Belarusian Analitical Workroom of Andrei Vardomatski

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Get to the heart of the matter

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Belarusian economy growth rates are seriously exaggerated.

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The most recent World Bank's Country Economic Memorandum (April 2012) says that Belarus had one of the highest economic growth rates in the world in the last 11 years. Author argues that the actual GDP growth in Belarus has been statistically overstated by two times. Such miscalculation is a consequence of the System of National Accounts (SNA) standard application to a non-market economy.

People are behind myths

Belarusian economy's high growth rates have become a trump card in the hands of opponents of market reforms in a number of countries. For instance, Russian communist leader Mr. Zyuganov, while speaking at the 4th All-Belarus People's Assembly (December 2010) praised the Belarusian economic achievements, "Yet once again I want to emphasize that your development model is the most effective, and you should continue steadily this way. If we compare the economic figures with 1990 standard, Belarus has achieved 150% growth, while Russia has not yet reached 100% ..." He also advised President Medvedev to "look at Belarus and the way it carries out reforms. Same recipe should be applied here in Russia".

Indeed, according to world statistics, Belarus was one of the ten countries with the highest growth rates. The Belarusian economy was tagged as "Belarusian miracle". When in 2011 the growth rate started falling, the authorities referred to random factors behind this (population's devaluation expectations, a significant increase in cars imports before the introduction of Russian duties in Belarus). Russian academician Sergei Glazyev provided theoretical explanations for the temporary slowdown in the economic growth. In an interview titled "Belarusian economic model: our common economic miracle[1]", he tried to demonstrate that the "currency crisis, which occurred in Belarus, came, surprisingly, as a result of the high economic growth rates in Belarus in the past year and a half". Firstly, when foreign trade volumes decreased during the crisis year of 2009, Belarusians stimulated exports via lowering prices 'here and there', hence, the shortage in the balance of payments occurred. Secondly, Glazyev argues, the situation deteriorated when Russian energy prices went up.

However these academic's arguments have not a leg to stand on. Firstly, prices always rise and fall 'here or there'. Therefore in macroeconomics the price index is used, which reflects the prices' dynamics for the bulk of the goods. And according to statistical data, such dynamics was in the favour of Belarus over the past year and a half. Compared with 2009, average export prices in 2010 increased by 15.5% and import prices by 13.3%. In 2011, the average export prices increased again, by far exceeding the average import prices (23.1% vs. 13.2% accordingly).

Secondly, the reduction in indirect Russian subsidies in the form of cheap energy had no significant impact on the balance of payments. According to our calculations, the foreign currency outflow from the country as a result of energy prices increases for Russian deliveries to Belarus was about USD 2.5 - 2.6 billion in 2010 – first half of 2011. Simultaneously, the foreign currency inflow due to the growth of foreign debt was USD 11 billion. Also, at least USD 1 billion should add to that as a result of state property privatization. All in all, foreign currency inflow has exceeded the outflow (due to reduced Russian energy subsidies) by 4 times. Therefore the reduction in the Russian subsidies could not provoke the currency crisis in the country.

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Statistical paradoxes

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[1] *Soyuznoye gosudarstvo* [*Union State*] magazine issue 7, 2011, p. 38

In 1993 Belarus started using the System of National Accounts (SNA) standard, adopted by virtually all countries in the world. GDP growth rates and other SNA indicators are calculated by international standards in Belarus. However if we believe these calculations, we'll find several paradoxes, which cast doubts on the credibility of the official figures.

For example, according to Belarusian statistics, GDP in 1996-2005 increased by 1.9 times and real wages by 3.5 times, while the share of wages in GDP remained virtually unchanged. Let's imagine that GDP is a pie made by the economy for the end consumer. Let's assume that in 1996 this pie weighed 2 kg and the population consumed (salaries) 1 kg, i.e. half of it. In 2005 the pie's weight doubled (up to 4 kg), while the consumption quadrupled (also up to 4 kg). The Belarusian statistics says that the share of the pie consumed by the population was all the time one-half. This paradox can be explained only by that statistics underestimated the growth in consumer prices in 1996 – 2005 by 1.84 times.

Another paradox: a close-up look

GDP per capita in 1995 in Belarus and Russia were at the same level: 66% from 1990 standard[2]. Economic growth kicked off in Belarus in 1996, in Russia in 1999. Average annual GDP growth in Belarus was always higher than in Russia. It is logical that by the end of 2009 GDP per capita in Belarus should be higher than in Russia. However de facto GDP per capita in Russia in 2009 was higher than in Belarus. It is an equally recognized fact that the Belarusian growth rate was higher than Russian. Graph 1, made using UNCTAD data (United Nations Commission) for average annual GDP growth rate, shows the averaged dynamics of GDP growth in Belarus and Russia. Identical gap between the GDPs in 2009 in favour of Belarus is observed if we replace the UNCTAD average indexes by annual indexes published by the Statistics Committee of Belarus and Russia (see Graph 2). This means that UNCTAD uses national statistical committees' data. The IMF uses the same data for its calculations. Now, let's look at Graph 3, which we have made using annual World Development Reports by the World Bank. This Graph shows that after 1999 (Russian recovery growth started that year), GDP per capita in Russia was growing more rapidly than in Belarus. In 2009 figures for GDP per capita in Russia exceeded Belarusian figures by 1.4 times[3]. This implies that Belarusian GDP growth at that time did not exceed Russian by 1.4 times, as national statistics said, and rather lagged behind by 1.4 times. Belarus' backlogging from Russia in 2009 in per capita terms is widely recognized, therefore the conclusion is that the growth rate of GDP per capita in Belarus for 1994-2010 is overestimated by two times.

Graph 1 and Graph 2 show the dynamics of country's GDP growth, while Graph 3 shows per capita growth. The dynamics of population decline in Belarus and Russia over the period was similar, therefore the findings about a substantial overrating of the economic growth and consequently, of the outcomes of Belarus development in value terms are attributable to both methods used for GDP presentations.

In 1995, these rates were also nearly equal, and accounted for 66% of 1990 standrd (see the article 'Comparative analysis of institutional and socio-economic dynamics in Russia and Belarus 1990s' in *Economics and Mathematical Methods*, issue No 3 / 2010). World Bank statistics says in 1995 Russian GDP per capita was higher than Belarusian by 6.5%.

Non-market prices are behind the paradoxes

In any command economy, executives and bureaucrats embellish the economic performance in their jurisdictions. Potentially this could also be the case in Belarus. However we would like to emphasise that application of the SNA standard is inappropriate in a non-market economy. First of all, we refer to

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[2] See the article 'Comparative analysis of institutional and socio-economic dynamics in Russia and Belarus in 1990s' .//*Economics and Mathematical Methods*, issue 3/2010). World Bank statistics says in 1995 Russian GDP per capita was higher than Belarusian by 6.5%.

[3] At the same time, the World bank also uses Belarusian official statistics data in other reports, which say that in 2001-2011 Belarusian GDO growth rate was higher than in Russia. Ibid. Country Economic Memorandum for Belarus. Economic transformation for growth. P. 3.
Report No 66614 BY, April 5th, 2012. http://belstat.gov.by/homep/ru/indicators/prices.php

non-market pricing policy in Belarus. Prices' growth for some goods is systematically constrained. First of all, it concerns prices for consumer goods, for instance, for agricultural products. Therefore, these prices are much lower than their production costs (farmers' payable, taking into account their debts to banks, is 10 times lower than accounts receivable). Moreover, the population pays only about one-third of the housing utilities costs and fifty per cent of the public transport services costs. Therefore, the consumer price index, which is used to translate nominal wage index into real wages is two times lower than the GDP deflator, which reflects the price growth index for all goods produced in the country. This explains the paradox why when GDP doubles and real wages quadruple, the share of wages in GDP remains unchanged.

Prices for capital goods produced in Belarus were also administratively regulated. Three are about 500 companies – monopolies in the country in this sphere. But most of them lost their monopoly status in 1995 on terms of the Customs Union with Russia. Therefore pricing policy for goods manufactured by these monopolies is cost-based. Some manufactured goods could even cost less than their production costs, for example, bearings, which are used by other Belarusian enterprises. It was assumed that the losses inside the country will be recovered by the export revenues.

Since domestic consumer goods and services make about 50% of GDP, GDP growth index as a whole is also overrated (due to overrated price growth indexes, which are used to translate nominal value indicators into real). Other value indicators of economic development were also overrated, for example, industrial production growth index. Yet in 2001 - 2003 Belarusian statistics reported that the production levels reached the 1990 standard. Russia reached this production standard in 2011 and 2012.

Natural indicators are more significant

Please see below (Table 1) some of the most important natural socio-economic development indicators in Belarus since its independence: most of them had not reached the 1989 standard. It implies that technological structure had deteriorated: the production of complex technical products had significantly decreased, while the production of lower technological complexity products had increased (cement, metal). Agricultural output has not yet reached the 1989 standard. The share of family incomes spent on food has increased, which suggests that living standards deteriorated. At the same time, the consumption of quality goods has decreased while alcohol consumption has increased significantly.

In construction, commissioning of residential housing has increased, but only in 2009 (5.81 million sq. M.) and in 2010. In previous years this figure was below the 1989 standard. In 2012 the commissioning of residential housing is anticipated at 4.8 million sq. m. Industrial construction (commissioning of production facilities) decreased significantly.

Simultaneously, the number of private cars, PCs and other household appliances has increased substantially. However, it has nothing to do with the Belarusian economy. All this is attributable to capitalistic achievements, i.e. consumer goods are produced in large quantities and are cheap. Most of it has been bought by Belarusians not for the money they earned. Each Belarusian today is responsible for USD 3.5 thousand of foreign debt. Yet it should be noted that each statistical Belarusian consumed at least USD 7,000 in Russian subsidies (i.e. consumed at the cost of Russians). Therefore, all in all, each Belarusian family of 3 owes about USD 30,000 (at the current USD exchange rate). Bearing in mind that the consumer value of one US Dollar in the 90s, or 2000s, respectively, was greater as compared with 2012 (one-bedroom apartment cost in the 90s was USD 5-8 thousand, today – USD 40-50 thousand), to have a realistic assessment of the Belarusian family consumption at the outside world's cost in today's US Dollars, USD 30 thousand should be multiplied by 2-3 times. Presumably, this amount compensates for the objections that Table 1 did not take into account all parameters in order to justify the findings.

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In detail

The majority of the countries in the world are market economies, or at least countries with market pricing. Even China, which is referred to as a socialistic country with high proportion of state ownership,

95% of the prices are free, i.e. determined by supply and demand. In socialist countries implementing pricing policy - Cuba and North Korea – the IMF and other international organizations' regular monitoring systems are not carried out. Therefore, it is likely that experts from these organizations treat Belarusian statistics as if it was statistics from a country with market pricing policy. For them, paradoxes resulting from using SNA standards in a country with superficial market economy and mixed pricing policy could go unnoticed (all in all, more than half of the prices are regulated).

Sometimes Belarusian independent economists also contribute to the myth about 'Belarusian miracle' by not treating Belarusian official statistics critically and trusting high economic growth rates. Doing so, they also create new myths. For instance, "GDP per capita in US Dollars in 1998 – 2008 increased by 4.1 times... Monthly wages increased from average USD 63 per month in 1998 to USD 413.4 in 2008," Mr. Shimanovich says in his book "Belarusian competitiveness" published by the Institute for Privatization and Management (IPM, 2010, p.26). The author does not say whether he meant real or nominal wages. He compares cost indexes for different years, which implicitly suggests that he implies real terms (otherwise we would have to assume that the author is economically illiterate). The more so, the salary is indicated in USD, not Br. There is no indication about the USD exchange rate standard he used to calculate the wages. (After all, during that period the US Dollar in the U.S. had depreciated by 32%, says www.USInflationCalculator.com). He should have calculated real exchange rate indexes, choose the standard for the USD exchange rate for calculating wages and made calculations using USD exchange rate standard and indexes, etc.

Now let's imagine that the quoted text would have caught the eye of a reader, not familiar with the Belarusian economy split hairs. The publication has authority behind it, has references and was written by independent economists. Therefore one would tend to believe that real wages increased by six times in Belarus during the past decade!

Regarding "4.1 times" GDP growth in eleven years, 1998-2008, everything is clear. The World Bank quotes 2.15 times GDP growth in 2001-2011 (see footnote 3). According to our calculations based on annual official data, in 1996 - 2005 GDP grew by 1.9 times. Belarus is 'ahead' of Russia's GDP per capita by 1.4 times. If during the past eleven years GDP actually grew by 4.1 times, Belarus would have been subsidizing Russia, not vice-versa.

Another example: different indices are used to assess the country's exports of goods efficiency. The most popular is the Balassa index, which is calculated as ratio between the share of exports of certain goods in total exports and the share of this good in the overall world exports (or exports from some countries in a region). If this ratio is greater than 1, export is effective. Note that this index is not an economic efficiency indicator, since its calculation is not based on cost parameters. But it is implicitly assumed that the index is used in countries with market economies, where business entities are free to determine prices, goods to be exported, etc. That is why the Balassa index, just like other similar indices, reflects the transaction's economic efficiency.

In Belarus these preconditions are not met. For instance, in the end of 2009 the Council of Ministers "encouraged" businesses, including private enterprises, to unload warehouses and export goods even at a loss. The country needed foreign currency. Or, for example, in agriculture the state dictates what to sow, to what extent to increase the number of cattle, how much, to whom and at what price to ship the harvested products. The state sets volume and price indicators for the food industry and food exports. Bearing this in mind, it is hard to assess the export's economic efficiency for certain goods. Only special studies somewhat clarify the picture.

For instance, based on these studies the Agriculture Minister has published an article where he claimed that butter exports were unprofitable (on April 7th, 2008) and was forced to resign two weeks later. But at current prices butter exports are increasingly unprofitable. Butter export is only effective when prices are high. But if we recall that the purchase prices in agriculture do not cover investments, and are also heavily subsidized by the government, it would be reasonable to doubt the efficiency of butter exports during these periods as well.

In the first half of 2012 dairy plants suffer losses because of the decreased export price on butter, the most important export. However the IPM continues promoting the use of the indices, not suitable for the command economy, to assess exports efficiency.

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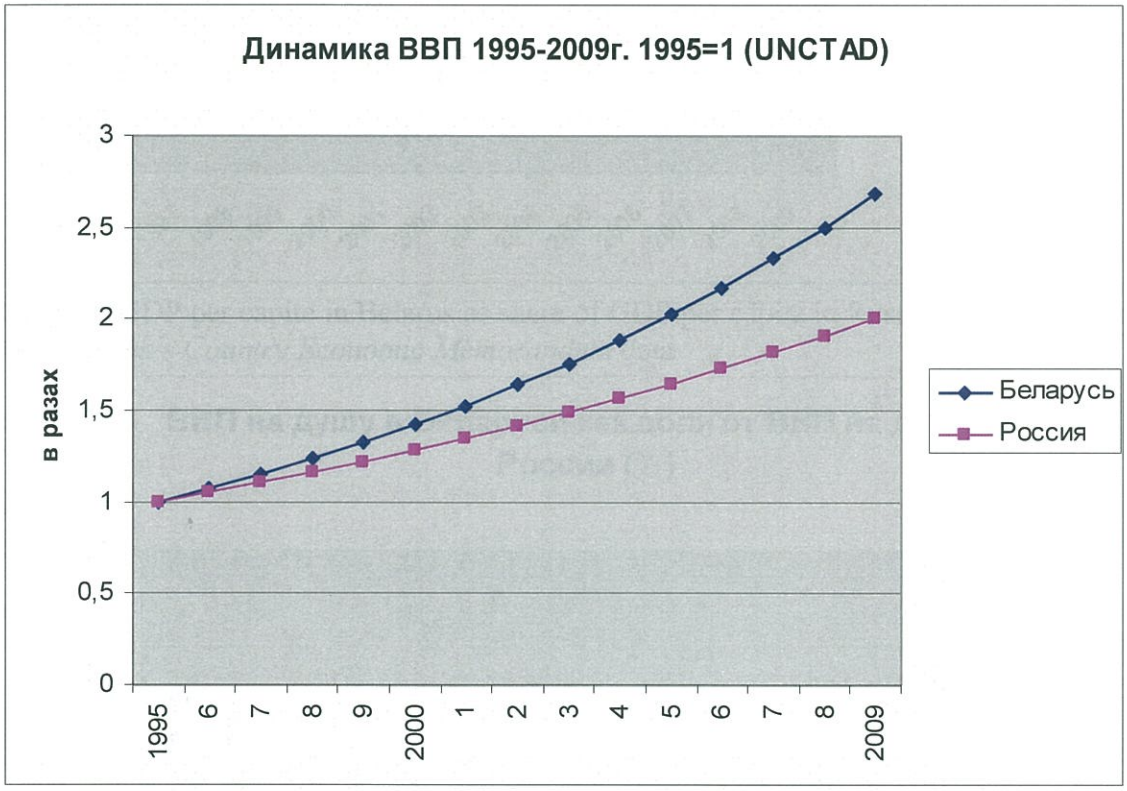
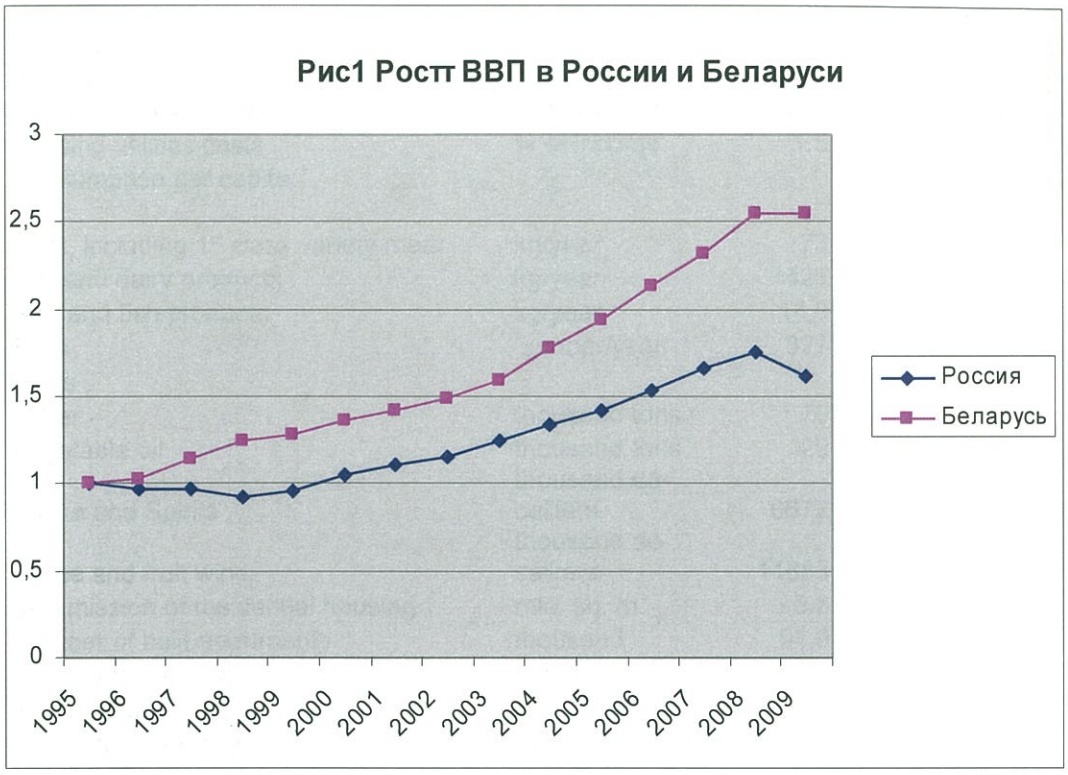
To sum-up all of the above, it could be concluded that, firstly, the rumours about the "Belarusian economic miracle" were greatly exaggerated. Secondly, the market institutions that stand up on the Belarusian model's facade do not correspond content-wise. Thirdly, the use of the SNA standard and other micro economic standards traditional for the market economy, while ignoring the previous conclusion, produce false results and generate paradoxes.

P. S. Paradox is the engine of science. If experts from international financial organizations and independent analysts from IPM believe that the author is wrong and prove it by providing a different explanation to the paradoxes, the economic science will only benefit from it.

Graph 1. GDP dynamics in Belarus and Russia in 1995 – 2009. 1995=1 (UNCTAD)



Graph 2. Figure 1. GDP growth in Russia and Belarus



Graph 3. GDP per capita in Belarus as share of GDP per capita in Russia (%). Calculations based on *World Bank's Country Economic Memorandum* data.

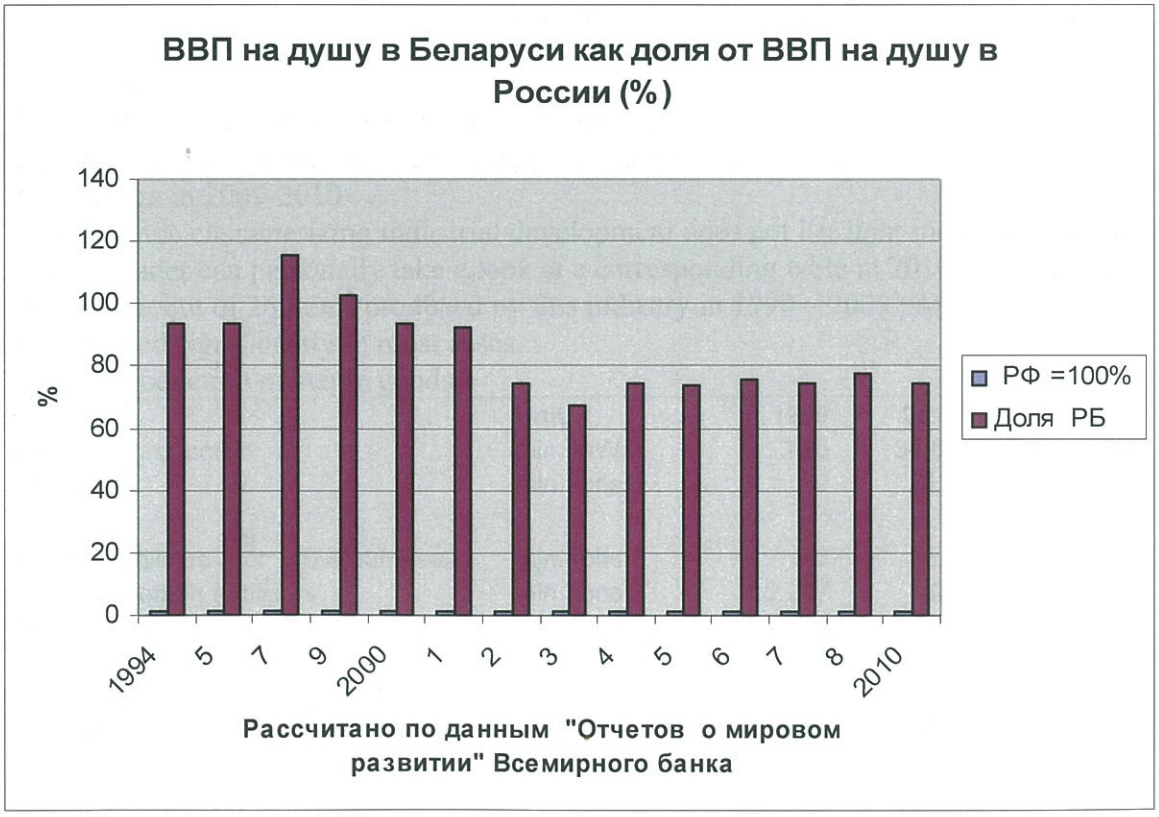


Table 1. Main socio-economic development indicators in Belarus.

Indicator	Unit	1989	2010
Life expectancy, at birth	years		

Men		66		64.6
Women		75		76.5
Population	Million people	10.2		9.46
Family food expenses	% of income	31.9		45.2**
Housing utilities costs	% of income	1.5		7.8*
Consumption per capita:				
Meat, including 1st class variety meat	kg/year	73		64*
Milk and dairy products	kg/year	421		286*
Fish and fish products	kg/year	18,8		14*
Eggs	number/year	327		191*
Sales				
Butter	thousand tons	75		33
Vegetable oil	thousand tons	29		81
Vodka and Spirits	thousand de-caliters	6672		14700*
Grape and fruit wine	thousand de-caliters	11885		21966*
Commission of residential housing	mln. sq. m.	5.5		6.6
Number of built apartments	thousand	91.9		84.7
Grain crop capacity	c/ha	31.6		30.5***
Gross grain crops	mln. tons	8.5		7.6***
Gross potatoes crops	mln. tons	11.1	7.5***	
Animal produce				
Milk	mln. tons	7.42		6.62
meat, slaughter weight (cattle and poultry)	mln. tons	1.2		0.97
Eggs	billion	3.65		3.53

* 2009 data

** According to the National Statistics Committee.
http://belstat.gov.by/homep/ru/indicators/prices.php Reference date 10\07\2012

*** Average in 2009-2010

Table 2, while characterizing industrial development does not list light industry data. Situation there is drastic. Reader can personally take a look at a corresponding table in 2010 Statistical Yearbook and find out that out of 26 items produced by this industry in 1990 – 2009 production of all (!) items has been reduced significantly in most cases.

Table 2. Production of staple goods

Item	**Unit**	**1989**	**2010**
Electricity production	mln. MW/h	38.5	34.89
Oil refinery	mln. tons	39	21,6
Mineral fertilizers (per 100% nutrients)	mln. tons	6.3	6.2
Including potash fertilizers	mln. tons	5.227	5.22
Steel	mln. tons	1.1	2.67
Tires	mln.	4.55	4.81
Man-made fiber and filaments, total	mln. tons	450	233
Tractors	thousands	101.3	44.4
Trucks	thousands	42	18.3***
Forages	thousands	9.5	0.44
Watches	Million	13.4	0.9
Receivers	thousands	979	6
TV sets	thousands	1300	446

Fridges and freezers	thousands	728	1007
Motorcycles	thousands	225	3.2
Metal cutting machines	thousands	15.5	3.7
Including N.C. machines	Items	1327	154
Cement	thousands	2.28	4.53
Precast concrete	mln. cubic meters	7.4	3.95
Lumber	mln. cubic meters	3.1	2.57