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Belarusian Universities challenges and European Higher Education Integration

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Outline

- Statistic indicators of Belarus's higher education development
- International assessment of Belarus's education
- Development paradox of Belarus's education
- Current objectives of higher education development in the context of European integration

Statistic data on institutions of Belarus's higher education

Indicator	2005	2010	2015	2016
Number of institutions of higher educations	**55**	**55**	**52**	**51**
Students per 10,000 population	**398**	**467**	**354**	**330**
Number of specialists graduated from institutions of higher educations "000	**53.6**	**73.3**	**78**	**74.6**

Cf: Austira -368; Belgium - 395; Germany -297.
Sweden - 492; Finland-571 students per 10,000 population

Tertiary education enrollment index according to the World Bank

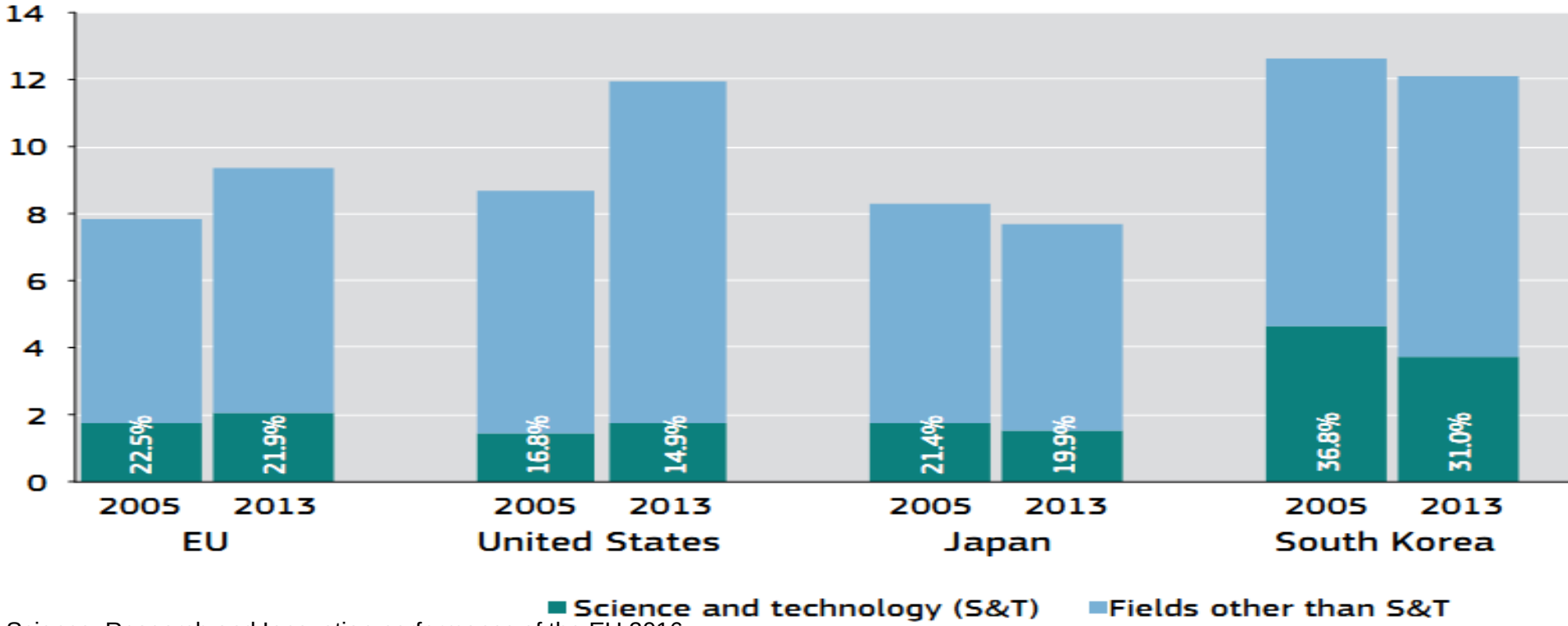
Rank	Country Name	2014
1	Spain	89.07%
2	Belarus	88.86%
3	Finland	88.67%
4	United State	86.66%
5	Chile	86.63%
6	Slovenia	82.92%
7	Ukraine	82.31%
8	Denmark	81.52%

(https://data.worldbank.org/indicator/SE.TER.ENRR?end=2014&start=1970&view=chart

STEM- Education

STEM education in Belarus comprises of two groups of disciplines: natural science and technology/ engineering. In 2016/2017 a total of 75,300 students or **24% of the student population** were specializing in these disciplines

Figure I-2-17 **Tertiary graduates per thousand population, 2005 and 2013 (% share of science and technology graduates in total graduates)**



Science, Research and Innovation performance of the EU 2016

Human resources in IUS-2016 and Belarus-2016

Human resources	Source EU/ Belarus	EU-28	Belarus
1. 1.1 New doctorate graduate (25-34)	Eurostat (2016) / Belstat (2016)	1.8	0.7
1.1.2 Population completed tertiary education (30-34)	Eurostat (2016) / Belstat (2016)	38.5	59,6
1.1.3 Youth with upper secondary level education	Eurostat (2016) / Belstat (2016)	82.6	92.6

Belarus in Global Innovation Index 2017 (out of 127)

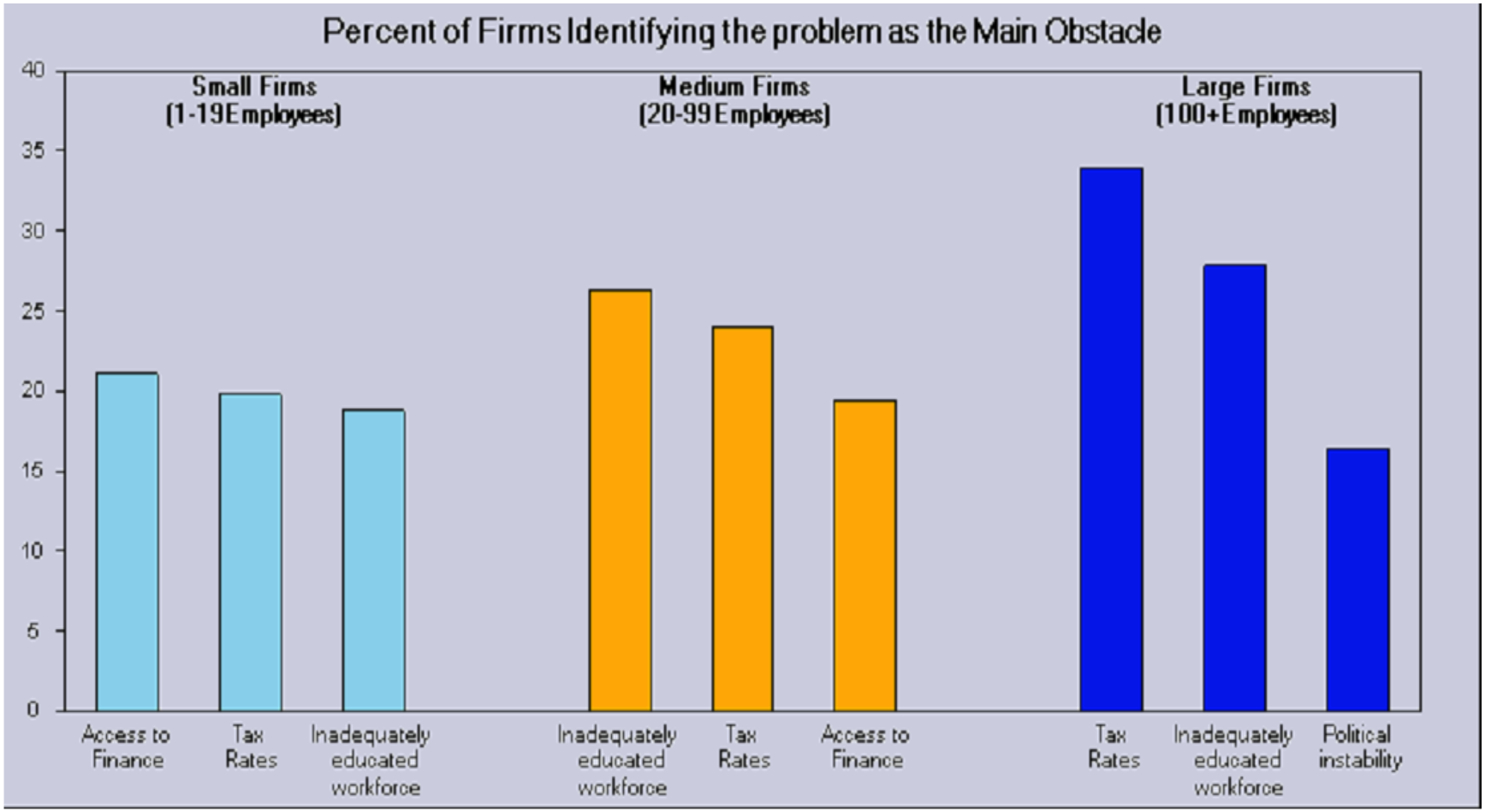
2.1	Education	64.5	12	●
2.1.1	Expenditure on education, % GDP	4.9	52	
2.1.2	Gov't expenditure/pupil, secondary, % GDP/cap	n/a	n/a	
2.1.3	School life expectancy, years	15.7	34	
2.1.4	PISA scales in reading, maths, & science	n/a	n/a	
2.1.5	Pupil-teacher ratio, secondary	8.4	12	●
2.2	Tertiary education	51.8	17	●
2.2.1	Tertiary enrolment, % gross	87.9	6	●
2.2.2	Graduates in science & engineering, %	28.6	12	●
2.2.3	Tertiary inbound mobility, %	3.3	54	

	2014	2015	2016	2017
Global Innovation Index	**58**	**53**	**79**	**88**
Innovation Output Sub-Index	**50**	**58**	**103**	**109**
Innovation Input Sub-Index	**70**	**55**	**64**	**63**
Innovation Efficiency Ratio	**27**	**73**	**116**	**120**

Business surveys on business environment in Belarus

Source: World Bank .Enterprise Survey 2013

Obstacles most salient for big business



Belarus paradox?

high ranks of international indicators of education and a low assessment of the country's innovative development, lack of the required competencies for this

- Термин «компетенция» (competency / competence), означающий способность индивида самостоятельно использовать и сочетать знания и умения, мобилизовывать различные психологические ресурсы, в том числе когнитивные, в зависимости от меняющихся требований конкретной ситуации
- **термин skills – еще менее привычный и с трудом поддающийся переводу на русский язык.**

  Наиболее близкими по смыслу терминами в русском языке являются «навыки» и «умения»
- **European Skills /Competences, Qualifications and Occupations (ESCO)**

“OECD Skills Strategy” направлена на развитие

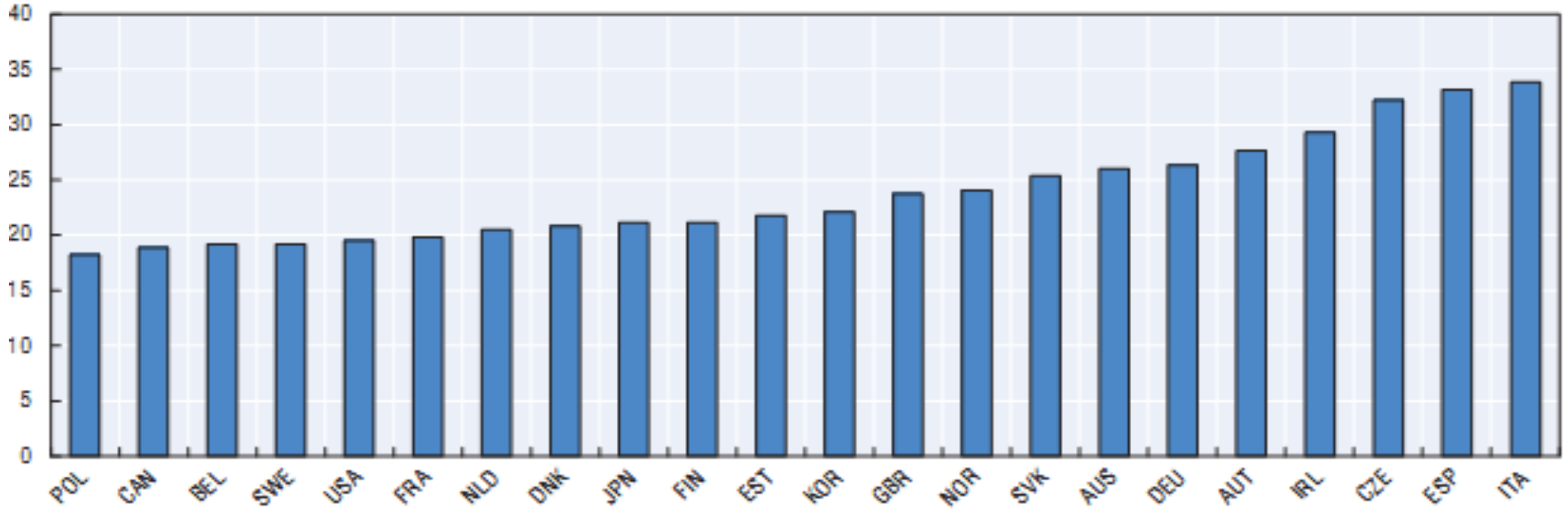
- востребованных специальностей и профессиональных навыков (developing relevant skills),
- актуализацию профессиональных навыков (activating skills supply),
- эффективное использование профессиональных навыков (putting skills to effective use).

Mismatch problem

Mismatch of education and available skills and competencies

Figure 3.1. **Skill mismatch and productivity**

Panel A: Percentage of workers with skill mismatch; selected OECD countries



Source: Adalet McGowan and Andrews (2015a), “labor market mismatch and labor productivity: Evidence from PIaaC data”, based on OECD (2013c), Key Findings of the OECD-KNOWINNO Project on the Careers of Doctorate Holders, www.oecd.org/sti/inno/CDH%20FINAL%20REPORT-.pdf

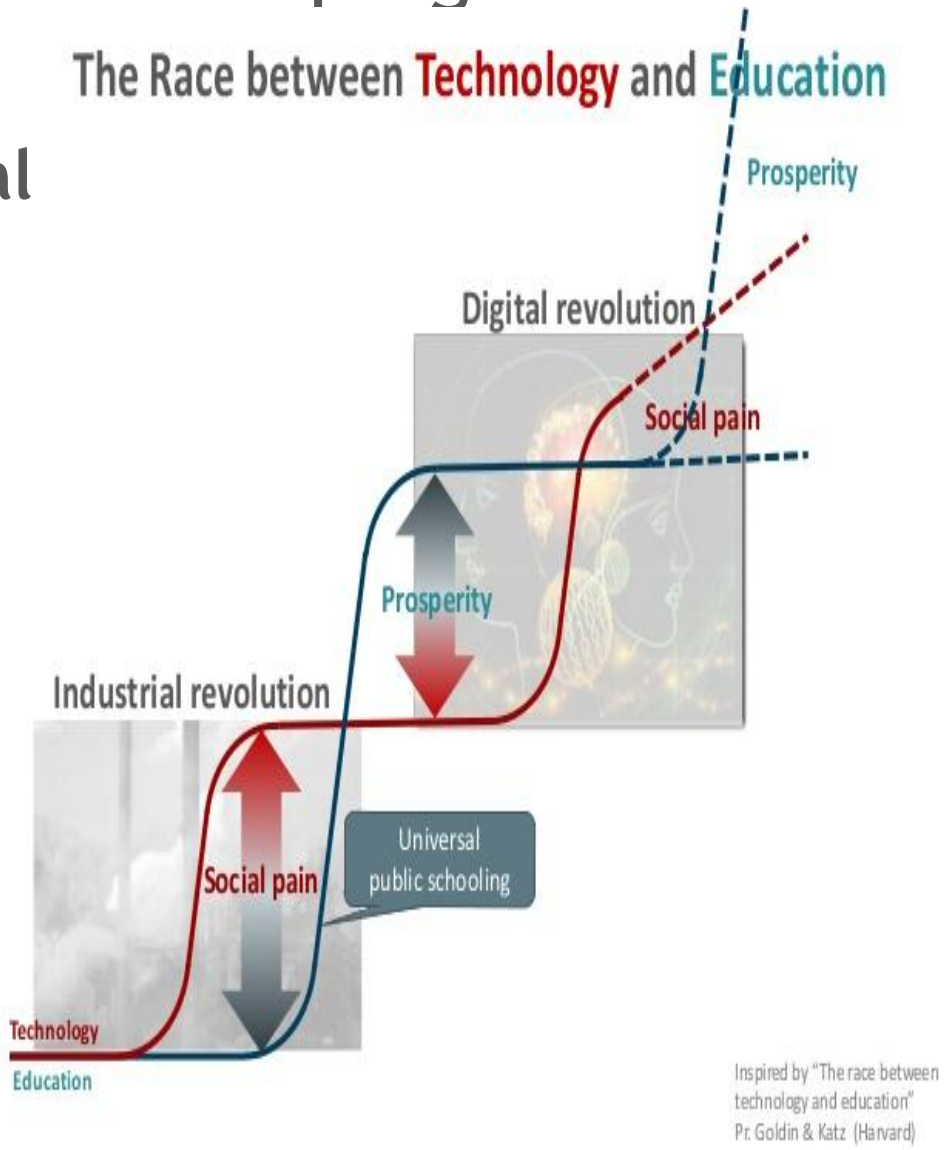
Main **challenges**

the gap between the needs of the economy and the skills of the workforce

- **soft skills-** черты личности, мотивация, ценностные установки (адаптивность, ответственность, самоорганизация)
- **transferable skills-** навыки делового общения, ведения бизнеса, понимание рисков, креативность , управление связями

National strategies of developing skills

- Objectives of innovational development
- Policy improvement in the sphere of education and qualification training enhancement
- Labor market development,
- Financial problems…



Financing of education

5.15. Государственные расходы на образование

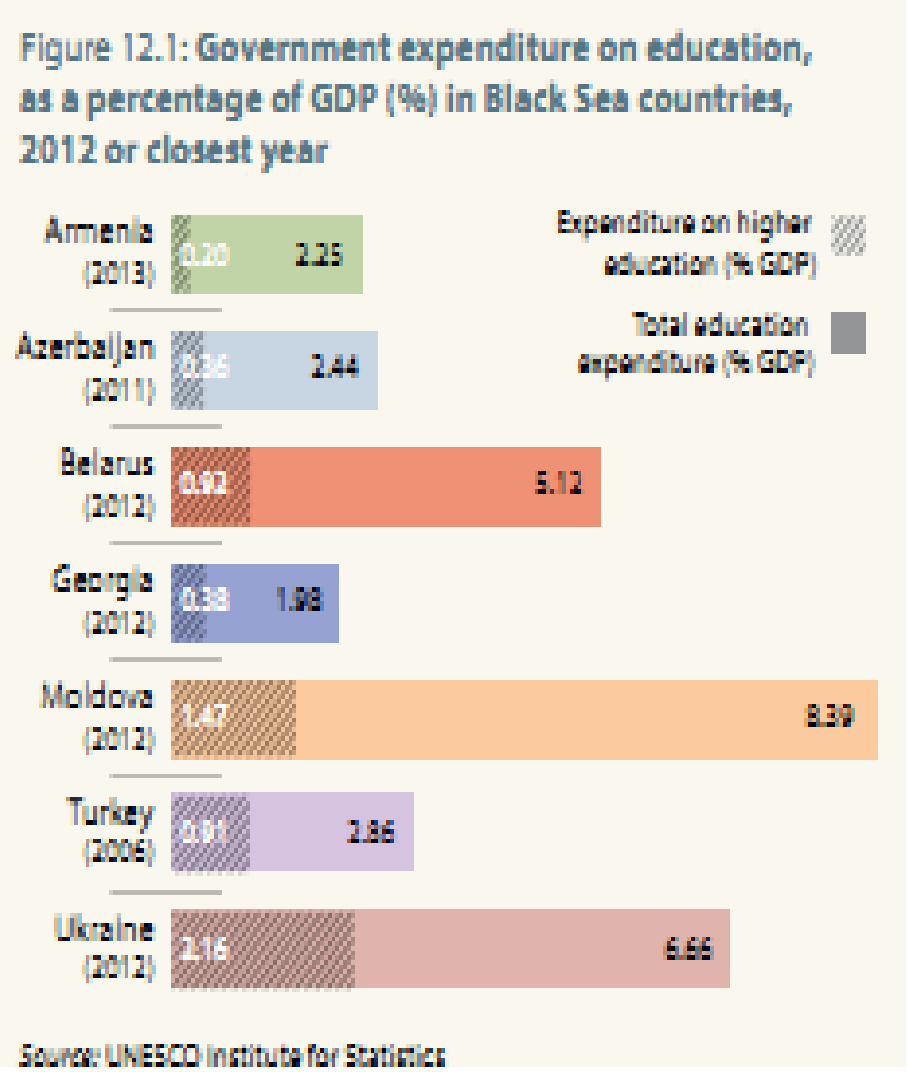
(в процентах к ВВП)

	2000	2005	2010	2011	2012	2013	2014	2015
Страны СНГ[1)]								
Азербайджан	3,9	3,0	2,8	2,4	2,7	2,5	2,6	3,0
Армения	2,6	2,5	2,8	2,8	2,4	2,3	2,4	2,4
Беларусь	6,3	6,4	5,4	4,8	5,1	5,2	5,0	4,9
Казахстан	3,3	3,4	3,5	3,6	4,0	3,3	3,3	3,3
Кыргызстан	3,5	4,9	5,4	6,4	7,0	6,1	5,6	6,0
Молдова, Республика	4,5	7,2	9,1	8,3	8,4	7,0	7,0	6,9

Expenditures on higher education (% GDP) BELARUS	2005	2010	2015	2016
Expenditures on qualification enhancement retraining, %	0.07	0.058	0,05	0,05
Expenditures on higher and post-graduate educations, %	**0.78**	**0.61**	**0,58**	**0,57**

составлено автором по данным о расходах госбюджета

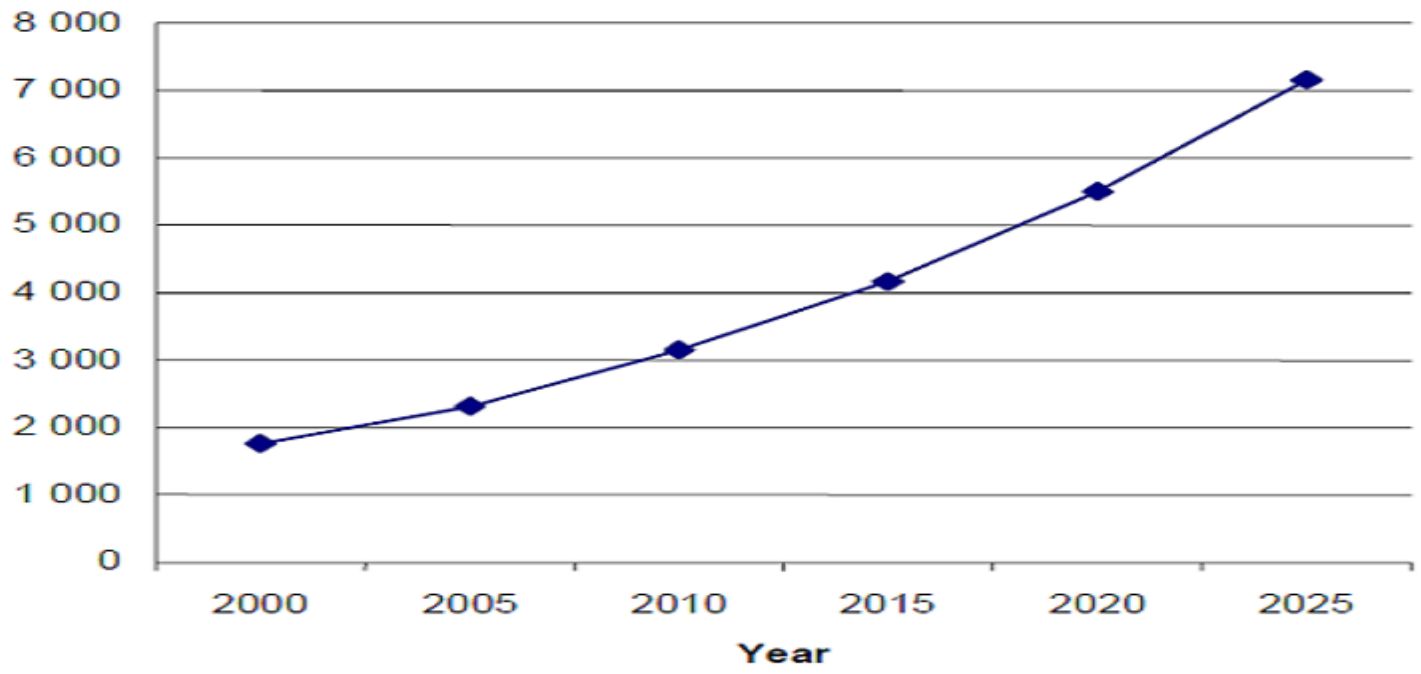
Expenditures on tertiary education in Belarus - 18% of total expenses



- Cf.: EU - 28%, Russia - 28% Lithuania -33%
- Expenditures on higher education in Belarus in 2015 accounted for 11.5% of total expenses on education
- Financial aspect of higher education is a most important barrier for its quality growth

По данным глобальных прогнозных исследований, к 2025 г. ожидается увеличение числа иностранных студентов: с 1,8млн. чел в 2000 г. до 7,2 млн чел. к 2025 г.

Figure 1
Projected Global Demand for International Education
(Thousands of International Students)



Repercussions of education underfinancing

- **lack of attractiveness of educational services for foreign citizens (4.8% of the total amount in 2016/17)**
- **outflow of Belarusian students for overseas study – 35,900 (6.4% of the total amount in 2014)**

	Expenses on education per 1 student of 3rd stage (USD,) 2014	% GDP per capita 2014
Belarus	**2763**	**15.4**
Lithuania	5800	23.6
Czech Republic	6954	23.9
Poland	5036	21.3
Russia	3707	14.7
EU average	10781	-

Source : UNESCO and Education at a Glance 2017

Participation in international assessments of education quality

- **awareness of the country's strengths and weaknesses**
- **possibility to perform inter-state comparisons (benchmarking)**
- **development of training processes**

- ***Russia in the program "Development of education for* 2013-2020" pointed out a sub-program "Development of quality assessment of education and information transparency of education system".**
- In Belarus, there is no education assessment (PIRL, TIMSS, PISA, as well as ICILS, AHELO, PIAAC), i.e. **we are unaware of quality!**

Higher education in the context of new challenges requires a transition from training a *knowledgeable human being* to training *a skilled human being*

Thank you for your attention!

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