



GEORGIA'S EDUCATION SECTOR

Georgia | Education Industry Overview July 28, 2020

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Reforms implemented in Georgia's education sector since the mid-2000s led to the financial and managerial autonomy of institutions, reinforced the institutional structure of the education system, eliminated corruption and expanded access to education. As a result:

- Government spending on education increased to 3.6% of GDP in 2019 from 2.8% in 2010
- School enrollment rates surpassed EU levels
- Hired employment and average salaries have positive dynamics

With limited public resources to offer high-quality education, the government created a favorable business environment for private education providers to fill the gap. As a result, Georgia has a greater prevalence of private education than its peers.

Despite these positive changes in the sector, most pupils in Georgia post below-average performance in international studies (TIMSS, PIRLS, PISA, etc.), and more importantly, the education system still fails to prepare market-responsive graduates:

- Every fourth of all 15 to 24 year-olds are not in employment, education, or training
- Young people are 2-2.5x times more likely to be unemployed than their parents
- Skills shortage is one of the most important challenges for employers

Recognizing existing problems, the government recently announced another wave of reforms in the education sector. State financing is aiming to reach 6% of GDP from 2022, far above the current 3.6%. The "new school model", the professional development of teachers and increased accessibility and quality of vocational education are the focus areas of planned reforms, with the main goal being to increase human capital and respond to labour-market demand.

With the aim of sharing our understanding of the sector with investors, students and policy makers, in this report we offer our views on key trends, hurdles and opportunities in Georgia's education sector. The report is split into five sections, starting with a general overview of the education industry, followed by a detailed analysis of education subsectors (general, VET and higher education) and finally, we analyse labour market outcomes and evaluate the economic return on education.



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Disclaimer



Terms and Definitions

MESCS - Ministry of Education, Science, Culture and Sport of Georgia

MoF - Ministry of Finance of Georgia

GeoStat - National statistics office of Georgia

- EuroStat Statistical office of the European Union
- **OECD** Organisation for Economic Co-operation and Development

EMIS - Education management information system

- NAEC National Assessment & Examinations Center
- M&A Mergers and Acquisitions

Primary education - Primary education provides learning and educational activities typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and numeracy), to establish a sound foundation for learning and solid understanding of core areas of knowledge and personal development, preparing for lower secondary education. It aims at learning at a basic level of complexity with little if any specialization.

Secondary education - Secondary education provides learning and educational activities building on primary education and preparing for both first labour market entry as well as post-secondary non-tertiary and tertiary education. Broadly speaking, secondary education aims at learning at an intermediate level of complexity.

Tertiary education - Tertiary education builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education.

Gross enrollment ratio - Number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. For the tertiary level, the population used is the 5-year age group starting from the official secondary school graduation age.

Net enrollment rate - Total number of students in the theoretical age group for a given level of education enrolled in that level, expressed as a percentage of the total population in that age group.

Private enrollment rate - Total number of students in the given level of education enrolled in institutions that are not operated by a public authority but controlled and managed, whether for profit or not, by a private body (e.g. non-governmental organisation, religious body, special interest group, foundation or business enterprise), expressed as a percentage of total number of students enrolled in the given level of education.

Inbound mobility rate - Number of students from abroad studying in a given country, expressed as a percentage of total tertiary enrollment in that country.

ICT - Information and Communications Technology

- PPS Purchasing Power Standard
- GDP Gross Domestic Product
- **GNI** Gross National Income

Urbanization rate - Population living in urban areas as percentage of the total population

Economic activity rate - Labour force as a percentage of total population

Employment rate - Number of employed people as a percentage of labour force

Unemployment rate - Number of unemployed people as a percentage of the labour force

Self-employment rate - Self-employed population as a percentage of the employed population

NEET rate - Share of youth not in education, employment or training, the proportion of young people who are not in education, employment, or training to the population of the corresponding age group

UNECE - United Nations Economic Commission for Europe

MOOCs - Massive open online courses



Executive summary

Georgia's education sector revenues totaled GEL 2.0bn or 4.1% of GDP in 2019, with private sector generating GEL 0.5bn. The private education sector enjoys growing revenues and strong financial performance, recording a 20.4% net profit margin in 2018 – 3x higher than that of total business sector in Georgia. Even though, government expenditure on education has tripled over 2010-19 standing at 3.6% of GDP in 2019, the indicator is still low compared to Western European countries, where education expenditure accounts for over 5% of GDP. The government plans to increase spending on education to 6% of GDP from 2022 to enhance human capital and support economic development. We expect the education sector to grow at a high single-digit annual rate in the medium term, backed by increased state financing and strong demand for educational services.

General education is the largest sub-sector, accounting for 78% of total enrollment (excl. pre-school) and 46% of total industry revenue. General education in Georgia is still concentrated in public schools, but the private sector enjoys rising enrollments and tuition fees due to a higher perceived quality compared to public schools. We believe this trend will continue, backed by increased disposable incomes, urbanization and positive demographic trends in the medium term. M&A activity is heating up, enhancing operational performance. Quality of education is still a challenge; however, a planned increase in teacher salaries and other reforms in the sector will hopefully improve educational outcomes.

VET programs are not prestigious among Georgian youth, with only 15.6k registered students or 6% of the eligible age group as of 2019. Vocational education enrollments are concentrated in public institutions. Despite improvements, state expenditure on vocational education remains low, accounting for only 3.2% of total state spending on education in 2019. The low geographic coverage of institutions is another factor limiting accessibility. With planned reforms and an increase in public spending, enrollments in vocational education are expected to grow.

The higher education sector has seen a strong and improving financial performance. Our outlook on the sector is optimistic, sustained by (i) increasing household incomes (ii) rising intakes from older age groups and foreign students; and (iii) low penetration compared to peers. We believe large players in the private market will keep gaining share versus smaller players and continue growing above the market due to their superior operational practices and economies of scale. We expect consolidation in the sector as it is still highly fragmented. On the one hand, the sector can benefit from a rising number of international students and older age groups; on the other, the stable level of high school graduates and limited affordability may drag growth down. Tuition fees are a heavier burden on students in Georgia compared to peer countries, as they are mainly financed by households, while public financing remains low and students have low or no self-earned incomes.

- The number of pupils is expected to reach 634.8k by 2024 from the current 592.9k
- We expect the private enrollment rate to rise from the current 10.6% to 11.5% in 2024
- Average revenue per pupil in private schools reached GEL 3,700 in 2019
- The net profit margin of the private sector hit 19.7% in 2018
- 6% of youth and 3% of upper secondary pupils participate in VET in Georgia vs. 48% of pupils in the EU
- Despite inequal opportunities in financing, the private sector grabs 35.4% of enrollment
- State spending on VET education is planned at GEL 54.3mn in 2020, which is still low at 3.6% of total spending
- The gross enrollment ratio in higher education exceeded 60% in 2018
- We estimate that the number of students will rise to 160.3k by 2024 from the current 152.8k
- Private penetration is high at 35.4% of total enrollment, and is anticipated to reach 37.4% by 2024
- Public financing of tertiary education is low by international standards
- The net profit margin of the private sector hit 25% in 2017-18



Higher education in Georgia has low economic return. It barely improves employability and adds a low salary premium to degree holders compared to peer countries. The reasons for the poor payback are complex: 1) the higher education system continues to provide an excessive number of graduates to an economy with a high job concentration in low-skill, low-wage sectors; 2) school and higher education graduates make uninformed career decisions; and 3) general and higher educational institutions in Georgia provide inadequate technical, cognitive and social skills. As a result, the unemployment rate is high for Georgian youth, there is a significant mismatch between professions and occupations and self-employment is widespread.

- Every 4th of all 15 to 24-year-olds are not in employment, education, or training
- C.60% of entry-level jobs do not require higher education degree
- Most employees are concentrated in lowproductivity, low-wage sectors
- Only 13% of employees are working within their field of specialty



Education Industry Overview

Georgia's education system

The Georgian education sector can be split into three main sub-sectors: 1) general education, 2) vocational education and training (VET) and 3) higher (tertiary) education (see Annex 1 for more detailed information).

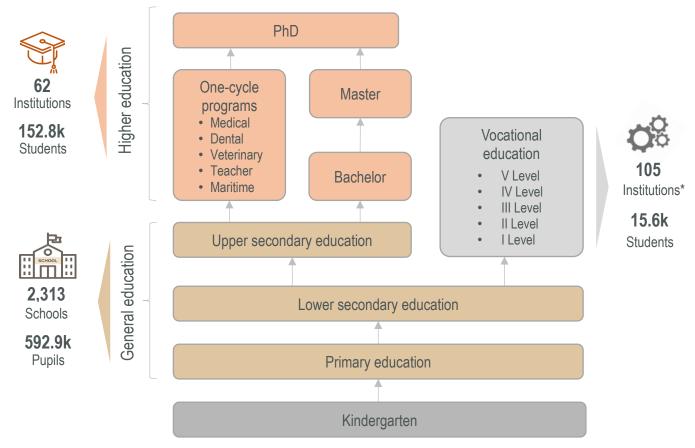
General education includes 12 years of study and is carried out at three levels:

- Primary (elementary) grades 1-6
- Lower secondary (basic) grades 7-9
- Upper secondary grades 10-12 or VET programs

Higher education in Georgia is carried out at three levels:

- Bachelor's programs or one-cycle programs
- Master's programs
- Doctoral programs (PhD)

Diagram 1: Georgia's education system



Source: MESCS

Note: Number enrollments for general and higher education as of Sep-19, for VET as of Dec-19 *Includes colleges and also general and higher educational institutions having vocational programs



Education in Georgia is provided by three types of institutions: (i) public institutions, which are not-for-profit, state-funded and operated organizations; (ii) private for-profit institutions, which are privately operated, profit-seeking businesses; and (iii) private not-for-profit institutions, which are non-governmental, privately funded organizations (e.g. religious schools) where revenue must be reinvested in the institution. The legal framework is favorable to the private sector, as education is exempt from value-added tax (VAT).

Table 1: Education in Georgia is provided by three types of institutions Number of educational institutions and enrollment by level, 2019/20

Education level	Type of institution	# of institutions	Enrollments, '000	Enrollments, %
	Public	2,086	530.1	89.4%
A A A A	Private for-profit	184	52.9	8.9%
General education	Private not-for-profit	43	9.9	1.7%
	Total	2,313	592.9	100.0%
	Public	19	98.8	64.6%
Higher education	Private for-profit	29	45.0	29.5%
	Private not-for-profit	14	9.0	5.9%
	Total	62	152.8	100.0%
	Public	43	10.1	64.6%
Vocational education	Private for-profit	57	5.4	34.3%
	Private not-for-profit	5	0.2	1.1%
	Total	105	15.6	100.0%

Source: GeoStat, MESCS

Size of education industry

According to our estimates, the Georgian education sector totaled GEL 2.0bn or 4.1% of GDP in 2019, up from GEL 0.7bn in 2009. The private sector grabbed 26.3% of total revenue (or GEL 0.5bn in 2019), and has seen a slight upward trajectory in recent years. We expect the education sector to grow at a high single-digit annual rate in the medium term, backed by increased state financing and strong demand for educational services.

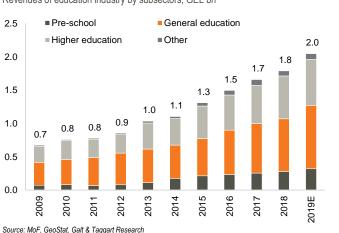
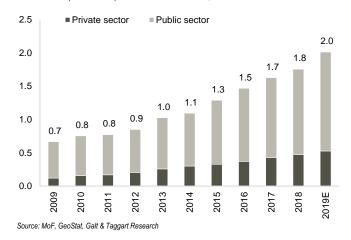


Figure 1: Education sector revenues increased at a CAGR of 11.6% over 2009-19 Revenues of education industry by subsectors, GEL bn Revenues of private and public education sectors, GEL bn

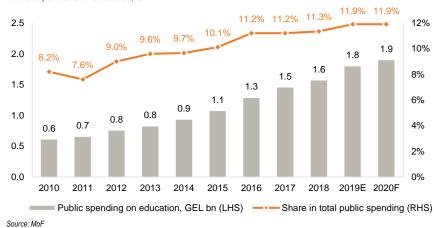


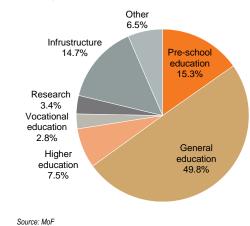


Public expenditures

Total government spending on education tripled to GEL 1.8bn over 2010-19, increasing its share of total state expenditure by 3.7ppts to 11.9% over the same period. The government spent half of its allocated education budget on general education in 2019, while only 7.5% was earmarked for higher education and 2.8% for VET programs. The rest represented spending on pre-school education (15.3%), infrastructure (14.7%), research (3.4%) and other support programs (6.5%) at every level of education.

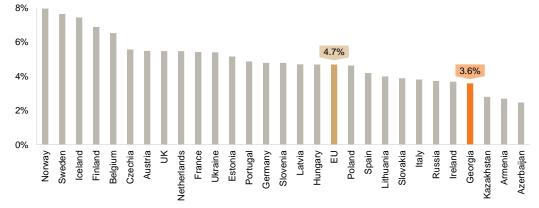
Figure 2: Public spending on education increased at a CAGR of 12.7% to GEL 1.8bn over 2010-19 Public expenditure on education, GEL mn Public expenditure structure in education, 2019





Government expenditure on education as a percentage of GDP in Georgia has also shown an upward trend, increasing from 2.8% to 3.6% over 2010-19. Despite these positive dynamics, the indicator is still low compared to western European countries, where education expenditure accounts for over 5% of GDP.





Source: World Bank, Eurostat, GeoStat, MoF

According to the budget code, the government plans to boost its expenditures on education to 6% of GDP from 2022. The government intends to use this extra money to improve the quality and efficiency of the education system.

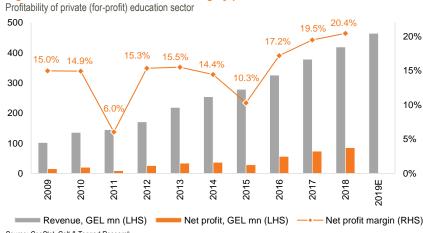


Private sector

As a result of a favorable business environment and growing demand, the private (forprofit) education sector has grown rapidly, at a 16.3% CAGR to GEL 0.5bn over 2009-19. The sector enjoys high profitability: the EBITDA margin reached 26.4% in 2018 and the net profit margin stood at 20.4%. Besides growing revenues and profitability, the education sector has a high level of liquidity: most educational institutions require annual or semi-annual fees to be paid in advance, granting operational and financial efficiency to the market players.

Salaries are the main cost category for the sector, comprising 65% of total operating expenditure. Notably, salaries in the private sector are 20-30% higher than in the public sector. Ongoing salary increases in public kindergartens, schools and universities are expected to push wages in the private sector up further (to maintain a qualified workforce). This might negatively affect profitability. According to our estimates, a 15% increase in salary costs will shrink the net profit margin by 7.0ppts if tuition fees remain the same or other costs are not cut.

Figure 4: Private education sector is highly profitable



Source: GeoStat, Galt & Taggart Research Note: Note: Profit is aggregated net income of profit-making companies, while loss is aggregated net loss of loss-making companies. Net profit margin of the sector is: (profit - loss) / revenue



We expect the education sector to maintain stable growth in the pandemic and post-pandemic periods. The sector's long-term drivers are government spending and demand for educational services, which tend to be relatively resilient amidst macroeconomic fluctuations. Moreover, we believe that COVID-19's impact on the Georgian education sector will be positive, mirroring the global trends of accelerated adoption of technology in the learning process, improved internet access in rural areas, and readiness to invest in online education tools by the government, educational institutions and households.

COVID-19 brought forward a structural change in the education sector. Even though useful technological tools for education have been available for some time, user engagement has been very low. Despite improvements, access to the internet and computers is still limited in Georgia, especially in rural areas (86% of households in the cities and 70% in rural areas had access to the internet as of July 2019, with 75% and 45% having access to computers respectively). The pandemic has accelerated the implementation of innovative teaching practices through:

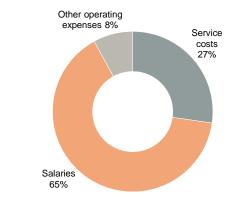
1. Enhancing internet access to pupils and teachers across the country

2. Rapidly engaging teachers, parents and pupils in digital learning processes - something that is usually a lengthy process

The sector will benefit from new learning platforms created during the pandemic. Online library, TV school, web school for upper-secondary pupils, I-school (an online bank of exercises in different subjects) and other platforms created to exchange information and knowledge among teachers, pupils and parents during the pandemic will remain useful tools in the sector.

Figure 5: Salaries are main cost category

Operating cost structure of private education sector, 2018



Source: GeoStat, Galt & Taggart Research

General Education



Quality – the best business plan

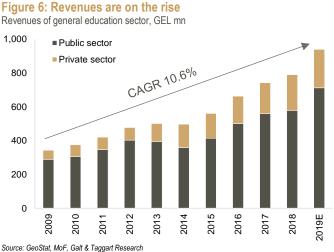
General education is the largest sub-sector, accounting for 78% of total enrollment (excl. pre-school) and 46% of total industry revenue. General education in Georgia is still concentrated in public schools, but the private sector enjoys rising enrollments and tuition fees due to a higher perceived quality compared to public schools. We believe this trend will continue, backed by increased disposable incomes, urbanization and positive demographic trends in the medium term. M&A activity is heating up, enhancing operational performance. Quality of education is still a challenge; however, a planned increase in teacher salaries and other reforms in the sector will hopefully improve educational outcomes.

- The number of pupils is expected to reach >634.8k by 2024 from the current 592.9k
- > We expect the private enrollment rate to rise from the current 10.6% to 11.5% in 2024
- Average revenue per pupil in private schools reached GEL 3,700 in 2019
- The net profit margin of the private sector hit 19.7% in 2018

Market size

We estimate that the general education sector's size was GEL 939mn in 2019, up from GEL 343mn in 2009. Public schools received 75.7% of total revenue in 2019; however, the private sector is growing, increasing its share by 8.6ppts to 24.3% over 2009-19. Public schools are entirely state-financed, while private schools are funded by both government (GEL 300 per pupil annually) and households, with 8.1% and 91.9% shares, respectively.

Growth of the private sector has been driven by both increased enrollments (see p.12) and rising tuition fees. Average revenue per pupil has more than tripled, up from GEL 1,100 to GEL 3,700 over 2009-19.



Profitability of the private general education sector has improved over the last decade. albeit with some shifting dynamics (see Figure 8). Net profit stood at GEL 35.9mn in 2018, translating into a 19.7% net profit margin, up from 6.7% in 2009.

Figure 7: Average annual fee in private schools rises rapidly Revenues of private general education sector

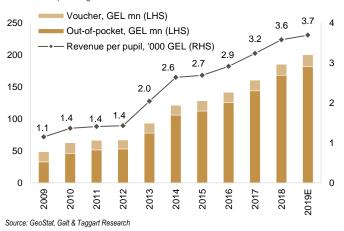
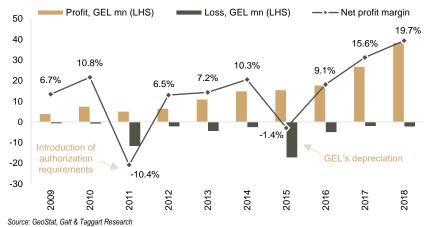




Figure 8: Private schools' profitability improves

Private general education sector's profitability



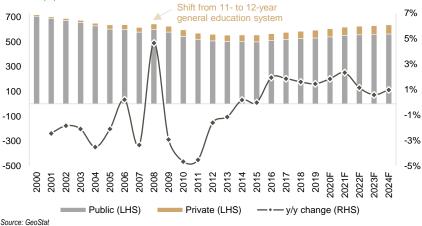
Note: Profit is aggregated net income of profit-making companies, while loss is aggregated net loss of loss-making companies. Net profit margin of the sector is: (profit - loss) / revenue

Enrollment trends

Georgia has achieved almost full attendance at schools, with a 96% net enrollment rate in 2018. The size of the school population was declining until 2013, but has since been on an upward trend, driven by improved demographic tendencies. 592.9k pupils attended schools in Georgia in the fall of 2019 and the number is expected to rise to 634.8k pupils by 2024.

Currently, 2,313 schools provide general education services - 2,086 public and 227 private. Introduction of authorization requirements in 2010, which set minimal standards for private institutions, along with an optimization program for the public sector (mainly in rural areas), has reduced the number of schools by 149 over the last decade.

Figure 9: Downward trend in total enrollment reversed in 2014 Number of pupils, '000



Despite the reduced number of pupils for the whole country, the school population has increased in the major cities of Tbilisi, Batumi, Kutaisi and Rustavi (see Figure 12). These four cities together accounted for 49.2% of total school enrollments in 2019/20, up from 39.6% a decade ago. Considering the trend of urbanization, concentration of pupils in the major cities is expected to grow.

Figure 10: Number of schools declined Number of schools, 2019/20

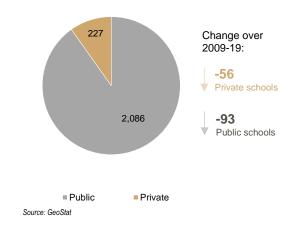




Figure 11: 34.7% of pupils are concentrated in Tbilisi

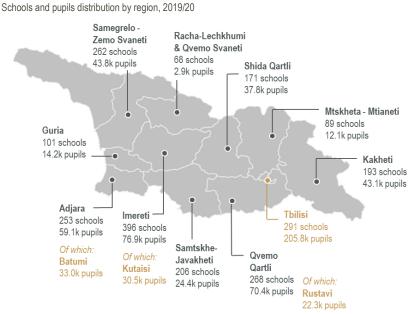


Figure 12: School population declines in rural areas

Number of pupils change over 2009-19

42.2%	Batumi
18.3%	Tbilisi
6.2%	Rustavi
5.9%	Kutaisi
-5.2%	Adjara
-5.7%	Qvemo Qartli
-14.8%	Imereti
-17.5%	Samegrelo - Zemo Svaneti
-17.6%	Shida Qartli
-17.8%	Samtskhe - Javakheti
-18.6%	Kakheti
-21.7%	Mtskheta-Mtianeti
-24.6%	Guria
-36.7%	Racha-Lechkhumi & Qvemo Svaneti

Source: GeoStat, Galt & Taggart Research

Note: 15 Schools and 2.3k pupils are registered in Abkhazia, but numbers are underestimated in our view

Private sector – gaining space

Generally, neither private nor public education guarantees good educational outcomes, so countries choose different models of education systems. However, private enrollment is trending globally, rising by 3.0ppts to 21.5% of total enrollment over 2012-18. Notably, this growth is more prominent in low- and middle-income countries than in rich countries.

Figure 13: Demand on private general education increases globally



Source: GeoStat

The better perceived quality of private schools versus public institutions has ensured growing private enrollments (2.8% CAGR to 62.8k pupils over 2009-19) in Georgia. As a result, private schools accounted for 10.6% of total enrollments in 2019/20 vs 7.6% in 2009/10, which is a significantly higher level compared to peer countries in the region (average 2.5%).

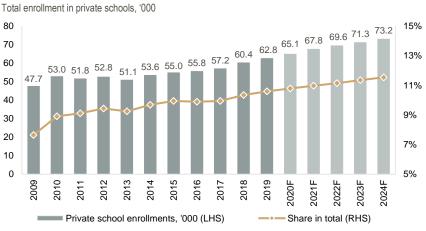
Source: EuroStat, Galt & Taggart Research



Quality education in Georgia is not widely affordable: pursuing studies in private schools (one child) would require c.25% of average household income, which makes private education unaffordable for a large portion of the population. We believe that the expected economic development and greater discretionary incomes will make private schools more accessible going forward.

Urbanization is supporting the growth of private enrollment as a result of concentrated demand and higher incomes. Batumi, Tbilisi and Kutaisi are the most attractive cities for private schools, recording 18.6%, 19.8% and 11.9% private enrollment rates, respectively, in 2019/20. With an increased number of urban residents and greater middle-income population, private enrollments at schools are expected to reach 73.2k pupils (or 11.5% of the total) by 2024.

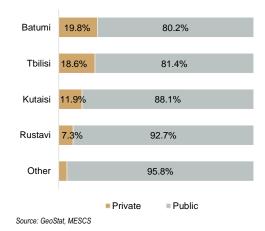
Figure 14: Private enrollment in Georgia grows at low single digits



Source: GeoStat, Galt & Taggart Research

Figure 15: Private enrollment rate is higher in major cities

Enrollment rate by type of school and location, 2019/20



Room to play for M&A

Despite strong growth, the private general education system in Georgia is still in its early development stage, with most of the private schools governed by teachers or family-owned entities. Lack of corporatization results in limited access to financial resources, interrupting growth and limiting M&A activity in the sector.

Due to growing demand, the average size of private schools increased from 169 to 277 pupils over 2009-19, still significantly lower than the average public school size in major cities (see Figure 16). Only eight private schools have more than 1,000 enrollments, together accounting for 15.2% of the market¹. This shows the strong consolidation potential of the sector as 64.3% of private schools have up to 250 pupils as of the 2019/20 academic year. We expect M&A activity to intensify in the sector considering its strong growth potential, the benefits of economies of scale and the ability of M&A to avoid the long process of reputation earning.

¹ Market share is calculated by number of pupils in private schools



Table 2: Schools with less than 500 pupils hold 59.1% of total enrollment in private sector

Number of private schools by enrollments, 2019/20

Enrollment range	# of institutions	Enrollments '000	% Institutions	% Enrollments
<250	146	20.2	64.3%	32.2%
250-500	50	16.8	22.0%	26.9%
500-750	13	7.6	5.7%	12.1%
750-1000	10	8.5	4.4%	13.6%
>1000	8	9.5	3.5%	15.2%
Total	227	62.5	100%	100%

Source: MESCS, Galt & Taggart Research Note: Number of private enrollments slightly differs in GeoStat and MESCS data due to date difference.

Georgia Capital is the pioneer investment holding company in Georgia's private general education sector. It carried out three acquisitions in 2019 (total investment of GEL 49mn), acquiring controlling stakes in British-Georgian Academy, Buckswood International School and Green School of Tbilisi, which together have 2,100 pupils (2019/20). It plans to invest more than GEL 186mn in private schools and increase the number of pupils to 30,000 by the end of 2025.

Table 3: Georgia Capital carried out 3 acquisitions in 2019, planning to allocate GEL 186mn totally through 2025 M&A transactions in Georgia's general education sector

Date	Acquirer	School	EV / EBITDA	Purchase of equity stake	Current capacity, # of pupils	Targeted capacity, # of pupils
Jul-19	GCAP	British-Georgian academy	6.4x	70%	800	3,200
Jul-19	GCAP	Buckswood International school	6.4x	80%	760	2,980
Aug-19	GCAP	Green school of Tbilisi	5.6x	80%*	1,250	5,000

Source: Company report

*Note: 80% equity stake in the current campus and 90% in three new schools that will be developed under green school brand

Table 4: Consolidation opportunity exists in every price segment

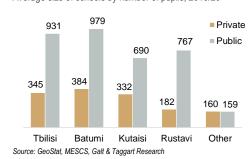
Market share of top 20 schools by enrollment, 2019/20

Private school	Number of pupils, '000	Market share by enrollments	Market share by revenue*	Location	Segment
Mtsignobartukhutsesi	1.4	2.3%	2.1%	Tbilisi	Mid-level
IB Mthiebi	1.3	2.1%	2.0%	Tbilisi	Mid-level
Newton free school	1.3	2.0%	3.1%	Tbilisi	Premium
Robert Schuman European school	1.2	2.0%	1.9%	Batumi	Mid-level
Batumi St. Andrew the first-called school	1.2	1.9%	0.8%	Batumi	Affordable
Georgian-American high school	1.0	1.7%	2.1%	Tbilisi	Premium
Green school of Tbilisi	1.0	1.6%	1.4%	Tbilisi	Premium
Euro-2000	1.0	1.6%	1.0%	Batumi	Affordable
St. George's International School	0.9	1.5%	1.5%	Tbilisi	Premium
UG school	0.9	1.4%	1.2%	Tbilisi	Premium
European school	0.9	1.4%	5.9%	Tbilisi	Premium
Promete	0.9	1.4%		Tbilisi	Mid-level
Georgian-American school Progress	0.8	1.3%		Kutaisi	Premium
Masterclass	0.8	1.3%		Batumi	Mid-level
lv. Javakhishvili named High School Imedi	0.8	1.3%		Kutaisi	Affordable
Gymnasium Shavnabada	0.8	1.3%		Tbilisi	Mid-level
Merab Chokhonelidze School	0.8	1.2%	0.6%	Kutaisi	Affordable
New school	0.7	1.2%	4.4%	Tbilisi	Premium
School Albion	0.7	1.0%	1.3%	Tbilisi	Affordable
Buckswood International school	0.6	1.0%	2.2%	Tbilisi	Premium

Figure 16: Private schools are significantly smaller than public schools in urban areas Average size of schools by number of pupils, 2019/20

Georgia | Education Industry Overview

July, 2020



Source: MESCS, SARAS, Galt & Taggart Research

Note: Affordable are schools with average tuition fee up to GEL 3000 annually, mid-priced- GEL3000-5000, Premium – more than GEL 5000 per year, (...) – Not available *Market share by 2018 year revenue



Quality issues of general education

Georgia has no evaluation framework that will systematically monitor quality of education. Therefore, international studies, such as Program for International Student Assessment (PISA), International Literacy (PIRLS) and International Mathematics and Science Studies (TIMSS), are the only reliable sources to assess general education quality. According to the latest PISA 2018 study:

- Georgian pupils rank below pupils of most peer countries, ranking 67th in math, 71st in reading and 74th in science, out of 78 countries.
- Georgia has one of the highest shares of low achievers in all three subjects (48.7% in Georgia vs 13.4% in OECD).
- Georgia's performance worsened² over 2015-18.

Pupils achievement scores in PISA (2018) by type of school

- Pupils in private schools record better outcomes than public school pupils on average and the gap in Georgia is higher than in the OECD.
- Performance of pupils differs significantly by residence (urban vs rural) and economic background in Georgia, indicating inequal access to educational resources.



Figure 17: International studies demonstrated significant disparities in performance of pupils in private and public schools

Source: NAEC, OECD

Box 2: The Government's "New School" Model

The "New School Model" is one of the most important ongoing reforms in the education sector and incorporates successful educational practices of other European countries. The reform aims to reorient teaching approaches from unified to more differentiated, decentralized and student-centered. This means that schools and teachers will have wider autonomy in the formation of educational content and its implementation. A new national curriculum will provide teachers with long-term goals to develop pupils' understanding and analytical skills instead of lesson-specific objectives. Innovations and digital technologies will be used in the academic process, which will increase not only the efficiency of teaching and administrative procedures but also pupils' engagement and ICT skills. The "New School Model" has been implemented in the primary grades (I-IV) of 165 schools as of December 2019 and will be introduced in all public schools by 2024. We believe the new approach will improve learning outcomes in the long term.

Private Public 550 +39 +40+43 500 450 +62 +54 400 350 300 OFCD Georgia OECD Georgia OECD Georgia **Science** Math Reading

² This is partly explained by changed testing format and increased coverage of pupils in 2018. Shift from paper-based to computer-based testing format negatively affects on performance in first execution year generally.

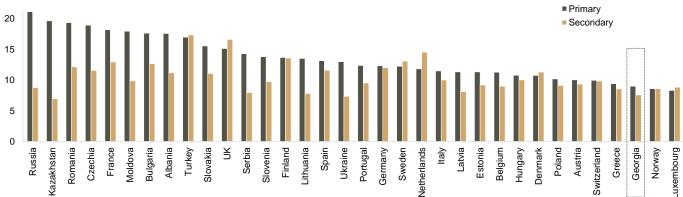


Teaching force - need for optimization

Georgian education system has oversupply of teachers, despite the number declining to 63.8k, down 20.2%, over 2009-19. This surplus of teachers makes the pupil-teacher ratio low at 9 in Georgia compared to 12 in the EU and 15 in peer³ countries. One of the reasons for this oversupply is the small size of schools operating in the regions of Georgia. But we also see a need for efficiency improvement as teachers in Georgia work fewer hours and teach fewer subjects than in peer countries (25.3 hours per week in Georgia vs 38.8 in the OECD)⁴.

Despite the overall surplus of teachers, the shortage is prevalent in specific subjects (e.g. science, mathematics) and locations (rural, mountainous areas). On top of this, quality is a major concern as both private and public educational institutions are struggling to hire qualified personnel.

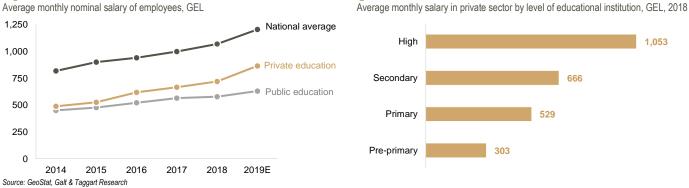




Source: World Bank

It is not surprising that this oversupply of teachers makes it the lowest paid job in Georgia and therefore unattractive as a career choice. This poses the risk of labour force shortage in the sector in the long term. The average salary in the education sector was GEL 726 in 1Q20, 40% less than the average worker's salary in Georgia. Salaries in the sector increased by 45% over 2014-19, in line with average salary growth in Georgia. Importantly, salaries in the private education sector are also low, despite private institutions paying 20-30% higher salaries. Earnings also differ by educational level, and are not surprisingly lowest for teachers in pre-primary institutions and highest in tertiary institutions.

Figure 19: Salaries in education sector remains below national average



Note: Salaries also include non-teaching staff's remuneration, but is still a good proxy in comparative terms

³ Europe and Central Asia excluding high-income countries, 2016

⁴ TALIS (2018)



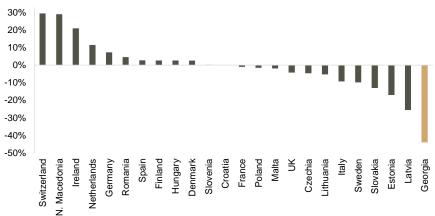


Figure 20: International comparison shows that salaries in Georgia's education sector is considerably low Gap between salaries in education sector and average national salary

Source: Eurostat, GeoStat, Galt & Taggart Research Note: Reference year is 2018 for Georgia and 2014 for other countries

Low salaries make the teaching profession unattractive for Georgian youth. As a result, Georgia has an older teaching workforce than most high-income and emerging countries in the region. The share of teachers over 50 years old rose by 11.5ppts to 48.5% over 2011-18.

Figure 21: Georgian education system lacks young teaching workforce Percentage of general education teachers, by age group, 2016

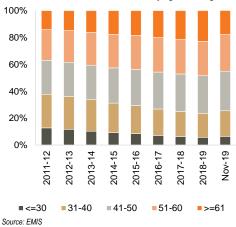


Source: OECD, EMIS, Galt & Taggart Research

To renew the teaching workforce, the government has implemented a teachers' retirement scheme, paying two years of salary to pension age teachers. As of December 2019, 6,500 of the 12,000 eligible teachers have chosen to retire. Furthermore, 1,900 young practitioners entered the public school system in 2019, positively affecting the age structure (see Figure 21). On top of this, the government plans:

- to gradually increase teachers' salaries up to GEL 1,800 by 2023, subject to increased utilization (working hours/subjects per teacher) and professional development;
- to introduce a new teacher development scheme, creating faster entry and promotion opportunities for young practitioners.

General education teacher distribution by age in Georgia





Shadow education - private tutoring

Teachers supplement their low salaries and few working hours with informal private tutoring, which is a widespread practice in Georgia. Education therefore has the second-highest share of the shadow economy at 17.8% after hotels and restaurants. Meanwhile, pupils use private tutoring to deal with problems of low teaching quality in schools. The planned salary increase will reduce incentives for private tutoring and increase the efficiency of teachers in the academic process. Additionally, the recent creation of formal preparation centers and increasing enrollments in private schools will reduce demand for private tutors and thus the share of shadow education going forward.

Vocational Education



Weak demand, poor supply

VET programs are not prestigious among Georgian youth, with only 15.6k registered students or 6% of the eligible age group as of 2019. Vocational education enrollments are concentrated in public institutions. Despite improvements, state expenditure on vocational education remains low, accounting for only 3.2% of total state spending on education in 2019. The low geographic coverage of institutions is another factor limiting accessibility. With planned reforms and an increase in public spending, enrollments in vocational education are expected to grow.

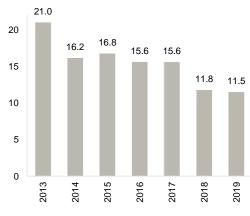
Due to limited accessibility and the low prestige of vocational education, only c.6% of the eligible group attends VET programs, while more than 60% is enrolled in higher education. Admissions to VET are dropping continuously, down from 21.0k students in 2013 to 11.5k in 2019. This has caused a shortage of VET graduates in the Georgian labour market and demand for technical skills is not being met (see p.42). Private and public sectors deal with insufficient technical knowledge with their own training programs or by recruiting foreign professionals. Our analysis does not capture informal professional education, which is widespread in Georgia.

Enrollment trends

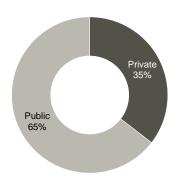
Currently, 62 private and 43 public educational institutions offer VET programs. Vocational and community colleges are the main providers of VET education in Georgia (80.2% of total enrollment), while higher education institutions hold a 18.3% share as of 2019 and the share of schools is minor.

Enrollment is concentrated in public institutions (a 64.6% share in 2019), as tuition is financed by the government, increasing their attractiveness over private institutions. According to recent government announcements, private vocational institutions will also be able to receive voucher financing, increasing accessibility and consequently demand for VET education, going forward.





VET enrollments by institutions, 2019 School 1% Higher educational institution 18% Vocational College 35% VET enrollments by type of institution, 2019



Source: GeoStat, MESCS, Galt & Taggart Research

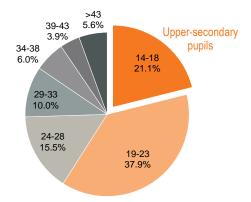
Note: Admissions are number of students admitted on VET programs during the year, while enrollments are number of students at a particular period

- 6% of youth and 3% of upper secondary pupils participate in VET in Georgia vs. 48% of pupils in the EU
- Despite inequal opportunities in financing, the private sector grabs 35.4% of enrollment
- State spending on VET education is planned at GEL 54.3mn in 2020, which is still low at 3.6% of total spending

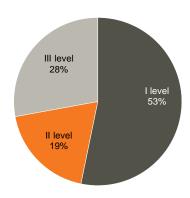


Demand for VET education is especially low among the school age population. Upper secondary pupils comprised only 21% of VET enrollments in 2019, while demand from older age groups is relatively high (79%).

Figure 23: Demand from adults is relatively high Student distribution in VET by age in Georgia, 2019



Admissions on VET by level of study, 2019



Source: MESCS

To increase the popularity of VET programs, VET graduates also gained the ability to receive a general education diploma and continue their education in higher educational institutions from 2016. This was done to stop the dead-end nature of VET education, but contrary to expectations, it did not increase the popularity. Demand for VET programs remains low with only 3% of upper secondary pupils studying on vocational programs in Georgia vs. 48% in the EU. The government plans to position VET as part of continuous education and this, together with growing demand for technical skills, is expected to increase the number of pupils enrolled in these types of programs.

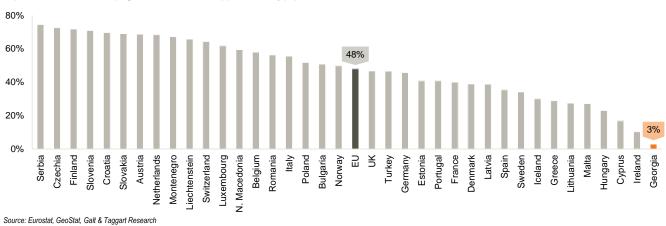


Figure 24: Almost half of pupils in EU and only 3% in Georgia study on vocational programmes Pupils enrolled in vocational programmes as % of total upper secondary pupils

Note: 2019 data for Georgia and 2017 for other countries

The VET education sector is highly fragmented. 81.9% of institutions have fewer than 300 students as of 2019. There are currently five institutions with more than 500 students, and only one (College Akhali Talga in Kobuleti) with more than 1,000 students.



Table 5: Only 6 institutions have more than 500 students in VET education Number of institutions providing VET education by enrollments, Dec-19

Enrollment range	# of institutions	Enrollments '000	% Institutions	% Enrollments
<=100	61	1.7	58.1%	11.1%
101-300	25	4.7	23.8%	30.2%
301-500	13	4.8	12.4%	30.9%
501-1000	5	3.0	4.8%	19.1%
>1000	1	1.4	1.0%	8.7%
Total	105	15.6	100%	100%

Source: MESCS, Galt & Taggart Research

Table 6: Public institutions are the largest players in VET

Top institutions by number VET enrollment, Dec-19

Institution	Туре	Location	VET enrollments, '000	Share in total enrollment
College Akhali Talga	Public	Kobuleti	1.4	8.7%
College Aisi	Public	Gurjaani	0.7	4.5%
College Mermisi	Public	Tbilisi	0.7	4.3%
Community College Panacea	Private	Tbilisi	0.6	3.6%
Community College Kavkasioni	Private	Tbilisi	0.5	3.5%
Community College Spectri	Public	Tbilisi	0.5	3.3%
Shota Meskhia State Teaching University of Zugdidi	Public	Zugdidi	0.5	3.1%
Community College Opizari	Public	Akhaltsikhe	0.4	2.6%
College Information Technologies Academy	Public	Tbilisi	0.4	2.6%
Batumi State Maritime Academy	Public	Batumi	0.4	2.5%

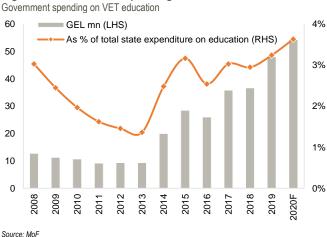
Source: MESCS

Lack of accessibility

Limited funding of VET institutions

With the introduction of a new VET funding model in 2013 (see Annex 3), state funding of vocational education expanded 5.0x times to GEL 48.0mn over 2013-19. Despite the growth, vocation programs' share of total public expenditure on education remains low, standing at 3.2% in 2019. The 2020 state budget targets VET spending at GEL 54.3mn or 3.6% of total expenditures.

Figure 25: Government spending on VET education



Note: Total state expenditure does not include funding of pre-school education (financed by local government)



Insufficient geographic coverage

Institutions providing VET education in Georgia are concentrated in the capital. Access to VET programs is an issue in the regions, except for Adjara. Moving to another city to study involves high indirect costs, creating an obstacle for both youth and the adult population from regions to attend VET institutions. Recognizing the problem of accessibility, the government of Georgia plans to launch new VET institutions in regions such as Tskaltubo, Kaspi, and Khashuri.

Table 7: Institutions providing VET programs have limited geographic coverage
Number of institutions with vocational education programs and share of students, by location, 2019/20

Region	# of private institutions	# of public institutions	Admissions, '000	% of institutions	% of admissions
Tbilisi	35	13	5.4	45.7%	46.6%
Adjara	9	6	2.8	14.3%	24.5%
Imereti	6	6	0.8	11.4%	7.0%
Samegrelo-Zemo Svaneti	2	4	0.8	5.7%	6.8%
Kakheti	3	3	0.5	5.7%	4.4%
Shida Kartli	2	4	0.3	5.7%	2.7%
Samtskhe-Javakheti	2	2	0.4	3.8%	3.1%
Kvemo Kartli	3	1	0.2	3.8%	1.6%
Other	-	4	0.4	3.8%	3.3%
Total	62	43	11.5	100%	100%

Source: GeoStat

Tertiary Education



Room for growth

The higher education sector has seen a strong and improving financial performance. Our outlook on the sector is optimistic, sustained by (i) increasing household incomes (ii) rising intakes from older age groups and foreign students; and (iii) low penetration compared to peers. We believe large players in the private market will keep gaining share versus smaller players and continue growing above the market due to their superior operational practices and economies of scale. We expect consolidation in the sector as it is still highly fragmented. On the one hand, the sector can benefit from a rising number of international students and older age groups; on the other, the stable level of high school graduates and limited affordability may drag growth down. Tuition fees are a heavier burden on students in Georgia compared to peer countries, as they are mainly financed by households, while public financing remains low and students have low or no self-earned incomes.

- The gross enrollment ratio in higher education exceeded 60% in 2018
- We estimate that the number of students will rise to 160.3k by 2024 from the current 152.8k
- Private penetration is high at 35.4% of total enrollment, and is anticipated to reach 37.4% by 2024
- Public financing of tertiary education is low by international standards
- The net profit margin of the private sector hit

Market size and public spending

Revenue of the higher education sector rose from GEL 251mn to GEL 691mn over 2009-19. Tuition fees are the main source of revenue for both public and private institutions. Higher education in Georgia is mainly financed by out-of-pocket payments (77% in 2019, according to our estimates), while government financing remains very low. International comparison highlights that state funding of higher education in Georgia is low, with per student financing (as a % of GDP per capita) lagging far behind selected developed and emerging countries in the region (see Figure 27).

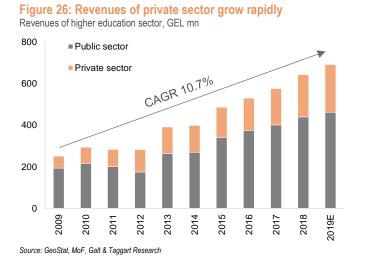
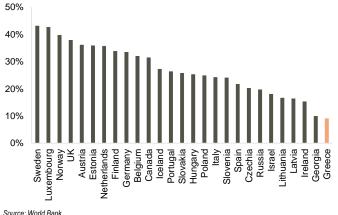


Figure 27: Public financing of tertiary education remains low Public expenditure per student, tertiary, % of GDP per capita, Latest data available



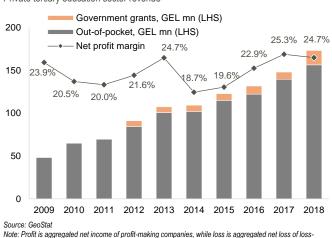
Growth of private institutions has outpaced that of the public sector, with their share of total revenue up by 10.3ppts to 33.2% over 2009-19. Revenue growth is partly driven by the increased number of students studying in private tertiary institutions (up c. 2x times over 2009-19). Increased enrollments in master's level courses and rising demand from international students are further drivers of sector growth, pushing revenue per student up.

Tertiary education remains profitable with net income up from GEL 11.5mn in 2009 to GEL 42.8mn in 2018. With increased revenues and efficiency (achieved by economies of scale), the net profit margin hit 25% in 2017-18.



Unlike developed countries, universities in Georgia do not have any research and development related revenues, which might be seen as an opportunity for the sector's growth outlook. Research and Development spending is one of the lowest in Georgia (0.3% of GDP vs 2.1% in the EU as of 2017) and efforts should be directed to develop this area, which will be beneficial for institutions, the public sector, companies and the economy overall.

Figure 28: Private tertiary education has strong financial performance Private tertiary education sector revenue



Note: Profit is aggregated net income of profit-making companies, while loss is aggregated net loss of lossmaking companies. Net profit margin of the sector is: (profit - loss) / revenue

Private tertiary education sector P&L, GEL mn

Figure 29: ...with stably ascending profits



Enrollment trends

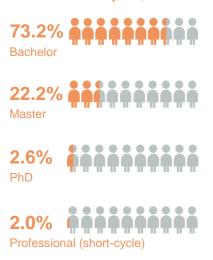
Shifting from an 11 to 12-grade general education system in 2008 and the introduction of authorization/accreditation requirements for private institutions in 2010 (see details in Annex 3) caused the sector to experience volatility during 2007-12, and more than 100 private institutions closed down. With the more stable regulatory environment, higher education enrollments have been growing steadily, recording a 4.5% CAGR to 152.8k students over 2012-19.

Attending higher education is a deep-rooted social norm in Georgia, even though it does not increase one's chances of employment significantly (see p.45). Pent-up demand and increased affordability lifted the gross enrollment ratio in Georgian higher educational institutions from 34.2% to 60.3% during 2008-18. Notably, Georgian students are concentrated in academic programs, while professional (short-cycle) programs attract only 2.0% of enrollment. In contrast, 36.4% of higher education enrollment in the USA, 35.5% in Turkey and 23.6% in Russia are for short-cycle professional programs (2017).

We believe the number of students will continue to grow at a slower pace to 160.3k in 2024 from the current 152.8k, supported by improved affordability, increased demand from older age groups and a growing number of foreign students. Notably, the flat number and poor academic performance of general education graduates limits higher education intakes.

The private sector is gaining share, with enrollment reaching 54.0k students (35.4% of total) in 2019/20, up from 29.2k (27.6%) in 2009/10. Private penetration in Georgian higher education institutions outpaces peer counties in the region, as well as many

Student distribution by level, 2019/20





Western European countries. Considering the already high level, we expect private penetration growth to slow down, and to rise by only 2ppts to 37.4% by 2024.

Figure 30: Total enrollment growth has been decelerating

Higher education enrollment, '000

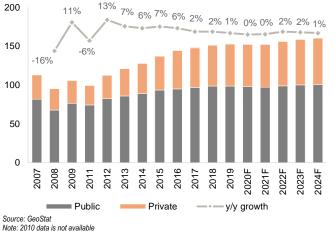


Figure 32: Students in Georgia are concentrated in academic programmes

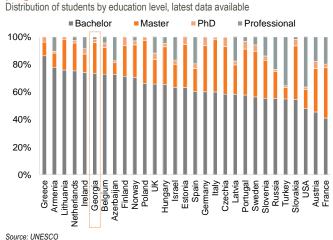
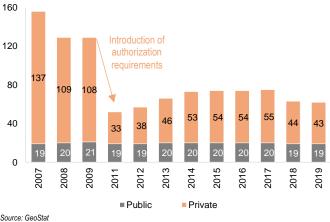


Figure 31: Private sector is affected by regulation and competition

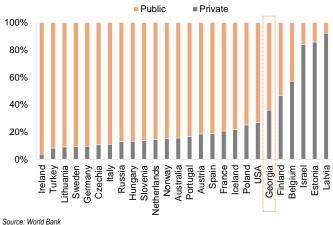
Number of higher education institutions in Georgia



Source: GeoStat Note: 2010 data is not available

Figure 33: Private penetration is high in Georgia compared to most peers

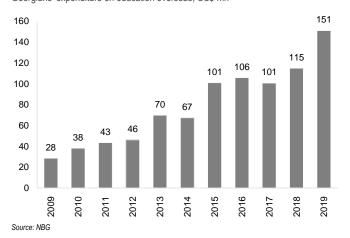
Distribution of students by type of higher educational institution, latest data available



More and more Georgian students attend higher education overseas to improve their career prospects in Georgia or foreign countries. According to Eurostat, 11.3k Georgian students studied in foreign countries in 2017, up from 7.1k in 2013. More than half of outbound students were enrolled in Central and Eastern Europe in 2017 and 35% in North America and Western Europe, with the rest (13%) attending higher education in Asian countries.



Figure 34: Spending on foreign education rises rapidly Georgians' expenditure on education overseas, US\$ mn

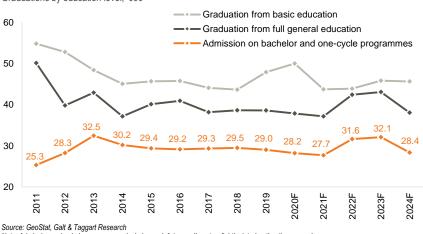


Problem #1: Flat number of general education graduates

The majority of higher education enrollment is at the bachelor level (73.2% in 2019), and school graduates are the main source of demand at this level. Therefore, sector growth is limited by a stagnating number of general education graduates, which is affected by demographic trends and barriers in the school-to-university transition process.

Over the last five years, on average 15-20% of pupils with a basic education diploma (9th grade) discontinued their education after a compulsory level or failed in schoolleaving examinations at 11-12th grades. Unified national exams are another barrier, with pupils posting a 65-75% success rate in recent years. Considering the size of the current school population and school graduation/enrollment rates, we expect bachelor intakes to decline to 28k students in 2020-21, but to rise to 31-32k students in 2022-23.

Figure 35: General education graduation limits higher education intakes Graduations by education level, '000



Note: Admission on bachelor programmes includes early/late enrollments, slightly deteriorating the comparison

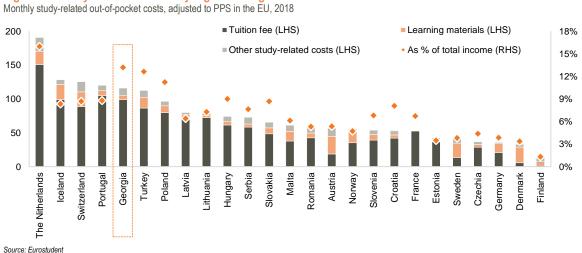
GALT & TAGGART

Problem #2: Limited affordability

Tertiary education is a high financial burden for Georgian households. According to Eurostudent, the out-of-pocket study-related cost, standing at 116.2 purchasing power standard (PPS)⁵ per month in Georgia, is quite high compared to many developed and comparable countries in Europe, mainly due to disparities in government funding. The out-of-pocket monthly study-related cost stands at 112.7 PPS in Turkey, 74.3 PPS in Hungary and 57.3 PPS in Romania. The gap is even wider when comparing the cost/income ratio, highlighting the low affordability of tertiary education for Georgian students.

Tuition fees represent a major study-related cost for Georgian students, with an 85% share of total spending on education. Public institutions have a price ceiling for the annual tuition fee of GEL 2,250, but private institutions have freedom to determine tuition fees at the time of admission and to make further adjustments.

Learning materials comprise only 5% of total expenditure in Georgia on tertiary education, while the ratio is significantly higher at 18% in European countries. The low cost of study materials in Georgia is explained by its unregulated print and digital textbook market and widespread availability of pirated textbooks of foreign or native authors.



Source: Eurosudent Note: Total income includes provision from family/partner, other public and private sources, in cash and in kind

Figure 36: Study costs are relatively high in Georgia

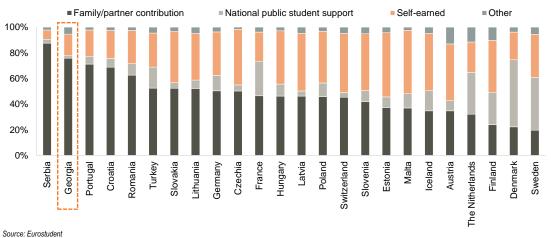
Students are mostly supported by families in Georgia, while students in other European countries enjoy a higher share of self-earned income alongside public national student support, softening the financial burden on households.

Underdeveloped student loan practices in Georgia are another hurdle for students, reducing their ability to pay. Notably, some private institutions are offering their own private financing opportunities to increase accessibility and therefore enrollments.

⁵ The purchasing power standard (PPS) is an artificial currency unit; one PPS can buy the same amount of goods and services in each country.





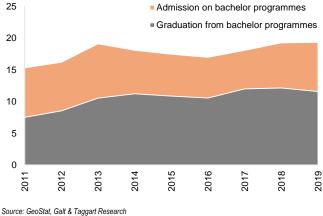


Note: Grants directly paid to educational institutions are not included in public support

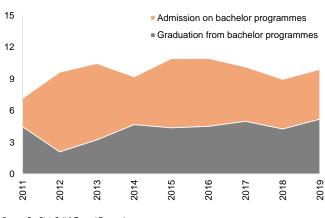
Problem #3: Drop-out and delayed graduation

Only c. 65% of students in public institutions and half of the students in private institutions manage to graduate from four-year (bachelor) programs on time. The high cost of tertiary education and poor academic results are the main reasons for drop-outs and delayed graduations. Delayed graduation numbers are also inflated by male students who intentionally prolong student status to avoid obligatory military service. International exchange programs, local mobility to other universities/programs, and some students starting full-time jobs are other factors causing late graduations.

Figure 38: Almost half of bachelor students* in private institutions and c. 35% in public institutions don't graduate on time Public institutions, '000 students Private institutions, '000 students



*Note: Students on healthcare programs are excluded



Source: GeoStat, Galt & Taggart Research *Note: Students on healthcare programs are excluded

Opportunity #1: Older age groups

The adult segment in tertiary education is growing gradually: currently, 14.3% of total higher education enrollment comes from students who are 25 years old and more, up from 6.6% in 2009. Increased demand for master's level courses and multiple graduations are the main reasons for the growth of the older age student pool. Limited

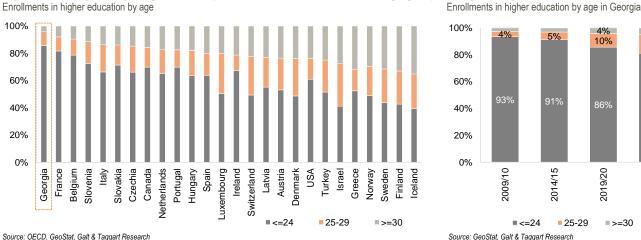


employment prospects are another reason pushing students to attend master's programs.

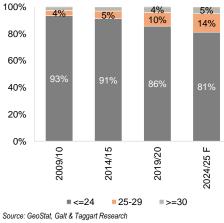
Over the last three years, on average 5.8% of admissions to bachelor level programs have been students who already have a higher education degree. One of the main intentions for multiple graduations is to avoid obligatory military service, while we do not rule out the possibility that some aim to change career path completely.

The trend of increasing demand for tertiary education from older-age groups will continue in our view, converging to the EU level. We believe the ageing population and existing skills mismatch in the labour market (see p.43) will enhance adult education in the medium to long term. Demand from working and older age groups will especially grow for short-cycle professional programs and other flexible educational services.

Figure 39: Georgia has younger student pool, but enrollments from older age groups rise gradually



Note: Reference year is 2019 for Georgia and 2017 for other countries



Opportunity #2: Inbound mobility

Demand has surged from international students for Georgian higher education, with number rising 16x times to 13.3k over 2009-19. As a result, foreign students comprise 8.7% of total tertiary enrollment in Georgia as of 2019/20, outpacing peer countries in the region. Considering the ongoing reforms and expected improvement of education quality, private sector activity, joint programs with foreign universities and the development of Kutaisi Technological University, Georgia has the potential to become an educational hub in the region.

Most international students come from India (51.3% in 2019/20) and Azerbaijan (10.1%). Safety, affordability (low annual fee and living costs), international recognition of the Georgian Diploma, the simple visa requirements and quality of education are the main drivers behind the growing demand, based on foreign students' survey⁶. The teaching languages for international students at Georgia's educational institutions are mainly English and Russian.

⁶ State Commission on Migration Issues in Georgia



Figure 40: Number of international students grows rapidly Foreign students studying in Georgian tertiary institutions, '000

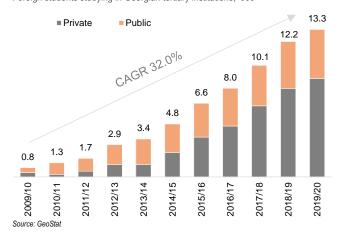


Figure 41: Most foreign students originate from India Foreign students studying in Georgia by origin, 2019/20

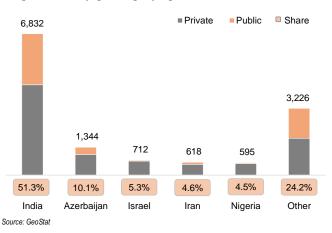
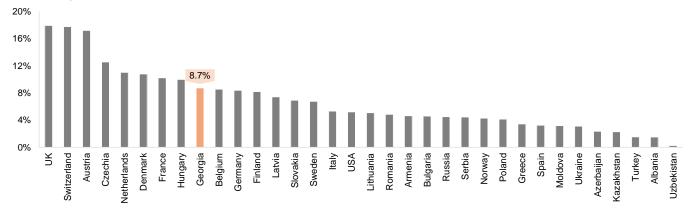


Figure 42: Georgia has potential to be positioned as an education hub in the region Inbound mobility rate, latest data available



Source: World Bank, GeoStat Galt & Taggart Research

Note: Inbound mobility rate - number of students from abroad studying in a given country, expressed as a percentage of total tertiary enrollment in that country.

Foreign students prefer private institutions, with 8.9K students (66.8% share of the total) enrolled in the private sector in 2019/20, while 4.4k international enrollments (33.2%) were in the public sector in the same period.

Health and welfare programs remain the most popular among international students, attracting c. 80% of the total. Tbilisi State Medical University and two private institutions (both offering medical programs) – New Vision University and University of Georgia – are the most attractive institutions for foreign students, together accounting for 42.9% of the total number.



Table 8: Medical programmes are most popular among foreign students

Top universities by number of foreign students, 2019/20

Institution	One-cycle medical programmes	Other programmes	Total number of foreign students	Foreign students' share in total enrollment	University's share in total inbound mobility
Tbilisi State Medical University	2,243	40	2,283	26.5%	17.0%
New Vision University	1,813	110	1,923	83.1%	14.3%
University of Georgia	1,162	377	1,539	22.5%	11.5%
European University	923	4	927	64.3%	6.9%
Caucasus International University	784	34	818	23.0%	6.1%
Tbilisi State University	461	178	639	2.9%	4.8%
Batumi Shota Rustaveli State University	602	15	617	9.7%	4.6%
Tbilisi Medical Academy	488	-	488	64.7%	3.6%
Teaching University Geomedi	483	1	484	56.8%	3.6%
Tbilisi Humanitarian Teaching University	334	143	477	67.4%	3.6%
Other	1,610	1,599	3,209	3.2%	23.9%
Total	10,903	2,501	13,404	8.7%	100.0%

Source: MESCS, Galt & Taggart Research

Note: Number of enrollments slightly differs in GeoStat and MESCS data due to date difference.

Opportunity #3: Consolidation

The average size of private tertiary institutions increased from 271 to 1,256 students over 2009-19, but is still very small compared to public institutions, with 5.2k students on average in 2019-20 (the top public universities have up to 25k enrollments). We expect concentration to continue, coming from both M&A activity and the organic growth of key players.

Table 9: Private higher education sector is highly fragmented Distribution of private institutions by number of students 2019/20

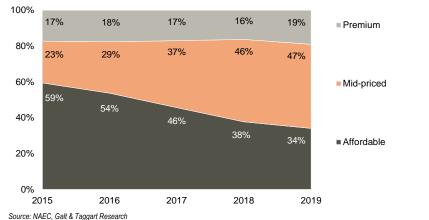
Enrollment range	# of Institutions	Enrollments '000	% Institutions	% Enrollments
0-100	8	0.4	19%	1%
101-500	9	2.5	21%	5%
501-1000	10	7.8	23%	15%
1001-2000	8	11.3	19%	21%
2001-4000	5	13.7	12%	26%
>4000	3	17.4	7%	33%
Total	43	53.0	100%	100%

Source: MESCS, Galt & Taggart Research Note: Number of private enrollments slightly differs in GeoStat and MESCS data due to date difference

Demand on premium universities are limited, with the majority of students enrolled in mid-priced and affordable programmes. Notably, demand on medium segment rises in expense of low-price programmes, while demand on premium segment stays relatively stable.



Figure 43: Demand on mid-price segment rises in private sector Admissions on bachelor level of private institutions



Note: Affordable are institutions with average weighted tuition fee (for local students) up to GEL 2,500 annually, mid-priced- GEL2,500-4,000, Premium – more than GEL 4,000 per year

Besides increased M&A activity within the sector, consolidation of different educational levels is expected. Successful private universities are launching school, corporate training and vocational programs that give providers a larger customer base and economies of scale.

Table 10: Consolidation opportunity exists in every price segment

Top private institutions by enrollment, 2019/20

Institution	Enrollment '000	Market share*	Status	Segment
The University of Georgia	6.8	12.9%	For-profit	Affordable
Georgian National University	6.1	11.6%	For-profit	Affordable
Caucasus University	4.4	8.3%	For-profit	Premium
Caucasus International University	3.6	6.7%	For-profit	Affordable
Free University	2.8	5.3%	For-profit	Premium
Business and Technology University	2.7	5.1%	For-profit	Affordable
New Vision University	2.3	4.4%	Not-for-profit	Affordable
Agricultural University	2.2	4.2%	Not-for-profit	Mid-priced
International Black Sea University	1.8	3.3%	For-profit	Premium
Georgian-American University	1.6	2.9%	For-profit	Premium
Grigol Robakidze University	1.5	2.8%	For-profit	Mid-priced
European University	1.4	2.7%	For-profit	Affordable
Georgian Institute of Public Affairs (GIPA)	1.3	2.5%	Not-for-profit	Premium
Tbilisi Open University	1.3	2.5%	For-profit	Affordable
Saint Andrew The First Called Georgian University	1.3	2.4%	Not-for-profit	Affordable

Source: MESCS, NAEC, Galt & Taggart Research

Note: Market share is calculated by number of students in private institutions, Affordable are institutions with average weighted tuition fee for bachelor programs (for local students) up to GEL 2,500 annually, mid-priced- GEL2,500-4,000, Premium – more than GEL 4,000 per year.

Labour market and education



Closed doors, wrong keys

Higher education in Georgia has low economic return. It barely improves employability and adds a low salary premium to degree holders compared to peer countries. The reasons for the poor payback are complex: 1) the higher education system continues to provide an excessive number of graduates to an economy with a high job concentration in low-skill, low-wage sectors; 2) school and higher education graduates make uninformed career decisions; and 3) general and higher educational institutions in Georgia provide inadequate technical, cognitive and social skills. As a result, the unemployment rate is high for Georgian youth, there is a significant mismatch between professions and occupations and self-employment is widespread.

employment, education, or training
C.60% of entry-level jobs do not require

Every 4th of all 15 to 24-year-olds are not in

higher education degree

 \succ

- Most employees are concentrated in lowproductivity, low-wage sectors
- Only 13% of employees are working within their field of specialty

Georgia's education system does not meet labour market demand. The government recognizes this problem and ongoing education reform is expected to fill this gap; however, forecasts of future skill requirements, which should be the foundation of education policy, are not yet determined.

In this section we attempt to answer the following questions:

- 1. How does Georgia's labour market work?
- 2. Why does the skillset of graduates not meet labour market demand?
- 3. Does investment in education pay back?

Question #1: How does Georgia's labour market work?

Georgia has achieved its economic success without actual growth in employment, as capital and productivity gains have been the major sources of growth. As a result, over 2011-2019, of an average 4.7% real growth, labour contribution was just 0.7ppts and the remaining 4.0ppts came from capital accumulation and productivity improvement.

Figure 44: Labour's contribution to economic growth was low

Overall contributions of capital, labour, and Total Factor Productivity (TFP) to growth, 2011-2019E

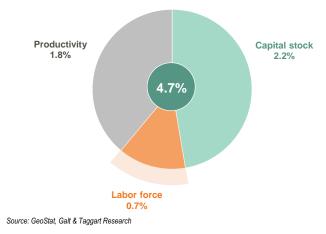
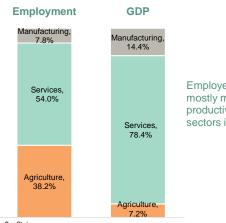


Figure 45: Agriculture still remains large employer, despite its share decreasing in recent years Employment and GDP by sector, 2019



Employed in agriculture mostly moved to more productive services sectors in recent years

Source: GeoStat



Diagram 2: Georgian labour force structure, 2019

Number of persons, '000



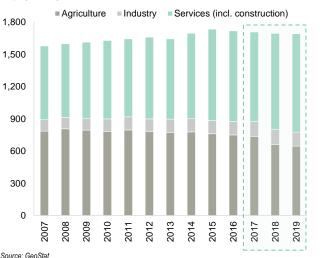
Other

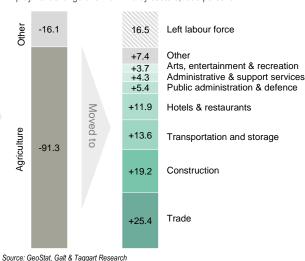
Agriculture

Source: GeoStat, World Bank, Galt & Taggart Research *Note: Working age population includes 15+ year-old people

Services have become the largest employer since 2014, as workers have moved away from unproductive agricultural activities. More than half of the workforce is engaged in services and produces 78.4% of GDP, with its share in total employment increasing to 54.0% in 2019 from 43.5% in 2007. Manufacturing accounts for 14.4% of GDP, but employs only 7.8% of the workforce. Agriculture (mainly self-employed) accounts for 38.2% of total employment in 2019, down from 49.8% in 2007. Despite this decline, agriculture remains the major employer, in contrast to developed countries, where industry and services account for the bulk of employment.

Figure 46: Workers moved from agriculture to service sectors, mainly to construction and trade Employment by sectors, '000 Employment change over 2017-19 by sectors, '000 persons





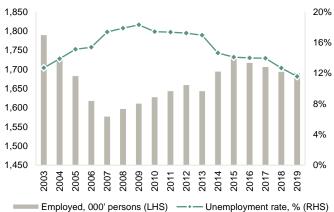
Note: Services include construction

Note: Data shows net changes in employment and does not capture movement between sectors precisely



Georgia's unemployment rate has reduced in recent years but remains at double digits – 11.6% – in 2019. Importantly, the reduction in unemployment reflects a declining labour force (due to demographics as well as migration) and increased hiring by the private sector, mainly by trade, industry, construction and tourism. Notably, public sector employment has been stable in recent years, reflecting optimization. International migration has helped ease domestic labour market pressures, with over 1mn Georgian migrants employed globally.

Figure 47: Unemployment rate remains at double digits Employment and unemployment



Source: GeoStat

Hired workers surpassed self-employed for the first time in 2018, accounting for about half of total employees. The number of hired individuals (as opposed to self-employed) in the private sector almost doubled between 2007 and 2019 to 550k, with its share in total hired employment increasing to 65% in 2019.

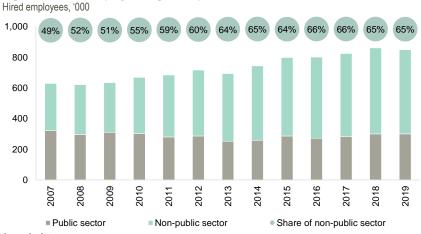


Figure 49: Hired employment grew in private sector

Importantly, growth in the trade and tourism sectors is matched with employment growth, unlike in other sectors. We have analysed business sector statistics (which excludes the financial sector) for 2008-18 to capture the link between the sector growth (turnover) and employment. Based on our analysis, 16% annual average growth of the trade sector resulted in 15% annual average growth in employment in this sector over 2008-18, while the tourism sector's (hotels and restaurants) respective figures are 24% and 16%. In contrast, 16% annual average growth in the healthcare sector increased employment by only 4% annually over the same period. Other sectors supporting employment growth are information & communication, administrative and professional



2015

2016

201

Hired

2018

2019

700

600

500

Source: GeoStat

2010

201

2012

2013

Self-employed

2014

Figure 48: Hired workers surpassed self-employed in 2018 Hired and self-employment, '000 persons

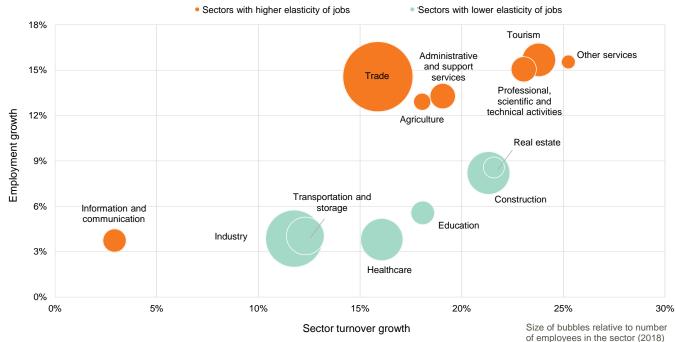


Source: GeoStat



services⁷, while real estate, industry and education businesses create modest employment growth.

Figure 50: Tourism, trade, IT, administrative and professional services sectors growth is matched with employment growth Average annual growth of private sector by industry, 2008-18



Source: GeoStat, Galt & Taggart Research Note: Arts, entertainment and recreation is excluded as an outlier

With a limited production base, the Georgian economy demands a low-skill labour

force. To assess job qualities in the formal economy, we excluded those employed in agriculture (already low-skilled and mostly self-employed) from our analysis. Low skilled workers (craft workers, technicians, service and sales workers, operators, clerks and other elementary occupations not requiring advanced knowledge) account for 71% of total employment as of 2019. Notably, demand has risen for the low skilled workforce over the last two years. Namely, demand for craft workers, plant and machine operators/assemblers grew 20.4% and demand for service and sales workers grew 10.4% over 2017-19.

Figure 51: Low-skill jobs comprise 71% of employment Employment in industry and service sectors by positions, 2019

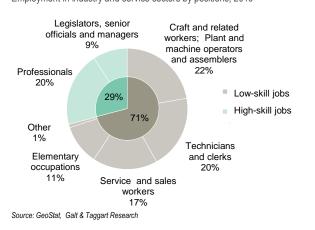


Figure 52: Demand on craft and plant workers rose the most Change in employment by positions over 2017-19

	20.4%	Craft workers; Plant and machine operators/assemblers
	10.4%	Service and sales workers
	6.2%	Technicians and clerks
	3.5%	Legislators, senior officials and managers
	0.6%	Professionals
▼	-2.5%	Elementary occupations
▼	-12.2%	Agricultural and fishery workers

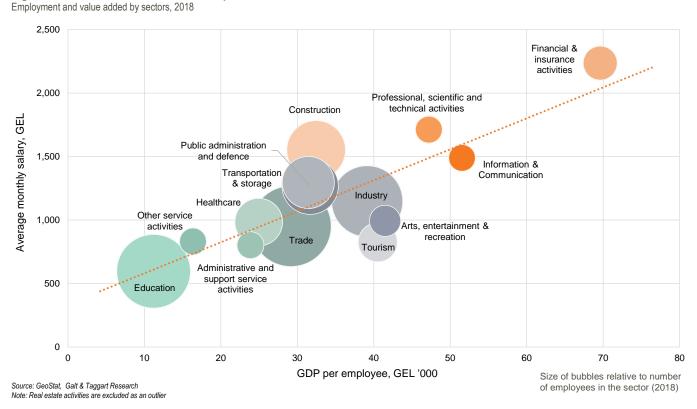
Source: GeoStat, Galt & Taggart Research

⁷ Includes legal, accounting and consultancy activities, activities, activities, architectural and engineering activities, technical testing and analysis, scientific research and development, advertising, market research and other professional, scientific and technical activities.



Productive sectors pay the highest salaries and employ fewer people than unproductive sectors. We also measured which sectors have the largest value-added per employee. Naturally, sectors that invest heavily in modern technologies or have good administrative procedures are the most productive and pay the highest salaries. These sectors are professional, scientific and technical, IT and financial service sectors posting the highest value-added per employee, having the highest quality labour force and paying the highest wages.

Figure 53: Productive sectors have well-paid but small workforce



Question #2: Why does the skillset of graduates does not meet labour market demand?

Reason #1 Irrational distribution of graduates

There is no reliable data to analyse labour market demand for higher education and VET graduates. However, in the belief that any data is better than no data, we attempted to combine GeoStat's employment statistics, information from the main online job platforms (Hr.ge and Jobs.ge) and other sources (World Bank, MESCS, Ministry of Economy, etc.) to assess demand and supply for recent graduates and measure the economic return of education (the employability and salaries of recent graduates). For this exercise, we estimated new entry-level jobs in 2019 and evaluated how recent graduates from higher education programs (2019) would fill the demand.

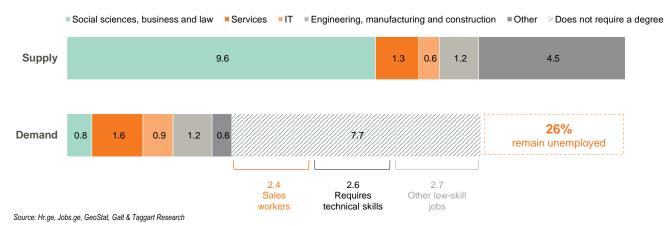
The Georgian economy doesn't produce enough advance-skill jobs for the current number of graduates. More than 60% of Georgian youth attends higher education, while less than 40% of entry-level positions require a degree, according to our estimates. This forces degree holders to accept less-skilled, low-wage jobs, causing inefficient use of resources in the economy.



Low-skill service and sales workers are the most demanded entry-level jobs. More than half of the entry-level vacancies created in 2019 represented elementary occupations, with no degree requirement, according to our estimates. A large number of vacancies in service and sales activities are caused not only by the dominance of trade and tourism sectors in the Georgian labour market, but also by a high turnover rate and seasonality in these occupations.

Figure 54: Supply and demand for labour force is imbalanced in Georgia

Supply of higher education graduates and demand on entry level jobs by required educational background in 2019, '000 persons



Social science, business and law graduates have to accept low-skill jobs. Aboveaverage salaries in the financial sector create incentives for Georgian school graduates to attend social science, business and law programs in universities, comprising 9.6k out of 17.3k bachelor graduates in 2019. However, as employment in respective fields is limited, a large share of recent graduates has to accept low-skill, low-wage occupations outside their specialty, mainly as service and sales workers in trade and hospitality sectors.

Demand for technical skills is unmet. Recruitment of technicians and craft workers mainly takes place outside online platforms; however, according to our calculations, these are the second most demanded jobs (c. 20% share in total) for entry-level applicants in 2019. Quantity and readiness of VET graduates in respective fields are limited, creating a gap in the labour market.

International comparison proves the irrational distribution of Georgian graduates.

The share of students enrolled in business, administration and law programs stands at 33.8% in Georgia, which is very high compared to graduates in world financial centers like the UK (18.8%) and USA (17.1%), according to World Bank. Meanwhile, enrollments in the fields of engineering, manufacturing and construction, which make up 22% of GDP, are among the lowest in Georgia (8.3% of total enrollment in 2019).



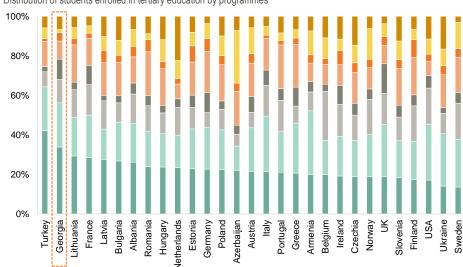


Figure 55: Georgia's education system continues to oversupply business, administration and law graduates Distribution of students enrolled in tertiary education by programmes

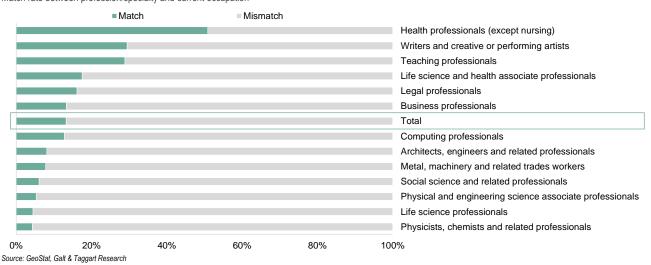
Other

- Education programmes
- Information and Communication Technologies programmes
- Engineering, Manufacturing and Construction programmes
- Natural Sciences, Mathematics and Statistics programmes
- Health and Welfare programmes
- Social Sciences, Journalism and Information, Art and humanities programmes
- Business, Administration and Law programmes

Source: World Bank Note: Reference year is 2017 for Georgia, Latvia, Armenia, Austria, Norway, Ukraine, Albania, and 2016 for others

As a result, only 13% of employees are working within their field of specialty, according to our analysis. Notably, healthcare, art and teaching professions show a relatively low level of mismatch, while the gap is high in every other field, including business, legal, engineering and science professions.

Figure 56: The mismatch rate between specialty and occupation is significant in every profession Match rate between profession/specialty and current occupation



Reason #2 Quality issues in the education system

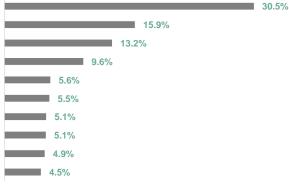
In the eyes of employers, the Georgian education system provides graduates with inadequate technical, cognitive and social skills. According to a survey of business demand for skills (2017) 8 in Georgia, inadequate technical skills are the biggest problem for the majority of enterprises (30.5% of surveyed) in the hiring process. Companies struggle to find relevant staff to handle specific equipment or processes, due to an

⁸ Ministry of Economy and Sustainable Development of Georgia



insufficient supply of VET graduates and absence of communication between businesses and educational institutions. Besides this, employers in Georgia seek employees with social and behavioral skills, as well as cognitive development skills, which also seems problematic for the Georgian labour force, indicating general quality issues in the education system.

Figure 57: In the eyes of employers Georgian labour force lacks both: "hard" and "soft" skills Percentage of employers reporting problems for filling vacancies, 2017



D	Technical skills
	Team work skills
	Acquire new information and skills
	Ability to calculate, read, and use data and datasheets
	Acquiring, interpreting and communicating information
	Decision-making skills
	Leadership skills
	ICT skills
	Understanding written documents and writing clearly
	Problem-solving skills

Source: MoESD

Georgia ranks 125th out of 141 countries in terms of workforce skills. International studies highlight the quality problems of the education system and poor skillset of the labour force in Georgia. According to the Global Competitiveness Index Report by the World Economic Forum, Georgia ranks 125th out of 141 countries in terms of the skills of the current workforce, 123rd in terms of the extent of staff training and 135th in its quality of vocational training as of 2019, and is outperformed by post-Soviet countries and other peers in the region.

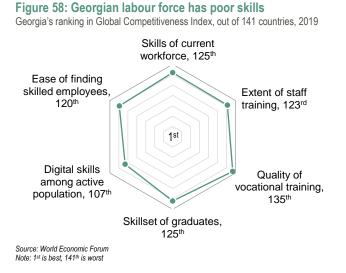
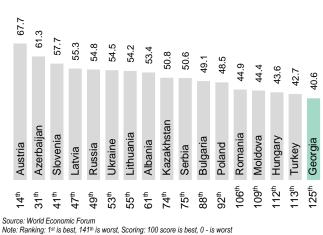


Figure 59: ...outperformed by peer countries in the region Skills of current workforce ranking out of 141 countries, score (0-100), 2019



Question #3: Does investment in education pay back?

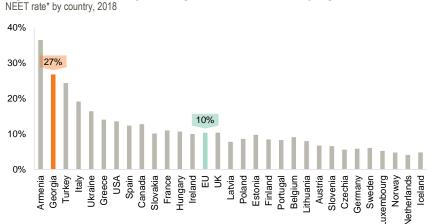
Georgian youth face difficulties finding a job. Lack of information on study and career choices hinders the healthy transition from educational institutions into the labour market. Those who are unable to find work that corresponds to their skills and expectations find themselves in low-skill temporary jobs outside their specialty or stay inactive for longer periods. As a result, the highest unemployment rate is posted among



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20-24 (30.5% in 2019) and 25-29 (18.9%) year-olds. Furthermore, Georgia has a remarkably high NEET⁹ rate: 26.9% of Georgian youth are not in education, employment, or training as of 2018, far above the EU's 10.4%.

Figure 60: Youth inactivity in Georgia remains considerably high



NEET rate in Georgia 40% 35% 31.0% 30% 26.9% 25% 23.2% 20% 15% 2012 2013 2014 2015 2016 2017 2018 Total Female Male

Source: World Bank, Galt & Taggart Research *Note: Share of youth not in education, employment or training (NEET) is the proportion of young people who are not in education, employment, or training to the population of the corresponding age group: youth (ages 15 to 24); persons ages 15 to 29; or both age groups..2017 for Armenia and Ukraine

Higher education adds low value to employees in the Georgian labour market. In

healthy labour markets, higher education increases employability, but it is the opposite in Georgia. This inverse relationship between educational attainment and employment rate among the selected countries is observed only in Georgia. Armenia. Russia, and Turkey. On a more positive note, the gap between the unemployment rates of higher education and school graduates decreased in Georgia from 6.9ppts to almost zero over 2011-18, indicating increased value of the higher education diploma.



Gap between employment rates of population with tertiary and non-tertiary education, 2018

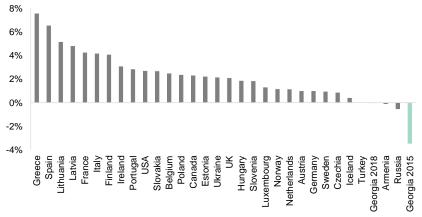
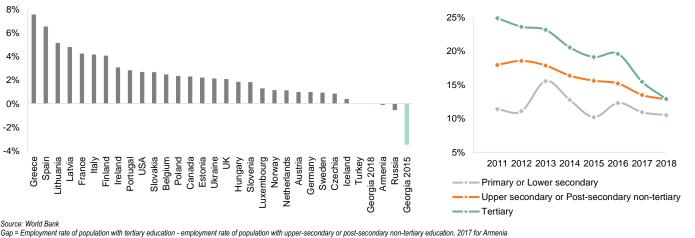


Figure 62: The gap between unemployment rates of low and high-skill population declined Unemployment rate by level of education achieved in Georgia



Source: World Bank

Degree-holding employees earn a 26% salary premium over those with only general education. As most of the workers are employed in low-skill occupations outside their specialty, higher education degrees add low value to their earnings. The 26% premium earned by the degree holder workforce in Georgia is significantly below the OECD average (56%).

⁹ not in education, employment or training



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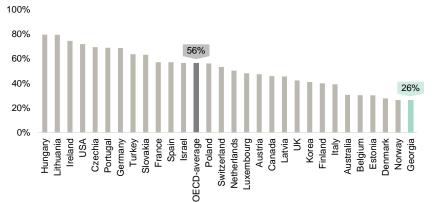


Figure 63: Georgian employees earn smaller premium on higher education compared to OECD countries Average salary premium of higher education graduate vs upper secondary graduate, 25-64 age group, latest data available

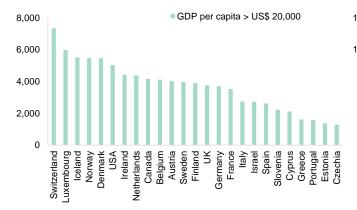
Source: OECD, GeoStat, Galt & Taggart Research

Georgia needs to align its education policy with countries' economic strategy in order to supply the economy with necessary skills in the medium to long term. Widely discussed economic changes in the post pandemic period also need to be taken into consideration. We believe that Georgia needs to enhance its production potential and skillset improvement is key to this (see our report Georgian economy – need for a new economic model in the context of global change). Based on our findings, we see job-creation potential in manufacturing, transport and logistics sectors, among others, for which enhancement of vocational education is essential. Other upsides are in BPO services, namely in telemarketing, customer relationship management (CRM) and IT services, dictating an increased need for foreign language and ICT skills.

With limited know-how, attracting FDI remains instrumental to supporting growth and employment in Georgia. With the country's favorable institutional set-up (ease of doing business, low taxes, uninterrupted energy supply, well-developed banking sector and telecommunications, etc.) and low labour costs, the poor skillset of the labour force is one of the main obstacles for attracting FDI, which should be addressed by the education policy.

Figure 64: Georgia has competitive advantage in salary rates

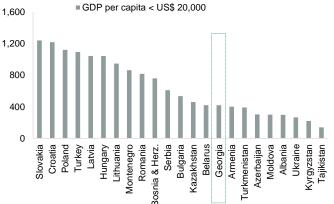
Gross average monthly wages by country, US\$, latest data available*



Source: Unece

Georgia's rank in doing business 2019 out of 190 countries





Annexes



Annex 1: Georgian education system structure

The Georgian education system provides three main types of education: general education, vocational education and training (VET) and higher (tertiary) education.

General education includes 12 years of study and is carried out at three levels:

- Primary (elementary) lasts for six years, covering ages 6–12
- Lower secondary (basic) lasts for three years, covering ages 12–15
- Upper secondary lasts for three years, covering ages 15–18 or:
- Vocational education and training programs, which have a 2-year duration

Primary and lower secondary levels of general education are compulsory for all children aged 6-15 in Georgia. After completing lower secondary education, pupils receive a Basic Education Certificate and can continue to study at upper secondary level or on vocational programs. Only pupils with a full general education certificate (Atestate) have access to higher education.

There are three levels of vocational education and training in Georgia. After completing each level of VET, the vocational diploma of the corresponding level is received. The general education certificate (Atestate) is a prerequisite for admission to the fourth and fifth levels of VET programs. The following educational institutions are allowed to provide vocational education and training programs:

- Vocational Colleges, which provide only the first three levels of VET programs
- Community Colleges, which offer all levels of VET programs, along with secondary general preparatory, Georgian language and liberal arts education programs
- General education institutions, which are authorized to provide the first three levels of VET programs
- Higher education institutions, which are authorized to carry out all five levels of VET programs

Students may enroll in a state-accredited higher education institution, based on their scores received at the unified national examinations, which are organized by the National Assessment and Examinations Center. The higher education system in Georgia has three levels of study:

- Bachelor's programs last for 4 years or:
- One-cycle programs last for 3–6 years
- Master's programs, with a 2-year-duration
- Doctoral programs (PhD) last for 3 years

Three types of institutions are allowed to provide higher education in Georgia: universities, teaching universities and colleges. Universities implement all three levels of higher academic education and research (bachelor's, master's and doctoral programs), teaching universities provide the first two levels (except for PhD programs), and colleges carry out only the first level.

Unified national exams and a bachelor's degree (or a degree equivalent to it) are the prerequisites for admission to master's education. Higher education institutions can independently determine any other conditions of admission. Only people with a master's or its equivalent degree have a right to study on PhD programs.



Annex 2: Key indicators

Indicator name	Value
Economy	2019E
GDP, USD bn	17.7
Real GDP y/y growth	5.1%
GDP per capita, US\$	4,764
GDP per capita, PPP	13,559
Demography	2019
Population, '000	3,723.5
Population aged <14 years, '000	754.5
Population aged 15-24 years, '000	426.3
Fertility rate, births per woman	2.0
Urbanization rate	58.7%
Education participation	2018
Net enrollment rate in primary education	99.2%
Net enrollment rate in secondary education	95.9%
Gross enrollment rate in tertiary education	60.3%
Pupils in VET as % of upper secondary enrollments	2.9%
Public spending	2019
Public expenditure on education as a percentage of GDP	3.6%
Public expenditure on education as a percentage of total government expenditure	11.9%
Employment	2019
Economic activity rate	62.9%
Unemployment rate	11.6%
Employment rate	55.7%
Self-employment rate	49.7%
NEET rate (2018)	26.9%

Source: GeoStat, MoF, MESCS, World Bank, Eurostat, Galt & Taggart Research

Annex 3: Education sector reforms

Due to its socio-economic importance, education has been one of the first sectors in Georgia to undergo rapid and radical transformation since 2004. Georgia has introduced profound educational reforms, including the structural reorganization of schools, universities, curricula and professional development programs at all levels, to achieve higher quality, transparency and efficiency:

 The decentralization of management, initiated in 2005, applied to every institutional level and aimed to support autonomous decision making. School boards of trustees, supervisory councils in VET institutions and academic and representative councils in higher educational institutions received the authority to manage administrative and financial matters of their institutions independently.

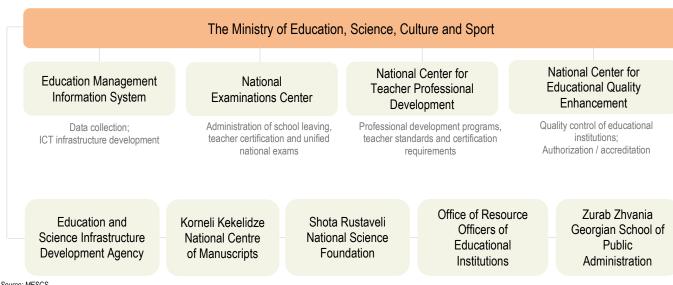


- A voucher funding system (per-capita financing) was implemented in 2005 at every education level to increase funding transparency, strengthen competition among educational institutions and provide them with financial autonomy.
- The introduction of unified national exams in 2005 standardized the selection system to eliminate corruption and ensure a fair and transparent process of admission to higher educational institutions
- Legal public entities, created under the Ministry of Education, are responsible for guality control, data collection, development and standard-setting (see details in Annex 4).
- The first national curriculum, which was implemented in 2005 to guide every school across the country toward better teaching practices and improved learning outcomes.
- Introduction of mandatory authorization/accreditation of institutions at every educational level, which means an evaluation of institutions to determine compliance with the authorization/accreditation standards. Since 2010, only authorized institutions have been allowed to carry out educational activities and issue a state-recognized Atestate/Diploma.
- A professional development scheme, which was first launched in 2010 and then renewed in 2015, is a teacher standards and certification system to create a qualified teacher base, encourage continuous learning and assure quality of education.

Annex 4: Institutional structure of the education system

The Ministry of Education (MESCS) formulates the overall educational policy and is responsible for its execution, monitoring and assessment. However, some core functions, such as quality assurance, examination and assessment, teachers' professional development, infrastructure development, science development, information and statistics are assigned to legal entities of public law (LEPL), operating under the umbrella of the Ministry (see Diagram 3). These institutions receive funds from both the state budget and their own activities.

Diagram 3: Institutional structure of the education system





Annex 5: Education funding models

The government uses a voucher (per-capita) system to fund educational institutions. Currently, the voucher amount for public schools varies between GEL 450 and GEL 800 per student, according to school size and location. This has been increasing every year since 2011, but the voucher per pupil for private schools has remained fixed at GEL 300 annually.

Students in high education institutions have an opportunity to be awarded 100%, 70% and 50% grants, amounting to GEL 2,250, GEL 1,575 and GEL 1,125 per year, respectively. Besides grant (per-student) financing, higher educational institutions are able to receive targeted program financing (only public institutions), based on the Ministry's initiatives and research grants, provided to contest/tender winner institutions.

The government used flat voucher financing of VET institutions until a new funding model was launched in 2013. With the new model, three main funding mechanisms were introduced: (i) vouchers, according to the number of students; (ii) program financing for salary, administrative and other current expenditures, transferred quarterly; and (iii) targeted program funding according to the Ministry's initiatives. Notably, the government funds only public VET institutions, although according to recent government announcements, private vocational institutions will also be able to receive voucher financing.

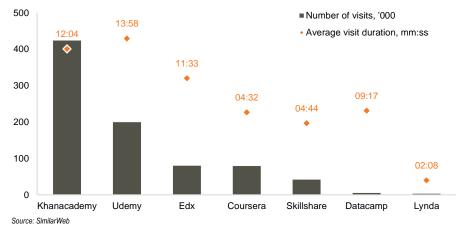
Annex 6: Massive Open Online Courses

With an ageing population, flexible solutions for continuous education are becoming popular among working and older age groups globally. Massive open online courses (MOOCs) are gaining space in the education industry, as they are convenient, self-paced and accessible through smartphones. MOOCs, usually partnering with leading universities, cover a variety of fields through short video lectures, digital textbooks and assignments, and provide feedback and valid certificates.

With an undeveloped local MOOCs market, the Georgian population is revealing an interest in top international providers, like Khanacademy, Udemy, Edx and Coursera. Khanacademy is the most popular provider in Georgia (more than 1.4mn visits over 2019-20), as it offers a large variety of free content, translated into the Georgian language. Free access to courses in the native language has resulted in the distinctive popularity of the platform in Georgia compared to peer countries. However, Georgia lags many east European countries in terms of the number of visits to other top MOOC platforms as a percentage of the total population, still showing higher interest in provided content compared to neighbor countries.

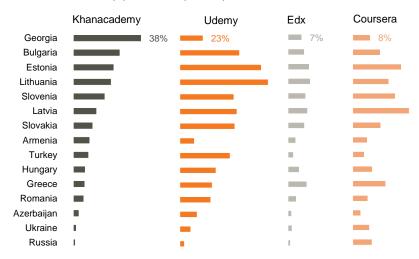


Figure 65: Massive Online Open Courses are gaining popularity in Georgia, with Khanacademy being most popular Top MOOCs visited by Georgian population, Jan-Mar 2020



Although the full-content MOOCs market is not developed in Georgia, there are successful attempts to provide some form of online learning, like preparation courses for unified national examinations (Nebula.ge) and online platforms for foreign languages (Lingwing.com).

Figure 66: Khanacademy remains popular in Georgia vs Udemy in peer countries Number of visits as % of total population, from Apr-19 to Apr-20



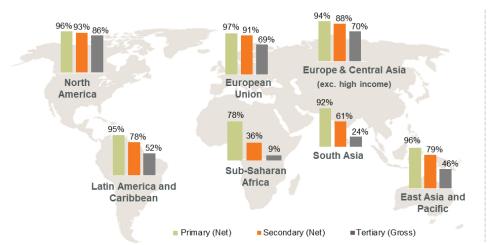
Source: SimilarWeb, World Bank, Galt & Taggart Research

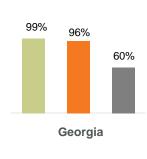
Annex 7: Enrollments globally

Demand for education is on a steady rise globally. Rising affluence has contributed to increased enrollment at all levels of education, especially in primary education, reaching a world average of 90.5% in 2018. Despite progress at the primary level, there is a remarkable gap in higher-level education penetration (secondary and tertiary) between developed and emerging parts of the world.



Figure 67: Penetration disparity in higher levels of education is significant between emerging and developed regions of the world Enrollment rates by education level and region, 2018



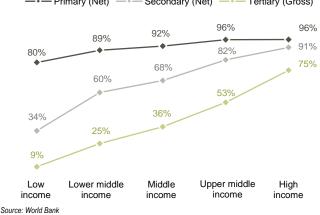


Source: World Bank, Galt & Taggart Research

Economic development and increased disposable incomes drive the demand for educational services (see Figure 68). Besides economic factors' impact on the rate of enrollment, demographic trends impact the sector's structure: the relatively young age of population in developing countries, in contrast with the older population of western developed countries, determines enrollment trends at each level of education.

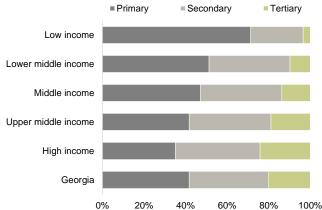
Georgia shows a positive (above world average) outcome in compulsory education in terms of net enrollment rate, and moderate, but improving results at the tertiary level, with the gross enrollment rate rising by 26.2ppts to 60.3% over 2008-18, which is still lower than developed and peer countries in the region, indicating growth potential. Demographic trends in Georgia are similar to developed economies (low birth rates and aging population), supporting growth of the life-long education sector.

Figure 68: With increased income education enrollment rises Enrollment rates by country income level, 2018 —•— Primary (Net) —•— Secondary (Net) —•— Tertiary (Gross)



Note: Countries classification is based on GNI

Figure 69: Primary education leads in developing countries Total enrollment by education level and country's income level



Source: UNESCO, MESCS, Galt & Taggart Research Note: Countries classification is based on GNI



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Annex 8: Demographic trends in Georgia

Urbanization

Urbanization drives the demand for education, as the urban population enjoys higher incomes and better access to educational resources. As educational institutions, especially VET and tertiary, are mainly concentrated in urban areas, access to education becomes even costlier for youth from the regions. Additional living expenses and indirect costs, along with the lower average income of the rural population, results in low demand for educational services among this population. Besides this, educational achievements translate into higher salary premiums in the cities than in rural part of the country, affecting the demand further.

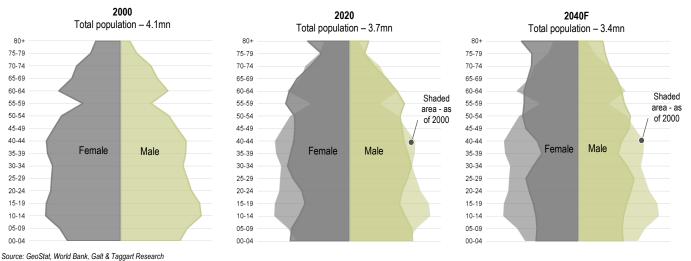
Despite a positive trend, the urbanization rate in Georgia (+1.8ppts to 58.3% over 2008-18) remains low compared to emerging economies in Europe and Central Asia (66.8%) and far below the European Union average, standing at 75.4%¹⁰. Economic development and urbanization are expected to drive demand for every level of education.

Demographics

The aging population is a serious challenge for the education sector in Georgia. A wave of births in 2014 will enhance demand for education in the medium term, although as the birth rate has been in a downward trend ever since, the long-term scenario is unfavorable. Besides the descending birth rate, a significant level of emigration is an issue for Georgia. Importantly, the younger population leave Georgia the most, with the highest rates in the 20–24 and 25-29 age groups.

Figure 70: Georgia has a rapidly ageing and shrinking population

Population age pyramid in Georgia



The population aged 5-34 – the potential pool for general and higher education – declined 22.2% to 1.4mn over 2000-20 and is expected to decrease further to 1.2mn in 2040. The share of this age group in the total population in Georgia (39%) is slightly lower than in peer countries $(42\%)^{11}$, but higher than in developed economies (33% in

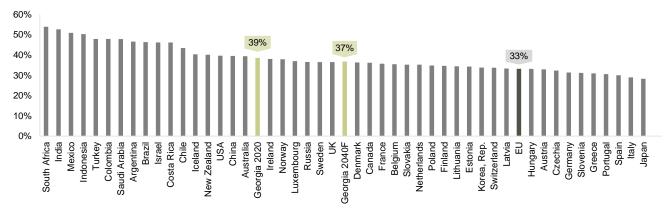
¹⁰ 2017 data

¹¹ Europe and central Asia excluding high income countries



EU) as of 2019. With the aging population, this metric in Georgia is expected to come closer to the European average.

Figure 71: Share of population aged 5-34 in Georgia is getting near European average Population aged 05-34 as % of total



Source: World Bank, Galt & Taggart Research



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