Fiscal

Risks analysis

2018-2021

Contents

1. Macroeconomic risks

1.1. Introduction

The events taking place in and beyond the country may significantly impact the macroeconomic development of the country, which in its turn influences the fiscal status of the country. Such events represent fiscal risks. The document aims to identify macroeconomic risks and assess their fiscal outcomes, for predeterminaton of fiscal policy responses as for negative also for positive deviation. All possible positive or negative economic and political factors, which may influence on macroeconomic indicators in the opinion of Ministry of Finance of Georgia, has been revealed during the process of macroeconomic risk assessment.

Based on the revealed risk analysis, the document reviews three scenarios of macroeconomic development: baseline, optimistic and pessimistic. The baseline scenario is the expected option of economic development, the probability of which is the highest in the medium term. Consequently, the Draft State Budget is drawn up based on the above scenario. The pessimistic scenario is created for the cases of impediment of economic development, while optimistic - for accelerating economic development. For effective management of macroeconomic risks, it is important to predetermine, what kind of fiscal responses will have govarment in the event of a deviation from the baseline scenario. For this purpose, the mentioned document contains responses of government policy toward optimistic and pessimistic scenarios.

1.2. Economic review

1.2.1. GDP (Gross domestic product) dynamics

In 2017, the real growth of gross domestic product made up 4.8 percent. While the nominal figure was determined by 37,847 million GEL, which is higher by 11.2 percent than the same indicator of the previous year.

Since 2017, economic growth in the region is developing rapidly and there is a sharp recovery in the economy. In the first half of 2018, according to preliminary data, economic growth cosnists of 5.4 percent.

1.2.2. Prices

The National Bank of Georgia implements the inflation targeting policy, which considers determination of moderate and forecastable rate of inflation and achievement of mentioned indicator, which is a necessary factor for long-term economic growth. According to the resolution of the Parliament of Georgia of 2016 “on the Main Directions of Monetary and Currency Policy of 2017-2019”, from 2018 the indicators for inflation targeting consists of 3%.

As of October 2018, the level of inflation, compared to the corresponding month of the previous year, has reached 2.3 percent (annual inflation rate). At the end of 2018, the deviation of inflation from the targeting indicator is not expected.

1.2.3. Georgian Lari exchange rate

In the beginning of 2018, Georgian Lari started strengthening and has stabilized at around 2.45 against USD, but due to geopolitical situation at around the country (sanctions imposed by the USA for Turkey), from August 2018, the rate of Georgian Lari was depreciated against US dollars and as of November it varies at around 2.66. A similar trend is observed against the EURO, which is characterized by a depreciation trend, on the international market, unlike last year.

Since January 1, 2018, in 11 months, the Georgian Lari had depreciated by 2.7 percent against US dollar, while had strengthened by 3.0 percent against EURO. The nominal effective exchange rate was strengthened by 8.4 percent. The real effective exchange rate has been also strengthened and as of October the strengthening consists of 3.0 percent.

1.2.4. The role of the private sector in economic growth

In the enterprise sector, as in the past year, as well in 2018 is observed significant activation. In the first half of the year, production output in the business sector grew by 14.2 percent, while the number of employeed persons has increased by 25.2 thousand people. In the economic growth of the first half of the current year, the private sector had an obvious leading role. It is noteworthy, that the effect of profit tax reform is still high by 2018, which resulted in 22.5 percent increasing of reinvestment indicator of direct foreign investment, in the first two quarters of 2018 compared to the same period of last year.

1.2.5. Foreign trade

In January-October 2018 foreign trade commodity turnover reached to 10,306 mln. US dollars, which is higher by 20.5 percent than the indicator of previous year; Among them, export consists of 2,751 mln. US dollars (higher by 24.5%) and import - 7,555 million US dollars (higher by 19.2%).

Turkey holds the first place among the largest trading partners of Georgia; According to data of January-October 2018, its share consists of 13.8 percent of the total commodity turnover. It followed by Russia with 11.0%, China 8.8% and Azerbaijan with 8.1% shares.

In January-October 2018, foreign trade turnover of Georgia with EU countries reached to 2,770 million US dollars, which is higher by 18.6 percent than the indicator of previous year. Among them, export was 600 mln. US dollars (higher by 11.1%) and import - 2,170 million US dollars (higher by 20.9%).

In January-October 2018, foreign trade turnover with CIS countries (excluding Russia) reached to 2,384 million US dollars (compared to the same period of 2017 is higher by 31.3%). Among them, export is 963 mln. US dollars (higher by 60.7%) and import - 1,420 million US dollars (higher by 16.8%).

1.2.6. Currrent Account

The high deficit of current account balance is one of the main vulnerability sources of the economy of Georgia; however, it should be noted that in 2017, the current account deficit reached to 8.8 percent, which is lower by 4.2 percentage points than the similar indicator of 2016. The main contribution to the mentioned improvement was done by the service article.

In the first and second quarters of 2018, the deficit reached to 10.3 percent. It should be noted, that comparing to the same period of 2017, the articles of services and secondary revenue are improved. In the medium term, the economic policy and structural reforms of the country are directed towards growth of savings in the economy, which is a prerequisite for reducing the current account deficit to a sustainable level.

1.2.7. Budget policy

In the medium term, the government follows consistent reduction policy of the fiscal deficit. On the background of acceleration of capital expenditures, due to current fiscal consolidation in 2018, the budget defici[1] will be reduced by 2.3 percent of gross domestic product, and by 2019 is forecasted the reduction by 2.6% of GDP. Consolidation will be preserved in the following years too and from 2020, in the medium term the budget deficit will be reduced by 2.5 percent of GDP.

1.2.8. Government debt

As of December 31, 2017, the debt of government was stated at 44.2 percent level of GDP. Among them, the foreign debt has reached 34.9 percent of GDP, while domestic debt was 9.3 percent. The mentioned indicator does not exceed the admissible norm defined by the Act of Economic Freedom (60% towards GDP). The changes in Georgian Lari exchange rate during the past period, has significantly increased the volume of state external debt depicted in the GEL, however, the state debt portfolio preserves favorable financial parameters and in the medium term, it will not reach the critical limit, which also shown by the results of the state debt sustainability analysis. Moreover, in long-term period the government preserves a policy to increase the share of domestic debt, in order to reduce external vulnerability.

1.2.9. Foreign Direct Investments

In 2017, foreign direct investment in Georgia increased by 21 percent and has reached to

1 894 mln USD.

In the first half of 2018, foreign direct investment in Georgia was 676 mln US dollars, which is less by 9.8 percent than the indicator of relevant period of the 2017. It should be noted that this reduction is caused by single factors and is linked to the change of owners of certain companies.

According to the data of the first two quarters of 2018, in the percentage structure of the largest direct investor countries Azerbaijan (20.2%) holds the first place and United Kingdom (19.3%) - the second. It is noteworthy that in 2017 Azerbaijan (24.5%) and Turkey (15.0%) were on the first-second places, however, due to single factors, net flow of direct investment (-8.8%) was observed in Turkey.

As for the economy sectors, direct foreign investments have significantly increased in energy and financial sectors, while decrease is observed in the construction sector.

1.2.10. International Monetary Fund Program

On April 12, 2017, the Executive board of the International Monetary Fund approved a new, three-year program for Georgia in the amoumt of 285 mln US dollars within frameworks of "Enhanced Financing Mechanism" (EFF).

The Fund shares and welcomes the economic policy of the Government of Georgia, which provides sustainable economic growth in the country. It is important, that the new program is based on a four-pointed plan of the reforms of government. Within the framework of the program, the International Monetary Fund will be the partner of our country in implementing of economic policy of the government.

The International Monetary Fund has adopted the economic and structural reforms of the government, which aims to preserve macroeconomic stability and support to economic growth.

The budget of 2017, like the medium term budgetary plans of the government, is a qualitatively transformed fiscal policy, which provides:

- Reduction of administrative expenses;
- Creation of friendly tax system for economic growth;
- Increasing efficiency of budgetary programs; and
- Investment growth in infrastructure projects.

By 2017-2020, the road infrastructure backbone of the country will be finished, which will enable us to use fully our logistics and tourism potential. Improved communication between the regions will be the most important result of infrastructure development, which will increase their involvement in the economic development of the country.

Within the framework of the program approved by the Executive Board of the International Monetary Fund, the Government of Georgia has implemented and continues implementing a number of structural reforms, which have positive impact on economic growth of country:

- In July 2017, was founded LEPL Deposit Insurance Agency. Deposit insurance system in Georgia was implemented by support of the World Bank and based on the basic principles of "Deposits Effective Insurance System", which is developed by the International Association of Deposit Insurers and the Basel Committee on Banking Supervision. It should be noted, that in 2018, was the first insurance case, which was successfully handled by the Agency;
- - In May 2018 the Law of Georgia on "Public and Private Partnership" entered into force, which establishes legal basis for public and private partnership, including rules and procedures related to the elaboration and implementation of the public and private partnership project. The goals of public and private partnership are: increasing efficiency of projects, obtaining of private financing, dividing risks between public and private sectors, and increasing efficiency of public finances spending. On September 5, 2018, according to N452 Resolution of government was approved the statute of LEPL Public and Private Partnership Agency". The Agency implements the authorities defined by the Law of Georgia on "Public and Private Partnership", which basically means the coordinating role in the given field in accordance with the principles of independence, non-discrimination, impartiality, transparency and accountability. Within the frameworks of Public and Private Partnership, the upper limit of state obligations is established under the regulating legislation of state finances. The Ministry of Finance of Georgia shall prepare the proposals for the purpose of its determining and reflecting in the regulating legislation of state finances until 31 December 2018;
- - In July 2018 Parliament has adopted the Law of Georgia on "Accumulative Pensions" and the package of legislative changes related to it. The mentioned legislative package is part of a pension reform, which mainly aims to improve social system in Georgia. The accumulated pension scheme will allow citizens to make savings from the salaries worked out for years with the maximum replacement coefficient. It is notable, the positive impact of pension reform on the economy; Georgia will receive the increased access to resources, which in its turn will be a step forward for capital market development. Accumulative pension reform mechanism will solve a major long-term challenge - providing a decent pension for the population of the pension age, unlike the existing system, which has significant disadvantages in terms of fairness, efficiency and fiscal sustainability. The accumulative pension system will be launched from January 1, 2019;
- Currently, the relevant ministries and agencies with high engagement of international partners, are actively working on creation of a legislative framework for insolvency, land reform, capital market reform, insurance system reform, refining public finance management and toward other directions.

1.3. Risks analysis identified in the previous document

1.3.1. Analysis of Materialization of Risk

In previous document were identified 5 positive and 4 negative macroeconomic risks. In the past period of 2016, two of positive risks were implemented:

Foreign demand increased rapidly. Trading partner countries showed out high economic growth, which has positively reflected on export and money transfers. Currently, the foreign demand shock is exhausted and the economy is developing stably and validly. The expected economic growth is higher than forecasted as of 2017 also in 2018; Fast growing foreign demand is one of the main reasons for this.

Decrease trend was revealed in dilarization, due to gradual implementation of the Larization Measures by the government. The stability of the financial sector still remains on high level.

Analyzing the negative risks, which was identified during the past period of 2017, it should be noted that the geopolitical situation in the region was preserved as acute stabiliy. Economic processes in Turkey are ongoing with high inflation and the depreciation of the national currency, which has negatively impacted on the trade balance between Georgia and Turkey and on the exchange rate of Georgian Lari.

Compared to the planned, the infrastructural funding was developed at insufficient pace, which (together with high mobilization of tax revenue, than expected) influenced on the fiscal deficit reduction.

Increasing of Policy rate by the Federal Reserve System was identified as negative risk in the report. Since January, 2018, the interest rate has increased by 50 basic points; however, there was no any significant resonance.

1.3.2. Analyze policy responses

Due to realization of the positive and negative risk factors, the dynamics of economic development of 2018 are close to the baseline scenario; however, economic growth is expected to be higher by 5.0% by compared to forecast. In the case of more positively events than expected, in accordance with the predisposed responses of the policy, the budget deficit has decreased and the current costs are not increased.

1.4. Macroeconomic risk-factors

In the process of identification of macroeconomic risks, was revealed the factors that may have influence on the dynamics of economic development.

1.4.1. Positive shocks

Global economic activity growth and expanding the trading area

Free foreign trade suports the country to come closer to the trade partners by economic development level. The rapid realization of free trade agreements than expected with China and DCFTA will cause rapid growth of the economy of Georgia.

Growth of direct foreign investments (FDIs)

Foreign direct investments are the significant part of Georgian total domestic investments. On the one hand, FDIs increase potential of more production and on the other hand, it is one of the most important sources for importing new technologies for economy. Therefore, foreign investments are important sources of economic growth for developing countries. Last year, the rating agency Moody's improved Georgian sovereign credit rating from BA3 stable to Ba 2 stable, meantime Fitch improved it from BB stable to BB positive. There is a progress in decreasing vulnerability as well. An index of dollarization is decreasing rapidly; the international monetary fund's program is in progress. Everything that was mentioned above positively reflects on investor's economic trust, which increases possibilities of FDI's growth.

Decrease of dollarization

De-dollarization (Lamination) activities were put into operation in 2017, which resulted in growth of larization by more than 10% point. Some actions are still in progress. High-rate of dollarization is considered one of the main weaknesses of Georgian economy (reports of international organizations and rating agencies indicate this as well). The growth of larization (decrease of dollarization) will decrease reports of shocks from a foreign sector; besides, it will increase flexibility of monetary politics and will strengthen channels of transmission, which is highly important for economic growth and decrease of ineffectiveness caused by instability of prices.

Retirement reform results in rapid growth of savings

The retirement reform was implemented in 2018. A second post was added to an existing basic pension, and pension agency was created. Creating a new post of retirement system will increase the amount of savings in economics, which on the one hand, will reduce a degree of vulnerability and on the other hand, it will increase potential GDP. By the help of retirement system, rapid growth of expected savings will result in higher and more stable economic growth.

Improving trust in business and among customers

Economics is characterized with rapid growth in 2017. Positive tendencies can be seen across the globe. Tax reforms are still in progress to help business in 2018. Relations with taxing system got easier for about 500 thousand businesses with annual working capitals. Mentioned businesses are taxed only 1% of their working capital. Excesses of taxation are planned to go back to the normal basis, which will reflect on business trust, it will incite investments and will help the potential growth of a long-term production.

1.4.2 Negative shocks

Geopolitical risks

The geopolitical situation is still unstable in the regions and there are risks of destabilization, which at one point threatens economic relationships, foreign trading system and economic growth, on the other hand, it influences expectations.

Despite the worsened political situation, the West implements sanctions against Georgia's trading partners. Decreased economic activities with trading partners, aggravating geopolitical situation in the region and intensifying expectations of destabilization affects foreign requirements and economic growth.

Not-enough acceleration of infrastructural projects

The acceleration of infrastructural programs plays the major role in the next years (2019) and last two years' budget. The mentioned program focuses on implementation of significant infrastructural projects, which comes along with many uncontrollable factors. If already-planned infrastructural projects cannot be done in time or budgets, set for this project, cannot be obtained, this will badly affect on-going and potential economic growth.

1.5. Analysis of macro-economic scenarios

Macro-economic scenarios are formed to assess abnormalities of the amount of budget indicator's already defined meaning during different, unpredictable occurrences; the point of these actions is to assess stability of fiscal sector when imposed to danger. During formation of these scenarios, the government observes changes on indicators because they have direct influence on the budget. Meantime, it is important to realistically estimate the amount of changes. Extremely small or big potential shock can create false representation of expecting risks. In order to determine the shock value there is a statistical indicator of "standard error", which is used to evaluate historical range of economic characteristics. Standard error is calculated according to last 10 years' data. It is because last 10 years' data is commonly used internationally.

A table listed below shows statistical data of significant range of macro-economic indicators

Name of variables	Average of 10 years	Standard error
Growth of GDP (%)	4.5%	1.2%
inflation (%)	4.5%	1.2%
Interest rate (%)	3.1%	0.1%
Exchange rate (USD to Gel)	1.9	0.10

Basic scenario

The basic scenario allows 4.5% economic growth and 3% inflation. According to the basic scenario, 12,578 m Gel of income is planned to be mobilized in 2019, from which 11, 280 m Gel will be tax income, operating balance 2,252m Gel, the growth of non-financial assets 3,222 m Gel, shortage of budget (according to IMF methodology) will be 1,183 m Gel.

Positive scenario

The positive scenario allows 5.7% economic growth and 4.2% price increase, which leads to, increased tax income and meantime total income with 96.6 m more Gel that basic scenario.

Negative scenario

The negative scenario allows 3.3% economic growth and 1.8% price growth. These conditions predict a shortage of tax income by 96.6 m Gel. In case of negative scenario, fiscal politics answer will be: maintaining the nominal amount of budget shortage in 2019. Mainly the growth of non-financial assets will be reduced.

	Basic	positive	negative	Basic	positive	negative
	Million Gel			% with GDP		
income	12 578	12 793,0	12 364	28%	27,8%	28,2%
Expenses	10 326	10 326	10 326,0	23%	22,5%	23,5%
Operating balance	2 252	2 467	2 038,0	5%	5,4%	4,6%
Growth of non-financial assets	3 372	3 372	3 185,0	7,5%	7,3%	7,2%

Shortage	-970,0	-755,0	-970,0	-2,2%	-1,6%	-2,2%
Shortage by IMF program	-1 183,0	-968,0	- 1 183,0	-2,6%	-2.1%	-2,7%

Influence of macro-economic indicators on fiscal state

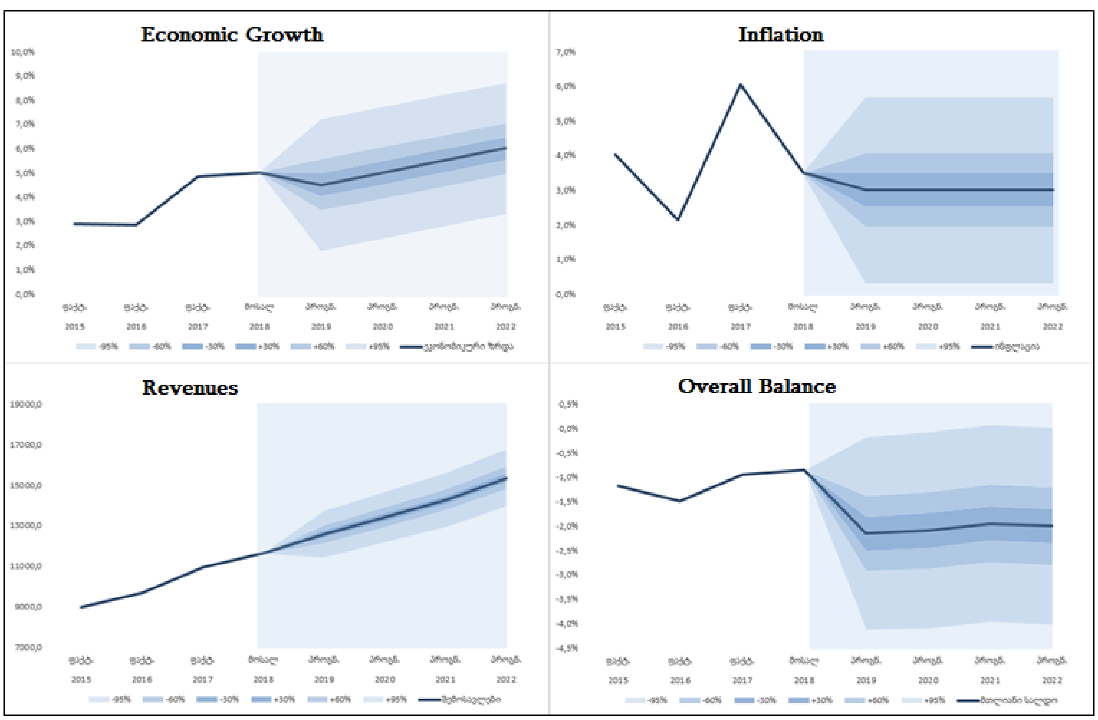
To assess influence of macro-economic risks on fiscal sector, the government needs to determine the amount of their expenses, income and shortage. As we already mentioned here are the Macro-economic indicators of fiscal sector: economic growth, inflation, exchange rate and interest rate and the amount of positive and negative changes on predicted indicators are determined by scale of historical ranges.

The table shown below describes how deviation of macro-economics' basic indicator influences fiscal sector.

A table

The noted analysis shows that economic growth and price range are important parameters influencing fiscal sector. Meantime, interest and exchange rates have a slight influence on fiscal state. This is why macro-economic scenarios are formed by using only economic growth and inflation shocks.

A table here shows economic growth (top left) inflation (top right) , income (bottom left) total balance (bottom right)



2. The SOE analysis

2.1 Overview

Georgian government is still in process of strengthening surveillance and management of SOEs, this process mainly focuses on assessing and managing fiscal risks that are coming from mentioned SOEs.

The state SOEs in Georgia are represented as public limited liability companies which are regulated by Georgian law about entrepreneurs and in some cases by the law of government ownership.(In particular, according to government ownership law, Government Property agency helps with management of those SOEs that were formed by the government or/and those SOEs that are shared with the government.) The law obliges company directors to write an annual report on company's work and future distribution of revenues and later present it to a supervisory board as well as at shareholders' annual meeting.

The complete Registry of governmental SOEs was created based on given-sources from governmental institutions, National Statistics Office of Georgia and other administrations. The registry includes those SOEs that central and local governments have created together and are classified as important companies for analysis of fiscal risks. These type of companies are: a) each Enterprise of the central government b) municipal SOEs, sharing more than 25% of their property with the government and have more than 200 thousand Gel working capital or if they includes wages of 15 thousand. Other important financial data has been used from different administrations to evaluate noted indicators. Based on mentioned information we created financial data base of 2017 for these SOEs.

According to above-mentioned criterions, the number of noteworthy SOEs was 286, which also includes 50 other subsidiary companies. So, by consolidating financial data, analysis is based on information of these 236 governmental SOEs and 50 other subsidiary companies' data is shown as additional information.

159 out of 236 presented companies is property of the central government, however the local government owns 77 of them. 100 out of 156 central government's companies share 100% of their property with the administration, while 29 share from 50% to 100% and 30 companies share less than 50%. Supervision of following 156 SOEs is distributed in this way:

111 enterprises – The ministry of Economy and Sustainable Development

26 enterprises- by the help of created Partnership Fund

3 enterprises – The Ministry of Regional Development and Infrastructure of Georgia

5 enterprises – The Ministry of Defense of Georgia

7 enterprises- The Ministry of Environment and Natural Resources Protection

2 enterprises- The Ministry of Education, Science, Culture and Sport of Georgia

1 enterprise- The Ministry of Internally Displaced Persons' issues

1 enterprise- The Ministry of Justice

3 enterprises- legal entities

As for enterprises under municipalities' control, 32 companies are Tbilisi and Batumi municipalities' property, which share 94% of their work capital with the government. For more information see the table 1.

Table 1.

	Number of companies	Shares	Share in total number of municipal government enterprises	Total income of 2017 (thousand Lari)	Share of total income	Share of municipal government enterprises total income
Total	236	100%		3,001,347.7	100%	
From here:						
Based on Municipalities	77	32.6%	100%	263,980.6	8.8%	100.0%
Tbilisi Municipality	13	5.5%	16.9%	210, 606.8	7.0%	78.9%
Batumi Municipality	19	8.1%	24.7%	38,674.2	1.3%	14.7%
Zugdidi Municipality	2	0.8%	7.6%	22.7	0.0%	0.0%
Poti Municipality	1	0.4%	1.3%	152.2	0.0%	0.1%
Telavi Municipality	3	1.3%	3.9%	1,108.7	0.0%	0.4%
Other Municipalities	39	16.5%	50.6%	13,416.1	0.4%	5.1%

According to information of national statistics' business registry, government enterprises are functioning in 12 different sectors (table 2). More than half of these companies are working in fields of health care and social services, communal, social and personal services, also real estates, leasing payments and providing service to their customers. 31.4 % of these companies' working capital is for transportation and communication sector, 40.6% for producing and distributing of electric energy and 18% is for trading operations.

	SECTORS	Number of companies			Total income of 2017 (thousand Lari)	Share of SOEs	
		Total	Central government	Municipal government		In total number of SOEs	Total of full income
A	Agriculture, hunting and wood industry	12	10	2	16,713.9	5.1%	0.6
C	Mining	2	2	-	523.0	0.8%	0
E	Manufacruring	18	17	1	51,623.7	7.6%	1,7%
E	Electric energy, production and distribution of gas and water	15	9	6	1,205,619.5	6.4%	40,2%
F	Building industry	19	11	8	54,968.7	8,1%	1,8%
G	Trading	10	10		535,517.9	4.2%	17,8%
H	Hotels and restaurants	11	10	1	45,673.1	4,7%	1,5
I	Transport and communication	14	8	6	933,008.1	5,9%	31,1
J	Financial work	7	7		0,0	3	0
K	Real Estate transactions, leasing and customer service	38	30	8	21,376.6	16,1	0,7
N	Health care and social service	54	37	17	23,490.5	22,9	0,8
O	Communal , social and	36	8	28	112,872.6	15,3	3,8

	personal services						
Total		236	159	77	3,001,387.7	100%	100

2.2 Relations between the central government and SOEs

2.2.1 Financial transfers

Government financially supports couple of other governmental companies. As usual, this type of assistance is already included in the budget and it is not a fiscal risk.

The total amount of financial transfers and the number of beneficiaries are Different every year. The total amount of direct financial support in 2016 was 223 m GEL (264 m GEL in 2015). 209 m GEL was a capital investment and the main beneficiary was Ltd. Amelioration, Ltd, United Water Supply of Georgia, Ltd. Mountain Resorts Development Company, Ltd. Meqaniatori, Ltd. Georgian Gas Transportation Company, Ltd. Akura. The point of this assistance was to develop irrigation and water systems also, Mountain resorts' and low pressure pipelines. Ltd Amelioration was given 11.7 m Gel to provide the irrigation system. Table 3 shows the financial support's detailed information for past 4 years.

Table 3

	2013		2014		2015		2016		
	subsidy	Capital investment	subsidy	Capital investment	subsidy	Capital investment	subsidy	debt	Capital investment
Ltd Georgian tele-radio station		10,000		7,000					
Melioration of Georgia		48,600		36,100		49,500	11,700		41,874
Sportmshens ervisi		11,500		16,000		9,000			12,919

(service of building sport)									
State building company		13,000		26,000		12,466			1,500
Gas transportation company of Georgia		1,000		21,000		20,000			20,000
Mekanizatori						34,000	2		25,500
sakseronavigatsia		5,500							
municipalproject				13		4			
Mountain resort development project		3,500	662	11,380		33,152			26,984
Infrastructural development project		6,420		9,730		4,800			
Akura	2,962		3,126			24,567			19,000
Tetnuldi development		12,545		5,000		21,000			5,000
Union of Georgian Airports		6,570	1320	3,704	1881				
Solid waste management company		22000				17,438	0		7,000

United water supply company	12,500	15,367		15,445		26,580	55		36,700
Building and trading branch									5,743
Other		2,546	0	14,822		11,741	235	2000	7124
total	15,462	158,547	5108	166,194	1881	264,248	11,993	2000	209,343

N	**2017 (thousand Gel)**			
	Name of the company	Subsidies	Capital investment (shares and other capital)	**total**
1	REC-Caucasus	-	480	480
2	Converting account of bank of GEORGIA	-	1,019	1,019
3	LTD ‘sportmshenvisi"	-	25,105	25,105
4	Saqtskal project"	-	147	147
5	Partnership funds	-	70,000	70,000
6	Electro system of Georgia	-	28,540	28,540
7	Ejis	-	198	198

8	Building, trading and producing branch	-	8,764	8,764
9	United water supply company	66	56,521	56,587
10	"ALIANSI"	-	1,378	1,378
11	Geo"	-	16	16
12	ltd "builoder-80"	-	5,644	5,644
13	gas transportation company of Georgia	-	70,000	70,000
14	Enguri HPP	-	910	910
15	“Mekanizatori“	0	41,917	41,917
16	Building company - builder 2011	-	10,819	10,819
17	ltd state building company	-	5,000	5,000
18	Ltd “sportbuilder“	-	10,000	10,000
19	Ltd david os	-	40	40
20	Ltd Engineering Solutions	-	178	178
21	Ltd Black Sea Arena	14,945	7,092	22,037
22	Ltd delta International	-	845	845
23	Ltd triply tourism	-	77	77
24	Ltd inofagi	-	55	55
25	Ltd knik	-	38	38
26	Ltd laqstoj.ge	-	80	80
27	Ltd ling way	-	31	31
28	Ltd wheat logistic company	-	190	190
29	Ltd Mountain resort development company	800	70,265	71,065
30	Ltd Agency of land rehabilitation	-	1	1
31	Ltd optio	-	42	42
32	Ltd Orient	-	105	105
33	Ltd „Perspektiva“	-	60	60
34	Ltd melioration company of Georgia	13,000	67,125	80,125
35	Ltd „solid waste management company of Georgia”	-	20,000	20,000
36	Ltd „tele-radio company of Georgia “	4	120	124

37	Ltd state service bureau	-	20,000	20,000
38	Ltd stics	-	53	53
39	Ltd pavni	-	46	46
40	Ltd Geo consulting	-	126	126
41	Ltd. Geohydro service	-	1,454	1,454
42	Ltd Union of airports of Georgia	2,768	71,700	74,468
43	Agricultural corporation of Georgia	-	-	-
total		**31,583**	**596,180**	**627,763**

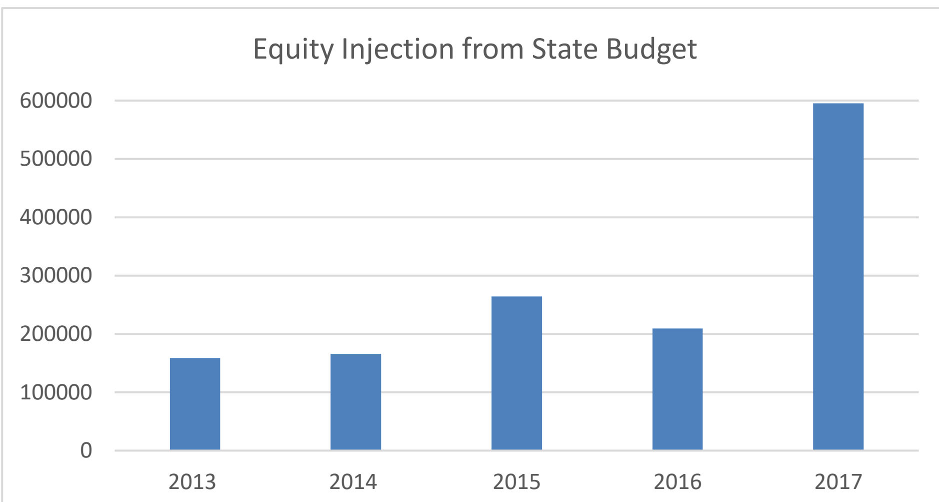


Table shows contributions to the capital by each year.

2.2.2 Equity Injections with the budgetary funds

Lending of Government's budgetary funds to the SOEs does not happen[1].

Capital projects planned in 2017 can explain the increase number of contributions to SOEs' capital from the government's budget itself. Here is one of the noteworthy contributions to the capital in 2017:

[1] The only exception was in 2016, when heavy rain damaged water reservoir of "Vardnilhes-1"'s dam.

According to Georgian Government's order in 2017, 24 January, N1557 the capital of partnership fund has grown with 9m more Lari and according to Georgian Government's order in 2017, 31 of August N1847 the capital of partnership fund has grown with 1m Lari. Mentioned orders included fixing and improving infrastructure of electric energy around Tbilisi which included financing and building 220/110 and 35 /10 kW electric sub-station in village Tabakhmela. Besides, partnership fund has grown with 60 more m Gel oriented on development of Anaklia port.

Ltd. Public Service bureau's capital has grown with 20 m Gel for the Ministry of Regional Development and Infrastructure and business-house buildings in Tbilisi.

Ltd. United Airports of Georgia's capital has grown with 74 m Gel in 2017, which was mostly oriented on building of Kutaisi's new terminal

Ltd. Mountain Resorts development company's capital has grown with 70,3 m Gel, 51,2 m Gel was spent on developing of Gudauri Skiing trails. 19,1 m Gel was part of subsidy loan services.

Ltd. Georgian Gas Transportation Company's capital has grown with 70 m Gel, the main purpose was to gasify villages.

Regardless of increased amount of contributions to government-owned companies, fiscal risks from this sector is not essential, because contributions to capital system is mostly used for capital projects and not for covering operating expenses.

2.2.3 Equity Injections with donor funding

From the finances received from of credit resources, the central government is able to give loans to SOEs to power engendering, water supply, communal infrastructure, agricultural and other type of projects. Ministry of finance of Georgia re-lends government funds by the same credit terms that were given from a creditor and they are all recorded in the central government's credit part. Fiscal risks can arise when municipalities and government-owned companies can't pay the loan so the central government has to work it out. From now on, these companies owe the central government the paid amount of money. These types of risks are regulated by the Ministry of finance's re-lending requirements. The ministry of finances approves each of these loans and assesses their sustainability.

Total foreign credit situation according to 31.12.2017 information in national currency included 4,518.1 m Gel, 2,668.6 m Gel is already obtained. Total amount of paid debt is 417,2 m Gel, existing interest rate's paid amount is 173.1m Gel, remaining- 2,249.0 m Gel. Government re-lended funds to six other government-owned companies (Electric system of Georgia, ltd

“United Water Supply company of Georgia”, ltd “Enguri hpp”, ltd “ Energotransi”, ltd Solid Waste Management Company of Georgia” ltd “ Saqaeronavigatsia”) their debt is 84.9% of government’s total credit loans. (3,835.6 m Gel)

To analyze fiscal risks, it is highly important to take coverage of loan terms into an account because when municipality or government-owned companies can’t pay the loans, the central government has to do it for them. Normally, the central government doesn’t need to face this situation because if any company is not able to pay the debt, the due payment is renewed for them.

The loan term for Georgian state Electro system included 1,387.7 m Gel by 31st December of 2017. 575.2 m Gel is ltd “Energotrani”s responsibility, and rest of them needs to be paid by ‘ Georgian state Electro system”. ‘ Energotrans took the loan for the Black Sea transmitting network’s project. To be more specific, during 2014-2016, the company wasn’t able to fully cover existing loans, so by the order of the Ministry due payments were renewed for this company. Besides, according to Georgian government’s order N2520 presented in 09.12.2016, the agreement was signed between the Ministry of Finances of Georgia and Ltd. Energotrans in 30.12.2016. according to this agreement, Ltd. Energotrans will cover existing loan-213.8 m Gel during 2017-2018 period of time.

Ltd. Energohouse was given 4 different loans for Vardnili and Enguri hydroelectric station’s rehabilitation. Total credit by 31.12.2017 includes 168 m Gel, the company didn’t have to pay the primary amount of money for 2 years, till November of 2015. In 2017 the primary loan was again renewed and rescheduled for 3 years. Rescheduling was allowed under two agreements, and paying for two other agreements is based on the old schedule. The total amount of company’s credit includes 6,757.9 thousand Gel by 31.12.2017’s data.

Ltd United water supply company of Georgia’s projects are funded by the Asian development bank, European bank of Reconstruction and development and European Investment bank to help improve Urban services, municipalities’ water projects and renewal of water infrastructure projects. The company has already paid 5,373.4 thousand Gel and there is no delayed payment. By the end of December in 2017, the credit loan will include 655.1 m Gel

Other government-owned companies pay their loans according to schedules and there is no fiscal risk at this point.

The government gives no guaranty to a company. Only a so-called comforting and supporting letters that is also very limited.

2.4 Loans between government-owned companies

Re-lending between companies or taking a shared-loan for the same purposes isn't a common practice in Georgia. Actually this type of loan hasn't be used in 2017 between Georgian companies.

2.5 Non-financial transfers

Besides financial transfers Georgian Government and government-owned companies transfer their assets, which includes Gas, lands, tools and other stated assets. The main purpose of these transfers is to let other companies implement projects way more efficiently. This doesn't cause any fiscal risks.

The Georgian Railway implemented the most important transfer when they handed over the property of 86m Gel at cost of 147 m GEL.

Gas transportation company of Georgia distributed Gas of 14 m Gel and equipment of 10 m Gel.

In 2016 , assets of 7 m Lari had been distributed on institutions that are controlled by the government.

The government distributed assets of 163 m Gel on partnership funds.

There is no non-financial transfers recorded in 2017 according to goven information.

Quasi-fiscal activities

Quasi-fiscal activities are non-commercial activities that are implemented according to public interest; however this causes loss for the company or brings less revenue than it was expected. If government-owned companies aren't compensated in these scenarios, they become less profitable and fiscal risks as well as need of funding with other assets are getting higher.

Also, when the government implements activities with better conditions than the market place has, this can be considered as quasi-fiscal activity. If government-owned companies are competing with private sector, this puts them in unequal position.

According to reforms that were implemented for fiscal transparency, which focuses on improving public financial management and integrating with EU standards, for this type of activities the government-owned companies need to be compensated. The ministry of finances has already started gathering information about these activities to assess their advisability.

	Company	Description	2012	2013	2014	2015	2016	2017
1	GOGC	Selling gas	237,250	326,060	401,829	591,932	429,541	475,854
2	LTD Engurhesi	Supply of electricity on the Abkhazian territory	14,462	17,259	16,677	18,374	19,487	25,489
		Additional purchased energy for Abkhazia					349	2,545
		Kodor HPP	473	480	430	465	479	431
3	LLC Georgian Railway	Transportation of passengers, Limestone and coal transport	25,420	20,260	26,380	36,770	39,125	33,576
4	LLC Saqrusenergo	Electrification work of Lentekhi Municipality :Matsatsuri, Tkhumali,Bavaria and khachemi					254	
	Total		277,605	364,059	445,316	647,541	489,235	537,896

2.7 Sensitivity Analysis.

Introduction

This chapter provides a financial risk analysis of seven major Georgian State-owned Enterprises (SOEs). The chapter first discusses the purpose of the analysis, the key assumptions underlying the analysis and the macro-economic scenarios that are modelled. The chapter then discusses the findings of the risk analysis before providing the conclusions. Appendices to the chapter provide the detailed base case financial projections and the results of the scenario analysis for the seven SOEs combined and for each SOE separately. The seven SOEs that are examined are:

1. Engurhesi;
2. Georgia Rail;
3. Georgian Oil and Gas Corporation (GOGC);
4. Georgian State Electrosystem (GSE);
5. Marabda-Kartsakhi (MK) Rail;
6. State Construction Co (SCC); and
7. United Water Supply (UWS).

These SOEs have been chosen largely because of their financial significance, with the seven SOEs accounting for 40% of the total revenue of SOEs included in SFR. ESCO and the Gas Transportation Company were to be included in the analysis but these two companies were unable to provide financial forecasts.

Objective of Scenario Analysis

The objective of the scenario analysis is to provide a high level financial assessment of some of the fiscal risks the Georgian government faces from several large SOEs over the next five years. The key question the analysis seeks to address is the financial implications for the SOEs and their ultimate shareholder, the Georgian Government, of adverse macroeconomic shocks. The shocks that are modelled are adverse shocks to GDP growth, the exchange rate and interest rates. The analysis is undertaken at a high level and the quantification of the risks is intended to be indicative rather than precise as there is inevitably uncertainty about the future financial projections and the impact of external events on each SOE.

The model includes three-year historic (2015-17) and five-year pro-forma (2018-2022) financial projections. The financial statements are a high-level Income Statement, Balance Sheet and Statement of Cash Flows. From these financial statements, key financial ratios are generated.

Economic Scenarios

The model considers six scenarios for Georgia's macroeconomic outlook:

- Scenario 1, the base-case scenario, uses each SOE's financial forecasts for the company's current and subsequent four years (i.e. 2018 to 2022);
- Scenario 2 assumes an adverse GDP shock, with GDP growing by only 1.5% in 2019 and 1.9% in 2020 (compared with the base case assumptions of growth of 4.6% and 5% in 2019 and 2020 respectively), with all other assumptions unchanged;
- Scenario 3 assumes an adverse exchange rate shock, with the Lari depreciating by 37% against other currencies in 2019, before making a small partial recovery, with all other assumptions unchanged;
- Scenario 4 assumes an adverse interest rate shock, with interest rates increasing by 200 basis points (2% points) in 2019 and remaining at their higher level, with all other assumptions unchanged;
- Scenario 5 provides a Combined Shock scenario and assumes adverse shocks to all three macroeconomic variables (GDP, exchange rate and interest rates), with the magnitude and timing of the shocks equal to the assumptions described in Scenarios 2 to 4 above; and
- Scenario 6 assumes a more severe initial adverse shock to GDP than Scenario 2, with GDP declining by 5% in 2019 (compared with the base-case assumption of 5% growth in GDP), with the other assumptions unchanged.

The assumptions underlying Scenarios 2 to 5 above are based on the IMF's Debt Sustainability Analysis (DSA) while the assumptions in Scenario 6 are based on the IMF's Fiscal Stress Test (FST) analysis for Georgia. The DSA scenarios are based on an analysis of the historical volatility in Georgia's economy and assume shocks equivalent to the largest observed adverse annual change in real GDP, the exchange rate and interest rates over the previous ten years.

It should be noted that the economic assumptions underlying Scenarios 2 to 6 outlined above are not the IMF's forecasts of the most likely development of the Georgian economy over the coming years. Rather, the scenarios are depictions of what could happen, given Georgia's recent past, in the case of adverse shocks affecting the economy. The purpose of the scenarios is to examine what would be the impact on the Georgian SOEs and their shareholder, the government, if these adverse scenarios did in fact eventuate.
The quantitative economic assumptions underlying the IMF's base-case projections for the Georgian economy are provided in Table 2 below:

Table 2. Base Case Assumptions: Article IV Projections

Base Case Assumptions	2018	2019	2020	2021	2022
Real GDP growth rate	5.0%	4.6%	5.0%	5.2%	5.2%
Exchange rate (GEL/USD)	2.53	2.62	2.58	2.55	2.55
Interest Rates					
Interest rate on GEL borrowings	8.1%	8.2%	8.6%	8.7%	8.9%
Interest rate on foreign currency (USD) borrowings	2.2%	2.0%	1.9%	1.6%	1.9%

In the base case, as indicated by the figures in Table 2 above, the Georgian economy is projected to grow by around 5% p.a. over the next five years, with the exchange rate and interest rates fluctuating somewhat but remaining relatively stable around their current levels.

The economic assumptions underlying the alternative scenarios (Scenarios 2 to 6) as described above are provided in Table 3 below:

Table 3. Alternative Scenarios Macroeconomic Assumptions

	DSA Assumptions	2018	2019	2020	2021	2022
Scenario 2	Real GDP growth rate	5.0%	1.5%	1.9%	5.2%	5.2%
Scenario 3	Exchange rate (GEL/USD)	2.53	3.58	3.52	3.48	3.48
Scenario 4	Interest Rates (floating)					
	Interest rate on GEL borrowings	8.1%	10.2%	10.6%	10.7%	10.9%
	Interest rate on foreign currency (USD) borrowings	2.2%	4.0%	3.9%	3.6%	3.9%
Scenario 5	Combined GDP, exchange rate and interest rate shocks					
	DSA Assumptions	2018	2019	2020	2021	2022
Scenario 6	Real GDP growth rate	5.0%	-5.0%	6.8%	8.0%	8.7%

The financial risk analysis is based on a medium-term (5 year) model using annual figures. As such, the analysis does not attempt or purport to capture all the financial risks facing the seven SOEs. For example, the model does not capture the following risks, even though these risks could be significant for several or all of the SOEs:

- Credit risks arising from late or defaulted payments by the SOEs' customers;
- Sector-specific risks such as changes in gas or electricity commodity prices or volumes that Engurhesi, GOGC and GSE in particular are exposed to;
- Market-share risks, as competitors increase their market share, for example through alternative forms of transport taking volumes away from Georgia Rail and MK Rail; and
- Construction and project-management risks which can be a major source of financial risk for some of the SOEs like SCC, UWS and MK Rail.

As with any model, the model is only as good as the core data and assumptions underlying it. No audit of the underlying data provided by the SOEs has been undertaken.

Results of Analysis

Base Case Projections

Before presenting the results of the scenario analysis, Table 4 below provides the base-case financial projections for the seven SOEs combined. As the table indicates:

- Net profit after tax (NPAT) is projected to be 267m Lari in 2018. NPAT is then projected to decline in 2019 (largely due to reduced financial income and increased depreciation at GOGC and increasing financing costs at MK Rail) before being projected to grow strongly over the subsequent three years;

- The return on assets of the SOEs in 2018 is expected to be only around 3%, well below the SOEs' cost of capital. The return on assets of the SOEs is projected by the SOEs to increase steadily to around 9% by 2022;

- The debt to total assets ratio for the SOEs as a group is high, at 77% in 2018. There is considerable variation in this ratio across the SOEs (with GOGC being around 44%, Georgia Rail around 56% but some, like GSE and MK Rail, being over 100%). The typically high level of debt to assets means the SOEs have little ability to withstand adverse economic shocks.

Table 4. Key Financial Indicators – Base Case

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	267	132	298	514	700
Net Worth (GEL million)	2021	2207	2425	2883	2758
Return on Equity (ROE) (%)	13%	6%	12%	18%	25%
Return on Assets (ROA) (%)	3%	4%	6%	7%	9%
Debt to Total Assets (D/(D+E)) (%)	77%	77%	75%	74%	73%
Interest Coverage (IC)	208.0	1.6	2.2	3.2	3.6
Current Ratio (CR)	2.0	1.7	1.9	2.6	3.0
Quick Ratio (QR)	1.9	1.6	1.8	2.5	3.0

The impact of the different economic shocks on the above base-case financial projections for the seven SOEs is presented below. The discussion focusses on the impact of the economic shocks on three key financial ratios for the SOEs:

- Aggregate NPAT;
- the combined net worth of the SOEs; and
- the debt-to-total assets ratio for the seven SOEs as a group.

Further details on the impact of the different economic shocks on additional financial metrics for the SOEs as a group and for each individual SOE are provided in the Annexes.

Low Growth Scenario

The low economic growth scenario envisages GDP growing by only 1.5% in 2019 and 1.9% in 2020 (compared with the base case assumptions of growth of 4.6% and 5% in 2019 and 2020 respectively). All other assumptions are unchanged from the base case. The results of the lower economic growth assumptions on the three key financial metrics noted above for the seven SOEs combined are provided in Figures 1 to 3 below. The impact is material but nowhere near as large as the impact of an exchange rate shock as discussed in the next scenario.

Figure 1. Decline in net profit after tax of SOEs in low economic growth scenario

Lower economic growth reduces the SOEs' projected NPAT by around 25 to 30 million Lari in this scenario.
NPAT is projected to recover in the out years.

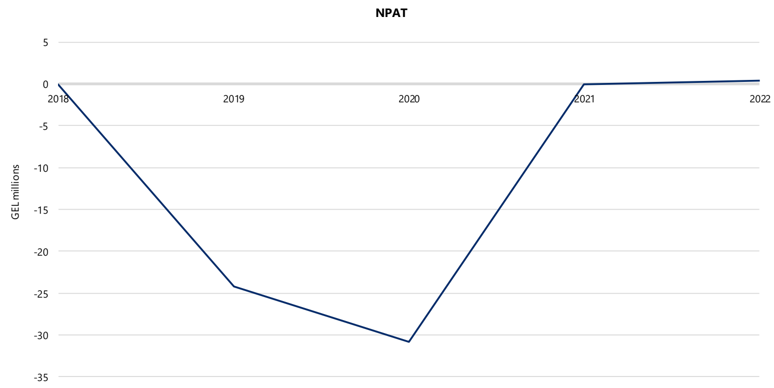


Figure 2. Decline in net worth of the SOEs in low economic growth scenario

The net worth of the SOEs declines by around 35 million Lari under the
lower economic growth scenario.

The loss of net worth is permanent.

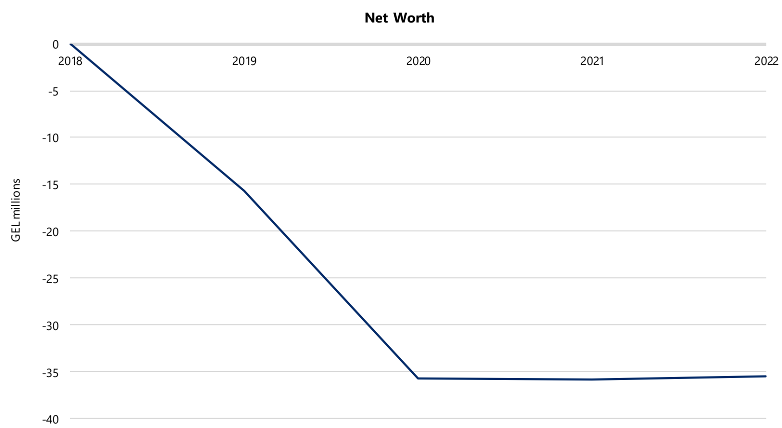
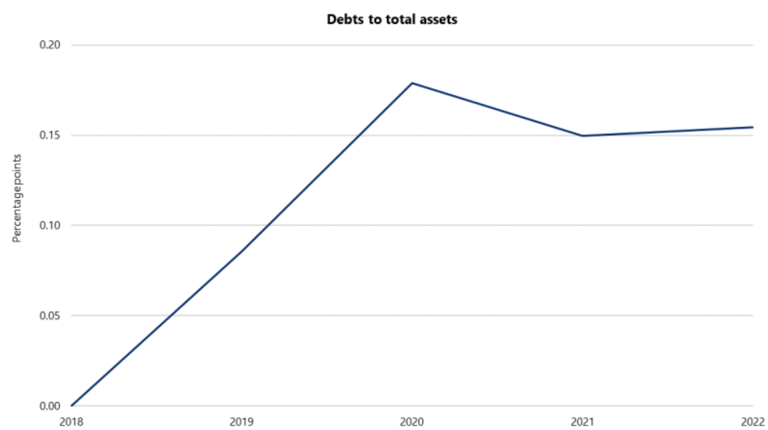


Figure 3. Increase in debt to total assets of the SOEs in low economic growth scenario

The ratio of debt to total assets for the SOEs increases only marginally in the lower economic growth scenario.



Exchange Rate Shock Scenario

In the exchange rate shock scenario, the Georgian Lari is assumed to depreciate by 37% against other currencies in 2019. The Lari is assumed to then make a small but only minor recovery over the subsequent three years. The results of the exchange rate shock on the financial performance and financial position of the SOEs are very significant, as indicated by Figures 4 to 6 below. The impact is so large because the SOEs have around 6,500 million Lari in debt, with almost all the debt denominated in foreign currencies (mainly USD and Euro). When the Lari depreciates the costs of servicing this debt increases proportionately. The effects of the exchange rate depreciation is dampened somewhat because some of the SOEs (eg, GOGC) receive revenue in foreign currency terms.

Figure 4. Decline in net profit after tax of SOEs in exchange rate shock scenario

The exchange rate shock has a major impact on the SOEs' projected net profit after tax (NPAT). NPAT is projected to decline by around 2,150 million Lari. This is a very large impact and arises from the SOEs' large holdings of foreign currency denominated debt.

The reduction in NPAT of the seven SOEs is equivalent to 5% of GDP.

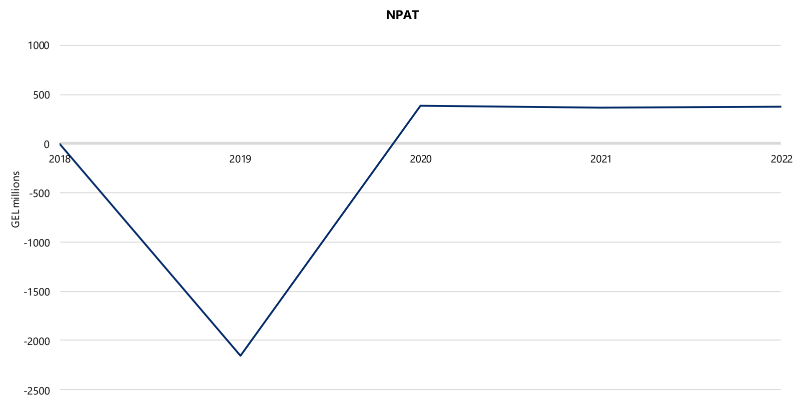


Figure 5. Decline in net worth of the SOEs in exchange rate shock scenario

The exchange rate shock results in the net worth of the SOEs declining by a similar amount as the decline in NPAT, ie around 2,200 million Lari.

Most of the decline in net worth is permanent. A partial recovery in net worth occurs as the Lari is assumed to recover somewhat against other currencies after the initial shock.

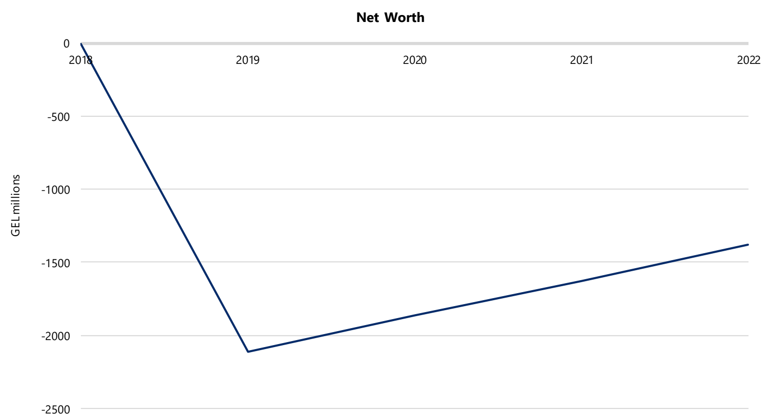
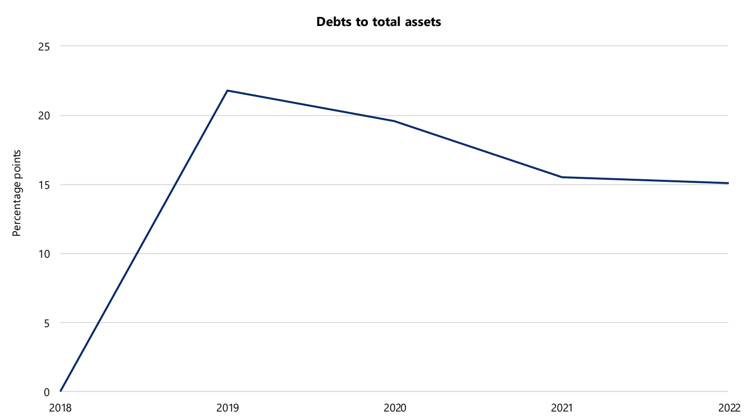


Figure 6. Increase in debt to total assets of the SOEs in exchange rate shock scenario

The ratio of debt to total assets of the SOEs combined increases by over 20 percentage points in the exchange rate shock scenario.

In the base case, the average debt to total assets ratio for the SOEs is 77% in 2019. Exchange rate shock results in debt to total assets increasing to almost 100%.

The increase in debt is equivalent to 5% of GDP.



Interest Rate Shock Scenario

In the interest rate shock scenario, interest rates are assumed to increase by 2 percentage points in 2019 and remain at their higher level, with all other assumptions unchanged from the base case. The results of the interest rate shock on the financial metrics for the SOEs are presented in Figures 7 to 9 below. The impact is material but nowhere near as significant as the impact of the exchange rate shock. The impact of higher interest rates is dampened by many of the SOEs having large parts of their debt portfolio at fixed interest rates which are sheltered from the increase in interest rates for the term over which the rates are fixed.

Figure 7. Decline in net profit after tax of SOEs in interest rate shock scenario

The increase in interest rates reduces the SOEs' projected NPAT by 24 to 33 million Lari p.a. over the period.

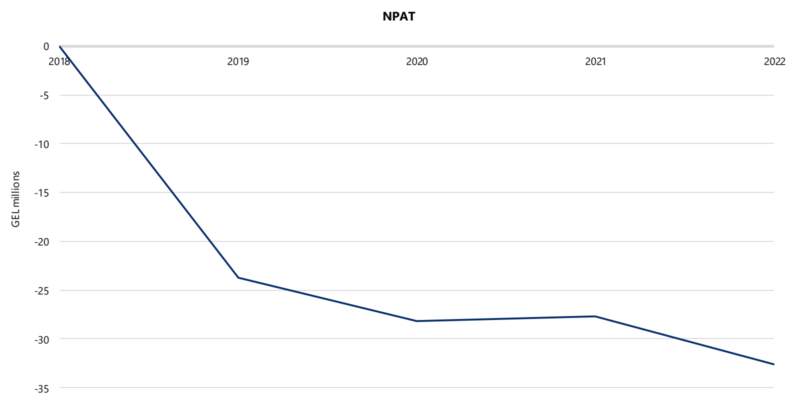


Figure 8. Decline in net worth of the SOEs in interest rate shock scenario

The net worth of the SOEs declines by around 73 million Lari under the higher interest rate scenario.

The loss of net worth is permanent.

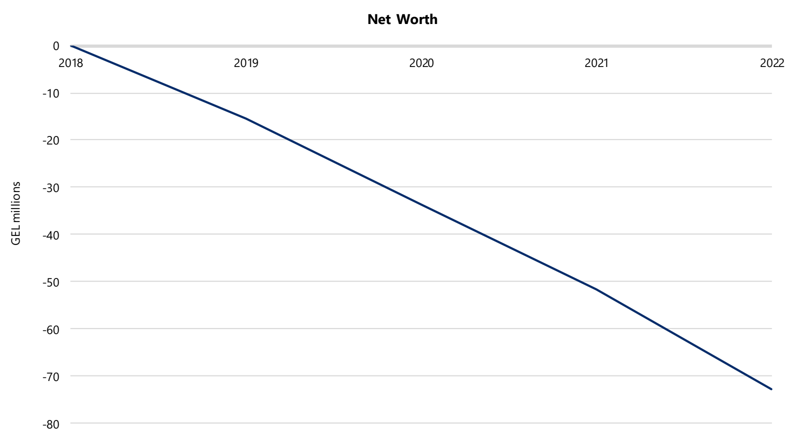
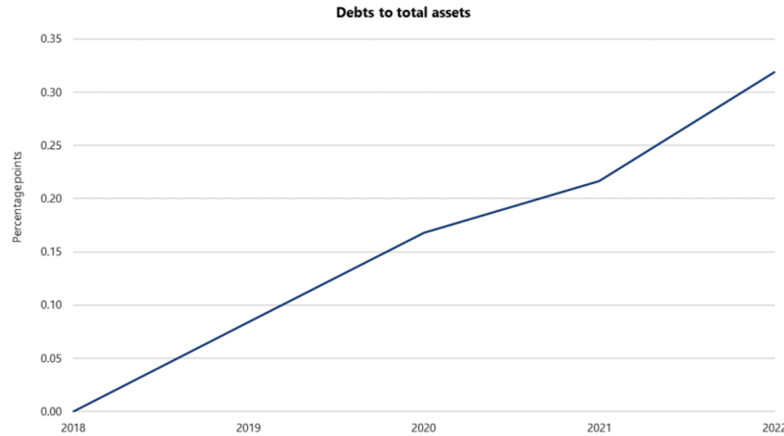


Figure 9. Increase in debt to total assets of the SOEs in interest rate shock scenario

There is only a very small increase in the ratio of debt to total assets of the SOEs in the interest rate shock scenario.



Combined Shock Scenario

In the Combined Shock scenario, there are assumed to be adverse shocks to all three macroeconomic variables (GDP, exchange rate and interest rates), with the magnitude and timing of the shocks as described in the scenarios above. The results of the combined economic shocks on the financial performance and financial position of the SOEs is very significant, largely because of the exchange rate effect noted above. The magnitude of the impacts is presented in Figures 10 to 12 below.

Figure 10. Decline in net profit after tax of SOEs in combined shock scenario

The combination of lower economic growth, a lower exchange rate and higher interest rates has a major impact on the SOEs' net profit.

NPAT is projected to decline by around 2,200 million Lari in the combined shock scenario. This decline is equivalent to over 5% of GDP.

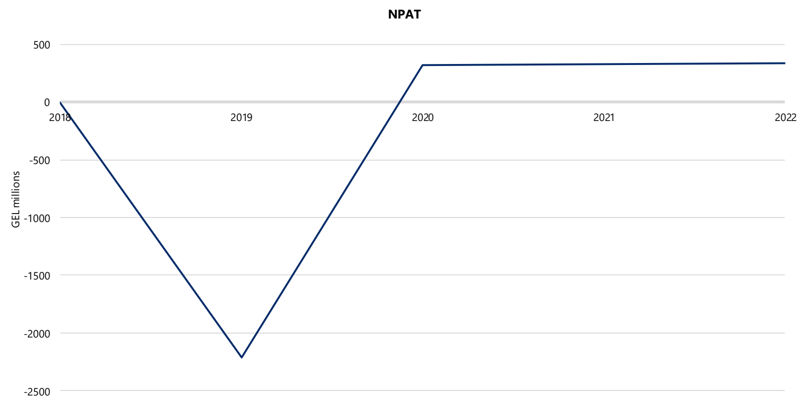


Figure 11. Decline in net worth of the SOES in combined shock scenario

The net worth of the SOEs declines by around 2,200 million Lari in the combined shock scenario.

This very large loss of net worth is partially recovered in the subsequent years as the Lari is assumed to gradually appreciate.

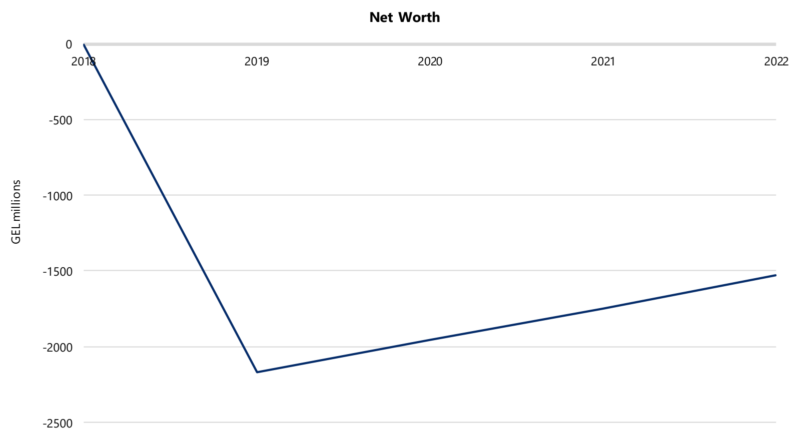
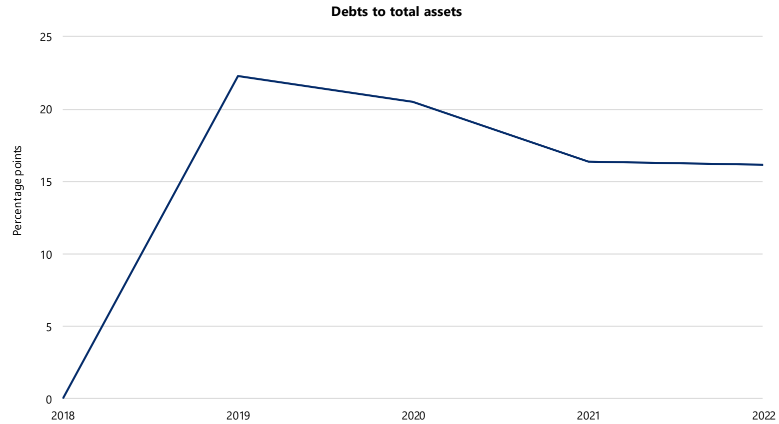


Figure 12. Increase in debt to total assets of the SOES in combined shock scenario

The ratio of debt to total assets of the SOEs combined increases by 22 percentage points in the combined shock scenario.

In the base case, the average debt to total assets ratio is 77% in 2019. The combined economic shocks result in debt to total assets increasing to 100%.



Major Economic Downturn Scenario

In the last scenario the impacts of a severe adverse shock to the economy are considered, with GDP declining by 5% in 2019 (compared with the base-case assumption of 5% growth in GDP). GDP is then assumed to recover strongly over the subsequent three years.

Figure 13. Decline in net profit after tax of SOEs in major economic downturn scenario

The major economic growth shock reduces the SOEs' projected net profit after tax (NPAT) by around 75 million Lari.
NPAT is projected to recover in the out years.

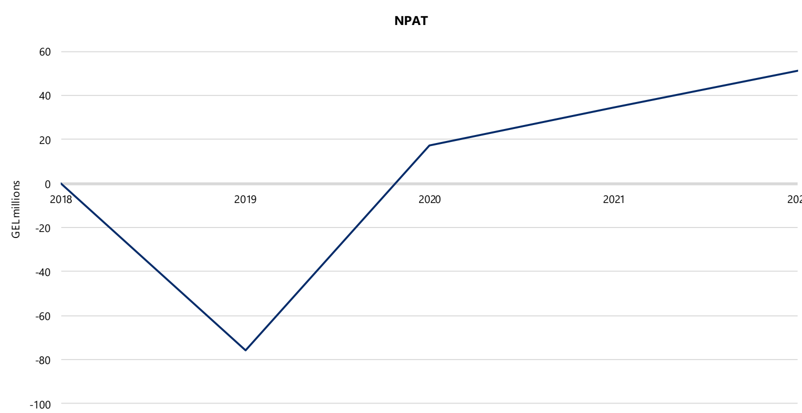


Figure 14. Decline in net worth of the SOES in major economic downturn scenario

The net worth of the SOEs declines by around 50 million Lari under the major economic growth shock scenario.

The net worth of the SOEs recovers in the outyears.

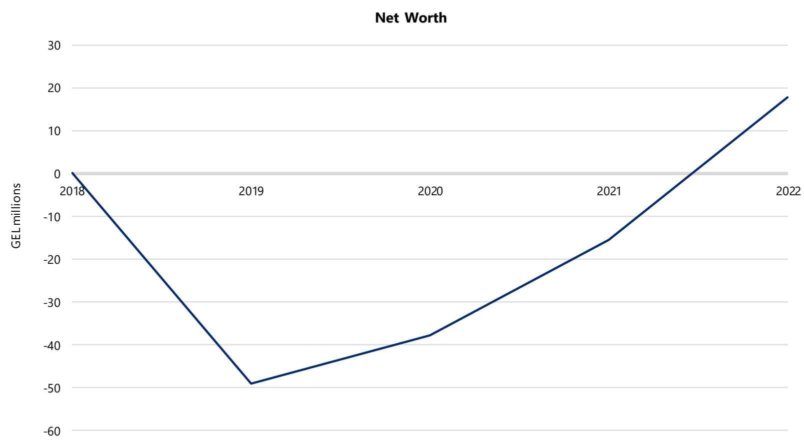
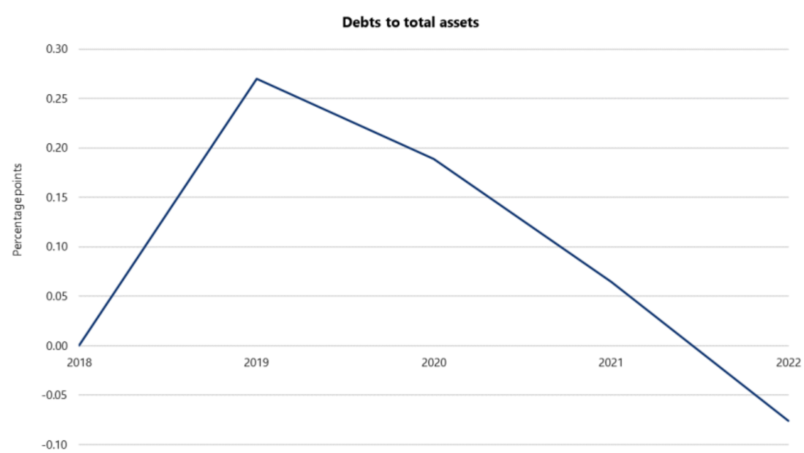


Figure 15. Increase in debt to total assets of the SOES in major economic downturn scenario

The economic shock has only a small effect on the ratio of debt to total assets of the SOEs.



Conclusions

The base case financial projections indicate the SOEs as a group are not currently achieving their cost of capital. While the SOEs project this situation to improve over the next five years, their high levels of debt to total assets (at over 75% on average) means they are highly exposed to adverse economic shocks. That most of their current 6,500 million Lari of debt is denominated in foreign currencies means the SOEs and their ultimate owner, the government, is highly exposed to a depreciation in the exchange rate.

The analysis highlights that this foreign exchange risk is by far the main macroeconomic risk the SOEs as a group face. While the smallest SOE, the State Construction Company has no debt, all the large SOEs are highly exposed to changes in the exchange rate. The analysis indicates that the impact of a major foreign exchange shock on the major SOEs is very large. The adverse impact on their combined NPAT and net worth and debt is over 2,000 million Lari and the companies' average debt to total asset increases by over 20 percentage points. The impact on NPAT is equal to around 5% of Georgia's GDP.

The analysis indicates that the SOEs are much less exposed to a downturn in the economy or higher interest rates. However, the impact of higher interest rates is still material (over 30 million Lari impact on NPAT). Further, any major economic downturn or sharp increase in interest rates is likely to be accompanied by a decline in the exchange rate, with the resulting large negative effects as shown in this report.

Annex 1: Financial Risk Analysis for the Seven SOEs Combined

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	267	132	298	514	700
Net Worth (GEL million)	2,021	2,207	2,425	2,883	2,758
Return on Equity (ROE) (%)	13%	6%	12%	18%	25%
Return on Assets (ROA) (%)	3%	4%	6%	7%	9%
Debt to Total Assets (D/(D+E)) (%)	77%	77%	75%	74%	73%
Interest Coverage (IC)	208.0	1.6	2.2	3.2	3.6
Current Ratio (CR)	2.0	1.7	1.9	2.6	3.0
Quick Ratio (QR)	1.9	1.6	1.8	2.5	3.0

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	267	108	267	514	700
Net Worth (GEL million)	2,021	2,192	2,389	2,847	2,722
Return on Equity (ROE) (%)	13%	5%	11%	18%	26%
Return on Assets (ROA) (%)	3%	3%	5%	7%	9%
Debt to Total Assets (D/(D+E)) (%)	77%	77%	75%	74%	73%
Interest Coverage (IC)	208.0	1.5	2.1	3.2	3.6
Current Ratio (CR)	2.0	1.7	1.8	2.5	3.0
Quick Ratio (QR)	1.9	1.6	1.8	2.4	2.9

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	267	-2,026	681	878	1,079
Net Worth (GEL million)	2,021	96	562	1,257	1,378
Return on Equity (ROE) (%)	13%	-2113%	121%	70%	78%
Return on Assets (ROA) (%)	3%	6%	9%	10%	12%
Debt to Total Assets (D/(D+E)) (%)	77%	99%	95%	90%	88%
Interest Coverage (IC)	208.0	0.2	4.8	4.7	4.1
Current Ratio (CR)	2.0	1.9	2.5	3.6	4.5
Quick Ratio (QR)	1.9	1.8	2.4	3.5	4.4

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	267	108	270	486	667
Net Worth (GEL million)	2,021	2,192	2,391	2,831	2,685
Return on Equity (ROE) (%)	13%	5%	11%	17%	25%
Return on Assets (ROA) (%)	3%	4%	6%	7%	9%
Debt to Total Assets (D/(D+E)) (%)	77%	77%	75%	74%	74%
Interest Coverage (IC)	208.0	1.5	2.0	2.8	3.2
Current Ratio (CR)	2.0	1.7	1.9	2.5	2.9
Quick Ratio (QR)	1.9	1.6	1.8	2.4	2.8

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	267	-2,081	617	840	1,035
Net Worth (GEL million)	2,021	40	465	1,136	1,229
Return on Equity (ROE) (%)	13%	-5142%	133%	74%	84%
Return on Assets (ROA) (%)	3%	6%	8%	10%	12%
Debt to Total Assets (D/(D+E)) (%)	77%	100%	95%	90%	89%
Interest Coverage (IC)	208.0	0.2	3.8	4.0	3.6
Current Ratio (CR)	2.0	1.8	2.4	3.4	4.3
Quick Ratio (QR)	1.9	1.8	2.3	3.3	4.2

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	267	56	315	549	751
Net Worth (GEL million)	2,021	2,158	2,387	2,868	2,776
Return on Equity (ROE) (%)	13%	3%	13%	19%	27%
Return on Assets (ROA) (%)	3%	3%	6%	8%	10%
Debt to Total Assets (D/(D+E)) (%)	77%	78%	75%	74%	73%
Interest Coverage (IC)	208.0	1.3	2.3	3.3	3.8
Current Ratio (CR)	2.0	1.6	1.8	2.5	3.1
Quick Ratio (QR)	1.9	1.5	1.8	2.5	3.0

Annex 2: Engurhesi

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-8	-17	-10	-8
Net Worth (GEL million)	170	162	145	136	128
Return on Equity (ROE) (%)	3%	-5%	-11%	-7%	-6%
Return on Assets (ROA) (%)	3%	2%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	53%	53%	49%	48%
Interest Coverage (IC)	1.8	0.4	0.0	0.4	0.5
Current Ratio (CR)	10.0	-150.0	-457.8	-574.0	-708.5
Quick Ratio (QR)	7.9	-154.6	-462.0	-578.0	-712.9

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-9	-17	-10	-8
Net Worth (GEL million)	170	161	144	134	126
Return on Equity (ROE) (%)	3%	-5%	-12%	-7%	-6%
Return on Assets (ROA) (%)	3%	1%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	53%	53%	49%	48%
Interest Coverage (IC)	1.8	0.4	-0.1	0.4	0.5
Current Ratio (CR)	10.0	-152.5	-462.6	-578.5	-713.5
Quick Ratio (QR)	7.9	-157.2	-466.8	-582.5	-717.9

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-11	-20	-13	-11
Net Worth (GEL million)	170	159	138	125	114
Return on Equity (ROE) (%)	3%	-7%	-15%	-10%	-9%
Return on Assets (ROA) (%)	3%	2%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	53%	54%	51%	51%
Interest Coverage (IC)	1.8	0.3	0.0	0.3	0.4
Current Ratio (CR)	10.0	-162.2	-485.8	-611.8	-761.2
Quick Ratio (QR)	7.9	-166.9	-490.0	-615.8	-765.6

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-58	-21	-14	-13
Net Worth (GEL million)	170	112	91	77	65
Return on Equity (ROE) (%)	3%	-52%	-23%	-18%	-19%
Return on Assets (ROA) (%)	3%	2%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	67%	70%	70%	72%
Interest Coverage (IC)	1.8	0.1	0.0	0.3	0.3
Current Ratio (CR)	10.0	-150.0	-474.9	-605.7	-761.6
Quick Ratio (QR)	7.9	-154.6	-479.1	-609.7	-766.0

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-11	-20	-13	-11
Net Worth (GEL million)	170	159	138	125	114
Return on Equity (ROE) (%)	3%	-7%	-15%	-10%	-9%
Return on Assets (ROA) (%)	3%	2%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	53%	54%	51%	51%
Interest Coverage (IC)	1.8	0.3	0.0	0.3	0.4
Current Ratio (CR)	10.0	-162.2	-485.8	-611.8	-761.2
Quick Ratio (QR)	7.9	-166.9	-490.0	-615.8	-765.6

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-62	-26	-18	-16
Net Worth (GEL million)	170	108	82	64	47
Return on Equity (ROE) (%)	3%	-58%	-32%	-28%	-35%
Return on Assets (ROA) (%)	3%	1%	0%	2%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	68%	72%	74%	78%
Interest Coverage (IC)	1.8	0.1	0.0	0.3	0.3
Current Ratio (CR)	10.0	-164.8	-511.8	-655.3	-831.5
Quick Ratio (QR)	7.9	-169.4	-516.0	-659.3	-835.9

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	5	-10	-16	-9	-7
Net Worth (GEL million)	170	160	143	134	127
Return on Equity (ROE) (%)	3%	-6%	-11%	-7%	-6%
Return on Assets (ROA) (%)	3%	1%	0%	3%	3%
Debt to Total Assets (D/(D+E)) (%)	53%	53%	53%	49%	48%
Interest Coverage (IC)	1.8	0.3	0.0	0.4	0.5
Current Ratio (CR)	10.0	-158.0	-465.6	-578.8	-710.5
Quick Ratio (QR)	7.9	-162.6	-469.8	-582.8	-714.9

Annex 3: Georgia Rail

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	29	54	123	207	249
Net Worth (GEL million)	1,274	1,308	1,388	1,522	1,684
Return on Equity (ROE) (%)	2%	4%	9%	14%	15%
Return on Assets (ROA) (%)	3%	4%	6%	8%	9%
Debt to Total Assets (D/(D+E)) (%)	56%	56%	56%	55%	55%
Interest Coverage (IC)	1.6	1.8	3.1	4.2	4.6
Current Ratio (CR)	1.7	1.3	2.1	3.5	5.3
Quick Ratio (QR)	1.6	1.3	2.0	3.5	5.2

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	29	45	112	207	249
Net Worth (GEL million)	1,274	1,303	1,375	1,510	1,671
Return on Equity (ROE) (%)	2%	3%	8%	14%	15%
Return on Assets (ROA) (%)	3%	4%	6%	8%	9%
Debt to Total Assets (D/(D+E)) (%)	56%	56%	56%	55%	55%
Interest Coverage (IC)	1.6	1.6	2.9	4.2	4.6
Current Ratio (CR)	1.7	1.3	1.9	3.4	5.1
Quick Ratio (QR)	1.6	1.2	1.9	3.3	5.0

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	29	-323	313	427	482
Net Worth (GEL million)	1,274	950	1,154	1,431	1,745
Return on Equity (ROE) (%)	2%	-34%	27%	30%	28%
Return on Assets (ROA) (%)	3%	9%	11%	13%	13%
Debt to Total Assets (D/(D+E)) (%)	56%	69%	67%	65%	63%
Interest Coverage (IC)	1.6	0.5	7.6	7.6	6.8
Current Ratio (CR)	1.7	1.9	3.9	7.6	12.3
Quick Ratio (QR)	1.6	1.8	3.8	7.6	12.2

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	29	52	121	205	247
Net Worth (GEL million)	1,274	1,307	1,386	1,519	1,679
Return on Equity (ROE) (%)	2%	4%	9%	13%	15%
Return on Assets (ROA) (%)	3%	4%	6%	8%	9%
Debt to Total Assets (D/(D+E)) (%)	56%	56%	56%	55%	55%
Interest Coverage (IC)	1.6	1.7	3.0	4.1	4.5
Current Ratio (CR)	1.7	1.3	2.0	3.5	5.2
Quick Ratio (QR)	1.6	1.3	2.0	3.4	5.1

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	29	-339	295	424	479
Net Worth (GEL million)	1,274	934	1,126	1,402	1,713
Return on Equity (ROE) (%)	2%	-36%	26%	30%	28%
Return on Assets (ROA) (%)	3%	9%	10%	13%	13%
Debt to Total Assets (D/(D+E)) (%)	56%	70%	68%	65%	63%
Interest Coverage (IC)	1.6	0.4	6.9	7.3	6.5
Current Ratio (CR)	1.7	1.8	3.7	7.4	11.9
Quick Ratio (QR)	1.6	1.8	3.6	7.3	11.8

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	29	26	129	219	266
Net Worth (GEL million)	1,274	1,290	1,374	1,516	1,689
Return on Equity (ROE) (%)	2%	2%	9%	14%	16%
Return on Assets (ROA) (%)	3%	3%	6%	9%	9%
Debt to Total Assets (D/(D+E)) (%)	56%	56%	56%	55%	55%
Interest Coverage (IC)	1.6	1.4	3.1	4.4	4.8
Current Ratio (CR)	1.7	1.2	1.9	3.5	5.3
Quick Ratio (QR)	1.6	1.1	1.9	3.4	5.2

Annex 4: Georgian Oil and Gas Corporation

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	136	87	208	200	307
Net Worth (GEL million)	1,037	1,115	1,271	1,423	1,644
Return on Equity (ROE) (%)	13%	8%	16%	14%	19%
Return on Assets (ROA) (%)	7%	7%	11%	9%	12%
Debt to Total Assets (D/(D+E)) (%)	44%	45%	53%	57%	57%
Interest Coverage (IC)	-10.4	2.9	5.0	3.4	3.8
Current Ratio (CR)	5.4	4.3	5.8	6.7	7.0
Quick Ratio (QR)	5.3	4.2	5.7	6.6	6.9

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	136	79	195	200	308
Net Worth (GEL million)	1,037	1,110	1,258	1,410	1,631
Return on Equity (ROE) (%)	13%	7%	16%	14%	19%
Return on Assets (ROA) (%)	7%	6%	10%	9%	12%
Debt to Total Assets (D/(D+E)) (%)	44%	45%	53%	57%	57%
Interest Coverage (IC)	-10.4	2.7	4.8	3.4	3.8
Current Ratio (CR)	5.4	4.2	5.6	6.6	6.9
Quick Ratio (QR)	5.3	4.1	5.6	6.5	6.8

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	136	-27	345	342	502
Net Worth (GEL million)	1,037	1,032	1,277	1,521	1,869
Return on Equity (ROE) (%)	13%	-3%	27%	22%	27%
Return on Assets (ROA) (%)	7%	11%	16%	13%	15%
Debt to Total Assets (D/(D+E)) (%)	44%	50%	57%	59%	58%
Interest Coverage (IC)	-10.4	0.9	8.0	4.9	5.0
Current Ratio (CR)	5.4	4.6	6.9	8.5	9.4
Quick Ratio (QR)	5.3	4.5	6.9	8.4	9.4

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	136	87	205	195	300
Net Worth (GEL million)	1,037	1,115	1,270	1,418	1,635
Return on Equity (ROE) (%)	13%	8%	16%	14%	18%
Return on Assets (ROA) (%)	7%	7%	11%	9%	12%
Debt to Total Assets (D/(D+E)) (%)	44%	45%	53%	57%	57%
Interest Coverage (IC)	-10.4	2.9	4.7	3.2	3.6
Current Ratio (CR)	5.4	4.3	5.8	6.6	6.9
Quick Ratio (QR)	5.3	4.2	5.7	6.6	6.9

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	136	-38	324	336	495
Net Worth (GEL million)	1,037	1,021	1,253	1,493	1,836
Return on Equity (ROE) (%)	13%	-4%	26%	23%	27%
Return on Assets (ROA) (%)	7%	11%	15%	13%	16%
Debt to Total Assets (D/(D+E)) (%)	44%	51%	57%	60%	58%
Interest Coverage (IC)	-10.4	0.8	7.1	4.6	4.7
Current Ratio (CR)	5.4	4.6	6.7	8.3	9.2
Quick Ratio (QR)	5.3	4.5	6.7	8.2	9.2

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	136	61	216	213	329
Net Worth (GEL million)	1,037	1,098	1,259	1,419	1,655
Return on Equity (ROE) (%)	13%	6%	17%	15%	20%
Return on Assets (ROA) (%)	7%	6%	11%	10%	12%
Debt to Total Assets (D/(D+E)) (%)	44%	45%	53%	57%	57%
Interest Coverage (IC)	-10.4	2.3	5.2	3.6	4.0
Current Ratio (CR)	5.4	4.1	5.7	6.6	7.1
Quick Ratio (QR)	5.3	4.0	5.6	6.6	7.0

Annex 5: Georgian State Electrosystem

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	68	38	43	104	99
Net Worth (GEL million)	-111	-86	-59	9	74
Return on Equity (ROE) (%)	nmf	nmf	-73%	1171%	135%
Return on Assets (ROA) (%)	9%	7%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	105%	102%	100%	98%
Interest Coverage (IC)	2.9	1.5	1.5	1.9	1.8
Current Ratio (CR)	0.3	1.3	1.8	2.1	1.9
Quick Ratio (QR)	0.3	1.2	1.7	2.0	1.9

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	68	33	36	104	100
Net Worth (GEL million)	-111	-90	-66	1	66
Return on Equity (ROE) (%)	nmf	nmf	-55%	7486%	151%
Return on Assets (ROA) (%)	9%	7%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	105%	103%	100%	98%
Interest Coverage (IC)	2.9	1.5	1.4	1.9	1.8
Current Ratio (CR)	0.3	1.3	1.7	2.0	1.9
Quick Ratio (QR)	0.3	1.2	1.7	2.0	1.8

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	68	-412	57	108	81
Net Worth (GEL million)	-111	-523	-486	-416	-363
Return on Equity (ROE) (%)	nmf	nmf	-12%	-26%	-22%
Return on Assets (ROA) (%)	9%	7%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	128%	120%	115%	112%
Interest Coverage (IC)	2.9	0.2	1.8	2.0	1.6
Current Ratio (CR)	0.3	1.3	1.7	2.0	1.8
Quick Ratio (QR)	0.3	1.2	1.7	1.9	1.7

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	68	26	35	93	87
Net Worth (GEL million)	-111	-94	-71	-11	46
Return on Equity (ROE) (%)	nmf	nmf	-49%	-879%	189%
Return on Assets (ROA) (%)	9%	7%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	105%	103%	100%	98%
Interest Coverage (IC)	2.9	1.3	1.4	1.8	1.6
Current Ratio (CR)	0.3	1.3	1.7	2.0	1.8
Quick Ratio (QR)	0.3	1.2	1.7	1.9	1.8

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	68	-429	41	95	67
Net Worth (GEL million)	-111	-540	-513	-451	-408
Return on Equity (ROE) (%)	nmf	nmf	-8%	-21%	-16%
Return on Assets (ROA) (%)	9%	7%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	129%	121%	116%	114%
Interest Coverage (IC)	2.9	0.2	1.5	1.8	1.4
Current Ratio (CR)	0.3	1.2	1.6	1.8	1.6
Quick Ratio (QR)	0.3	1.2	1.6	1.8	1.6

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	68	21	46	112	110
Net Worth (GEL million)	-111	-97	-67	6	77
Return on Equity (ROE) (%)	nmf	nmf	-69%	1962%	142%
Return on Assets (ROA) (%)	9%	6%	6%	8%	8%
Debt to Total Assets (D/(D+E)) (%)	109%	105%	103%	100%	97%
Interest Coverage (IC)	2.9	1.3	1.5	2.0	1.9
Current Ratio (CR)	0.3	1.2	1.7	2.1	1.9
Quick Ratio (QR)	0.3	1.2	1.7	2.0	1.9

Annex 6: Marabda-Kartsakhi Rail

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-5	n/a	n/a	n/a
Net Worth (GEL million)	-476	-481	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	134%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	128.3	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

Debt Shock Analysis Scenarios:

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-5	n/a	n/a	n/a
Net Worth (GEL million)	-476	-481	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	134%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	128.3	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-831	n/a	n/a	n/a
Net Worth (GEL million)	-476	-1307	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	192%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	0.0	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-5	n/a	n/a	n/a
Net Worth (GEL million)	-476	-481	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	134%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	128.3	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-831	n/a	n/a	n/a
Net Worth (GEL million)	-476	-1307	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	192%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	0.0	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

Stress Test Scenarios:

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	52	-5	n/a	n/a	n/a
Net Worth (GEL million)	-476	-481	n/a	n/a	n/a
Return on Equity (ROE) (%)	nmf	nmf	n/a	n/a	n/a
Return on Assets (ROA) (%)	0%	0%	n/a	n/a	n/a
Debt to Total Assets (D/(D+E)) (%)	137%	134%	n/a	n/a	n/a
Interest Coverage (IC)	0.1	128.3	n/a	n/a	n/a
Current Ratio (CR)	240.9	233.2	n/a	n/a	n/a
Quick Ratio (QR)	240.9	233.2	n/a	n/a	n/a

Annex 7: State Construction Company

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	4	7
Net Worth (GEL million)	74	74	76	78	83
Return on Equity (ROE) (%)	-1%	1%	3%	6%	8%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	23.2	-42.0	-23.1	-17.3
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.8
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

Debt Shock Analysis Scenarios

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	4	7
Net Worth (GEL million)	74	74	75	78	82
Return on Equity (ROE) (%)	-1%	0%	3%	6%	8%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	12.9	-41.1	-25.0	-17.9
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.8
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	4	7
Net Worth (GEL million)	74	74	75	78	83
Return on Equity (ROE) (%)	-1%	0%	3%	6%	8%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	2.5	-30.2	-21.0	-17.3
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.8
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	4	7
Net Worth (GEL million)	74	74	75	78	83
Return on Equity (ROE) (%)	-1%	1%	3%	6%	8%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	16.7	-49.9	-24.2	-17.7
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.8
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	4	7
Net Worth (GEL million)	74	74	75	78	82
Return on Equity (ROE) (%)	-1%	0%	3%	6%	8%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	1.4	-31.8	-23.4	-18.4
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.8
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

Stress Test Scenarios

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	-1	0	2	5	7
Net Worth (GEL million)	74	74	75	78	83
Return on Equity (ROE) (%)	-1%	0%	3%	6%	9%
Return on Assets (ROA) (%)	-1%	0%	2%	3%	4%
Debt to Total Assets (D/(D+E)) (%)	33%	38%	42%	45%	52%
Interest Coverage (IC)	6.0	-9.0	-65.8	-26.8	-18.9
Current Ratio (CR)	2.3	2.3	2.3	2.6	2.9
Quick Ratio (QR)	2.1	2.0	2.1	2.3	2.5

Annex 8: United Water Supply

Base Case	2018	2019	2020	2021	2022
NPAT (GEL million)	-37	-34	-41	-47	-24
Net Worth (GEL million)	82	127	171	226	-400
Return on Equity (ROE) (%)	-45%	-27%	-24%	-21%	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	92%	90%	89%	87%	-685%
Interest Coverage (IC)	-1.6	-2.2	-1.6	-1.4	0.0
Current Ratio (CR)	2.0	2.1	2.0	1.6	nmf
Quick Ratio (QR)	2.0	2.0	1.9	1.4	nmf

Debt Shock Analysis Scenarios

DSA Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	-37	-34	-42	-47	-24
Net Worth (GEL million)	82	127	170	225	-401
Return on Equity (ROE) (%)	-45%	-27%	-25%	-21%	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	92%	90%	89%	87%	-673%
Interest Coverage (IC)	-1.6	-2.2	-1.6	-1.4	0.0
Current Ratio (CR)	2.0	2.1	2.0	1.6	nmf
Quick Ratio (QR)	2.0	2.0	1.9	1.4	nmf

DSA Exchange Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	-57	-361	-21	-36	-29
Net Worth (GEL million)	62	-220	-156	-90	-721
Return on Equity (ROE) (%)	-92%	nmf	nmf	nmf	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	94%	117%	110%	105%	-995%
Interest Coverage (IC)	-0.7	-0.1	6.6	-3.2	0.0
Current Ratio (CR)	2.0	2.1	2.0	1.4	nmf
Quick Ratio (QR)	2.0	2.0	1.8	1.2	nmf

DSA Interest Rate Shock	2018	2019	2020	2021	2022
NPAT (GEL million)	-37	-37	-46	-53	-31
Net Worth (GEL million)	82	124	163	213	-419
Return on Equity (ROE) (%)	-45%	-30%	-28%	-25%	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	92%	91%	89%	88%	-493%
Interest Coverage (IC)	-1.6	-1.7	-1.2	-1.1	0.0
Current Ratio (CR)	2.0	2.1	1.9	1.4	nmf
Quick Ratio (QR)	2.0	2.0	1.8	1.2	nmf

DSA Combined Shocks	2018	2019	2020	2021	2022
NPAT (GEL million)	-57	-365	-28	-43	-37
Net Worth (GEL million)	62	-224	-166	-107	-745
Return on Equity (ROE) (%)	-92%	nmf	nmf	nmf	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	94%	117%	111%	106%	-722%
Interest Coverage (IC)	-0.7	-0.1	-12.5	-1.8	0.0
Current Ratio (CR)	2.0	2.1	1.9	1.2	nmf
Quick Ratio (QR)	2.0	2.0	1.7	1.0	nmf

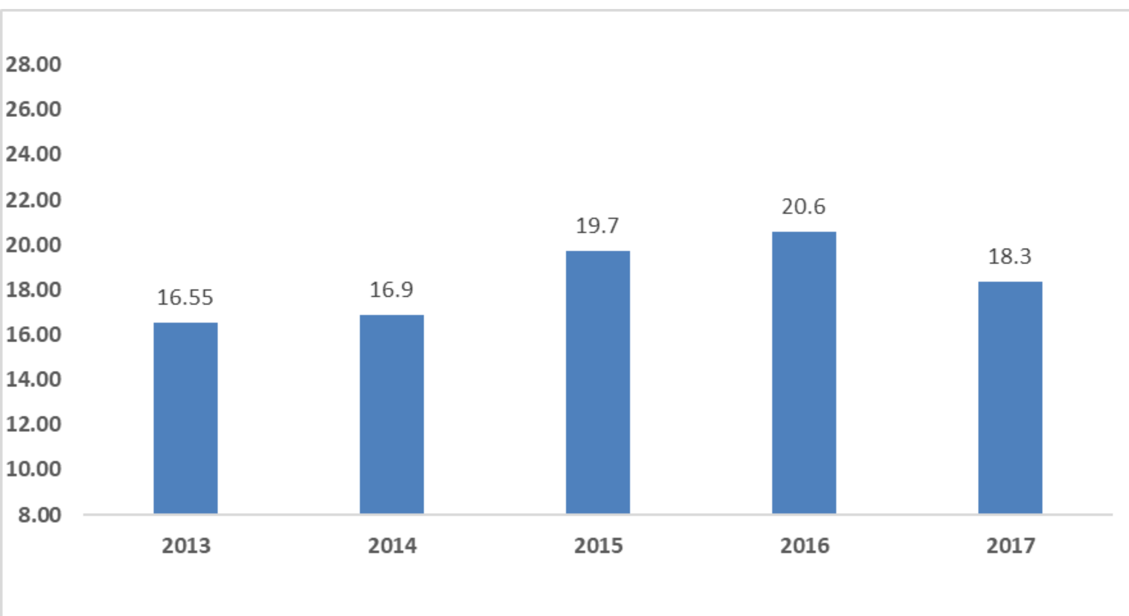
Stress Test Scenarios

Stress Test Lower Growth	2018	2019	2020	2021	2022
NPAT (GEL million)	-37	-35	-41	-47	-24
Net Worth (GEL million)	82	126	170	226	-400
Return on Equity (ROE) (%)	-45%	-28%	-24%	-21%	nmf
Return on Assets (ROA) (%)	-2%	-2%	-2%	-2%	0%
Debt to Total Assets (D/(D+E)) (%)	92%	90%	89%	87%	-676%
Interest Coverage (IC)	-1.6	-2.3	-1.6	-1.4	0.0
Current Ratio (CR)	2.0	2.1	2.0	1.6	nmf
Quick Ratio (QR)	2.0	2.0	1.9	1.4	nmf

2.8. government-owned companies financial indicators

In order to asses current financial situation of government companies, the ministry of finances created a questionnaire, which was later sent to municipal and central governments' companies. Companies were also asked to present other major factors that could cause the fiscal risks. These reports were presented by 68 companies.

Table 3 shows the part of government companies credit responsibilities to country's GDP



Compared to the last year in 2017, state companies have a 10 percent increase. Expenditure increases are higher than revenue and include 12 percent. The aggregate loss amounted to 562.1 million lari by 2017 and in the year 2016 - 434.7 mln lari as a result losses have increased by 127.4 mln lari.

However, it is noteworthy that the loss of assets by the audit company has caused damage. Specifically, in case of Georgian Railway Audit Company KPMG was recognized as a cash asset of 382.6 million lari building in 2010-2012 and in case of Georgian State Electricity 250.1 million GEL.

According to the results of 2017, net profit is 70.6 million lari and is estimated to be 434.8 more million compared to 2016.

The share of losses in 2017 comes to such companies as Georgian Railway, EnergoTrans, United Water Supply Company of Georgia. Besides, Marabda-Kartsakhi Railway completed the year 2017 with a profit, even though the company has no operating income. Information about financial indicators of these companies is detailed below.

At the aggregate level in 2017, the turnover of companies was negative and was - 11%.

The cost of state enterprises' assets decreased by 3% by 2017, capital declined by 7% and liabilities decreased by 0.4%. It is noteworthy that by 2016 the increase in liabilities amounted to 12%. It should be noted that the share of Marabda-Kartsakhi railway liabilities of the LLC is 28% of the total liabilities of 68 enterprises discussed in the analysis. Accordingly, the company is significantly worse in the part of the coefficients of liabilities and liabilities of the total state enterprises. The ratio of the liabilities of the state enterprises to the corporation increased from 123% in 2016 to 132% in 2017. If you take out the Marabda-Kartsakhi Railway indicator from the analysis, then this indicator is 85%, which is normal and manageable.

Table 1. Total financial results of state-owned 68 enterprises (including LLC Marabda-Kartsakhi Railway)

68 compound indicator of enterprise	2012	2013	2014	2015	2016	2017
Revenues	1,983,172.1	2,090,639.6	2,259,622.4	2,738,563.4	3,161,586.4	3,468,187.4
Expenses	1,796,140.4	2,068,644.0	2,298,360.0	3,494,488.8	3,608,885.7	4,025,331.0
Net profit after tax	151,485.3	-45,096.5	-61,067.2	-757,076.8	-441,242.8	-562,937.0
Profitability						

Increase in Revenues		5%	8%	21%	15%	10%
Increase in Expenses		15%	11%	52%	3%	12%
Operational margin	12%	6%	4%	4%	1%	-14%
Cost Recovery Ratio	91%	99%	102%	128%	114%	116%
ROA	2%	0%	-1%	-6%	-3%	-5%
ROE	4%	-1%	-1%	-14%	-8%	-11%
Balance sheets						
Capital	4,284,537.9	5,019,592.0	5,666,931.6	5,590,764.4	5,676,484.4	5,285,115.7
Liabilities	4,022,757.6	4,443,618.9	4,917,822.2	6,267,293.1	6,997,841.4	6,973,085.4
Liquidity						
Current Ratio	280%	280%	240%	235%	242%	207%
Solvency						
Obligations /Capital	94%	89%	87%	112%	123%	132%
Interest Coverage	399%	-101%	-70%	-574%	-303%	-391%

Table 2. Total financial results of state-owned 67 enterprises

67 compound indicator of enterprise	2012	2013	2014	2015	2016	2017
Revenues	1,982,840.1	2,090,316.1	2,250,801.4	2,738,291.3	3,118,821.3	3,296,270.3
Expenses	1,744,129.4	2,018,754.4	2,201,449.0	3,161,863.4	3,360,782.5	3,861,855.2
Net profit after tax	203,164.3	4,469.6	27,022.8	-424,772.9	-235,904.7	-570,591.2
Profitability						
Increase in Revenues		5%	8%	22%	14%	6%
Increase in Expenses		16%	9%	44%	6%	15%
Operational margin	13%	7%	5%	5%	2%	-13%
Cost Recovery Ratio	88%	97%	98%	115%	108%	117%

ROA	3%	0%	0%	-4%	-2%	-5%
ROE	5%	0%	0%	-7%	-4%	-10%
Balance sheet						
Capital	4,224,458.9	5,011,289.0	5,748,869.1	6,004,940.9	6,295,998.1	5,893,255.8
Liabilities	3,276,623.6	3,581,852.0	3,825,986.5	4,683,324.4	5,092,854.2	5,016,612.2
Liquidity						
Current Ratio	224%	235%	204%	211%	222%	190%
Solvency						
Obligations /Capital	78%	71%	67%	78%	81%	85%
Interest Coverage	574%	10%	33%	-338%	-162%	-419%

68 state companies were distributed in various risk categories based on several criteria. The companies that have already received financial support have been placed in high risk category. Also, companies' risk is assessed by net worth, namely, equity capital.
In addition, companies that do not meet two or three of these three criterias listed below are high risk categories.

• Solvency: Determining the total liabilities with respect to assets (10 companies are unable to meet the above criterion, which is above the marginal rate, more than 0.5);

• Profitability: Determines the ratio of return on capital, ie, how valuable is the enterprise. (59 companies do not meet the above criterion, have a lower coefficient of a 10% rate);

• Liquidity: defined by the Current Ratio that assesses the current assets and current liabilities. The criterion margin is 2 (16 companies do not meet the above criterion, the ratio of the ratio is lower than 2 on the margin).

Based on the analysis, 40.5 percent (29 companies) of state companies were assessed as highly risky and their total liabilities amounted to 4,492 million lari by the end of 2017 (11.7 percent of GDP). Marabda-Kartsakhi railway liabilities amounted to 1,956 million lari. Without it, the liabilities of high-risk companies amounted to 2,536 million lari, or 6.7 percent of GDP. In the Marabda-Kartsakhi Railway Loan Agreement, the Government of Georgia has no obligation to deal with Marabda-Kartsakhi's obligations. Over 50 percent of the above-mentioned obligations (without Marabda-Kartsakhi) are on the electricity system of Georgia, while 27 percent comes to the United Water Supply Company of Georgia.

The liabilities of 28 companies with average risk are 4.5 percent of GDP (1.7 billion GEL). These companies failed to meet one of the above criteria. If the financial situation of these companies will be established, they will be at high risk, and in case of improvement they will move to a lower risk category.
If the state companies' data are negative, the supervision of the National Agency of State Property, starts working on liquidation, reorganization, privatization or merger of the company.

On the basis of such decisions, the number of state companies decreased from 1315 to 106 in 2009- 2017. In the long term, the Ministry of Finance will work with other relevant ministries in order to reform the legal base of state-owned enterprises in order to strengthen fiscal risk management.

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Risk rating analysis for 12 enterprises reviewed

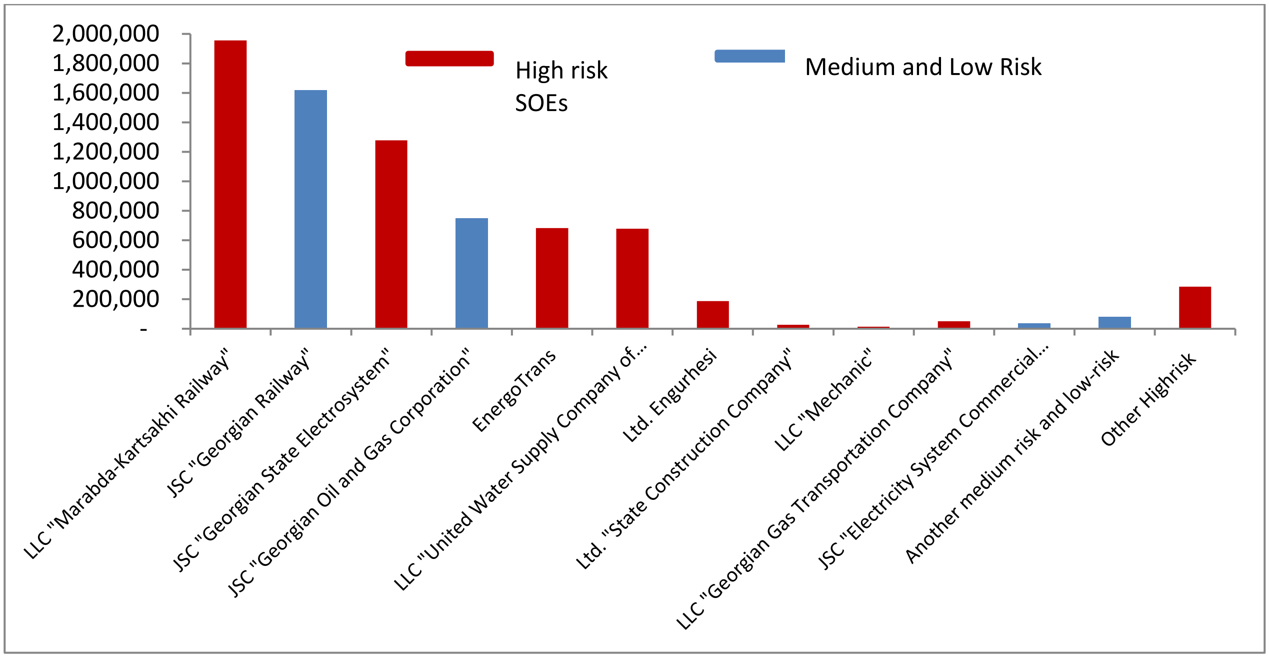
Name	2012	2013	2014	2015	2016	2017
Marabda-Kartsakhi		high	high	high	high	high
Parntnership fund	high	high	high	high	high	high
Railway	average	average	average	average	average	average
electrosystem	high	high	high	high	high	high
energotrans	high	high	high	high	high	high
Gas corporation of Georgia	average	low	low	average	average	average

United water supply company	average	high	high	high	high	high
Enguri hpp	high	high	high	high	high	high
Operator of electric energy	average	average	average	high	average	average
Gas transportation company	low	high	high	high	high	high
State building company	high	high	high	high	high	high
mekanizatori	high	high	high	high	high	high

Diagram 2. Obligations of state enterprises

(High risk in red

Average or low risk in blue)



2.8.1. LLC Marabda-Kartsakhi Railway

The Marabda-Kartsakhi Railway is implementing the last part of the Georgian section of "Silk Road" project. The project aims to connect Asia with the Middle East, Central Asia and Europe to promote trade.
After launching the project, the initial turnover of the project is 5 million tons, and the second stage is expected to increase the turnover of 15 million. The project includes 29.2 km. The construction of a new railway line in Georgia.
Rehabilitation of existing 157 km long lane, construction of new stations and renewing of other infrastructure - the Soviet-era railroad will be replaced by a standardized railroad that can be used to minimize wagons in China and Europe and reduce travel time.
Marabda-Akhalkalaki section during December, 2015 and Marabda-Kartsakhi section

successfully passed the test in 2016 and in 2017 railway line began to work under construction. It is expected that the railway will be fully functional by 2019. The project is still under implementation, the main activity of the company is the construction of the railway and its related infrastructure. Consequently, the company does not have its own operating revenues, which makes it a loss (but by the end of 2017 the company finishes). In addition, it is also added that the credit was made in foreign currency and the exchange rate impairment increased the loss rate.

The project is financed by the Azerbaijani side with a loan allocated by the Republic of Azerbaijan. The total volume of the loan amounted to 775 million US dollars and was issued in 2 tranches: the first tranche - $ 200 million and the annual interest rate was 1%, and the second tranche - 575 million USD was the annual interest rate of 5%. The interest rate is capitalized. As of 31 December 2017, 133 million US dollars remained unused (2016: 145 million USD). It is expected that the total cost of the project will not exceed the outstanding credit amount and no additional financial assistance is required.

Table 5.1 Overview of major financial indicators of the Marabda-Kartsakhi Railway (thousand GEL, percent)

LLC Marabda-Kartsakhi Railway	2012	2013	2014	2015	2016	2017
Revenues	332.0	323.5	8,821.1	272.1	42,765.1	171,917.1
Expenses	52,011.0	49,889.6	96,911.1	332,625.4	248,103.2	163,475.8
Net profit after tax	-51,679.0	-49,566.1	-88,090.0	-332,303.9	-205,338.1	7,654.2
Profitability						
Increase in Revenues		-3%	2627%	-97%	15615%	302%
Increase in Expenses		-4%	94%	243%	-25%	-34%
Operational margin	#DIV/0!	#DIV/0!	#DIV/0!	-65233%	#DIV/0!	#DIV/0!
Cost Recovery Ratio	15666%	15424%	1099%	122233%	580%	95%
ROA	-6%	-6%	-9%	-28%	-16%	1%
ROE	-86%	-597%	108%	80%	33%	-1%
Balance sheet						
Capital	60,079.0	8,303.0	-81,937.5	-414,176.5	-619,513.7	-608,140.1
Liabilities	746,134.0	861,766.9	1,091,835.7	1,583,968.7	1,904,987.2	1,956,473.1
Liquidity						
Current Ratio	4759%	4917%	3942%	1353%	2587%	2090%
Solvency						
Obligations /Capital	1242%	10379%	-1333%	-382%	-307%	-322%
Interest Coverage	-2009%	-7846%	-1738%	-5341%	#DIV/0!	98%

2.8.2. JSC Partnership Fund

Partnership Fund was founded with consolidating the largest state-owned enterprises of Georgia. JSC Georgian Partnership Fund is an investment fund operating in accordance with the laws of Georgia on "Entrepreneurs" and "SST-Partnership Fund".
The Supervisory Board is headed by the Prime Minister of Georgia. The Supervisory Board is composed of representatives of the Government of Georgia and persons invited from the private sector. The foundation holds 100% of such large companies
Such as JSC Georgian Railway, JSC Georgian Oil and Gas Corporation, JSC Georgian State Electrosystem and JSC Electricity System Commercial Operator. The Partnership Fund also owns 24% share of JSC Telasi.
The main functions of the Fund are attracting investments and investing in private and state companies operating in Georgia, through equity financing and debt financing and guarantee. Priority is given to projects implemented in energy, agriculture, industry and real estate sectors. In 2015 the Fund implemented investments in the authorized capital of leasing projects for the production of spare parts of construction materials and aircraft, fruit export, construction and trade centers. Loans were made on agriculture and infrastructural sector projects. In 2015, the Ministry of Labor, Health and Social Affairs transferred several hospitals to the Partnership Fund for the purpose of incorporating these institutions, private developers and reduction of state ownership to at least 50%.

In 2016 the Fund has invested 25 million GEL on energy, real estate and entrepreneurial projects. Partnership Fund has taken a USD 150 million loan to finance its own business. Loan repayment began in 2017 and will last until 2020.
Dividends received from subsidiary companies are the main source of income for the loan service. In 2016, Georgian Oil and Gas Corporation paid 12.7 million GEL dividends, ESCO - 24 million GEL. The dividends paid in 2015 were the Oil and Gas Corporation of Georgia (29 million GEL).
In case of lack of sufficient dividends, the fund is required to liquidate its investments or borrow from subsidiaries.

In 2016, the Partnership Fund had to borrow 6 million lari from its own company, Georgian Railway, to cover the debt service. Partnership Fund Fitch estimates as a BB-rated company. Reporting company reports and financial statements of the Pantry Fund are available publicly. The main reason for losses received in 2017 (441 million GEL) is negative consequences in the subsidiaries of the foundation. In particular, JSC "Georgian Railway" ended the 2017 year with loss of 354 million lari, which is based on the audit company "KPMG Georgia". "Tbilisi Bypass Railway" project.
JSC "Georgian State Electrosystem" ended the 2017 year with a loss of 320 million GEL, which is due to the audit company "KPMG Georgia", due to the lack of Net Operating Cash Flows of

JSC "EnergoTrans" Ltd's subsidiary JSC Georgian State Electrosystem is significantly less than planned.
The above was mainly due to the deficit of budgetary cash flows caused by electricity transit.

Table 5.2 Overview of major financial indicators of the Partnership Fund (thousand GEL, percent)

JSC Partnership Fund	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	1,365,724.8	1,349,719.3	1,465,071.4	1,855,648.8	2,190,263.8	2,367,414.6
Expenses	1,134,420.7	1,252,323.8	1,289,016.8	2,018,227.4	2,105,529.3	2,804,332.1
Net profit after tax	193,911.2	59,371.1	156,121.5	-154,912.6	100,067.0	-441,517.5
Profitability						
Increase in Revenues		-1%	9%	27%	18%	8%
Increase in Expenses		10%	3%	57%	4%	33%
Operational margin	19%	13%	19%	17%	18%	-12%
Cost Recovery Ratio	83%	93%	88%	109%	96%	118%
ROA	4%	1%	3%	-3%	2%	-7%
ROE	8%	2%	6%	-6%	4%	-19%
Balance sheet						
Capital	2,341,264.5	2,450,525.9	2,631,023.1	2,627,794.5	2,765,218.8	2,301,109.1
Liabilities	2,714,330.5	2,775,814.1	2,964,133.6	3,546,754.2	3,899,550.6	3,881,691.9
Liquidity						
Current Ratio	187%	249%	171%	206%	196%	133%
Solvency						
Obligations /Capital	116%	113%	113%	135%	141%	169%
Interest Coverage	808%	283%	232%	-146%	80%	-339%

1

2.8.3. JSC Georgian State Electrosystem

The Georgian State Electrosystem is responsible for the transmission and dispatching of electricity, carries out technical control of the entire power system to ensure continuous and reliable supply of energy. Georgian State Electrosystem is responsible for transferring Georgia as imported and exported electricity. The company has two subsidiaries: Ltd. EnergoTrans, which is responsible for the operation of high voltage transmission lines with Turkey, and JSC Karcal Energy, which supports electricity exchange transactions between Georgia and Turkey. JSC Georgian State Electrosystem is fully owned by the Partnership Fund.

The Georgian State Electrosystem implements and plans to develop the entire transmission network in Georgia. The 10-year transmission network development plan is approved by the

Government. Strengthening the network has improved energy security, which is confirmed by a complete or partial reduction of accidents - from 16 cases in 2005 to 4 cases in 2015.

Similarly, technical losses have improved from 14.95 percent to 2.14 percent. The Black Sea Power Transmission Network (BSTN) project was completed in 2012, which significantly increased the possibility of transferring electricity to Turkey. New capital projects, which are currently underway, will enable Georgia to increase the scale of trade in the energy sector in the region and to ensure even more stability of the country's electrical system. These projects include:

- Jvari-Khorga connecting project, which will enable power transmission from western Georgia and Turkey to the north-west hydropower plants; - Kazbegi connecting project, which will create a second 500 kilowatt line connecting the 1100 MW power supply network.

According to the new tariff methodology approved by the Georgian National Energy and Water Supply Regulatory Commission, the Georgian State Electricity System will be updated annually for the transfer and dispatch service.
The tariff calculation is calculated using the formula: company's operating expenses + regulated assets of the company * WACC / Tariff year forecasted email. Energy consumption. The WACC for 2014-2017 tariffs was 13.54 percent, and from 2018 to the next tariff period (3 years) its indicator increases to 16.4 percent, which allows the company to receive additional revenue. After the introduction of a new tariff methodology, the company's income is growing annually. Accordingly, the company's operating income increased by 87 million GEL during 2012-2017, which is 123% increase in percentage. This increase in operating income allows the company to generate financial indicators and generate profits, but in 2015-2017, despite the company's operating profit generated by the currency, it has recovered its foreign currency liabilities, which in turn caused a negative net profit of 114 million lari in 2015, In 2016 - 80 million GEL, and in 2017 - 320 million GEL.

2017 financial loss (320 million GEL) is essentially due to the valuation of the subsidiary JSC EnergoTrans Ltd (250 million GEL). The auditors of the international group considered the necessity of reducing the company assets due to the reduction of revenue from the transit, at the expense of the 400 kV transmission line reduction.
The company is mainly dependent on borrowing funds: By the end of 2015, the ratio of liabilities (991 million GEL) to capital equity was 647% and by 2016 the ratio of liabilities (1168 million GEL) equals to 1125%, by the end of 2017 at -721% Is the negative capital of the enterprise - 177 million GEL (2016) Positive 103 million GEL). The interest rate coefficient is:

- 2015 - 537 percent; - 2016 - 402 percent; - 2017: -1 505 percent.

This indicates that the results of the company's activities are not enough to cover financial expenses, which in itself is a high risk.
The Georgian State Electrosystem has significant long-term commitments. Despite the improvement of financial indicators, the company's ability to serve the debt covers a long period of time. As of December 31, 2016, the company's restructured debt amounted to 66.4 million lari,

comprising of liabilities arising before 2006, as of 31 December 2017, the balance sheet of GEL 62,9 million.
In addition, by the end of 2018, 15 million lari will be covered by the schedule under rehabilitation plan and the remaining liability will be covered by the end of 2023.
The Georgian State Electrosystem has significant long-term commitments. Despite the improvement of financial indicators, the company has ability to serve the debt covers during a long period of time. As of 31 December 2016, the restructured debt of the company constituted 66.4 million lari, comprising of liabilities arising before 2006, as part of this obligation, as of December 31, 2017, the existing balancing balance of 62.9 million lari. In addition, by the end of 2018, 15 million lari will be covered by the schedule under rehabilitation plan and the remaining liability will be covered by the end of 2023. The company (with the companies included in the group) has a debt obligation of 1 054 million at the end of 2017. 381.5 million GEL is from the Ministry of Finance of Georgia from the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the German Reconstruction Investment Bank (KfW) 672.5 million GEL from the Asian Development Bank (ADB) and the World Bank, and 672.5 million GEL from EBRD, EBR, EBR, Obligations arising from loans from the German Reconstruction Investment Bank (KfW). By the end of 2017, the company attracted 108 million lari grants (long-term assets received as grants) from various international financial institutions to fund infrastructural investment projects. In addition, in 2017, the grants attracted investment projects of 4,8 million. Gel was made. These funds are not subject to the return of the company when the company will not be able to utilize the cash flows or make a significant threat to the implementation of the project, which is virtually ruled out. The company has cash deposits in the bank, which is rated by the credit rating agency "Fitch" B. The impact of the interest rate is negligible to the company because the interest rate of its liabilities is not variable. The ratio of liabilities to the equity is high and the cost coverage coefficient remains negative.

Table 5.3. Consolidated JSC Georgian State Electrosystem (along with subsidiaries of the Group) Review of the main financial indicators (thousand GEL, percent).

JSC Georgian State Electrosystem	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	67,408.0	78,715.0	124,607.0	117,051.0	132,826.0	150,144.0
Expenses	81,956.0	136,240.0	120,953.0	232,220.0	204,599.0	470,468.0
Net profit after tax	10,741.0	-63,178.0	3,919.0	-114,052.0	-80,023.0	-320.36.0
Profitability						
Increase in Revenues		17%	58%	-6%	13%	13%

Increase in Expenses		66%	-11%	92%	-12%	130%
Operational margin	-5%	5%	-2%	17%	17%	-145%
Cost Recovery Ratio	122%	173%	97%	198%	154%	313%
ROA	-1%	-6%	0%	-10%	-6%	-29%
ROE	-4%	-29%	2%	-75%	-77%	181%
Balance sheet						
Capital	282,437.0	219,806.0	259,843.0	153,021.0	103,846.0	-177,450.0
Liabilities	741,922.0	803,464.0	818,548.0	991,476.0	1,168,499.0	1,278,990.0
Liquidity						
Current Ratio	38 %	73%	53%	43%	48%	16%
Solvency						
Obligations /Capital	263%	366%	315%	648%	1125%	-721%
Interest Coverage	-234%	-1282%	19%	-537	-402%	-1505%

2.8.4. Energotrans Ltd

EnergoTrans Ltd (hereinafter referred as "Company") was founded in 2002. Since 2009, the joint stock company "Georgian State Electrosystem (GSE)" has been 100% share holder of EnergoTrans Ltd. The company's ultimate parent company is JSC "Partnership Fund".

EnergoTrans activities of LLC are governed by the active legislation in Georgia, on the bases of normative acts issued by the Government of Georgia and regulatory body under the abovementioned legislation. Including the Georgian Law on Electricity and natural gass, by the Order No. 77 of the Minister of Energy of Georgia of August 30, 2006 on approval of Electricity (Capacity) Market Rules, by Decree No. 10 of April 17, 2014 of the Georgian National Energy and Water Supply Regulatory Commission on approval of the Network Rules, by Decree # 366 of the Government of Georgia of December 24, 2013 on the determination of the rule of protection of linear structures of electrical networks and their protection zones, by the decree 57 of the Government of Georgia of March 24, 2009 on the issuing rules of building permisiions and on the conditions of permission. The company owns a quality control certificate ISO 9001.

The main activity of Energotrans Ltd is the transmission of electric power, the export of electiric power and implementation of the transit. Energotrans Ltd owns: 500 electricity supply lines "Vardzia-Zekari", 400 kv electricity supply lines "Meskheti" and 500/44/220 kv substation Akhaltsikhe. The total length of electricity supply lines existing in the ownership of Energotrans is 290 km on the territory of Georgia. It includes Georgia's 10 municipality teritories and from the south side connects “the Gardabani 500”” and “the big Zestafoni” substations passing through Akhaltsikhe 500/400/220 kv substation. In addition to the above mentioned, the Akhaltsikhe substation is connected to Turkey's substation "Borchkha" via 400 kv transmission line "Meskheti". It is unique in its importance in the Caucasus region, since it was first here installed the High - Voltage Direct Current (HVDC). The indicated project, which is known as "Black Sea Transmission Network Project", was funded by the German Reconstruction Bank (KFW), the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). The cost of the project amounted to 250 million euros (including 25,000 thousand euros represents a financial contribution from KFW related to the construction of new supply lines of electicity within the framework of the "Black Sea Power Transmission Network Project" (BSTN). The financial contribution is not subject to rembursement except the case if the company does not properly use the received funds or will make a significant threat to the project implementation, which will additionally ensure the protection of the Georgian electricity supply line by means of an additional 500 kv connection, also creates the possibility of exporting electricity to the direction of Turkey. "Black Sea Transmission Network Construction Project" was completed in 2013.

Since the launch of power electricity supply lines after 2013, the company's revenues are growing annually, however, the use of export and transit capacity is low and the income earned from this activity is not enough to cover the loss received from the company expanses and currency devaluation. The exchange rate devaluation has negatively impacted on the financial position of the company because its liabilities are denominated in foreign currencies, especially in 2015-2017. In 2017, the company's loss amounted to 315 million, in 2016 - 33 million GEL , while 2015 - 92.5 million GEL. The effect of profit tax reform carried out in the tax system was not bigger than the company's indicator and its tax benefits has amounted to 1.6 million GEL.

On December 31, 2017, the leadership of Energotrans Ltd revealed the indicator that the company's main means (cash generating units) could be devaluated by the reason, that in 2017 the net operational cash inflow was less than planned, which was mainly caused by the backwardness of planned cash flow from the transit of electricity with factual data. The reproducible value of the generating unit of cash is based on its applicable value, which is determined by discounting of future cash flows generated from the long-term use of the cash generating unit. Consequently, the balance sheet value of the cash-generating unit was higher, than its reproducible cost and the corresponding devaluation loss in the amount of 250,117 thousand GEL was recognized in devaluatiom loss during 2017, which was proportionally distributed to the cash generating units.

In 2017, the contractual funds, that was the company’s obligation to pay within the Subloan Agreement (KfW) concluded with the Government of Georgia was not timely covered by the Company, due to the deficit of funds. The company failed to agree with the terms of the loan restructuring with the Government of Georgia in 2017, so the company did not receive the formal consent of the rescheduling of the mature payments in 2017. Violation of Contractual Conditions Based on Sub- loan agreement (KfW) represents a case of default that grants the Government of Georgia the unconditional right to demand to cover immediately the loans and credits of 276,166 thousand lari (as of 31 December 2017).

As of 31 December 2017, the loan has been reclassified in the current liability article in the financial reporting of the condition of the company. As of December 31, 2017, the main means by balance sheet value of 25,594 thousand GEL (2016: 50,404 thousand GEL) are mortgaged from the Ministry of Finance of Georgia as securities for received loans and credits.

The company's cash flows are in placed in JSC "TBC Bank", which’s evaluation rating is B according to Fitch.

Table 5.4. Overview of the main financial indicators of EnergoTrans Ltd (thousand GEL, percent).

	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	1,486	13,569	60,792	37,416	46,776	44,122
Expenses	12,676	56,133	48,738	127,928	81,363	359,263
Net profit after tax	(9,852)	(49,533)	8,580	(92,468)	(32,965)	(315,141_
Profitability						
Increase in Revenues		813%	348%	-38%	25%	342%
Increase in Expenses		343%	-13%	162%	-36%	3111%
Operational margin	-663.0%	-365.0%	14.1%	-247.1%	-70.5%	-549.0%
Cost Recovery Ratio	853.0%	413.7%	80.2%	341.9%	173.9%	814%
ROA	-1.4%	-7.1%	1.3%	-14.8%	-5.6%	-102.0%
ROE	-8.2%	-69.5%	10.7%	-535.8%	-57.6%	84.0%
Balance sheet						
Capital	120,779.0	71,246.0	79,826.0	(17,257)	(57,222)	(374,495)
Liabilities	564,282.0	629,692.0	590,293.0	642,206	648,448	681,966
Liquidity						
Current Ratio	3.2%	6.3%	5.9%	3.7%	3.3%	5.0%
Solvency						
Obligations /Capital	467.2%	883.8%	739.5%	-3721.4%	-1133.2%	-182.0%
Interest Coverage			50.3%	-548.6%	-212.%	

2.8.5. JSC Georgian Oil and Gas Corporation

JSC Georgian Oil and Gas Corporation was historically responsible for the management of four operational segments of the business, which includes Gas supply (gas purchase and sale of social sectors), pipeline leases (includes lease income, which is received from gas pipeline leased to „Georgian Gas Transportation Company') Oil extraction (includes oil sales from the share distribution contracts), oil transportation (includes oil transportation via the Western Route Export Pipeline through the Georgian territory). From 2015, the corporation's activity also included electricity generation and supply. The activities related to gas purchases are based on four long-term contractual agreements, mainly with fixed prices and long-term structures. All income of the corporation and nearly 85 percent of the corporation's expenses are directly denominated in US dollars or linked to US dollars.

The Oil and Gas Corporation of Georgia has started construction of an important project, the second combined thermal power station in the second half of the current year. The corporation also intends to invest in the development, construction and operation of underground gas – holder, the corporation also has invested in Gori wind power stations.

In 2016, Georgian Oil and Gas Corporation earned 78 million lari as a profit, which is more than the profit of 31 million lari generated in 2015, while in 2017 the company received 220 million profit, which is higher by 142 million lari than the indicator of 2016. This was mainly caused by the launch of Gardabani 230 mv combined thermal power station in August 2015 (the corporation owns 51% of Gardabani control package and the remaining 49% holds is owned by Partnership Fund). In 2016 the dividends of 27.3 million GEL were declared and paid, in 2017 - 77.1 million lari dividends. The ratio of the Company's debt with total assets is 43% (2017 - 50.7%) in 2017, while the ratio of the liabilities with total assets in 2017 is 45 percent (in 2016 – 55 percent). After entering Gardabani's second thermal power station into exploatation, the main source of operational income of the corporation will be the electric power generation and supply segment. This indicated segment will significantly increase the corporation revenues (approximately 350-400 mln GEL in case of both thermal power stations functioning) and accordingly the corporation's net profit will be increased.

The company has a long-term strategic plan where the main priorities are defined. This long-term plan has a positive impact on the company's activities and management.

Between the government of Georgia and Azerbaijan has been signed a 60-year agreement that allows the company to buy gas at a low price, and also the agreement to sell this gas, which significantly softens the influence risk of the exchange rate and gas price change. However, the company also delivers gas to the commercial sector with market prices, on which it conveys the risk of the impact of the gas price change. The oil and gas corporation receives gas from Russia on the basis of a long-term gas supply agreement. It is sensitive to oil prices because purchases are related to oil prices, and sales are fixed in US dollars. The sensitivity of the company with the change of exchange rate depends on its obligations and expenses, 85% of which are denominated in US dollars.

The Georgian Oil and Gas Corporation issued a USD 250 million euro bonds in May 2012, whose contractual timelines expired in May 2017 (the corporation's carried out refinancing of the bonds in April 2016).

In April 2016, the Georgian Oil and Gas Corporation issued, placed and registered unsecured bonds on the London Stock Exchange. As a result of this transaction, the company issued state bonds of $ 250 million with 6.875 percent and with contract term of 2021 and redeemed 78.62 percent of the the placed bonds (USD 250 million issued in 2012), with nominal price of 197 million USD. The company has been granted an international credit rating. According to Fitch, the corporation's rating is BB- and according to Standard & Poors estimates - B +. The ratings of the company and the Prospectus on company's issuance of the Bonds includes detailed information about the corporation.

The Georgian Oil and Gas Corporation Ltd issued a 15-mln USD for a one year term to the Bureau of State Services on 5 September 2012, while on the basis of a contract signed on 27 September of the same year, for a period of one year 13.5 mln USD as well. The bureau failed to return a loan liability to the corporation in the agreed deadlines due to the lack of proper funds. Depending on the above, between the corporation and the bureau was concluded a Loan Restructuring Agreement in 2014, according to which the funds should have been covered in 2014-2017. Within the framework of the Restructuring Agreement, the the Bureau of State Services paid a part of the sum and could no longer cover the amounts. Between the corporation and the state, which was represented by the LEPL "National Agency of State Property", a contract was concluded on transferring demands and rights. According to the agreement, the corporation transferred to the State the right to request the existing debt as of October 12, 2016 towards the Bureau of State Services LTD. In accordance with the order 2016 of the agency, in the capital of bureau was inputed the right to demand 28 million US Dollars which amounted 68.9 million GEL according to the exchange rate set by the National Bank.

100% of the corporation's funds are placed in 4 different banks in Georgia, the rating of which is by the assessment of Fitch BB-. The impact of the interest rate on the corporation is insignificant because a large portion of its liabilities have a fixed interest rate.

JSC „Partnership Fund" is the owner of 100% share of the company.

At the current stage the company carries out the following projects:

- The construction of 13 km segment of the 31 km section of Natahtari – Lekhura of the East-West Main Gas Pipeline. The contract on construction has been signed with the winner company in tender "Rapid Engineering" at the contract price of 3,657 thousand GEL. Currently, 55% of works are completed.
- The construction of 45 km section of "Kobuleti branch line" of East-West Main Gas Pipeline. The contract on construction has been signed with the winner company in tender "Comfortmshen XXI", with a contractual value of 10,709 thousand GEL. Currently, 95% of works are completed.
- The sectional testing was carried out on the section of 67 kms long of Kakheti main gas pipeline in order to determine suitable sections. On the bases of the study the rehabilitation works of damaged pipeline segments were completed. In the spring of 2019, the mentioned section is planned to be exploited.
- The state procurement tender of pipes and taps was opened in November 2018 at a total cost of 7,432 thousand GEL, the to be purchased materials are intended for the construction of the 33 km section of Adigeni-Goderdzi, which is planned in 2019.

Timetable 5.5 JSC Review of major financial indicators of JSC Georgian Oil and Gas Corporation (thousand GEL, percent)

JSC Georgian Oil and Gas Corporation	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	339686,0	380394,0	372190,0	528763,0	696011,0	742117,5
Expenses	247082,0	268791,0	278725,0	494398,0	598593,0	519652,6
Net profit after tax	81026,0	94293,0	83889,0	30953,0	78037,0	220405,9
Profitability						
Increase in Revenues		12%	-2%	45%	32%	7%
Increase in Expenses		9%	4%	77%	21%	-13%
Operational margin	27%	28%	26%	18%	23%	31%
Cost Recovery Ratio	73%	71%	75%	94%	86%	70%
ROA	9%	9%	7%	2%	5%	13%
ROE	20%	17%	12%	4%	11%	24%
Balance sheet						
Capital	398759,0	568923,0	675964,0	714859,0	711594,0	912510,3
Liabilities	479551,0	485970,0	554944,0	689185,0	869676,0	747331,9
Liquidity						
Current Ratio	562%	930%	365%	507%	325%	645%
Solvency						
Obligations /Capital	120%	85%	82%	96%	122%	82%
Interest Coverage				142%	162%	453%

2.8.6 United Water Supply Company Ltd.

The United Water Supply Company provides water supply and sewerage services throughout Georgia, except for urban settlements of Tbilisi, Mtskheta, Sachkhere, Rustavi and Adjara Autonomous Republic. The main activities of the company include the following: water extraction, processing and supply; projection, construction, installation, repair and operation of water supply and sewerage networks; Production and rehabilitation of constituent elements of water supply and sewerage systems. As of December 2016, it serves more than 305,000 households and about 18,700 non-household customers. The company was founded in 2010 in order to centralize service. 100% of the company's shares owns the state and the management is carried out through the Ministry of Regional Development and Infrastructure.

Many infrastructural projects are in the process of implementation and include construction of pumphouses, reservoirs, pipelines, water supply systems and distribution networks as well as the construction of wastewater treatment facilities and drainage systems. These projects are financed through the preferential lending incurred by the Asian Development Bank, the European Bank for Reconstruction and Development (EBRD) and European Investment Bank. The mentioned funds are supplied by the Ministry of Finance to the United Water Supply Company of Georgia Ltd with mechanism of credit. The total liabilities of the company are 678.8 million lari as of 2016.

The loss of the company in 2016 was 63 million lari, which was significantly due to devaluation of exchange rate of Lari. This indicator has not changed substantially by 2017 - the loss of the reporting period amounted to 64 million GEL. The company is taking the steps to optimize expenditures (for example, without amortization of obsolescence the operataional expenses by 2016 amounted to $ 41 million, while by 2017 - 35 million GEL), however, it is not enough to achieve a zero profit indicator. At the same time, the expansion of availability to drinking water is achieved annually through the implementation of infrastructural projects in Georgia, which is the prerequisite for growth and development.

Because of the devaluation of the exchange rate from the revaluation of denominated liabilities of foreign currency of the company, the currency loss was observed in 2015 and 2016.

As noted above, the company's debts amounted to 678 million lari by the end of 2016 and it is provided by the Ministry of Finance by mechanism of credit from EBRD and EIB, the indicated indicator amounted to 679 million GEL by the end of 2017. The company's loan is denominated in foreign currency, accordingly the company is particularly sensitive to currency devaluation and the indicated represents a source of fiscal risk. Water tariffs are imposed by Georgian National Energy and Water Supply Regulatory Commission. Up to this date, tariffs have been established on the basis of availability of water quality and daily supply. At this stage, the tariffs calculation has not been finished as it was defined by the order N18 of Georgian National Energy and Water Supply Regulatory Commission on August 29, 2008. The company will evaluate the assets existing on its balance sheet during the audit of 2017-2018, which will be considered one of the main determining criteria of tariffs in the future.

Together with other factors, individual metering processes throughout the company is considered to be the factor of hindering, delaying metering policy, deficit of accounting losses related to metering (as network and as well as of subscribers), and accounting problems of assets). The current tariffs do not match the expenses carried out by the company, which hinders the company's profitability. The tariff approved by the Georgian National Energy and Water Supply Regulatory Commission is based on historical operational expenses, amortization of existing assets and capital feedback. Consequently, this does not provide the possibility of long-term financial sustainability. However, revision of tariffs determining methodology is ongoing in accordance with the best international practice. In addition, in places where there are no meters, fixed tariffs are imposed. The company expands the metering area, which allows targeted spending of the water. Social campaigns and writing off historical debts are being implemented, which is the basis for improving gathering of revenues. The company also carries out legal actions to the customers, who have the debt towards the company. At present, mobilization of payment from household amounts to nearly 86.7 percent, while it amounts to 99.64 percent from non-household.

At this stage, annual allocations of funding, which is reflected by the input in the capital of the United Water Supply Company, is directed to the service of liabilities. In 2016, the capital investment of the United Water Supply Company amounted to 36.7 million lari (27 million lari in 2015), while in 2017 - 56.5 million lari (19.7 million out of this amount was directed to capital projects).

Table 5.6. Overview of the main financial indicators of the United Water Supply Company (thousand GEL, percent)[8].

The United Water Supply Company LTD	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	46939,6	51 230,1	44875,9	37552,2	37262,2	37221,0
Expenses	41499,9	64087,1	67286,7	111898,4	100526,7	101255,0
Net profit after tax	4623,7	-12857,0	-22410,8	-74346,5	-63264,5	-64034,0
Profitability						
Increase in Revenues		9%	-12%	-16%	-1%	0%
Increase in Expenses		54%	5%	66%	-10%	1%
Operational margin	1%	-29%	-71%	-67%	-74%	-53%
Cost Recovery Ratio	88%	125%	150%	298%	270%	272%
ROA	1%	-3%	-4%	-12%	-8%	-7%
ROE	2%	7%	-12%	-58%	-63%	-26%
Balance sheet						
Capital	270207,9	182734,3	187034,6	127366,1	100751,0	246509,0
Liabilities	207778,3	283249,0	384293	509845,1	678770,6	679305,0
Liquidity						
Current Ratio	313%	167%	198%	202%	187%	284%
Solvency						
Liabilities /Capital	77%	155%	205%	400%	674%	276%
Interest Coverage	32739 %	-399%	-1545%	-3257%	-1198%	

2.8.7. "Engurhesi" (Enguri Hydroelectric Station) LTD

The owners of 100% shares of the Engurhesi Ltd is the state. The company is managed by the Ministry of Economy and Sustainable Development of Georgia. The company is responsible for the operation of Enguri Hydroelectric Station, Vardnilhesi cascade and for several small hydroelectric stations located in the Kodori Gorge on the territory of Autonomous Republic of Abkhazia.

Vardnilhesi cascade is located fully in the Autonomous Republic of Abkhazia, which started operation in 1971, it consists of 4 (four) electric stations and is currently operating only one "Vardnili-I" which's capacity is 220 megawatts. Other remaining 3 (three) hydroelectric stations were robbed in the 90s during the events of the war, the remaining hydrotechnic structures are now being preserved. Enguri Hydroelectric Station began operating in 1978 and its installed capacity is 1,300 MW. The Enguri Hydroelectric Station and Vardnilhesi cascade jointly generate more than 4 billion kwt – hour, annually, which is 35 percent of Georgia's annual electricity demand. Enguri Hydroelectric Station is partially located on the territory of Autonomous Republic of Abkhazia. According to the law of Georgia 'on Electricity and Natural Gas" and the market rules of electricity (capacity), the company has the obligation to provide electricity in the territory of Abkhazia. In addition, the company is supplying the territory of Abkhazia with electricity free of charge and does not receive revenues. Currently, the consumption of Abkhazia is about half of the electricity generated by the Enguri Hydroelectric Station and the Vardnilhesi cascade, whereas the demand for electric power supply increases to 5% from year to year. Especially during the winter months, when the demand for electricity is reached to the peak, while the supply is restricted, the volume of electricity to be supplied to Abkhazia is higher than the generated electricity form the Enguri Hydroelectric Station and Vardnilhesi Enguri Hydroelectric Station and the company in order to satisfy this demand has to procure additional capacity.

During the last three years, the company has been a loss making and the loss amounted to 10 million lari in 2017, it amounted to 7.3 million lari in 2016 (13.2 million lari in 2015). One of the factors of the loss is the currency devaluation. The company has a large amount of liabilities in foreign currency. Increasing supply of electricity in Abkhazia means that the received revenue from the realization of remaining electricity for sale will not be enough to cover the company's operational expenses. Besides, it does not allow the Enguri Hydroelectric Station to use the means of cross-subsidizing of expenditures.

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8. Differences Between financial indicators and current financial indicators reflected in the analysis of state enterprises published in 2016 are caused by the mechanical error correction in the company's reporting.

The rehabilitation of Engurhes and Vardnilhesi hydroelectric stations is financed by the Ministry of Finance with those reborrowed funds that the Ministry receives for Engurhesi hydroelectric station from the EBRD and EIB as a loan. The share of liabilities in the company's capital structure is more than 50%. The accumulated revenues by the company do not allow receiving the profit of such amount that would be enough to cover the expenses. From the state budget for the company allocatation of funds as a loan does not happen. The exception was allowed in 2016 when due to the heavy rains deep spillway of Kashkhali of “Vardnilhesi – 1” was damaged. . Negotiations with Donor Organization were ongoing on allocating additional funds for the completion of the construction and rehabilitation works related to the technical safety on the constructions of water supply and dam of“Vardnilhesi – 1”. However, in order to repair the damages immediately, prior to receiving funding from the donor organization, from the Funds of Projects to be Implemented in the Regions of Georgia for the Ministry of Energy of Georgia Enguri Hydro Electric station was allocated the interest - free loan in the amount of 2 million GEL in order to conduct rehabilitation works of Vardnilhesi-1 dam on the basis of the Decree No. 1342 of the Government of Georgia dated July 7, 2016. The term of return of the loan was determined until the first December of 2016, which was completed.

The electricity tariff of the company compared to other companies operating in the Georgian market is significantly lower. In order to improve the financial situation, the company applied to Georgian national energy and water supply regulatory commissions in 2016 and 2017 with a statement on calculation of the tariff. According to the tariff set by GNERC, the cost of electricity delivered to the territory of Abkhazia was recorded into the companies revenues, however, since the company does not receive revenues from it, despite its demand, in the part of the expenditue relevant expanses has not been recognized, which significantly worsens the financial position of the company.

The duration term of the exploitation of hydroelectric stations is from 80 to 100 years, provided that the necessary updates should be made every 20-25 years. The rehabilitation and modernization of both hydroelectric stations are ongoing by the company. This includes rehabilitation of electric, hydro – technic and hydro-mechanic equipment, including improvement of security, cleaning of river diversion catchment area and increasing its capacity, rehabilitation of pressure tunnel, construction of access roads and removal of lama from water reservoirs.

In the main activity of the company the quasi-fiscal activities are high, which represent electricity power supply in the territory of Abkhazia without reimbursement. Net loss received from the mentioned activities is about 30 million lari per year.

Table 5.7. Overview of major financial indicators of “Engurhesi" LTD (thousand GEL, percent)

"Engurhesi" LTD	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	39 969,8	42 029,0	60 956,6	46 768, 1	50 970,2	58 334,4
Expenses	42 765,7	48 848,8	49 878,5	59930,0	58 268,2	68 370,3
Net profit after tax	-2 795,9	-6 819,8	11 078,2	-13161,9	-7 298,0	-10 035,9
Profitability						
Increase in Revenues		5%	45%	-23%	9%	14%
Increase in Expenses		14%	2%	20%	-3%	17%
Operational margin	4%	7%	19%	0%	5%	10%
Cost Recovery Ratio	107%	116%	82%	128%	114%	117%
ROA	-1%	-2%	3%	-4%	-2%	-3%
ROE	-1%	-4%	6%	-7%	-4%	-6%
Balance sheet						
Capital	193 247,6	188 941,1	199 584,7	185 877,6	178 579,6	169 417,3
Liabilities	99 238,6	117 246, 8	130 127,9	163 005,0	171 330,0	187 650,6
Liquidity						
Current Ratio	653%	1878%	155%	233%	86%	655%
Solvency						
Liabilities /Capital	51%	62%	65%	88%	96%	111%
Interest Coverage	-156 %	-364%	2678%	-2639%	-391%	-387%

2.2.8 JSC Electricity System Commercial Operator

JSC "Electricity System Commercial Operator" (ESCO) performs defined functions by the "Market Rules of Electric power (Capacity) " approved by the order N77 of August, 2006 of the Minister of Energy of Georgia and by the law of Georfia "On electricity and natural gas", exclusively carrying out the trade of balancing electric power, according to country's seasonal needs carries out import and export of electricity.

The volume of balance electric power sold (purchased) by ESCO in 2017 amounted to 20.2% of the total supply in the network. Electricity power imported by ESCO from Russia, Azerbaijan and Armenia accounted is 12 per cent of the total supply in the country. The share of imported electicity power in balance electricity amounted to 51 per cent. About 35% of the electricity power purchased by ESCO is the electricity generated by hydroelectric power plants (HPPs), 11% of thermal power plants (TPPs), and wind energy is 3% of total balance electric power.

Distribution companies have purchased 87.4 percent of the electric power of the realized balance sheet, direct consumers purchased 11 percent and remaining 1,6 percent is the balance electricity power supplied to Abkhazia.

Also, in accordance with the Law of Georgia on Electricity and Natural Gas and the Electricity (Capacity) Market Rules, the company carries out purchase, realization and payment of guaranteed capacity from thermal power plants.

According to the active market rules, buying and selling balancing Electricity power, as well as guaranteed capacity is not profitable activity for ESCO, the cost of balancing electricity is determined according to the same rules, based on the principle of calculation of the average weighted price (without profit component). The transferring to the customer the same amount of the purchased electricity and guaranteed capacity expanses are carried out through ESCO, that allows JSC "Electricity System Commercial Operator" to fully compensate the purchased electricity and guaranteed capacity expenses.

The company operates as a direct buyer (not as an agent) in the operations of purchasing and selling balancing electricity power and guaranted capacity and is obliged to make payments in favor of balancing electricity sellers and guaranteed capacity sources. Despite the fact, that whether he received from the customer the price of guaranteed capacity and balancing electric power. Consequently, the risk level of company's loan and liquidity is related to the process of non - payment of electricity power and/ or guaranteed capavity fees, in particular from consumers.

The company has a credit risk within its current activities. This is the potential financial risk of the company if the customer (the Contracting Party of the financial instrument) does not fulfill the obligations under the contract in relation to the ESCO's refund. Credit risk is generated to the company mainly from current trading requirements.

The Company will undertake measures to minimize their risk of their influence on probability and financial stability of the enterprise:

- Collecting, analyzing, and forecasting information about payments from debitors monthly ;
- Systematic, direct partnership with enterprises, discussing existing problems with the management of the relevant enterprises;
- Accrual of pennalty in case of failure to perform financial liability on time;
- Towards exporters who are not licensees, using preliminary banking guarantee machanisms as a rule;
- In case of violation of the terms of the contract, the bank guarantee requirements for existing and future forecasting payments in accordance with "Electricity (Capacity) Market Rules" and Standard Contract terms;
- Warnings in a written form and in 72 hours after warning applying the measures of discontinuing or restricting the supply of electricity in accordance with "Electricity (Capacity) Market Rules" and Standard Contract terms;
- To bring a suit into the court on forced payments.

The company is slightly capitalized. The debt, which fully contains trade credit and short-term liabilities, constitutes about 210 percent of its capital.

Esko Liquidity is essential for managing financial risks. The company has undistributed profit, which in the course of financing operational expenses plays a buffer role in the absence of a resource in specific

moment.
At the same time, according to paragraph 4 of article 23 of the Law of Georgia on Electricity and Natural Gas, ESCO is obliged to conclude Guaranteed Purchase Agreement of electicity power (PPA) with the relevant person, according to the terms agrred with the Government of Georgia, the Esco and the Investor. ESCO does not participate in the to be comncluded memorandum with investor, in the process of determining the price and purchase period and its liability includes the Memorandum of Understanding with the investor and its obligation includes tu purchase electricity power generated from from newly constructed electric stations, mainly in the autumn-winter months, when consumption of electricity is significantly higher in the country in comparison to the volume of electricity generated in Georgia.
By the end of 2017, there were 35 concluded such agreements in total.

That circumstance is essential that according to these agreements, the procurement scheme of electricity power from these stations by ESCO, payment and liability conditions, the rights and responsibilities (except for the purchase of electricity) are not significantly different from the terms of the purchase of electricity from other generating facilities in the electricity market and in particular cases the fiscal risks from similar types of projects are minimal.
In order to reduce the sensitivity to the exchange rate, the amendment was made in the "Electricity (Capacity) Market Rules" according to which the created course difference on the imported electricity by ESCO will be reflected in the realized balaning price of electricity, which effectively minimized the company's monetary risk.
In terms of financial risk assessment it is important that the ESCO has no obligations towards financial institutions in 2017, has not issued no guarantees or guarantee letters, no funds are observed paid in advance. In addition, in accordance with the applicable legislation, taking into consideration the specificity of Esco's activity, its competence does not include making decisions on such cardinal issues such as determining price for purchase or sale of balance electricity and guaranteed capacity, selecting purchaser and buyer enterprizes, the discussion of discounts, rescheduling of paymens and so.on. These issues are regulated by acting normative acts (except for export operations), and therefore do not constitute the Esco's managerial decision, which in turn reduces the risks associated with such decisions. It should be noted that net profit of the company exceeded 10 million GEL in 2017 (2017 - 1.7 million GEL).

A significant part of profit in 2017 was received from the sale of exported electricity, also such increase of profit indicator was caused by a recovery of written off hopeless debts in the past years,which is connected to the payment of debt accumulated over the years as a result of selling assets of the company, being in the bankruptcy process- "Kakheti Energy Distribution".

JSC "Partnership Fund" is 100 percent shareholder of JSC "Electricity System Commercial Operator". Shares with the right to fully manage, with the relevant agreement has been transferred to the Ministry of Economy and Sustainable Development of Georgia, which carries out the basic rights and duties of the share holder.

The company's cash flows are located in the leading banks of Georgia, whose rating is based on Fitch's B.

Table 5,8: Overview of the main financial indicators of the Electricity System Commercial Operator (thousand GEL, percent).

Electroenergetics system	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year

commercial operator						
Revenues	173 0004,2	118 032,2	142 549,1	230 713,5	328 345,5	508 456,5
Expenses	171 492,6	117 126,9	141 316,8	232 496,8	326 163,0	498 383,4
Net profit after tax	1450,3	909,0	1219,3	-1768,8	1704,8	10073,2
Profitability						
Increase in Revenues		-32%	21%	62%	42%	55%
Increase in Expenses		-32%	21%	65%	40%	53%
Operational margin	0%	1%	2%	0%	0%	2%
Cost Recovery Ratio	99%	99%	99%	101%	99%	98%
ROA	4%	3%	3%	-3%	3%	19%
ROE	31%	16%	18%	-35%	25%	60%
Balance sheet						
Capital	4716,3	5652,8	6872,2	5074,4	6859,3	16908,5
Liabilities	29170,0	28333,0	29523,9	52218,1	56435,8	35572,2
Liquidity						
Current Ratio	114%	118%	121%	108%	112%	147%
Solvency						
Liabilities /Capital	618%	501%	430%	1029%	823%	210%

2.8.9 Georgian Gas Transportation Company LLC

LLC "Georgian Gas Transportation Company" is the only licensed natural gas transportation company in the territory of Georgia. The existing license has been issued since 2009 with unlimited duration. The main activity of the company includes transportation of natural gas in the teritoriy of Georgia and transit of natural gas from the Russian Federation to the Republic of Armenia. In addition, according to the demand the company also carries out natural gas supply too (in the past period, up to 2018, natural gas was supplied to JSC "Georgian Oil and Gas Corporation"). In order to carry out this activity, the company has lease agreement with "JSC Georgian Oil and Gas Corporation" on existing main gas pipeline system in the territory of Georgia and infrastructure related to it. The lease rent is fixed from September 2017 and is depicted in Lari (in the past period it was depicted in US dollars and was depending on the capacity of natural gas put through on the above mentioned main line).

The natural gas transportation tariff has been changing since 2017 and it depends on the company's operating and capital expenditures (The transportation tariff was unchanged until 2017 and three different tariffs were operating for various customers, unified transportation tariff is effective since July 20, 2017 and it is the subject to renewal annually). This tariff is established and regulated by the Georgian National Energy and Water Supply Regulatory Commission (GNERC). In the past period, since the country's gas transportation was carried out in national currency, and the lease tax was defined in the dollar, the exchange rate influenced on company's financial indicators, and the mentioned currency risk does not exist any more in the current period.

Herewith, in addition to the above mentioned, some of the activities in the company's costs and revenue structures are carried out in US dollars, in particular the revenues received from transit and gas supply services and the expanses carried out to fill the losses.

Despite, that JSC "Georgian Oil and Gas Corporation" is responsible for the capital expenditure of the pipeline system, all other expenses related to system repair, service, protection and exploatation are taken by Georgian Gas Transportation Company.

In 2016 the company has acutely improved financial indicators in comparison with 2015 year (2015 year; loss up to 44 million lari) and profit amounted to 48 million lari, as well it ended 2017 year with profit amounted to 11 million lari , which was reflected in the improved indicator of capital feedback, which amounts to 7 percent in 2017. In addition, the correlation coefficient of liabilities with the capital significantly improved and decreased from 88 percent to 44 percent.

Within the framework of the Village Gasification Project, LTD "Georgian Gas Transportation Company" by the task of the government carries out the construction of low and medium pressure gas pipelines (gas distribution network). The construction was financed by the Ministry of Energy of Georgia in the past and now by the Ministry of Economy and Sustainable Development with the increased statutory capital of the company. After completion of construction, these assets will be transferred to the state by their balancing value and therefore the company's statutory capital will be reduced.

The company's profitability improved its solvency. The ratio coefficient with assets of liabilities decreased from 98 % to 47 % in 2016 and to 30 per cent in 2017. In the current period, due to the low indicator of solvency and generated loss in the past, the company has generated up to 40 mln lari debt towards JSC "Georgian Oil and Gas Corporation" because of not paying the lease rent. At present, the company carries out paying of the current expenses of the lease rent monthly, while the debt of the past period as a result of restructurisation annually.

LTD "Gas Transportation Company" is in full management of the Ministry of Economy and Sustainable Development of Georgia.

Time Table 5.9: Overview of the main financial indicators of Georgia's gas transportation company (thousand GEL, percent)

Gas transportation company of Georgia	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	155 560,1	151 152,0	188 670,0	221 882,0	169 418,0	182 220,0
Expenses	129 957,6	133 347,0	201 457,0	264 097,0	118 029,0	170 739,0
Net profit after tax	22100,5	16 452	-11147,0	-43 785,0	48 401, 0	11 481,0
Profitability						
Increase in Revenues		-3%	25%	18%	-24%	8%
Increase in Expenses		-3%	51%	31%	-55%	45%
Operational margin	15%	10%	-8%	-21%	28%	-4%
Cost Recovery Ratio	84%	88%	107%	119%	70%	94%
ROA	33%	33%	-14%	-44%	45%	7%
ROE	40%	35%	-26%	-1850%	85%	10%
Balance sheet						
Capital	55 436,0	47 512,0	42 275,0	2 367,0	57 147,0	116 604,0
Liabilities	10662,0	4 385	36 144,0	97 710,0	50 572,0	51 200,0
Liquidity						
Current Ratio	446%	787%	139%	71%	137%	443%
Solvency						
Liabilities /Capital	19%	9%	85%	4128%	88%	44%
Interest Coverage						

2.8.10 Ltd. State Construction Company

The State Construction Company carries out construction projects, in particular rehabilitation, modernization and reconstruction of state roads, bridges and tunnels, as well as other civil construction works related to state projects. The company also produces construction materials and provides services using professional equipment. The company was established in 2006 with the full ownership of the

Government of Georgia and is under the management of the Ministry of Regional Development and Infrastructure.

At this stage the ongoing projects include road construction and rehabilitation. For example, the reconstruction and building of the road of the Stepantsminda-Sameba church of inner state importance (Cost of project - GEL 7.8 million - 99% of works completed), restoration of the roadway of Senaki-Poti-Sarpi of international significance, the strengthening works of road and coastal line protion (project cost - 58.4 million GEL) the construction of Tetnuldi ski resort (project cost - 15.5 million GEL - works are completed, project was financed by Georgian and French governments), hospital construction in village Rukhi (project cost - 41.3 million GEL - at the final stage).

Most of the projects are carried out by the company within the state budget allocations. Amounts transferred to the company increases its capital. The construction costs are capitalized and after the completion of the projects their transfer is carried out to a unit launching for exploatation, which reduces the capital of the State Building Company LLC. The company's debts are low and amounts to only 22 percent of its total assets.

The function of the company is actually implemented in a kind of "hybrid environment", which means that its purpose is as to obtain financial profits from specific works, as well as according to the interests of the state, to carry out such works that are beneficial and financially profitable for the state. To illustrate more of the mentioned givens, we can bring as an example the so called Liquidation works of the Devdorac disaster. These works were not fully profitable for the company, but were profitable for its founder, which is the main goal of establishing any company. In this case, the benefit of the founder was the liquidation of the disaster in a timely manner ny relatively lower expenses and maximum efficiency compared to market prices. In 2017, the company's realized operating losses amounted to 6 million lari, while in 2016 10 million lari. This loss is somewhat determined by the accounting policies of the organization. In particular, the company's operating expenses and adequate revenues have been recognized after a certain construction process / cycle at any time, which is protracted in time (for the reporting period of 2018 the focus is on the reporting period and not on the construction process). The process of recognition of revenue and expenditure depends on the work performed during the completion of each construction phase, on the conduction of expertise and on the procudure of relevant recognition / authorization of works from recipient subject’s side.

On financial results are also negatively reflected:

- 1) Conditions of various normative and legislative acts which reduce factual / real expenses for the purpose of calculating to be recognized revenues;

- 2) Sums allocated on projects under the Government Order (placed in the capital) are not reflected in the statement of profit or loss, therefore the share of overhead expenses to be confired makes preassure on company's operating loss (long process), their assignment objectively and calculation is connected with some difficulties. In the future, elaboration of the appropriate procedure "assumptions" is planned, according to which is defined objective distribution of overhead expenses.

The company's vision is to maintain and develop advanced positions in its activities as a reliable and highly reputable company in the development of infrastructure. Company management is actively working on improving operational performance indicators and strengthening management, modernization of accounting policies and principles in order to maximize the internationally recognized principles of accounting.

In the longer prospect it is expedient to increase the share of funds attracted by the private sector in the company's revenues by increasing the number of projects implemented in the private sector.

Table 5.10. Overview of the main financial indicators of the state construction company (thousand GEL,

percent).

State construction company of Georgia	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	28 679,0	25 446,0	36 313,2	21 771,9	16 495,5	20 369,0
Expenses	34 115,2	29 865,4	45 493,3	28 234,1	26 577,0	26 207,7
Net profit after tax	-4 598,1	-4 419,4	-3 180,1	-6 462,2	-10 081,6	-5 838,6
Profitability						
Increase in Revenues		-11%	43%	-40%	-24%	23%
Increase in Expenses		-12%	52%	38%	-6%	-1%
Operational margin	-20%	-19%	-26%	-32%	-62%	-29%
Cost Recovery Ratio	119%	117%	125%	130%	161%	129%
ROA	-11%	-7%	-10%	-6%	-9%	-5%
ROE	-12%	-9%	-12%	-7%	-11%	-6%
Balance sheet						
Capital	37 979,9	50 719,6	79 398,5	92 413,5	91 674,3	93 987,0
Liabilities	4983,0	12 600,1	10 179,7	8 541,9	14 583,6	27 126,0
Liquidity						
Current Ratio	583%	346%	680%	957%	610%	402%
Solvency						
Liabilities /Capital	13%	25%	13%	9%	16%	29%
Interest Coverage						

2.8.11. JCS Georgian railway

Georgian Railway is a vertically integrated railway company, which is responsible for the functioning of the railway system throughout the country. The Georgian Railway provides freight and passenger transportation services. It is also responsible for the maintenance and construction of railway infrastructure throughout Georgia. The Georgian Railway is fully owned by the Partnership Fund.

The loss of Georgian Railways in 2015 amounted to 65.5 million GEL which was mainly due to negative changes in currency exchange rate. The company received a net profit of 65.1 million lari in 2016.

The tariff policy of the company is not subject to state regulation, it was granted with the authority to define it. Although tariffs set in certain areas of business are defined by the agreement on international railway transit tariffs, Georgian Railway has flexibility in setting tariffs. As for passenger tariffs, this segment compete with other means of transportation. The aim of the Georgian Railway is to increase the rate of tariffs along with improving the quality of service. The improvement of service, optimization of schedule, marketing and targeting towards high-income customers represents a constituent part of strategic initiatives that makes passenger transportation business a profitable activity.

As of December 31, 2015, by the Georgian Railway was written off trade and other irreparable entries in amount of 141 million lari, that was mostly derived from the overdue debts of the company. The Georgian Railway manages its own credit risks by the demand for preliminary payments with the cargo and passenger transportation companies.

At the current stage, the company is implementing two major capital investment projects: Modernization Project - "Fast Railway" and construction of Tbilisi Bypass Railway. In 2016, on the construction was spent 182 million GEL (186 million GEL in 2015) and 70 million GEL on machinery and equipment. The modernization project is designed to increase transportation capacity and to improve train speed which is achived by modernization of railway infrastructure between Tbilisi and Batumi (the Black Sea). The bypass road project implies the movement of railway infrastructure so as not to move freight and passenger trains through the Tbilisi center. In October 2013, all construction works related to the Tbilisi Bypass road project were suspended. In accordance with the decree of the Government of 2016, the decision of the Tbilisi Railway Bypass Railway Project should be made within 4 months and the completion of the project was determined no later than 22 months after the decree. However, the discussion has not been end yet on this issue and the company has continued its construction contract.

The memorandum signed between the Georgian Railway and the Government of Georgia in 2012 envisaged to transfer to be made available land plot to the state within the Tbilisi bypass railway road, in exchange for payment of 138 mln Swiss Francs without VAT by the state to the company (equivalent in national currency). After the completion of the project, the Parties agreed by the same memorandum, that paying to be compensated amount of money to the company would be carried out as a result of the distribution of the company's net profit, from the dividends to be acceptable from the state. The company, as of 31 December 2011, has declared 138 million Swiss francs from undistributed net profits. After the agreemnt with the government, 100 million GEL was paid in the form of dividends in the state budget. Part of the payable amount remained for reinvestment for the Tbilisi Railway Bypass Project for the future, while 24 million GEL - VAT expense shall be paid to the company by the Government.

The ratio of the company's liabilities to the total assets is 50 percent. The company has a 50 mln loan to cover (rate: Libor + 1.25 percent, term: 2026, Currency: US Dollar) used to finance to purchase passenger trains. The loan is secured by 52 million GEL worth of passengers trains. The company has issued Eurobonds worth USD 500 million (coupon: 7.8 percent; contractual maturity: 2022 year). The issuing of this Bond Agreement includes a paragraph for change of the right of control (for example if the share of the state will fall below 50 percent, limit of dividends and net profot ratio to 50% and imposing on 3.5 ration maximum with net debt operating profit (EBITDA - after amortization of profit tax, interest rate, revaluing and amortization). In addition, there are strict requirements for financial reporting, which the company performs. Issuing rating of obligations by Fitch estimates are BB, while S & P estimates B +. At the current stage, bonds trading is ongoing by about 5 per cent, which is more than about 150 basis points of Georgia's sovereign securities interest rate. In July 2015, the company purchased the remaining $ 28 million bonds of 250 million dollars bonds issued in 2010, whose contract timing expired. Payment of

dividends is limited by Eurobonds agreement. Dividends in 2015-2017 was not paid.
The agreement was made with the government on the reduction of dividends by the amount of the transfer of the railway station from Makhinjauri to Batumi by Georgian Railway station. As for the financial results of 2017, in the profit and loss of the company was fixed the loss in the amount of 354.1 million GEL. According to the conclusion of the Audit Company, the damage is fully determined by the value of the company's assets, by the estimates of the audit company KPMG's it is due to devaluation of the assets.
After reevalaution the total cost of reimbursement amounted to 382.6 million lari, meaning that the company's profits before taxation was up to 29.2 million lari, it is noteworthy that by 2016 the same indicator was 26.3 million lari.
Table 5.11: Overview of the main financial indicators of the Georgian Railway (thousand GEL, percent).

JCS “Georgian Railway station”	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	520 878,4	507 631,8	535 589,8	626 476,0	563 220,0	516 792,0
Expenses	406 278,0	431 442,0	490 420,0	702 529,9	536 952,7	870 244,0
Net profit after tax	97 217,4	65 229,8	39 285,8	-65 498,9	65 126,3	-354 100,0
Profitability						
Increase in Revenues		-3%	6%	17%	-10%	-8%
Increase in Expenses		6%	14%	43%	-24%	62%
Operational margin	26%	22%	26%	33%	33%	-59%
Cost Recovery Ratio	78%	85%	92%	112%	95%	168%
ROA	3%	2%	1%	-2%	2%	-12%
ROE	6%	4%	3%	-4%	4%	-28%
Balance sheet						
Capital	1 530 800,2	1569127,0	1562451,0	1471210,0	1599276,0	1244848,0
Liabilities	1300744,6	1316100,0	1405630	1622707,0	1626407,0	1617389,0
Liquidity						
Current Ratio	250%	315%	224%	282%	219%	179%
Solvency						
Liabilities /Capital	85%	84%	90%	110%	102%	130%
Interest Coverage	932%	458%	88%	-110%	123%	-663%

2.8.12“Mechanizer” LTD

The main directions of the "Mechanizer" Ltd are providing agricultural technic services, provision of agricultural products producers and farmers with information, consultations, introduction of modern technologies in the production of agricultural products, conducting works for pre or post sowing and further works.

The "Mechanizer" Ltd offers the service to resident living in the regions of Georgia, who are using the land in taking care of agricultural crops, renders consultation about the implamantation of pesticides and high quality seeds, new technologies and new cultures. "Mechanizer" LTD has the opportunity to provide the service to the users of the land in different regions of Georgia in agricultural terms, to carry out the service works of ploughing of spring, autumn timely, also the works of sewing, processing with herbicides, cultivation, harroing, entering of mineral fertilizers, and most importantly harvesting timely and for without loss.

In 2012, the mechaniser LTD carried out the purchase of agricultural technics from various countries on the basis of the relevant orders of the government and the founder. In the framework of the project, the contracts were signed in six directions: 1) three-year leasing agreement with ОАО ПроМагролизинг (Belarus); 2) Equipment Buying Agreements with 5 Different Companies (KHUN S.A France; CNH U.K LTD Great Britain; John Deer International GmbH Switzerland; Maschio Gaspardo S.p.A Italy; CLAAS Global Sales GmbH Germany).

The Advances of the company indicated in second paragraph of the contracts was financed in the capital of Mechanizer LTD from the amount of money received for the same reasons while on the remained part was concluded 5 year credit contracts with JSC Bank of Georgia in the amount 15.6 million USD and 23.9 million euros. Also, a three-year bank guarantee was issued in amount of 3.1 million euros. The expanses of these credit contracts were financed from the state budget by entering into the capital of Mechaanizor LTD, which increased the company's capital. With this purpose, by entering into the capital in 2015, 26 million lari and in 2016 22 million GE allocation was carried out.

In order to secure JSC "Bank of Georgia", the Georgian Oil and Gas Corporation had a 26.5 million lari deposit directed as a mortgage, while by the Ministry of Agriculture wasissued a letter of comfort. No delay was fixed in payment of loan service. Company liabilities amounted to 24.6 million lari by the end of 2016. This obligation was fully covered in 2017.

In 2017 the company's losses amounted to 20.8 million lari, in 2016 - 23.8 million lari and in 2015, 33.5 million lari. Among the reasons for causing the mechanizer LTD loss is the most importantly the use of expensive production capacity in operating activities. In particular, the company's annual losses are mainly caused by the expense of technic depreciation, which amounted to 17.6 million lari in 2015 and 15.6 million lari in 2016. A similar indicator isaw defiend in 2017 was determined by 12 million GEL. This is due to the high cost of this technique itself. There is also a large share of property taxes, which is due to the cost of agriculture equipment, buildings (13 regional service centers) and other basic means. Until 2017 in the unprofitability of company played a big role the realization of currency risk. As noted, long-term financial liabilities of the company were presented in the form of US dollars and euros, and sources of their financing from the state budget would enter into the company in GEL. However, it is necessary to note that this factor has been removed since the end of 2017, as all of the above-mentioned monetary financial liabilities have been completed by this time.

Table 5.12. Overview of the main financial indicators of Ltd "Mechanizer" (thousand GEL, percent)

Mechanizer LTD	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
Revenues	8,530,2	28,264.9	22,456.5	20,379.1	16,134.3	7,008.6

Expenses	22,932.6	43,265.6	51,127.1	53.912.0	40,240.1	27,804.6
Net profit after tax	-14,402.4	65 229,8	39 285,8	-33,352.9	-24,105.7	-20,796.1
Profitability						
Increase in Revenues		231%	-21%	-9%	-21%	-57%
Increase in Expenses		89%	18%	5%	-25%	-31%
Operational margin	-140%	-34%	-130%	-107%	-139%	-373%
Cost Recovery Ratio	269%	153%	228%	265%	249%	397%
ROA	-9%	-6%	-14%	-18%	-14%	-10%
ROE	-20%	-8%	-20%	-23%	-17%	-11%
Balance sheet						
Capital	72,947.3	177,266.4	1562451,0	1471210,0	1599276,0	1244848,0
Liabilities	90,371.1	75,803.5	54,381.1	42,158.2	24,674.3	12,738.9
Liquidity						
Current Ratio	359%	4905%	587%	559%	397%	420%
Solvency						
Liabilities /Capital	124%	43%	37%	29%	17%	7%
Interest Coverage	-1034%	-295%	-765%	-998%	-1200%	-1873%

3. Public and private cooperation projects.

1. Public and private cooperation projects

On May 4, 2018, the Georgian Law on Public and Private Cooperation entered into force, which establishes the legal basis for public and private co- operation, including the rules and procedures relating to elaboration and implementation of the public and private partnership project, the principles of public and private co-operation, the relevant institutional system, as well as other issues related to public and private cooperation.

The legal framework clearly determines the basic principles of public and private co-operation and the criteria required to meet the project in order to be qualified as a public and private collaborators and to compy with the regulatory framework envisaged by the draft law. The basic principles of such projects in accordance with law are transparency, foresight, prohibition of discrimination, quality ratio, optimal distribution of risks, fiscal responsibility, environmental protection and social sustainability.

The Public and Private Cooperation law defines the role of the Ministry of Finance of Georgia which participates in almost all stages of implementation of the public and private partnership project and carries out the following assessments:

-Evaluation of access to public finances;
- Assessment of the ratio with the quality price;
- Fiscal Risk Assessment;
- Other assessments within the competence.

On the basis of the assessment, the Ministry of Finance of Georgia recommends the Government of Georgia on the expediency of signing the contract.

It should be noted that according to the Decree N452 of the Government of Georgia of 5 September of the current year, was approved the LEPL - Public and Private Cooperation Agency ". The agency represents coordinating circle on each stage of public and private cooperation project implementation. It ensures the creation and management of the current and completed public and private cooperation projects database. At this stage is on going making a complete set of agency staff, therefore, it is expected that the database set out in Article 30 of the Law on Public and Private Cooperation will be created for the 2019 reporting period.

The main public and private co-operative projects in energy sector, that carry a possible fiscal risk at this stage are underway, accordingly in the document of Fiscal Risk Analysis is provided detailed analysis of the projects implemented and planned in the field of energy.

The guaranted purchase agreements of electricity

The guaranted purchase agreements of electricity play an important role in Georgia's economic development as an opportunity to attract investors in the energy sector. The Guaranteed Purchase Agreements of electricty, which are concluded with the Electricity Producer Company, are long-term and envisage increase in production of local consumption and export electricity in Georgia. The Guaranteed Purchase Agreements of electricty are used throughout the world and its aim is to enable new investors and banks to activate financing of new energy projects.

The Guaranteed Purchase Agreements of electricty is concluded with the state-owned company "Electricity System Commercial Operator" (ESCO), which is responsible for balancing the supply and demand of electricity between the market and the private power producing company. Under the The Guaranteed Purchase Agreements of Guaranteed Procurement Agreement, a license for construction and for operating electric station will be issued to a private company. Instead of it, ESCO is obliged to purchase a concrete, pre-agreed amount of electricity, at an agreed price. ESCO usually sells purchased electricity.

Although ESCO is not required to reflect electricity guarantee procurement contracts in its financial statements. Fiscal transparency standards require potential fiscal expenses and consequently fiscal risks disclosure related to these agreements by the Ministry of Finance of Georgia. For this reason and because of the gradual deregulation of the electricity market in line with EU standards, it may create fiscal risks, The Ministry of Finance considers it necessary to disclose guaranteed procurement contracts according to this standard. Those projects of Guaranteed Purchase Agreements that meet the following criteria shall be subject to disclosure annually:

A) The Guaranteed Purchase Agreement of Electricity is signed; B) Permits have been issued and c) financial resources are provided for the implementation of the project.

In the current legislative system, the fiscal risk associated with guaranteed purchase agreements is low.

However, this can be changed in terms of market deregulation. The new model of the electric power market is planned to start from 2020; However, the Government is considering one of the possible options to establish a liability of a public supplier over the transitional period, To maintain a regulated supply for the limited segment of the market; This variant may reduce the fiscal risk of a guaranteed purchasing contract of electricity in a deregulated market. Probability of material risk of financial risks associated with guaranteed procurement contracts of electricty happans in case if the guaranteed purchase price will significantly exceed market prices existing on availebla import.

Nowadays, 181 mutual understanding memorandums has been concluded with the government, on projects having guaranteed purchase conditions of electricity, from which 29 projects are being operated ((Investment 1 211.87 million USD, installed capacity 572.45 MW), and 24 Construction or pre construction (investment 1.76 billion USD, installed capacity 872.55 MW) 29 of recepeint of license (Investment 2 376.13 million USD, installed capacity 1 575.54 MW) and other 99 technical economic (invested 5.4 mlrd USD, installed capacity 3307.86 MW) are at the stage of study; In the case of 8 projects, Memorandum of Understanding envisages procurement of annual electricity from the manufacturer by ESCo , for 10 projects – the purchase during 8 months, for 4 projects – the purchase during 3 months, for 3 projects - purchase of 20% of total production.

The estimated nominal value of the procurement contracts envisaged by the Memorandums of Guaranteed Procurement Agreements of electricity is US $ 8.2 billion, which is distributed over the period of guaranteed purchase agreement.

The expected current cost of guaranteed purchase agreements is estimated by $ 3.3 billion, which is 19.9% of the forecast (Gross domestic product) of 2018. The maximum number of expected annual payments of Esko is observed in 2024, which is 0.3 percent of the GDP.
For influence analysis on fiscal sector, it is important to evaluate the fiscal costs and fiscal risks of guaranteed purchase agreements.
Fiscal expense calculated by multiplying the guaranteed purchase volumes on the difference[2] between the guaranted purchase price and the predicted basic price.
The fiscal risk is estimated by two scenarios.
- **Risk scenario 1.** calculated by multiplying the guaranteed purchase capacity on the remainder between the guaranteed purchase price and predicted basic price, that is decreased by 10%.
- **Risk scenario 2.** calculated by multiplying the guaranteed purchase volume on the remainder between the guaranted purchase price and predicted basic price decreased by 30%.

The table below shows the total estimates of fiscal costs and fiscal risks in the total period of guaranteed procurement agreements in total:

Table 6. Possible Fiscal Impacts from the agreements of Guaranteed Procurement of electricity in the total period of the agreements of guaranteed purchase in total:

	Fiscal Cost		Risk Scenario 1 (10%)		Risk Scenario 2(30%)	
	Mln. USD	% GDP	Mln. USD	% GDP	Mln. USD	% GDP
ALL	394.86	2.42%	866.39	5.30%	1,179.98	7.22%
Top-10	336.58	2.06%	830.75	5.08%	1,059.78	6.48%
Top-5	334.91	2.05%	832.28	5.09%	1,056.00	6.46%
Top-3	297.79	1.82%	360.06	2.20%	484.62	2.96%

Table 7. Expected nominal and discounted fiscal cost for all projects, for top-10, top-5 and top-3 projects (baseline Scenario):

YEAR	All Projects		TOP 10		TOP 5		TOP 3	
	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted
2018	4.14	3.87	0.00	0.00	0.00	0.00	0.00	0.00
2019	6.05	5.29	0.00	0.00	0.00	0.00	0.00	0.00
2020	6.01	4.91	0.00	0.00	0.00	0.00	0.00	0.00
2021	10.53	8.03	0.00	0.00	0.00	0.00	0.00	0.00
2022	36.02	25.68	25.40	18.11	23.47	16.73	23.47	16.73
2023	26.66	17.77	29.29	19.52	30.46	20.30	30.46	20.30
2024	28.65	17.84	30.41	18.94	29.53	18.39	30.46	18.97
2025	31.72	18.46	37.19	21.65	36.32	21.14	30.46	17.73
2026	38.78	21.10	37.19	20.23	36.32	19.75	30.46	16.57
2027	47.12	23.95	36.03	18.32	36.32	18.46	30.46	15.49
2028	47.02	22.34	35.97	17.09	36.32	17.25	30.46	14.47
2029	46.85	20.80	35.97	15.97	36.32	16.13	30.46	13.53
2030	47.03	19.52	36.32	15.07	36.32	15.07	30.46	12.64
2031	45.28	17.56	36.32	14.08	36.32	14.08	30.46	11.81
2032	43.66	15.82	36.32	13.16	36.32	13.16	30.46	11.04
2033	43.37	14.69	36.32	12.30	36.32	12.30	30.46	10.32
2034	40.90	12.95	36.32	11.50	36.32	11.50	30.46	9.64
2035	40.10	11.86	36.32	10.75	36.32	10.75	30.46	9.01
2036	39.65	10.96	36.32	10.04	36.32	10.04	30.46	8.42
2037	37.53	9.70	36.32	9.39	36.32	9.39	30.46	7.87
2038	37.40	9.03	36.32	8.77	36.32	8.77	30.46	7.36
2039	37.40	8.44	36.32	8.20	36.32	8.20	30.46	6.88
2040	37.40	7.89	36.32	7.66	36.32	7.66	30.46	6.43
2041	37.40	7.37	36.32	7.16	36.32	7.16	30.46	6.01
2042	37.23	6.86	36.32	6.69	36.32	6.69	30.46	5.61
2043	37.22	6.41	36.32	6.25	36.32	6.25	30.46	5.25
2044	30.59	4.92	30.57	4.92	30.57	4.92	30.46	4.90
2045	30.46	4.58	30.46	4.58	30.46	4.58	30.46	4.58
2046	30.46	4.28	30.46	4.28	30.46	4.28	30.46	4.28
2047	30.46	4.00	30.46	4.00	30.46	4.00	30.46	4.00
2048	30.46	3.74	30.46	3.74	30.46	3.74	30.46	3.74
2049	30.46	3.50	30.46	3.50	30.46	3.50	30.46	3.50
2050	30.46	3.27	30.46	3.27	30.46	3.27	30.46	3.27
2051	30.46	3.05	30.46	3.05	30.46	3.05	30.46	3.05
2052	30.46	2.85	30.46	2.85	30.46	2.85	30.46	2.85
2053	30.46	2.67	30.46	2.67	30.46	2.67	30.46	2.67
2054	30.46	2.49	30.46	2.49	30.46	2.49	30.46	2.49
2055	30.46	2.33	30.46	2.33	30.46	2.33	30.46	2.33
2056	30.46	2.18	30.46	2.18	30.46	2.18	30.46	2.18
2057	28.07	1.87	28.07	1.87	28.07	1.87	28.07	1.87

SUM	1,315.36	394.86	1,200.11	336.58	1,197.70	334.91	1,087.26	297.79
Sum/GDP		2.4%		2.1%		2.0%		1.8%

Table 8. Expected nominal and discounted fiscal cost for all projects, for top-10, top-5 and top-3 projects Risk Scenario - 10%):

YEAR	All Projects		TOP 10		TOP 5		TOP 3	
	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted
2018	8.41	7.86	0.00	0.00	0.00	0.00	0.00	0.00
2019	11.06	9.66	0.00	0.00	0.00	0.00	0.00	0.00
2020	11.57	9.45	0.00	0.00	0.00	0.00	0.00	0.00
2021	17.31	13.21	0.00	0.00	0.00	0.00	0.00	0.00
2022	52.78	37.63	36.14	25.77	35.24	25.12	27.98	19.95
2023	86.50	57.64	80.27	53.49	78.81	52.52	36.86	24.56
2024	85.92	53.51	82.62	51.45	87.86	54.71	36.86	22.96
2025	71.34	41.52	79.38	46.20	79.36	46.19	36.86	21.45
2026	67.49	36.71	94.47	51.38	94.45	51.38	36.86	20.05
2027	76.13	38.70	86.12	43.78	86.07	43.75	36.86	18.74
2028	107.79	51.21	98.75	46.92	98.67	46.88	36.86	17.51
2029	101.19	44.93	113.26	50.29	113.18	50.25	36.86	16.37
2030	113.09	46.93	132.46	54.96	132.46	54.96	36.86	15.30
2031	125.86	48.81	132.46	51.37	132.46	51.37	36.86	14.30
2032	142.77	51.74	132.46	48.01	132.46	48.01	36.86	13.36
2033	142.22	48.17	132.46	44.87	132.46	44.87	36.86	12.49
2034	138.59	43.87	132.46	41.93	132.46	41.93	36.86	11.67
2035	137.42	40.66	132.46	39.19	132.46	39.19	36.86	10.91
2036	136.72	37.80	132.46	36.63	132.46	36.63	36.86	10.19
2037	131.39	33.95	130.26	33.66	130.26	33.66	36.86	9.53
2038	45.95	11.10	45.07	10.88	45.07	10.88	36.86	8.90
2039	46.29	10.45	45.07	10.17	45.07	10.17	36.86	8.32
2040	46.58	9.83	45.07	9.51	45.07	9.51	36.86	7.78
2041	46.58	9.18	45.07	8.88	45.07	8.88	36.86	7.27
2042	46.34	8.54	45.07	8.30	45.07	8.30	36.86	6.79
2043	46.33	7.98	45.07	7.76	45.07	7.76	36.86	6.35
2044	37.03	5.96	37.01	5.96	37.01	5.96	36.86	5.93
2045	36.86	5.54	36.86	5.54	36.86	5.54	36.86	5.54
2046	36.86	5.18	36.86	5.18	36.86	5.18	36.86	5.18
2047	36.86	4.84	36.86	4.84	36.86	4.84	36.86	4.84
2048	36.86	4.53	36.86	4.53	36.86	4.53	36.86	4.53
2049	36.86	4.23	36.86	4.23	36.86	4.23	36.86	4.23
2050	36.86	3.95	36.86	3.95	36.86	3.95	36.86	3.95
2051	36.86	3.69	36.86	3.69	36.86	3.69	36.86	3.69
2052	36.86	3.45	36.86	3.45	36.86	3.45	36.86	3.45
2053	36.86	3.23	36.86	3.23	36.86	3.23	36.86	3.23
2054	36.86	3.02	36.86	3.02	36.86	3.02	36.86	3.02

2055	36.86	2.82	36.86	2.82	36.86	2.82	36.86	2.82
2056	36.86	2.63	36.86	2.63	36.86	2.63	36.86	2.63
2057	34.02	2.27	34.02	2.27	34.02	2.27	34.02	2.27
SUM	2,557.02	866.39	2,512.25	830.75	2,514.88	832.28	1,315.35	360.06
Sum/GDP		5.3%		5.1%		5.1%		2.2%

Table 9. Expected nominal and discounted fiscal cost for all projects, for top-10, top-5 and top-3 projects (Risk Scenario - 30%):

YEAR	All Projects		TOP 10		TOP 5		TOP 3	
	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted	Nominal	Discounted
2018	17.00	15.89	0.00	0.00	0.00	0.00	0.00	0.00
2019	21.08	18.42	0.00	0.00	0.00	0.00	0.00	0.00
2020	22.69	18.52	0.00	0.00	0.00	0.00	0.00	0.00
2021	30.87	23.55	0.00	0.00	0.00	0.00	0.00	0.00
2022	79.29	56.53	48.95	34.90	46.39	33.08	37.00	26.38
2023	116.44	77.59	101.15	67.40	98.04	65.33	49.67	33.09
2024	117.20	72.99	105.49	65.70	111.06	69.17	49.67	30.93
2025	98.12	57.10	102.01	59.37	100.34	58.40	49.67	28.91
2026	93.56	50.89	119.27	64.88	117.60	63.97	49.67	27.01
2027	103.03	52.38	107.45	54.62	106.29	54.03	49.67	25.25
2028	143.55	68.20	122.96	58.42	122.02	57.97	49.67	23.60
2029	134.28	59.62	141.64	62.89	140.70	62.47	49.67	22.05
2030	147.59	61.25	166.19	68.96	166.19	68.96	49.67	20.61
2031	163.59	63.44	166.19	64.45	166.19	64.45	49.67	19.26
2032	184.82	66.99	166.19	60.23	166.19	60.23	49.67	18.00
2033	183.75	62.24	166.19	56.29	166.19	56.29	49.67	16.82
2034	177.79	56.28	166.19	52.61	166.19	52.61	49.67	15.72
2035	175.90	52.04	166.19	49.17	166.19	49.17	49.67	14.69
2036	174.69	48.30	166.19	45.95	166.19	45.95	49.67	13.73
2037	166.95	43.14	163.62	42.28	163.62	42.28	49.67	12.83
2038	65.41	15.80	62.57	15.11	62.57	15.11	49.67	11.99
2039	65.15	14.71	62.57	14.12	62.57	14.12	49.67	11.21
2040	64.94	13.70	62.57	13.20	62.57	13.20	49.67	10.48
2041	64.94	12.80	62.57	12.33	62.57	12.33	49.67	9.79
2042	64.58	11.90	62.57	11.53	62.57	11.53	49.67	9.15
2043	64.55	11.12	62.57	10.77	62.57	10.77	49.67	8.55
2044	49.91	8.03	49.88	8.03	49.88	8.03	49.67	7.99
2045	49.67	7.47	49.67	7.47	49.67	7.47	49.67	7.47
2046	49.67	6.98	49.67	6.98	49.67	6.98	49.67	6.98
2047	49.67	6.52	49.67	6.52	49.67	6.52	49.67	6.52
2048	49.67	6.10	49.67	6.10	49.67	6.10	49.67	6.10
2049	49.67	5.70	49.67	5.70	49.67	5.70	49.67	5.70
2050	49.67	5.33	49.67	5.33	49.67	5.33	49.67	5.33
2051	49.67	4.98	49.67	4.98	49.67	4.98	49.67	4.98

2052	49.67	4.65	49.67	4.65	49.67	4.65	49.67	4.65
2053	49.67	4.35	49.67	4.35	49.67	4.35	49.67	4.35
2054	49.67	4.06	49.67	4.06	49.67	4.06	49.67	4.06
2055	49.67	3.80	49.67	3.80	49.67	3.80	49.67	3.80
2056	49.67	3.55	49.67	3.55	49.67	3.55	49.67	3.55
2057	45.91	3.07	45.91	3.07	45.91	3.07	45.91	3.07
SUM	3,433.60	1,179.98	3,243.04	1,059.78	3,236.55	1,056.00	1,771.54	484.62
Sum/GDP		7.2%		6.5%		6.5%		3.0%

The assessment of Fiscal Risk of the Agrements of Guaranteed Procurement of electricity anticipates the assumption, that the ESCO expenses are not cross-subsidized from comperatively cheap electricity producers. The existing regulatory system implies such a cross-subsidizing that ensures low financial risk of ESCO.

The government eases fiscal risks, but remains committed to all obligations taken towards investors in accordance with the existing mutual memorandum.

Information on some PPA projects/projects that can be identified as Public and Private Partnerships.

As we noted above, on May 4, 2018, the Law of Georgia on Public and Private Cooperation entered into force, which establishes legal basis for public and private co-operation.

The criteria for public and private co-operation are established by the law:

A) Long-term - minimum term of contract for public and private cooperation shall be determined by the legal act of the Government of Georgia but not less than 5 years;

B) The Value - Prior to July 1, 2020, the cost of public and private cooperation should be no less 5 000 000 lari, while from July 1, 2020, the minimum amount of public and private cooperation project cost shall be determined by the legal act of the Government of Georgia;

C) Provide public services by private partner or creation and maintainance and / or operation and maintain of public infrastructure;

D) Distribution of risks between public and private partners;

E) The full or partial financing of a private and public partnership project by a private partner.

See below the information about those projects (agreements), which are signed before the enactment of the public and private partnership law and accordging to its nature and content of the activity may be identified as public and private partnerships projects.

Anaklia Deep Sea Port

On 3 October 2016, between the Government of Georgia and the Anaklia Development Consortium was concluded an Investment Agreement on Building, Operation and Transfer (BOT) of Black Deep sea water Port of Anaklia. In addition, the agreement entered into force on November 3, i.e. after paying the so called “Signing Bonus” and submitting pre - building of the bond and guarantee.

9 phases are scheduled for construction / development of Anaklia port. On the 9th phase, the port capacity will reach to 100 million tons. In addition, the volume of annual freight turnover of the first phase of the port is defined by 8 million tons.

The full cost of the investment project is not defined by an investment agreement. The amount of estimated investments in the documents presented by the investor is defined by $ 2.5 billion, from which about 586 million investments will be made during the first phase.

The investor has taken various obligations under the investment agreement, including the freight turnover, the commitment to present the surveys according to terms, including bonds and guarantees, as well as insurance submission, and etc. i.e, the investor's basic liabilities are quite voluminous.

At this stage, activities are going on in various directions, including:

- Negotiations between the investor and the potential operator of the container terminal - the American company "SSA Marine" are going on the terms of the Container Terminal Operating Agreement;
- Negotiations are going on with international financial institutions on the terms of financing;
- The port's detailed design is in the preparation process.

As of today, the investor has a number of issues submiited to the Commission for consideration:

- The Simulation survey of the ship in real time, the main purpose of which is to determine whether the movement of the ships in the harbor is safe enough in the condition of extisting breakwater and plan ;
- Wave impact research, the main purpose of which is to determine in the condition of the existing breakwater whether the docks are protected from waves.

The main liabilities of the state are defined by the investment agreement, namely:

- To transfer the lands, that are in state ownership and the land bought from private individuals to the investor by the structure agreement (high and low priority lands are already transferred, in February 2019 other lands should be transferred);
- Traffic and railway infrastructure should be arranged on the way to port no later than the commencement of port operation;

At the same time, in 2017, on the bases of the decision of discussing Commission on the issues related to the Anaklia deep sea Port was approved the general plan, the preliminary design and the main part of the technical economic study by the investor. The preparation construction works of first phase of the port (annual freight turnover of 8 million tons) started on December 22, 2017, and the works in the marine part (deepening the bottom) started in September 2018. Construction in the marine section will begin during 2019. The investor is planning to launch operations at the end of 2020. 52 years after the signing the port will be handed over to the state.

Gardabani 1

Gardabani 1 is an infrastructural project aimed at increasing the stability and sustainability of Georgia's energymarket by constructing new power generation objects.

The Government with cooperation of the state enterprise, by obtained funding from private investors by the latter, implements a long-term infrastructure project within the framework of the Implementation Agreement, and takes the responsibility the risks associated with this project and about the implemented investmint in case it cannot be removed.

For the implementation of the Gardabani 1 project, a separate legal entity was established by LTD "Gardabani Thermal electic station", which is currently the Gardabani Thermal Power station Operator. Gardabani 1 project included Construction of 230 MW combined cycle thermal power station in Gardabani. For the implementation of the project by JSC "Partnership Fund" was created Ltd "Gardabani Thermal Power station". The project realizaton was implemented by Calik Enerji San. Ve Tic. A.S while funding of the project was made by JSC "Oil and Gas Corporation" by funds obtained from foreign investors. The Implementation Agreement of Gardabani 1 was signed among the following parties:

1. The Government of Georgia;
2. JSC Partnership Fund;
3. JSC "Georgian Oil and Gas Corporation";
4. Gardabani Thermal Power Station Ltd.
5. JSC "Electricity System Commercial Operator.

Obligations of the Government of Georgia:

Ensure recognition as a source of guaranteed capacity of LTD "Gardabani Thermal Power station" and thermal power station (during the period of the contract); Ensuring conclusion of long-term agreement between ESCO and LTD "Gardabani Thermal Power station" for the purpose of payment of the guaranteed capacity fee set by the regulator (Georgian National Energy and Water Supply Regulatory Commission) LTD "Gardabani Thermal Power station LTD;

In case of ESCO's abolition (liquidation, bankruptcy, the cancelation of the function of collecting guaranted capacity fee) and / or transfer of its functions to another person, for the purpose of paying the Guaranteed Capacity Fee, ensure the transfer of the imposed obligations imposed on ESCO to the person concerned, which is no less solvent than ESCO.

Liabilities of Gardabani Thermal Power station Ltd: To ensure the completion of the construction and operation of thermal power station of the combined cycle working on 230 MW installed capacity gas in Gardabani untill the end of 2016 and to supply of electric power to the Electrical Energetic system of Georgia in the time specified by Georgian legislation.

The contract entered into force on October 1, 2013, and the construction was completed in July 2015, the generation of revenue started from September 2015. The capacity of investment is 213 million USD. Term of exploitation of thermal power station of the combined cycle of Gardabani was determined for 25 years (was granted the status of guaranteed capacity operator was granted until October 1, 2040). The thermal power plant is reflected on the balance of "Gardabani thermal power station" Ltd. and is not anticipated the transfer of the asset to the state.

The fixed tariff of 1 kw electric power generated by Gardabani thermal power station amounts to 8,012 tetri by 2018.

Gardabani 2

Gardabani 1 is an infrastructural project aimed at increasing the stability and sustainability of Georgia's energymarket by constructing new power generation objects.

For the implementation of the Gardabani 2 project, by JSC "Georgian Oil and Gas Corporation" was established as a separate legal entity LTD "Gardabani Thermal Power Station 2", which will carry out operation after the construction of the thermal power station during the Implementation Agreement.

Gardabani 2 Project anticipates the Construction of 230 MW thermal power station of the combined cycle in Gardabani. In order to implement the project by the JSC "Oil and Gas Corporation" was founded LTD "Gardabani Thermal Power station 2" . The project is implemented by "China Tianchen Engineering Corporation" while the project was funded by JSC "Oil and Gas Corporation" from its own funds.

The Implementation Agreement of Gardabani 2 was signed among the following parties:

1. The Government of Georgia;

2. Gardabani Thermal Power station 2 Ltd;
3. JSC "Georgian Oil and Gas Corporation";
4. JSC "Electricity System Commercial Operator.

The Obligations of the Government of Georgia:

Ensure timely issuance of permits and licenses for implementation of the project by Gardabani Thermal Power Station 2 Ltd;

Ensure (during the period of the contract) recognition as a source of guaranted capacity of the Gardabani Thermal Power station 2 Ltd and termal power station by the Regulatory Commission (Georgian National Energy and Water Supply Regulatory Commission);

Provision of natural gas supply for the operation of thermal power station with fixed tariff - $ 143 per 1,000 cub. meters. This tariff shall be applicable for 15 years after the project's launch;

Within 15 years of Gardabani 2 operation commencement, to provide a minimum amount of electricity generation and consumption of 1,2 billion kilowatt / kW by Gardabani thermal power station 2, which is established annually by the Ministry of Energy of Georgia;

Supervision of obligations fullfilment fulfilled by ESCO within the implementation agreement / Georgian legislation;

In case of ESCO's abolition (liquidation, bankruptcy, the cancelation of the function of collecting guaranted capacity fee) and / or transfer of its functions to another person, for the purpose of paying the Guaranteed Capacity Fee, ensure the transfer of the obligations imposed on ESCO to the person concerned, which is no less solvent than ESCO.

In case of transfer of the functions imposed on ESCO to the other organization, the Government shall provide transfering all rights and obligations of the Agreement existing between ESCO and LTD "Gardabani Thermal Power Station 2" to the other organization.

For the purpose of implementation agreement, in case of changes in the legislation, as a result of which the expanses, other financial burden, damage and liability of JSC "Oil and Gas Corporation" / Gardabani Thermal Power Plant 2 will increase in relation to the construction and operation of Gardabani 2, they have the right to apply to the government in relation to make changes in the contract, in order that their financial status maintained at what level it would be before making amendments in legislation;

In case of inadequately and / or improper fulfillment of obligations by the government within the Implementation Agreement, if JSC "Oil and Gas Corporation" / Ltd "Gardabani Thermal Power Station 2" will suffer loss, the government will compensate these loss / damage to these companies;

If the share of JSC "Oil and Gas Corporation" in Gardabani Thermal Power station 2 will be transferred to another company by the decision of the Government, the government is obliged to pay the compensation to the JSC Oil and Gas Corporation, which would be sufficient in order to receive at least 9,07 % feedback from the project of Gardabani 2.

<u>Liabilities of "Gardabani Thermal Power Station 2" Ltd:</u> To ensure the completion of the construction and starting operation of the combined cycle thermal power station at Gardabani working on gass 230 MW installed capacity in Gardabani till the end of 2019, for which Gardabani Thermal Power Station 2 is obliged to obtain construction permission; Conduct the construction with all necessary safety norms; To provide free access of the representatives of the Ministry of Energy and the government; Attract funds for implementation of the project in cooperation with JSC "Oil and Gas Corporation" and the terms of financing will be agreed with the Government of Georgia.

The contract entered into force on September 28, 2016, and will enter into exploitation in the fourth quarter of 2019; The capacity of investment is USD 170-180 million. The term of exploitation of the combined cycle thermal power station in Gardabani is 25 years. The unfinished construction is reflected on the Balance of Gardabani Thermal Power station 2 and is not supposed its transfer to the state after completion of construction.
The fixed tariff of 1 kW electricity generated by the Gardabani thermal power station according to the Implementation Agreement is 5.5 cents, and the annual purchase capacity constitutes 1,2 billion kw. Under the same agreement price of natural gas is $ 143 per 1,000 cub meters of gas.

Tbilisi Shota Rustaveli International Airport

The project includes taking of Tbilisi Airport by lease agreement, by TAV Urban Georgia – private parner, its development, purchase of equipment and facilities. Until 2027, a private partner will be able to fully manage and maintain the airport. From 2027 the airport will be transferred free of charge into the ownership of the public partner.
The Contract Parties are TAV Urban Georgia and the United Airports of georgia. TAV Urban Georgia is responsible for the management and development of the Tbilisi Airport while the United Airports of Georgia is responsible for supervision and support within its competence.
The effective agreement entered into force on 28 May 2015. The initial agreement, which was replaced by the existing agreement, came into force on 6 September 2005.
The Tbilisi Airport operated prior to making investment in it by TAV, but the completeion of the construction of a new terminal by Tav and its entering into exploration was carried out in February 2007.
"Along with the construction, operation and transfer agreement, with changes and amendments in relation to Tbilisi International Airport", the term is defined for 12 years. The term of the initial precedent of the document, the period of the initial agreement, after amandements included the years 2005-2027.
In the case of this Agreement, the cost of the project is not directly specified, however, taking into consideration the investments made by TAV, the cost of the project is no less than 261,529,213 GEL, which really matches the damand of the value.
Implemented investments include construction of old terminal and new terminal, arrangement of parking lots, rehabilitation of runway, path and platform.

Name	Tav Investment	On UAG Balance _ hystoric	Entering into exploatation	Expiry date	Collected depreciation	Residual 31/12/2018
Old terminal	124,315,798	79,232,225	2007	40 years	9,603,906.09	69,628,319
New terminal	65,880,385	59,719,615	2017	40 years	2,115,070	57,604,545

As for the rest of investments above mentioned implemented in Tbilisi, TAV's investment in 2015-2017 period is approximately 71,333,030 GEL.
In this case, a private partner carries out the construction of a large part of airport buildings and their implementing, which truly meets the criteria of public service provision, creation of public infrastructure, maintenance and implementation.

According to the agreement, business risks are fully entrusted to a private partner, but the risks resulting from the legistlative or government actions – to a public partner.
The project is fully funded by a private partner.
Several guaranteed tariffs are defined by the contrat, such as fixed taxes for airlines (passenger taxes, cost of landing). Transfer of the airport and its assets will be free of charge.
As indicated in the table, the term of exploitation of created assets created 40 years. The assets are reflected on the balance of Georgian airports, and from 2027 all asset will be transferred to the United Airports of Georgia in case of desire to enable it to operate the airport thoroughly or to transfer it to another operator.

<u>**Batumi International Airport**</u>

The project includes the management of 100% share of the Batumi Airport by TAV - a private partner, and, at the same time, making a lease agreement (both immovable and movable property) of Batumi international airport by Batumi Airport Ltd managed by Tav, its development, purchase of equipment and the construction of the buildings. Until 2027, a private partner will be able to fully manage and maintain the airport. From 2027 the airport (as Batumi Airport as well as itself the property of the airport) will be transferred free of charge to the public partner in ownership.
This project is implemented on the basis of two basic agreements.
<u>The first agreement</u> was signed on August 9, 2007 the parties are the TAV Batumi Operations LLC and the Ministry of Economic Development of Georgia, according to which 100% share of LLC Batumi Airport was handed over to TAV Batumi Operations LLC for management (it is responsible to pay about 1.4 million lari debt, which it had at the moment of concluding the agreement).
And the second lease agreement was signed on May 28, 2015 - lease agreement between Batumi Airport and "United Airports of Georgia" LLC, according to which the “Batumi Airport” LD takes by lease the property of Batumi International Airport. Both of them are valid until August 10, 2027.
The cost of the project is not directly defined, however, taking into consideration the investment made by TAV, the cost of the project is no less than 19,753,150 GEL.
According to the agreement, business risks are fully entrusted to a private partner, but the risks resulting from the legislative and government actions to - a public partner.
Investment volume, value of the created asset and depreciation

Name	Hystoric value	The evaluation of auditor of United airports	Entering into exploatation	The expiry of exploatation	Collected depreciation	Residue 31/12/2018
The terminal building of Batumi airport	10,829,525	4,761,933	2007	32 years	533,327	4,228,695
The terminal building of	360,984	175,274	2007	42 years	14,954	160,320

fire fighting of Batumi airport						
Batumi Airport Substation Building with the equipment	288,787	116,815	2007	42 years	9,966	106,849
Batumi Airport Warehouse Building	72,197	50,492	2007	42 years	4,308	46,184
Batumi airport platform	6,787,931	-	2007	11 years	-	-

As indicated in the table, the defined term of exploatation of the created assets is different according to the assets and is between 11 and 42 years. The assets are reflected in the balance of the Georgian airports, and from 2027 all asset will be transferred to the United Airports of Georgia in case of desire to enable it to operate the airport thoroughly or to transfer it to another operator.

As for "Batumi Airport" Ltd, its share will be returned to the state, namely to the Ministry of Economy and Sustainable Development.

Several guaranteed tariffs are defined by the contract, such as fixed taxes for airlines (passenger taxes, cost of landing). The transfer of airport and its assets will be carried out free of charge.

In this case, a private partner carries out the construction of a large part of airport buildings and their operation, which truly meets the criteria of public service provision, creation of public infrastructure, maintenance and implementation.

The project was implemented on May 26, 2007.

The project is fully funded by a private partner.

6.3 Batumi International Container Terminal Ltd

LTD "Batumi International Container Terminal" operates "Batumi Sea Port" # 4, #5, #6 docks on the basis of a lease agreement signed with „Batumi Sea Port" LTD, which in turn was transfered by the state of April 11, 2006 with free of charge usurfruct right, during its exist to "Batumi Sea Port" LTD ("Batumi Sea Trading Port" LLC).

The lease validity period was defined with 48 years from 2007 including 2055 and LLC "Batumi International Container Terminal" was given the right to develop and operate the ferry crossing and container terminal in the „Batumi Sea Port".

LTD "Batumi International Container Terminal" is a company established in Georgia by the Philippines company "ICTSI". "ICTSI" is an International Container Operator, which owns or operates around the world up to 30 container terminals.

"Batumi Container Terminal" LTD has been operating in Georgia for 11 years and improves the quality of service and freight turnover annually.

As of 2018, it processes 20% of Georgia's container market, while as for ferry transportation – it renders the service to 80% ferry transportation of Georgia.
"ICTSI" is investing with its own funds annually in Batumi International Container Terminal in order to increase freight turnover and competition not only with Georgia's ports, but also to compete with the ports of neighboring states to attract more burdens.
"Batumi International Container Terminal" is not connected with the state with direct agreements.