



Human capital development is increasingly seen as the biggest driver of economic growth and the most powerful tool in the fight against poverty (World Bank, 2018). This idea is embodied in the World Bank's new initiative - Human Capital Project, which is designed to stimulate more and better investment in human capital. As one of early adopter countries, Georgia is collaborating with the World Bank to build an evidence-driven strategy for accelerating progress in human capital outcomes.

### Georgia's HCI by Components

Survival	Probability of Survival to Age 5	0.989
School	Expected Years of School	12.5
	Harmonized Test Scores	445
	Quality-adjusted Years of School	9.8
Health	Survival Rate from Age 15-60	0.852
	Fraction of Children Under 5 Not Stt	0.887
Human Capital Index (HCI)		0.61

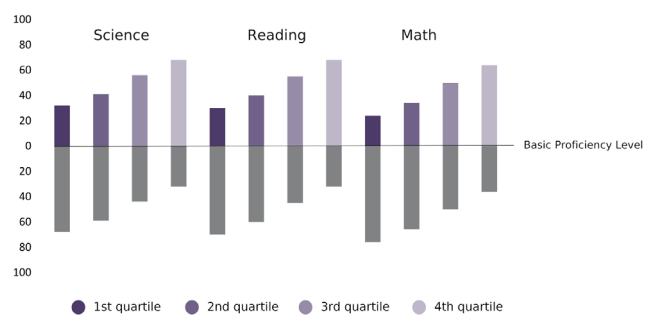
Source: World Bank (2018) Human Capital Index

In evaluating the level of education, the HCI looks at enrolment as well as learning, synthesizing the quantity and quality of education. In Georgia, while school enrolment rates are fairly high across all income groups (99%, overall), the data on learning outcomes reveals the existence of socioeconomic divides in the country. Based on students' performance on the PISA<sup>1</sup> international competence test, overall, 51%, 52%, and 57% of Georgian students fail to reach the basic proficiency levels in science, reading, and math, respectively. In the top socioeconomic quartile<sup>2</sup>, the respective proportions are 32%, 32% and 36% while for the bottom quartile, the underperformance rates reach 68%, 70%, and 76%.

Georgia's Human Capital Index of 0.61 indicates that children born in Georgia today will only be 61% as productive as they could have been given a complete secondary education and full health. The Index highlights losses of productivity in the national economy that can be attributed to gaps in education and health. These gaps can be larger in the case of lower socioeconomic groups where health and educational deprivation hinders the fulfillment of individuals' potential.

This newsletter will examine the educational dimension of human capital through a socioeconomic lens to highlight the constraints placed by poverty on human capital development.

Students above and below the Basic Proficiency Level by Socioeconomic Status (%)

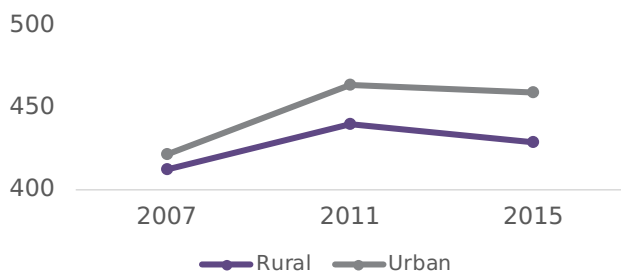


Source: PISA (2015)

It is important to note that, even in economically developed countries, socioeconomic characteristics play an important role in determining learning outcomes. For instance, in Singapore, one of the top-performing countries on PISA tests only 2%, 3% and 2% of students from the highest socioeconomic quartile underperform in science, reading, and math, respectively. But in the economically disadvantaged group, the underperformance is notably higher at 21%, 23% and 17%.

It is important to take note of the example of Singapore, as it highlights a universal need for educational policies to specifically target socioeconomic constraints on human development. Regardless of the degree of economic development, successful policies are carefully designed to diminish the influence of these barriers and create opportunities of maximum productivity for all.

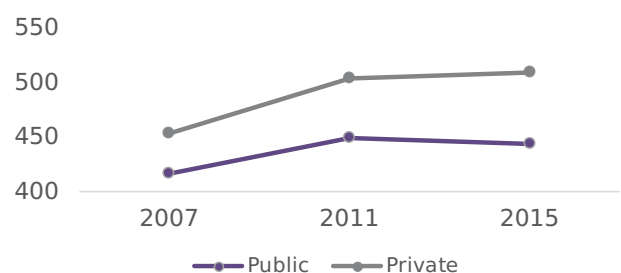
### TIMSS Test Scores by Settlement Type (4th Grade)



Source: TIMSS (2015)

In the Georgian context, socioeconomic divides can also be studied based on the differences between students' achievements in rural/urban settlements and public/private schools. Based on TIMSS test scores, students in private schools of urban settlements perform significantly better, but of particular interest here is the dynamic of change over the past 8 years. The data shows that the achievement gap between urban and rural settlements has widened - among 4th-graders, the difference between the average test scores of urban and rural dwellers comprised 9 points in 2007, 24 - in 2011, and 31 - in 2015. In 2007, students from public schools scored 38 points lower in science compared to students from private schools. By 2015, the gap increased further, reaching 65 points.

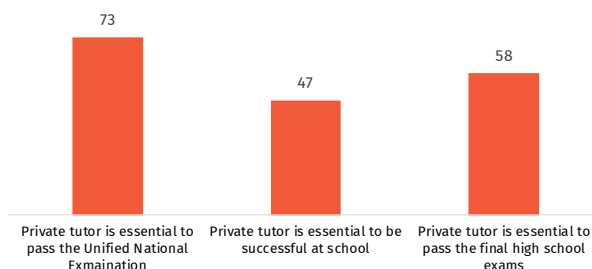
### TIMSS Test Scores by School Type (4th Grade)



Source: TIMSS (2015)

Another noteworthy aspect of the Georgian education system that exacerbates educational inequality based on income is the widespread practice of private tutorship in Georgia. According to the most recent public opinion survey of 2018, 73% of the population believed that private tutorship is essential for passing the Unified National Examination (UNE). Of further note is that the need for private tutors is not exclusively tied to the UNE. In the same public opinion poll, 58% of the public considered private tutors to be needed for passing the final high school exams while 47% saw them as a crucial element of being successful at school.

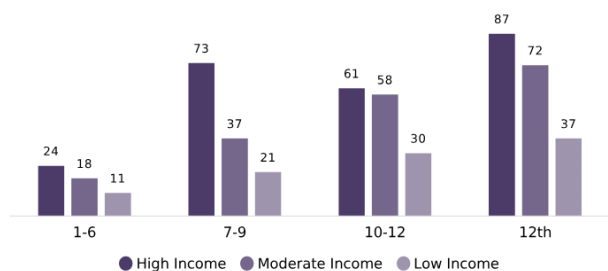
Public Opinion on Private Tutors (%)



Source: NDI Public Opinion Poll, 2018

Available data<sup>3</sup> also suggests that students' access to private tutorship varies in different income groups. Across all ages, students from higher socioeconomic backgrounds seem to have greater access to private tutors. 87% of students from a high income background have a tutor in at least one subject, while the corresponding number in the low income group is only 37%.

Private Tutorship by School Grades and Income Groups (%)

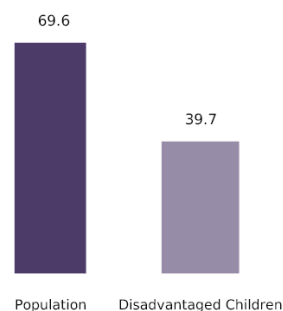


Source: Bregvadze, T. (2012)

In Georgia, inequalities in education can be traced back to early childhood development (ECD). Extensive evidence suggests that economic disparities at an early age translate into further inequalities in terms of cognitive skills, health, and behavior. Preschool education can potentially play an important equalising role, give educational and developmental opportunities to children from disadvantaged households and prevent intergenerational transmission of poverty.

In Georgia, however, ECD's equalizing potential is, evidently, largely untapped. UNICEF's report on preschool education in Georgia shows that only 40% of disadvantaged children are enrolled in any type of preschool learning institution compared to an overall enrolment rate of 70% in the country.

Enrolment in Preschool Education by Socioeconomic Status (%)



Source: UNICEF (2018)

The data above demonstrates the importance of socioeconomic factors in shaping human capital. It also emphasizes the need for the Georgian government to take this factor into account when designing policies. Disregarding the barriers that hinder the fulfillment of human potential among the poor magnifies existing inequalities, undercuts the effectiveness of policies, and also limits the state's ability to advance socioeconomically.

1 PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) are international surveys assessing learning among school students. PISA is concerned with students aged 15 while TIMSS surveys 10- and 14-year-olds.

2 Socioeconomic status assessment in PISA is based on a set of variables related to the education and employment of student's parents and availability of educational resources and basic amenities at home. Students are assessed to be disadvantaged if they are in the bottom quartile of the index distribution.

3 Bregvadze, T., 2012. Analysing the shadows: private tutoring as a descriptor of the education system in Georgia. International Education Studies, 5(6).

4 Kobakhidze, M. N., 2018. Teachers as Tutors: Shadow Education Market Dynamics in Georgia. Hong Kong: Springer International Publishing.

Basic Economic Indicators	2014	2015	2016	2017	2018 I	2018 II	2018 III	2018 IV
Nominal GDP (mIn USD)	16507.8	13988.1	14377.9	15086.5	3651.6*	4155.8*	4185.3*	
GDP Per Capita (USD)	4438.3	3754.9	3857.3	4046.8	979.1*	1114.3*	1122.2*	
GDP real growth (%)	4.6%	2.9%	2.8%	4.8%	5.2%	5.6%	3.7%	
Consumer Price Index (annual average)	3.1%	4.0%	2.1%	6%				
Foreign Direct Investment (mIn USD)	1817.7	1665.6	1565.8	1894.5	300.1*	390.4*	344.7*	197.1*
Unemployment Rate	14.6%	14.1%	14%	13.9%	14.0%	12.1%	12.2%	12.3%
External Public Debt (mIn USD)	3997	4315	4515	5177	5298	5186	5140	5434
Poverty Rate (relative)	21.4%	20.2%	21.0%	22.3%				