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Content

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Higher Education in Uzbekistan: Structure Developments and Reform Trends

INTRODUCTION

Currently, education is becoming an important prerequisite for the introduction of new technologies in all spheres of human activity for increased competitiveness and for an improvement in living standards. Social accountability of higher education to a great extent implies an opportunity for individuals to obtain qualifications and social skills that would enable them to be in demand in a changing labour market, fully participating in the developing, innovative economy, thus ensuring the wellbeing of individuals and society as a whole. Taking in consideration the increasing role of higher education, its development strategy is determined by national strategy priorities and is aimed at improving the quality of education and ensuring its access.

With a transition to a market economy a demand arose for a comprehensive restructuring of the education system, which had focused on staff training in the context of a planned economy, where the Government not only determined the demand for training of its educational cadre down to the last detail, but also dictated the forms, methods and ideology of education. New conditions have changed the requirements for the structure of training specialists with higher education, knowledge and skills. There is now a demand for staff that can generate new knowledge and understand the spectrum of innovative capabilities in a specific area of qualification. They should be high-end specialists capable of skillfully resolving economic and production issues, with analytical skills and capable of making proper decisions.

Uzbekistan's aspiration to integrate into the modern industrial world has called for the creation of a system of higher education that can quickly adjust to rapidly changing demands of a labour market. It has become necessary to boost competition that creates incentives for developing higher education institutions and also for them to provide high quality educational services.

In 1997, the National Vocational Training Program (NVTP) was adopted, which has determined the major directions for, and stages of reforms in all spheres of education including higher education. However, to date, extensive government regulation of higher education and lack of competition have seriously impeded the creation of effective incentives and mechanisms that would strengthen the education potential of the higher education institutions. This prevents educational institutions from sufficiently, promptly and flexibly responding to labour market demands.

This Policy Brief[1] provides a rationale for the need to mobilize new sources of funding and considers issues of expanding the autonomy of higher education institutions and competition development. At the same time, measures are suggested to eliminate some legal constraints that restrict the creation of private institutions of higher education; recommendations are provided with the aim of reforming the enrollment mechanism of higher education institutions and expanding the competences of higher education institutions.

1. CURRENT STATUS AND CHALLENGES

1.1. Accessibility and Quality Assurance

Current trends in societal development require a transition to a principally new level of accessibility to higher professional education.

On 5-8 July 2009, the World Conference on Higher Education, held in Paris, France, aimed to develop provisions of the World Conference on Education for All held in Jomtien, Thailand, from 5 to 9 March, 1990, and the World Education Forum held in Dakar, Senegal, in April 2000. Its predecessor in 1998 focused on taking decisions on the most significant issues of modern higher education. These included improvement of access, equitable opportunities, improvement of quality and the social responsibility of higher education. Clearly, the most important role of higher education is to create and exchange knowledge to resolve global problems of today - ranging from the eradication of poverty to sustainable human development.

Currently, higher education in Uzbekistan is represented by 62 higher education institutions including 20 universities and 42 institutes. In Tashkent, there are affiliates of Westminster University, the Plekhanov Russian Academy of Economics, Lomonosov Moscow State University, and the Gubkin Russian University of Oil and Gas. In addition, the Management Development Institute of Singapore opened and an affiliate of Polytechnic University of Turin admitted its first students in 2009.

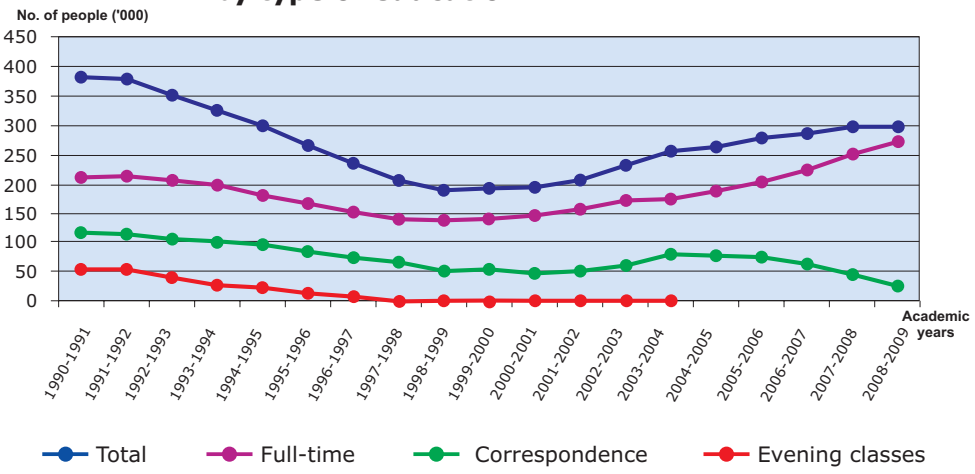
Presently, taking into account affiliates of various higher education institutions, there are a total of 71 institutions in Uzbekistan: 35, or almost half of them, are located in provinces, thus allowing an increase of accessibility of this type of education. Overall, enrollment at higher education institutions in the academic year of 2008/2009 totalled 297,900 students - 271,800 full-time and 26,100 enrolled in correspondence courses. However, the number of students per 10,000 population is still low,

[1] The Policy Brief "Higher Education: Development of the System and Reforms Stages in Uzbekistan" is based on the Analytical Review "IndexInfo" of the Center for Economic Research (CER) "National System of Ensuring Quality of Higher Education", 2009 (hereinafter referred to in the footnotes as the "CER Analytical Review 2009") and UNDP National Report "Education in Uzbekistan: Matching Supply and Demand" 2007/2008 (hereinafter referred to in the footnotes as the "NHDR 2007/2008"): electronic versions of all indicated reports in English and Russian can be found on the UNDP (www.undp.uz) and CER (www.cer.uz) websites.

at around 108. Despite a current trend of increasing enrollment, this indicator is still low compared to the same indicator in: Kazakhstan, at 497; Kyrgyzstan at 426; Moldova at 338; and Georgia, at 355.[2]

Considering that the population of Uzbekistan considerably surpasses that of these countries, according to the indicator of the number of higher education students per capita, Uzbekistan is exceptionally low.

Figure 1. Total no. of higher education students, by type of education



Source: The State Committee of the Republic of Uzbekistan on Statistics.

As shown in Figure 1, the total number of students, after a significant decline in all forms of education between 1991-1999, shows a growth trend only starting from 1999/2000 academic year. It should be noted, however, that the enrollment at higher education institutions in 2008/2009 is considerably lower than that of 1991, the beginning of reform in higher education in country.

In this context of changing quantitative parameters, the distribution of the number of students according to their majors is also undergoing a change.[3] Among the higher education institutions in the country, 22 specialize in education, 15 in industry, communication, construction and transportation five in medicine, four in agriculture, nine in economy and law, and seven in other industries. In 2007, 273,700 out of 286,300 students were undergraduates and 12,600 were graduate students. Also, 69 percent of the students at the undergraduate level and 75 percent of the graduate students study on a contract or fee-paying basis. Structural changes in staff recruitment result from: increased demand for specialists due to a reform of secondary general and secondary special, and vocational education; structural reforms in agriculture; expansion of the range of services; and an increased demand for new specializations in other areas.

An analysis of common trends in the professional structure shows a significant increase in enrollment - from 32 percent in 2001 to 40 percent in 2006 to 54.8 percent in 2008 - for specializations such as education,[4] i.e. teacher training and pedagogical science. An increase in the number of specialists in public education is caused by demographic factors in the country and a need to train specialists under the National Program of School Education.

[2] The indicator of number of students per 10,000 population in all countries of the Commonwealth of Independent States (CIS) and a wide range of "far-abroad countries" (countries outside the former USSR) are represented in CER's 2007 "Report on the Higher Education System".

[3] Over the last seven years, annual enrollment has increased by more than one third, while the number of university students has increased more than 1.5 times. The number of young people annually admitted to graduate school increased more than twofold, while the number of graduate students during this period increased by more than three times (see NHDR 2007/2008, Chapter 3).

[4] Share of students enrolled in this specialization out of the total enrollment.

Nevertheless, there is still a rigid admission quota set by the Government for certain specializations, including education, on a contract or fee-paying basis. At the same time, the underdevelopment of some types of external studies and distance learning as well as a lack of a non-governmental, alternative sector of education services seriously aggravate the issue of access to education.

An opportunity for adults in the older age group has narrowed following the elimination of correspondence education in the country. People who after completion of secondary school and lyceum were unable for various reasons to apply for full-time study, being unable to simultaneously pay for education and support a family, are practically denied an opportunity to pursue higher education in the foreseeable future.

It is assumed that the main indicator of a higher education institution's viability is its ability to be one step ahead of changes in society. However, in this case, the results of its scientific and educational activity will be accountable to society as a whole. The choice of employer is affected by social status and the reputation of the higher education institution.

Despite measures taken to address organizational, financial and educational aspects, higher education in Uzbekistan currently fails to ensure training of skilled human resources that meet the new requirements of the labour market.

A poll of entrepreneurs conducted as part of a sociological survey[5] revealed that the training level of graduates of higher and secondary special education institutions in the country is fully satisfactory for: only 18.2 percent of respondents for graduates specializing in economics: 18.6 percent of respondents for graduates in technical specializations; - 17 percent of respondents for graduates in law and legal studies; and 28.9 percent of respondents for graduates in information technologies.

University graduates often lack the skills for successfully developing business and knowledge of business economics. The demands of the business sector for human resources training are more dynamic than the ability of state educational facilities to meet them.

Under these conditions, it is difficult to balance labour market demand and human resources training. Consequently, social spheres (health care, education) remain understaffed even though a sufficient number of specialists are trained.[6] There is still a lack of engineering technicians for industrial enterprises and of skilled and experienced managers for small business. With regard to labour market demands, personnel training is still problematic in other spheres.

1.2. Legislative Constraints for Development of Private Competitive Participation

Given limited funds and increasing demand for higher education, a non-governmental sector of educational institutions that promotes competition should harmoniously supplement the state sector of education. Although private competitive participation is set forth as a priority area in the NVTP, to date, not a single private higher educational institution has been registered in Uzbekistan.

Contradictions in existing legislation make it virtually impossible for commercial educational institutions to be established and operated legally. In line with Article 6 of the Law "On Education" of the Republic of Uzbekistan of 1992, a non-public educational institution acquires the right of a legal entity and the right to engage in educational activity from the moment it obtains its state accreditation according to the procedure established by the Cabinet of Ministers of the Republic of Uzbekistan; however, it must get a licence in order to commence its functioning. According to Clause 8 of the

[5] Social survey "Entrepreneurs of Uzbekistan: Problems, Opinions, Social Portrait", CER, 2006.

[6] For example, in some schools in Surkhandarya and Kashkadarya Provinces, about 30 percent of the teachers have not completed higher education.

Regulation on "Provisions about Institutions", approved by the Resolution No. 100 of the Cabinet of Ministers of 01.03.2004, in order to receive a licence, an educational institution should have the status of a legal entity prior to submission of an application for licensing.

As a consequence, a vicious cycle is created in which it is necessary to acquire the status of a legal entity in order to receive licence. However according to the law, this is granted only after accreditation. Accreditation can be obtained only once it is proved that the education quality complies with the established standards and requirements, i.e. after the first batch of students graduate. Due to a lack of a clear-cut legal framework for establishing private higher education institutions, applications to the Cabinet of Ministers and the State Testing Center[7] for licensing remain unconsidered.

1.3. Enhanced Autonomy of Higher Education Institutions

Within the context of the reform process, based on positive international experience, Uzbekistan has been gradually implementing a system of public governance of educational institutions by establishing trustee and supervisory councils. Their members include, according to the Resolution[8] on a Trustee Council of a higher education institution of the Republic of Uzbekistan founding organizations, local governments, business circles, public organizations and sponsors, through which higher education institutions are able to autonomously resolve their problems. Presently, such councils are in place at, *inter alia*, Samarkand State University, Navoi Mining Institute and Tashkent State Technical University. According to a special Resolution of the Cabinet of Ministers, Tashkent State University was transformed into the National University of Uzbekistan, with a number of authorities delegated to independently resolve certain organizational and financial problems. This is a notable and, for the time being, a one-of-a-kind step towards some autonomy.

However, it is still early to speak of full-fledged activity of school and supervisory boards in the life of higher education institutions. At most higher education institutions, trustee and supervisory councils have not been even formally established. An aforementioned Resolution on a Trustee Council specifies that "[a] council is a standing advisory body of public governance of a higher education institution." Thus, a university trustee council has a legal status equal to a public and advisory body of a university administration whose main objective is to assist in day-to-day administration of a higher education institution.

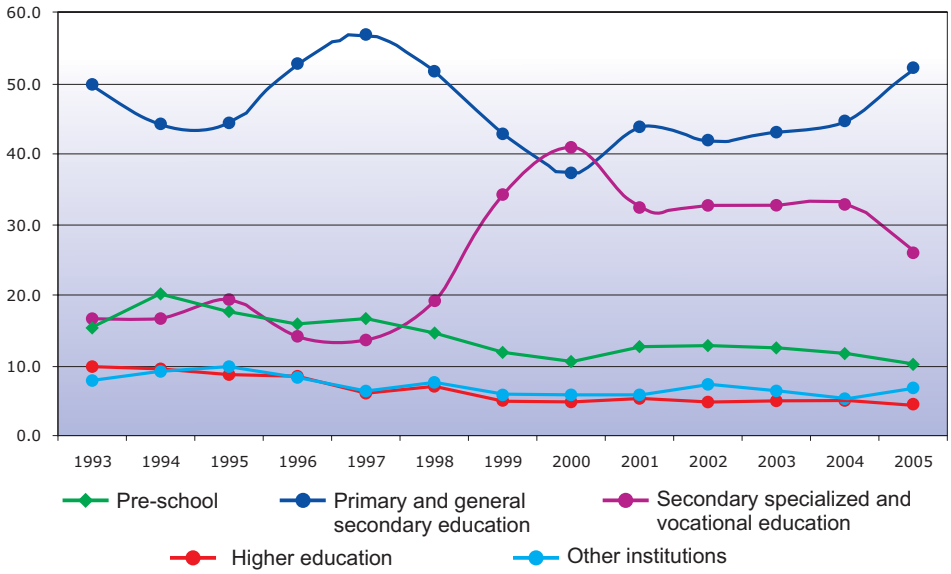
1.4. Forms of Financing and the Role of the Government in Regulating University Activities

Uzbekistan's education sector is funded from the state budget at three tiers: national (central), provincial and district budgets. Higher education, educational institutions, academic lyceums, vocational colleges and regional institutes for training and professional development of public education staff are funded by the state budget. The pattern of expenditure on education gives an idea of the priorities of the government's education policy: more than half (65-70 percent) of state expenses on education are earmarked for general secondary as well as secondary specialized and vocational education.

[7] This is an executive body that controls education quality.

[8] Annex to Decree No. 326 of 14 November 2002, of the Ministry of Higher and Secondary Special Education of the

Figure 2. The pattern of expenditures on education, 1993-2005 (% of total expenditure)



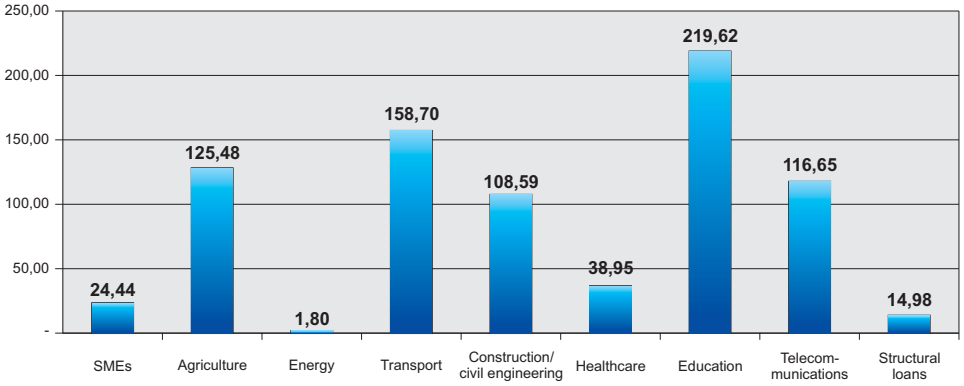
Source: Ministry of Finance of the Republic of Uzbekistan.

The high percentage of state expenditure for primary, secondary, and secondary specialized education results mainly from the demographic situation in the country. By the end of 2008, 37.5 percent of children under 18 years of age represented potential enrolment for pre-school institutions and secondary schools, lyceums and colleges, whereas 67.8 percent of children were of school age. In 1990, the state expenditure in higher education constituted about 10 percent of total state expenditure in educational sector, declined to 6.4 percent in 2005. In GDP terms it represents a decline from 1 to 0.6 percent in 2005.

Upon gaining independence, Uzbekistan took measures to diversify the sources of funding education. Notably, educational institutions began to supplement budget revenue with extra-budgetary resources revenue. All higher education institutions introduced a contract or fee-paying form of admission for students who failed to score enough points during entrance tests to receive state scholarships.

External assistance of international donors and finance institutions to promote the development of the education sector plays an important role in its financing. From 2000 to mid-2007, 122 projects were implemented in the country for a total of US$ 1 billion, while higher education was allocated 4.19 percent of the total expenses.[9] In 2003-2007, a total of US$ 219.62 million was allocated to the sector including for the publication of textbooks and informational support for educational facilities.

Figure 3. Disbursement of loan proceeds, 2003-2007, by sector (US$ million)



Source: Report on Cooperation and Development: Uzbekistan, 2004-2008. UNDP, 2009.

[9] A detailed description of financing higher education is contained in NHDR 2007/2008, pp. 134-135; see also www.undp.uz.

Expenditure per student in 2000-2005 barely changed. A slight trend towards an increase in state expenditure per student is witnessed during the annual adjustment for inflation of teachers' salaries and students' scholarships. Reduction of extra-budgetary expenditure per student is a consequence of the fact that in 2003, the adjustment for inflation of the contract amount was not made.

Table 1. Trends of expenditure per student, 2000/2001-2005/2006

Indicators	Monetary unit[10]	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
Total expenditure per student	UZS ('000)	125.8	124.2	126.3	109.1	109.1	112.3
	US dollars	531.7	524.9	533.8	461.1	461.1	474.6
Budget expenditure per student on scholarship	UZS ('000)	153.5	162.7	171.4	172.1	184.8	197.8
	US dollars	661.5	687.7	724.4	727.4	781.1	836.0
Off-budget expenditure per student on a fee-based contract	UZS ('000)	92.3	92.8	96.7	73.7	70.7	72.3
	US dollars	390.1	392.2	408.7	311.5	298.8	305.6

Source: Report on the Higher Education System, CER 2007.

In 2005, with respect to budget financing per student (UZS 197,800 per year, or US$ 836) and payment per student on fee-based contract, the amount of state expenditure decreased by 25 to 50 percent depending on a student's academic performance.[11] This residual amount per student does not meet even the minimal needs of higher education institutions. For example, total expenses per student at Russian universities during this period were, on average, RUB 23,000-25,000 (EUR 700-800) per year, while in 2003, in French Universities, they reached EUR 8,370.[12]

In the academic year of 2005/2006, the tuition fee for an undergraduate studying on a contractual basis varied from UZS 472,900, or approximately US$ 418 (pedagogical specialization) to UZS 774,000, or US$ 683 (law, international relations and international law).[13] Scholarships were also paid to the students out of this amount. The tuition fee of an A-student constitutes from 62.3 percent (law, international relations and international law) up to 102 percent (pedagogic specialization) of his/her scholarship. It can be concluded that higher education institutions have little incentive to encourage excellent/gifted students or to raise the quality of education. The lack of competition and opportunities to generate additional funds led to an actual stagnation of their development and disincentives to improve the level and quality of training specialists.

Box 1. Scientific, methodological and technical infrastructure of higher education institutions

In-depth interviews with teachers specializing in economic studies revealed that 57 percent of respondents had difficulties in coping with new methods of teaching due to lack of computers and well-equipped classrooms. At most of the educational facilities, Internet is not used during lessons and for independent study, although this is the quickest, most accessible and interactive mean of acquiring knowledge.

Although the library stock is built up annually, the problem of ensuring quality teaching material still remains rather critical. Textbooks or manuals are developed and published by the state administration. Inadequate financial incentives of authors eventually result in poor quality of teaching and methodological literature.

While students qualifying from national schools, lyceums, and colleges are taught in the Latin script, most textbooks in the libraries of higher education institutions and information on websites and printed matter are published in Cyrillic. This means that today's graduates of secondary schools, specialized colleges and academic lyceums can hardly make use of these materials. In some cases, not only do most students lack supplementary learning materials, but they also do not have access to the mandatory set of basic textbooks.[14]

[10] Calculations are made on the basis of GDP deflator, baseline of 2000. The rate of the Central Bank of Uzbekistan as of the beginning of 2000 was: US$ 1 = UZS 236.6. Source: Ekonomika Uzbekistana. Analytical Review for the 1st quarter of 2004, p. 16. Table 1.4.1.

[11] The amount of student scholarships is established depending on academic performance of students.

[12] Kastueva-Zhan, "Splendor and Destitution" of Higher Education in the Russian Federation, a Programme of Studies in the Russian Federation and CIS, No. 14, September 2006.

[13] "Report on the Higher Education System", CER 2007, Chapter 2.

[14] An assessment of availability of teaching and methodological literature was conducted in 2006 by the Development Center for Secondary Specialized and Higher Education under the MHSSE of the Republic of Uzbekistan.

The current practice of planning and system of financing state-funded institutions impedes effective utilization of budgetary funds. Expenses are determined on the basis of the allocation made during the preceding year. Such an approach does not motivate the management of educational institutions to make efficient use of allotted funds, since they have limited authority, and saving allocated resources could translate to lower funding in the following year.

It was hoped that with the introduction in 1999 of a new system of financing for the state-funded institutions, their capacity for a more flexible and efficient use of extra-budgetary resources would be enhanced. However, established restrictions and predefined prioritization of the use of funds prevented significant changes in the situation. Therefore, most of the money is spent on satisfying accounts payable and strengthening physical infrastructure. The overall proportion of higher education expenditure devoted to salaries largely remains unchanged. Low wages discourage talented professionals from opting for a career in academia. The caliber of the teachers and instructors is often sub-standard and corruption is rampant.

Box 2. Human resources potential of higher education institutions

Measures adopted within the National Vocational Training Program (NVTT) have contributed to the capacity building of teaching personnel leading to a reduction of the student-teacher ratio. Still, most universities still face the problem of an ageing staff. Older teachers find it difficult to adapt to the new technologies and teaching methods. Young specialists are not motivated to become teachers because of the low salary levels. In general, in 2006, taking into account all bonuses, privileges and additional payments, the salary of a university teacher was only 70 percent of the average salary in the country.[15]

Relatively low incomes of the faculty staff and the lack of differentiation in remuneration across highly skilled specialists and teachers with basic qualifications do not stimulate scientific research activity. During the last five years, the number of post-graduates and doctoral students who have presented a thesis/dissertation has been decreasing. As a result, the teaching staff composition with scientific degrees has gradually decreased, which is also having an impact on the quality of teaching and scientific research.[16]

Since the academic year of 2001/2002, commercial banks have begun to grant loans to students admitted in universities on a contract or fee-paying basis.[17] It is recommended that commercial banks grant credits with a grace period upon graduation from an educational facility and set an interest rate for student loans in the amount not exceeding the current refinancing rate of the Central Bank of the Republic of Uzbekistan.[18]

Currently, student loans are granted in the country by Uzpromstroybank, Ipotekabank, Agrobank, Ipak Yuli Bank, Alokabank and Trastbank as well as some credit unions. The payback scheme is ten years for Bachelor's programmes and five years for Master's programmes. In addition to the students themselves, student loans can be granted to their parents or guardians. However, according to various data, the number of students in educational facilities on student loans is less than 10 percent of the total number of students. This is primarily due to a floating but, in general, high credit interest rate - up to 14 percent of the annual interest rate, strict mandatory monthly payments for credits, a need to produce a document to ensure credit recovery or other collateral, and tight schedules of principal redemption - three months upon graduation from a higher education institution.

[15] Differential wage rates based on the qualification of teachers is not a motivating factor. Professors and teaching staff of higher education institutions comprise five categories of positions (grades 11-19 on the wage scale). A difference between grades is on average UZS 4,6100 (slightly over US$ 3 per month). Therefore, a head of department who is nine levels higher on the wage scale than an assistant teacher is only paid 1.44 times more.

[16] According to data of the State Committee on Statistics, there are 41 students per teaching Candidate of science [science teacher candidate?], and 188 students per teaching Doctor of Sciences.

[17] Student loans are provided to the citizens of the Republic admitted to higher educational institutions on a contract and fee-paying basis, guaranteed by their parents and/or guardians.

[18] There is also a system of providing preferential credits as non-interest-bearing student loans for orphans, children raised in boarding schools and persons disabled from childhood in Disability Categories I and II, as well as students from low-income families, with a due payment of 50 percent of all accrued interest payments of a loan from the resources of the State Fund for Employment Assistance.

Together with limited financial resources, the development of higher education in Uzbekistan is hampered by the current model of public governance that still retains elements of the command and administration system. Wide spectrum of authority for regulating this sphere lies with the Cabinet of Ministers and the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan (MHSSE). Detailed instructions for implementing organizational, financial and educational activities set by the regulatory bodies restrict competition among higher education institutions and preconditions for its development.[19]

Government regulation determines terms of payments for faculty, setting admissions quotas for grant-based and contract or fee-paying-based study, tuition and approval of detailed standards of personnel training. MHSSE controls class attendance numbers, the number of extra-curricular activities by pedagogues, and the number and types of activity clubs, etc. It is worth noting the complicated and lengthy procedures for introducing new majors into Bachelor's programmes and specializations into Master's programmes. University administrations and councils are not even entitled to make minor structural reorganizations. Even the names and number of departments, divisions and other subdivisions of education facilities are determined by the highest authorities. A multitude of agreements and bureaucratic barriers considerably restrict the efforts of higher education institutions in determining the demands of the labour market and in using them to guide their activities.

The large proportion (85-90 percent) of mandatory courses and disciplines in Bachelor's and Master's curricula approved by MHSSE also restricts prompt reaction to the requirements of the labour market. Indeed, most university subjects in the curricula rarely aim at in-depth professional graduate training. Prescribed mechanisms and procedures for facilitating fee-paying tuition also put restraints on how higher educational institutions can use the extra-budgetary funds. Tuition fees in all higher education institutions are set by the Cabinet of Ministers in coordination with the Ministry of Finance, the Ministry of Economy and other line ministries. As a result, regardless of the quality of education, available staff and infrastructure resources, a single fee rate is established for one specialization in all universities throughout the country.

2. HIGHER EDUCATION IN UZBEKISTAN IN THE CONTEXT OF WORLD EDUCATIONAL SYSTEMS

2.1. Integration of Uzbekistan into the Global Educational Process

Higher education reforms in Uzbekistan from 1991 to 1997 and the adoption of the NVTP facilitated a gradual integration of the country's educational system into the global educational process. Creating its own National Model of Education, Uzbekistan relied on lessons learned from countries providing elite education, as well as provisions of the Bologna Process, although Uzbekistan is not an official participant.[20] The Bologna Process promotes the improvement of culture and quality of higher education. The system of higher education in Uzbekistan implements the Process through a performance review (state attestation) of higher education institutions. Once every five years, a higher education institution

[19] See Бекмурадов А. Университетская автономия. Ж. «Экономическое обозрение», № 1, 2007 г (Bekmuradova A. University's Autonomy. Ekonomicheskoye Obozreniye Journal, No. 1, 2007).

[20] The priority of university education, adoption of a system of comparable degrees (Bachelor's, Master's), the establishment of educational standards this is not a full list but are some of the indicators in the system that bring Uzbek education in line with European education. A great deal of attention is given to the development and adoption of mobility patterns, curriculum design in line with foreign universities, practical training and scientific research.

undergoes a performance review by the State Testing Center under the Cabinet of Ministers. Their performance is reviewed according to criteria developed on the quality of its academic activity, the qualifications of its teachers, and its readiness to render services in line with the state educational standards.

According to formal characteristics, higher education meets the advisable standards of the International Standard Classification of Education (ISCED) adopted by the General Conference of United Nations Educational, Scientific and Cultural Organization (UNESCO). Serving as a tool to process and analyse comparable indicators, ISCED helps to adjust and occasionally make amendments during a reform of national models of education. It is well known that a baseline unit for international classification is a curriculum specified in two directions: level of education and area of education.[21]

2.2. Overview of Experience of Some Developed Countries and Transitional Economies

Overall, at the turn of 21st century aspirations for higher education have become a trend for economically developed countries. In 1997, for example, in Organisation for Economic Co-operation and Development (OECD) countries, nearly 14 percent of the population aged 25-34 had a higher education, compared to 18 percent in 2002.[22]

Box 3. The role of education under new conditions
In the context of globalization, when a country's ability to innovate gives it a competitive edge, high levels of educational achievement no longer guarantee membership in a prestigious "elite" group of countries - it is now an absolute necessity for survival and for achieving economic and political independence.
Source: NHDR 2007/2008.

Currently, 30-40 percent of jobs in Europe are given to specialists with higher education. In addition, higher education increases the income of specialists with diplomas by 1.5-2 times. Most commonly, employers consider higher education an essential to master professional skills. This requires ongoing reform of the education system and a re-evaluation of current parameters and standards.

In order to ensure comprehensive training of skilled specialists who meet labour market requirements, there is a need to reconsider issues of financing higher education.

Box 4. International experience in results-based state financing of higher education institutions
Despite the vast variety of methods of results-based financing, two major methods are distinguished in international practice: constant indicators and time-bound efficiency-based contractual funding arrangements. The set of constant indicators in turn is subdivided into two types: single and multi-criteria systems.
The single criteria system. The French tertiary education system receives about 50 percent of its state funding based on a per capita principle (per capita norms vary according to the course and the specialization). Calculated funding is allocated to institutions as a lump sum, which provides tertiary institutions with significant budgetary autonomy. In Denmark, 30 to 50 percent of the state funding is disbursed based on the number of students who have passed state exams. This type of funding is advisable given the efficient education quality monitoring in place in the country. The Dutch funding system allocates about 50 percent of public funding for university teaching based on an output criteria. To prevent dramatic fluctuations, the amount of funding is calculated based on the average number of graduates over a two-year period.
The multi-criteria system. In South Africa, 89 percent of state expenditures on higher education are disbursed based on multiple performance criteria. The Ministry of Education publishes an annual statement that determines how performance criteria will be calculated

[21] Compliance of higher education in Uzbekistan with global trends is discussed in detail in Chapter 3 of the NHDR 2007/2008.
[22] Education at a Glance, OECD Report 2002 and 2004.

and qualified. In practice, less efficient higher education institutions receive funding provided they have a credible action plan for improving performance; otherwise, they are likely to close down without government financing.

Time-bound efficiency-based contractual funding. In France, 30 percent of state funding is disbursed based on contracts signed between the government and the universities. The contracts are drawn up based on negotiations between the Ministry of Education and the individual university for a four-year period: in Finland, such contracts are for three years.

Source: Approaches to Result-based Financing in Tertiary Education. World Bank, 2004.

Calculations show that in order to achieve an average indicator of population coverage with higher education for transitional economies, investment in higher education must be increased from 0.6 to 1.4 percent of the GDP. Increasing the funding of higher education to this level through public investments in the near future seems unadvisable, if not impossible. Rather, this can be achieved through a more active participation of business circles in the process of education and funding from the private sector; presently, this is one of major potential sources of increasing investment in higher education.

In recent years, the countries that financially support students link this support with academic indicators, but the level of requirements varies. The condition for support in UK and Denmark are more active involvement of students in the learning process. Both Norway and Sweden require students to write exams, while Sweden stipulates an established time period. In the Netherlands, beginning in 1996, basic grants were replaced by academic-performance-based grants. In most developed countries, both the public and private sector take part in the educational loan system. Student loans are common even where higher education is funded from budgets of various levels, for example, in Germany and Sweden. Students usually receive loans for related costs such as accommodation, textbooks and miscellaneous expenses. Student loan systems in many developed countries were developed and introduced in the 1970s-1980s and are still undergoing changes.

Reputable scientific centres of Europe generally refer to the Asian model during their research of current trends in the world's education systems. Scientists affirm that the developing Asian educational system harmoniously combines institutional structures and education management from Asian countries and borrowed from beyond the continent, particularly from the United States of America and the UK.

Special attention in this research is given to the structure and content of education in Japan as well as the "Asian Tigers" (Republic of Korea, Taiwan Province of China, Singapore and Hong Kong Special Administrative Region). Their powerful breakthrough on the world market mainly results from appropriate priority setting. Due to their small territory and lack of mineral deposits reserves, the governments have invested in education. Only a highly educated people with their level of capability and innovative approach, according to them, could lift these countries from the category of poor and technically backwards through a trend of steep progress and create "an economic miracle". Later, leaders of Malaysia, China, India, Turkey and other Asian countries with varying natural resources potential adapted this view of the role of education.

As indicated in the research literature, national and historical traditions and mentalities were important support in achieving impressive results in education and relevant scientific and technical progress. The ***Republic of Korea*** is currently characterized by a modern culture of pursuing higher education at prestigious universities. Its higher education is both egalitarian and elitist. On the one hand, the Government consistently and willingly supports the policy of equal opportunities with regard to access to higher education; on the other hand, the universities form a distinct hierarchy where listing the value of diplomas from various universities may be different. Such a balanced and circumspect policy has yielded positive results. In 2005, 97 percent of the population aged 25-34 had a higher

education. This is the highest indicator among countries with highly developed production. And yet, in the 1960s, its national income was lower than that of Mexico and South American countries, as was its educational qualification in the ranking of 30 OECD countries. The country's success resulted from its ability to change peoples' attitudes to education and to adequately respond to increased demand.[23]

Table 2. Human Development Index (HDI) of the Republic of Korea and its three dimension indices (1975 - 2007)

Year	Human Development Index	HDI dimension index		
		Life expectancy index	Education index	GDP index
1975	0,713**	..	..	..
1980	0,722*	..	..	..
1985	0,760*	..	..	..
1990	0,802*	..	..	..
1991	0,859	..	..	..
1992	0,882	0,770	0,910	0,882
1993	0,886	0,770	0,920	0,970
1994	0,890	0,770	0,930	0,970
1995	0,894	0,780	0,930	0,970
1997	0,852	0,790	0,950	0,820
1998	0,854	0,790	0,950	0,820
1999	0,875	0,830	0,950	0,840
2000	0,882	0,830	0,950	0,860
2001	0,879	0,840	0,960	0,840
2002	0,888	0,840	0,970	0,860
2003	0,901	0,870	0,970	0,870
2004	0,912	0,870	0,980	0,890
2005	0,927*	0,882	0,980	0,900
2006	0,933*	..	..	..
2007	0,937*	0,904	0,988	0,920

Source: Global Human Development Reports 1993-2009, UNDP

* HDR 2009, page 165
** HDR 2007/2008, page 234

Japan. In Japan, 42 percent of the employable population aged 25-65 has a higher education. This results from the high level of production automation in the country, which requires workers to have a high level of professional training. Education has ceased to be a prerogative of white-collar workers. Presently, there are nearly 600 universities in the country (of which 425 are private), in which about 2.5 million students pursue their studies. The Japanese educational system is paradoxical. Despite all the changes in recent decades, it is still among the most conservative and unique in the world. However, it is precisely the educational reforms that lead to a renewal of Japanese society - beginning with the first modernization at the end of the 19th century that based Japanese higher education on a Western model, and ending in recent reforms aimed against the traditional secluded life and the total dependency of educational institutions.

Reform launched by the Government in 2001 aims to reduce the number of higher education institutions by merging them into university corporations that enjoy greater autonomy. These corporations will not only become owners of the University facilities and property, but will also become fully autonomous. According to the authors of the reforms, this will not only increase the accountability of higher educational institutions for the quality of diplomas, but will also encourage management to mainstream activities in order to establish links between science and business. The corporations will have to create unique curricula and syllabi, identify its unique university

[23] Schleicher Andreas. The Economics of Knowledge: Why Education is Key for Europe's Success. Policy Brief. The Lisbon Council. 2006.

specializations and fully capitalize on liberalization policy and on diversification. A positive impact of reform is the emerging integration process of higher education institutions and research institutes. Cooperation between business and education, integration of scientific centres and universities, and administrative autonomy of higher education institutions are the main achievements of Japan's educational reform to date.[24]

The People's Republic of China. China has formed a multi-tiered system of higher education. During the last five years, a number of higher educational institutions in the country almost doubled, totalling 2,200 units in 2007. All students have to pay for education, but a scholarship system has also been set up. University graduates find jobs on their own or enter post-graduate programmes. Chinese universities are able to send their students abroad for study and internships. According to the scale of higher education, China ranks first in the world. According to the most recent ranking of the "The Times" (UK) in 2008, the 200 best universities in the world included six Chinese universities.[25] Beijing University ranks 36th on the list; as a comparison, Michigan State University ranks 183rd. The prestige of Chinese business schools has also grown. Its best is Shanghai China Europe International Business School (CEIBS), which ranked 11th in the Financial Times Executive MBA ranking from among the 100 world best schools in 2008.[26] In 2006, it ranked 21st, yet in 2001, it was not even among the top hundred. During the first five years of reform, public funding for Chinese universities more than doubled, for a total of US$10.4 billion annually. Part of additional expenses was spent on the repatriation of scientists who gave up successful careers abroad: they were offered decent salaries, even by American standards, and Western working conditions.

Although all higher educational institutions in China are under the jurisdiction of the Government, there is no unified curriculum for all universities. Each university not only designs a teaching methodology, but also determines its own methods of overseeing the academic performance of students and the teaching quality of the academic disciplines. In contrast to European and American universities, where one educational institute may offer a hundred specializations, Chinese universities have strict specializations: there are pedagogical, technical, linguistic and other higher educational institutions.[27]

The Russian Federation. Higher education in the Russian Federation, which has been a participant of the Bologna Process for six years,[28] is certainly undergoing reform. The two-tiered system of education was introduced later than in Uzbekistan, as well as Bachelor's and Master's programmes. A "certified specialist" level is still offered. However, one of the most elite universities in the Russian Federation, the Moscow State University, does not support the Bologna Process. This is an indication, above all, that universities of this level are reputable enough to maintain an attitude of "fundamental education" in contrast to European innovative systems. Second, this shows the liberalization of the educational management system, which allows sufficient autonomy of the educational institutions in making important decisions for a higher education institution.

Today, the Russian Federation has more students than they had in their entire history, including during the Soviet period: 6.2 million students were enrolled in 658 state-owned and 450 private civilian university-level institutions licensed by the Ministry of Education.[29] In 2004/2005, the number of students at state universities reached 419 per 10,000 population, yet only 170 received state funding. The labour market in the Russian Federation is replete with economists and lawyers, while industry is lacking

[24] Source: www.platobraz.ru/text7-8/nomer7-8japan.shtml.
[25] www.timeshighereducation.co.uk.
[26] www.rankings.ft.com/businessschoolrankings/global-mba-rankings.
[27] Higher education in China (25 May 2006): www.partnery.cn.
[28] www.bologna.spbu.ru.
[29] Education for all by 2015, p. 341.

line managers, engineers and technical managers (in contrast to India, for example, which has invested in training engineers). In order to ensure adequate personnel training, industrial groups are showing greater interest in education.[30]

2.1. Lessons Learned from Educational Management Systems in Foreign Countries

The most important direction of educational reforms in foreign countries is the restriction of state regulation and the simultaneous expansion of the autonomy of higher education institutions in terms of organization, finances and education. The "elite ranking" countries determine this trend as the fundamental principle of higher education.

Based on international experience, three major models of delegating authorities from the central government body (ministry) are suggested: (i) devolution through a regional government agency; (ii) devolution through a specialized agency (intermediary organization); and (iii) granting authority directly to higher education institution.[31]

The **first model** is most appropriate for countries with a federal system and a wide degree of decentralization. It is difficult to use this model in Uzbekistan due to inadequate administrative and managerial capacities at the local level. The **second model** poses a risk that such an organization may become an analogue of the MHSSE. The **third model** would reduce MHSSE's role in strategic management, while the remaining competences - operational and tactical management - will be the responsibility of higher educational institutions. ***Considering the conditions in Uzbekistan, the third model - granting greater autonomy to higher education institutions is the preferable option.***

Currently, a university can and should have a direct impact on socio-economic development, acting as a kind of donor of fundamental knowledge and, at the same time, practice-oriented innovations. Modern information technology societies are becoming more interested in their citizens' ability to independently act, make decisions and be flexible in adjusting to changing living standards. There is a need to develop mechanisms for improving forms of, and mainstreaming the involvement of, medium- and large-sized enterprises, professional associations of educational facilities, pedagogues and scientists, parents and public organizations into the implementation of the state educational policy. Effective tools to help achieve this objective are trustee and supervisory councils of higher education institutions. International experience on their establishment and operations shows that they are entitled to supreme executive authority and to act as legal bodies that formulate an organization structure and policy of a university, ranging from the curricula to the procedure of filling vacancies of teachers and employees of higher educational institutions.

[30] According to the report of the Public Chamber of the Russian Federation, "Education and Society. Is the Russian Federation Ready to Invest in the Future?", the aspiration to associate with the higher education institutions or departments was expressed by managers of a number of industrial corporations, such as Severstal, Sukhoy, Beeline and RusAl. Another demonstration of cooperation is the signing of an agreement in April 2006 between RusNeft and MSU for creating "An MSU Higher School of Innovative Business" under MSU with a status of a department.

[31] These models do not exclude various options of delegating certain authorities by the Ministry of Education to other bodies in order to set up new types of educational facilities, such as the creation of industrial universities. In Uzbekistan, financing in this case is provided by a line Ministry, department, or stakeholder, which is also empowered to implement various mechanisms to provide students and teachers additional incentives. Representatives of these line ministries, departments, or stakeholders participate in the development of the training and methodological framework, and the organization of the learning process in a corresponding higher educational institution.

Box 5. An analysis of primary roles and responsibilities of trustee and supervisory councils

Implementing an educational policy. This is the main duty of trustee and supervisory councils. The trustee councils of most renowned universities of the Western Europe and North America are responsible for formulating the missions of the universities and taking measures to achieve the set goals. The councils make decisions on the quantity and nature of departments, scientific centres and other structural subdivisions of the university. Their competency includes issues regarding specializations and qualifications assigned by the universities. Council activities in the area of educational policy include analysis of syllabi, research programmes, admission prospects, financial plans, professional development plans for the faculty, reconstruction and renovation of buildings, and technological upgrade.

Performance review. This is the key task of university trustee councils in the United States, Western Europe and some universities of the Asia-Pacific Region. In practice, this entails an assessment of: the activities of the chief university administrator - the president; the suggested curricula; and the effectiveness of the use of equipment and intellectual resources. The councils frequently use the university's mission, goals and objectives as assessment criteria. Charters of certain universities state that the council may not delegate its right to another body in the university or to an external institution. A preliminary assessment is provided by an independent expert.

An analysis of the concrete activity of trustee councils of foreign universities makes it possible to single out four priority areas: the development of a university mission; the determination of common rules for students, teachers and university employees; academic issues; management of the university's tangible resources.

The Governments of Japan, Malaysia, China, Turkey, Singapore, Canada and other countries consider the autonomy of higher education management as the guarantee of successful development of a country's educational potential. The opening of borders, increasing globalization and its accompanying internationalization of higher education as well as socio-economic factors have called for systemic changes in educational management. Autonomy or "autonomation"[32] of education is one of the effective steps towards improving the educational system and towards a true knowledge-based economy.

[32] "Autonomation" consists in increasing financial and administrative autonomy of higher education institutions in all areas of management ranging from personnel and administrative and financial policy to planning student admissions, content and volume of training courses and the prioritization of research areas. Autonomation should by no means be perceived as complete independence of higher education institutions from the government.

3. CONCLUSIONS AND RECOMMENDATIONS

The analysis of the higher education system in Uzbekistan and factors that determine its development reveals limited investments, insufficient autonomy of higher education institutions, and a lack of competition between them. Financial and institutional constraints prevent the creation of incentives for building capacities. Higher educational institutions do not have to compete for students, i.e. "buyers" of educational services; hence, there is a lack of incentives to improve the quality of education. Extensive government regulation of higher education inhibits the appropriate response to new challenges and problems. This Policy Brief suggests the following tenets for higher education reforms:

1. Limit government regulation and develop autonomy of the universities by increasing their competences in the academic, recruitment, admissions and financing matters. With a view to minimizing possible risks and avoiding errors within the whole system, the new principles of autonomous management should first be piloted in leading state and corporate higher education establishments.

2. Develop private education to attract new sources of funding for higher education and promote competition. This requires eliminating legislative contradictions and amending Article 6 of the Law of the Republic of Uzbekistan "On Education" in order to lay down clear procedures to grant legal status to private universities as well as to fulfill accreditation norms.

3. Shift to new methods of financing higher education by expanding forms, types and means of financing. Create a conducive environment to attract funds of the private sector enterprises and businesses. Use per capita rates for the staff remuneration and abandon the per lesson and per credit hour salary for the faculty of higher education facilities.