

ჯანდაცვის სფეროს ბარომეტრი

Assessment of financial stability
and risks of Healthcare sector

14th edition



CURATIO
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#HSBarometer



Purpose of a study

- The 14th edition of the Healthcare Barometer was prepared through collaborative efforts of Galt & Taggart and Curatio International Foundation
- The purpose of the Barometer is to assess the financial stability and risks of the healthcare sector in Georgia
 - The study includes analysis of the hospital and outpatient services
 - The analysis excludes pharmaceutical, dental and stand-alone laboratory units
- The analysis is based on public information and statistics released by public agencies, the financial statements of public and private companies, and analytical papers published during 2014-20.

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Executive summary

There is excessive medical infrastructure in the sector, causing inefficiency. The average acute care hospital bed occupancy rate is 49% in Georgia (2019), significantly lower than the EU (77%) and CIS (83%) averages. One of the reasons for the low efficiency is the fragmentation of the sector, where 60% establishments account for only 10.9% of hospitalizations (2019), and hospitals are on average 3x times smaller than in OECD countries (by number of installed beds). This has a negative effect on the financial performance of the sector.

The profitability of the healthcare sector has been deteriorating since 2015. At the same time, accrued liabilities by the government worsens the liquidity of the sector, forcing medical institutions to:

- 1) Increase debt: Debt to EBITDA ratio increased 3x times to 2.6 over 2015-19
- 2) Delay trade and salary payables: Days Payables Outstanding (DPO) averaged 8 months, while Days Salaries Outstanding reached 1.5 months in 2019.

Government spending on healthcare is growing rapidly. Budget overspending in UHC program totaled GEL ~350mn (8% more than the approved budget) during 2014-20. However, part of the existing liabilities owed by the state to medical entities, is not reflected in the budget and the actual overspending is much higher (up to GEL 551mn).

The state started to implement unified tariffs to manage healthcare expenditures (by 520 Decree and others). Unified tariffs, unless based on sound methodology, quality-oriented and periodically adjusted, could jeopardize the financial stability of the sector, the quality of medical services, and the financial protection of patients.

High level of uncertainty about expected state regulations and policy could hinder investments and the development of long-term investment or operating strategies of medical companies.

Expected risks

- Bankruptcy of medical companies and unpaid banking, trade and payroll liabilities;
- Attempts to balance revenue and expenses by reducing the quality of services (if allowed);
- Inducing demand and/or transferring part of the cost to the patient to offset the decline in revenue, increasing out-of-pocket payments.

Possible options for risk management

- Supplier network optimization aimed at reducing fragmentation
- An effective quality management and monitoring system
- Cost-appropriate and quality-oriented unified tariffs with periodic adjustments
- Advance announcement, inclusive development and transparency of planned regulations before their introduction

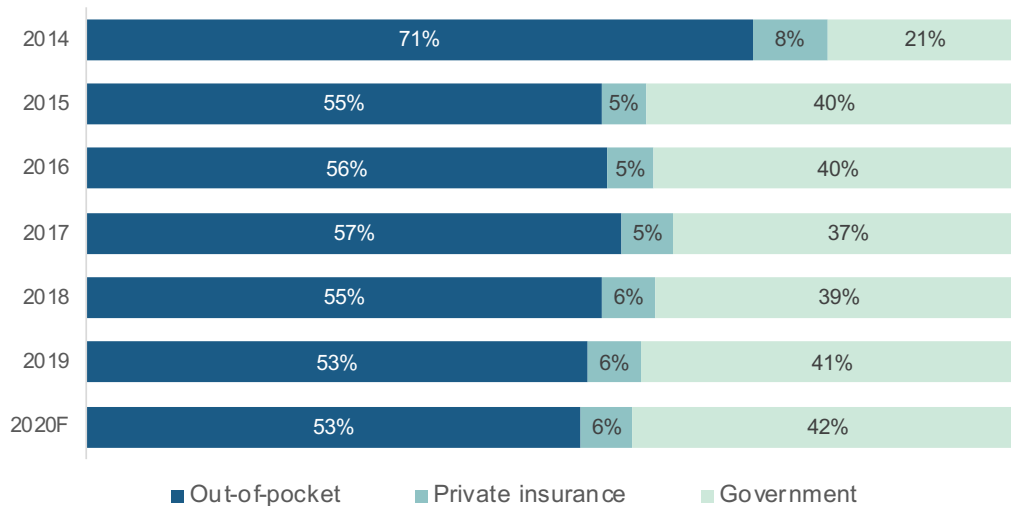
Healthcare spending and efficiency of the sector



Public healthcare spending increased in 2014-20, however the share of out-of-pocket payments is still high

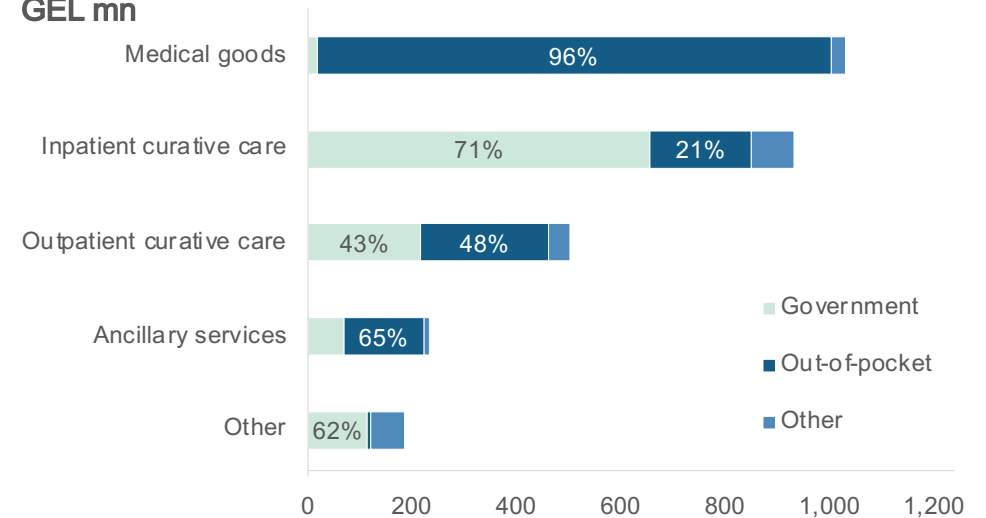
- Total expenditure on healthcare increased by 61% (CAGR = 7%) to GEL 3.5bn over 2014-20.
- The share of public expenditure in total spending increased from 21% to 42% over 2014-20, however more than half of total spending is still out-of-pocket (53% in 2020).
- Total national healthcare expenditure includes:
 - 36.9% spending on pharmaceuticals, which is mostly out-of-pocket (96%) and
 - For other medical services, mostly hospital and outpatient services, with the share of state funding ranging between of 37-42% since 2015.

Total healthcare expenditures in Georgia by source



Source: National health accounts, BMI Research 2018-2020

Total healthcare expenditures in Georgia by function and source, GEL mn

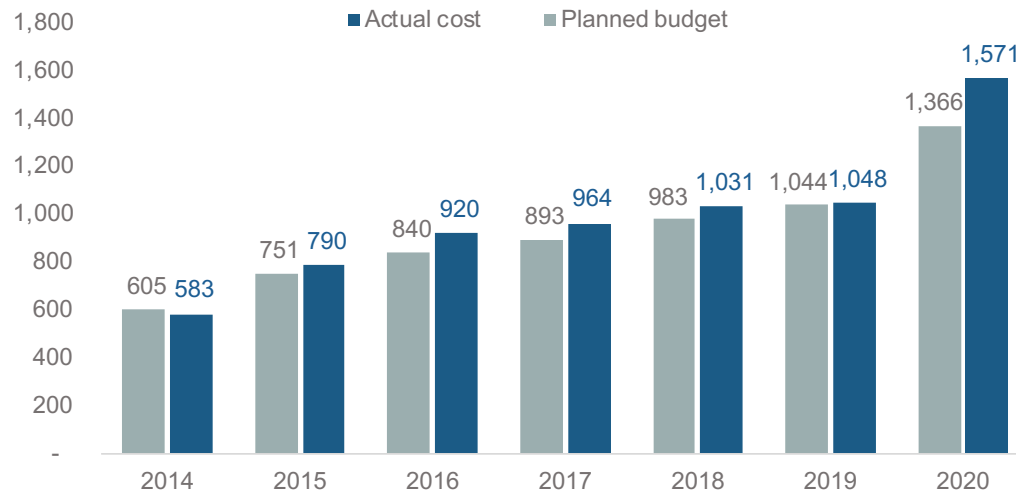


Source: National health accounts, 2017

Budget overspending of universal healthcare program amounted to GEL 350mn in 2014-20

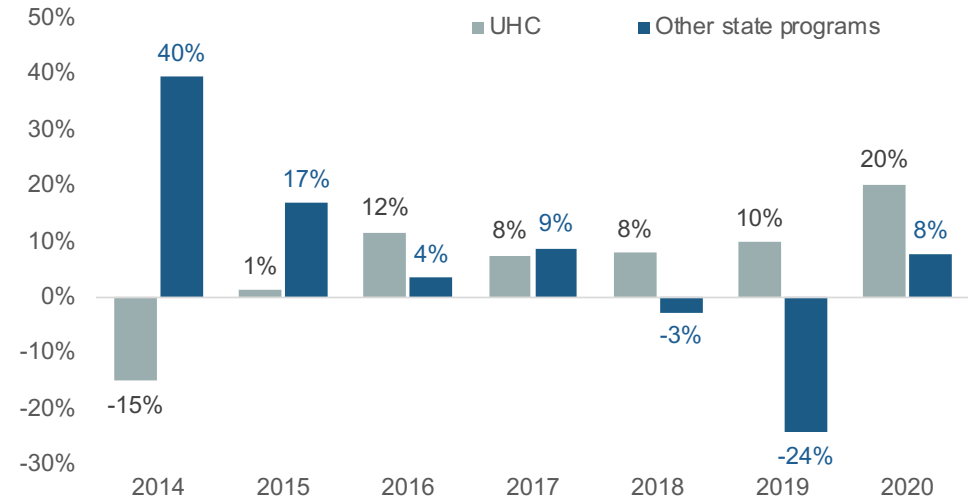
- The overspending of the UHC totaled GEL 350mn in 2014-20, i.e. 8% over the approved budget.
- However, this GEL 350mn does not include accrued liabilities to medical institutions. According to the State Audit report of 31 December 2018 – GEL 201mn was owed to medical institutions, increasing the total overspending to GEL 551mn (12% over the approved budget).
- According to some estimates, these liabilities increased to GEL 450mn by end of 2019. However, with reduced utilization of services in 2020, the state repaid a significant part of the accrued liabilities and reduced outstanding payables from 6 to 3 months.
- Notably, extra costs of the UHC were partially covered by transfers from other healthcare programs. Transfers from other healthcare programs totaled GEL 76mn during 2014-20, partially offsetting the overspending problems of the UHC.

Planned and actual public healthcare expenditures, GEL mn



*Note: actual cost in 2020 includes spending on management of COVID-19, amounting to GEL 251mn
Source: MoF

Actual / planned public healthcare expenditures (%)

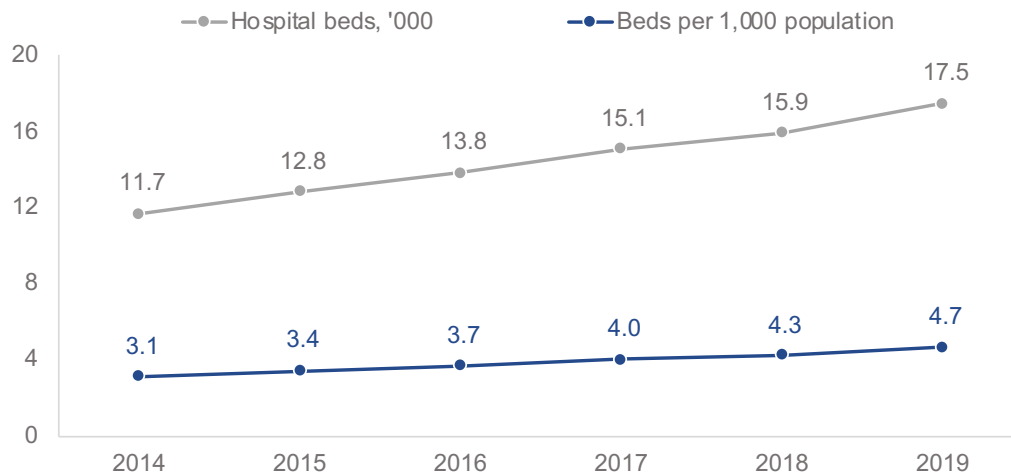


Note: In 2014 the universal healthcare program was combined with the health insurance program, thus funds are summed to calculate the difference.

Georgia's healthcare sector has excessive medical infrastructure and low efficiency

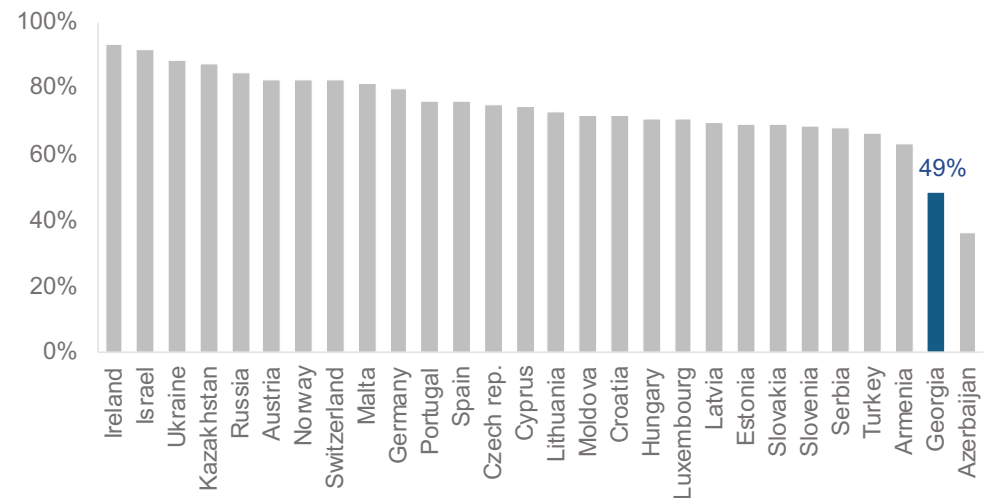
- Growing public spending, in the absence of strict provider selection criteria, created incentives for newly established medical facilities to actively engage in the implementation of the state programs. As a result, the number of outpatient facilities increased 1.4 times and the number of hospital beds increased 1.5 times during 2014-19.
- There is an oversupply of hospital beds in Georgia, with only 49% occupancy rate in 2019, significantly lower than the EU (77%) and CIS (83%) averages. All these indicate the inefficient use of invested capital and other resources.
- Mainly small and presumably inefficient facilities entered the market, without significant impact on the market share of the leading companies, but certainly reducing the efficiency of the sector.

Hospital beds in Georgia



Source: GeoStat, Social Service Agency

Occupancy rate of hospital beds



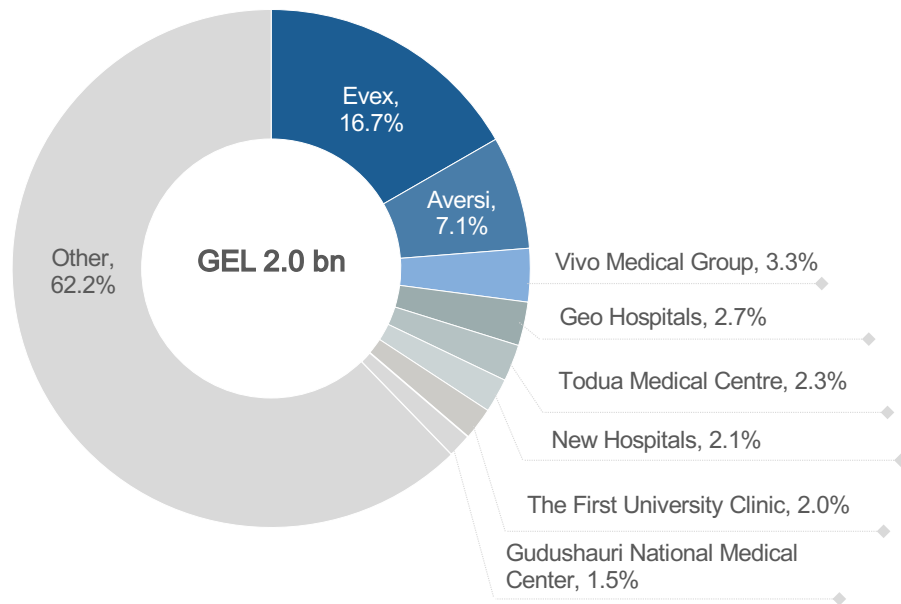
Source: WHO

Note: Latest data available

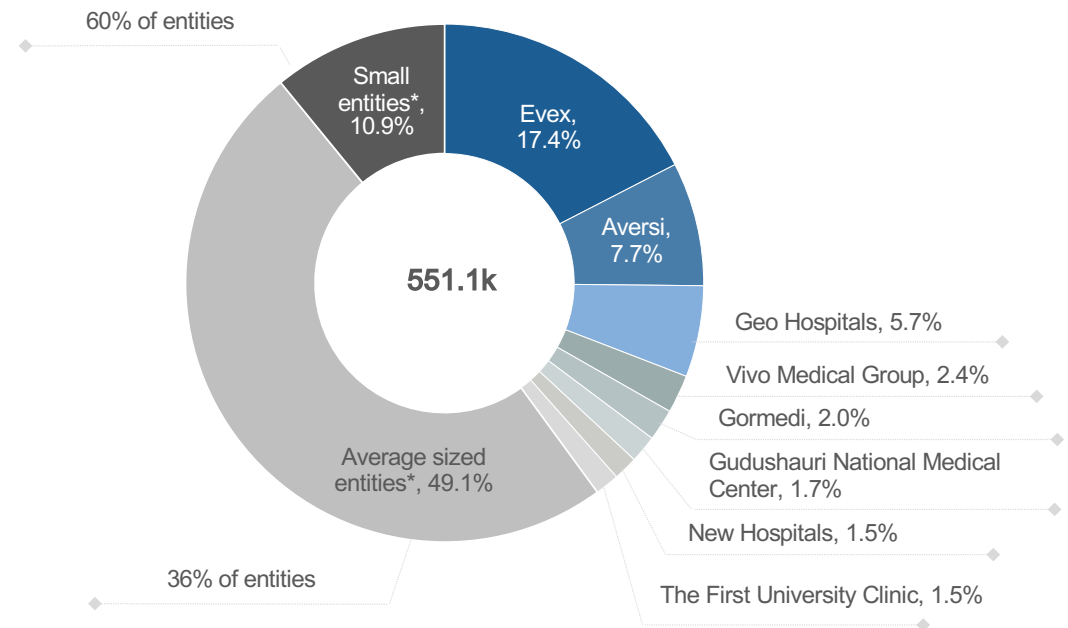
The sector fragmentation is one of the reasons behind low efficiency

The top-3 players in the healthcare sector accounted for 27.1% of total revenue and 30.9% of hospitalizations in 2019. The rest of the players individually held less than 3% of the market, both in terms of revenue and hospitalizations. However, 60% of hospital facilities held only 10.9% of the total market, in terms of hospitalizations in 2019.

Market shares by revenue, 2019



Market shares by hospitalizations, 2019



Source: SARAS, NCDC, GeoStat, Author's calculations

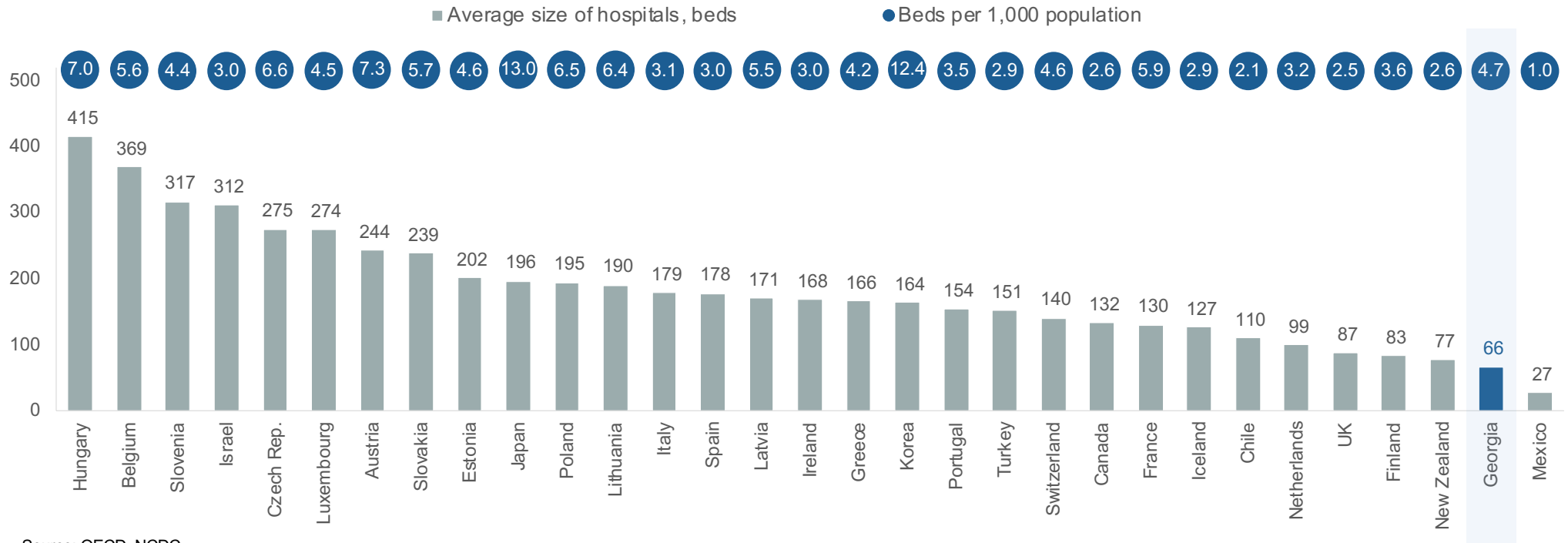
Note: Hospitalizations for hospital chains are consolidated

*The number of annual hospitalizations in medium-sized hospitals ranges from 1,500 to 8,000, the number of hospitalizations in small-sized hospitals does not exceed 1,500.

Hospitals in Georgia are on average 3 times smaller than in OECD countries

The fragmentation of the sector is evidenced by an international comparison: there are on average 66 beds in one hospital in Georgia, 3 times less than in the OECD countries (186 beds on average).

Average size of hospitals and number of beds per 1,000 population



Source: OECD, NCDC

Note: reference year is 2019 for Georgia, 2018 – for other countries

Current challenges in the healthcare sector



Decree 520 will reduce the revenues of UHC providers by 5-7%, according to our estimates

- Increasing health expenditures and accumulated debt forced the government to make public health spending more stable and predictable. Therefore, the government decided to move to a unified tariff for selected set of services and took the first step in 2019 with Decree 520.
- According to our estimates, the Decree 520 will reduce the sector revenues by 5-7% (assuming the demand for services remains same), although the impact on less institutions with less diversified services will be greater.

Type of service	Expected fiscal effect of Decree 520, GEL mn	
	Minimal	Maximum
Emergency care	34.6	50.3
Cardiology	29.1	29.1
Intensive care	49.9	74.1
Total saving	113.6	153.4
Share in sector revenues	-5%	-7%

- The introduction of the unified tariffs could have positive effect on the state budget, although there is a risk that institutions may balance revenues with expenditures by:
 - Buying cheaper medicines and medical goods and/or
 - Reducing the number of prescribed diagnostic procedures and tests (not-optimization) and/or
 - Increasing the patient to medical staff ratio to reduce payroll costs and/or
 - Introducing co-payment and other mechanisms to transfer part of the costs to the patients
- Unless effective quality control mechanisms are in place, there is a risk that the patients will be affected financially or by lowering quality of rendered services.
- In addition to cost control, it is important to take measures focusing on optimizing the supplier network, increasing the efficiency of the sector, introducing service quality monitoring/control measures and aiming at financial protection of the patients.
- These requires government spelling out its long-term policies well in advance. High uncertainty regarding the expected regulations and state policy changes hinders investment attractiveness of the sector and the development of long-term strategies by medical companies.

Challenges faced by the healthcare sector are multiprong

The cost-of-service provision is expected to increase

- Medical goods account for about 25% of service cost and price inflation is high.
- COVID19 created the need for additional inputs (gloves, face masks and other equipment) further increasing the cost of medical care.
- Increased demand related to the global pandemic is making medical goods more expensive worldwide.
- Drugs and medical supplies are mostly imported, driving costs higher on the back of GEL depreciation against major foreign currencies.
- Higher utility tariffs: electricity tariffs increased by 65-75%, while water tariffs increased by approx. 48% from 2021 compared to 2018-20

GEL's depreciation is an additional burden

- Medicines and other medical goods, equipment, spare parts and maintenance services are mainly imported exposing service costs to exchange rate depreciation.
- 62% of the bank liabilities of healthcare sector are denominated in foreign currency.
- In total, 35%-40% of the sector's expenditures are in foreign currency, therefore, GEL's depreciation significantly increases costs, while the fixed reimbursement rates by the Government in GEL yet do not account for these factors..

Demand for planned medical services is expected to decline

- Current economic crisis and the declining purchasing power of the population is expected to slow down the demand recovery for planned and non life saving medical procedures.
- In our view, demand for planned medical procedures most likely will not return to pre-pandemic levels until 2022.

Profitability and consequently the investment attractiveness of the sector are expected to deteriorate

- Unified tariffs (Decree 520) on the back of rising costs threaten the liquidity and financial stability of the sector, unless the tariffs are adjusted periodically.
- New requirements for medical entities (2020-21) require significant investments, which may increase the sector's debt and worsen their solvency, if provider network are not optimized in a timely manner.

Out-of-pocket payments are expected to increase

- Losses from unified tariffs are likely to be offset by increasing out-of-pocket payments (OOP) and financial burden on the patients.
- Prevalence of household's catastrophic health spending were already increasing and by 2017 reached 34%. With expected OOP growth it is expected that more households could face financial "catastrophe" in Georgia.

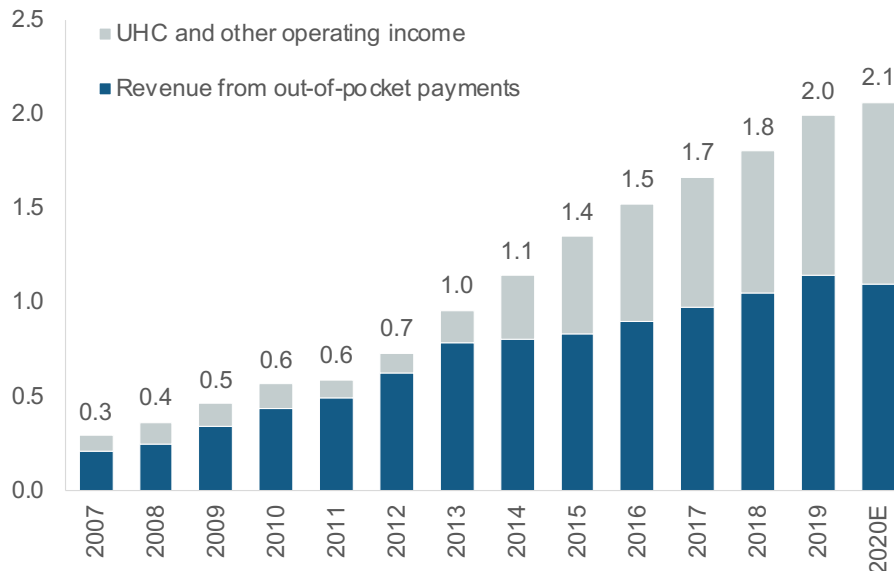
Financial stability of the healthcare sector



The profitability of the healthcare sector has been deteriorating since 2015 and risks are accumulating

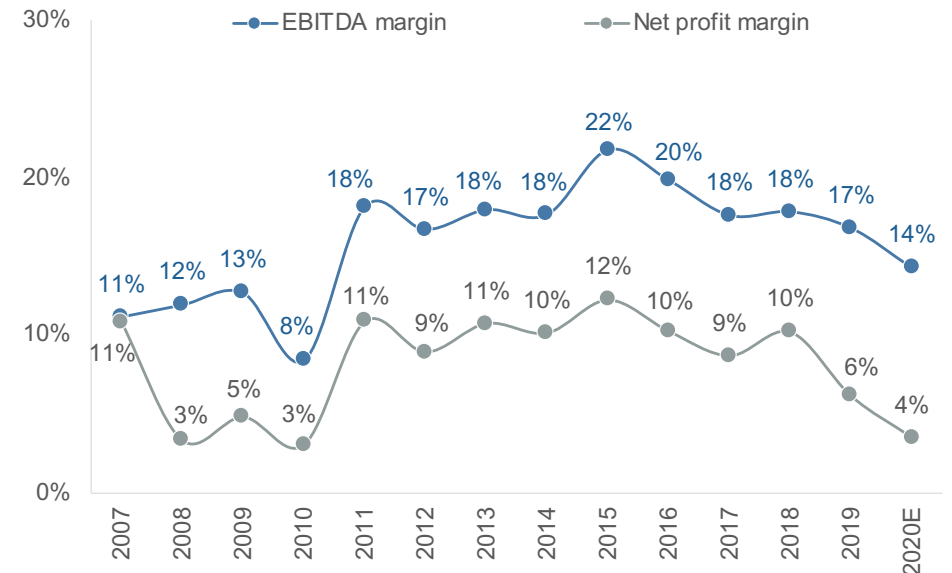
- Healthcare provider revenues (hospitals and outpatient establishments) grew at a CAGR of 14.9% over 2010-19, driven by increased government spending and out-of-pocket payments.
- However, profitability rates have been declining since 2015, increasing the risks for operating activities and negatively affecting solvency in the industry.

Revenue of private healthcare sector, GEL bn



Source: GeoStat, ფინანსთა სამინისტრო, Author's calculations
 *Note: mainly includes revenues from universal healthcare.
 The data do not include retail and wholesale of pharmaceuticals.

Profitability of private healthcare sector

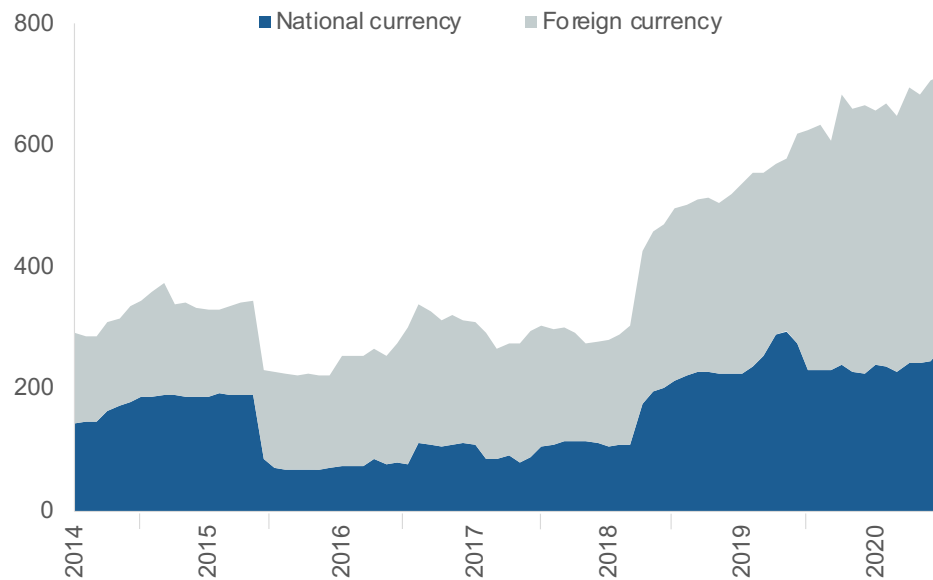


Source: GeoStat, Author's calculations
 Note: Net profit margin = (accumulated profit of profitable companies – accumulated loss of loss-making companies) / Sector revenues

The banking liabilities of the healthcare sector are growing rapidly

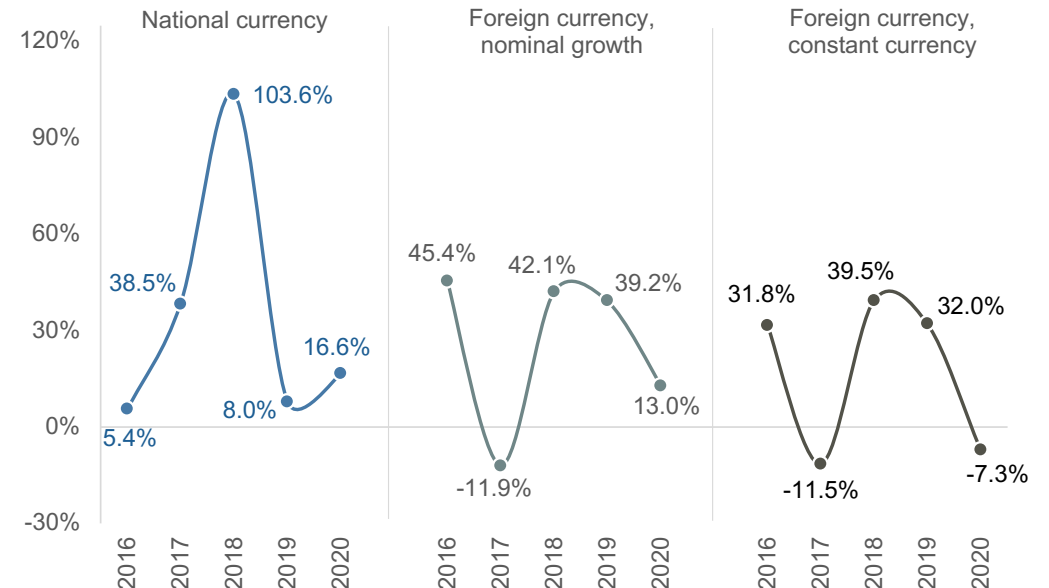
- Banking liabilities of the healthcare sector increased by 107.9% to GEL 715.2 million during 2014-20 (of which 62.1% are denominated in foreign currency and 37.9% in national currency). The healthcare sector, with a share of 3.8% (2020), is the 6th largest borrowing sector in the loan portfolio of Georgian banks.
- Growing liabilities of the sector is driven by:
 - The deterioration of the liquidity, which led to a decrease in the profitability and the accumulation of debt
 - Capital expenditures
 - GEL depreciation

Bank loans of healthcare sector, GEL mn



Source: NBG

Annual growth of healthcare sector's bank loans, %

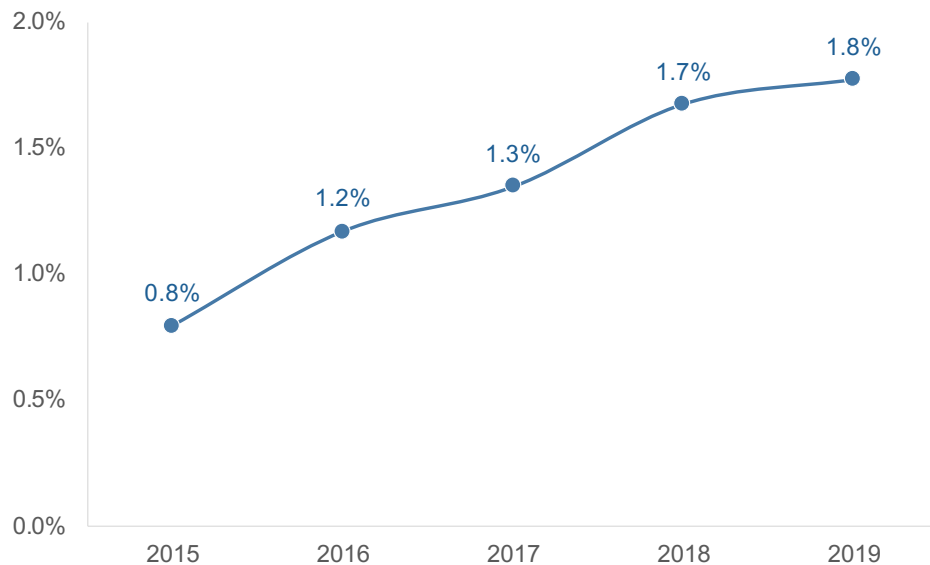


Source: NBG

Solvency ratios in the healthcare sector are deteriorating

- Total loans* to the healthcare sector increased 3 times during 2014-19, while EBITDA volume remained stood at the same level. As a result, the solvency of companies deteriorated, and Debt to EBITDA ratio grew from 0.9 to 2.6 during 2015-19 (while the average Debt to EBITDA ratio for the business sector of the Georgian economy was at 1.7 over the same period).
- Notably, leading players in the healthcare market have larger debts (Debt to EBITDA ratio in the range of 4-5) than that of small and medium-sized institutions.

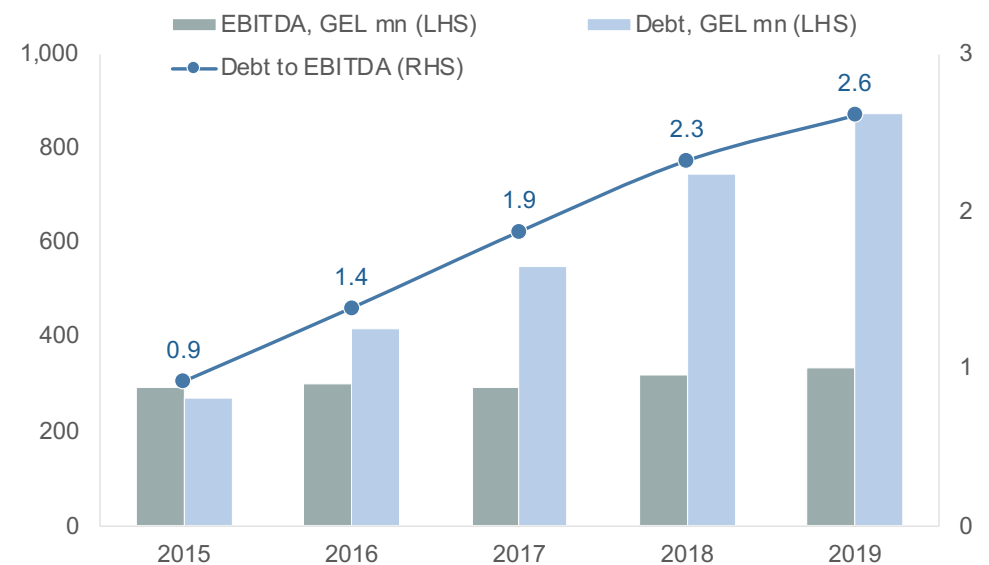
Debt of healthcare sector to GDP, %



Source: NBG, SARAS, GeoStat, Author's calculations

*Note: includes banking loans, debt securities and loans from IFIs

Healthcare sector debt/EBITDA



Source: NBG, SARAS, GeoStat, Author's calculations

*Note: includes banking loans, debt securities and loans to IFIs

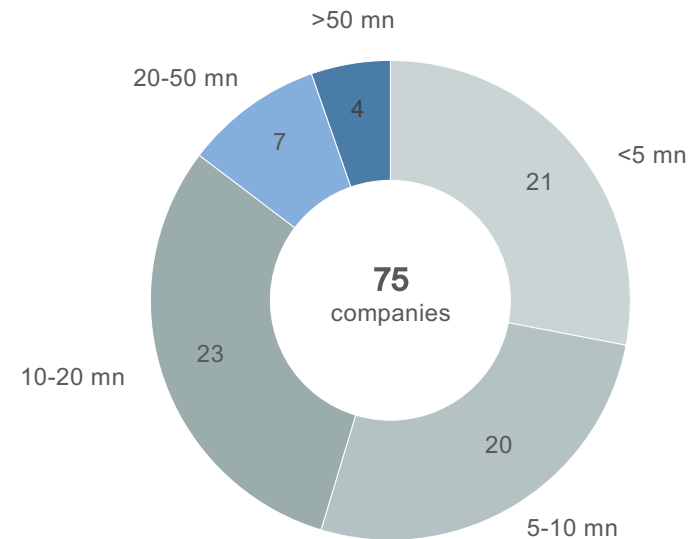
Financial analysis of medical companies



Financial analysis of medical companies

- To assess the financial stability of the healthcare sector, we analyzed the 2018-19 financial indicators of 75 large, medium and small-sized companies.
- The main activities of these companies are inpatient and outpatient services in Tbilisi and other regions of Georgia.
- The selected 75 companies account for 63.6% of sector revenues and 69.4% of hospitalizations, according to 2019 data.
- From these 75 companies:
 - Annual revenues of 41 companies do not exceed GEL 10 million
 - Annual revenues of 30 companies range from GEL 10 to 50 million
 - Annual revenues of only 4 companies exceed GEL 50 million

Number of selected companies by revenue 2019, GEL

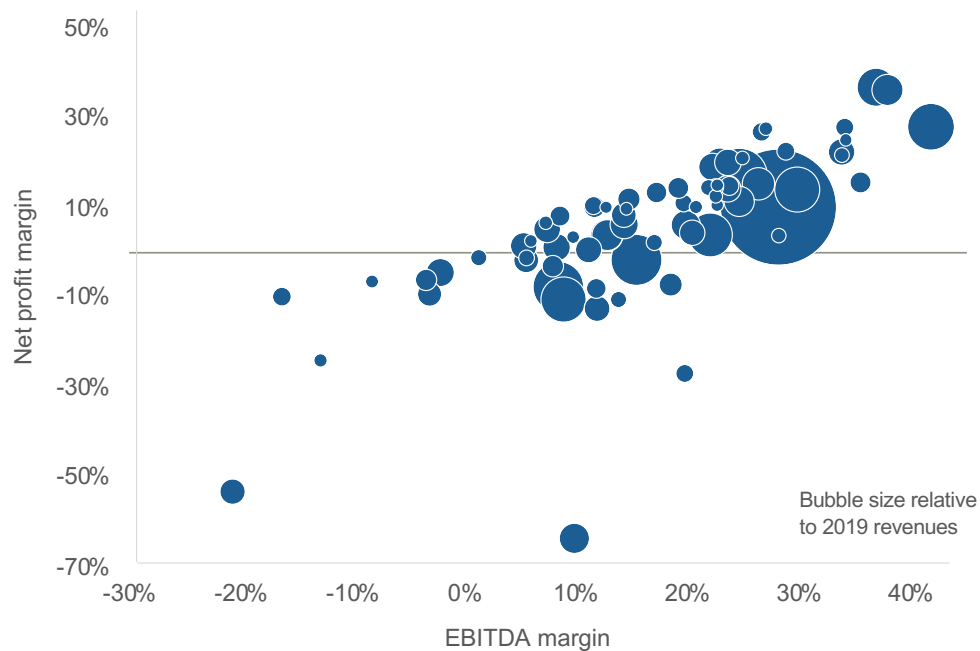


Source: SARAS, Author's calculations

29% of medical companies were loss-making in 2019

- The profitability of medical companies varies widely, subject to the size, location, specialization and other characteristics.
- The average EBITDA margin of the selected companies stood at 15.0% in 2019, while the net profit margin was 4.0%, the latter being far behind the average of the business sector in Georgia - 11%.
- In 2019, 29% of medical companies were loss-making vs 26% in 2018. Among the loss-making companies are small, medium-sized and large companies.

Profitability of selected companies, 2019



Source: SARAS, Author's calculations

	Average	Q1	Q2	Q3
EBITDA margin	15%	8%	17%	24%
Net profit margin	4%	-2%	8%	15%
ROAA	6%	-2%	6%	14%
ROAE	31%	2%	13%	26%

Source: SARAS, Author's calculations

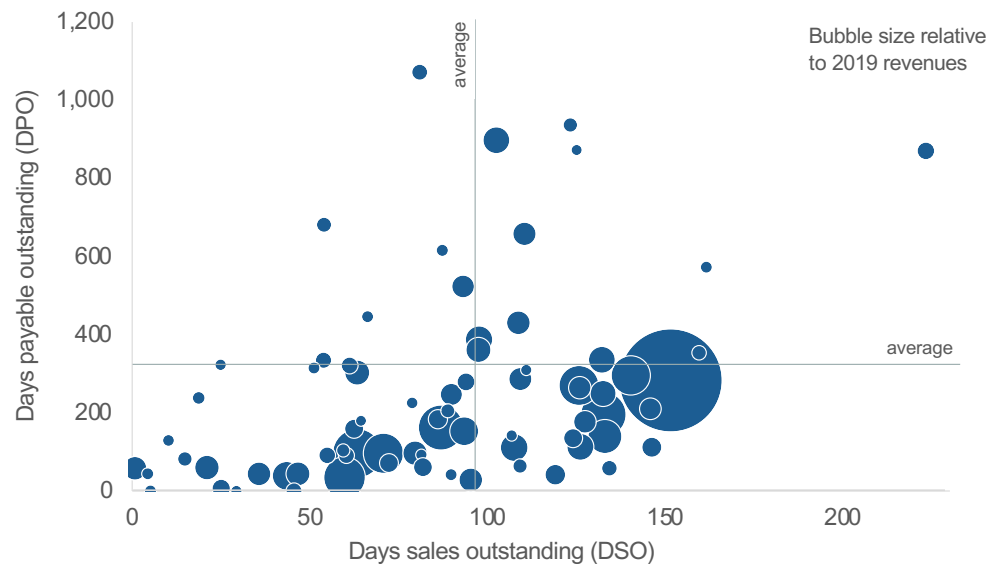
Note: Q1=25 percentile, Q2=50 percentile, Q3=75 percentile

Companies delay to pay their liabilities in order to maintain liquidity

The duration of receivables from Social Service Agency and private insurance companies, together with low profitability indicators, hinder the financial stability of the healthcare sector:

- In 2019, DSO averaged 3 months and exceeded 4 months for a quarter of companies.
- Notably, out-of-pocket payments, taking place soon after receiving the service, improve this indicator, while the DSO of the Social Service Agency reached 5-6 months in 2019.
- Companies respond to this problem by extending the maturity of trade and payroll liabilities: days payable outstanding (DPO) averaged 258 days, while the days salaries outstanding reached 43 days in 2019.

Liquidity indicators of selected companies, 2019



Source: SARAS, Author's calculations

	Average	Q1	Q2	Q3
Days inventory outstanding (DIO)	105	122	72	49
Days sales outstanding (DSO)	90	124	89	59
Days payables outstanding (DPO)	258	323	182	91
Days salary payables outstanding	43	55	30	14
Days Cash on Hand	34	4	15	38

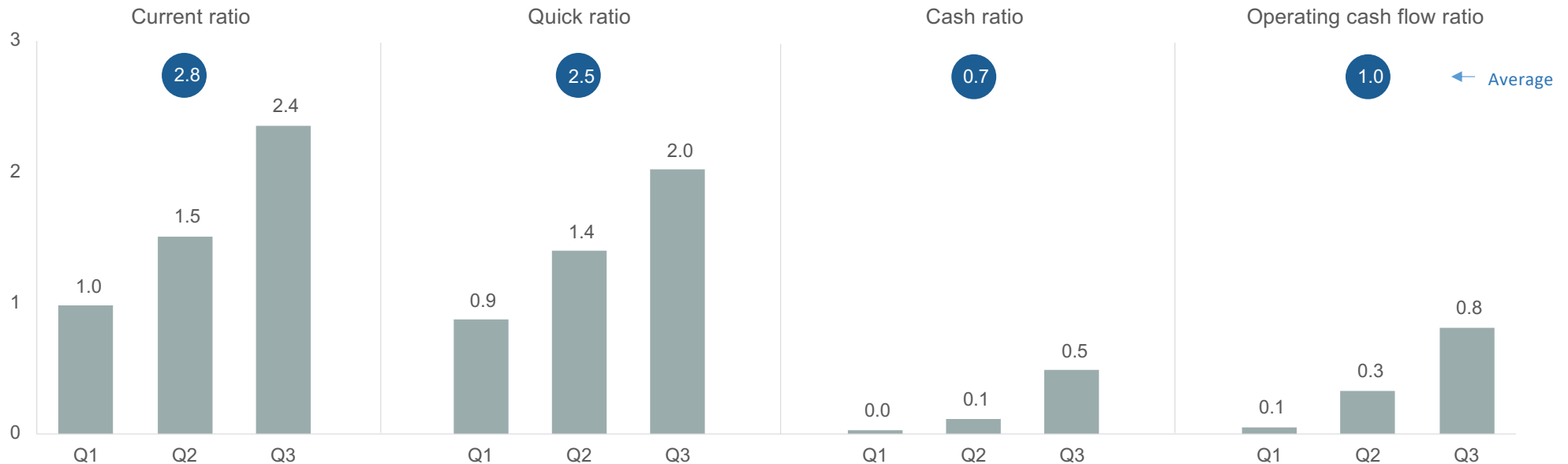
Source: SARAS, Author's calculations

Note: Q1=25 percentile, Q2=50 percentile, Q3=75 percentile

Operating cash flow is not sufficient for current liabilities

- The average current and quick ratios of the sector are above 1, which means that current assets exceed current liabilities for most companies. However, a large portion of current assets are not liquid.
- More conservative liquidity indicators - cash ratio and operating cash flow ratio - indicate that cash flows generated from operating activities are not sufficient to meet current liabilities for $\frac{3}{4}$ of companies.

Liquidity indicators of selected companies, 2019



Source: SARAS, Author's calculations
Note: Q1=25 percentile, Q2=50 percentile, Q3=75 percentile

Terms and definitions



Terms and definitions

GeoStat	National statistics office of Georgia
NBG	National Bank of Georgia
OECD	Organisation for Economic Co-operation and Development
NCDC	National Center for Disease Control and Public Health
25 percentile (Q1)	A value below which a 25% of companies fall
50 percentile (Q2)	Median - a value below which a 50% of companies fall
75 percentile (Q3)	A value below which a 75% of companies fall
CAGR	Compound Annual Growth Rate
EBITDA	Earnings before interest, taxes, depreciation, and amortization
ROAA	Return on Average Assets (Net profit / Average total assets)
ROAE	Return on Average Equity (Net profit / Average total equity)
Days inventory outstanding (DIO)	Average inventory / COGS * 365
Days sales outstanding (DSO)	Average trade receivables / revenue * 365
Days payables outstanding (DPO)	Average trade payables / COGS * 365
Days salary payables outstanding	Average salary payables / salary expense * 365
Current ratio	Current assets / current liabilities
Quick ratio	(Current assets - inventory) / current liabilities
Cash ratio	Cash and cash equivalents / current liabilities
Operating cash flow ratio	Operating cash flow / current liabilities
Days Cash On Hand	Cash and cash equivalents / (operating expenses - noncash expenses) * 365

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