

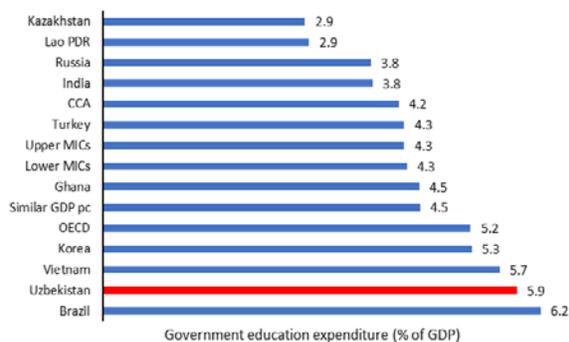
## Spotlight 2. Education Expenditures

*Uzbekistan spends more on education than regional and income peers. Given the country's substantial share of prime working age population, improving the efficiency of government education spending is part of the challenge of raising education outcomes to bolster human capital and create productive jobs.*

**Education at all levels in Uzbekistan is undergoing substantial change.** Reforms aim to expand access to preschool education and restructure the general secondary and secondary specialized education. By 2021, the government aims to reach 100 percent enrollment in preschool education for students ages 5-7. The government is revamping general secondary education (GSE) to that students have 11 years of compulsory education and the choice of three pathways.

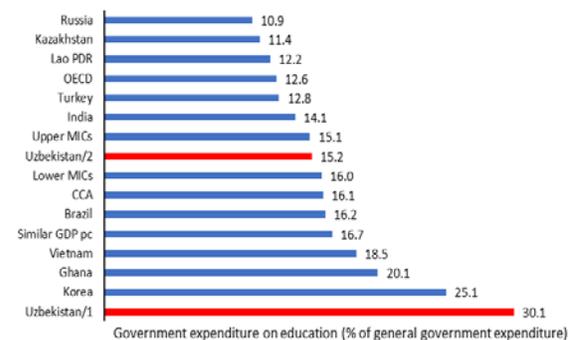
**Lack of consistent data on education achievements does not allow the authorities to make a connection between spending on education and outcomes.** While some assessments of student outcomes do take place in the country, these are not done under a standardized and systematic approach, so their results cannot be compared over time. Thus, it is not possible to tell whether quality is improving based on the results of current national assessments. The State Inspection for Supervision of Quality of Education (SISQE) has been tasked with improving Uzbekistan's student assessments since May 2018.

**Figure S2.1. Government Education Spending, 2018**  
(in percent of GDP)



Source: World Bank, Uzbekistan authorities, and UNESCO Institute for Statistics (<http://uis.unesco.org/>)  
Note: For Uzbekistan, using actual 2018 GDP.

**Figure S2.2 Government Education Spending, 2018**  
(in percent of budget expenditures)



Source: World Bank, Uzbekistan authorities, and UNESCO Institute for Statistics (<http://uis.unesco.org/>)  
Note: For Uzbekistan, using actual 2018 GDP.  
1/ Relative to the budget spending.  
2/ Relative to the consolidated spending.

**Uzbekistan's education spending is one of the highest in the world.** Government education spending amounted to 5.4 percent of GDP in 2017 and 5.9 percent in 2018, more than in Kazakhstan, Russia, Turkey, countries with similar incomes, regional peers, and the OECD (Figure S2.1). About a third of the government budget is dedicated to education, an amount little changed over the last decade and, again, one of the highest in the world (Figure S2.2). Even relative to

consolidated government expenditures that are twice as large as the government budget – education outlays amount to about 15 percent of total spending. This is more than the average for Europe and Central Asia (11 percent) and the OECD (13 percent).

**There are multiples possible explanations for the high public spending on education in Uzbekistan compared to other countries in the region.** These explanations relate to the modalities of service delivery, limited participation of private providers, and previous policies on secondary specialized and higher education. While a detailed analysis of the public spending on education is planned for 2020, existing data already shows that:

- Regarding modalities of service delivery, the full-day preschool model, which was exclusively provided in Uzbekistan until the introduction of the half-day model in 2013, was very expensive and a clear barrier to access.
- Concerning private provision, there were very few private preschools, general secondary education schools and universities in Uzbekistan until 2017. This situation changed only recently in preschool education with the ongoing reforms to expand service provision.
- On previously implemented policies, vocational education and training was the single or the most important path for more than 1.3 million students until 2017, which made Uzbekistan's vocational system large and expensive (a system with more than 120,000 teachers and 1,400 vocational colleges). Given the barriers to higher education because of government quotas, such large and expensive vocational education system was fundamental for many students until the start of the reforms in 2017.

**The bulk of education spending – about three-fourths – is for general secondary and secondary specialized education.** Even with the recent expansion of secondary education to 11 mandatory years, almost all enrolled students complete secondary education. Just a tenth of them, however, continue to higher education, one of the lowest shares among regional peers and the OECD countries. A more granular analysis of the spending on higher education adjusted for the number of students is likely to show the system's inefficiencies.

**It is difficult to assess whether education spending translates into learning outcomes.** At the preschool education level, the Ministry of Preschool Education (MPSE) does not assess children's development or their readiness for primary education. In GSE, there are no early literacy assessments in Uzbekistan to indicate how well the education system supports literacy in the first years of education. While the Ministry of Public Education (MoPE) regularly conducts national examinations in grades 4 and 9, the results are not comparable across schools and over time because these assessments are not standardized. In fact, the MoPE does not conduct any sample-based standardized assessments under a systematic approach. Additional exams are organized by the SISQE, but results are not used to inform instruction or policy making. Furthermore, Uzbekistan has not participated in any large-scale international assessments such as PISA, the Progress in International Reading Literacy Study (PIRLS), or the Trends in International Mathematics and Science Study (TIMSS) yet, which makes it impossible to compare the performance of its students with those in other countries.

**The limited data that are currently available suggest that the quality of GSE and learning outcomes of students at this level remain variable and inequitable.** Although enrollment levels in GSE are roughly on par with OECD countries and gender parity has mostly been achieved, measurement of the quality of learning outcomes at this level remains a major challenge. The best available measure of learning outcomes in GSE in Uzbekistan is the National Assessment of Learning Outcomes of Primary School Graduates (NALOPSG), which was applied to grade 4 students in 2013. With the caveat that the NALOPSG was not a standardized assessment of learning outcomes, its results showed that on average, grade 4 students were not able to correctly respond to at least 50 percent of the tested content in native language and reading. This signals a potentially significant shortcoming of the education system as well as a barrier to acquisition of higher-order skills that require proficiency in reading and language. More in-depth analysis is needed based on current data to understand the nature and causes of this learning deficiency. In mathematics, on the other hand, students were able to respond correctly to at least 50 percent of the content tested on average. In the same assessment, urban students consistently outperformed their peers from rural schools in all subjects tested. For mathematics, reading, and native language, students in urban areas scored higher than the average, whereas students in rural areas scored lower than the average.

**The lack of reliable data on student learning outcomes makes measurement of human capital development in Uzbekistan challenging.** Investment in human capital are increasingly important as the nature of work evolves in response to rapid technological change. Existing evidence shows that in Vietnam, for example, workers able to perform nonroutine analytical tasks earn nearly 25 percent more than those who cannot. By improving their skills, health, knowledge, and resilience—their human capital—people can be more productive, flexible, and innovative. The changing nature of work makes firms demand workers with higher levels of human capital, especially advanced cognitive and socioemotional skills. The government is committed to joining the World Bank’s Human Capital Project as one of its early adopters. However, the first measurement of the Human Capital Index, which is a component of the Human Capital Project, does not include Uzbekistan, given the absence of data on student learning outcomes.

**Uzbekistan recently signed an agreement on the country’s participation in PISA 2021 and in the Teaching and Learning International Survey (TALIS).** The former decision represents a government commitment to assessing student learning outcomes and using that information to inform policy. TALIS asks teachers and school leaders about working conditions and learning environments in their schools. Although not a direct measurement of learning outcomes, TALIS will provide critical information to the MoPE on important determinants of learning.

**Improving the efficiency of education will help improve the quality of human capital and boost Uzbekistan’s growth potential.** Some of the options to consider include:

- Developing adequate measurements of education outcomes to help assess whether students are learning and whether the substantial fiscal resources are spent efficiently and effectively. The country is on track to produce reliable data to measure the quality of education for the first time in history.
- Enrolment in secondary education is nearly universal and completion is also nearly universal, as there is no “grade repetition” in Uzbekistan. Enrolment in higher

education, however, is very low at about 10 percent. The key question is whether government resources are optimally allocated between universal secondary education and tertiary education, given the demand of a modern economy.