role in agricultural markets and in asset ownership together with the associated relaxation of the existing price controls. The volume of state purchase was substantially reduced and many formerly state-owned food-processing enterprises were corporatized. In turn, these changes have brought about an important policy shift towards "minimum" prices for agricultural products and a less control over the prices of food commodities. Other measures, such as the withdrawal of unproductive land, the transfer of the social burden to the local governments, and the rationalization of input supply have brought important financial savings to the sector, although their full effectiveness can only be realized with complementary reforms.

6.91 State policy regarding the agro-food complex appears to have as its overriding goals the security and delivery of affordable food for its citizens and the maintenance of employment and reasonable income levels for rural dwellers. This policy with its evident internal contradictions gives rise to both budgetary and efficiency costs. At the same time, the state appears to be aware of the need for reforms in the agro-food complex to ensure better value for taxpayer resources. These reforms, however, are conceived against a background that involves the retention of the main features of a centrally planned economy and, crucially, in respect of the primary sector, the ownership and control of the vast bulk of agricultural land by the state. In the recommendations that are outlined below, the retention of the existing command system is taken as a given and the focus instead is on reforms that are feasible within this

constraint. The recommendations are designed to maximize the contribution the sector can make to the national economy without requiring a continuation of the current unsustainable level of subsidies.

6.92 The greatest prospect for the enhancement of the contribution of the agro-food industry's contribution to material income generation lies with the development of an export-oriented food-processing sector. Belarus' food-processing sector in all branches suffers from a severe lack of capital, pervasive inefficiencies and lack of intrinsic competitiveness. This severely hampers the development of a serious export-oriented sector, or at least one that is not overly dependent on the Russian market. Success in food export markets requires substantial investment to underpin efficiency, and, most important, to ensure adequate product quality. Experience elsewhere has shown that modernization and efficiency improvements in primary agriculture can occur quickly once they are driven aggressively by the processing sector. There are far too many processing plants of an inefficient size, especially in the dairy sector, and most of these plants have an outdated capital stock. The state has committed itself to reducing the number of plants, but the proposed reduction is nowhere near what is required in the medium term.

6.93 However, modernization can only come about with the support of external capital and expertise. Consideration should be given to a joint state-private sector initiative, involving, for example, external participation, in the area of dairy processing. The successful development of a number of modern plants of an efficiently-sized could have significant externalities, aside from the welcome level of FDI that would accrue. Such investments bring clear benefits in terms of technological transfer and know-how. The success of any such investment will of course require commitments in relation to the procurement of raw materials as well as autonomy in the management of the enterprise. It is recommended that a scoping study be conducted involving the World Bank and the government of Belarus to determine the feasibility of this type of venture.

6.94 Producer price levels need to be brought much more into line with international prices. While there has been progress toward a more appropriate alignment of prices, there is still considerable room for improvement. When prices in Belarus are benchmarked against world levels, competitive pricing would imply that there is significant scope for price increases in the case of milk, beef and veal, pork, wheat and rye while price reductions are warranted in the case of poultry and, particularly, sugar beet. As regards input prices, while total input prices are not significantly out of line with Russian prices – an outcome that has been substantially helped by exchange rate adjustments – fertilizer prices are substantially below competitive levels. While energy prices are very much in excess of Russian levels, the latter prices do not reflect true resource costs and thus a downward adjustment is not warranted.

6.95 Able managers of state-controlled farm entities who are prepared to take on risks should be given much greater decision-making autonomy. It is reasonable within the existing system for the state to lay out the responsibilities of farm managers, but the quid pro quo ought to be the delegation of much greater independence in the management of these responsibilities. This autonomy should extend to managers having a veto on the acceptance of the conjoining of unprofitable entities. At the very least, when an unprofitable entity is conjoined to profitable one managers should have autonomy in deciding on the adoption of appropriate rationalization strategies. While the intent to strike a significant wage differential between managers and other workers is a welcome policy development, the extent of the differential that is countenanced is much too modest to encourage innovation and risk-taking and ought to be increased substantially.

6.96 Steps to align production more closely with optimal soil and location conditions should be pursued more aggressively. There should be more significant output shifts across regions at present if a greater impact is to be achieved.

6.97 The private farm sector needs to be given greater opportunity to farm without undue interference from the state and on an equal footing with state-controlled entities. A number of private farms have apparently been required to take on the management of unprofitable entities. This unwelcome burden will hamper the efficient development of the private sector. Moreover, the resulting amalgamated entities are burdened with an uncertain ownership status, which will hinder much-needed investment if the matter is not clarified.

6.98 While the performance of the household sector in terms of output growth has been most impressive, there is a clear need to ensure that the transfers from state-controlled entities are rendered more transparent. All transfers should be explicitly accounted for so that the true underlying productivity performance of this important sub-sector can be revealed.

6.99 The productive efficiency of primary agriculture in most countries is underpinned by appropriate education and training, farm advisory and research services. In most countries these services are managed and funded by the state because they constitute public goods. The exception tends to be in the area of technical advice and consultancy, where the gains from the services tend to accrue to the individual producer. These services justify private sector activity, or, at very least, close to full-cost recovery from the beneficiaries if the service is operated by the state. Belarus appears to have the architecture of a potentially effective service in place in the areas of research and education and training. However, these services are designed in the context of a planned system, which has, in fact, been changing in recent years (albeit to a limited extent). In the context of an enhanced export drive, these services require an urgent review and overhaul as to their appropriateness for the challenge of sustaining the growth achievements to date. Advisory and consultancy services appear to be not well developed. In an effective system the advisory service acts as the conduit of new research for producers. This service is the anchor of successful drives towards modernization for most countries. However, resources are scarce and ought to be directed in the most efficient manner. The only way for this to be done effectively, short of privatizing the service, is by the recovery of full-costs from users. Only efficient and profitable entities would be in a position to bear such costs, and hence the flow of services would tend toward the efficient entities.

6.100 Similar concerns apply with respect to the supply of inputs. It is not always clear that all entities “purchase” inputs with the intention of fully, if ever, settling accounts.

6.101 This raises another major concern regarding the fragility of the Belarusian agro-food complex which involves the operation of the sector’s financing system. Soft loans appear to be a pervasive feature of the system. This not only hampers the development of a serious banking industry but it also nullifies any attempt to promote internal markets within the command economy system. As long as farms can have losses written off with relative ease, any attempt to (for example) impose full-cost recovery for state services or resources will not be effective.

6.102 Government support of the agro-food complex is extensive but is not acceptably transparent. Unlike other neighboring countries, no comprehensive estimates are available of the extent of market and budgetary transfers that employ, for example, the OECD’s methodology. A comprehensive assessment of the extent and nature of transfers to the agro-food complex will greatly facilitate the analysis of the effects of state support and the monitoring of government intervention. Likewise, the system of state-managed financing of the sector’s capital needs requires to be fully revealed with a view to charting a path toward the fundamental reform of the sector.

CHAPTER 7

DEVELOPMENTS IN THE ENERGY SECTOR

7.1 At the time of independence, Belarus inherited an extensive electricity and gas transmission network and significant oil refining capacity. However, the country indigenous energy resources are limited and it is therefore heavily dependent on imports of primary energy fuels, essentially from Russia. In 2004 net imports accounted for 87 percent of Belarus' total primary energy consumption.

7.2 However, Belarus enjoys an important strategic location between the Russian Federation and the European Union, which enables it to play a key role as a transit route for energy exports from Russia to markets in Central and Western Europe. This role takes the form of the outright transit of oil and gas and the conversion of crude oil supplied from Russia into refined product exports.

7.3 To obtain a better understanding of the key issues that Belarus faces with regard to its energy sector, it is instructive to look at breakdown of the sector's strengths and weaknesses and the associated opportunities and threats it faces (Table 7.1).

Table 7.1: Belarus—Energy Sector Breakdown

Strengths	Weaknesses
<ul style="list-style-type: none"> • Location as a transit country • Geographical proximity to its primary energy supplier • Extensive wood resources • Established electricity network • Established gas transmission network • Export refining capacity 	<ul style="list-style-type: none"> • Limited indigenous energy resources • High dependence on imported energy • Very heavy dependence on Russia as a supplier of primary energy • Aging physical infrastructure • Limited oil and gas storage facilities • Weak legislative and regulatory framework • Limited commercial focus of operations
Opportunities	Threats
<ul style="list-style-type: none"> • Increased production of domestic resources (primarily wood) • Diversification of energy supply sources • Expanded transit activities and increased transit revenues • Increased security of domestic supply as a result of expanded storage facilities • Increased efficiency through private sector participation 	<ul style="list-style-type: none"> • Disruption in energy supplies from Russia (particularly gas) • Higher energy import costs • Deterioration in service quality • Further deterioration of the domestic infrastructure • Fiscal pressures as a result of explicit and implicit subsidies

7.4 The government faces several key challenges in the energy sector, which could be summarized as follows:

- To mitigate the risks associated with heavy dependence on energy imports sourced from Russia
- To ensure the provision of acceptable levels of energy utility services to domestic customers
- To maximize the benefits associated with Belarus' role as an energy transit country
- To protect the interests of all stakeholders in the sector.

7.5 This chapter reviews the main trends in the energy sector and discusses a number of available options to address the above challenges effectively.

A. DYNAMIC OF ENERGY SECTOR INDICATORS IN 2001-04

7.6 Over the last 10 years, Belarus has been successful in sustaining the performance of the energy sector. Compared with that of other FSU countries, the performance of Belarus electricity and gas sectors has been strong from both the technical and the financial standpoints. The level of investments has increased, technical efficiency improved, and the economy has realized a considerable amount of energy savings. The incidence of both quasi-fiscal subsidies and deficits has declined. These positive trends have been important factors in the country's ongoing macroeconomic stabilization.

7.7 There are two major explanations of this performance: (i) the stable governance and structure of the sector since the mid 1990s, and (ii) a reasonable level of funding available to meet operations and maintenance needs. In contrast to many other transitional economies, Belarus did not embark on drastic structural market reforms at the beginning of the transition period. As a result, it avoided the mistakes and the associated negative consequences of market failures that have sometimes accompanied the initial stages of reforms in the neighboring countries (such as the siphoning off sector financial flows and shadow privatization). The preservation of the monopolistic structure of the sector together with an economy-wide command and control management style helped the sector to survive the hard times that affected its neighbors and largest trade partners in the 1990s. Moreover, an adequate financing of sector assets was supported by relatively large margins retained by the gas transmission and distribution companies. This contributed directly to the stable financing of current operations and maintenance needs in the gas sector and indirectly (through the Innovation Fund of the Ministry of Energy) to the better maintenance of Belenergo's assets.

7.8 While the current sector structure and governance arrangements proved adequate during the early transition, they now require reforms, or they will hamper the sector and its overall economic developments in the years ahead. Presently, with a growing economy, restored payment discipline, improved cost recovery, and the ongoing elimination of misbalanced tariffs, the Belarus energy sector is well placed to embark on market reforms and structural transformations for improving its efficiency and bringing in private sector knowledge, experience and capital. Collections, tariffs, and misbalanced tariffs are discussed below, first for electricity and then for gas.

Electricity

Collections

7.9 Belarus has improved electricity collections significantly in recent years, with total payments at 100.5 percent and cash payments at 80.3 percent in 2004. The main efforts were focused on reducing a the non-monetary share of transactions and, as a result, the cash payments more than doubled as compared with 2001 when they were about 37 percent. Total collections exceeded 100 percent in both 2003 and 2004 (i.e., overall, Belenergo has been fully paid for current sales and has started to collect past debts). Payment performance is uneven among the various categories of consumers, with households and the viable part of the industrial sector being disciplined payers and the agriculture sector and loss-making industrial enterprises exhibiting a below average payment pattern. The electricity sector's payment discipline in cash terms, as reported by country official sources, is still below the payment performance in Poland and Ukraine. However, if we consider the differences in the accounting of the cash payments, it is likely that Belarus came close to reaching Ukraine's level of cash payments in 2004 (95 percent).

Tariffs

7.10 Electricity tariffs in Belarus are regulated by the Ministry of Economy, while in Ukraine and Poland they are set by dedicated regulatory bodies. The weighted average retail tariff (WART) in Belarus went up from US cents 3.4/kWh in 2001 to US cents 4.7 /kWh in 2004, and was just marginally lower than a deemed cost recovery level of about US cents 4.8/kWh. The tariff hike was driven mainly by increased gas tariffs which accounted for a large part of Belenergo's production costs, and a larger share of local generation in the country electricity balance that is more

expensive than imported electricity. The tariff/cost recovery level was much better than that in Ukraine, where in 2004 the WART was US cents 3.1 /kWh with a cost recovery level of about US cents 4.7 /kWh.

Misbalanced tariffs

7.11 Electricity tariff distortions in the form of misbalanced tariffs¹³⁹ were reduced from 2001 to 2003 roughly by a factor of three, coming down from 0.27 to 0.75, if measured as the ratio of household tariff to industrial tariff. However, household electricity tariffs did not follow an overall electricity tariff increase stemming from the gas price hike in 2004. As a result, the ratio worsened to 0.58 in 2004. In addition to households, there are other categories of consumers benefiting from misbalanced tariffs, namely, some industrial enterprises, the agriculture sector, communal utilities, and budget entities.

7.12 The misbalanced tariff phenomenon is to a large degree a legacy of the Soviet era and therefore it is widespread in many other FSU countries. For example, the mispricing subsidies to households are still provided in Ukraine and, according to the national electricity regulatory body, accounted for US\$459 million in 2004 (or above 10 percent of electricity annual sales and 0.7 percent of GDP). In contrast to Belarus and Ukraine, in Poland the misbalanced tariffs to households have been fully eliminated the household/industrial tariff ratio exceeded 1.2.

Gas

Collections

7.13 Belarus has dramatically improved its gas collections, specifically those paid in cash. The latter increased from 12.7 percent to 83 percent between 2001 and 2004. The major driving force behind these improvements was the need to pay fully, and in cash, for imported gas (the share of cash payments for imported gas accounted for 3.3 percent in 2001 but reached 88.6 percent in 2004). In Belarus the monetary gas collections are still below the level in Poland and Ukraine. However, because of differences in the accounting of the cash payments, it is likely that Belarus came close to Ukraine's level of cash payments in 2004 (95 percent).

Tariffs

7.14 As in the electricity sector, the gas tariffs are calculated on the basis of a cost-plus method and are regulated by the Ministry of Economy. This arrangement is similar to Ukraine, where formally there is a gas sector regulator, but in practice most tariffs are proposed by the vertically integrated monopoly Naftogaz and are effectively approved by the Cabinet of Ministers.

7.15 The WART reflects a dynamic of gas purchase price, transmission and distribution (T&D) tariffs, and the ratio between household and non-household tariffs (Table 7.2). The tariff reductions in 2000-03 were achieved at the expense of curtailed transmission and distribution tariffs. Because a number of industrial enterprises receive gas at discounted prices, the industry tariff and WART are in fact lower than as presented in Table 7.3. The structure and incidence of discounted gas tariff remains non-transparent.

Table 7.2: Belarus' Actual Gas Tariffs with VAT, 2000-04 (US\$/MCM)

	2000	2001	2002	2003	2004
Purchase Price,	30.7	31.1	30.6	36.9	46.7
T&D Surcharge	33.8	25.2	21.3	14.4	18.8
WART**	64.5	56.3	51.9	51.3	65.5
Retail tariffs for:					
Non-households	69	60.7	53.4	51.2	67
Households	9.2	13	27.5	52.8	57.3

* MCM (million cubic meters).

**WART is calculated as a sum of purchase price and T&D surcharge.

Source: Ministry of Energy.

¹³⁹ The term "misbalanced tariffs" is used instead of cross-subsidies because both industrial and household tariffs are considered to be below a deemed cost recovery level.

Table 7.3: Belarus, Poland and Ukraine--Electricity and Gas Sector Data, 2001-04

Electricity	2001			2002			2003			2004		
	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland
Total collections, %	85	80.7	98	97.8	89.8	100	102.2	93.5	100	100.5	97.6	
Cash, %	37	65.1		45.6	82.6		86	91.2		80.3	94.9	
WART*, US cent/kWh	3.43	2.47	5.48	3.23	2.62	5.91	3.83	2.87	6.55	4.7	3.1	
HH tariff, US cent/kWh	1.13	2.3	6.3	1.59	2.3	6.89	3.14	2.3	7.6	3.3	2.3	
Industrial tariff, US cent/kWh	4.13	2.57	5.27	3.77	2.72	5.63	4.14	3.05	6.1	5.4	3.3	
Ratio HH tariff/Industrial tariff	0.27	0.89	1.2	0.42	0.85	1.22	0.76	0.75	1.25	0.6	0.7	
Total losses, %	11.1	20.14		10.9	19.89	11.5	10.2	18.51	10.4	10.2	14.98	
Normative losses, %	11.3	12.3	10	11.3	12.8	10	11.3	12.54	10	11.3	11.68	
Gas	2001			2002			2003			2004		
	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland	Belarus	Ukraine	Poland
Total collections, %	94.9	89.4		97.5	90.4		107.9	91.4		100.6	95.3	
Cash, %	12.7	87.1		22.4	88.9		42	91.1		83	95.3	
WART*, US\$/1,000m3	46.9	40.6	195	43.3	40.6	198	42.8	40.6		54.6	40.6	
HH tariff, US\$/1,000m3	10.8	28.1	207	22.9	28.1	233	44	28.1		47.7	28.1	
Industrial tariff, US\$/1,000m4	50.6	51.6	160	44.5	51.6	154	42.7	51.6		55.8	56.8	
Ratio HH tariff/Industrial tariff	0.21	0.54	1.29	0.51	0.54	1.51	1.03	0.54		0.85	0.49	

Note: Tariffs are provided net of VAT.

Source: "Belarus, Poland, and Ukraine", the World Bank

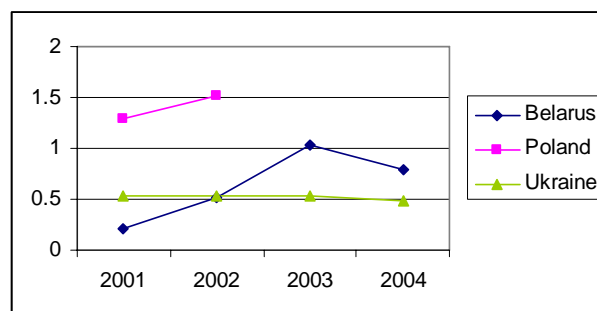
7.16 The government of Belarus has used its access to relatively cheap energy from Russia strategically. A considerable portion of the benefits associated with this low cost energy was not passed on to energy consumers but was left within the sector (through relatively high margins in gas and power distribution) and invested in the reliability of the energy system. It is interesting to note that the gas WART in Belarus has been higher than that in Ukraine, although Ukraine has been buying gas at significantly higher prices than Belarus (about US\$50/1000m3). The lower WART in Ukraine stems from the following factors: (i) under-pricing the domestically produced gas accounting to about 20 percent of the consumption; (ii) selling the gas received from Russia at a transit fee below the purchased level; and (iii) charging lower T&D tariffs. Ukraine's transmission and distribution network is substantially larger than Belarus', but Ukraine's T&D tariff with VAT was about US\$10/MCM, while in Belarus it ranged between US\$/MCM14.4 and 33.5 during 2000-04.¹⁴⁰

Misbalanced tariffs

7.17 As in the electricity sector, mispricing subsidies provided from industrial consumers to households went down significantly from 2001 to 2003. As a result, the ratio of the household tariff/industrial tariff to the increased nearly fivefold -- from 0.21 to 1.03. However it went down to 0.75 in 2004 because of an import gas price increase and frozen household tariffs. In Ukraine this ratio was about 0.5 in 2004, while in Poland it exceeded 1.5 in 2002 (Table 7.3 and Figure 7.1.).

7.18 In addition to households, several industrial consumers benefit from preferential gas tariffs that are granted by Ministry of Economy resolutions on an ad hoc basis. Moreover, the sale of LPG gas to households living in rural areas is still underpriced. The practice of discounted gas tariffs for specific industrial customers is not applied in Ukraine but, in contrast to Belarus, Ukraine consistently keeps household tariffs significantly lower than both the economic cost and industrial tariffs.

Figure 7.1: Household and Industrial Tariffs for Gas in Belarus, Poland and Ukraine, 2001-04



Source: World Bank.

B. ENERGY EFFICIENCY IN BELARUS

7.19 In contrast to many other CIS countries, energy efficiency has been a top priority for the Belarus government since the mid-1990s. This has resulted in a considerable reduction in the energy intensity of the national economy and an increased share of locally produced resources in the country's energy balance.

¹⁴⁰ Because of such a dynamic variation in the gas T&D tariff in Belarus, it is likely that a portion of the T&D fees was utilized by the government to finance non-sector related activities.

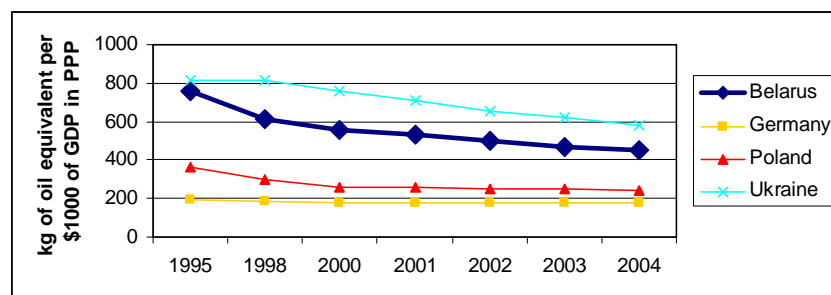
7.20 The energy tariff adjustment to economic levels in the FSU has been carried out slowly. Most of the countries have been using depressed energy and infrastructure tariffs as a social mitigation tool during transition. As a result, the tariff approach to promoting energy efficiency has not been fully applicable in these countries. On the other hand, the energy saving potential was not truly recognized as a cost-effective energy resource and energy policies were traditionally driven by the supply side of the energy market.

7.21 Right and economically sound tariffs for energy resources, and private ownership on the demand side, are the two most important complementary market conditions for promoting energy efficiency. When one (or both) of these conditions is not met, then administrative measures on the part of a government could compensate for market failures and create incentives that would reduce the energy intensity in the economy. Belarus is a good example of convincing progress made in improving energy efficiency by applying command and control mechanisms at the initial stage of energy efficiency reforms and the country is gradually moving to market-based mechanisms to further curb energy intensity.

7.22 The Belarus government's policy for reducing energy intensity has brought tangible results, with the energy intensity factor going down from 0.76 in 1995 to 0.45 in 2004 (Figure 7.2), as measured by tons of oil equivalent (toe), to produce US\$1,000 of GDP adjusted by purchasing power parity (PPP). As compared to neighboring countries, Belarus has a better performance than Ukraine and other FSU countries, except the Baltics (Figure 7.3). When comparing the energy efficiency performance of Belarus and Ukraine, one should take into account that Ukraine's formal progress in this area since 1999 is largely due to a reduced share of a shadow economy rather than a genuine reduction of the country's energy intensity. However, Belarus will need to further support energy efficiency measures rigorously if it is to achieve the level of European countries.

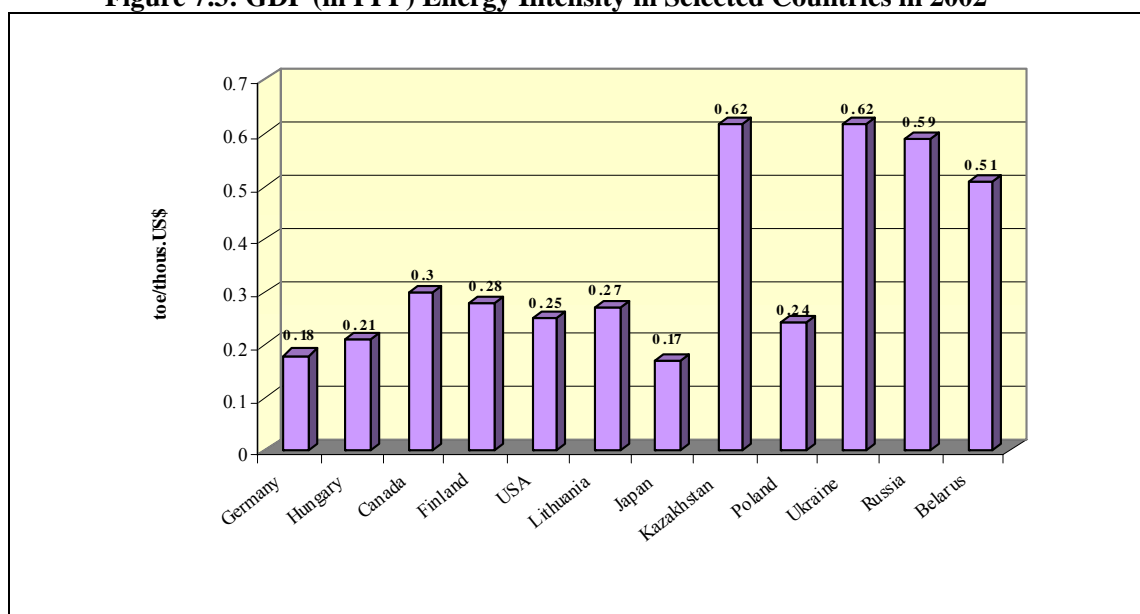
7.23 An important indication of improved technical efficiency in Belarus' energy sector relates to the relatively low level of energy losses in its networks. For example, electricity losses in distribution were comparable to those in Poland and were much lower than in Ukraine (Table 7.3). There were also positive developments in fuel efficiency in both power and heat generation.

Figure 7.2: Total Primary Energy Supply per GDP (PPP), kg o.e./US\$1,000



Source: World Bank.

Figure 7.3: GDP (in PPP) Energy Intensity in Selected Countries in 2002



Source: Key World Energy Statistics. The IEA, 2004.

7.24 The government's energy efficiency agenda included both administrative measures and economic incentives, and this combination proved to be an effective strategy in Belarus' political and economic environment. The strategy emphasizes energy conservation through a strict regulatory regime to promote rational energy consumption and to invest in upgrades of the technical infrastructure. In 1996 the government introduced the practice of setting energy efficiency targets for relevant ministries and other public entities. Energy efficiency in private enterprises is encouraged through energy consumption norms.

7.25 Because of low energy tariffs and the dominance of the public sector in the economy, the government of Belarus has to use administrative interventions to promote energy efficiency. This is done through a number of actions, including: (i) establishing the accountability of oblast governors for achieving energy efficiency targets and far close monitoring of this performance;¹⁴¹ (ii) exercising administrative and financial sanctions against enterprises and managers that do not meet the agreed energy efficiency indicators; (iii) instructing sectoral ministries to use at least 20 percent of their respective sector innovation funds to finance energy efficiency projects; and (iv) making available funds at the national level to co-finance energy efficiency projects. In addition, in 2002-03 the government embarked on a program of transferring small heat-only boilers from owner-operated industrial enterprises to the Belenergo generation companies. This measure helped to reduce the costs of heat supply and to improve its reliability.

7.26 These energy efficiency activities have also been supported by legal, regulatory, and institutional frameworks. This is achieved through the energy efficiency law; national, regional

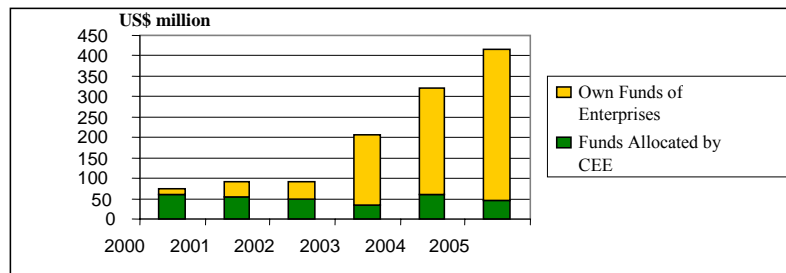
¹⁴¹ Oblast governors regularly report to the country leadership on the social and economic development of their respective oblasts. Governors' performance is largely assessed through the system of 16 leading macroeconomic and social indicators, which include the indicator for energy efficiency performance.

and sectoral energy efficiency programs with specific and monitorable targets; and the establishment of an energy efficiency agency – the Committee on Energy Efficiency (CEE). The CEE was established in 1993 and has been responsible for energy efficiency at both the national level and local levels. The role of the CEE is to implement and monitor government energy efficiency programs and regulations, including the compliance of energy consumers with energy saving indicators. In contrast to some other countries in the region, where similar bodies were set up (e.g., in Ukraine in 1994), the CEE has far-reaching powers, including the right to allocate state funds in support of energy efficiency projects and to impose fines on entities and managers that fail to meet energy efficiency targets.

7.27 Moreover, contrary to other CIS countries, Belarus has allocated a relatively large amount of public funding to support the implementation of energy efficiency projects. Total spending on such projects amounted to about 1.2 percent of GDP in 2003. The government has recognized that a reduction in energy consumption requires investment in energy saving equipment and technologies. A specific financing mechanism is based on centralizing perspective financing (a portion of the energy sector Innovation Fund) and providing the CEE with a mandate to allocate these funds among enterprises and entities to directly co-finance energy efficiency projects or subsidize interest rates on bank loans. Initially, these government funds were used to co-finance the bulk of the project costs, but with time this financial support began to play a somewhat catalytic role, covering just a fraction of full project costs with the rest funded by enterprises (Figure 7.4).

7.28 The energy efficiency reforms are also being supported through the creation of economic incentives on the demand side. These incentives include raised energy tariffs, strengthened payment discipline, and the exemption of financial gains stemming from energy savings from taxation while using the savings to pay back loans, to reinvest in further energy efficiency projects, and to reward the management and staff participating in such projects.

Figure 7.4: Financing of Energy Efficiency Projects in Belarus, 2000-05



Source: Committee on Energy Efficiency, 2005.

C. DEPENDENCE ON RUSSIA AS THE PRIMARY SOURCE OF ENERGY SUPPLIES

7.29 As is indicated in Table 7.4, Belarus consumes approximately 25 million metric tons of oil equivalent (MMTOE) of primary energy resources annually but produces only a little over 3 MMTOE. The balance has to be imported. In addition, Belarus imports crude oil for its refining

complex and then exports refined products.¹⁴² As a result, the total imported energy in 2004 amounted to about 36 MMTOE. The import volumes were all sourced out of Russia.

Table 7.4: Belarus Primary Energy Supply and Consumption, 2000-04

	2000	2001	2002	2003	2004
PRODUCTION					
crude oil (mt)	1.85	1.85	1.84	1.82	1.80
natural gas (bcm)	0.26	0.26	0.25	0.25	0.25
peat & wood (mt)	6.60	6.80	7.10	6.80	7.00
hydro (TWh)	0.03	0.03	0.03	0.03	0.03
Total Production (mmtoe)*	3.25	3.28	3.32	3.25	3.27
IMPORT					
crude oil (mt)	12.01	11.91	14.02	14.89	17.81
natural gas (bcm)	17.12	17.27	17.58	18.11	19.64
petroleum products (mt)	1.08	0.38	0.49	1.00	1.14
electricity (TWh)	7.22	8.32	6.79	7.40	4.05
coal (mt)	0.43	0.43	0.33	0.30	0.30
Total Import (mmtoe)	28.92	28.52	30.58	32.53	35.99
EXPORT					
Crude oil (mt)	0.35	0.40	0.60	0.80	1.05
petroleum products (mt)	7.78	7.66	9.88	10.54	12.96
electricity (TWh)	0.00	0.00	0.23	0.75	0.80
Total Export (mtoe)	8.13	8.06	10.54	11.53	14.21
Primary Energy Consumption (mmtoe)	24.05	23.74	23.36	24.25	25.05
Annual Percentage Change		1.27%	1.63%	3.84%	3.27%

Note: A ton of oil equivalent is defined as 10 Gcal. The applied conversion factors are: coal, 0.39; crude oil and petroleum products, 1.0; natural gas, 0.81; peat and wood, 0.18; and electricity, 0.25.

Sources: MSA and World Bank.

7.30 Existing infrastructure and Belarus' geographical proximity to Russia essentially ensure that Russia will be Belarus' primary source of energy supply for the foreseeable future. As is indicated in Table 7.5, the 2004 cost of energy imports to Belarus amounted to about 19 percent

¹⁴² Exports of oil products reached about 13 million tons in 2004, about two-thirds of the total output.

of GDP. While the cost of energy imports is partially offset by energy exports, it does constitute a major cause of a negative trade balance for the country. The energy import bill amounted to US\$4,424 million in 2004 as compared to the energy export inflow of US\$3,556 million. The bulk of energy export revenues, specifically about US\$3,120 million, stemmed from the export of petroleum products produced at the two domestic refineries primarily from imported oil. The resulting energy trade balance deficit of US\$868 million (=4,424-3,556) represented about 33 percent of the country's negative trade balance of US\$2,594 million in 2004.

Table 7.5: Cost of Energy Imports, 2000-04

	2000	2001	2002	2003	2004	2004
Gas						%
Bcm	17.10	17.30	17.60	18.10	19.64	
price USD/1000m3	30.70	31.10	30.60	36.90	47.68	
<i>Gas subtotal, USD million</i>	<i>524.97</i>	<i>538.03</i>	<i>538.56</i>	<i>667.89</i>	<i>936.58</i>	<i>21.2%</i>
Oil						
Mt	12.01	11.91	14.02	14.89	17.81	
price USD/t	136.20	115.80	107.30	133.20	181.40	
<i>Oil subtotal, USD million</i>	<i>1635.76</i>	<i>1379.18</i>	<i>1504.35</i>	<i>1983.35</i>	<i>3231.46</i>	<i>73.0%</i>
Petroleum Product						
Mt	1.08	0.38	0.49	1.00	1.14	
price USD/t	195.40	242.50	198.30	161.70	155.40	
<i>Oil subtotal, USD million</i>	<i>210.06</i>	<i>91.18</i>	<i>97.17</i>	<i>161.70</i>	<i>177.16</i>	<i>4.0%</i>
Electricity						
TWh	7.20	8.30	6.80	7.40	4.05	
price US cents/kWh	1.79	1.78	2.10	1.94	1.94	
<i>Electricity subtotal, USD million</i>	<i>128.88</i>	<i>147.74</i>	<i>142.80</i>	<i>143.56</i>	<i>78.57</i>	<i>1.8%</i>
TOTAL, USD million	2,500	2,156	2,283	2,956	4,424	100.0%
GDP, USD million	12,728	12,329	14,651	17,513	22,891	
Fuel and Energy Import to GDP, %	19.6%	17.5%	15.6%	16.9%	19.3%	

Sources: MSA and World Bank.

7.31 While Belarus cannot avoid a high level of future dependence on Russia for its energy supplies, there are actions it can take to reduce the overall risk associated with this level of dependence:

- Belarus has the potential to increase the use of indigenous energy resources, in particular wood and peat, although care would have to be taken to avoid any negative environmental consequences.
- The introduction of additional energy efficiency measures offers Belarus the opportunity to reduce the absolute levels of energy consumption. While Belarus has made essential progress over the last decade, there is clearly the potential to raise efficiency.
- Opportunities exist to diversify Belarus' source of electricity imports. Specifically, arrangements to purchase electricity from Ukraine offer an alternative to imports from Russia.

- Ultimately, Belarus' future supply security will be best assured by underscoring the mutuality of interests between Belarus and Russia. This mutuality of interests arises because Belarus functions both as a transit country providing access for Russian energy supplies to countries in Central and Western Europe and as a purchaser of Russian energy supplies. Consistently demonstrating that it will perform as a “good” transit country, that capable of providing a predictable, secure transportation route for Russian energy exports to Europe, is the best way for Belarus to underscore this mutuality of interests.

D. DELIVERY OF ACCEPTABLE UTILITY SERVICES TO DOMESTIC CUSTOMERS

7.32 As has been noted, Belarus inherited an extensive electricity network together with an established gas network. As in much of the rest of the FSU, however, these infrastructure facilities are in need of rehabilitation and upgrading. The ability of the utility service companies to deliver services of an acceptable quality is, therefore, dependent on adequate investment to restore, upgrade and maintain these infrastructure facilities. The best way to ensure that such funds will be available and will be appropriately deployed is to provide for the establishment of a solid financial footing for the utility companies that will ensure their continued financial viability.

7.33 To ensure the financial viability of energy companies, the priority measures that need to be undertaken are as follows:

- To eliminate the implicit subsidies in the sector through the introduction of full cost recovery tariffs and appropriate measures to ensure full collections
- To address the overhang of debt obligations, both external and internal.

Subsidies within the Sector

7.34 At the time of the breakup of the Soviet Union, energy supplies throughout the FSU countries were heavily subsidized. Despite significant reform efforts since then, in most countries subsidies still remain, reflecting the legacy of the widespread expectation that energy should be provided at little or no cost. The three components that make up these subsidies are: (i) non-payment for energy consumed; (ii) tariff structures that do not cover the full cost of the energy supplied; and (iii) excessive losses that reflect both operating inefficiencies and theft.

7.35 In common with the rest of the FSU, Belarus continues to generate implicit subsidies in its energy sector (Tables 7.6 and 7.7). However, Belarus has made significant progress in reducing the level of implicit energy subsidies. As is indicated in the tables below, implicit subsidies for electricity and gas combined (based on total collections rather than cash collections) were greatly reduced in the past years and went down from about 2.3 percent of GDP in 2001 to only about 0.2 percent in 2004. However, this understates somewhat the implicit subsidy, given the shortfall in cash collections and the unidentified nature of discounts to specific industrial enterprises. Nevertheless, in terms of cost recovery within the sector it represents a performance that is among the best in the CIS countries.¹⁴³

¹⁴³ For example, in Ukraine an estimated electricity cost recovery tariff is about US cents 4.7/kWh, while the actual retail tariff was only US cents 3.1/kWh in 2004. However, in terms of financial management performance, Belarus lags behind the Baltic countries, as well as such CIS countries as Armenia and Moldova.

Table 7.6: Electricity Sector Implicit Subsidies, 2001-04

	2001	2002	2003	2004
Actual WART*, US cents/kWh	3.4	3.2	3.8	4.7
Cost Recovery WART*, US cents/kWh	4.1	4.1	4.2	4.8
Actual Collections	85.0%	97.8%	102.6%	100.5%
Cash Collections	37%	45.6%	80.6%	80.3%
Actual Consumption (net of Losses), TWh	29.9	29.6	30.0	30.9
Subsidies from Mispricing, US\$ million	202	258	111	22
Subsidies from Non-payments, US\$ million	154	21	-30	-7
Total Subsidies, US\$ million	356	279	81	14
Total Subsidies/GDP, %	2.9%	1.9%	0.5%	0.1%

Note: *WART stands for weighted average retail tariff. Electricity cost recovery WART is estimated based on gas price and resulting cost of local generation, deemed cost recovery transmission and distribution (T&D) costs of US cents 1.3/kWh, network losses, and ratio between locally produced and the imported electricity in domestic consumption.

**Cost Recovery WART is a deemed cost recovery level of tariff reflecting both recurrent costs and investment needs. The Cost Recovery WART is different from the Production Cost (Sebestoimost') since the latter does not reflect the investment needs.

Source: Ministry of Energy.

Table 7.7: Gas Sector Implicit Subsidies, 2001-04

	2001	2002	2003	2004
Actual Retail Tariff, US\$/1000m ³	\$46.90	\$43.30	\$42.30	\$54.60
Cost Recovery Retail Tariff, US\$/1000m ³ *	\$41.10	\$40.60	\$46.90	\$56.70
Actual Total Collections	94.90%	97.50%	107.90%	100.60%
Actual Cash Collections	12.70%	22.40%	42.00%	83%
Actual Gas Consumption, bcm	17.207	17.527	18.28	19.799
Subsidies from Mispricing, US\$ mln.	-100	-47	84	42
Subsidies from Nonpayments, US\$ mln.	41	19	-61	-6
Total Subsidies, US\$ mln.	-59	-28	23	35
Total Subsidies/GDP, %	-0.47%	-0.20%	0.13%	0.15%

*Weighted average retail tariff.

Sources: Ministry of Energy and World Bank analysis.

7.36 While average tariff levels for both electricity and gas are very close to full cost recovery levels, there remain tariff imbalances among customer categories (Table 7.8). Households pay lower tariffs than other customer categories despite the fact that the cost of supplying households is greater than the cost of supplying other customers. Therefore, tariffs need to be rebalanced if economic distortions, in terms of consumption incentives, are to be avoided.

Table 7.8: Electricity and Gas Tariffs in 2004

	Electricity, US cents/kWh	Gas, US \$/MCM
Household tariff	3.3	47.7
Industrial tariff	5.4	55.8
Ratio HH/Industrial tariff	0.6	0.85

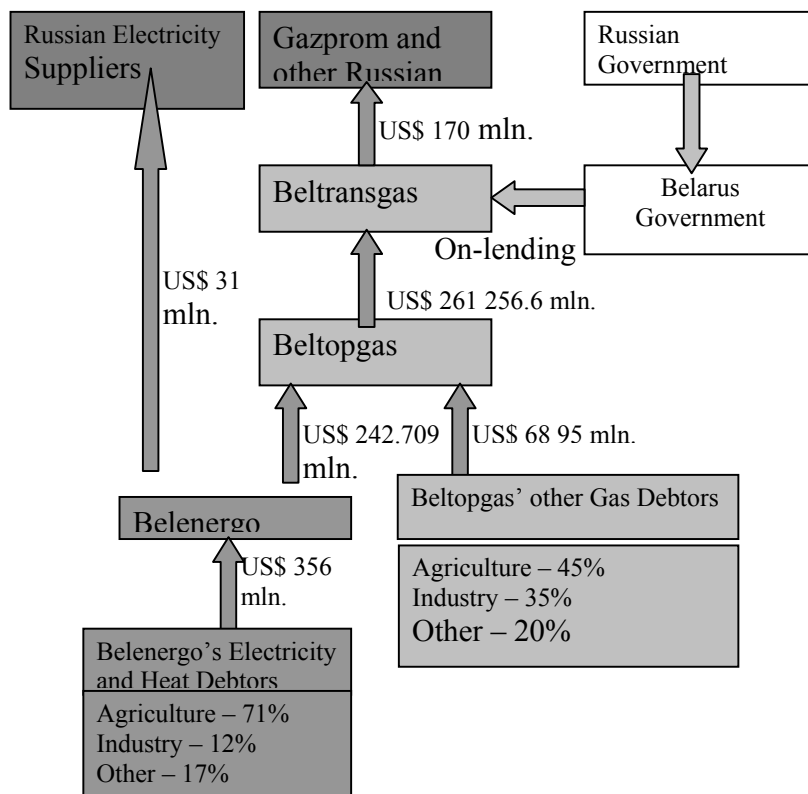
Source: Ministry of Energy.

Domestic and Foreign Energy Debts

7.37 Although implicit subsidies in the electricity and gas sectors have currently largely been eliminated, Belarus' utilities have a legacy of under-recovery of costs which translated into financial shortfalls that led, in turn, to non-payments by utility companies for Russian energy supplies. As of January 2004, accumulated payables to two utility companies, Belenergo (electricity) and Beltopgas (gas) totaled US\$424 million and payables to Russian suppliers totaled US\$201 million. The structure of these debt obligations is summarized in Figure 7.5.

7.38 A significant portion of the payables to Belenergo and Beltopgas are likely to remain unpaid. Consequently, there is a need to develop an inventory of receivables, identify what portion could be paid and write off the balance. Measures will then be required to structure the arrangements for securing payments for those receivables deemed potentially recoverable.

Figure 7.5: Belarus' Domestic and Foreign Energy Debts as of January 1, 2004*



*Does not include oil and fuel.

Sources: Ministry of Energy, MSA, World Bank staff estimates.

7.39 Belarus has made good progress in recent years in paying for its energy supplies from Russia, and progress is also being made to reduce past energy debts, as shown in Figures 7.6 and 7.7. Dealing with payment obligations to Russia is clearly an important element in the strategy to

assure energy supply security in the future. It underscores the importance for utility suppliers in Belarus to maintain a high level of collections and to be assured that tariffs will cover all costs.

Figure 7.6: Belarus' Payments to Russia for Imported Electricity

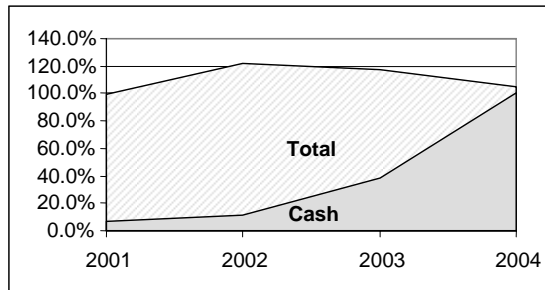
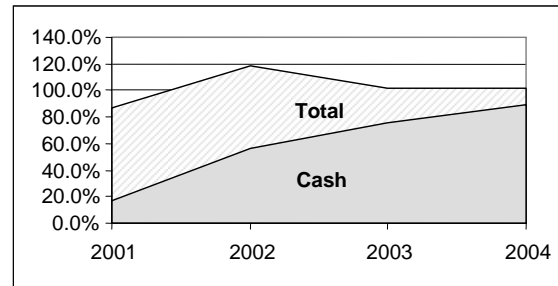


Figure 7.7: Belarus' Payments to Russian Gas Suppliers



Source: Belarus Infrastructure Monitoring Report by the IPM. April 2005.

Russian Subsidization of Belarus' Energy Sector

7.40 Belarus has been the beneficiary of low-priced energy supplies from Russia for a number of years. As indicated in Table 7.9, the prices paid by Belarus have been substantially below international price levels.

Table 7.9: Prices of Energy Purchases from Russia, 2000-04

Commodity	2000	2001	2002	2003	2004
Gas: US\$/MCM					
Price paid by Belarus	30.70	31.10	30.60	36.90	47.68
Estimated price paid by Western Europe	85.00	100.00	93.00	104.00	135.00
Oil: US\$/Ton					
Price paid by Belarus	136.20	115.80	107.30	133.20	181.40
International parity price	206.15	177.75	181.99	210.97	275.21
Electricity: cents/kWh					
Price paid by Belarus	1.79	1.78	2.10	1.94	1.94
South Eastern Europe price	>4.00	>4.00	>4.00	>4.00	>4.00

Note: *Netted back to the Russian border.

**World Bank estimates based on the blend of West Texas Intermediate, Brent Blend and Dubai. Urals parity prices are estimated to be lower than indicated in the table numbers by about US\$ 3/barrel or US\$ 19/ton.

*** South Eastern Europe electricity market is deemed to be more relevant than the EU market since Belarus' power system has better prospects for being integrated with the South Eastern Europe network than with UCTE.

Sources: MSA and World Bank staff analysis.

7.41 Russia has demonstrated a willingness for the present to supply energy to CIS countries at prices below international parity levels. However, in the longer term Belarus should be ready to face a significant price adjustment. Moreover, as Table 7.10 indicates, Belarus has enjoyed lower prices for gas than have other CIS countries.

Table 7.10: Price of Gas at the Border of CIS Countries Supplied by Russia, 2004-05 (US\$/MCM)

Country	2004	2005
Armenia	54.00	54.00
Azerbaijan	52.00	60.00
Belarus	47.68	47.68
Georgia	60.00	60.00
Moldova	80.00	80.00
Ukraine (estimated)	56.40	70.40

Source: World Bank staff analysis.

7.42 Over 2000-04, the overall level of Russia's subsidization of the Belarus economy via discounted gas prices, when compared with a US\$50/MCM benchmark gas price,¹⁴⁴ amounted to about US\$1.1 billion (Table 7.10).¹⁴⁵ However, the annual amount of these subsidies went down substantially from about 2.3 percent of GDP in 2000 to just about 0.1 percent in 2004 (i.e. these subsidies have been largely phased out).

Table 7.11: Estimated Economic Gain of Belarus from Depressed Import Gas Prices, 2000-04(US\$)

	2000	2001	2002	2003	2004
1 Actual purchase price, US\$/MCM	30.7	31.1	30.6	36.9	46.7
2 Benchmark gas price, US\$/MCM	50.0	50.0	50.0	50.0	50.0
3 Volume of imported gas, bcm	17.1	17.3	17.6	18.1	19.6
4 Import gas price subsidies, US\$ million	330	327	341	237	65
5 Transit fee discount, US\$ million	33	33	37	42	44
6 Adjusted subsidies (=4-5), US\$ million	297	294	304	195	21
7 GDP, US\$ million	12,758	12,421	14,653	17,513	22,889
8 Subsidies to GDP, %	2.3%	2.4%	2.1%	1.1%	0.1%

Sources: MSA and World Bank staff analysis.

7.43 Russia has begun to raise the prices of gas sold to some of the CIS countries and therefore it is likely that Russia will seek further increases in the price of the gas supplied to Belarus. The increases in 2003 and 2004 allowed Russia to cover its short-run marginal cost of supply to Belarus (reflecting the cost of arrangements to purchase gas from Turkmenistan). Future increases are likely to be directed at bringing the price of gas sold to Belarus more in line with the price of gas sold to Central and Western Europe, which may be twice as high as the current price level.

7.44 Russia sought higher gas prices in 2004, with Gazprom initially insisting on a price in the range of US\$50 - \$55/MCM. However, Belarus made the following concessions related to energy transit arrangements as a quid pro quo for a lower gas purchase price:

- Belarus had originally requested an increase in the gas transit fee for volumes transported through the Beltransgas trunk lines from US\$0.60 per MCM per 100 kilometers to

¹⁴⁴ This is about the average price paid by Ukraine for gas imported from Turkmenistan and Russia during 2001-04.

¹⁴⁵ The financing of these subsidies was largely absorbed by Gasprom.

US\$1.02 per MCM per 100 kilometers. Belarus ultimately settled on a fee of US\$0.75 per MCM per 100 kilometers.

- Belarus dropped its demand to buy 6 BCM of gas from Russia at US\$100/MCM for resale into Europe.
- Belarus agreed to recognize Russian property rights in the oil transit network Zapad-Transnefteproduct, which passes through Belarus and whose shares were impounded in September 2003, after Gazprom made a declaration of gas price increases.

7.45 Gazprom has hinted at future increases in gas prices but has also indicated that price levels may be predicated on the outcome of proposals to set up a joint venture involving Gazprom's operation of the gas transmission lines through Belarus.

E. MAXIMIZING THE BENEFIT FROM BELARUS' ROLE AS AN ENERGY TRANSIT COUNTRY

7.46 Belarus' transit oil and gas network is one of the most important strategic assets in the country. It generates a steady revenue stream from the transit of Russian crude oil and natural gas to Europe and strengthens Belarus' bargaining position vis-à-vis Russia on prices on imported fuels, in particular natural gas.

7.47 In order to ensure the sustainability of the benefits associated with Belarus' role as an energy transit route, the country needs to demonstrate that it can be regarded as a reliable partner worth being considered as the preferred transport route for the increases in the deliveries of oil and gas to Europe that are likely to materialize in the next five to ten years. Belarus also needs to ensure that the transport network (including the natural gas storage facilities) is properly maintained and that investments to upgrade and expand the system are made as and when required.

7.48 In the past, Belarus has demonstrated that as a whole it can be relied upon as a transit route for natural gas¹⁴⁶. However, Russia's plans with regard to alternative gas pipeline routes indicate that there are some constraints in perceiving Belarus as the preferred transit route for Russian gas. Therefore, Belarus would benefit from further strengthening its reputation as a "good" transit country in order to be viewed as a fully reliable partner by both Russia and its gas customers in Europe.

7.49 The physical condition of the transmission network is also a concern, since investment by Beltransgas in the network has fallen well short of requirements. In order to rectify this, Beltransgas would need to secure funding for future investments. Strategically, it would be important for Beltransgas to be able to borrow from commercial sources. However, to secure such borrowings, Beltransgas would have to demonstrate that it can be viewed as a reliable borrower. Typically, this would mean providing potential lenders with extensive operating and financial information, with the latter preferably being subject to audit. This information should conform to international accounting standards and should demonstrate that the management of the company and the governance of its revenue streams conform to good international practice. Alternatively, Belarus could seek funding for Beltransgas through entering into a joint venture or consortium arrangement with Russia and/or one or more of Russia's European natural gas customers (Box 7.1).

¹⁴⁶ Except for the case of pricing disagreements in 2004 and the resultant suspension of gas deliveries by Russia to Belarus (and, subsequently, of all gas deliveries to and through Belarus, for a short period).

Box 7.1: International Borrowings by Naftogaz of Ukraine

A good example of securing funds on international capital markets was recently demonstrated by the VINC Naftogaz of Ukraine. In September 2004, the company placed five-year US\$500 million in five-year Eurobonds at 8.125 percent per year, and at present it is holding discussions with the Deutsche Bank on the opening of a US\$2 billion credit line. Naftogaz succeeded in borrowing internationally through improved corporate governance and through the meeting of disclosure requirements via an audit conducted in accordance with the IFRS. The results of the audit are now publicly available on the company's web site: http://www.naftogaz.com/files/sm14_NAK_circular_eng.pdf.

Source: World Bank.

Operation of the Network

7.50 Russia has actively promoted the concept of a Belarus/Russia joint venture to operate the transit pipeline system. The potential benefits to Belarus include a one-time infusion of funds to the budget as a result of the sale of a stake in the transmission network and the prospect that Belarus would continue to benefit from gas deliveries at prices below international parity levels.¹⁴⁷ Such benefits, however, would come at the cost of reduced national control over the country's strategic asset.

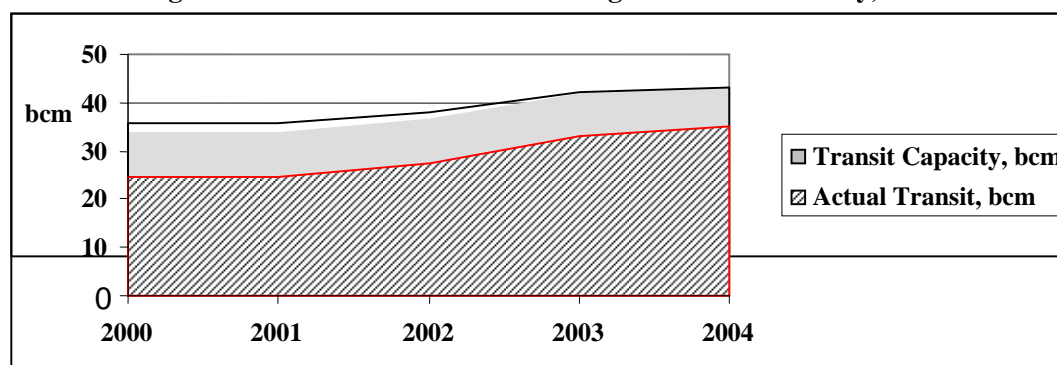
7.51 An alternative to a joint venture arrangement, in which a share in the network would be sold outright, would be a concession arrangement whereby the ownership of the asset would remain in the hands of the Belarusian government, but the right to operate the network and the obligation to maintain it would be transferred to a private operator for an extended period of time (typically, between 15 and 30 years). A concession arrangement would have the advantage of alleviating some of Belarus' concerns relating to the sale of its strategic asset, while at the same time it would transfer the obligation to maintain and upgrade the system to a third party. However, while concessions would bring in some up-front payments, they would be less than those obtainable from an outright sale of a share in the network. In the event that a concession approach is selected, care would have to be taken to ensure that the interests of Belarus and of the concession holder remain consistent throughout the life of the concession by including, for example, appropriate incentives to upgrade and maintain the system as the end of the life of the concession approaches.

Maximizing the Economic Rent Available from Transit Activities

7.52 The volume of Russian gas transiting through Belarus has been increasing and reached 35.3 BCM in 2004, as can be seen in Figure 7.8. About two-thirds of this gas was transported through the Yamal-Europe pipeline, which is owned by Russia but is operated by Beltransgas. The remainder was transported through the Beltransgas trunk pipeline system. The transit fees paid by Russia to Belarus amounted to US\$0.46/MCM per 100 kilometers for the gas transported through the Yamal-Europe pipeline system and US\$0.75/MCM per 100 kilometers for the gas transported through the Beltransgas network.

¹⁴⁷ In discussing the joint venture option Russia tentatively agreed to continue to supply gas to Belarus at discounted prices.

Figure 7.8: Russian Gas Transit through Belarus' Territory, 2000-04



Source: Ministry of Energy.

7.53 The transit fees of US\$0.75/MCM are at about half the level applicable for transit through Poland and Lithuania and about 70 percent of the fee applicable for transit through Ukraine. However, there is an apparent link between the low level of transit fee payments and the low level of prices charged to Belarus for the gas it purchases from Russia. The transit fee is paid directly to Beltransgas, and so the only mechanism through which the state can benefit directly from the transit arrangements is through Beltransgas' normal tax payments.

7.54 A distinction needs to be made between the transit fee arrangements associated with the transportation of gas through the Beltransgas trunk line system and the transportation of gas through the Yamal-Europe pipeline, which is owned by Gazprom. In the case of pipelines owned by a transit country, it is normal international practice to set a tariff based on normal cost recovery principles (i.e., the pipeline company recovers its full costs including a reasonable return on investment). Under such circumstances, the state benefits from the taxes attributable to the profit associated with the transit activity.

7.55 In the case of pipelines owned by the supplier of the commodity, different rules for tariff setting may apply. The pipeline owner may be taxed on the basis of a deemed profit attributable to its transit operations. Alternatively, a transit fee may be agreed upon between the pipeline owner and the transit country. Insofar as gas transit is concerned, a limited number of examples exist of transit fee operations. Three that represent appropriate benchmark operations are summarized in Table 7.12. As the table indicates, the transit fees paid to the host governments in all three cases are substantially higher than the fees paid to Beltransgas in respect of the transportation of gas through the Yamal-Europe line.

Table 7.12: Gas Transit Fee Arrangements in Three Countries

Transit Country	Source of Gas	Approx. Distance km	Transit Fee	
			US\$/MCM	US\$/MCM/100 km
Tunisia	Algeria	370	~5.00	1.35
Morocco	Algeria	450	7.00	1.56
Georgia	Azerbaijan	250	2.50	1.00

Source: World Bank.

7.56 In future negotiations on transit fee arrangements Belarus should keep in mind the distinction between the arrangements involving the Beltransgas trunk line system and the use of the Yamal-Europe pipeline. In the latter case, Belarus should consider negotiating an arrangement

whereby a transit fee is paid directly to the budget, with Beltransgas being compensated strictly for the costs of operating the pipeline.

F. PROTECTING THE INTERESTS OF STAKEHOLDERS IN THE SECTOR

The Regulatory Environment

7.57 The companies operating in the energy sector in Belarus have de facto monopoly status. One company, Belenergo, operates in the power sector (and it also involved in heat supply) and two companies operate in the gas sector (Beltransgas is responsible for transmission and Beltopgas is responsible for distribution and supply). An acceptable regulatory environment, either in the form of an independent regulatory function or through contractual regulatory arrangements, is an essential pre-requisite for attracting private sector investment to the utility sectors. However, even where the sector is controlled by SOEs, appropriate regulation has an important role to play.

7.58 Regulation normally has two important purposes, namely:

- Protecting consumers from monopoly practices in those parts of the sector that are not subject to competition. The regulator establishes prices and quality of service standards and tries to stimulate a competitive market. To the extent that the regulator succeeds, new investments will be undertaken by the utilities and consumers will be satisfied with the quality of service. If the regulator fails to set prices at a level that provide a fair, reasonable and acceptable rate of return to investors, new investments will not be forthcoming and the quality of service will deteriorate.
- Monitoring proper competitive behavior. Whenever the regulator determines that there is not enough competition, or that there are anti-competitive practices, it should take action to prevent these practices from adversely affecting consumer prices or the quality of service.

7.59 The range of specific functions assigned to a regulator may vary, but in general, the following key functions are assigned throughout the world:

- Approving and setting tariffs
- Issuing licenses
- Reviewing/approving system expansion, upgrading and rehabilitation plans by all regulated licensees
- Requiring the implementation of a system of accounts consistent with international accounting standards
- Requiring the filing of annual and other periodic reports containing all information necessary for the discharge of regulatory responsibilities
- Specifying the quality of service and reliability standards as well as customer service standards
- Carrying out inspections and enforcing licensing conditions and other regulatory requirements
- Overseeing the creation of programs and incentives to promote maximum efficiency in the use of utility services
- Cooperating with other government agencies in a transparent manner in implementing national priorities in such areas as national security, regional development, environmental protection and social welfare

- Adjudicating disputes involving licensees and the government, between and among licensees, and between licensees and consumers
- Carrying out a continuous and thorough program of public interaction and information on matters relating to the regulator's mandate.

7.60 While not all of these activities are required in an environment in which utility services are provided by SOEs that have de facto monopoly status, many of the requirements remain appropriate and valid.

7.61 In Belarus, regulatory functions are assumed by the Ministry of Economy and not by a dedicated regulatory body. Establishing an independent regulatory agency and investing in capacity building for this agency has the potential to promote improvements in efficiency within the sector, better quality service delivery, and greater assurance that the interests of consumers and other stakeholder will be protected. It would also play an important role in helping to introduce a business climate conducive to investment at such time as Belarus elects to promote private sector participation in its energy sector.

The Structure of the Sector

7.62 The structure of the energy sector can have an important impact on sector efficiency and on ensuring that the interests of consumers and other stakeholders are treated fairly. Both Belenergo and Beltopgas operate as vertically integrated monopolies with Belenergo supplying 100 percent of electricity into the market and about 42 percent of heat delivery and Beltopgas acting as both the supplier and distributor of gas.

7.63 Vertically integrated operations of this sort (particularly those operating as de facto monopolies in an environment of limited regulation, as is the case in Belarus) lack transparency and are therefore capable of hiding inefficiencies. It is a common practice internationally to require that utility operations be unbundled (this, for example, is a requirement under the EU directives related to electricity and gas delivery within the European market). While an outright unbundling of Belenergo and Beltopgas may not be considered an acceptable option at this time, a virtual unbundling of operations through the separation of assets into discrete operating companies would be desirable and could be affected under the overall control of a holding company. Such operations should be corporatized and should be encouraged to function as independent commercial enterprises, but with a requirement to report financial and operating results through the holding company.

7.64 Overall, in a number of fundamental dimensions of structural reforms in the energy sector, Belarus lags behind almost all other FSU countries. This is a major concern because in the longer term these reforms are critical to sustain improvements in sectoral efficiency. Other CIS countries have recently moved more decisively toward private sector involvement in the energy sector and have also enhanced their institutional framework to make it more transparent and accountable. The latter was achieved as a result of (i) the introduction of international accounting standards, and (ii) the setting up of regulatory agencies that require companies inter alia to disclose their operating and financial results.

G. CONCLUSIONS AND RECOMMENDATIONS

7.65 Since the mid-1990s Belarus has succeeded in sustaining and even improving the performance of the energy sector. This has helped to advance macroeconomic stabilization and the growth of the country's economy during the past decade. The investments in the sector were sufficient to maintain sector assets in a satisfactory condition, and modernization projects

contributed to improved energy efficiency. The incidence of both quasi-fiscal subsidies and deficits declined, and this improved the financial viability of energy companies. Moreover, the centralized sector structure and preserved command and control governance mechanisms helped the sector to survive the economic crises which badly affected many FSU countries and their respective energy sectors in the second half of the 1990s.

7.66 However, the government of Belarus will need to address the following five challenges in the energy sector if it is to further support economic growth and exploit the comparative advantages of the country.

7.67 **First, reducing the overall risk associated with the excessive energy dependence on Russia.** These risks can be mitigated through the implementation of the following measures:

- Increasing the use of indigenous resources, in particular peat and wood
- Further improving the energy efficiency of the economy
- Diversifying electricity import
- Performing as a “good” transit country.

7.68 **Second, strengthening the financial viability and creditworthiness of the sector companies.** While some progress was made in this area in recent years, more is needed to ensure that the utility companies are on a commercially sustainable footing. Specifically, the following policies are proposed:

- Completing the phasing-out of implicit subsidies in the sector through the introduction of full cost recovery tariffs for all categories of consumers and appropriate measures to ensure full collections
- Restructuring the existing stock of debt obligations, both external and internal.

7.69 **Third, maximizing the benefits associated with Belarus’ role as an energy transit country.** Belarus’ oil and gas transit network is one of the most important strategic assets of the country. To ensure the sustainability and eventual expansion of the benefits of the transit business in the future, Belarus has to convince Russia that it represents a reliable and preferable route for oil and gas export to Europe. To achieve this, Belarus will need to address the existing reputational issues and to provide for additional investments by securing commercial borrowing and/or considering options for entering into a joint venture or consortium arrangements with Russia and/or Russian’s European natural gas customer(s).

7.70 **Fourth, protecting the interests of the stakeholders in the sector.** The power sector and part of the gas sector are monopolized by VINCs, which are regulated by the Ministry of Economy and not by a dedicated regulatory body. Establishing an independent regulatory agency and investing in its capacity building would help Belarus to promote both improvements in energy efficiency and better quality service delivery. It would also bring greater assurance that the interests of consumers and other stakeholders are well protected. The regulatory reform would also be critical for setting up business conditions that are conducive to private investment in the sector when Belarus elects to promote private sector participation in energy.

7.71 **Fifth, attracting financing for rehabilitating and modernizing sector assets.** Over the next decade the sector will face a growing demand for investments that unlikely to be met internally. In order to secure external financing, the energy sector structure and governance arrangements should be adjusted through structural and institutional transformations, such as unbundling VINCs, introducing disclosure and corporate governance principles, and developing public-private partnerships.

CHAPTER 8

PRIORITY DIRECTIONS FOR REFORMS

8.1 This final chapter summarizes the policy recommendations that follow from the analysis concerning economic growth in Belarus.

8.2 **In the longer term, to achieve and ensure sustained growth in Belarus, the authorities need to make a determined push toward advancing a comprehensive reform program to accelerate the country's transition to a market economy.** These efforts should address a number of pending issues in all of the core areas of liberalization, macroeconomic stabilization (including price and exchange rate stability), privatization, and wide-ranging structural reforms. Despite their up-front costs, the structural reforms (including those involving public administration, legal and judicial matters, social assistance and insurance, and infrastructure) represent a critical element of the sustainable growth strategy. Box 8.1 highlights major government reforms programs.

Box 8.1: Major Government Reform and Development Programs

Many of the recommendations offered in this chapter, such as a reduction in the tax burden and the modernization of the tax structure, further disinflation, export diversification, FDI attraction, improvements in the business environment, etc., are in line with the objectives spelled out in the various government development programs, including the following:

- Program of Socioeconomic Development for the Period 2001-05
- National Program of Export Development for the Period 2000-05
- Program of Structural Changes and Increase in Competitiveness of the Republic of Belarus
- Annual Programs of State Support for Small Business Development
- National Program of Investment Attraction into the Republic of Belarus until 2010
- National Sustainable Socioeconomic Development Strategy for Belarus until 2020.

However, the programs often contain conflicting objectives and there has been no analysis of trade-offs stemming from the attempt to meet many different objectives simultaneously (wage growth versus competitiveness; state support versus the tax burden; export promotion versus import substitution). In addition, no assessment of the opportunity costs of different measures aimed at meeting the same objective was presented. There is also a substantial bias in the programs in favor of administrative measures to reach the objectives, while the government discounts the potential benefits of strengthening market incentives and freeing private initiative.

Given that the government has begun the preparation of major programs for the next five years (including the Program of Socioeconomic Development for the period 2006-10), it is our expectation that the government finds the analysis and recommendations in this report appropriate to be reflected in these new documents.

8.3 The current international and domestic environment seems to be quite favorable to supporting a policy shift toward the acceleration of structural reforms. At the moment, the government is well equipped to mitigate the potential costs of these reforms because the policy settings are largely determined by the growing economy, the positive trends in the perceptions of both the enterprise sector and the household sector, the favorable developments in the global economy, low debt, and strong administrative capacity of the state. This situation could change: various pressures could become stronger and then the same reforms would become politically more costly and fiscally more risky. In short, the current window of opportunity should be used in order to ensure that the authorities' growth objectives are sustainable.

8.4 **In the case of Belarus, the level of FDI attracted should be seen as an indicator that summarizes the economy's longer-term potential to sustain growth and competitiveness.** Belarus seriously underutilizes the advantages of its geographic location as a basis for attracting FDI and restructuring its trade patterns. Addressing this weakness should be a policy priority. FDI inflows would ease the financing constraint, facilitate technology transfer, and provide access to new product markets. Privatization has been an important channel for FDI in the Central European countries and this link might prove important in Belarus as well. Even if there are concerns about widespread foreign ownership, liberalizing economies in the Far East, such as Vietnam, have generated considerable gains from channeling foreign investments through joint ventures.

8.5 **This report, however, is primarily focused on a narrower set of key reform priorities,** which could be sufficiently advanced within the very gradualist approach toward market transformation explicitly chosen by the government. Many of the recommendations that follow are fully consistent with the objectives outlined in the various government development programs (Box 8.1). These recommendations are intended to help the government address the immediate growth challenges, as identified by the report's analysis, which otherwise may undermine the sustainability of the current growth and poverty outcomes.

8.6 **The focus of the report's recommendations is on two inter-related challenges that** the government must address in order to strengthen the competitiveness of the economy as a source of sustainable growth:

- **Imposing stricter market discipline** on the existing enterprise sector in order to accelerate its restructuring and productivity growth at the micro level
- **Encouraging the expansion** of both new and fully restructured traditional firms that have proved to be quite competitive without state support.

Market Discipline

8.7 The main strategy for disciplining traditional enterprises could be summarized as follows:

- **Restructuring and drastically downsizing the existing system of state support to the real sector,** including strengthening discipline in the financial sector through discontinuing the regular recapitalization of state-owned banks and winding down directed credit programs and moving the residual quasi-fiscal activities from the banking sector to the budget. This would help sustain the fiscal balance under lower statutory tax rates. Moreover, this would improve the incentives for enterprise restructuring and equalize business conditions among different types of business entities.
- **Accelerating the exit of non-viable firms.** A shift toward a more pro-business economic policy in Belarus should employ at least some highly visible cases of bankruptcy and the liquidation of non-viable large enterprises. Such liquidations would be important to support several other improvements. First, they would send an important signal to the entire real sector and thus would have an important incentive effect. Second, they would bring some additional fiscal savings. Third, they would release economic resources for new firms.
- **Advancing trade liberalization** to expose domestic enterprises to the discipline of international competition. The immediate priorities include eliminating the existing non-

- tariff restrictions on imports and reducing the use of restrictions on trade with Russia that are inconsistent with the Customs Union agreements.
- **In the agriculture and food processing sector, taking additional steps to harden the budget constraint.** These include: (i) the elimination of implicit subsidies, especially those that are allocated through distorted input prices; (ii) better targeting of government support toward more efficient farms and the equalization of access to state support between private and state farms; (iii) a more aggressive reduction in capacity in food processing; and (iv) a more cautious approach toward merging profitable and non-profitable farms. In the last case, at the very least, managers of consolidated farms should be allowed to implement appropriate rationalization strategies. The government needs to develop aggregate measures of agricultural support using the OECD methodology. There is also a clear need to ensure that the transfers from state-controlled farms to the household sector are rendered more transparent.
 - **Ensuring further strengthening of the financial viability and efficiency of the energy sector companies.** While some progress was made in this area in recent years, more is needed to ensure that these companies are on a commercially sustainable footing and thus could meet a growing commercial demand for energy in a cost efficient way. Specifically, the following policies should be seen as priorities in the sector: (i) completing the phasing-out of implicit subsidies through proper tariff adjustments; (ii) restructuring the existing stock of debt obligations, both external and internal; and (iii) diversifying electricity import.
 - **Preparing the pilot program of large-scale privatizations** to cover several efficient SOEs (including state banks), which could be privatized competitively in an orderly and transparent way.

Encouraging New Business Growth

8.8 **The competitiveness of the Belarusian economy is greatly constrained by the unnecessary business costs** associated with current government policies. The economy is also affected by depressed new entry that undermines its flexibility as well as its capability to withstand potential shocks. There is an urgent need for policy adjustments along the following primary directions:

- **Reducing the tax burden and reforming the tax structure.** The priority is to reduce the incidence of the most distortive taxes, such as turnover and payroll taxes. The latter would create additional incentives to accelerate the pension reform that might include an increase in the retirement age. The existing implicit taxes on the industrial sector should be phased out as well. This will require steps to advance the divestiture of enterprise social assets, to eliminate tariff cross-subsidization in utilities, and to provide of agricultural inputs at fixed low prices.
- **Liberalizing employment and wage policies.** Enterprise managers need more decision making power on labor and wage issues, while the government should discard its use of administrative controls to attain wage increase targets. Combining this policy with a renewed impetus to support new market entry would limit its potential negative effects on overall employment.
- **Advancing price liberalization** by phasing out the residual price control, including downsizing the list of enterprises that are subject to price control as monopolists, as well as the list of regulated export prices. This also includes further liberalization of interest

rates. In agriculture, producer price levels need to be brought much more into line with international prices. In an economy that has been increasingly internationally integrated, the government could rely on competition as a primary tool for avoiding excessive price growth.

- **Reducing the level of day-to-day regulatory costs.** By launching a more efficient dialogue with the enterprise sector, the government should be able to identify and reduce various unnecessary costs that stem from inefficiencies in the regulatory regime. The priority areas for action may include: (i) reforming tax administration to make the system simpler, more stable and predictable; (ii) halting the recent trend of deterioration in customs administration, which includes addressing the issue of customs valuation practices; (iii) liberalizing the procedures for new entry (by reducing the time needed for business registration and simplifying the procedures); and (iv) reducing informal market protectionism and trade barriers at the regional level. It is also recommended to streamline and consolidate the tariff schedule, which would help reduce both the administrative costs of customs clearance and the risk of corruption.
- **Limiting discretionary administrative interference.** The government needs to change the incentive system for the regulatory agencies to discourage their discretion in enforcing regulatory requirements. Among other things, this means a drastic reduction in "unplanned tax inspections" and similar interventions, which are the most detrimental to the business climate. In agriculture, able managers on state-controlled farms should be given much greater decision-making autonomy. Also, businessmen should be offered an independent channel to the central administration to report irregularities in regulatory interventions. This is something that the government could accomplish without a fundamental overhaul in the underlying system of regulations.
- **Accelerating reform in the standards system.** Although the needed legislative framework is mainly in place, slow reform implementation has not yet permitted a switch from the excessive compulsory regulation inherent in the ex-Soviet GOST system to the modern two-tiered system of internationally compatible mandatory technical regulations and voluntary standards.
- **Consolidating recent progress toward a stable macroeconomic environment,** including tightening monetary conditions to lower inflation and taking additional measures to scale down government interventions in the economy (including quasi-fiscal activities) minimize the fiscal deficit and thus lower government financing requirements and interest rates. Sustained macroeconomic stability is critical for strengthening enterprise incentives for restructuring and investment.

8.9 **The government should advance its international integration efforts in the direction of both the WTO and the CIS.** The experience of other transition economies suggests that the trade negotiations, especially those for WTO membership, could become an important driver for a number of domestic reforms. The government should be prepared to advance its trade negotiations by reducing the current level of subsidization in agriculture and industry, including exporters, and, as mentioned above, by reducing the existing non-tariff restrictions on imports. In addition, much more progress is needed in liberalizing and de-monopolizing a number of sectors, such as financial services and telecommunications.

8.10 **The government must invest considerable resources in improving the country's investment image if it is serious about attracting sizable foreign investments.** As a starting point, the government should make highly visible decisions to address the most common concerns of the private sector. For example, the golden share rule should either be abolished or as

a minimum, the existing legislation should be modified in line with the international experience. Its future application should be legally restricted to a narrow set of cases that directly relate to the strategic interests of the state. It would also be advisable to establish a specialized institution for investment promotion which would employ best international practices in this area and could support a broad communications campaign to develop Belarus' image as an attractive location for business and investment. Some degree of administrative control over Free Economic Zone (FEZ) operations should be preserved to ensure that residents of these zones do not abuse their tax customs duty advantages.

8.11 The government could make more extensive use of the Chinese experience of gradual liberalization from the 1980s. In particular, the use of the FEZ mechanism by China as a primary tool for FDI attraction in the early stage of liberalization seems to be quite applicable under Belarus' circumstances. The strengthening and expanding of the existing FEZs in Belarus could be undertaken relatively easily given the accumulated experience. At the same time, an intensive promotion of FEZs, especially those at the borders with Poland and Lithuania, could be a practical way for Belarus to benefit from new opportunities that emerge as a result of the recent EU expansion. However, as international experience suggests, to be successful FEZs must be properly set up and managed, and their development should be integrated with the national reform program: the zones should be seen as an instrument of advancing economy-wide reforms, not as an alternative to reforms. FEZs should be given considerable operational autonomy, and the government should encourage competition between different zones. Private management of the zones should also be encouraged.¹⁴⁸ As mentioned above, some administrative control over FEZ operations should be preserved to ensure that residents of the zones do not abuse their tax customs duty advantages.

8.12 Attracting foreign investments is of special importance for the future rehabilitation and modernization of the energy sector. Over the next decade the sector will face a growing demand for investments that probably cannot be met internally. In order to secure external financing, the energy sector structure and governance arrangements should be adjusted through structural and institutional transformations, such as unbundling the existing monopolies, introducing disclosure and corporate governance principles, and developing public-private partnerships. Establishing an independent regulatory agency and investing in its capacity building would make the sector more attractive to external investors while it would also help to promote both improvements in energy efficiency and a better quality service delivery.

8.13 Belarus also has an opportunity to maximize the benefits associated with its role as an energy transit country. In order to ensure the sustainable expansion of its transit business, Belarus must convince Russia that it represents a reliable and cost efficient route for oil and gas export to Europe. To achieve this, Belarus will need to address the existing reputational issues and also to provide for additional investments by securing commercial borrowing and/or considering options for entering into a joint venture or consortium arrangement with Russia and/or Russia's European natural gas customer(s).

8.14 The food processing industry represents a sector that should become a major beneficiary of FDI. The development of export-oriented food processing requires substantial investment to underpin efficiency and, most important, to ensure adequate product quality. At the same time, experience elsewhere has shown that modernization and efficiency improvements in primary agriculture can occur quickly once they are driven aggressively by a modernized and internationally competitive processing sector.

¹⁴⁸ Madani (1998), Perrin and Sachwald (2004).

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