

IMPROVING THE NATIONAL COMPETITIVENESS OF BELARUS: WHAT GOVERNMENTAL DEVELOPMENT PROGRAMS ARE MISSING

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Summary

This study, conducted within the REFORUM project, analyzes the substance of governmental development programs with a view to identifying any missing dimensions, which, if implemented, could have sufficient capacity to encourage improvements in the national competitiveness of Belarus.

The analytical framework of the study envisages that areas of activities incorporated in programs will ultimately target, to a greater or lesser degree, improvements in the indicators of the so-called components of national competitiveness — qualitative and quantitative parameters characterizing its level. The list of the components of competitiveness has been drawn up based upon the methodology of the World Economic Forum.

The analytical part of the study therefore builds upon the search for areas of activities, as well as targets and objectives focused on the improvement of specific indicators of the components of national competitiveness in major governmental development programs and associated sectoral programs.

The findings of the analysis have made it possible to identify the following parameters of the components of national competitiveness, which were either missing in state development programs altogether or covered only partially.

The **institutions** component fails to include the indicators of the quality of work of law enforcement agencies, rule of law, and good governance. The *government efficiency* parameter is included only partially and envisages activities aimed at improving the operation of selected economic institutions.

In the **infrastructure** component, little attention is paid to the development of airport infrastructure, as well as the promotion of the quality of logistics.

The **higher education and training** component, as presented in the programs, is missing the indicator of the availability of vocational training and skill improvement services.

The indicator of hiring and firing practices is lacking in the coverage of the **labor market efficiency** component, and arrangements to improve the indicator of the capacity of the state to retain and attract professional personnel are missing.

Furthermore, growth in the national competitiveness of Belarus can additionally be expedited through improvements in the parameters of the **innovation**¹ component. Given the peculiar nature of the evolution of the innovation sector in Belarus, improvements in the environment for the operation of the IT sector might become a crucial development driver.

¹ This component is not included in the detailed analysis, because Belarus is currently in transition between the factor-driven economy and the innovation-driven economy. The innovation component is therefore less important than the other components of national competitiveness.

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Introduction

In 2011, improvements in the country's positions in global competitiveness rankings were included in the list of objectives declared in the program of activities of the Belarusian government². The drafters of Program I had thought that the package of arrangements that needed to be implemented for Belarus to enhance its competitiveness would enable the country to move up to top-30 countries on the World Economic Forum Global Competitiveness Index³.

However, as of today, Belarus has not been included in the WEF GCI or any other national competitiveness ranking (the competitiveness scoreboard of the Institute of Management and Development⁴). The problem is not the critically low level of Belarus's competitiveness, but the lack of trust of the compilers in official statistics required to calculate the WEF and IMD competitiveness ranks.

Third-party assessments of Belarus's national competitiveness based upon the WEF methodology are available (see Akulič, Valietka, Naŭrodski, Suškievič, 2015). They show that if Belarus had been included in the WEF ranking in 2014, it would have had rank 55, next to Mexico and Costa Rica⁵. Judging by the estimate, a conclusion can be drawn that the arrangements for the country to improve its national competitiveness envisaged in Program I were not sufficient for Belarus to get into the list of the top-30 performers on the WEF Global Competitiveness Index.

It can be assumed that there were two reasons why Belarus did not manage to improve its hypothetical ranks towards the top-30 on the WEF GCI. The first one was the wrong choice of areas of activities and/or improper setting of the targets and objectives of the governmental policy documents. In other words, the state authorities might have either *made a wrong choice* or *missed* some of the areas of activities, which could have enhanced the country's national competitiveness. The second reason is either mistakes made during the development of specific arrangements for each area of activities or ineffective implementation of such arrangements.

This study focuses on the analysis of the *correspondence* of the dimensions, as well as targets and objectives set out in the governmental development programs to the areas, where the authorities need to be making the most efforts in order to improve national competitiveness. The analysis of the process of the *development and implementation* of the arrangements to enhance national competitiveness is beyond the scope of this study for two reasons.

First, the nature of the decision-making system in Belarus brings about a situation where the development of legislative measures and their introduction by no means always correlate with the tasks and objectives of policy documents and are for the most part purely contextual and aimed at addressing short-term challenges.

Second, the examination of the implementation of specific arrangements appears to belong to the analysis of the effectiveness of governmental programs and calls for a separate study that goes well beyond the framework of national competitiveness. In brief, this paper centers on the identification of gaps that emerged when measures to improve Belarus's national competitiveness were being developed.

² To be more precise, the Program of Activities of the Government of the Republic of Belarus for 2011–2015 (hereinafter Program I; see Program of Activities of the Government of the Republic of Belarus for 2011–2015. Council of Ministers of the Republic of Belarus, Resolution No. 216).

³ Hereinafter the WEF.

⁴ Hereinafter the IMD.

⁵ Belarus would have improved its position from the year 2012 (had it been included in the ranking) by six notches.

Naturally, the main objective of the implementation of governmental development programs is not so much the improvement in national competitiveness ranks as the achievement of the country's socioeconomic development targets. Therefore, further analysis was based upon what the governmental programs *are missing* when it comes to their targets and objectives and what could additionally encourage the improvement of Belarus's national competitiveness. The inclusion of these missing areas of activities in future governmental development programs has potential to accelerate the increase in the level of the country's national competitiveness.

Because the Program of Activities of the Government of the Republic of Belarus for 2011–2015 included an objective to improve Belarus' rank in the WEF Global Competitiveness Index, further analysis will draw on theoretical assumptions and calculations based upon the available WEF methodology.

The study has the following structure:

The first part provides the classification of country economies based upon the methodology of the WEF GCI. According to this classification, the type of the country economy applicable to Belarus is identified, along with the components of competitiveness where parameters should be improved on a priority basis for Belarus to ultimately boost its country competitiveness. Further, the first part describes the analytical methodology that is used in the second part to analyze the reviewed governmental development programs.

The second part offers the analysis of governmental development programs: it focuses on the search for areas of activities, targets and objectives centered on the improvement in the parameters of the components of national competitiveness based upon the WEF methodology described in the first section of the study.

The conclusion provides the key findings of the research study.

1. Analytical framework

This portion of the study addresses the approach of the WEF GCI to the classification of country economies and uses it as the basis for identifying the components of competitiveness, in which parameters should be improved on a priority basis for Belarus to enhance its national competitiveness. This part also contains a description of the analytical methodology that will be used to analyze the reviewed governmental development programs.

According to the WEF methodology, a high level of national competitiveness is contingent upon improvements in the twelve so-called “pillars” of competitiveness. The significance of each pillar for the ultimate competitiveness level differs depending upon which of the three development phases a country is going through (see Autushka-Sikorski, 2015 for more details on the WEF methodology).

The first development phase is characterized by growth that builds upon cheap resources that a country possesses: these include primarily mineral resources and vast cheap workforce. The second stage is characterized by a degree of economic development, where a country exhausts its growth reserves that draw upon cheap resources and as a result needs to focus on improving production efficiency: automation of companies, improvement in the quality of goods, and further training of workforce. As soon as a country has exhausted the growth reserves ensured by efficiency, it will need to move on to the third, innovative stage. Economies driven by innovation improve their competitiveness by marketing their unique innovative technologies, goods, or services, which becomes possible owing to innovation – both technological and non-material.

The WEF methodology classifies countries in terms of per capita GDP⁶, breaking down countries based upon the following principle.

Table 1.1. Weights of competitiveness factors and thresholds for stages of development

	Stage of development of an economy				
	Factor-driven	Transition from Stage 1 to Stage 2	Efficiency-driven	Transition from Stage 2 to Stage 3	Innovation-driven
GDP per capita (US\$)	< 2,000	2,000 – 2,999	3,000 – 8,999	9,000 – 17,000	>17,000
Weight for basic requirements	60%	40%-60%	40%	20%-40%	20%
Weight for efficiency enhancers	35%	35%-50%	50%	50%	50%
Weight for innovation and sophistication factors	5%	5%-10%	10%	10%-30%	30%

Source: WEF, 2015.

⁶ Excluding economies that rely exclusively on export of resources. If mineral products account for more than 70% of a country's export, it is considered to be an efficiency-driven economy.

Formally, according to the WEF classification, Belarus is currently in transition from the efficiency-driven economy to that driven by innovation.

Table 1.2. GDP per capita (PPP\$) of Belarus, 2005–2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP per capita (US\$)	9,619	10,980	12,317	13,905	14,072	15,369	16,589	17,208	17,623	18,177

Source: IMF.

Depending on the stage of development that an economy is going through, arrangements to improve competitiveness should be targeted to achieve progress in the *components* of one of the three competitiveness promotion *factors*: productivity, efficiency, or innovation. The components, for their part, consist of several parameters.

To improve Belarus's national competitiveness it is necessary to focus on improvements in the indicators of the productivity and efficiency components.

Table 1.3. Types of country economies and competitiveness factors according to the World Economic Forum methodology (excerpt of a table)

Economic growth factors	Growth factor components/Parameters of the components⁷	Type of economy
Basic requirements⁸	Institutions <ul style="list-style-type: none"> • Government efficiency • Corruption and combat against corruption • Rule of law and good governance 	Factor-driven economy
	Infrastructure <ul style="list-style-type: none"> • Overall infrastructure quality • Quality of roads and ports • Quality of logistics 	
	Macroeconomic environment <ul style="list-style-type: none"> • Inflation • State budget balance • Government debt • Country credit rating 	
	Health and primary education <ul style="list-style-type: none"> • Life expectancy • Infant mortality • HIV/tuberculosis/malaria incidence • Quality of primary education and enrollment rate 	

⁷ In most cases, the parameters of the components of competitiveness are grouped within categories: for instance, the "availability of electricity" parameter in the "infrastructure" component has been incorporated in the "overall infrastructure quality" parameter. See WEF, 2015 for a detailed list of the parameters.

⁸ Economy, driven by basic requirements further will be named as factor-driven one.

Efficiency enhancers	Higher education and training <ul style="list-style-type: none"> • Higher education enrollment rate • Quality of science education • Quality of management schools • Internet access in schools • Availability of further training and skill improvement services • Local availability of specialized research infrastructure • Staff qualification 	Efficiency-driven economy
	Goods market efficiency <ul style="list-style-type: none"> • Intensity of local competition and extent of market dominance • Total tax rate • Business impact of rules on FDI 	
	Labor market efficiency <ul style="list-style-type: none"> • Flexibility of wage determination • Hiring and firing practices • Wages and productivity • Country capacity to retain talent • Correlation between pay and productivity 	
	Financial institutions <ul style="list-style-type: none"> • Availability and affordability of financial services • Availability and affordability of loans • Soundness of banks • Venture capital availability 	
	Technological readiness <ul style="list-style-type: none"> • Availability of latest technologies • Amount of Internet users • Internet bandwidth • Mobile telephone subscriptions 	
	Market size <ul style="list-style-type: none"> • Export in per cent of GDP • GDP adjusted for Purchasing Power Parity (PPP) 	

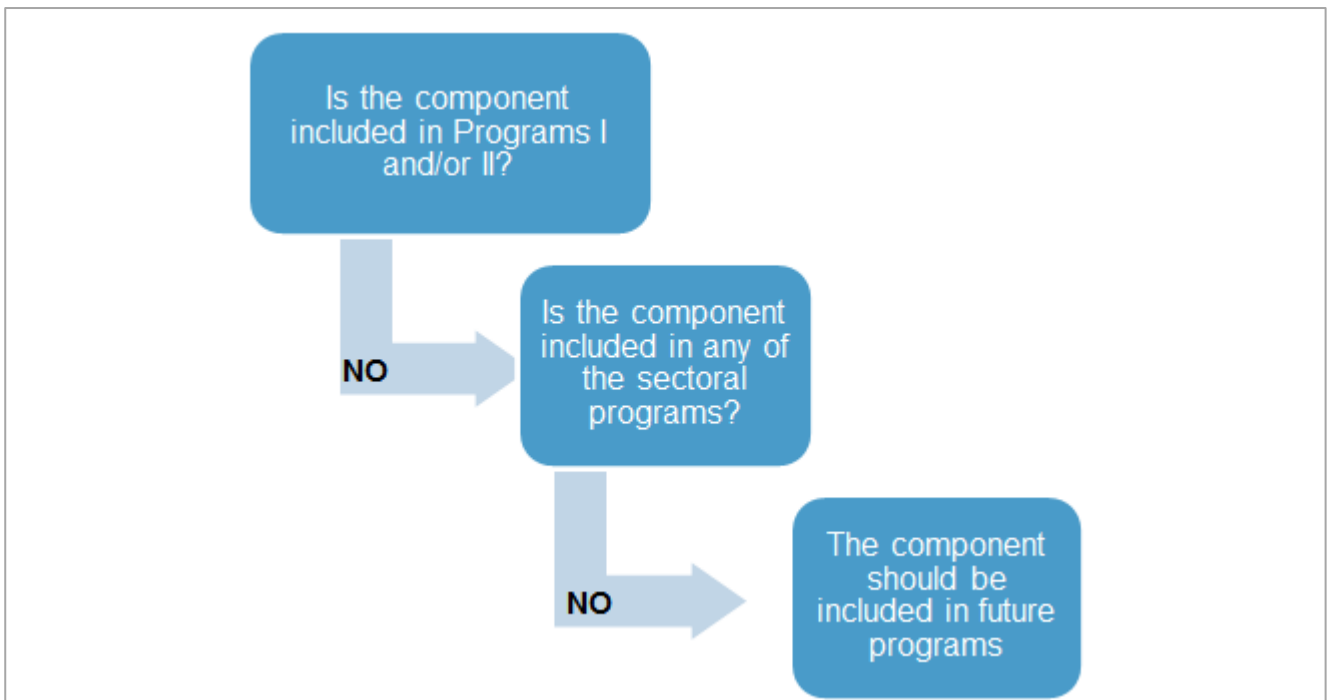
Source: WEF, 2015.

The major governmental development programs are selected as units of analysis, along with associated sectoral programs approved since 2011, when improvements in national competitiveness rank were for the first time included in the Program of Activities of the Government of the Republic of Belarus. The list of programs explored in this study includes: 1) Program of Activities of the Government of the Republic of Belarus for 2011–2015; 2) Program of Socioeconomic Development of the Republic of Belarus for 2011–2015⁹ (hereinafter Program I

⁹ Socioeconomic Development Program of the Republic of Belarus for 2011–2015. Decree of the President of the Republic of Belarus No. 136.

and Program II, respectively). These programs are the largest ones and incorporate the most areas of activities targeting socioeconomic development. Further analysis of each of the areas of the Programs will follow the flow chart below:

Chart 1.1. Logic chart for further analysis



If the parameters and/or components of basic requirements and efficiency enhancers should not be discovered in Programs I and II, search will continue in sectoral programs. The components and their parameters that are not covered at any level of governmental development planning will be considered as missed growth points for Belarus's national competitiveness.

2. Analysis of the development programs

Program I¹⁰ focuses on 25 main areas of activities (see full list in Annex I). Thirteen of these 25 areas are either directly or indirectly associated with improvements in the components of competitiveness required for factor-driven and efficiency-driven economies. These areas include:

- 1) Establishment of a favorable institutional environment for business development;
- 2) Promotion of competition and effective anti-trust policy;
- 3) Support for entrepreneurship and fostering of public–private partnership;
- 4) Development of the financial sector;
- 5) Monetary policy;
- 6) Fiscal policy;
- 7) Transport;
- 8) Information and communications technologies;
- 9) Labor relations;
- 10) Healthcare;
- 11) Education;
- 12) Raising FDI;
- 13) Export promotion.

Program II focuses on 23 main areas (see full list in Annex II), of them nine are either directly or indirectly associated with enhancements in the components of competitiveness necessary for factor-driven and efficiency-driven economies:

- 1) Healthcare and improvement in the quality of medical services;
- 2) Education;
- 3) Employment and labor market;
- 4) Promotion of the development of entrepreneurship and business;
- 5) Fiscal policy;
- 6) Monetary policy;
- 7) Development of financial markets;
- 8) Price and antitrust policy;
- 9) Foreign economic activity.

¹⁰ As was mentioned above, Program I stands for the Program of Activities of the Government of the Republic of Belarus for 2011–2015.

When grouped with the components of growth in competitiveness described in Table 1.3, these dimensions are mapped as follows:

Table 1.4. Correspondence of dimensions envisaged in Programs I and II to the components of national competitiveness

Economic growth factors	Growth factor components	Corresponding dimensions in Program I and Program II¹¹¹²
Basic requirements	Institutions	Establishment of a favorable institutional environment for business development
	Infrastructure	Transport, Information and communications technologies
	Macroeconomic environment	Monetary policy, Fiscal policy; Monetary policy, Fiscal policy
	Healthcare and basic education	Healthcare, education; Health promotion and improvement in the quality of medical services, Education
Efficiency enhancers	Higher education	Education
	Goods market efficiency	Promotion of competition and effective anti-trust policy, Raising FDI; Price and antitrust policy
	Labor market efficiency	Labor relations
	Financial institutions	Development of the financial sector; Development of financial markets
	Technological readiness	Information and communications technologies
	Market size	Export promotion; Foreign economic activity

Further analysis will show to what extent various dimensions included in the Programs and envisaged targets and objectives correlate with the requirements incorporated in the components of the competitiveness promotion factors based upon the WEF methodology. Ideally, the objectives of the areas of activities envisioned in the Programs should ensure improvements in *all* of the components.

¹¹ Names of corresponding dimensions in Program I and Program II are divided by a semicolon and sometimes coincide.

¹² Corresponding dimensions refer to the areas, which (at least partially) incorporate the targets, objectives, and arrangements to improve the parameters of the components of national competitiveness specified in the table.

2.1. Institutions

Institutions as a component of growth in competitiveness according to the WEF methodology calls for improvements in the following four parameters:

- Government efficiency;
- Corruption and combat against corruption;
- Quality of work of law enforcement agencies;
- Rule of law and good governance.

Only one of the dimensions in Program I is aimed, in a varying degree, at improvements in institutions — *Establishment of a favorable institutional environment for business*.

The objective of this dimension of the Program is declared as “promotion of innovative development and competitiveness of the national economy, as well as improvement in the effectiveness of the operation of state agencies.” To achieve this goal it is planned to streamline the structure of state agencies and alter the system of economic planning, which will enable the country to change from administrative controls towards a system based upon market mechanisms and indirect interference of the state, where the state will be primarily involved in correcting so-called “market failures.”

The targets and objectives of this dimension are somewhat contradictory. On the one hand, the goal of this area of Program I is the transition towards indirect regulation by the state; on the other hand, it is planned to attain this goal by *expanding the powers* of the state authorities in the supervised areas. Further, the description of measures to implement this policy does not include specific suggestions how to alter the structure of economic management agencies with a view to streamlining them. There is no description of how the proposed measures will impact the institutional business environment, either.

These issues should have been clarified in the Program for the Promotion of Small and Medium-sized Business in the Republic of Belarus for 2013–2015 (hereinafter the SMEs Promotion Program). The SMEs Promotion Program is a sectoral program that envisaged a more detailed description of arrangements to create a favorable institutional environment for business and functioned as a sort of “support program” for the corresponding dimension of Program I¹³.

However, restructuring and streamlining of state agencies as an area of activities is not part of the SMEs Promotion Program, whereas changes in institutional and legal framework are limited to measures to develop a law on public–private partnership and generalized “simplification of administrative procedures.” The SMEs Promotion Program was adopted as late as 2013, two years after the Program of Activities of the Government was approved.

At the same time, apart from the area that aims at establishing a favorable institutional environment for business development, Program I does not include any other dimensions that target improvements in the quality of institutional operation.

For its part, Program II comprises a whole chapter that envisages improvements in the quality of work of institutions — Modernization of Economic Institutions and State Management System. However, four out of five sections of the chapter are associated with the components of financial institutions (*Promotion of financial markets* section), macroeconomic environment (*Fiscal policy*

¹³Concerning the Program for State Support for Small and Medium-sized Business in the Republic of Belarus for 2013–2015. The Council of the Minister of the Republic of Belarus, Resolution No. 1242.

and *Monetary policy* sections) and goods market efficiency (*Price and antitrust policy* section), rather than with institutions as a component of national competitiveness. This does not automatically mean that Program II fails to include activities to improve the quality of institutions: the above sections can include areas, targets, and objectives aimed at improving the quality of some *sectoral* institutions (for example, financial regulation institutions).

The said sections are indeed focused on some narrow sectoral and limited institutional changes. The *Fiscal policy* section incorporates simplifications of procedures for the collection of taxes, fees and charges, tax administration and control, as well as streamlining of budget expenditures and reduction in the government debt. The section centered on the promotion of financial institutions provides for improvements in the institutional structure of the banking sector through a reduction in its concentration, engagement of private investors, and improvements in prudential requirements and supervisory procedures. The *Price and antitrust policy* segment envisages, *inter alia*, the liquidation of cross-subsidy in payments for energy. The *Monetary policy* section is not intended for any institutional changes and envisages activities aimed exclusively at bettering the macroeconomic environment: ensuring the stability of the BYR exchange rate, curbing inflation, and putting in place effective monetary policies.

Unlike Program I, Program II pays a lot more attention to *economic* institutions — the entire chapter Encouragement of the Development of Entrepreneurship and Business focuses on the country's economic institutions. The section envisages the following activities targeting improvements in economic institutions: 1) simplification of certification, licensing, and standardization procedures; 2) establishment of a system of venture capital funds and leasing companies; 3) improvements in the control and supervisory activities; 4) improvements in the structure of state property management.

At the same time, there are no sectoral programs (apart from the SMEs Promotion Program described above) aimed at improving the quality of institutions. More precisely, no such programs or plans were adopted in the period from 2011 to 2015.

Programs I and II do not include an anti-corruption dimension. However, the relevant action plan, objectives and targets of this dimension are spelt out in the Program for Combating Crime and Corruption for 2013–2015¹⁴ and provide for measures to not only enhance anti-corruption activities, but also consolidate the available toolkit to combat corruption.

Therefore, when it comes to arrangements to improve the institutional environment, Programs I and II are limited to measures to strengthen some economic management institutions listed above. The Programs do not include areas focused on changing state management institutions, improving the quality of governance and overall efficiency of institutions, as well as ensuring the rule of law.

2.3. Infrastructure

Infrastructure as a component of growth in competitiveness according to the WEF methodology calls for efforts to improve the following parameters:

- Overall infrastructure quality;
- Quality of roads and ports¹⁵;

¹⁴ Program for combating crime for 2013–2015. Ministry of the Interior of the Republic of Belarus.

¹⁵ The port infrastructure portion will be excluded from the search, because Belarus has no access to sea, whereas the inland navigation infrastructure is not critical to the transportation system.

- Quality of logistics;
- Quality of airport infrastructure.

Program I¹⁶ incorporates the transport promotion section that focuses on these indicators.

Arrangements to achieve these objectives outlined in Program I are for the most part centered around the development of the physical transport infrastructure, i.e. improvement in indicators for such parameters as the **quality of roads, overall infrastructure quality, and the quality of airport infrastructure**. This Program dimension includes activities to build roads, introduce new technologies and put into operation new transport. Program I also focuses on improvements in the physical railway infrastructure (construction of railway lines and modernization of rolling stock) and physical road infrastructure (construction and modernization of highways, improvements in the structure of roadside service facilities, and construction of logistics centers).

Program I is less focused on improvements in the **quality of airport infrastructure** (the Program only mentions the construction of a second runway of the Minsk National Airport and setting up of a logistics center at the airport) and even less on improvements in procedures and practices to manage the transport and logistics system of the country. For its part, Law No. 223 *Concerning measures to construct and reconstruct facilities at the Minsk National Airport*¹⁷, which could provide broader and more detailed measures to develop the national airport, seems to have been adopted with a sole purpose of approving the investment project to implement the improvements indicated in Program I.

As was mentioned earlier¹⁸ in the overview of Belarus' indicators in transport infrastructure rankings, one of the main challenges standing behind the low level of transport infrastructure development is not so much the problem of physical infrastructure as logistics restraints — poor quality of logistics services, length of transportation chains, and complicated execution of transit documents. Therefore, the transport development dimension spelt out in the Program only partially targets improvements in the transport infrastructure in the manner required for enhancing the country's competitiveness.

However, activities aimed at promoting the transport infrastructure are described in more detail in the Program for the Development of Belarus's Transit Capacity for 2011–2015¹⁹.

The areas of activity included in the Program for the Development of Transit Capacity, its targets and objectives envisage the following components of the promotion of transport infrastructure:

- 1) Promotion of the physical infrastructure: roads, transport, as well as the physical infrastructure of service facilities (automation of checkpoints, ticket sales points, etc.);
- 2) Promotion of international cooperation in the management and coordination of transportation;
- 3) Unification of the regulatory framework for transport with the Customs Union member states, as well as promotion of cooperation and coordination for the purpose of improving the transport management system;
- 4) Promotion and modernization of roadside service facilities;

¹⁶ Some dimensions envisaging infrastructure improvements are missing in Program II.

¹⁷ Concerning measures to construct and reconstruct facilities at the Minsk National Airport. Decree of the President of the Republic of Belarus No. 223.

¹⁸ See Autushka-Sikorski, 2015.

¹⁹ State Program for the Promotion of the Transit Capacity of the Republic of Belarus for 2011–2015. Council of Ministers of the Republic of Belarus, Resolution No. 1852.

- 5) Development and modernization of information and management technologies in logistics (including border and customs checkpoints);
- 6) Promotion and modernization of the land navigation and observation structure;
- 7) Construction of logistics centers within the framework of the uniform logistics network of the Eurasian Economic Community;
- 8) Introduction of new information technologies to manage traffic, including air traffic.

However, the Program for the Development of Belarus' Transit Capacity seems to be missing two essential areas of activities, which could ideally contribute to the development of the transport infrastructure. First, the program does not envisage simplifications of customs clearance and border-crossing procedures while focusing solely on the modernization of checkpoints. Second, the program does not include any provisions on the development of the legislation, which would eventually facilitate the establishment of firms that offer logistics services in Belarus.

Therefore, although the parameters of infrastructure as a component of national competitiveness are missing from Program I, they are described in much detail in the sectoral Program for the Development of Belarus' Transit Capacity. Nevertheless, there are gaps in the program when it comes to activities aimed at improving logistics patterns as an element of the transport infrastructure. Further, the airport infrastructure parameter could have been explored in more detail.

2.4. Macroeconomic environment

Macroeconomic environment as a competitiveness promotion component requires improvements in the following parameters:

- Inflation;
- State budget balance;
- Government debt;
- Country credit rating.

Programs I and II both have monetary and fiscal policies dimensions focused on these indicators²⁰, and all of the competitiveness parameters for the macroeconomic environment component are effectively covered in Programs I and II. The above dimensions of the two Programs provide for the:

- Establishment of a system for the effective management of the government debt and improvement in the efficiency of the use of loans;
- Reduction in the amount of the government debt;
- Reduction in the consolidated budget deficit;
- Increase in the efficiency of budget expenditures;
- Arrangements to maintain low consumer inflation;
- Improvement in the sovereign credit rating and Belarus's position in the OECD Country Risk Classification.

Therefore, the parameters of the macroeconomic environment component are fully reflected in Programs I and II.

2.5. Healthcare and basic education

The healthcare and basic education component implies improvements in the following parameters:

²⁰ Programs I and II have identical names for these two areas.

- Life expectancy;
- Infant mortality;
- HIV/tuberculosis/malaria incidence²¹;
- Quality of primary education and enrollment rate.

The following dimensions of Programs I and II are aimed at improving indicators within this component:

- Improvement in living standards and quality of life of the population (Program I);
- Demographic security (Program I);
- Demographic security and consolidation of the family (Program II);
- Health promotion and improvement in the quality of medical services (Program II);
- Education (Programs I and II).

The **life expectancy** parameter is accounted for in the areas incorporated in Programs I and II. The former provides for measures to increase life expectancy by reducing premature mortality, as well as general health promotion arrangements, including through the eradication of pernicious habits (drinking and smoking) and improved availability of medical services to the population.

Program II also includes the life expectancy parameter in the context of the achievement of objectives associated with the promotion of the infrastructure of medical services and improvement of their availability, reduction in premature mortality and increase in life expectancy, as well as introduction of new effective measures to prevent diseases.

Although Programs I and II do not comprise areas of activities that directly aim at reducing **infant mortality**, we believe both Programs account for this competitiveness parameter due to indirect arrangements. The dimensions of the Programs (as described above) have an explicit purpose of reducing premature mortality (which implies a reduction in infant and child mortality) and include measures to promote maternal and child health.

At the same time, Programs I and II fail to cover the **HIV/tuberculosis prevention** parameter. The two programs only comprise a general dimension to prevent chronic diseases. No specific measures to prevent HIV or TB are provided in detail.

Arrangements to reduce HIV and tuberculosis incidence are provided in the two targeted sectoral programs of the Ministry of Healthcare: State Program *Tuberculosis* for 2010–2014²² and State Program for HIV Prevention for 2011–2015²³. The former aims at reducing tuberculosis death rate and incidence (by 1% and 2% annually, respectively) and includes measures to modernize and re-equip tuberculosis dispensaries and prevention institutions. The state HIV prevention program is aimed at reducing HIV incidence, cutting the infection rate, and extension of the longevity of HIV carriers.

Basic education as a component of competitiveness is included in Program I. The program envisions technical modernization and retrofitting of general education institutions, improvement in the quality of education (first and foremost through higher quality language teaching and enhancing technological literacy), and increase in the availability of general education institutions (with 100% coverage of five-year-olds with preschool courses, and coverage of 92% and 85% of

²¹ The malaria incidence level will be excluded from the search in Programs I and II, because the disease is uncharacteristic of Belarus.

²² State Program *Tuberculosis* for 2010–2014. Council of Ministers of the Republic of Belarus, Resolution No. 11.

²³ State Program for HIV Prevention for 2011–2015. Council of Ministers of the Republic of Belarus.

children in urban and rural areas, respectively, with general education). Program II is less concerned with basic education and focuses on the technical re-equipment of educational institutions and improvements in language teaching.

Therefore, the parameters of **healthcare** and **basic education** as components of national competitiveness are fully included in Programs I and II, as well as sectoral programs.

2.6. Higher education

As a component of national competitiveness higher education envisages activities to improve the indicators of the following parameters:

- Higher education enrollment rate;
- Quality of science education;
- Quality of management schools;
- Internet access in schools;
- Availability of further training and skill improvement services;
- Local availability of specialized research infrastructure;
- Staff qualification.

The *Education* dimension covers this component of competitiveness in Programs I and II (the names are identical for both). The Programs have no individual areas to plan activities targeting exclusively *higher* education improvements, though.

The **higher education enrollment rate** parameter is reflected in Programs I and II, which include targets for increasing the absolute number of students of higher education institutions (training of at least 147,500 specialists with higher education and admission of at least 163,000 people in higher educational institutions — Program I) and the share of citizens with higher education (to 85% — Program II).

Programs I and II also focus on increasing the number of engineering and technical graduates and improving the quality of training in disciplines taught to students of technical training institutions, including extramural students. The Programs thus cover the parameter of **quality of science education**.

The **Internet access in higher education institutions** parameter is included in both Programs. Program I envisages broadband Internet access of each educational establishment and upgrade of computer hardware in all higher education institutions. Program II incorporates measures to introduce state-of-the-art information and communications technologies in higher education institutions and ensure broadband Internet access while upgrading the available software tools.

The **local availability of specialized research infrastructure** parameter is also covered in both Programs. Program I addresses it indirectly by introducing measures to improve the physical infrastructure of higher education institutions. Program II provide a broader coverage and includes objectives to:

- Expand the research and laboratory infrastructure of higher education institutions;
- Create scientific and innovation centers and innovation parks in higher education institutions.

The **staff qualification** parameter is accounted for due to the inclusion in Program I of arrangements to provide internal and external traineeship opportunities for teachers, as well as exchange programs with higher education institutions in foreign countries. Program II does not address this parameter at all; however, it is included in the State Program for the Promotion of Higher Education for 2011–2015. The Program envisages measures to “form competent higher-education teaching personnel complying with international requirements.” These arrangements

include the organization of practical training and internships at “leading organizations and research centers.” Further, the Program provides for advanced training of academic staff by inviting professors from foreign universities to Belarusian higher education institutions and inclusion of Belarusian researchers in international doctoral programs.

Therefore, Programs I and II include all of the elements of the higher education component, except for **quality of management schools** and **availability of further training and skill improvement services**.

These elements might be included in the sectoral program of the Ministry of Education for the promotion of higher education for 2011–2015²⁴. The Program includes dimensions to promote business education in the English language at the master’s degree level. However, this dimension is only mentioned once and in passing, and no specific targets and objectives are provided.

The main document addressing the **quality of management schools** parameter is the Concept for the Formation and Development of the System of Business Education in the Republic of Belarus²⁵. The Concept increases the relevance and provides substantiation for the need to promote business education in Belarus. However, it was issued not long ago, in August 2015, and essentially it is not a state program. The Concept includes only the substantiation for the need to develop business education in Belarus, proposed development priorities, and indicative targets without specifying tasks, objectives, and arrangements to promote business education.

There are no sectoral programs focused on the promotion of the system of advanced training and skill improvement in Belarus. Only one program includes provisions that partially cover this parameter — the State Program for the Development of the System of Skill Improvement and Further Training of Executive Staff and Specialists of the State Authorities, as well as Specialists for Supporting Priority Areas of Socioeconomic Development of the Country. However, this Program is centered exclusively on the system of further training for executive personnel employed by state agencies; furthermore, it was adopted back in 2002 and needs to be renewed and updated.

The bottom line is that Programs I and II include all parameters of the higher education component, except for quality of management schools and availability of further training and skill improvement services.

2.7. Labor market efficiency

Labor market efficiency as an element of competitiveness requires improvements in the five parameters below:

- Flexibility of wage determination;
- Hiring and firing practices;
- Wages and productivity;
- Country capacity to retain talent;
- Correlation between wages and productivity.

Four dimensions of Programs I and II are focused on these parameters: *Labor relations* and *Wages* (Program I), and *Employment and labor market* and *Household incomes* (Program II).

²⁴ State Program for the Promotion of Higher Education for 2011–2015. Council of Ministers of the Republic of Belarus, Resolution No. 893.

²⁵ Concept for the Formation and Development of the System of Business Education in the Republic of Belarus. Council of Ministers of the Republic of Belarus, Resolution No. 734.

The **flexibility of wage determination** parameter is addressed in the *Wages* dimension of Program I and *Household incomes* dimension of Program II. These two dimensions make use of virtually the same wording to ultimately provide business entities with broad rights in the choice of the form and system of compensation paid to their employees with a view to deregulating the labor market.

The **wages and productivity** parameter is also included in the *Wages* dimension of Program I and *Household incomes* dimension of Program II. The two areas envisage increases in real household incomes as an “important incentive to encourage labor activity.” Program I specifies that the increase in household incomes in real terms is expected to reach from 85% to 93% throughout the period of the Program.

However, the income bracket is only one portion of the parameter. The part that pertains to productivity gains is accounted for in the section of Program I that formulates its priority objectives and targets and envisages a 62%–67% increase in labor productivity in the period from 2011 to 2015.

The **wages and productivity** parameter is addressed in the *Wages* dimension of Program I and *Household incomes* dimension of Program II. Both dimensions provide for a firm linkage (as defined in Program I) and direct correlation (as defined in Program II) between compensation paid to employees and performance indicators, which include, among others, labor productivity.

The parameters entitled **hiring and firing practices** and **country capacity to retain talent** are included in neither Program. There are no sectoral subprograms or ministerial action plans to expand or supplement the list of activities envisaged in Programs I and II, which could account for these parameters. The only exception is the Republican Program for Improvements in Labor Conditions and Safety for 2011–2015; however, it focuses on the introduction of rules, norms, and regulations aimed at reducing injuries and ensuring health improvements of workers.

Therefore, the policy documents fail to cover two parameters of the labor market efficiency component — hiring and firing practices and country capacity to retain talent.

2.8. Financial institutions

The financial institutions component envisions activities to improve the following parameters:

- Availability and affordability of financial services;
- Availability and affordability of loans;
- Soundness of banks;
- Venture capital availability

The *Development of financial institutions* section of Program I and *Development of financial markets* section of Program II cover this component of competitiveness.

Both dimensions address activities to improve indicators for the **soundness of banks** parameter and incorporate measures to ensure the stability and efficiency of banks, as well as improvements in the institutional structure of the banking sector through a reduction in concentration, engaging private investors, and structural refinement.

All of the other parameters are accounted for in the Programs only partially. The **availability and affordability of loans** and **financial services**, and **venture capital** parameters are only covered via measures to develop the financial and banking markets, as well as the promotion of equity funds. However, this does not necessarily mean that these parameters are lacking in the Programs: the thing is that they are a lot better covered by *other* dimensions of the Programs.

The parameter referred to as **availability and affordability of loans and financial services** is addressed in the general substantiation for the targets and objectives of Program II (Chapter 6), as well as the sections *Encouragement of the development of entrepreneurship and business* and *Monetary policy* of the same Program. The **venture capital availability** parameter remains covered only partially. There are no specific sectoral programs and ministerial decrees focused exclusively on improved access to venture capital investment in Belarus.

2.9. Technological readiness

The technological readiness component requires advancements in terms of the following parameters:

- Availability of latest technologies;
- Amount of Internet users;
- Internet bandwidth.

In Program I, positive changes in the parameters are to be ensured by activities envisaged in the section *Information and communication technologies*, and in Program II, they are covered by the *Service sector* parameter. All of the parameters of the technological readiness component are accounted for in Programs I and II.

Both Programs include the parameter designated as **availability of latest technologies**, pointing to the need for the development in Belarus of data transfer services with the use of WiMAX and LTE technologies, modernization and development of data transfer networks with the change to Ethernet solutions, and introduction of 4G mobile networks.

The Programs also include the **Internet bandwidth** parameter and envisage the expansion of the external gateway to 200 Gbps, increase in the number of stationary broadband ports to 3 million, and in Internet access speed to 100 Mbps.

Although the Programs do not cover the **Amount of Internet users** parameter, meaning that there are no specific targets for the increase in the number of users, this parameters can be considered partially accounted for via the promotion of the Internet services sector, which will eventually impact the availability of Internet connections and, consequently, the number of Internet users.

Programs I and II thus appear to be covering all of the parameters of the technological readiness component.

2.10. Goods market efficiency

Goods market efficiency as a component of competitiveness calls for improved indicators of the following parameters:

- Intensity of local competition and extent of market dominance;
- Total tax rate;
- Business impact of rules on FDI.

The parameter identified as **intensity of local competition and extent of market dominance** is present in Programs I and II in the *Price policy and antitrust legislation* dimension of Program I and the *Promotion of competition and effective antitrust policy* dimension of Program II. The Programs envisage activities to improve the operation of existing monopolies, reduce market entry barriers for new companies, create an antitrust regulatory authority, and reduce the level of monopolization of infrastructures used by business entities.

The **tax rate** parameter is covered by the *Fiscal and monetary policy* area of Program I and *Fiscal policy* dimension of Program II. These areas provide for measures to bring down the tax burden (to 26% of GDP), reduce the tax burden on companies (including moves to cut the profit tax

rate), streamline the structure and procedures for collecting taxes, and decrease time and resource costs for companies to pay taxes.

The **business impact of rules on FDI** parameter is covered by the *Investment policy and raising FDI* dimension of Program I and *Investment activity* dimension of Program II. These two areas anticipate an increase in FDI by 90%–97% by 2015, improvements in the investment climate and reduction in risks (which will help build investors' trust and increase FDI inflows), expansion of possibilities for investment, and creation of financial instruments facilitating investment procedures.

All of the parameters of the goods market efficiency component are therefore effectively accounted for in Program I and II.

2.11. Market size

The market size component calls for improvements in the following parameters:

- Export in per cent of GDP;
- GDP adjusted for Purchasing Power Parity (PPP).

Two dimensions focus on improving these two parameters, namely, *Increase in export, ensuring balanced foreign trade* (Program I) and *Foreign economic activity* (Program II).

The *Increase in export* dimension of Program I covers the **export in per cent of GDP** parameter and envisages a growth in export supplies of commodities and services by 120% and 200%, respectively, as well as an increase in the share of science-driven and high-technology products in the total export volume. There is a special condition for export expansion: it should be faster than GDP growth, meaning that export will be growing in per cent of GDP. In Program II, the *Foreign economic activity* dimension also accounts for the **export in per cent of GDP** parameter, although in less detail and without any specific targets.

Neither dimension of Program I and Program II (*Increase in export* and *Foreign economic activity*, respectively) include the growth in the GDP parameter; however, it is duly covered in other portions of the Programs. Program I mentions growth in **GDP adjusted for Purchasing Power Parity** in the section that describes the main objectives and targets of the Government for 2011–2015. Program II also covers the parameter in the list of the main targets to be reached as a result of the implementation of the Program.

Conclusion

Although the Program of Activities of the Government of the Republic of Belarus for 2011–2015 had expected the country to move up into the top-30 economies on the World Economic Forum Global Competitiveness Index (GCI), third-party estimates show that by the end of 2014, Belarus would have had rank 55 had it been included in the ranking.

This study has analyzed the correlation of the areas of activities, targets, and objectives of the state policy documents with the components of national competitiveness, in which parameters should be improved for Belarus to have a higher rank on the GCI.

The analysis is based on the search for the areas of activities that were not covered in the policy documents or were accounted for only partially. The inclusion of respective dimensions in future state development programs can accelerate the improvement in the country's national competitiveness.

According to the WEF classification, Belarus is currently going through the transition stage from the factor-driven economy to that driven by innovation. This means that in order to enhance its national competitiveness Belarus needs to improve the indicators of 10 components of competitiveness listed in Table 1.3. Analysis shows that the governmental; development programs (and associated sectoral programs) developed from 2011 to 2015 envisage activities necessary for only five elements of country competitiveness out of 10. Some of the parameters of the infrastructure, financial institutions, state institutions, labor market, and higher education components are not covered.

When it comes to **infrastructure**, policy documents focus primarily on modernization and renovation of the physical infrastructure while disregarding activities to improve logistics indicators. Availability of venture capital investment is the parameter that the governmental development programs are missing in the **financial institutions** component. In **higher education**, the quality of management schools and availability of further training and skill improvement services are only given indirect attention. The programs also tend to completely ignore such parameters as the capacity to retain talent and hiring and firing practices in the **labor market efficiency** component. When it comes to **state institutions**, the programs tend to leave out rule of law and good governance, as well as government efficiency.

It was noted in the first part of the research study that Belarus is currently in transition from the efficiency-driven economy to the innovation-driven economy. Therefore, change to a higher national competitiveness level can be achieved through improvements in the promotion of the innovation infrastructure. Given the specific nature of the Belarusian economy, we assume that active promotion of the IT services sector can become a crucial driver for Belarus to become an innovation-driven economy.

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Annex I. Areas of activities incorporated in Program I

- Increase in the efficiency of the management system for socioeconomic development;
- Implementation of measures to improve the positions of the Republic of Belarus in the leading international rankings;
- Support for entrepreneurship and fostering of public–private partnership;
- Reform of property relations;
- Promotion of competition and effective antitrust policy;
- Fiscal and tax policy;
- Financial sector development;
- Monetary policy;
- Investment policy and raising FDI;
- Establishment of an effective national innovation system;
- Structural policy and improvement in economic competitiveness;
- Industry;
- Agribusiness;
- Construction;
- Service sector;
- Information and communications technologies;
- Transport;
- Trade;
- Tourism;
- Utility services;
- Investment in human capital;
- Increase in living standards and quality;
- Creation of new possibilities for self-actualization of young people;
- Promotion of national culture;
- Growth in export, ensuring a balanced foreign trade;
- Effective environmental policy;
- Sustainable regional development;
- Ensuring economic security.

Annex II. Areas of activities incorporated in Program II

- Demographic security and consolidation of the family;
- Health promotion and improvement in the quality of medical services;
- Education;
- Employment and labor market;
- Household incomes;
- Culture;
- Physical culture and sport;
- Youth policy;
- Promotion of the development of entrepreneurship and business;
- Fiscal policy;
- Monetary policy;
- Development of financial markets;
- Price and antitrust policy;
- Research, technical, and innovation policy;
- Investment activity;
- Industry;
- Agriculture and forestry;
- Construction and provision of housing to the population;
- Service sector;
- Foreign economic activity;
- Sustainable regional development, improvement in competitiveness;
- Environmental policy and use of natural resources;
- Economic security of the state.