

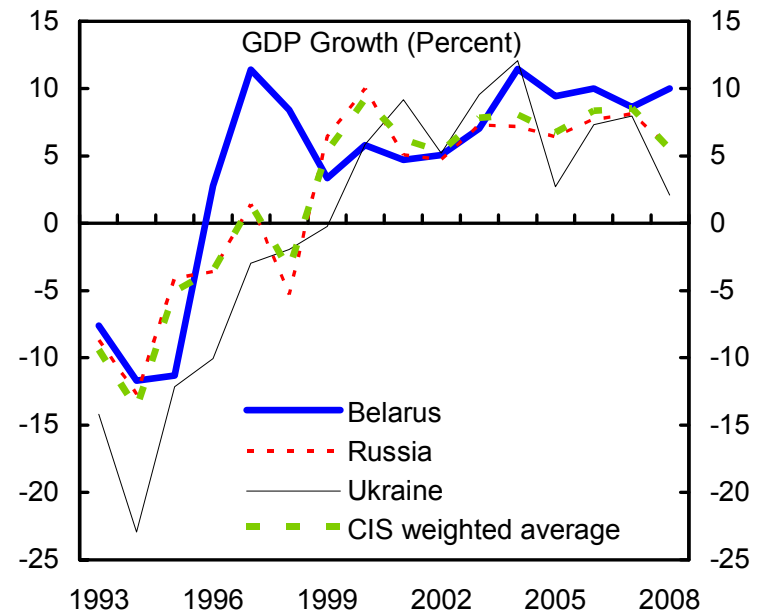
Belarus

Sources of Recent Growth and
Prospects for Future Growth

Shuang Ding

Belarus made impressive economic achievements in the past decade.

- Average annual growth of 7.5 percent
- Growth less volatile than other CIS countries
- Poverty declined from 30-40 percent to 6 percent
- Other social indicator improved: UNDP Human Development Index ranked at the top of CIS in 2006



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

Growth has been driven by investment, but return to investment is falling.

Investment Activity, 2001–08

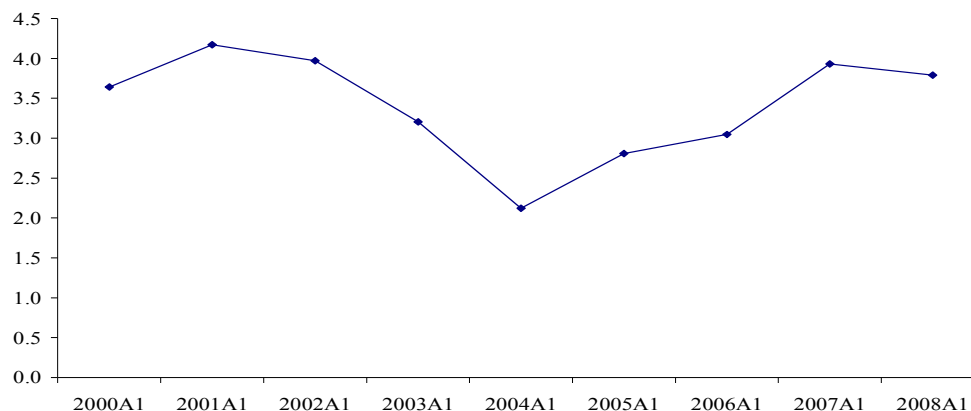
(Percent)

	2001	2002	2003	2004	2005	2006	2007	2008
Investment to GDP ratio								
Belarus	24.4	23.2	25.3	29.5	26.5	33.5	35.9	35.8
Russia	21.9	20.1	20.8	20.9	20.1	21.4	24.3	25.5
Ukraine	21.8	20.2	22.0	21.2	22.6	24.8	28.2	28.5
CIS average 1/	22.4	22.7	25.0	26.6	26.7	26.2	28.4	27.0

Sources: IMF, World Economic Outlook; and IMF staff calculations.

1/ Includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan.

Belarus: Incremental Capital-Output Ratio, 2000-2008 1/



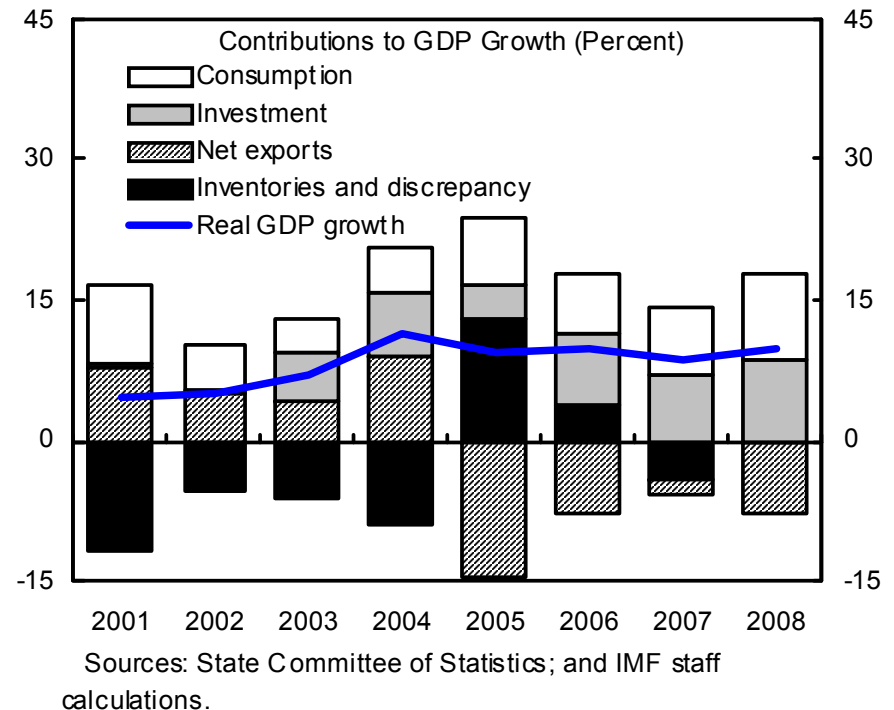
1/ ICOR is calculated by dividing the investment-to-GDP ratio by the rate of GDP growth.

Other sources of growth on the supply side

- Labor force: well-educated and disciplined; total working population increased recently
- High capacity utilization: low unemployment and ambitious targets
- Labor productivity: GDP per employee compares favorably to other CIS countries

Growth pattern on the demand side

- Growth has been increasingly boosted by domestic demand: government programs; wage increases
- Exports have benefited from vibrant growth in Russia and the world since 2003
- Positive terms of trade, due to preferential energy pricing arrangement with Russia, has had wealth effect



Sources of growth based on the production function approach

$$Y = A L^{\alpha} K^{\beta}$$

$$y = a + \alpha l + \beta k$$

$$\text{Solow residual} = y - \alpha l - \beta k$$

- GDP grew by 8.3 percent on average during 2001-08
- Capital accumulation contributed to 70 percent of the growth
- TFP contributed 23 percent

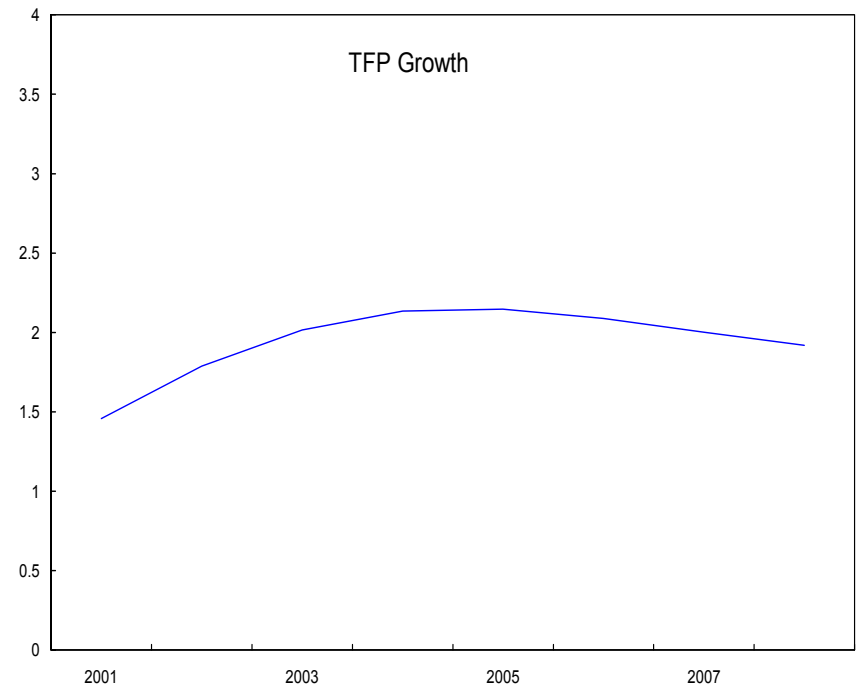
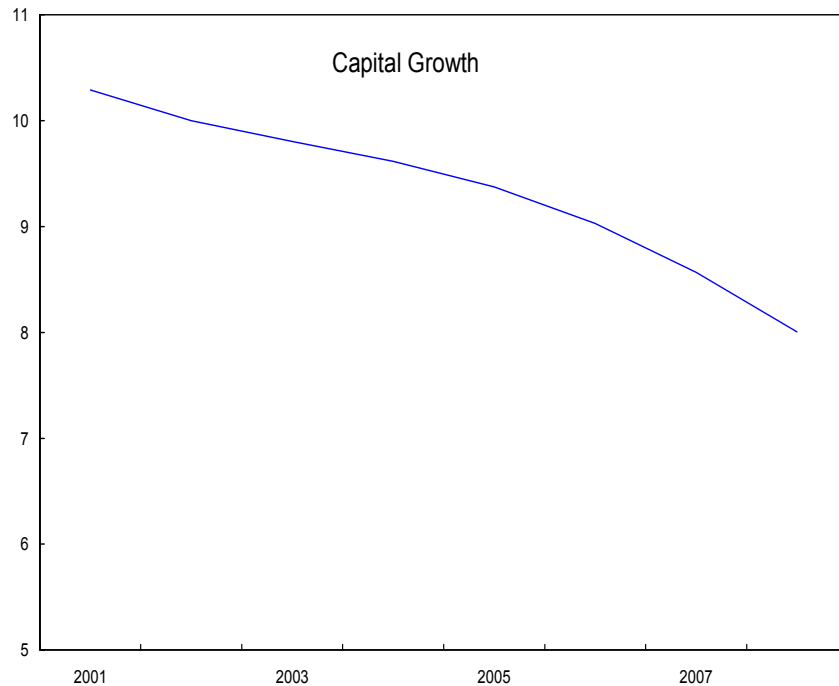
Belarus: Sources of Economic Growth
(In percent)

	1995-2000	2001-08
Real GDP growth	3.4	8.3
Factor accumulation 1/	6.3	6.1
Labor	-0.9	0.4
Capital	12.3	10.7
Solow residual 2/	-2.9	2.2
Total factor productivity	-0.7	1.9
Cyclical factors	-2.2	0.3

1/ Accumulation of labor and capital, using factor shares of 0.45 and 0.55 respectively.

2/ Residual from the growth accounting exercise.

Filtered variables show a declining trend of capital stock and TFP growth



Estimate of potential growth: changing factors

- Potential GDP levels and growth rates of Belarus's main trading partners are likely to be permanently lower after crisis
- Easy access to the Russian market no longer guaranteed
- Energy subsidies from Russia are being phased out
- Attracting external financing to supplement domestic savings would become more difficult and more costly
- Returns from high investment appear to have diminished

Estimate of potential growth: results

Belarus: Sources of Economic Growth
(In percent)

	2001-08	Potential growth Estimate
Real GDP growth	8.3	5.7
Factor accumulation 1/	6.1	3.8
Labor	0.4	0.0
Capital	10.7	6.9
Solow residual 2/	2.2	...
Total factor productivity	1.9	1.9
Cyclical factors	0.3	...

1/ Accumulation of labor and capital, using factor shares of 0.45 and 0.55 respectively.

2/ Residual from the growth accounting exercise.

- Potential growth after crisis would be about 5.7 percent.
- To repeat its growth rate in the past decade (7½ percent per year), an annual average TFP growth rate of 3.7 percent will be required.

In search for TFP gain: the case of China

China: Sources of Economic Growth, 1953-94
(In percent)

	1953-78	1979-94
Output growth	5.8	9.3
Capital input growth	6.2	7.7
Labor input growth	2.5	2.7
Total productivity growth	1.1	3.9

- Agricultural reform: leasing the land to farmers; reallocation of labor from agriculture to higher value-added activities
- Price and wage reform
- Liberalizing regulations that led to a dramatic rise of the nonstate sector, which helped absorb excess labor from SOEs
- SOE transformation accelerated after 1992: moving small enterprises out of the state sector, commercialization of large ones, along with banking reform
- China's open-door policy and "special economic zones", which helped attract massive foreign direct investment (FDI)
- Social safety net to alleviate the cost of transformation

Preliminary Conclusions

- Belarus maintained high growth rates in the past decade, by leveraging its inherent strength but also benefiting from a favorable external environment
- The current economic crisis exposed its vulnerability to external shocks
- Some of the factors contributing to its remarkable growth record are temporary, and estimated potential growth rate after the crisis is substantially lower than the pre-crisis period
- Improving productivity holds the key to high and sustainable growth.
- Experience in other countries proves that total factor productivity can be increased by pursuing reforms to improve resource allocation and enlarge the private sector.

Recommended Reforms

- Reducing price controls to the minimum, allowing wages to be liberalized to reward high productivity, and liberalizing labor market
- Abolishing mandatory quantitative targets
- Making lending decisions based on the profitability and risks of the projects rather than government directions
- Liberalizing conditions for new entry and startup, and improve access to credit by private sectors
- An ambitious and transparent privatization agenda that is open to foreign investors would help bring capital, technology, and management and marketing skills, with spillover effect
- Establishing safety net to cushion the social impact

Questions and comments: sding@imf.org