© 2004 International Monetary Fund

Republic of Belarus: Selected Issues

This Selected Issues paper for the **Republic of Belarus** was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **April 22, 2004**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the **Republic of Belarus** or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to <u>publicationpolicy@imf.org</u>.

Copies of this report are available to the public from

International Monetary Fund • Publication Services 700 19th Street, N.W. • Washington, D.C. 20431 Telephone: (202) 623-7430 • Telefax: (202) 623-7201 E-mail: <u>publications@imf.org</u> • Internet: http://www.imf.org

Price: \$15.00 a copy

International Monetary Fund Washington, D.C.

INTERNATIONAL MONETARY FUND

REPUBLIC OF BELARUS

Selected Issues

Prepared by Veronica Bacalu, Zuzana Brixiova, Etibar Jafarov, and Jérôme Vacher (all EUR)

Approved by the European Department

April 22, 2004

Contents

Page

I. Labor Market Trends and Institutions in Belarus	4
A. Labor Market Trends	4
B. Labor Market Institutions	
C. Conclusions	12
Text Tables	
1. Labor Force. Employment and Unemployment. 1995–2002	
2. Employees on Involuntarily Reduced Schedule, January–December 2003	86
3. Unemployment Benefits, by Regions	
4. Job Turnover, by Sectors, in Thousands, January–September 2003	
Text Figures	
1. Employment and Unemployment Trends	5
2. Sectoral Shifts, GDP, and Real Wages	7
3. Wage Arrears. 1995–2003	
4. Regional Differences	9
5. Flexibility of Hiring and Firing	
References	14
II. Tax Reform in Belarus	15
A. Overview of the Tax System in Belarus	15
B. Tax Reform Challenges in Belarus	21
C. Conclusions	23

Text Tables	
General Government Revenue, 1999–2003	
Tax Structure in 1999–2003.	
Revenue Structures in Belarus and Russia	
Tax Structures in Belarus and Russia, 1999–2003	21
Text Box	
1. Tax Policy Changes in 2004	17
2. How Large Should the Tax Burden Be for Transition Countries?	
References	24
III. Estimates of Exchange Rate Pass-Through	
A. Background	
B. Methodology	
C. VAR Results	
D. Conclusions	
Taxt Tables	
1 Correlations Datwoon the Naminal Evaluance Date and Different Measure	as of Inflation 27
2. Exchange Pate Pass Through Coefficients	20 cs of initiation .27
2. Exchange Rate Fass-Thiough Coefficients	
4 Vector Autoregression Estimates For Russian ruble	
Text Figures Inflation and Exchange Rates (1995-2003)	26
Year-on-Year Inflation and Exchange Rate Depreciation	
Official and Parallel Exchange Rates Against the USD (1995-2003)	28
Official and Parallel Exchange Rates Against the Russian Ruble (1995-2	.003)
CPI: responses to Cholesky One Standard Deviation Innovations +/-2 Sta	andard Errors31 $m_{s} + \frac{1}{2}$
Standard Errors	32
Variance Decompositions	
References	
IV. Reform Strategy for the Banking Sector	
A. Current Situation	
B. Previous Reforms	43
C. Moving Forward	44

Text Tables

1. 2.	Financial Intermediation Indicators for Belarus and Selected Countries, 1999–2002 Main Indicators of Activities of the Six Largest Banks, 2001–03	.39 .40
Te	xt Figures EBRD Index of Banking Sector Reform in 2003	.37
Re	ferences	.46

I. LABOR MARKET TRENDS AND INSTITUTIONS IN BELARUS¹

1. In most countries of Central and Eastern Europe and the Commonwealth of Independent States (CIS), the transition from central planning to market has been characterized by the emergence of a private sector that would stimulate growth and job creation. However, since the private sector has not fully compensated for the job losses in the state sector, the shift from "labor hoarding" to open unemployment has been one of the most painful characteristics of transition. The possible currency union with Russia makes labor market flexibility a particularly critical issue for Belarus. This chapter describes labor market trends in Belarus and the role of labor market institutions in the outcome.²

A. Labor Market Trends

2. The Belarusian labor market is distinguished by low official unemployment, combined with a low share of the private sector in the aggregate employment. Registered unemployment was only about 3 percent of the labor force in 2002 and 2003, substantially below the level in other transition economies, including Lithuania (Figure 1). At the same time, the private sector accounted for less than 45 percent of total employment. This share is greatly overstated, as official statistics count all public enterprises that have been corporatized as private. Nevertheless, it is still among the lowest in transition economies, (Table 1). Similarly, the number of small and medium-sized enterprises (SMEs)—crucial for job creation especially in the early stages of transition—is the lowest in the region.

(In thousands)								
	1995	1996	1997	1998	1999	2000	2001	2002
Population	10210	10177	10142	10093	10045	10020	9990	9951
Total labor resources	5849	5830	5837	5864	5928	6005	6076	6110
Labor force	4541	4547	4496	4523	4537	4537	4520	4511
Employed	4410	4365	4370	4417	4442	4441	4417	4381
o/w in the "private" sector	1769	1797	1825	1877	1884	1882	1865	1928
(as percent of employed)	40.1	41.2	41.8	42.5	42.4	42.4	42.2	44.0
Unemployed	131	183	126	106	95	96	103	131
(as percent of labor force)	2.9	4.0	2.8	2.3	2.1	2.1	2.3	2.9
Not in labor force	1325	1293	1309	1336	1386	1468	1556	1609

Table 1. Belarus: Labor Force, Employment and Unemployment, 1995–2002

¹ Prepared by Zuzana Brixiova

² This chapter draws on data provided by the Ministry of Statistics, Ministry of Labor, World Bank, and Fund staff calculations.



Figure 1. Belarus: Employment and Unemployment Trends

3. **Youth unemployment is surprisingly high in Belarus.** Unlike most transition economies, where the highest unemployment is among older workers, in Belarus young people (30 years of age and below) constitute almost half of the unemployed.^{3 4} Unemployment among workers with secondary general or basic education and women is also a concern. In 2002, these groups accounted for 73 and 63 percent of the unemployed, respectively. The outward shift in the Beveridge curve (vacancy-to-unemployment curve) also points to the mismatch in skills between the unemployed and the vacancies, as well as to a geographical mismatch, and suggests that policies aimed at improving skills and increasing mobility are needed. At the same time, the low vacancy-to-unemployment ratio calls for policies aimed at encouraging private job creation.

4. **At 15 percent, the cumulative fall in employment since 1990 has been similar to other transition economies.** The official employment rate decreased from 51 percent of total population in 1990 to 44 percent in 2002, and is now comparable to the employment rate in, for example, Lithuania, and similar to the EU average. The employment rate would be somewhat lower if forced administrative leaves and involuntary part-time employment—especially prevalent in industry—were taken into account (Table 2). Since the decline in employment did not result in a corresponding increase in unemployment, labor force participation decreased sharply, due partly to unfavorable demographic trends (Figure 1).

	Part t	ime	Involuntary leave with reduced pay				
				Number of			
		Hours		days per		days per	
		per		released	without	released	
	Total	worker	Total	worker	pay	worker	
Belarus total	197,890	114	158,589	18	78,747	14	
of which							
Industry	131,096	129	114,885	20	50,334	16	
Agriculture	6,963	87	3,724	15	2,872	15	
Construction	32,822	53	27,478	13	16,695	11	

Table 2. Employees on Involuntarily Reduced Schedule
January - December, 2003

³ However, youth unemployment is very high in Poland (more than 40 percent of people under 25 are unemployed).

⁴ The high share of pensioners among the Belarusian population suggests that in some cases older workers may retire to obtain pensions, which are fairly generous, rather than unemployment benefits, which are not.



Figure 2. Sectoral Shifts, GDP, and Real Wages

- 7 -

5. Even though Belarus has pursued a very gradual path of transition, a distinct sectoral shift from agriculture and industry towards services can be observed.⁵ Specifically, between 1990 and 2002, the share of agriculture in employment declined from 20 percent to 12 percent, while the share of industry in employment fell from 31 percent to 27 percent. Correspondingly, the share of services in employment increased from 38 percent to 53 percent (Figure 2). Most job creation in services occurred in trade and public catering (increase from 7 percent to 13 percent), health and education (increase from 14 percent to 18 percent), and public administration. At the same time, the share of employment in financial intermediation, real estate, transport, stagnated or even declined. The potential for development of this part of the service sector in Belarus has so far not been utilized and should be encouraged. According to official data, formal sector employment in small and medium-sized enterprises (SMEs) has also stagnated in all major sectors of the economy.

6. Following a sharp initial fall because of high inflation between 1991 and 1995, increases in real wages have consistently outpaced increases in labor productivity.⁶

Specifically, between 1995 and 2002, labor productivity increased only by 45 percent while real wages increased by almost 140 percent (Figure 2). The largest increases occurred in financial and computer services, while wages in agriculture declined more than other sectors. Overall, these wage increases created inflationary pressures, undermined the government's ability to contain the fiscal deficit, and put additional strain on alreadystruggling state-owned enterprises.



In fact, in many cases, the enterprises could not afford the increased wage bill and accumulated wage arrears. After a sharp drop in 1996, wage arrears peaked again during 2002, but were reduced in 2003, financed by directed credits from the commercial banks to the troubled enterprises (Figure 3).⁷

⁵ The service sector now accounts for more than 50 percent of employment in most transition countries (Raiser and others, 2003).

⁶ The decline of employment was much lower than the decline in official GDP, leading to an initial drop in labor productivity.

⁷ In the last several years, the wage arrears were always cleared in December due to directed credits from the banking sector, only to reemerge in January.



Figure 4. Regional Differences

7. While official unemployment rates are low nationwide, large regional disparities in employment rates and average wages have emerged, particularly between the capital and outlying provinces. The employment rate in Minsk was above the national average already in 1995, and the difference has grown since then (Figure 4). Relative to the rest of the country, average wages are higher and job opportunities are much more abundant in Minsk (as evidenced by the low unemployment-to-vacancy ratio). This disparity has led to continuous migration from the provinces to the capital, housing shortages there notwithstanding. Indeed, overall shortages as well as rigidities in the housing market have hampered the role of labor mobility as an effective balancing mechanism. Based on the experience of neighboring countries, regional disparities are likely to widen further with the progress of transition, in particular between urban and rural areas.

B. Labor Market Institutions

8. **Labor market institutions play an important role in labor market outcomes by changing incentives, both for employers and for employees.**⁸ In this section, three types of labor market institutions—and their rigidity—are examined: (i) wage regulations; (ii) the unemployment insurance scheme; and (iii) hiring and firing regulations.

9. **In Belarus, the government influences wage setting in the public sector through the "tariff system,"** determined on the basis of tariff scales, the tariff rate of the first grade, and tariff qualification guide. The current *tariff scale* is a system of coefficients corresponding to 27 classes (ranks) of workers. The ratio between the highest and the lowest rank is 7.84. The *tariff qualification guide* describes professional characteristics and types of work for each rank. After discussions with labor unions, the government approves the *tariff of the first grade,* which must be at least as high as the minimum wage (also fixed by the government). Changes in the first grade (currently set at BLR 35,000/month) automatically affect other grade levels. The tendency of the system toward compression of wages is somewhat mitigated by bonuses and other payments that employees receive, which can compose up to 30 percent of wages (ILO, 2004).⁹

10. **The unemployment insurance scheme is not particularly generous.** The statutory duration of benefits is about one half year, but benefits are capped. Guided by the 1999 Law

⁸ Other factors, such as the housing market, transportation infrastructure, legal framework, are also crucial for explaining cross-country differences in labor-market performance among countries of Central and Eastern Europe (Svejnar, 2002).

⁹ Pastore and Verashchagina (2003) examine the distribution of wages in Belarus and finds that, despite the slow pace of reforms, the wage distribution is increasingly rewarding higher skills (especially education). Although the returns to schooling are much lower than in market and most transition economies, the wage gap between workers at the top and at the bottom end of the educational distribution is sizeable and increasing.

on Employment (and amendments), the scheme entitles the unemployed to the following forms of compensation:

- Employees released because of liquidation of the enterprise or staff retrenchment receive as a minimum three months of salary as a severance payment;
- For the unemployed, benefits are set at 70 percent of the average wage during the first 13 weeks of unemployment and at 50 percent during the next 13 weeks. Moreover, the benefit cannot be lower than the minimum wage and cannot be higher than two times the minimum wage; and
- Allowances for the unemployed during professional training are set at 50–75 percent of the average wage.

11. The take-up rate of unemployment benefits is fairly low, probably because of the low benefit level. In all but one region, the share of the unemployed receiving benefits is less than 50 percent, and in the capital the figure is less than 30 percent (Table 3). With the benefits-to-average-wage replacement ratio at about 10 percent, unemployment benefits in Belarus are low, especially in comparison with Central and Eastern European countries. Such low benefits do not ensure attainment of minimal living standards, and contribute to low registered unemployment. At the same time, from the standpoint of labor market flexibility and incentives of the unemployed to search for jobs, they do not constitute a hindrance.

						Minsk-		
	Total	Brest	Vitebsk	Gomel	Grodno	city	Minsk	Mogilev
Unemployed (thousands)	136.1	23.5	22.5	23.3	15.1	15.2	18.6	17.9
Receiving unemployment								
benefits (thousands)	61.9	11.1	11.0	9.8	7.7	4.1	9.2	8.8
(in percent of								
unemployed)	45.4	47.1	49.0	42.2	50.8	27.3	49.1	48.8
Ave. wage (thous. BYR)	235.5	220.3	230.7	244.3	227.2	338.1	252.9	219.0
Ave. benefit (thous. BYR)	24.7	21.3	25.4	24.9	22.3	22.1	26.0	30.1
(in percent of ave. wage)	10.5	9.7	11.0	10.2	9.8	6.5	10.3	13.8

Table 3. Unemployment Benefits, by Regions

12. The level of employment protection in Belarus is high, owing mainly to limited progress with enterprise restructuring and market-oriented reforms. Hiring flexibility (the availability of part-time and fixed-term contracts) is limited by the Labor Code (1999), which stipulates that fixed-term contracts should be signed only when open-ended contracts are not suitable. Flexibility of firing (grounds for dismissal, notice period, and severance payment) is also low. While a two-month notification period, and severance payments of three months of wages, are in line with provisions in other countries, workers in the public sector can be fired only in a narrow set of circumstances. These include liquidation of the enterprise, consistent failure of an employee to fulfill working duties, alcoholism, etc. Consequently, on average almost 80 percent of job separations in 2003 occurred either at the request of the employee or through an agreement between the employer and the employee (Table 4).

	Hiring	g Separations						
			Voluntary or					
			by In p					
		Total	agreement	total				
Total	784.6	825.1	653.3	79.2				
Industry	183.7	214.3	149.6	69.8				
Agriculture	92.7	114.2	97.1	85.1				
Construction	104.6	98.9	76.4	77.2				
Services	403.6	397.7	330.2	83.0				

Table 4. Job Turnover, by Sectors, in Thousands January–September 2003

13. **Belarusian employment rules are comparatively restrictive.** Using the methodology and data of Botero and others (2003) the World Bank (2003) has quantified the government regulations in the areas of employment laws and constructed a Hiring and Firing Index.¹⁰ These indices suggest that both hiring and firing protection laws in Belarus are among the most restrictive in the CIS and the EU accession countries (Figure 5).

C. Conclusions

14. Since Belarus is still at an early stage of transition from a centrally planned to a market economy, it can draw on the extensive reform experience of other countries. In the area of labor markets, one important lesson from the EU and EU accession countries is that unemployment is, to a large extent, a regional problem that calls for introducing greater labor market flexibility and creating a supportive business environment in the affected regions. Another lesson from transition economies is that labor-market institutions contribute to different unemployment and wage paths. Specifically, higher unemployment benefits and minimum wages have led to higher wages and lower employment in Central and Eastern Europe and the Baltics than in the CIS, especially during the early stages of transition.

15. An immediate policy concern for the Belarusian government is to ensure that labor market institutions facilitate the reallocation of workers across sectors and regions, while minimizing social costs. Overall, in their present form, labor-market institutions in Belarus are highly rigid and seem to hinder rather than support the transition process. At the same time, the social safety net is outdated, costly and does not provide adequate income support to the poorest of the unemployed. The government thus faces the challenge of launching a labor-market reform that would provide adequate protection for workers as well as design incentives for the unemployed to search for new jobs.

¹⁰ The flexibility of hiring index covers the availability of the part-time and fixed-term contracts. The flexibility of firing covers workers' legal protections against dismissal, including grounds for dismissal, notice period, and severance payment. Each index takes values between 0 and 100, with higher values implying greater regulation.



Flexibility of Hiring in CIS countries

Figure 5. Flexibility of Hiring and Firing 1/

Flexibility of Hiring in EU Accession Countries



Flexibility of Firing in CIS countries







Source: World Bank.

References

- Botero, Juan, and others (2003), "The Regulation of Labor," National Bureau of Economic Research Working Paper 9756.
- Haiduk, Kiryl, and others (2004), "Belarusian Economy at a Crossroad," International Labor Office, Moscow (forthcoming).
- International Monetary Fund (2003), "Republic of Estonia: Selected Issues and Statistical Appendix," IMF Country Report No. 03/331.
- Pastore, Francesco and Verashchagina, Alina (2002), "The Distribution of Wages in Belarus," draft.
- Raiser, Martin; Schaffer, Mark and Schuchhardt, Johannes (2003), "Benchmarking Structural Change in Transition," European Bank for Reconstruction and Development Working Paper No. 79.
- Svejnar, Jan (2002), "Labor Market Flexibility in Central and Eastern Europe," William Davidson Institute Working Paper No. 496.
- World Bank (2003), Doing Business in 2004: Understanding Regulation, Washington, D.C.: Oxford UP (<u>http://rru.worldbank.org/doingbusiness</u>).

II. TAX REFORM IN BELARUS¹¹

- 15 -

1. The comparatively large size of government in Belarus may not be compatible with the authorities' objective of securing rapid economic growth. This chapter examines the current status of the tax system in Belarus and assesses recent efforts to reform it. The chapter argues that the current tax system in Belarus is distortionary, and that it weakens the competitiveness of the economy. The tax system could be improved by abolishing some inefficient taxes, simplifying others, eliminating exemptions and privileges, and in some cases lowering rates. However, broader fiscal reform is needed to support the tax reform. Section A discusses the current status of the tax system in Belarus; section B suggests ways to improve the design of the tax system in the context of the broader reform agenda; and section C concludes.

A. Overview of the Tax System in Belarus

Revenue performance

2. Since independence, Belarus has maintained revenue collection at levels close to those of Soviet times, avoiding in the process the sharp revenue decline characteristic of most countries in the initial transition period. However, it also reflected the pattern of general economic transition and delay in reforms of a predominantly state-owned economy. Relatively high levels of tax collection also removed the need to reform public expenditures.

3. The ratio of general government revenue to GDP in Belarus is the highest among the CIS countries. At around 45 percent of GDP on average in 1999–2003 (Table 1), it is also very high when compared with most other transition economies with a similar level of income. Tax revenue—including the taxes of the social protection fund and several other earmarked budget funds—averages almost 43 percent of GDP. Some off-budget funds, such as innovation funds, are not included in general government revenue, but are estimated at about 2 percent of GDP.

4. **Changes in the structure of taxes in recent years have reflected the worsening financial situation of the enterprise sector**. In particular, weak performance of enterprise profit taxes has been compensated by stronger performance of both taxes on labor and of indirect taxes. The favorable performance of taxes on labor has reflected repeated administrative increases in wages, as well as social protection fund contributions (also a tax on labor), while weak profit taxes resulted from the worsening enterprise finances. (The number of loss making firms has fluctuated between one third and one half of industry for several years.)

¹¹ Prepared by Veronica Bacalu

	1999	2000	2001	2002	2003
Total General government revenue	45.3	45.8	44.9	42.8	44.7
Total tax revenue 1/	43.0	44.2	43.3	41.3	42.9
State (Republican and local) budget revenue	34.8	34.8	33.4	31.4	33.8
Current revenue	28.6	27.9	26.9	25.4	27.6
Current tax revenue	26.6	26.7	25.6	24.0	26.0
Direct taxes on income and profits, o/w	7.8	7.9	7.7	6.4	6.6
Personal income tax	3.0	3.0	3.1	3.0	2.9
Profit tax	4.7	4.3	3.7	2.5	2.6
Taxes on wage fund	1.6	0.8	0.9	0.8	0.8
Taxes on goods and services, o/w	14.0	14.6	13.3	12.7	13.5
VAT	8.7	9.0	8.4	8.3	8.1
Excises	3.3	2.8	2.6	2.3	2.3
Property tax	0.6	1.0	1.4	1.5	2.0
Customs duties	1.9	1.6	1.7	2.0	2.7
Other	0.7	0.8	0.6	0.5	0.5
Non-tax revenue	2.0	1.2	1.3	1.5	1.7
Capital revenue and transfers	0.3	0.4	0.3	0.1	0.1
Revenue of budgetary funds	5.8	6.5	6.0	5.6	6.0
Social Protection Fund revenue	10.5	11.1	11.5	11.4	10.8

Belarus: General Government Revenue, 1999-2003 (in percent of GDP, unless otherwise indicated)

1/ Including budget earmarked funds and not including innovation funds.

Source: Ministry of Finance, SPF, and IMF staff estimates.

Current status of the tax system

5. **Belarus has undertaken several important tax reforms in the past decade.** These include introducing the credit-method VAT, improving the excise tax law, simplifying the corporate income tax, and strengthening tax administration. Current tax legislation is comprised of laws, presidential edicts and decrees, government resolutions, and instructions related to different types of taxes and their application.¹² Unlike many countries in the region, tax compliance is satisfactory in Belarus; tax administration and enforcement are adequate.¹³

6. **To modernize the tax system, the authorities have been introducing a comprehensive tax code.** They are doing so in stages, beginning with the adoption of the general part of the tax code effective January 1, 2004. It unifies the concepts and definitions

¹² Chapter V of IMF Country Report 03/119 describes in detail the status of the tax system. With minor exceptions (noted in Box 1 of this chapter), the tax system is largely unchanged since then.

¹³ However, there is some evidence to suggest the grey economy in Belarus is rather large (Schneider, 2002), implying that tax administration may have room for improvement.

used across different pieces of legislation. It also creates the framework for the introduction of the special part of the tax code that will stipulate changes to laws governing individual taxes. While a draft of the special part was presented to the Council of Ministers in January 2004, its adoption is not expected soon. Moreover, some provisions of the general part are currently suspended as they contradict existing tax laws and regulations. It is expected that they will be enforced together with the special part of the tax code.

7. In the meantime, the authorities have implemented a number of changes to the existing tax system aimed at reducing the overall tax burden. The key change is a reduction in the standard VAT rate, meant to harmonize the rate with that applied in Russia (Box 1). According to the authorities, VAT revenue is expected to decline by about 1.3 percent of GDP in 2004.

Box 1. Tax Policy Changes in 2004

Effective January 1, 2004, the authorities introduced the following major changes to the existing tax legislation:

1. The maximum VAT rate was decreased from 20 percent to 18 percent. Zero rating for transit services (important for gas transit) was eliminated, increasing the rate to 18 percent. However, the preferential 10 percent VAT rate was not abolished, and its coverage (mainly in agriculture and in goods consumed by children) did not change.

2. The turnover tax burden was reduced from 4.5 percent to 4.15 percent. These turnover taxes are earmarked in the following way:

- 0.4 percent for special local housing-investment funds (down from 0.5 percent in 2003);
- 0.75 percent for the housing maintenance fund (down from 1 percent in 2003);
- two percent for the republican agriculture support fund (instead of one percent to the republican agriculture support fund and one percent to local agriculture support funds in 2003); and
- one percent for the road fund (unchanged).

3. The preferential profit tax rate of 15 percent for SMEs was abolished in favor of the standard rate of 24 percent. Exemptions granted to housing construction were also abolished.

4. Some preferences on the real estate tax were removed for scientific activities that are not financed by the budget.

5. A new tax on sales of gasoline and diesel fuel was introduced, not exceeding 10 percent.

8. The treatment of some components of the tax base in Belarus differs from that in most countries, and adds to the complexity of the system. Some provisions in the tax legislation in Belarus contribute to higher tax collections. For instance, business expenses face particularly restrictive treatment under the profit tax, as do capital expenditures under

the VAT. At the same time, other provisions, such as tax holidays for some categories of taxpayer and a number of individual concessions, offset these gains.

Taxes and growth

9. There is evidence to suggest that the structure of a country's tax system can have a significant influence on growth.¹⁴ Although the tax structure varies among countries depending on their level of income, tax policy can affect long-term growth performance by promoting neutrality, eliminating distortions, and contributing to physical and human capital accumulation. For example, emphasizing taxation of consumption relative to labor and capital could be supportive of growth, insofar as it shifts the tax incidence away from investment and employment.

10. The economic structure of taxes in Belarus has been relatively stable in

1999–2003, with taxes on labor continuously playing a significant role. The hike in the incidence of taxes on labor during 2001 and 2002 reflects high administrative increases in wages at that time. The increase in the share of capitalrelated taxes in 2003 is mainly due to the relatively strong performance of the property tax.

Belarus: Tax Structure in 1999-2003 (in percent of total)

	1000	2000	2001	2002	2002
	1999	2000	2001	2002	2003
Consumption	33	33	31	31	31
Labor	35	34	36	37	34
Capital	19	19	19	19	21
Turnover taxes 1/	14	15	14	14	14

Source: Ministry of Finance, SPF, and staff estimates 1/ Turnover taxes are levied on consumption or capital, depending on the taxpayer's nature of business.

11. The Belarusian tax system is characterized by several types of taxes that have generally been abolished in neighboring transition countries. In addition to turnover taxes, these include the emergency payroll tax and a number of extrabudgetary innovation funds (with rates from 0.25 percent to 20 percent of production costs). These levies add to the overall tax burden, undermining enterprise finances and discouraging investment.

12. **Many Belarusian tax policies and their application are highly distortionary.** The rates for some taxes, including in particular the profit tax, are differentiated among different sectors or enterprises depending on their profitability or social importance. As a result, the better performers pay higher tax rates than poor performers, distorting incentives for improving efficiency and, hence, the allocation of capital. Turnover taxes are very problematic as well.¹⁵ Another highly distortionary element is tolerance by the state of different types of tax arrears and non-payment. Tax exemptions, deferrals, rescheduling, and

¹⁴ Ebrill (1999), Mitra and Stern (2002).

¹⁵ In a survey (Rakova, 2003), respondents identified turnover taxes as one of the most problematic aspects of the tax system, followed by the profits tax, social security contributions, and local taxes.

forgiveness applied to individual enterprises or whole sectors (for example, agricultural production) are widespread.¹⁶ As of end-2003, tax exemptions and deferrals reportedly amounted to Blr 588 billion (1.6 percent of GDP), including Blr 226 billion (0.6 percent of GDP) in deferred taxes. In addition, at end-2003, tax arrears equaled Blr 456 billion (1.3 percent of GDP), including Blr 206 billion (0.6 percent of GDP) in arrears to the Social Protection Fund.

13. **Instability of the legal system in Belarus contributes to the distortionary character of tax policy**, as firms' ability to plan their activity is undermined. Moreover, instability in the tax system results in high compliance costs, as enterprises continually need to keep up with changing and complex tax legislation by hiring accountants, consultants, and lawyers. This burden is particularly important for small and medium-sized enterprises (SMEs).

14. **Finally, widespread use of quasi-fiscal activities in Belarus effectively adds to the tax burden on enterprises**. Besides the taxes officially levied by the state, many enterprises—both public and private—are required to participate in a variety of activities in the interest of the state. For example, these activities include (but are not limited to) the following:¹⁷

- Enterprises are required to maintain on their balances units that provide social services, including housing, childcare and medical services;
- Oil refineries have been instructed to provide energy resources to agricultural enterprises for the sowing and harvesting campaigns; and
- Some ministries and departments assess fees and levies for their services that are not recorded in the budget.

Harmonization with Russia

15. **Belarus is seeking to harmonize its tax policy with that of Russia** in the context of a broader agreement on creation of a currency union, and possibly a union state. The Belarusian authorities acknowledge the need to reduce the tax burden to improve the competitiveness of the Belarusian economy relative to that of Russia, where significant tax reforms have been introduced, including by lowering nominal rates, broadening tax bases, and simplifying the tax system.

¹⁶ For example, the Presidential Decree #138 of March 22, 2004 granted agricultural enterprises debt rescheduling for all debts, including tax arrears, till 2009.

¹⁷ World Bank (2003).



16. **However, to date, tax harmonization has not progressed very far.** In August 2000, Russia and Belarus agreed on a process to create a body of unified tax legislation. The action plan adopted at that time envisaged convergence of the list of taxes, unification of tax principles and definitions and introduction of a unified tax code. However, implementation of this plan has been delayed. While favorable oil prices have facilitated the implementation of sweeping tax and fiscal reforms in Russia, lack of structural reform and high expenditure commitments have left Belarus lagging behind in most areas.

17. The Russian tax system relies relatively more on direct taxes, while Belarus depends more on payroll and turnover taxes. Russia has introduced a flat 13 percent rate on personal income tax, while in Belarus, PIT rates range from 9 percent to 30 percent. Excise tax rates differ for some goods, but import and export duties have broadly been harmonized. Turnover taxes and innovation funds do not exist in Russia. Moreover, Russia has moved to the destination principle for assessing VAT liability in trade with all CIS countries except Belarus, though discussions are now underway on shifting to the destination principle (except for energy) between Belarus and Russia as well. To support the competitiveness of Belarusian goods, the authorities have granted tax privileges to Belarusian enterprises and sectors of the economy.



Tax structures in Belarus and Russia, 1999-2003 (in percent of total tax revenue)

B. Tax Reform Challenges in Belarus

18. The authorities in Belarus hope to promote rapid economic growth and to level the playing field in trade with Russia by introducing a number of tax reforms, mainly in the context of the specific part of the tax code. Currently, the tax burden in Belarus seems excessive by comparison with other transition countries (Box 2). The main priorities are to decrease the tax burden by lowering rates and abolishing some taxes, while expanding the tax base by eliminating ad hoc concessions and exemptions. In particular, tax accounting of expenses, depreciation, and capital spending needs to be brought in line with international practice. Taxes that rely on tax bases largely overlapping with those of internationally accepted taxes (mainly turnover and some payroll taxes), should be abolished. Finally, simplifying the tax system and reducing the number of taxes would reduce compliance costs.

19. **Priority steps to improve individual taxes in Belarus include the following**:

- *Turnover taxes* and taxes for *innovation funds* should be repealed, albeit phased over a reasonable time period in order to introduce measures to offset the revenue loss;
- *Excise tax* rates on a number of commodities (including alcohol, tobacco and fuel) should be increased for revenue and social policy considerations. In most cases, ad valorem rates should replace the existing specific rates;

Box 2. How Large Should the Tax Burden Be for Transition Countries?

A recent World Bank paper argues that transition economies should target tax revenues at about 22 percent to 31 percent of GDP, depending on the country's stage of development. For most countries, the paper recommends an increase in the share of direct taxes, especially of personal income taxes, and in most cases a cut in high marginal tax rates, elimination of tax exemptions, and simplification of tax systems. The suggested benchmark structure is based on broad efficiency considerations and consistency with the structure of public expenditure for countries at comparable income levels.

	Base, percent of GDP	Rate, percent	Yield, percent of GDP
Total tax revenue			22-31
VAT	40-60	12-22	6-7 ^{1/}
Income tax	25-45	20-25	6-9
Social Security contribution	20-50	20-30	6-10
Excises (tobacco, alcohol, petroleum)			2-3
Other taxes (trade, property, etc.)			2

- **Corporate income tax** rates should be unified, with the possible exception of those applying to SMEs. Tax holidays and reduced rates for specific enterprises or sectors should be eliminated, including for the free economic zones. Accounting for tax and balance sheet purposes should be reconciled. Special relief for reinvested profits should be replaced by improved provisions for depreciation. Discretionary disallowances for some business expenditures should be reviewed, taking international practice into consideration. The treatment of losses should be harmonized with international practice by allowing them to be carried forward against future profits;
- The reduced *VAT* rate and exemptions for education, medical services, religious activities, banking and financial services, and gambling should be eliminated on grounds of simplicity and transparency. VAT refunds should be paid in full on fixed and intangible assets (rather than spreading refunds over 12 months, as at present). The accrual method of VAT accounting is recommended for both purchases and sales of goods. Special rules that presently govern the prices used for assessing VAT liability should be reviewed; and
- *Personal income tax* rates could be reduced from the current five-rate structure to two brackets, since the overwhelming majority of taxpayers (around 99 percent in 2001) pays the basic rate of 9 percent. At the same time, the base rate could be

increased modestly to reduce disparities between the corporate and personal income taxes.

20. Measures to offset the revenue loss because of rate cuts and elimination of certain taxes are crucial for the success of the proposed tax reform. These measures could include streamlining public expenditures, abolishing many quasi-fiscal activities, and improving tax administration still further. In the medium term, social security and public administration reforms need to be undertaken to make the overall fiscal stance sustainable.

C. Conclusions

21. The tax burden is relatively high in Belarus, undermining the authorities' objective of rapid economic growth. In addition, the tax system is overly complex, meaning that compliance costs are high, further undermining competitiveness. Tax reform is needed in the context of broader structural reforms to improve the business environment, reduce pressure on enterprise finances and encourage investment. However, significant expenditure rationalization will be needed in order to finance reduction in the tax burden.

References

- Ebrill, Liam, and others, 1999, "Tax reform in the Baltics, Russia, and other countries of the Former Soviet Union," IMF Occasional Paper No.182, Washington D.C.: International Monetary Fund.
- IMF, 1994–2004, "Staff Reports" and "Selected Issues" on countries of the Former Soviet Union, Washington D.C.: International Monetary Fund.
- Lorie, H., 2003, "Priorities for further fiscal reforms in the CIS," IMF Working Paper/03/209, Washington D.C.: International Monetary Fund.
- Mitra, Pradeep, and Nicholas Stern, 2002, "Tax Systems in Transition," Washington D.C.: World Bank.
- Rakova, Elena, 2003, "Problemy i perspektivy razvitiia malogo i srednego priedprinimatel'stva v Belorussii," mimeo, Institute of Privatization and Management (www.ipm.by).
- Schneider, Friedrich, 2002, "Size and Measurement of the Informal Economy in 110 Countries Around the World," World Bank (http://rru.worldbank.org/documents/informal-economy.pdf).
- Shome, P., and IMF, 1995, "Tax policy handbook," Washington D.C.: International Monetary Fund, Fiscal Affairs Department.
- Tanzi, Vito, and Howell Zee, 2000, "Tax policy for emerging markets: Developing countries," IMF Working Paper/00/35, Washington D.C.: International Monetary Fund.
- World Bank, 2003, "Belarus: Strengthening Public Resource Management," Report No. 26041-BY.

III. ESTIMATES OF EXCHANGE RATE PASS-THROUGH¹⁸

1. Although Belarus formally has a crawling band exchange rate regime defined against the Russian ruble, in practice the authorities have usually targeted the U.S. dollar rate, arguing that dollarization is high and the pass-through effect to prices is significant. This chapter provides preliminary estimates of the pass-through from the nominal exchange rate (for the dollar and the ruble) to inflation in Belarus. The main results are:

- The nominal exchange rate pass-through to headline inflation is estimated at around 0.4 percent from the dollar and 0.3 percent for the ruble for a one percent change in the exchange rate, and is much higher for producer price inflation, and
- Half of the exchange rate change is transmitted to prices within the first two quarters, and the impact effect of depreciation (felt within one quarter) is relatively high (about 0.2 percentage points).

A. Background

2. **The pass-through effect normally operates through three basic channels**: (i) the direct effect through prices of imported goods in the CPI; (ii) the indirect effect through prices of imported intermediate goods; and (iii) the effect through expectations, including also the expected response of monetary policy.

3. Several characteristics of the Belarusian economy suggest that the pass-through effect will be significant: (i) the high degree of openness of the economy; (ii) the high degree of dollarization; and (iii) the relatively low credibility of monetary policy, given that Belarus has had the highest inflation in the region for about five years. Indeed, the pass-through effect tends to be higher during high inflation periods. At the same time, the pass-through effect could be mitigated by several factors: (i) the influence of price controls; (ii) the fact that the high openness ratio predominantly reflects transit activities; and (iii) the possibility that dollarization in Belarus is limited to asset dollarization (i.e., prices are generally not fixed in dollars¹⁹).

4. **The exchange rate regime is also conducive to a strong pass-through effect.** Exchange rate unification was achieved in October 2000, and the authorities employ a crawling band regime defined in de facto terms against the dollar. By using the exchange rate to anchor expectations, the authorities have gradually brought inflation down to moderate levels.

¹⁸ Prepared by Jérôme Vacher.

¹⁹ However, there is anecdotal evidence that dollars are used for transaction purposes, at least for large transactions (apartments, automobiles).

Exchange rate pass-through is high in Russia.²⁰ The nominal exchange rate pass-5. through is estimated at between 0.5–0.7 percentage points for a 1 percent change in the exchange rate, and is transmitted within roughly two to three quarter. The impact effect of depreciation on inflation is (within one quarter) also relatively high (about 0.3 percentage points). It takes roughly three quarters for approximately 60 percent of the shock from the nominal exchange rate to inflation to be absorbed.









²⁰ See Stavrev (2003).

6. **The nominal exchange rate is highly correlated with inflation in tradable goods prices, producer prices and headline inflation.** As expected, the correlation is the lowest with services price inflation (Table 1). The correlation is much stronger with the US dollar than with the Russian ruble, and seems to have increased since October 2000. However, differences between the correlations with the Russian ruble and the US dollar have narrowed, as have those with the nominal exchange rate and producer price inflation.

	BYR/USD exchange rate	BYR/USD exchange rate (-1)	BYR/USD exchange rate (-3)	BYR/RUR exchange rate	BYR/RUR exchange rate (-1)	BYR/RUR exchange rate (-3)	Headline inflation	Producer Price Inflation	Inflation in food items	Inflation in non food items	Inflation in services
BYR/USD exchange rate	1.00	0.46	0.74	0.75	0.37	0.67	0.69	0.38	0.66	0.58	0.32
rate (-1) BYR/USD exchange	0.58	1.00	0.67	0.27	0.95	0.66	0.51	0.44	0.42	0.80	0.29
rate (-3) BYR/RUR exchange	0.41	0.45	1.00	0.65	0.65	0.98	0.54	0.49	0.48	0.77	0.25
rate BYR/RUR exchange	0.75	0.32	0.37	1.00	0.28	0.62	0.44	0.20	0.49	0.35	0.06
rate (-1) BYR/RUR exchange	0.39	0.74	0.34	0.40	1.00	0.66	0.40	0.38	0.34	0.75	0.17
rate (-3) Headline inflation	0.02	0.10	0.32	0.12	0.10	1.00	0.49	0.48	0.44	0.77	0.19
Producer Price	0.59	0.47	0.36	0.26	0.05	-0.08	0.82	1.00	0.94	0.32	0.36
Inflation in food items	0.60	0.48	0.37	0.29	0.05	-0.06	0.98	0.81	1.00	0.43	0.26
Inflation in non food items Inflation in services	0.47	0.44	0.29	0.09	-0.10	-0.05	0.89	0.73	0.83	1.00	0.19
initiation in services	0.26	0.19	0.20	0.17	0.04	-0.10	0.57	0.45	0.40	0.48	1.00

Table 1: Correlations Between the Nominal Exchange Rate and Different Measures of Inflation (monthly data)

1/ Below the diagonal: Jan.95-Dec.03; above the diagonal: Oct.00-Dec.03

B. Methodology

7. Vector auto-regressions (VARs) are estimated to assess exchange rate passthrough coefficients from the US dollar and the Russian ruble, and the speed of exchange rate pass-through in Belarus. The period covered is 1996–2003. The following endogenous variables are used: (i) seasonally-adjusted inflation (CPI and PPI); (ii) seasonally-adjusted broad money; and (iii) exchange rates (USD and RUR). We focus on bilateral rates rather than the nominal effective exchange rate for two reasons:

• in order to gain a better understanding of the respective roles of the dollar and the ruble in an economy that is highly dollarized, but in which most external transactions take place with Russia; and

• because available nominal effective exchange rate data reflect official exchange rates during the early part of the period (though parallel market rates were in existence until late 2000).

Exogenous variables should represent two types of shocks: supply shocks and demand shocks. Supply shocks are usually proxied by oil prices or commodities prices, and we take the IMF all-commodities index as a proxy. Demand shocks are usually proxied by industrial production or by the output gap. In the case of Belarus, national accounts data are problematic, hence we use wages as an indicator of demand shocks, as in other transition countries.²¹ After proceeding with augmented Dickey-Fuller tests, we use first differences of log-transformed levels to achieve stationarity of the series. Pass-through coefficients are estimated by using impulse responses in VAR (Lehigh and Rossi, 2001, Belaisch, 2003, Gueorguiev, 2003). The exchange rate pass-through coefficient can be estimated by dividing coefficients on the inflation response to exchange rate by exchange rate responses to the exchange rate.



8. The estimates take into account the prevailing parallel market exchange rates for the period until October 2000. We also allow for a break in the series at that point. First, we use a subsample starting in October 2000 to estimate exchange rate pass-through effect after exchange rate unification; second, we use parallel exchange rates in the period prior to exchange rate unification.

9. **In addition to CPI and PPI, we use median-core inflation in our sample.** The most common measure of core inflation simply excludes food and energy prices from the headline inflation rate. Another measure is median-core inflation.²² Median-core inflation,

²¹ See Gueorguiev (2003).

²² See chapter III of IMF Country Report No. 03/119.

based on median price change in the cross section of commodities contained in the CPI basket, measures the price change of a typical commodity.

C. VAR Results

Exchange rate pass-through to the CPI is high—about twice the level that is typically estimated in industrial countries. However, it is not significantly different from the pass-through coefficients in Russia, and is also very close to results obtained for Romania. For a one percent change in the dollar exchange rate, about 0.4 percent is transmitted to prices (Table 2). The exchange pass-through coefficient with the ruble is, as expected, lower than that with the dollar. Given the persistent macroeconomic instability in Belarus, one might have expected an even higher pass-through coefficient. However, the widespread use of price controls during most of the period may offer an explanation for these estimates.²³

	USD parallel*	USD parallel*	RUR parallel*	RUR parallel*	USD	RUR
	1996:02-2003:09	1996:02-2003:09	1996:02-2003:09	1996:02-2003:09	2000:10-2003:09	2000:10-2003:09
Months	CPI	PPI	CPI	PPI	Core inflation	Core inflation
1	0	0	0	0	0	0
2	0.069	0.092	0.084	0.163	0.088	0.111
3	0.133	0.169	0.170	0.371	0.142	0.142
4	0.189	0.240	0.204	0.469	0.168	0.183
5	0.237	0.303	0.223	0.541	0.185	0.199
6	0.275	0.357	0.240	0.620	0.203	0.219
7	0.305	0.401	0.249	0.682	0.216	0.234
8	0.328	0.437	0.253	0.725	0.224	0.243
9	0.345	0.466	0.255	0.759	0.231	0.251
10	0.356	0.489	0.256	0.787	0.237	0.257
11	0.364	0.506	0.257	0.808	0.241	0.262
12	0.369	0.520	0.257	0.824	0.244	0.266
13	0.372	0.531	0.257	0.836	0.246	0.268
14	0.374	0.539	0.257	0.845	0.248	0.271
15	0.375	0.545	0.257	0.853	0.250	0.272
16	0.375	0.550	0.257	0.858	0.251	0.274
17	0.376	0.554	0.257	0.863	0.252	0.275
18	0.376	0.557	0.257	0.866	0.253	0.275
19	0.376	0.559	0.257	0.868	0.253	0.276
20	0.376	0.560	0.257	0.870	0.254	0.276
21	0.375	0.562	0.257	0.872	0.254	0.277
22	0.375	0.563	0.257	0.873	0.254	0.277
23	0.375	0.563	0.257	0.874	0.254	0.277
24	0.375	0.564	0.257	0.874	0.254	0.277

Table 2: Belarus: Exchange Rate Pass-Through Coefficients

* Using parallel market exchange rates prior to October 2000.

²³ Econometric results are provided in tables 3 and 4 and the associated figures.

10. **Exchange rate pass-through has been both fast and long lasting in Belarus**. As in Russia, the impact on prices is felt mostly in the first three months. About half of the shock is transmitted within the first two quarters. However, the effects of the exchange rate on inflation seem to be longer lasting in Belarus.

11. **Exchange rate pass-through to the PPI is high, and is stronger with the Russian ruble than with the dollar**. As in other countries, the exchange rate pass-through to producer price inflation is higher than with the CPI. But the influence of the ruble reflects Russia's importance in Belarusian foreign trade.

12. Since October 2000, exchange rate pass-through to core inflation has been significant. Although caution should be applied to VARs performed on a short sample, these estimates indicate that more than a quarter of exchange rate shocks are transmitted through core inflation.

13. Variance decomposition also shows a significant effect of exchange rate changes on inflation volatility. Inflation dynamics remain dominated by past inflation, but dollar exchange rate changes have a significant role and more so than in Russia for instance.

D. Conclusion

14. **The estimates presented in this chapter are preliminary**. In particular, persistent macroeconomic instability, the short sample and the use of parallel market exchange rates suggest that the results should be interpreted with caution. For the more recent period, use of core inflation to estimate exchange rate pass-through coefficients is another reason to consider the results preliminary.

15. Nevertheless, these results suggest that exchange rate pass-through is significant in Belarus. Notably, the estimates show the impact of dollarization on inflation in Belarus. Despite strong economic links with Russia, inflation is significantly influenced by the exchange rate vis-à-vis the dollar, rather than the ruble, a fact that could be taken into account in the conduct of exchange rate policy in Belarus.



CPI: Responses to Cholesky One Standard Deviation Innovations +/- 2 Standard Errors

Core inflation: Responses to Cholesky One Standard Deviation Innovations +/- 2 Standard Errors



USD equation

Response of CORE INFLATION to CORE INFLATION



Response of CORE INFLATION to BROAD MONEY





Response of CORE INFLATION to RUR















RUR equation

20

20

20

Sample(adjusted): 1996:02 Included observations: 92 Standard errors in () & t-s	2 2003:09 after adjusting statistics in []	endpoints	
	СРІ	USD	BROAD MONEY
CPI (-1)	0.837759	1.010219	0.459336
	(0.11547)	(0.68267)	(0.21771)
	[7.25503]	[1.47980]	[2.10987]
CPI(-2)	-0.096044	-0.650414	-0.052600
	(0.10176)	(0.60160)	(0.19185)
	[-0.94383]	[-1.08115]	[-0.27417]
USD (-1)	0.092912	0.346756	-0.004178
	(0.01926)	(0.11388)	(0.03632)
	[4.82351]	[3.04498]	[-0.11505]
USD(-2)	0.009064	0.031938	0.011259
	(0.02250)	(0.13302)	(0.04242)
	[0.40283]	[0.24009]	[0.26540]
BROAD MONEY(-1)	-0.047421	-0.544244	-0.142379
	(0.06042)	(0.35718)	(0.11391)
	[-0.78489]	[-1.52371]	[-1.24995]
BROAD MONEY(-2)	0.014140	-0.017178	0.015558
	(0.03898)	(0.23044)	(0.07349)
	[0.36277]	[-0.07454]	[0.21170]
С	0.005632	0.043464	0.042178
	(0.00370)	(0.02187)	(0.00698)
	[1.52234]	[1.98716]	[6.04670]
WAGES	0.060810	0.091044	0.038874
	(0.03012)	(0.17809)	(0.05679)
	[2.01868]	[0.51123]	[0.68448]
COMMODITIES	0.030472	0.069328	0.138989
	(0.03810)	(0.22524)	(0.07183)
	[0.79983]	[0.30780]	[1.93497]
R-squared Adj. R-squared Sum sq. resids S.E. equation F-statistic Log likelihood	0.866146 0.853244 0.020045 0.015541 67.13454 257.3089	0.234657 0.160889 0.700608 0.091875 3.181006 93.82703	0.303034 0.235856 0.071253 0.029300 4.510947 198.9698 4.120770
Akatke AIC	-5.398020	-1.844066	-4.129779
Schwarz SC	-5.151323	-1.597369	-3.883082
Mean dependent	0.051068	0.056027	0.058451
S.D. dependent	0.040567	0.100297	0.033518
Determinant Residual Covaria Log Likelihood (d.f. adjusted) Akaike Information Criteria Schwarz Criteria	ince	1.52E-09 542.5294 -11.20716 -10.46707	

Table 3. Vector Autoregression Estimates for US dollar

	СРІ	RUR	BROAD MONEY
CPI (-1)	1.104610	1.597873	0.450076
	(0.10491)	(0.44306)	(0.18548)
	[10.5288]	[3.60642]	[2.42650]
CPI (-2)	-0.280239	-1.474649	-0.038606
	(0.10500)	(0.44345)	(0.18564)
	[-2.66885]	[-3.32543]	[-0.20796]
RUR (-1)	0.080141	-0.074921	0.001862
	(0.02415)	(0.10198)	(0.04269)
	[3.31887]	[-0.73470]	[0.04362]
RUR (-2)	-0.023125	-0.277869	0.024323
	(0.02571)	(0.10856)	(0.04545)
	[-0.89958]	[-2.55949]	[0.53517]
BROAD MONEY (-1)	-0.071837	-0.180983	-0.141902
	(0.06409)	(0.27065)	(0.11330)
	[-1.12094]	[-0.66871]	[-1.25241]
BROAD MONEY (-2)	0.004008	0.149759	0.013278
	(0.04147)	(0.17512)	(0.07331)
	[0.09666]	[0.85520]	[0.18112]
С	0.005740	0.032281	0.041648
	(0.00398)	(0.01682)	(0.00704)
	[1.44114]	[1.91915]	[5.91462]
WAGES	0.083382	0.195743	0.036344
	(0.03238)	(0.13676)	(0.05725)
	[2.57475]	[1.43124]	[0.63477]
COMMODITIES	0.014593	-0.054568	0.139471
	(0.03941)	(0.16644)	(0.06968)
	[0.37026]	[-0.32785]	[2.00162]
R-squared	0.848167	0.180104	0.304806
Auj. K-squared	0.833333	0.101078	0.237799
S E equation	0.016551	0.069899	0.029262
F-statistic	57.95686	2.279041	4.548890
Log likelihood	251.5118	118.9783	199.0869
Akaike AIC	-5.271995	-2.390833	-4.132325
Schwarz SC	-5.025298	-2.144136	-3.885628
Mean dependent	0.051068	0.035621	0.058451
S.D. dependent	0.040567	0.073724	0.033518
Log Likelihood (d f adjusted)	ance	1.07E-09 558 4860	
Akaike Information Criteria	,	-11.55404	
Q1 Q1 1		10 01205	

Table 4: Vector Autoregression Estimates for Russian ruble

References

- Belaisch, Agnes (2003), "Exchange Rate Pass-Through in Brazil," Working paper No. 03/141, Washington DC: International Monetary Fund.
- Billmeier, Andreas, and Leo Bonato (2002), "Exchange Rate Pass-Through and Monetary Policy in Croatia," Working paper No. 02/109, Washington DC: International Monetary Fund.
- Gueorguiev, Nikolay (2003), "Exchange Rate Pass-Through in Romania," Working paper No.03/130, Washington DC: International Monetary Fund.
- Leig, Daniel and Rossi, Marco (2002), "Exchange Rate Pass-Through in Turkey," Working paper No. 02/204, Washington DC: International Monetary Fund.
- Stavrev, Emil (2003): "The Pass-Through from the Nominal Exchange Rate to Inflation," Chapter II of Russian Federation: Selected Issues, IMF Country Document No. 03/146, Washington DC: International Monetary Fund

IV. REFORMING THE BANKING SECTOR²⁴

1. **Banking sector vulnerability is a serious and possibly growing problem in Belarus.** The main issues are the high level of dollarization and asset quality that could well be impaired, given years of directed lending. A currency union with Russia, if established according to the agreed timetable (January 2005), would only increase the vulnerability of the system, as it would require tighter macroeconomic policies, stronger financial sector competition, and limited or no lender of last resort (LOLR) capabilities for the National Bank of Belarus (NBB).²⁵

2. The authorities have undertaken some important measures to reform the banking sector, but the process needs to be accelerated. During 2002–03, they have sought to increase capital requirements and improve banking supervision. However, it will also be important to eliminate directed credits, tighten prudential regulations, and level the playing field for state and nonstate banks. Nonviable banks should be closed as soon as possible whereas viable but undercapitalized banks should be required to come up with credible restructuring plans. While priority should be given to operational restructuring to stop losses from recurring, financial restructuring may become unavoidable. Measures should also be taken to improve the operational environment for banks. An FSAP is expected to be conducted in late 2004; in the mean time, this chapter provides an assessment of the priority areas for banking sector reform. Section A describes the banking system at present; section B summarizes several recent attempts to reform the system; and section C concludes by making preliminary suggestions regarding a more comprehensive reform program.

A. Current Situation

3. The banking sector remains relatively underdeveloped and heavily concentrated.

The ratios of M2/GDP and credit to the economy/GDP in Belarus are significantly lower than in advanced transition countries, while the spread between lending and deposit rates and the dollarization ratio are higher (Table 1). The largest six banks, five of which are largely state controlled, make up 85 percent of assets and 87 percent of total



²⁴ Prepared by Etibar Jafarov

²⁵ See Gulde, and others (2004).

capital of the banking system (Table 2).²⁶ The rest of the sector is highly fragmented.

4. **State intervention in the operational activities of both enterprises and banks is at the core of problems in the banking sector.** About 80 percent of GDP is produced in state enterprises. In the banking sector, at end-2003, the share of the government and the NBB in the capital of the banking system was 79 percent and 3 percent, respectively. Further, for some years the government has used the banking system to stimulate growth in particular sectors and to finance quasi-fiscal activities.²⁷ The four largest SCBs mainly service specific sectors and are often forced to lend without adequately measuring and pricing risk. In 2004, for example, the government has "recommended" that the six largest banks provide credits to specific investment projects amounting to more than 3 percent of GDP.²⁸ In addition, the authorities strongly influence interest rate decisions of commercial banks by "suggesting" deposit and loan interest rates. Very often banks are forced to restructure previous loans, which usually involve issuance of new government guarantees.²⁹ As a result, the financial situation of the SCBs is generally worse than that of the other commercial banks (Table 2).

5. **In turn, the SCBs have largely been shielded from competition.** The SCBs do not always comply with prudential regulations. Further, they have easy access to central bank and government resources, and often benefit from government guarantees for loans they extend. The SCBs enjoy state insurance on deposits of individuals, while the other banks do not have access to this facility.³⁰ In addition, Belarusbank and Belagroprombank regularly receive substantial capital injections from the government.³¹

²⁶ These include four state-controlled banks (SCBs)—Belarusbank, Belagroprombank, Belpromstroibank, and Belinvestbank—as well as Belvneshekonombank (in which the share of the public sector is less than 50 percent of capital), and Priorbank (a subsidiary of Raiffeisen Bank of Austria). Only these banks are "authorized" to carry out state programs.

²⁷ Belarus committed to abolishing directed credits under its 2001 SMP, but directed credits resumed in 2002 when banks were forced to restructure overdue loans to food processing companies and to finance payments for wage and energy arrears. This practice continued in 2003–04.

²⁸ See Government Resolution No. 152 of February 11, 2004 (<u>http://pravo.by/webnpa/text.asp?RN=c20400152</u>).

²⁹ The latest of these initiatives allows investors of loss making farms to defer repayment of bank debts of these enterprises for three years. See Presidential Ukaz No. 138 of March 19, 2004 (<u>http://pravo.by/webnpa/text.asp?RN=P30400138</u>).

³⁰ Belarusbank and Belagroprombank have an unlimited government guarantee on all household deposits, while the other authorized banks have unlimited government guarantees for household deposits in foreign currency and limited guarantees in national currency. Belarusbank and Belagroprombank do not pay premiums.

³¹ Most of these capital injections were made when the government converted into capital its claims on the banks (which arose when direct NBB credits to the budget were lent to the banks to finance housing construction).

	2000	2001	2002	2003
Monetization ratio (Domestic currency broad money/GDP)				
Belarus	6.8	7.3	7.6	9.5
Russia	15.7	17.9	19.6	24.1
Ukraine	14.6	18.2	23.2	28.5
South East European countries				
Central and Eastern European and Baltic countries				
Monetization ratio (Total broad money/GDP)				
Belarus	17.2	15.2	15.0	17.1
Russia	21.4	23.7	26.2	29.8
Ukraine	19.0	22.4	28.7	36.1
South East European countries	32.2	38.1	35.4	
Central and Eastern European and Baltic countries	45.5	48.1	49.3	
Credit to the economy as percent of GDP				
Belarus 1/	16.5	14.9	15.7	17.8
Russia	13.1	16.7	18.7	22.3
Ukraine	12.4	14.5	19.4	27.1
South East European countries 2/	17.5	18.3	19.2	
Central and Eastern European and Baltic countries 2/	29.9	30.1	31.4	
Spread between 3-month domestic currency deposit and lending rates				
Belarus	0.5	16.5	10.5	6.3
Russia	6.6	9.2	6.5	5.5
Ukraine	28.0	18.9	14.9	9.8
South East European countries	13.3	12.6	10.7	
Central and Eastern European and Baltic countries	6.0	5.4	5.3	
Dollarization ratio (Foreign currency deposits/total broad money)				
Belarus	59.8	52.0	49.0	44.2
Russia	26.9	24.5	25.4	18.9
Ukraine	23.2	18.9	19.3	21.0
South East European countries				
Central and Eastern European and Baltic countries				
Memorandum item:				
Asset share of state-owned banks				
Belarus	66.0	53.2	67.6	
Russia				
Ukraine	11.9	11.8		
South East European countries	45.3	38.8	29.9	
Central and Eastern European and Baltic countries	21.5	8.2	7.0	

 Table 1. Financial Intermediation Indicators for Belarus and Selected Countries, 1999-2002

 (In percent; end of period; unless otherwise specified)

Sources: Belarus authorities; EBRD Transition Report (2003), De Nicola et. al (2003); and IMF staff estimates.

1/ Includes credit to SOEs.

2/ Credit to the private sector only.

	Assets 1/	loans		Shareholde	rs' canital		Denosits	Profits	Return on	, INN		State n	rograms	Government
			Total (1)	by MOE (2)	by NBB (3)	(2) plus (3) (As share of (1))			Assets (In percent)	Million rubels	In percent of loans	Credits issued	Credits issued (In percent of loans)	guarantees issued
								Six Largest]	Banks					
2003	9,027,853	6,071,553	1,265,276	1,141,477	26,816	06	6,587,224	106,929	1.2	238,126	3.9	2,314,681	38	261,734
2002	5,705,503	3,727,232	670,917	578,107	25,474	86	4,273,279	39,863	0.8	331,004	8.9	1,196,574	32	134,380
2001	3,775,500	2,419,702	255,559	191,553	21,449	75	2,660,394	18,530	0.6	362,832	15.0	777,107	32	184,793
							Re	st of commerc	cial banks					
2003	1,557,608	887,535	181,276	1,184	17,521	1	1,109,751	24,540	1.6	16,378	1.8	0	0	0
2002	1,003,971	559,248	145,037	545	17,523	0	676,554	13,848	1.6	24,831	4.4	0	0	26
2001	609,028	306,893	61,587	490	6,405	1	369,859	10,194	2.0	29,849	9.7	0	0	28
								Six Largest]	Banks					
2003	85.3	87.2	87.5	6.99	60.5	:	85.6	81.3	:	93.6	:	100.0	:	100.0
2002	85.0	87.0	82.2	6.66	59.2	:	86.3	74.2	:	93.0	:	100.0	:	9.66
2001	86.1	88.7	80.6	2.66	77.0	÷	87.8	64.5	÷	92.4	:	100.0	:	100.0
							Re	st of commerc	cial banks					
2003	14.7	12.8	12.5	0.1	39.5	:	14.4	18.7	:	6.4	:	0.0	:	0.0
2002	15.0	13.0	17.8	0.1	40.8	:	13.7	25.8	:	7.0	:	0.0	:	0.0
2001	13.9	11.3	19.4	0.3	23.0	:	12.2	35.5	:	7.6	:	0.0	:	0.0
								Total for the	system					
2003	10,585,461	6,959,088	1,446,562	1,142,661	44,337	42	7,696,975	131,469	1.2	254,504	3.7	2,314,681	33	261,734
2002	6,709,473	4,286,480	815,954	578,652	42,997	71	4,949,833	53,710	1.0	355,835	8.3	1,196,574	28	134,638
2001	4.384.528	2,726,595	317,146	192,043	27.854	61	3.030.253	28.724	0.8	392.681	14.4	777,107	29	184.821

Table 2. Belarus: Main Indicators of Activities of the Six Largest Banks, 2001-2003 (In millions of rubels unless otherwise specified)

Sources: The National Bank of Belarus; and IMF staff calculations. 1/ Total assets adjusted for accounts of interbranch settlements and expenditures.

- 40 -

6. **Banks face incentives that encourage excessive risk taking and discourage taking corrective measures at an early stage.** Governmental pressure to finance particular projects, for example, reduces the incentive for banks to implement adequate procedures for loan screening. The potential for depositors to impose discipline on banks, on the other hand, seems to be limited by the poor quality of the accounting system, weak disclosure practices, deposit insurance, and a lack of alternative investment vehicles. The situation is exacerbated by the lack of skilled labor in the financial sector.

7. Weaknesses in the accounting and disclosure rules and in the legal framework hinder the development of the system. Private investors and depositors as well as bank supervisors need current, accurate, comprehensive, and transparent information on the creditworthiness of banks in order to monitor them and to be able to make adequate investment and supervisory decisions.³² Belarusian banks, however, largely mask their weak financial situation by inadequate accounting and asset classification, and assets are rarely reflected in the balance sheets at market values. Ownership and creditor rights are not well-protected. Banks are often distracted by unwarranted visits by the tax, police, and other control bodies. The legal system makes it difficult and time consuming to trigger bankruptcy procedures and seize collateral for delinquent loans.³³

8. **The banking system is prone to significant risks, despite good reported vulnerability indicators.** Capital adequacy and liquidity ratios are high, and the ratio of NPLs to total loans is fairly low.³⁴ Nevertheless, the key problems would seem to be the following:

- Senior officials, including President Lukashenko, have become increasingly concerned about NPLs. As a result, in mid-2003 the NBB issued an instruction to banks to reduce them to no more than 5 percent by end-2003. In practice, this target was met, as NPLs were reportedly reduced to less than 4 percent at end-2003 (from about 15 percent of total loans in mid-2002). The authorities attribute the fall to improved payments discipline, but to a large extent it also occurred as a result of: (i) rapid increases in total loans, (ii) "evergreening" (informally rolling over) of loans, and (iii) issuance of government guarantees, which doubled in nominal terms in 2003 (Table 2). Moreover, weak accounting and asset classification practices also mask the vulnerability of the system;
- Underprovisioning for NPLs is widespread; in 2003, for example, underprovisioning was about 5 percent of total capital;

³² Banks themselves need such information about their clients.

³³ In 2003, the bankruptcy law was changed to make bankruptcy procedures even more difficult to initiate.

³⁴ See Box 1 in the associated staff report for the 2004 Article IV consultation.

- There is a danger of currency mismatches, as the economy remains highly dollarized.³⁵ Banks often lend in foreign currency to borrowers with limited foreign currency revenues, and are not able to hedge the underlying foreign exchange risk. The situation is exacerbated by the fact that the ratio of banking system foreign assets to foreign currency deposits is low;
- **Banking sector profitability is low**. With adequate (loan loss) provisioning (see above), the banking sector would have recorded losses in 2000–02 and virtually no profit in 2003;
- A large part of bank capital has been financed by the NBB, either directly or indirectly through the budget. In 2003, for example, the NBB provided long-term, low-interest loans of Blr 155.6 billion (about ½ percent of GDP) to the government for recapitalizing commercial banks; and
- With the exception of Priorbank, Belarusian banks largely do not have access to international capital markets. While this factor has limited the financial leverage of banks, it also means that banks will not be able to borrow significant amounts abroad if necessary.

9. **The macroeconomic situation is not very conducive for the development of the banking system.** While the Belarusian authorities report relatively robust GDP growth rates, the financial situation of enterprises remains difficult. Belarus has a crawling band exchange regime, although its international reserves are low and it continues to have the highest inflation rate among FSU countries.³⁶ The rubel appreciated in real terms against the dollar from September 2001 to end-2002, hurting the competitiveness of Belarusian goods, but depreciated in 2003 as the ruble and euro appreciated against the U.S. dollar. Administrative wage increases and the slow pace of structural reforms have significantly worsened the financial situation of the corporate sector, thereby calling into question the quality of banking system assets. The recent rapid growth in credit to the economy should, therefore, be viewed with caution. Credit to the economy increased by 71 percent in real terms during 2001–03, despite the fact that at least one third of the enterprises were lossmakers.³⁷ Household credit rose rapidly as well.

10. **Bank supervision suffers from weak powers to correct problems, as well as the administrative burden of managing the liquidation of bankrupt banks**. Bank supervisors do not seem to have sufficient power to force SCBs to comply with prudential regulations. Belarusbank and Belagroprombank, in particular, systematically violate reserve requirements

³⁵ There are no sizable markets for hedging instruments.

³⁶ The band is formally identified in terms of the Russian ruble, but de facto the authorities target the dollar.

³⁷ Cottarelli, and others (2003), discuss problems associated with credit booms in Central and Eastern Europe.

and underprovision for NPLs. Moreover, the NBB's ownership of large stakes in several banks (Belinvestbank, Poiskbank, Mezhtorgbank, and Belvneshekonombank) creates a conflict of interest with the NBB's supervisory role. Finally, managing the liquidation of bankrupt banks drains away the limited resources of the NBB.

11. Some state officials are pushing to oblige state-owned enterprises (SOEs) to move their deposits to SCBs. If adopted, this measure would further reduce the efficiency of the banking system to intermediate capital. At present, the authorities are merely studying this proposal, but anecdotal evidence suggests that some SOEs have begun moving their deposits from private commercial banks to SCBs.

B. Previous Reforms

12. A concept paper on development of the banking system was adopted in 2001. It contains several progressive measures, but falls short of proposing a comprehensive reform package. The document aims at reducing the state ownership of banks and opening up the system to foreign competition, both long-overdue measures. However, it fails to identify the state control and quasi-fiscal role of the systemic banks as the main source of banking system vulnerability, stating that "radical changes in respect of the ownership or the structure of Belarusbank, Belagroprombank, and Belinvestbank, including the sale of the NBB shares in these banks is not a priority issue of the system restructuring."

13. The authorities have been trying to consolidate the system by increasing capital requirements. In 2002, a unified minimum capital of \in 5 million was introduced, replacing the preferential requirement of \in 2 million for banks with local capital, and \in 5 million for banks with foreign capital. While increasing minimum capital requirement was a welcome measure, since it increased the resilience of the system to shocks, doing so in combination with the large capital injections to the SCBs by the government effectively discriminated against small private banks.

14. The authorities have recently adopted a new concept note on banking supervision, prepared by the NBB banking supervision department. The document—which is a step in the right direction—emphasizes the importance of rigorous licensing and proper evaluation of business plans as the first steps to preventing future banking system problems. It also aims at improving self-assessment of banks, removing restrictions on the frequency of on-site inspections, improving the disclosure of information on bank owners, introducing consolidated bank supervision, and expanding power to impose fines and close banks. In line with this concept note, the authorities have already carried out a self-assessment against BIS principles, and are working toward fully realizing these principles.

15. The NBB has recently changed prudential regulations in order to discourage banks from lending in foreign currency to enterprises without regular sources of income in foreign currency. Demand for loans in foreign currency remains very high, however, as borrowing in foreign currency has been much less expensive than borrowing in rubels. 16. On the macroeconomic front, the NBB has announced that starting in 2004 it will stop (inflationary) direct financing of the budget deficit, which was mainly used to finance housing.³⁸ However, the NBB expanded credit to government very substantially in the last days of 2003, effectively "pre-paying" its 2004 contribution to the housing sector. Moreover, the authorities moved the burden of financing the housing construction onto commercial banks. In 2004, for example, Belarusbank alone will provide Blr 500 billion for this purpose.³⁹

C. Moving Forward

17. Stable macroeconomic conditions would do much to reduce uncertainties and volatilities in the economy and contribute to improvement in financial intermediation.⁴⁰ Bringing inflation down to levels similar to those of neighboring countries is also essential for establishing and retaining investors' confidence, for which the key measure is stopping direct NBB financing of the budget. This would require downscaling the housing construction program and organizing mortgage lending based on market terms (rather than shifting the fiscal burden of the housing program to the banking sector).

18. **Stopping directed credits and leveling the playing field should be the first step in rehabilitation of the banking system.** The government needs to stop intervening in the operational management of banks, and all banks should be required to comply with prudential regulations. Exemptions from prudential regulations for SCBs should be abolished and all banks should be treated equally with regard to deposit protection.

19. **Prudential regulations may need to be tightened further.** Despite the latest changes in prudential regulations, the pace of credit growth, particularly in foreign currency, remains a concern. Divestiture of the NBB's shares in commercial banks would also eliminate the conflict of interest between the NBB as a shareholder and supervisor of the same institutions.

20. In the rehabilitation of individual banks, priority must be placed on the restructuring the largest SCBs, since they are crucial for the stability of the system. At the same time, one of the most important tasks is to identify loss-making banks, a task that is more difficult than it seems, given the need for adequate information on asset classification and accounting. In this exercise, banks should be classified into three groups: (i) viable and

³⁸ Elimination of direct NBB financing of the budget in 2004 was a condition under the 2002 Joint Action Plan on creating a monetary union with Russia.

³⁹ Belarusbank will charge 10 percent for housing loans, and will be compensated from the budget for the difference between that rate and the refinance rate, plus 3 percent.

⁴⁰ While macroeconomic stability is essential for sustainable long-term growth, the authorities need to prepare financial institutions for difficulties stemming from tight policies in the short term.

meeting regulatory requirements; (ii) nonviable and insolvent, and (iii) viable but undercapitalized.

21. All viable but undercapitalized banks should be required to present

restructuring plans showing how they intend to remain profitable and solvent. All insolvent and nonviable banks, on the other hand, should be closed/resolved as soon as possible to stop their losses. To prevent additional losses from occurring, operational restructuring needs to be given priority. This requires identifying the profitable and unprofitable activities of remaining banks in order to reduce costs through retrenchment of unprofitable branches and by reducing staff. It may also necessitate changes in management, business strategy, and product mix and pricing. In other countries, the key elements of operational restructuring have included implementing new technology; increasing the use of automation; improving accounting, asset valuation, and internal controls and audit; and establishing adequate loan screening, risk management, and loan recovery procedures.

22. Opening up the system to competition would facilitate operational restructuring.

Exposing banks to strong competition could have a disciplinary effect on weaker banks, while the entrance of foreign banks could improve competitiveness by weakening the dominant position of the largest banks. Moreover, under the right conditions (including a more favorable environment for FDI), the entry of foreign banks could help diversify the economy and reduce vulnerability.

23. **Asset rehabilitation should be a key component of financial restructuring.** Best practice typically includes either the creation of a debt recovery unit in banks or the creation of specialized asset management companies (AMC), which can either be private or publiclyowned. The experiences of other countries suggests that handling problems in each bank may help to maximize the recovery value of impaired assets, but at the cost of relatively slow overall progress. Centralized AMCs can be relatively more efficient when the size of the problem assets is large, as asset management may involve economies of scale, and skilled staff is in shortage. However, publicly-owned, centralized AMCs may lack incentives for maximizing recovery values and may be subject to political interference.

24. Bank restructuring will require improving the operational environment for

banks. The efficiency of the banking system would largely improve by applying international accounting standards (IAS) to banks and enterprises, enforcing and improving transparency rules, reforming the legal system to strengthen ownership and creditor rights and ease foreclosure and bankruptcy rules, and carrying out land reform.

25. Finally, but most importantly, banking reform needs to be supported by operational and financial restructuring of the corporate sector. Indeed, the poor performance of the unreformed state enterprise sector is the ultimate source of the bad debt problem in the banking sector. Banks will never have good investment choices until reform and privatization of the enterprise sector has been addressed.

References

- Cottarelli, Carlo, Giovanni Dell'Ariccia, Ivanna Vladkova-Hollar, 2003, "Early Birds, Late Risers, and Sleeping Beauties: Bank Credit Growth to the Private sector in Central and Eastern Europe and the Balkans, IMF Working Paper 03/213, November, 2003 (Washington, International Monetary Fund).
- De Nikolo, Gianni, Sami Geadah, and Dmitriy Rozhkov (2003), "Financial Development in the CIS-7 Countries: Bridging the Great Divide," IMF Working Paper 03/205, October 2003 (Washington, International Monetary Fund).
- Gulde, Anne-Marie, Etibar Jafarov, Vassili Prokopenko, 2004, "Costs and Benefits of a Currency Union Between Belarus and Russia," IMF Working Paper, *forthcoming*.
- Presidential Ukaz No. 274 "Ob Odobrenii Kontseptsii Razvitiya Bankovskoy Sistemy Respubliki Belarus na 2001-2010," May 28, 2002 (Concept of banking system development).
- Resolution No. 19 of the National Bank of Belarus "Ob Utverzhdeniya Kontseptsii Razvitiya i Sovershenstvovaniya Bankovskogo Nadzora v Respublike Belarus i Plana Meropriyatiy po Vnedireniyu Mezhdunarodnykh Standartov Bankovskogo Nadzora," January 31, 2003. (Concept of banking supervision).