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"Effects of Russian WTO Accession and EU Enlargement on Belarus: Initial Estimations"

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Abstract

This paper aims to study the joint effects of Russia's entry into the WTO and of the impending EU Enlargement in a small open Eastern European Economy, the Republic of Belarus. The paper is organized as follows. It starts with the brief description of Belarus trade prior independence in Section I. Changes in commodity and geographical structure of Belarus trade since independence are analyzed in Section II. In Section III trade regime and trade-related policies are described. Section IV is dealt with the discussion of the rationale of the movement towards closer integration with Russia. In Section V, a small CGE model is used to present very preliminary estimations the effects of the developments above. This paper was done as an input to the USAID/IRIS Project n° 220/001.0-03-337.

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Introduction

This paper aims to study the joint effects of Russia's entry into the WTO and of the impending EU Enlargement in a small open Eastern European Economy, the Republic of Belarus.

Belarus had a better growth performance during the 1990s than many CIS (Community of Independent States) countries (see Table 1 and Figure 1). One of the traditional explanations for this Belarus growth is that it had been achieved largely due to the trade and para-fiscal transfers from Russia[2]. Russia and, to a much lesser degree, other Central and Eastern European Economies largely dominate Belarus trade (see Vinhas de Souza and Bakanova, 2001). Therefore, both Russia's WTO Accession and the EU Enlargement[3] are expected to have significant effects in Belarus.

The paper is organized as follows. It starts with the brief description of Belarus trade prior independence in Section I. Changes in commodity and geographical structure of Belarus trade since independence are analyzed in Section II. In Section III trade regime and trade-related policies are described. Section IV is dealt with the discussion of the rationale of the movement towards closer integration with Russia. In Section V, a small CGE model is used to present very preliminary estimations of the effects of the developments above.

I. Belarus Trade before Independence

Belarus became an independent nation only in 1991, after the collapse of the former Soviet Union. Under central planning, the Belarusian Soviet Socialist Republic (BSSR), being previously a predominantly agricultural area, had developed a diversified and extensive industrial base, with many assembly industries. The share of Belarus in the USSR output of many complex industrial products was far in excess of its population share[4]. The share of industry in GDP reached 49% in 1990: for the FSU (Former Soviet Union), only the Armenian figures were higher [5].

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[2]On the domestic side, an expansionary policy stimulated demand/consumption and production –regardless of costs- by state-owned enterprises, on the basis of tightening of administrative control over all economic activities, was the main responsible for the observed growth rates.

[3]From May 1 2004, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia will become full-fledged members of European Union. Bulgaria and Romania have 2007 as an indicate Accession date from the European Commission. Turkey, who is also applying for membership, has no set date for the beginning of negotiations. Croatia formally applied for membership in March 2003 (see Vinhas de Souza and van Aarle, 2003).

[4]See Odling-Smee, 1992.

[5]As described in the World Bank study on Belarus (see World Bank, 1997), the industrial sector in Belarus was "concentrated in industries such as automobiles, electrical and mechanical engineering and chemicals. At the breakup of the USSR, Belarus was left with about 2,000 republican level industrial enterprises, highly vertically integrated, many of which served the all-union markets as well as markets in Eastern Europe….A few large enterprises, accounting for only 15% of all units, controlled 60% of production. Products were heavily biased towards capital and energy intensive heavy industry, and many focused on electronics, optics, and transport equipment for the military. Management skills in finance, sales and marketing were limited - financial management and marketing decisions were commonly handled from Moscow" (p.31).

In spite of substantial differences in estimates for income levels in the pre-transition period (either in PPP or in current USD), it is safe to conclude that Belarus had had a GDP per capita in PPP terms well above almost all other CIS - Commonwealth of Independent States - countries (only the Russian level was somewhat higher), and broadly comparable with the Baltics (Estonia, Latvia and Lithuania) and the CEECs (Central and Eastern European Countries). On average, the population of the BSSR enjoyed higher living standards than the ones in most other regions of the FSU, which was partially due to a rate of growth during 1985-1989 above the USSR average[6].

As a consequence of its industrial development, Belarus was highly dependent on trade in general, and on trade with other republics of the USSR in particular. Thus, total and intra-regional ("inter-republican") trade accounted for, respectively, 47.3% and 41.0% of Belarus GNP - the highest figures not only for CIS, but also for the Baltics and CEECs.[7] Having been one of the most industrialized and economically developed republics of the FSU (alongside the Baltic States), Belarus was a net contributor to its budget, transferring more than comparatively larger states, like Ukraine. At the same time, taking into account the price-setting mechanisms of the FSU (overpriced "soft goods", such as foodstuffs, manufactured products and services, and underpriced "hard goods", mostly raw materials, making, therefore inter-republican trade a channel of indirect income transfers in addition to direct budgetary ones), Belarus was classified as a "double recipient", by both importing underpriced energy resources and by exporting overpriced industrial goods[8].

Both the geographical and commodity pattern of Belarus trade were highly distorted. According to calculations based on gravity models, after the adjustment to market economy conditions, the combined share of the FSU should not exceed 25% of Belarus total trade (against 87% in 1989), and the share of Russia alone should not be more than 10% (52% in 1989)[9]. However, some very important factors are not captured by gravity models: isolation from Western markets, common business culture, similar consumer preferences, common infrastructure - all that is usually labeled as "*Soviet Legacy*"[10]. Historically and culturally, Belarus has been *the* closest to Russia among all FSU republics, and an alteration of centuries of historical traditions might take a long time. Therefore, although the redirection of Belarus trade from Russia towards the West is an imperative for Belarus, its structural dependence from Russia on both exports and imports side can significantly hold back this process[11].

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[6]For brief overview of Belarus economic position relatively to other CIS prior independence see, World Bank, 1997, ibid.

[7]Michalopoulos and Tarr, 1995, p.15.

[8]See Orlowski, 1993 and 1995.

[9]Gros and Dautebande, 1992. In EBRD (1999), the predicted share of all transition economies in Belarus trade would be 11%, while the one of the EU would be 60%.

[10]For example, already existing pipelines could make it preferable for Belarus to continue import of natural gas and oil from Russia, rather than search for alternative suppliers in the world market. These factors were highlighted by Lücke (1995).

[11]Of course, this is heavily dependent on the policy pursued by the Belarusian authorities.

Bakanova at al. (2003) shows that, prior to independence, Belarus actual trade pattern (as measured by indices of Revealed Comparative Advantages - RCA) had no correlation with the expected one, based on the measure of international competitiveness (measured by Domestic Resource Costs ratios - DRC), both in Belarus trade with other USSR republics and with the rest of the world[12] . Therefore, during the transition the task was much more complicated than simple redirection of trade flows: the commodity pattern of trade also had to be changed substantially. At the same time, the potential costs to Belarus from the disruption of trade links with the rest of the FSU were estimated as 52.9% NMP (Net Material Product) - the highest amongst the fifteen republics[13]. Belarus terms-of-trade losses due to moving to the world prices in the inter-republican trade were estimated in range of 29-31% GDP[14].

II. Trade Patterns in 1992-2000

An analysis of Belarus trade during the period 1992-1994 is complicated by the limited accuracy of the available data. Belarus trade statistics as an independent state had been collected since 1992, but insufficient funding and lack of experience held back the introduction of new methodologies and appropriate procedures of data collection[15].

With some caution, it is possible to distinguish the following features of Belarus trade during the period 1992-1994. First, maintaining considerable volumes of exports and imports in 1992, due to the industrial potential accumulated in previous years and to the fulfilment of contractual obligations still arising from the FSU. This was followed by a sharp fall in trade volumes in 1993, as a result of a number of negative factors of the transition period (the breaking up of production links, increase in price of energy

[12]For this computations the following data-set was used: 110-sector input-output tables for 1987 (the latest year for which such disaggregated input-output tables are available for Belarus) and trade and price ratios data from Tarr,1993. "Domestic Resource Costs" (DRC) ratios, which compare the opportunity costs of domestic production to the value added it generates, were computed. For a given activity j: **DRCj=(DCj)/IVAj**. DRCs are considered as measures of effectiveness and international competitiveness of domestic production and are used as indicators of comparative advantages. Also, indices of "Revealed Comparative Advantages" (RCA) were computed, with a breakdown for 2 trade zones, as **RCAij=(Xij-Mij)/(Xij+Mij)**, where i is country and j is commodity. Ranking the industries by RCAs and DRCs and calculating Spearman rank correlation coefficients by zone, the rank correlation coefficients between DRCs and RCAs are -0.05 and 0.08 for inter-republican and extra-republican trade respectively. The results were checked by computing indices of "Contribution to Trade Balance", $\mathbf{CTB_j=(1000/(X+M))*[(X_j-M_j)-(X-M)*(X_j+M_j)/(X+M)]}$, where j is commodity, X and M - total value of the country exports and imports. This indicator helps to avoid a bias of the RCA, in which any of its specific values can be consistent with any volume of trade. Its outcome was -0.009 and 0.016, respectively.

[13]See Nuti and Pisani-Ferry, 1992, table 4.

[14]See Tarr, 1994.

[15]See, for an overview of problems of Foreign Trade Statistics in CIS after the break up of the USSR Belkindas and Ivanova, 1996.

resources[16] and raw materials, etc.). In 1994, the total volume of trade stabilized, but with a substantial reduction in the physical volume of trade with CIS countries[17].

Since most of data on Belarus trade are available from 1995-1996 and because 1996 is the first year of recovery, the analysis here concentrates on the period 1995 onwards.

Belarus is a small open economy with trade turnover accounted for more than 110% on average during the period 1995-2000 (Table 1). The CIS countries and, especially Russia, remains it main trade partners (Tables 2a and 2b). Thus, the share of Russia in Belarus total exports increased from 45.5% in 1995 to 51.0% in 2000 and in exports to CIS countries - from 72.2% to 84.5% during the same period. Even larger -and increasing more rapidly- is the share of Russia in Belarus imports, total and from CIS: 53.3% and 80.6%, respectively, in 1995 and, 65.3% and 92.2%, respectively, in 2000. It is almost a good representation of reality to say that *Belarus trades with Russia*. This differs substantially from directions of trade of Poland, Latvia and Lithuania, even though the latter two countries are similar to Belarus in their level of external energy reliance[18]**.** Additionally, a substantial share of Belarus-Russian trade is in *barter* trade (Figures 2a and 2b). The prices and conditions of barter deals differ substantially from the ones in pure monetary transactions[19].

The commodity structure of Belarus trade did not changed substantially between 1996 and 2000 (Tables 3a and 3b). The major export categories are transport vehicles, machines and equipment, mineral products, textiles and chemicals products (64.9% and 66.7% of total exports in 1996 and 2000 respectively), whilst the major import categories are mineral products, machines and equipment, chemical products, products of food production and non-precious metals (78.9% and 77.9% of total imports in 1996 and 2000 respectively). Nevertheless, the commodity structure of Belarus trade differs across two trade zones: CIS and non-CIS ("rest of the world" - ROW). Thus, whilst in exports to non-CIS countries the major categories are chemicals (in which fertilizers are the most important items) and mineral products (refinery products), exports to CIS countries are, to a large degree, represented by capital goods (machinery and transport equipment). On the imports side, major import categories from non-CIS countries are chemical products (including pharmaceuticals) and machinery. Imports from CIS countries are clearly dominated by mineral products (crude oil and gas): 44.9% and 43.6% of total imports from CIS, in 1996 and 2000 respectively. Since Russia is the major CIS partner, the

[16]Thus, for instance, whilst in 1993 Belarus paid US$21.7 per ton of Russian oil and US$35.7 per 1,000 cubic meters of gas, in 1994 the prices raised to US$57.0 and US$50.0 respectively. At end-March 1999 price for gas for Belarus had been reduced to US$30.6 per 1,000 cubic meters.

[17]We are here referring to physical volumes. The value of Belarus trade with CIS countries had been significantly affected by the combination of high inflation and deterioration in terms of trade.

[18]The figures for Latvia, Lithuania and Poland in 1999 are, respectively, 53,77%, 46,51% and 64.97% from its imports come from the EU (imports from Russia, overwhelmingly energy related: 10.51%, 20.00 and *5.82%*), while 62.55%, 50.11% and 70.56% from its exports go to the EU.

[19]Which constitutes even another problem that any researcher faces in analysing Belarus trade in total, and with Russia in particular.

commodity structure of Belarus trade with CIS in total reflects that with Russia, though if one considers Russia alone, the dependence upon imports of energy resources becomes even more evident: 57.5% and 47.0% of total imports from Russia in 1996 and 2000 respectively.

To sum up, Belarus, unlike its close neigbours - Poland, Latvia and Lithuania - did not succeed either in reorientation towards non-CIS markets or in re-structuring the commodity pattern of its trade. This is attributed not only to the failure in designing and implementation a new trade policy, but also to the general macroeconomic environment.

III. Trade Policies

Belarus trade regime has been changed substantially in the years since independence. By mid-1995 Belarus had achieved some progress in the liberalisation of its trade and foreign exchange system. This was reflected in the EBRD transition indicator for these area of reform: by mid-1995, Belarus had progressed to "2" (some liberalisation of import and/or export controls; almost full current account convertibility), but afterwards it was rolling back to "1" [20] (widespread import and/or export controls; very limited legitimate access to foreign exchange). Some positive developments in the monetary and foreign exchange policy in 2000 led to the upgrading of the Belarus position in this area to "2-" by mid-2000. On average, Belarus transition indicators fell from 2.1 in mid-1995 to 1.5 in mid-2000.[21]

On the exports side, commodity coverage by quota and/or licensing is determined by ecological, health and cultural reasons (for example, industrial waste, precious metals, antique) and by obligations according to international regulations (for example, textiles, which are subject to the EU quotas, or mineral fertilisers, which are subject to the EU anti-dumping duties). Also, for some products, the licensing is imposed to ensure their supply to domestic market (for example, wastes and scraps of black and colour metals). Export duties had been abolished by the end of 1996, but were reintroduced at the end of 1999, under the pressure of Russia: export duties are now applied to some raw materials that are important categories of Russian exports, first of all, mineral oil products, which constitute 95% of all goods subject of export duties in Belarus.

On the imports side, there are licencing requirements for some products as well as an import ban for hazardous wastes. In 2000 special provisions for the imposition of safequard measures, such as anti-dumping duties, were introduced. Import duties are relatively moderate, both on average (by different estimates, the weighted average import tariff of Belarus in 2000 was in the 8.6-10.2% range) and in terms of their dispersion across commodity groups (from 0%-100%, the highest rate, 100%, is applied only to certain spirits: if do not take this group into account, than the dispersion will be significantly less,

[20] Which effectively means back to the very beginning, since the EBRD scale starts from "1".
[21] EBRD Transition Report, various issues.

0%-30%).[22] Moreover, due to privileges granted to certain importers, the collection rate is even less than the average tariff (less than 7% in 2000).

A Free Trade Agreement signed in April 1994 between FSU countries (except the Baltics) had provided Belarus with zero tariffs in trade with CIS. Belarus also had applied different principles in levying VAT on goods imported from CIS and non-CIS: the origin principle for the former and the destination principle for the latter. The situation had been gradually changed and recently the same principle (the destination principle) is applied for levying VAT on imported goods from both trade zones.

From this brief overview of the tariff structure it is possible to conclude that the tariff structure itself does not exhibit any significant biases, and that Belarus trade regime can be considered as rather open. Major constraints to trade are related to domestic policies, and, first of all, to foreign exchange policy, price controls, domestic trading monopolies, entry barriers for private businesses, etc. Although the multiple exchange rate system (characterized by an overvalued official exchange rate, several "black" and "grey" currency markets with high premium upon the official rate(s), scarcity of foreign exchange and its rationing) had been abandoned in September 2000, and some positive changes in relation to price controls had been observed recently (under the IMF Stuff Monitoring Programme - SMP), there has been very little progress in terms of privatisation and structural reforms. Business regulations are opaque, unpredictable and discourage private initiative. The state still is heavily involved in all economic activities. Not surprisingly, for the period 1992-2000 the cumulative FDI inflow per capita in Belarus is about *USD 120* - one of the lowest figures among all European transition economies.[23] Some recent attempts at re-initiating reforms can bring positive results only if the liberalisation of foreign exchange market (starting from a devaluation of the overvalued exchange rate) and macroeconomic stabilisation will be backed by sound fiscal policy and further structural reforms aimed at private sector development. This is clearly what the experience of other transition and developing economies teaches us.[24]

IV. Relations with Russia

A fundamental factor in Belarus trade regime is its integration with Russia. In 1995 Belarus signed an "Agreement on Customs Union Creation" with Russia. Since then, the integration process has been very uneven, but it has accelerated since the end of 1999, when an agreement was achieved about the creation of a "Union State" with the Russian Federation. The major economic motivations for closer integration with Russia, and their short and long-run impacts can be summarised as follows.

[22]However, like in most other countries, there is an "escalating" tariff structure, so that effective protection is higher than can be seen from the nominal tariff rates.
[23]The figure is even less - about USD 30 - if we subtract from the total cumulative FDI inflow, Russian FDI related to a single project, the construction of the gas pipeline "Yamal-Western Europe".
[24]See, for example, Tarr and Shatz, 2000.

Benefits (already obtained and/or expected)

- Subsidies in a form of supply of energy resources at below-market prices[25];
- Barter trade and barter payments for energy resources;
- Privileged access to the Russian market for Belarusian goods;
- FDI attraction with an eventual perspective to supply the Russian market.

Medium- to Long-term impact on growth and development

- Fears of cuts in supply of gas and oil due to the arrears;
- Commercialisation of Russian energy sector is already imposing a constraint -and will impose it further- on subsidising Belarus through below-world price for gas, and also through the acceptance of goods for arrears: this will reduce the demand for some Belarusian goods and will also increase substantially the costs of production and reduce the competitiveness of Belarusian goods *in the absence of restructuring*;
- Barter deals are not always on terms favourable for Belarus;
- Such a high concentration of trade is dangerous, as the Russian crisis of 1998 clearly demonstrated; although the recovery in Russia was beneficial for Belarus trade and growth, the aftermath of this crisis is different from that in 1996: this time, the Russian recovery seems to be based on a recovery of its "real sector", with Belarus losing price competitiveness on Russian markets, when compared to the Russian domestic industries helped by the real devaluation of the Ruble;
- The trade diversion effect from economic integration with Russia might be significant for Belarus, which can also effect negatively the competitiveness of Belarusian industries (forced to use inputs from Russia instead that from more efficient suppliers).

To sum up, there are substantial "pros" and "cons" of Belarus integration with Russia. For Belarus, Russia is a "large country", so a "common trade policy" for Belarus effectively means the adoption of Russian trade policy, though the industrial policy priorities of the two countries are different. Nevertheless, as indicated in a previous work (see Vinhas de Souza and Bakanova, 2002, ibid), a wider set of international connections would be welfare improving for Belarus.

V. A Small CGE Model for Belarus

In this section, a small computable general equilibrium model, based on Whalley, Tourdyeva and Brenton (see Whalley, Tourdyeva and Brenton, 1997) is used to present very preliminary estimations of the possible impacts of a Russia accession to the WTO,

[25]According to the World Bank estimates, the implicit subsidy received by Belarus from imports of Russian gas in 1999 vary from 5% (if Belarus were to pay the same priceas Ukraine) to 16% of its GDP (if the world price had to be paid). However, this calculations do not take into account the fact that transit fees for the transport of Russian gas and oil through Belarusian territory are more than 4 times lower than what is charged by the Baltics and more than 2 times lower than what is charged by Ukraine (not to mention the general static and dynamic losses from subsides, arising from the distortion of the information content of prices, resulting in a less than optimal allocation of existing factors and in a distortion of the signs to invest and accumulate new factors of production).

together with the implications of the last Enlargement of the EU, on Belarus. The model separately covers Belarus, Russia, the EU, the Central and Eastern European countries (CEECs) and the Rest of the World (ROW). This allows the analysis of the impacts of both bilateral and multilateral trade policy interventions involving Belarus.

Computable general equilibrium models are a commonly used tool for the analysis of the impact of various economic policy changes. Notably, they have been used for many years to evaluate the effects of trade policy changes. They played a major role in the analysis of the impacts of the Uruguay Round of multilateral trade liberalization[26].

In this model, products are treated as region specific (the so-called "Armington Assumption", which allows for the existence of intra-industry trade). Production possibilities in each region in the model are represented by a Constant Elasticity of Transformation (CET) frontier, while consumer demands reflect the maximization of regional Constant Elasticity of Substitution (CES) preference functions subject to regional budget constraints. In equilibrium, prices for all products are endogenously determined to clear markets (that is, domestic consumption plus exports equals production), and a trade balance condition holds for each region. The model specifies demand and supply within regions. Prices for all products produced by all regions, and prices of products supplied by regions are endogenously determined to clear all markets simultaneously.

Once fully specified and calibrated, the model is used to reproduce a 1998 benchmark, in which all the equilibrium conditions are satisfied. Then trade tariffs are changed relative to the base case, and the benchmark and counterfactual *equilibria* compared.

Data and Parameters in the Model

The data used in the model was taken from the 45-sector Input/Output matrix produced for Belarus for the year 1998, the most recent available, and complemented by data provided by BET (Belarus Economic Trends), from the IMF/IFS and IMF/BOPS (Balance of Payments Statistics) databases. Production data in the model reflects gross output by sector. Data for production in the EU and the CEECs were taken from the "NewCronos" database and supplemented where necessary with data from domestic sources. For Russia, the principal source of data was the input-output table for 1999. Whalley, Tourdyeva and Brenton, 1997 assume that GDP of the ROW is three times the magnitude of EU GDP, a procedure also followed here. Trade data between the EU and each of the regions in the model was taken from the COMEXT database.

Each regions consumption of its own production of goods and services in the model is implied by the difference between production and exports. Consumption of foreign goods is given by imports by product and region..

The model covers 12 sectors and five regions. They are:

[26]See, for example, Harrison, Rutherford and Tarr, 1996, and Francois, McDonald and Nordstrom, 1996.

Products	Regions
1-Power	The Republic of Belarus-BEL
2-Mineral Fuels	The Russian Federation-RUS
3-Ferrous metals	The 15 Countries of the European Union – EU
4-Non-ferrous metals	The 10 EU Central and Eastern European Countries candidate Countries - CEEC
5-Chemicals	The Rest of the World – ROW
6-Machinery	
7-Light Industry (textiles, clothes)	
8-Food processing	
9-Other manufacturing	
10-Agriculture	
11-Services	
11-Financial Services	

The benchmark data set includes production and consumption for all regions and all products, as well as data on taxes and tariffs in each of the regions. Bilateral trade flows are implied by the consumption in each importing region of region-specific products from other regions, along with the differences within the exporting region between production and own consumption of the region specific products. It must be said that even such simple model used here has required significant effort in terms of data collection, adjustments to ensure consistency of data, and model solution.

Tariff rates for Belarus come from the tariff schedule for 1997, as reported on the UNCTAD-TRAINS (Trade Analysis and Information System) database, aggregated onto the sector classification used in the model from the 8-digit Harmonised System (HS), and using imports from the EU in 2000 as weights. For tariffs against the rest of the world, unweighted averages were used. Tariffs for bilateral trade with Russia, Belarus main trade partner by far, are assumed as zero. Tariffs for the other regions are taken from Whalley, Tourdyeva and Brenton, ibid.

The model initially assumes elasticity values in production in all regions at 0.9. Again following Whalley, Tourdyeva and Brenton, ibid, Russian membership of the WTO is assume to imply that all industrial tariffs currently above 15 per cent will be reduced to the 15 per cent level and that all tariffs between 10 and 15 per cent will be consolidated at 10 per cent. It is also assumed that tariff protection of processed and unprocessed agricultural products will both decline by 2 percentage points. Finally, it is also assumed that there will be some liberalisation of trade in services with accession to the WTO. Specifically, it is assumed that the *ad valorem* equivalent of restrictions on services declines from 50 to 40 per cent.

With Enlargement, the EU and CEECs remove all remaining tariffs on bilateral trade flows. This affects mainly agricultural products and services, as since 1997 the "Europe Agreements" had already reduced substantially tariffs on industrial products. In addition the CEECs, also adopt the Common External Tariff of the EU. This entails greater protection of agriculture in the CEECs, but lower barriers to trade in industrial

products and services. Belarus is not assumed to react to any of those developments in the simulations done here.

Model Results

Below the main results on the initial estimations are presented, expressed in percentage changes between the benchmark model run and the WTO/Enlargement scenario model run.

As one may see from Table 4a, changes in production are effectively close to zero in most sectors. One may observe significant reductions in the power sector, metals, food agriculture, other industries and financial services, while slight increases are observed in the chemicals, machinery and light industries sectors.

As one may see from Table 4b, one may observe an increase in exports in most sectors from Belarus to its two main markets, Russia and Eastern Europe (one must remember that EU entry effectively means a reduction of most of the import tariffs used by the CEECs –being agriculture and food industries the main exceptions: see UNECE 2003), with the exception of non-ferrous metals. One may also observe a decrease across the board in exports to the EU and to ROW (Russia, on the other hand, increases exports to both regions, and the CEECs increase exports to the EU).

As one may see from Table 4c, a decrease in imports by Belarus from Russia is observed, and also an increase of imports in most sectors from all other partners, albeit Eastern Europe sees some reductions, linked to the imposition of higher, CAP-related tariffs.

In terms of Gross Domestic Product, one observes a loss of *1.25%* of Belarus in the WTO/Enlargement scenario, but in welfare terms the reduction is much smaller *(-0.226%*), as "Terms of Trade" gains partially compensate for the reduced domestic production.

VI. Conclusions

In this paper, some very preliminary estimations of the combined potential effects of Russian Accession to the WTO and the EU Eastern Enlargement in the Republic of Belarus were presented. There are some reduced, but significant GDP losses. In welfare terms, nevertheless, the losses are truly marginal, as they are, to a large extent, compensated by "Terms of Trade" gains.

Any of the estimations here presented is of a very tentative nature, due to data and model questions. The research on this subject, with more comprehensive future estimations and sensitivity analysis, will continue

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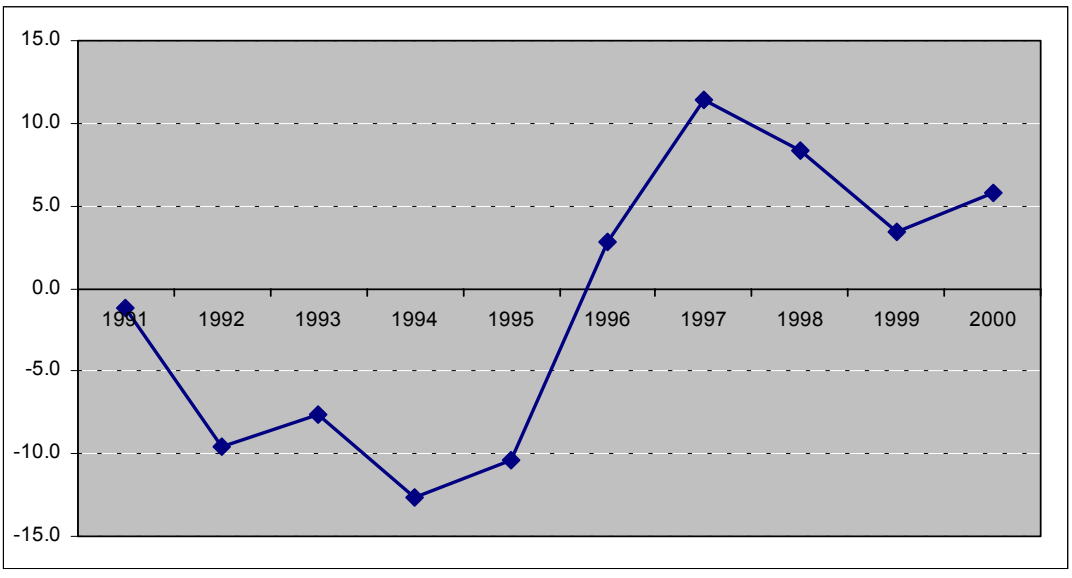
Table 1. Belarus: Selected Economic Indicators

	1992	1993	1994	1995	1996	1997	1998	1999	2000
% change over the previous year									
GDP	-9.6	-7.6	-12.6	-10.4	2.8	11.4	8.4	3.4	5.8
Gross Capital investment	-29	-15	-11	-31	-5	20	25	-8	-3
Industrial production	-9.2	-9.9	-19.2	-10.2	4.7	17.6	9.7	10.3	7.2
Agricultural production	-8.5	1.5	-14.4	-2.5	1.5	-5.4	-0.7	-7.2	8.1
Consumer prices	970.8	1190.2	2221	709.3	52.7	63.8	73	293.7	168.6
Producer prices	531	1787	1916	499	33.6	88	72	355.8	185.7
Real household income	-20	16	-9	-27	17	6	19	-3	11
Real wages	-12.4	-6.5	-30.9	-5	5.1	14.3	18	7.3	11.8
Retail sales	-22	-14	-10	-23	31	18	26	11	8
Unemployment rate	0.5	1.4	2.1	2.9	4	2.8	2.3	2.1	2.1
General Government (% GDP)									
Government Balance	n.a.	-1.9	-2.6	-1.9	-1.6	-2.1	-1.5	-2.9	-0.6
Total Revenues	n.a.	54.7	47.9	42.5	41.8	32.1	36.2	36.5	34.9
Total Expenditures	n.a.	56.6	50.5	44.4	43.4	34.2	37.7	39.4	35.5
Balance of Payments (% GDP)									
Current Account	n.a.	-6.6	-10.9	-4.5	-3.9	-5.9	-6.1	-1.7	-1.3
Trade Balance	n.a.	-8.1	-12.0	-6.5	-8.6	-10.1	-9.5	-5.1	-6.6
Exports	n.a.	28.6	61.6	46.8	43.6	55.7	50.0	50.6	54.9
Imports	n.a.	36.1	73.7	53.3	52.2	65.8	59.5	55.8	61.5
External Debt (% GDP)	n.a.	2.7	25.1	14.6	7.1	7.2	7.4	7.9	7.1
Gross official reserves (in months of imports)	n.a.	0.3	0.4	0.8	0.6	0.5	0.5	0.6	0.5
Population, m	10.24	10.24	10.21	10.18	10.14	10.09	10.05	10.02	9.99

Sources: National Statistics, BET, and IMF.

Figure 1. Belarus growth 1991-2000 (% over previous year)



Source: National Statistics.

Table 2a. Belarus Foreign Trade 1992-2000: Exports as % of Total.

	Exports							
	1992	1994	1995	1996	1997	1998	1999	2000
Total with CIS	66.4	58.8	63.0	66.8	73.1	73.0	61.4	60.3
Russia	40.0	46.1	45.5	53.2	64.7	65.2	54.6	51.0
Ukraine	15.8	9.8	12.6	8.8	6.0	5.5	4.7	7.6
Kazakhstan	3.6	1.0	1.6	1.6	0.7	0.7	0.5	0.3
Moldova	1.7	2.6	1.5	1.3	0.9	0.9	0.5	0.5
Uzbekistan	2.4	0.4	1.2	1.4	0.4	0.3	0.3	0.1
Others	2.9	0.4	0.6	0.5	0.4	0.5	0.7	0.8
Total with ROW	33.6	41.2	37.0	33.2	26.9	27.0	38.6	39.7
EU-15	11.4	14.7	12.0	8.2	6.9	7.3	8.9	9.4
Austria	3.1	0.7	0.4	0.3	0.2	0.3	0.3	0.2
Germany	1.8	6.5	5.6	3.6	3.0	2.8	3.6	3.1
Italy	0.6	1.3	1.3	1.1	0.9	1.0	1.1	1.0
Netherlands	1.2	1.0	1.6	1.2	1.2	1.1	0.9	1.8
AC-10	..	..	16.1	14.0	8.7	9.4	13.9	18.8
Poland	4.5	4.4	5.7	5.9	3.4	2.6	3.5	3.8
Latvia	1.5	1.0	4.1	4.4	1.0	2.4	4.4	6.3
Lithuania	1.6	1.4	3.0	3.1	1.9	2.2	2.9	4.7
China	0.8	1.7	0.6	0.4	1.0	1.4	2.9	1.8
Others	13.8	18.0	11.6	11.2	12.6	11.0	16.0	13.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

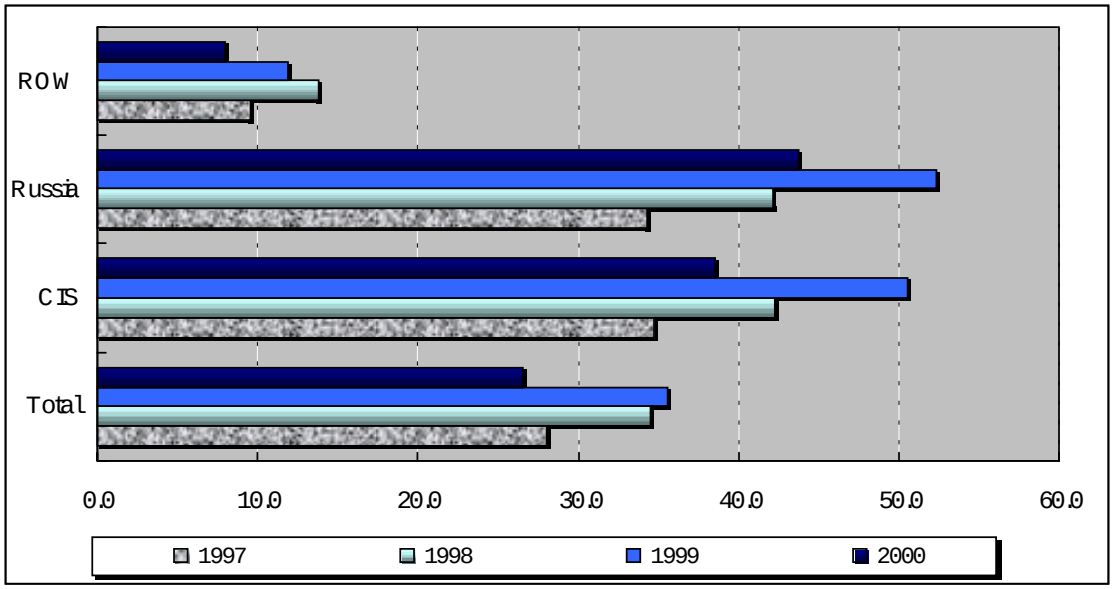
Sources: National Statistics, BET.

Table 2b. Belarus Foreign Trade 1992-2000: Imports as % of Total.

	Imports							
	1992	1994	1995	1996	1997	1998	1999	2000
Total with CIS	75.9	68.2	66.1	65.9	66.8	65.0	64.3	70.8
Russia	52.6	61.1	53.3	50.8	53.6	54.6	56.4	65.3
Ukraine	16.0	4.9	10.2	12.8	11.2	8.7	6.2	4.0
Kazakhstan	2.9	1.1	1.0	0.8	0.7	0.4	0.2	0.5
Moldova	1.2	0.3	0.6	0.7	0.7	0.6	0.7	0.4
Uzbekistan	1.4	0.3	0.7	0.5	0.4	0.4	0.4	0.3
Others	1.8	0.5	0.3	0.3	0.3	0.3	0.3	0.3
Total with ROW	24.1	31.8	33.9	34.1	33.2	35.0	35.7	29.2
EU-15	9.2	19.0	16.7	18.0	16.6	18.2	19.7	15.1
Austria	1.5	1.4	0.8	0.8	0.7	0.7	0.6	0.7
Germany	3.1	11.4	7.6	8.7	8.0	8.9	10.3	6.9
Italy	0.4	0.7	1.5	1.6	1.8	2.1	2.5	2.0
Netherlands	0.7	0.9	1.6	1.7	1.0	1.0	1.2	0.9
AC-10	..	..	10.9	8.8	8.7	9.1	7.5	6.5
Poland	0.5	1.9	3.5	2.8	2.9	3.3	3.2	2.5
Latvia	1.0	0.5	1.0	0.7	0.8	0.7	0.5	0.4
Lithuania	1.5	0.5	2.1	2.2	2.2	2.4	1.5	0.8
China	2.7	4.3	0.4	0.4	0.4	0.5	0.6	0.6
Others	9.2	5.6	10.1	10.0	10.4	10.0	10.2	9.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

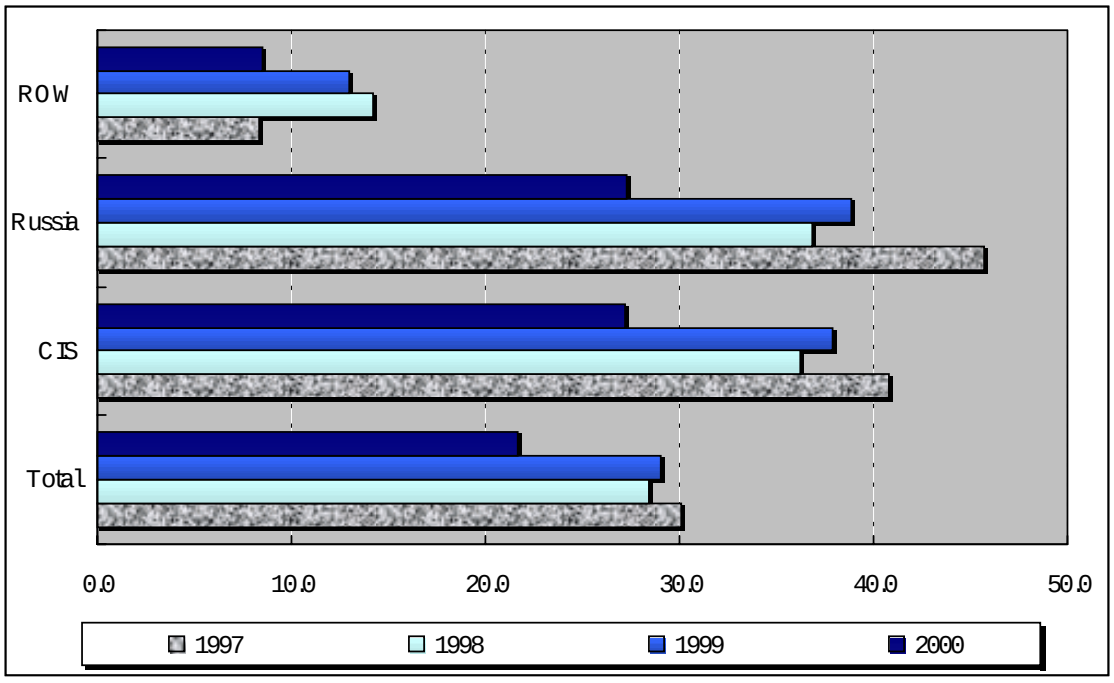
Sources: National Statistics, BET.

Figure 2a. Share of Barter in Belarus Exports, in %



Source: National Statistics.

Figure 2b. Share of Barter in Belarus Imports, in %.



Source: National Statistics.

Table 3a. Commodity Structure of Belarus Trade in 1996, in % of Total.

	Exports				Imports			
	CIS	Of which Russia	Non-CIS countries	**Total**	CIS	Of which Russia	Non-CIS countries	**Total**
Transport vehicles	**17.7**	**17.0**	**13.6**	**16.3**	**4.0**	**3.4**	**4.4**	**4.2**
Mineral products	**11.7**	**11.2**	**14.3**	**12.6**	**44.9**	**57.5**	**3.8**	**30.9**
Machines, equipment and mechanisms	**17.1**	**17.2**	**5.4**	**13.2**	**7.5**	**6.3**	**23.8**	**13.1**
Textiles	**7.5**	**7.7**	**17.9**	**10.9**	**2.0**	**1.5**	**8.6**	**4.3**
Chemical products	**5.4**	**4.7**	**24.9**	**11.9**	**8.0**	**7.8**	**14.9**	**10.4**
Products of food production	**11.6**	**12.8**	**2.9**	**8.7**	**10.0**	**3.4**	**18.9**	**13.1**
Non precious metals	**6.5**	**6.6**	**8.2**	**7.1**	**14.3**	**10.7**	**5.8**	**11.4**
Plastic and rubber	**6.9**	**6.4**	**2.4**	**5.4**	**4.7**	**4.8**	**5.6**	**5.0**
Construction materials	**3.1**	**3.4**	**1.2**	**2.5**	**0.9**	**0.6**	**1.0**	**0.9**
Wood and wood products	**3.1**	**2.3**	**3.6**	**3.3**	**1.8**	**2.0**	**2.8**	**2.2**
Other	**9.3**	**10.6**	**5.7**	**8.1**	**1.8**	**2.0**	**10.4**	**4.7**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Statistics data.

Table 3b. Commodity Structure of Belarus Trade in 2000, in % of Total

	Exports				Imports			
	CIS	Of which Russia	Non-CIS countries	**Total**	CIS	Of which Russia	Non-CIS countries	**Total**
Transport vehicles	**18.5**	**19.6**	**7.7**	**14.2**	**3.1**	**3.2**	**4.1**	**3.4**
Mineral products	**10.6**	**2.1**	**34.5**	**20.1**	**43.6**	**47.0**	**1.2**	**31.2**
Machines, equipment and mechanisms	**15.5**	**17.0**	**3.7**	**10.8**	**8.3**	**8.2**	**25.4**	**13.3**
Textiles	**10.8**	**12.0**	**10.3**	**10.6**	**2.7**	**2.5**	**8.4**	**4.4**
Chemical products	**4.8**	**4.9**	**20.3**	**11.0**	**7.1**	**6.7**	**15.4**	**9.5**
Products of food production	**10.6**	**12.0**	**2.8**	**7.5**	**8.5**	**5.7**	**22.8**	**12.6**
Non precious metals	**6.1**	**6.7**	**8.8**	**7.2**	**14.2**	**13.7**	**4.2**	**11.3**
Plastic and rubber	**6.4**	**7.0**	**1.9**	**4.6**	**3.8**	**3.9**	**7.0**	**4.7**
Construction materials	**3.3**	**3.5**	**1.2**	**2.5**	**1.1**	**1.1**	**1.4**	**1.1**
Wood and wood products	**4.0**	**4.1**	**4.6**	**4.3**	**3.0**	**3.2**	**3.3**	**3.1**
Other	**9.5**	**11.0**	**4.3**	**7.4**	**4.6**	**4.8**	**7.0**	**5.3**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: National Statistics data.

Table 4a. Changes in Production in Belarus by Sector (%)

1-Power	-0.11
2-Mineral Fuels	0.00
3-Ferrous metals	-0.16
4-Non-ferrous metals	-13.03
5-Chemicals	0.02
6-Machinery	0.23
7-Light Industry (textiles, clothes)	0.20
8-Food processing	-0.09
9-Other manufacturing	-0.04
10-Agriculture	-0.05
11-Services	0.00
11-Financial Services	-0.11

Table 4b. Changes in Imports from Belarus (%)

Sectors	RUS	EU	CEEC	ROW
1-Power	0.00	0.00	0.00	0.00
2-Mineral Fuels	1.03	-3.04	4.09	-2.63
3-Ferrous metals	1.07	-3.01	4.13	-2.59
4-Non-ferrous metals	-10.75	-14.37	-8.01	-14.00
5-Chemicals	1.07	-3.00	4.13	-2.59
6-Machinery	0.87	-3.20	3.92	-2.78
7-Light Industry (textiles, clothes)	0.86	-3.21	3.91	-2.80
8-Food processing	0.99	-3.08	4.05	-2.67
9-Other manufacturing	0.98	-3.10	4.03	-2.68
10-Agriculture	0.99	-3.08	4.05	-2.67
11-Services	0.00	0.00	0.00	0.00
11-Financial Services	0.00	0.00	0.00	0.00

Table 4c. Changes in Exports to Belarus (%)

Sectors	RUS	EU	CEEC	ROW
1-Power	-1.42	0.00	-4.23	2.55
2-Mineral Fuels	0.00	0.00	0.00	2.15
3-Ferrous metals	-1.80	2.76	2.50	2.31
4-Non-ferrous metals	-2.00	2.65	2.06	2.30
5-Chemicals	-2.45	2.91	2.65	2.55
6-Machinery	-2.99	2.84	2.25	2.56
7-Light Industry (textiles, clothes)	-2.92	2.71	1.89	2.55
8-Food processing	-2.18	2.87	-9.67	2.54
9-Other manufacturing	-2.23	2.79	5.93	2.56
10-Agriculture	-1.51	2.81	-15.03	2.55
11-Services	0.00	0.00	0.50	2.53
11-Financial Services	0.00	0.00	0.00	0.00