

CHALLENGES FOR INDUSTRIAL POLICY IN GEORGIA

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INTRODUCTION

It has been 25 years since Georgia gained its independence; however, ideas espoused by the national liberation movement on freedom and adoption of democratic values still remain on the agenda, since it was not possible to create the minimal socio-economic basis to guarantee the setback or complete reverse of these ideas. European integration does not automatically lead to the adoption of European standards of life, as can be seen in the economic situations of several new EU member countries. There is only a chance that countries are able to reach these living standards, Greece being a prime example to illustrate this. The road towards embracing European values relies solely on economic development.

For the past 25 years, governments have changed, reforms have been introduced, programmes have been written, government economic advisers have been replaced, some statistical data as well as international indexes have been improved, the budget has been growing, and the number of rich people has been rising. However, according to several estimates, Georgia has an unemployment rate of around 60%¹ and the worst rank for unequal distribution of wealth amongst all post-soviet states.² This has resulted in a bipolar society, with the majority of the country's natural, material, and financial resources in the hands of a small group of people, who control state development, while the majority of the population, short on resources, have minimal leverage to change the situation. According to data from the National Statistics Office of Georgia, the proportion of the population living below the extreme poverty line between 2008–2011 grew from 6.4% to 9.2%, and in 2013 it reached 9.7%, which equals 437 238 people. 55% of population depends on agriculture, for the most part subsistence farming.

'No system where a vast area of economic inconvenience is called a "margin" of social exclusion, and, at the same time, a narrow margin called the "elite" swims in excessive wealth, has a great future.'³ These words by Grzegorz Kołodko were not directed towards Georgia, but perfectly reflect its current situation.

According to present-day data, the world's developed countries and international financial institutions help 138 developing countries in implementing reforms, while only a few of them actually succeed. Along with this, the relationship between the amount of aid received and economic growth is not proportional.

This is the situation in Georgia. After 25 years of making reforms and receiving international aid, economic development has been elusive. In this paper, we will review the economic processes in Georgia from the angle of industrial policy and the conditions for industries in general.

After the collapse of the USSR, Georgia experienced total deindustrialisation. During this time, dozens of high-tech factories were ravaged with a large number sold as scrap metal. Basically, Georgia's economic structure regressed and the breakdown of its industrial sector turned it into more of an agrarian country. Unfortunately, terms like 'Industrial policy' and 'Industrialisation' have become discredited over the last 25 years, because of the influence of the country's Soviet past. The three principles of the Washington Consensus—deregulation, privatisation and liberalisation—have become the unchanging dogma for the Georgian political elite. The purpose of this document is to identify the challenges to implementing industrial policy while also stimulating informed public discussion around this issue.

The first chapter of the paper is dedicated to a review of macroeconomic data, demonstrating obstacles to the development of production processes in Georgia and elements which support it. Among other things, Georgia's economic structure and the structural division of GDP are discussed. In the following chapters, when reviewing macroeconomic data, the paper will address issues such as education policy, research and development, trade policy, and regimes that have an impact on industrial processes in Georgia. Also, instruments of particular industrial policy are described in the text which are used by the Government of Georgia to develop manufacturing in the country. In the final part of the work, the challenges that arise in relation to industrial policy in Georgia are summarised. The paper also contains concrete recommendations for the Georgian government, which can be useful for the development of proper industrial policy instruments at the initial stage.

¹ According to the five-year Social-economic Development Strategy of Georgia, *GEORGIA 2020*, the official rate of unemployment is 15%. However, the programme reveals that 55% of self-employed people live in rural areas, who should be considered unemployed as well.

² According to research published on 20 January 2015 by the International Labour Organisation, Georgia ranks first place in the region with the highest economic inequality rate. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf

³ Grzegorz W. KOŁODKO, *THE NEW PRAGMATISM, OR ECONOMICS AND POLICY FOR THE FUTURE (An Essay)*; Acta Oeconomica, Vol. 64 (2) pp. 139–160 (2014) DOI: 10.1556/AOecon.64.2014.2.1

ECONOMIC STRUCTURE OF GEORGIA AND THE SITUATION IN THE MANUFACTURING SECTOR

After the collapse of the Soviet Union, Georgia experienced extreme regression according to most economic indicators. Despite the fact that 25 years have already passed since, Georgia is still one of the weakest countries in the region. 10% of the population lives in extreme poverty. With regard to income distribution, Georgia is one of the most unequal countries in the post-soviet space (with a GINI coefficient of 42). According to data from the Statistics Office of Georgia, unemployment in Georgia is around 14%, according to criteria of international organisations. However, if partial employment and hidden unemployment is taken into consideration, the unemployment figure is 37.1% for 2013. The fact that 52% of employees work in the agriculture sector indicates the economic backwardness of Georgia. Meanwhile, agriculture has only a 9.2% share of GDP. This indicates that almost half of the population is actually excluded from economic processes. If one compares economic figures of Soviet Georgia and today's indicators in the sense of productivity, GDP per capita in Georgia is only 49% of the world average, while in 1988 this figure was 88%.⁴ To summarise the economic situation in Georgia it should be noted that after the demise of the Soviet Union there was a weakening of human capital; a sharp decrease in the population and their income' deindustrialisation of the country; and a transition from an industrial economy to a traditional, mainly subsistence economy.

Since the beginning of the 1990s, every active government of Georgia has built their doctrine on the principles of a non-state-intervention policy. This has included fast deregulation of the economy, liberalisation, and rapid privatisation of existing public wealth. Especially after 2003, the Government of Georgia energetically implemented the principles of the Washington Consensus. During that time, the Government of Georgia declared the development of industries such as tourism, energy sector and agriculture as a priority. Although, if one considers certain macroeconomic figures, for example, unemployment, Georgia did not achieved any progress in that direction. For example, the rate of unemployment in 2003-2012 fluctuated between 13–15%.

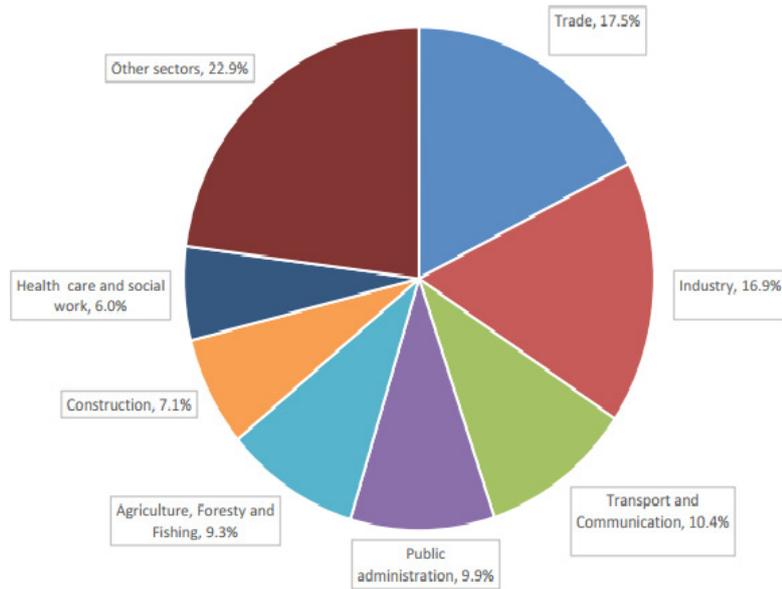
Table 1, source Geostat

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Economically active population (labour force), in thousands	2023.9	2021.8	1965.3	1917.8	1991.8	1944.9	1959.3	2029.1	2003.9	1991.1
Employed, in thousands	1744.6	1747.3	1704.3	1601.9	1656.1	1628.1	1664.2	1724.0	1712.1	1745.2
Unemployed, in thousands	279.3	274.5	261.0	315.8	335.6	316.9	295.1	305.1	291.8	246.0
Rate of unemployment, %	13.8	13.6	13.3	16.5	16.9	16.3	15.1	15.0	14.6	12.4

Despite the fact that most bureaucratic mechanisms were disrupted, most important industrial enterprises were still sold (in the worst cases at the price of scrap) and human capital dissipated. Despite this, the Government of Georgia could still conduct strong industrial policy, as manufacturing still plays the most important role in the economy of Georgia. According to 2014 data, manufacturing makes up 16.9% of GDP, with only trade taking a higher share.

⁴ Figures are calculated on the basis of GEOSTAT data

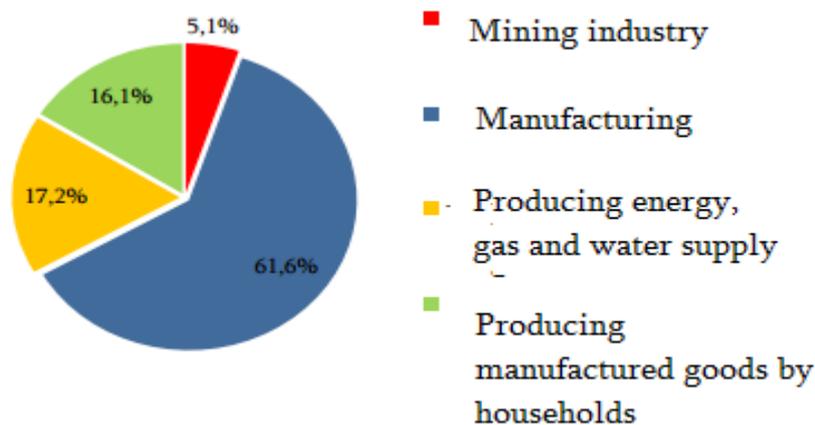
Figure 1: Breakdown of Georgian GDP in 2014* (%), National Statistical Office of Georgia, 2015



However, it is important that the industrial sector's large share of GDP does not cloud the bigger picture, and two significant factors should be taken into account. Firstly, it is significant that according to data from 2013, if we assess the subsectors of the industrial sector, manufacturing accounts for only 61.6% of the total indicator. The rest of the industrial sector is made up of mining and quarrying (5.1%); electricity, gas and water supply (17.2%); and processing of products by households (16.1%).⁵ Thus manufacturing, which stands out with high added value and a high level of spill-over effect in employment and in different sectors, holds only two-thirds of the total industrial sector.

Secondly, it should be noted that heavy industry is an especially significant sector, this includes: production of steel, ferroalloys, cement, traincarriages, airplane components, and other metal-containing products. The main reason why these industries were preserved is their competitive advantage compared with other producers in the region, and the soviet technological legacy. All of the abovementioned production takes place in plants built during the Soviet Union. These plants have well organised infrastructure and, in some cases, are situated in clusters (for example, Chiatura manganese, Zestafoni ferroalloys, and Rustavi steel plants).⁶ In addition to this, existing industrial facilities benefit from a comparative advantage due to cheap electricity and local mineral deposits. To recap, the share of manufacturing in GDP is not necessarily high and it is not 17.1% but 60% of this indicator. Besides, a major part of this manufacturing depends on the usage of domestic resources and on the industrial clusters inherited from the Soviet Union.

Figure 2, Breakdown of industrial sector in Georgia⁷



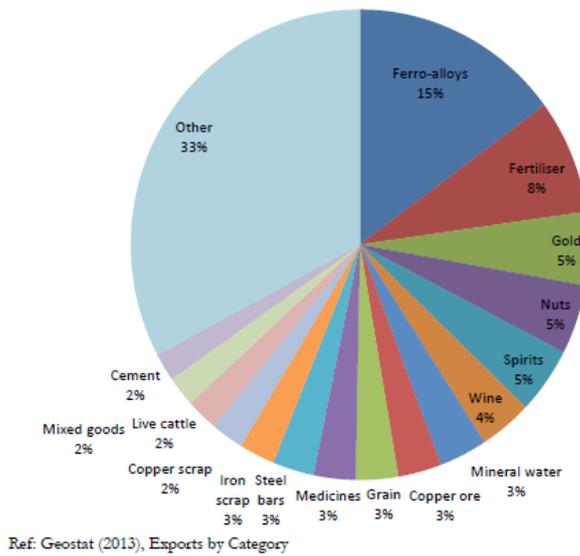
⁵ Ministry of Economy and Sustainable Development of Georgia, description of the manufacture sector, 2014 http://economy.ge/uploads/ek_seqtorebi/gdp_seqtorebi/mrecveloba_2014_3_geo.pdf

⁶ Assessment of the Heavy Industry Sector for Rustavi Steel (2013). See more at: http://geowel.org/index.php?article_id=83&clang=0#sthash_eF6H9Knr.dpuf

⁷ Breakdown of industrial sector in Georgia, 2013, Ministry of Economy and Sustainable Development

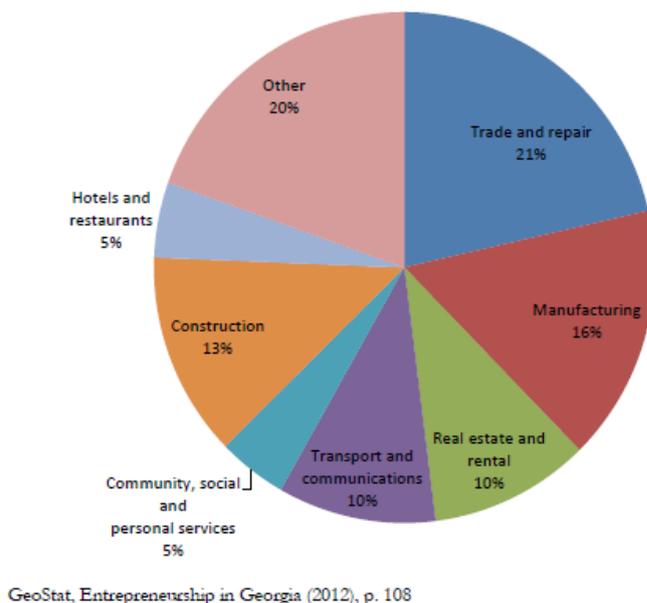
Today, the industry creates more added value than agriculture, tourism, construction and transport (the figure for manufacturing is about 10%). The industry is a leading component of the Georgian economy also in terms of exports. For example, production of ferroalloys, fertilisers, steel and cement makes up 28% of exports (excluding re-exporting of cars from the total figure). If we compare this to the figures of other higher-priority sectors, the difference is indeed significant. For instance, wine production makes up only 4% of exports and hazelnuts around 5%. This is essentially important when comparing the resources spent by the state supporting heavy industry and agriculture.

Figure 3, Breakdown of Georgian exports (excluding cars)⁸



In terms of employment, manufacturing also leads other economic sectors with 16% of total employees, while high-priority sectors such as hotels and restaurants only account for 5%.

Figure 4, Breakdown of employment (from ½ million people employed in registered and active businesses) 2011⁹

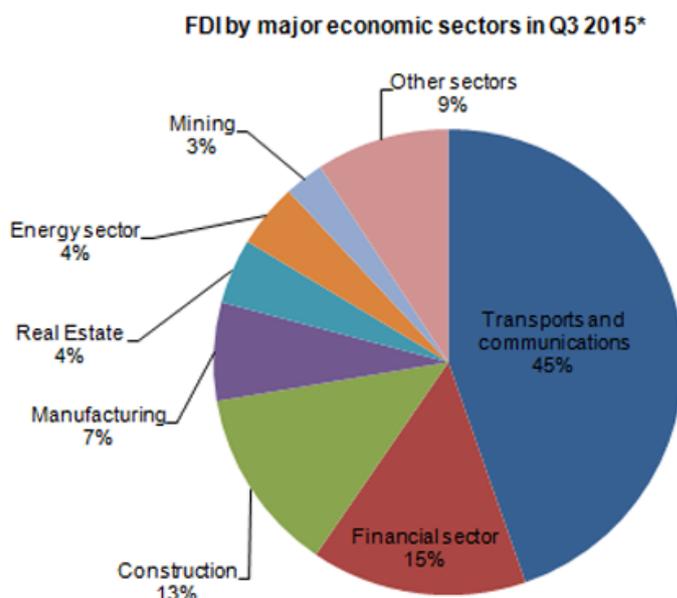


⁸ The graph is taken from the following paper: Assessment of the Heavy Industry Sector for Rustavi Steel (2013). See more at: http://geowel.org/index.php?article_id=83&clang=0#sthash.eF6H9Knr.dpuf

⁹ Ibid.

It is worth noting that the role of foreign direct investments (FDI) in Georgia's industrial sector compared to the other sectors is quite small. The financial sector is on top with a 15% share of total FDI; manufacturing's share is only 7%. Respondents participating in this research, link low levels of FDI in manufacturing to weak human capital, as well as to the problems associated with long-term political stability. Interesting opinions are expressed by well-known scholars about foreign direct investments in the post-soviet space, who somewhat describe the inadequacy of the indicator mentioned above. As Robert Wade claims, during 1998-2003, only 3% of global FDI went to CIS and former Yugoslav countries. Wade believes that by that time, the incentives for the majority of these investments was not taking advantage of low-wage workforces or low taxes to export goods to high-income markets, but solely increasing sales in local markets.¹⁰

Figure 5, FDI in Georgia by sectors, GEOSTAT, 2015¹¹



As the graph below shows,¹² a significant portion of Georgia's manufacturing comes from materials containing metals, production of which depends on local raw materials. By its share in exports and GDP, as well as by the added value, mining and quarrying, and more precisely ferroalloy production, is a leading sector of the economy. However, this sector does not stand out in terms of high spill-over effects or high levels of technological extensibility. Furthermore, the existence of such industries does not require the expansion of high-tech and innovative processes, and mostly depends on the maximal utilisation of local workforces and natural resources. These types of production are greatly influenced by the price and demand of their product on the global market (because of the elasticity of demand).

Table 2, GDP at current prices by 45 activities (2012)¹³

Category Description ⁵	Added-Value million (GEL)	Percentage of total GDP	Additional information provided in discussion with GeoStat
Metal and metal products	563.4	2.5%	This is nearly 85% ferroalloy (manganese)
Chemical products and non-metallic mineral products	517.5	2.3%	55% non-metal construction materials and 40% chemical products (fertilizer and pharmaceuticals)
Paper products, textiles, wood paper and printing	301.0	1.3%	20% textiles and 45% publishing and printing
Transport and manufacturing equipment	198.4	0.9%	Nearly 50% railway and 30% furniture

Reference: GeoStat (2013), Gross Domestic Product at Current Prices by 45 Activities (2012) supplemented through discussion with GeoStat.

¹⁰ ROBERT H. WADE, Bringing the State Back, published in the book *Towards a Prosperous Wider Europe*. Macroeconomic policies for a growing neighbourhood, edited by Michael Dauderstadt, Friedrich-Ebert-Foundation, Bonn 2005.

¹¹ FDI in Georgia by sector, GEOSTAT, 2015, http://geostat.ge/index.php?action=page&p_id=140&lang=eng

¹² The graph is taken from the following paper: Assessment of the Heavy Industry Sector for Rustavi Steel (2013). See more at: http://geowel.org/index.php?article_id=83&clang=0#sthash.eF6H9Knr.dpuf

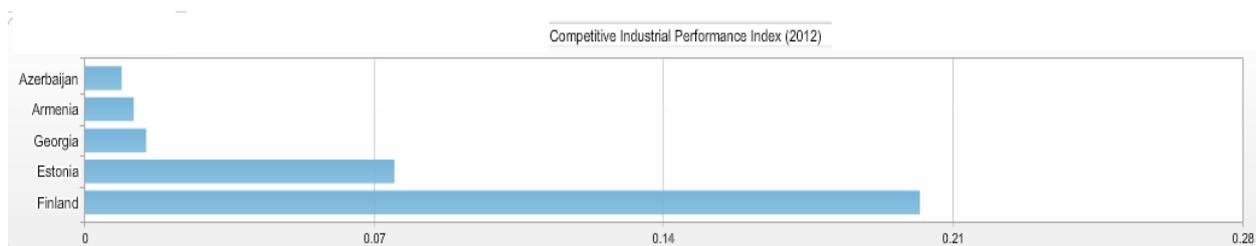
¹³ Ibid.

In 2015, Rustavi Metallurgical Plant (Rustavi steel LLC) was forced to cut 500 jobs, since the price of steel products fell by 40% on international markets.¹⁴ Georgian Manganese LLC linked its decision to temporarily dismiss 3 700 employees in Chiatura to problems in the global market as well.¹⁵ To conclude, it can be said that it is necessary for the leaders in the Georgian industrial sector to be maintained, since they create high added value and employ a large number of people, nevertheless, they don't have high potential for making structural changes in the country.

In the Competitive Industrial Performance Index, Georgia holds the 96th position.¹⁶ According to this indicator, Georgia significantly lags behind the average EU rate. It is worth noting that, some indicators of the index possibly miscalculate Georgia's industrial policy. It may be especially misleading in terms of evaluating the sophistication of exported goods, which in Georgia's case includes re-exported cars (which is regarded as sophisticated production).

COMPETITIVE INDUSTRIAL PERFORMANCE 2012/2013 REPORT

The Competitive Industrial Performance Index was created by UNIDO and its main purpose is as a benchmarking and measuring instrument for selection of strategies for industrial competitiveness. This index is also used for elaboration of policies and diagnostics. It has three main dimensions of assessment. The first dimension reflects the capabilities of countries to produce (MVapc) and export (MXpc). Sub-indicators of this dimension are: added value of productivity per capita (MHVAsh) and export of produced production per capita (MVAsh). The second dimension includes technological depth and progress of a country. In this case a share of medium and high technological productivity in total added value of manufacturing is used (MHXsh), also, a share of such production in total exports (MXsh). The third dimension reflects the competitiveness of a country on a global level, and the share of a country's production in world production. In this case both a share of the added value of a country's production in the same sub-indicator and on a global scale (ImWMVA), and a share in the total amount of trade with produced production in the world (ImWMT)¹⁷ are used.



CHANGE OF DISCOURSE OR CONTINUATION OF OLD POLICY? POST-2012 ECONOMIC POLICIES AND INDUSTRIAL DEVELOPMENT

Since 2012, strengthening the state's role in the economy started to be actively discussed by the new Government of Georgia. Under the new government, the non-interference principle was partially revised. However, until now, the Georgian Government has remained faithful to this principle in key economic directions. The outlook of the current Georgian government on economic development are manifested in the Social-economic Development Strategy of Georgia – Georgia 2020, which was written in 2013 by the Georgian government.¹⁸

The document reveals the three following critical problems¹⁹ that are critically important for the inclusive development of Georgia's economy:

1. Weak competitiveness of the private sector
2. Weak development of human capital
3. Limited access to finance

With its broad vision in identifying problems and long-term estimates, this document is unprecedented for the last 25 years. However, in order to offer viable solutions, accurate analysis of the current situation, among other things,

¹⁴ Rustavi Metallurgical Plant is planning to cut hundreds of jobs, 2015 <http://www.tabula.ge/ge/story/97720-rustavis-metalurgiuli-garxana-ramdenime-aseuli-tanamshromlis-datxovnas-gegmavs>

¹⁵ Georgian Manganese stopped mining in Chiatura, 2016 <http://www.ipress.ge/new/21620-jorjian-manganezma-chiaturashi-madnis-mopoveba-shetsyvita>

¹⁶ <http://www.unido.org/data1/Statistics/Research/cip.html>

¹⁷ Report of Competitive Industrial Performance 2012/2013 https://www.unido.org/fileadmin/user_media/Services/PSD/Competitive_Industrial_Performance_Report_UNIDO_2012_2013.PDF

¹⁸ Social-economic Development Strategy of Georgia "GEORGIA 2020" http://www.economy.ge/uploads/news/giorgi_kvirikashvili/Strategy2020.pdf

¹⁹ In the Strategy 2020 the bounding constraints are translated as critical problems.

is required. Adequate planning determines the viability of any programme, which should be based on proper analysis of the causes of the current state of affairs. From this point of view, the document does not stand up to criticism. It is true, that it offers an overview of the causes of Georgia's current poor economic conditions, but the evaluation section of the paper is quite contradictory. In particular, on the one hand, the document says that:

'The primary aim of the second wave of reforms launched in 2004 was market liberalisation, which, among other issues, was based upon measures such as the reduction of taxation and the number of permits and licenses. Analysis of the business environment of these years, shows, that despite the changes... such economic environment became gradually formed and was unable to stimulate long-term economic growth, and in the end, it led to the system crisis.'

On the other hand, it has been evaluated positively:

*'**The economic policies** of the last decade were successful in terms of investment and correspondingly increasing economic growth rates'*

However, it also states that:

'Results of the economic growth did not reach the major part of the population and the poverty rate remains high.' the political economy was not underlined by chance. The purpose of this research is to emphasise the opinion that the reason for Georgia's economic development slowdown is not the wrong macroeconomic policy, but the **wrong economic policy** itself, and more precisely, the wrong political ideology on which this economic policy is based on.

It is extremely hard to find any sign of logic in the programme, which says that economic policy has been good, but the results have been poor. Illogicality and irrationality have been the main paradigms of Georgia's economic life. The policy for implementing the aforementioned strategy is based on the same paradigm. In particular, introduction of the strategy claims that:

*'[The] Main principle of the strategy of [the] country's economic development is guaranteeing freedom for the private sector with **a small, efficient and transparent government**. This means establishing an economic order where ... major force for drive will be the private sector.*

.....The state's involvement in entrepreneurial activities will be minimal, and it will not seek to compete with the private sector: its participation in economic activities will be limited to sectors where the private sector remains weak and inefficient.

The Government's economic policy considers the private sector's competitiveness to be a very significant driver of economic development.'

The essence of this message is quite simple: government will interfere less in the economy, since the private sector – or the market – will better look after it. It is hard not to draw parallels with the former government's economic policy, whose paradigm, as then Minister of Economy Kakha Bendukidze put it, was not having an economic policy at all.

It is clear that these remarks are not only conceptual after examining this 'strategy' further, especially its planning section. It has to be said that in general, the required actions towards macroeconomic policy are skilfully structured. However, Georgia's ample experience in this realm also needs to be taken into account, which has shown that the improvement of some macroeconomic indicators is not enough to meet the goals outlined by the 'strategy' like – employment growth, balancing the level of life in the regions, boosting exports, developing technical and professional education, etc.

This requires implementing a **development-oriented policy**, which means changing the economic structure of the country. In Georgia's case, such change means redistribution of the workforce from agriculture to higher production sectors, which must guarantee the development of the country even more. This feature of the programme is defective not only conceptually, but statistically as well.

For example, according to the document, the current rate of unemployment is 15%. Further definition suggests that with the number of self-employed individuals in agriculture who are informally deemed as unemployed, this rate would have been 70%. This means that 55% of the population, more than half the total, works in agriculture, while the current rate of unemployment is 15%, and this indicator is planned to be slightly lowered (to 12%) by 2020. What would happen to the self-employed people is mentioned nowhere.

Also, another idea found in the programme – *'moving on exporting of products with high added value'* – can be deemed as unattainable. It is planned that the coefficient of *'technological complexity of a product'* should reach 9.5 by 2020.

It is a well-known fact that high added value and technological complexity of production are not compatible with developing a countries' agricultural and service economies. In order to determine what chance Georgia's present-day economy has to reach these kinds of goals, it is first useful to understand the meaning of technological complexity of a product. There is a matrix²⁰ for calculating such complexity:

²⁰ Eurostat Statistics in focus – 1/2013, Industry, trade and services, http://ec.europa.eu/eurostat/statistics-explained/index.php/The_EU_in_the_world_-_industry,_trade_and_services

HIGH-TECHNOLOGY INDUSTRY

- Air and spacecraft machinery, pharmaceuticals, office, accounting & computing machinery, radio, television and communication equipment, precision and optical instruments.

Medium-high-technology industry

- Electrical equipment and apparatus, motor vehicles, trailers and semi-trailers, chemical products excluding medication, railway technology and transportation equipment, machinery and equipment and etc.

Medium-low-technology industry

- Building and repair of ships and boats, manufacture of rubber and plastic, manufacture of coke, refined petroleum products and nuclear fuel, manufacture of non-metallic mineral products, manufacture of basic metals and fabricated metal products.

Low-technology industry

- Other manufacturing, waste recycling, manufacture of wood, cellulose and paper, printing and publishing, manufacture of food products, beverages, tobacco, textiles, wearing apparel, manufacture of shoes and leather products.

Table 3, Levels of technological development in the industrial sector²¹

State	Level of technological development			
	High	Higher than average	Lower than average	Low
EU 27	3.3	1.0	-0.4	-0.7
EU 17	3.8	0.7	-0.8	-0.1
Hungary	4.6	4.0	1.0	-1.1
Poland	14.5	8.4	6.9	3.0
Czech Republic	5.4	7.3	1.5	-1.4
Estonia	35.1	6.8	-0.1	-1.4
Latvia	0.8	9.9	1.0	3.5
Lithuania	5.2	7.2	1.3	-0.1
Romania	1.7	12.7	3.5	1.7
Bulgaria	1.9	3.8	-0.1	-1.4

From the point of view of Georgia's current natural, material and human resources, it is very hard to imagine advancing to such levels of technology in the upcoming years, especially if transit, services, and tourism remain the main driving forces of Georgia's economy as is planned by *Strategy 2020*. These goals are not unachievable. In the last three decades, several countries which were not ahead of Georgia in terms of development took just a few years to reach close to the leading positions in global value chains (see the table). To answer the question, how they managed it, is simple, their economic policy paradigm was: development.

GEORGIAN STATE AGENCIES RESPONSIBLE FOR INDUSTRIAL DEVELOPMENT

Since 2012, new state institutions have been created with regard to the development of the manufacturing sector in Georgia. The main goal for these institutions is to promote various manufacturing industries. At present, three state agencies are working in this direction, and their activities are significantly intertwined. The Ministry of Economy and Sustainable Development is a coordinating or umbrella institution. The individual institutions are: the Entrepreneurship Development Agency, Partnership Fund, and Georgia Industrial Development Group. It should be noted that none of these institutions were created specifically to make and implement industrial policy but their work does overlap with the idea of industrial policy. Thus, we believe it is necessary to assess their strengths and weaknesses and also to assess the role of these institutions in making state industrial policy in the future. In our estimation, establishment of these institutions in their current format was not backed by any type of long-term strategic vision. According to our observations, functions among the aforementioned institutions are too vaguely distributed. Moreover, one can argue that, their existence in general is an imitation of international experiences, and not an attempt to change the trajectory of economic development.

²¹ The table is taken from: Eurostat Statistics in focus – 1/2013, Industry, trade and services, http://ec.europa.eu/eurostat/statistics-explained/index.php/The_EU_in_the_world_-_industry_trade_and_services

As a general introduction, it can be said that there is no clear vision for industrial development either in the Government of Georgia or in the political opposition. Basically, words like 'industrial policy' and 'industrialisation' were either unused or put in a negative light due to the controversial Soviet experience. Nowadays, Georgia does not have a plan or strategy for industrial development. There is no large-scale institution in the Government, or departments or divisions, which would be responsible for the creation and management of this policy. For example, Georgia has the National Tourism Administration, with funding of 18 million GEL from the state budget. In addition there is the *National tourism development strategy – 2025*, which presents concrete perspectives in the direction of tourism development in Georgia. However, the Georgian Government does not have any such agencies or strategies in terms of industrial development.

ENTREPRENEURSHIP DEVELOPMENT AGENCY (THE PROGRAMME, *PRODUCE IN GEORGIA*)

One of the main state programmes promoting industrial development is, *Produce in Georgia*, which was created in 2014. This programme is currently coordinated by the LEPL Entrepreneurship Development Agency of the Ministry of Economy. **One of the main priorities of this programme is to support production of industrial goods.** A total of 16 million Georgian lari (GEL) was allocated within the state budget for manufacturing.²² The programme includes three interventions at the micro level: financial support, infrastructural support, and consultative assistance. Financial support envisages co-financing loans (10% threshold) with a guarantee of no more than 30% of the loan, which is given for a 2–4 year period. Infrastructural support comprises of the free transfer of real estate owned by state, while consulting help offers organisational support and assistance with regard to setting up new technologies (via the engagement of the Agency of Innovations). This programme has its own priorities in terms of industrial development. The priorities are declared as the following: production of construction materials, pharmaceutical production, machine manufacturing, textile production, production of electrical devices, chemical production, metal finished goods, wood processing, and paper and carton production. The programme considers the creation of new enterprises with state financial assistance as a priority. According to Giorgi Tsikolia, director of the Entrepreneurship Development Agency of the Ministry of Economy and Sustainable Development, over one year, 90 companies were engaged in the programme. Since the commencement of the programme, establishment of new businesses, enhancing capabilities of small enterprises, ensuring entrepreneurs with necessary knowledge, and increased access to information have become possible.²³ According to EPRC data, the state has supported the creation of 90 new industrial projects. The amount of investment in these enterprises is around GEL 250 million. Commercial bank issued loans amounting to more than GEL 122 million have also been secured for the private sector within the programme. The number of people finding employment as a result of these projects is up to 5 000. In terms of beneficiaries, in the industrial sector, construction materials (23%), metals (20%), and carton and packaging materials (18%) have dominated, while the chemical industry, pharmaceuticals, and electrical devices manufacturing have also been included in projects. In the agricultural sector, high-tech farms (24%), high-tech greenhouse farms (27%) and fish processing (26%) should be noted, as well as high-tech poultry farming (6%).²⁴

Even though, the programme *Produce in Georgia* aims to promote new businesses, it does not stimulate substantially new activities for Georgia's economy. According to the requirements of the programme, the concept of "new businesses" does not imply encouragement of new economic activities, but conversely, just starting a new business in general. At first glance, these differences do not contradict each other, but in Georgia, it does not help new sectors to emerge and production to diversify.

The second major problem is the scarcity of state allocated funds. As it was mentioned above, for the advancement of industrial production, the Georgian Government allotted only 16 million GEL. It is impossible to achieve tangible results in industrial development with this amount of resources. We can use the expenses of the Georgian Government in agriculture as an illustration. During 2012–2015, the Government of Georgia invested 1 billion GEL in agriculture.²⁵ This sum of money does not include the annual budgetary finances for the Ministry of Agriculture, which exceeds 200 million GEL.²⁶

The third problem with this programme, is the total dependence of projects supported by *Produce in Georgia*, on the equity participation of commercial banks. Obviously, banks' priorities and selection criteria for projects are based on the commercial viability and low-risk of proposed ideas. Priorities such as diversification of sectors, high potential of employment, and technological development are not as important for commercial banks. Therefore, the financial support component provided by the programme *Produce in Georgia*, in terms of co-financing loan interest, make commercial banks stronger, rather than stimulating the industrial development of Georgia.

²² Advertising leaflets of the program *Produce in Georgia* http://qartuli.ge/uploads/pdf_47.pdf

²³ Georgian government summed up annual results of the program *Produce in Georgia*, 2015 <http://www.eprc.ge/index.php?a=-main&pid=1077&lang=geo>

²⁴ Ibid.

²⁵ 'Banks and Finances', *Under the new government, 1 billion laris were invested in agriculture*, 2015 <http://bfm.ge/ekonomika/akhali-khelisuflebis-pirobebshi-soflis-meurneobashi-1-miliardi-laris-investicia-gankhorcielda/>

²⁶ Draft project of 2015 state budget. <http://www.civil.ge/geo/article.php?id=28719>

THE PARTNERSHIP FUND

The second important instrument with regards to the development of industrial policy, is a state investment fund – the Partnership Fund. It was founded as a result of consolidation of large state enterprises in the transport, energy, and infrastructure sectors (Georgian Railway, Oil and Gas Corporation, State Electro System, Commercial Operator on Electro-energetic System, Telasi). The goal of the Fund is to support commercially profitable projects in higher-priority sectors of economy that will help to attract private investments in these sectors. Among the important possessions of the Partnership Fund are, Georgian Railway and the Georgian Oil and Gas Corporation. They have shares with a value of around USD 1.4 billion in total, and total assets of USD 2.95 Billion, as well as an annual income of almost USD 50 million from assets and financial investments.²⁷ Agro-business, the energy sector, infrastructure and logistics, manufacturing, real estate, and tourism have all been named as high priority spheres for the fund. The fund is authorised to participate in capital and also to issue loans, although participation of the fund in any project should not exceed the share from private investors.²⁸ Starting from 2013, projects implemented have included: a hotel, *Gino Wellness Spa* in Akhaltsikhe, on the territory of Rabati Castle; a livestock breeding farm, *Kalanda*, in Kvemo Kartli; and the *Royal Button Hotel* in Kvareli. Currently, work on following investments is underway: a new deepwater port on the Black Sea, with USD 500 million in total investment; *Nenskra HPP* in Svaneti, with USD 628 million; *Gardabani TPP*, with USD 220 million; several hotels, *Rixos Borjomi*, *Sairme*, and *Radisson Tsinandali*, totalling USD 76 million; a construction materials enterprise, with USD 6 million; and a refrigerator facility, with USD 7 million.²⁹ At present, only two projects co-financed by the Partnership Fund are in the sphere of manufacturing, the first is a construction materials plant in which the fund invested USD 2.3 million (including the transfer of land).³⁰ This facility will mainly be oriented towards replacing imports. The second project is an aircraft composites factory, the value of which is USD 85 million, in which the share of the fund will be USD 40 million. Within the framework of the project, 300 local residents will be employed, who will be re-trained by specialists invited from Israel. 100% of production at this factory will be exported. Construction of the aircraft composites factory will be completed in 2017.³¹ The Partnership Fund will be the main shareholder of this enterprise. It will be jointly managed by the Partnership Fund and a subsidiary of *Elbit Systems*, *Elbit Systems Cyclone*, through a joint venture – *Aero-Structure Technologies (Cyclone)*. The share capital of *Aero-Structure Technologies (Cyclone)* is USD 60 million, in which *Elbit Systems Cyclone* has a share of 33.3% with the rest divided between the Partnership Fund and *Project Ltd*, owned by the fund.³²

Figure 6, Investments Projects of Partnership Fund 2012-2013³³

Investment Projects of Partnership Fund, 2012-2013, Annual Report 2013	Amount (mio USD)	Sector	% of total	Type of investment
Hog Farm	2.100	Agribusiness	0.74	Convertible debt
Gardabani 230MW combined cycle gas fired power plant	231.50	Energy	81.23	Equity
Nenskra HPP	11.900	Energy	4.18	Equity
Oni HPP cascade	2.900	Energy	1.02	Equity
Tbilisi logistics terminal with cold storage	3.900	Logistics	1.37	Equity
Black Sea Port	3.700	Logistics	1.30	Equity
Likani Hotel	18.000	Tourism	6.32	Equity and debt
Tsindali Hotel	3.800	Tourism	1.33	Convertible debt
Akhaltzikhe Hotel	2.600	Tourism	0.91	Convertible debt
Kvareli Hotel	1.400	Tourism	0.49	Convertible debt
Sairme Resort	1.000	Tourism	0.35	Convertible debt
Lagodekhi Trading, border trading center	2.200	Tourism	0.77	Equity
Total	285.000	Tourism	100.00	

²⁷ Investments and projects of Partnership Fund throughout 2011-2015, source: Transparency International <http://www.transparency.ge/blog/sapartniro-pondis-proektebi-da-investitsiebi-2011-2014-tsts?page=2>

²⁸ Partnership Fund, annual report http://www.fund.ge/geo/who_we_are/4

²⁹ The role of Partnership Fund in Georgian Economy, N. Evgenidze, 2014 <http://www.eprc.ge/index.php?a=main&pid=743&lang=geo>

³⁰ Investments and projects of Partnership Fund throughout 2011-2015, source: Transparency International <http://www.transparency.ge/blog/sapartniro-pondis-proektebi-da-investitsiebi-2011-2014-tsts?page=2>

³¹ The Partnership Fund has started building factory of aircraft details, 2015 <https://ici.ge/news/340664-sapartniro-fondi-saaviacio-nawilebis-garxnis-mseneblobas-iwyebis.html>

³² The factory of aircraft details will be build in Tbilisi 2015 <http://www.civil.ge/geo/article.php/print.php?id=29670>

³³ The graph taken from Feasibility Study: Georgian Promotional Institution, Frankfurt School of Finance & Management,

Representatives of the Partnership Fund stated in an interview that if until 2013 the main emphasis was on tourism and energy projects, after the arrival of new management, this discourse has changed. They started to think about other sectors too, especially about manufacturing sectors. According to the fund's representative, in the past the fund was oriented mainly on building hotels because these types of project were easier, and could be rapidly implemented, while also being profitable; this simplified the strategy of the fund. The change of discourse is also reflected in the internal activities of the fund. While in the past it was waiting for investment initiatives from investors, currently it is conducting its own analytical work (creating business projects) and is looking for potential partners. In the interview, the representative of the fund stated that these types of activities made it possible to agree on the aircraft composites factory project in Tbilisi, which was implemented on the basis of joint work between the Ministry of Economy and the Partnership Fund. The main criterion for the Partnership Fund during selection of projects is their commercial side. Indicators such as diversification of manufacturing, innovation, creation of high added value, high potential for employment, export orientation, and import substitution are secondary criteria. In terms of the number of business projects, the number of local firms exceeds foreign investments. However, in terms of the total value of investments, foreign investment is higher, due to the large size of projects in the energy sector.

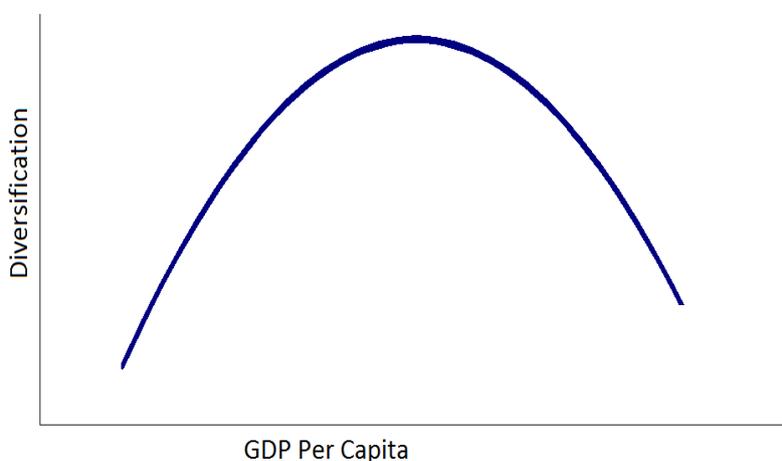
In autumn 2015, management of the Partnership Fund changed once more. As the representative of the Partnership Fund noted in a conversation with the authors of this paper, important systemic changes are planned in the Fund. A law will be adopted to transform the fund into a financial institution or development bank, the number of personnel will be increased, and new structural units will be created. However, the Partnership Fund will continue to work on current projects during the transitional period and subsequently, the new institution will be based on the staff of the Partnership Fund and its institutional experience.

GEORGIAN INDUSTRIAL DEVELOPMENT GROUP

The third important instrument that is utilised by the Georgian Government is the Industrial Development Group, created in 2014. It currently operates under the Ministry of Economy and Sustainable Development of Georgia. The staff of the group is composed of 12 employees and its goal is to create industrial development projects, identify projects with new economic activities and prepare business plans. It also aims to develop recommendations for industrial policy. At present, the total value of projects prepared by the Industrial Group exceeds USD 80 million. Active work is underway on the following projects: production of natural facing and ceramic tiles, export of greens to Europe, production of milk powder, sewing and textile factories, plants of essential oils, carton boxes, steel square pipes, and establishment of match factories.³⁴ As was stated by representatives of this institution during the interview, multi-dimensional analysis was carried out during elaboration of projects including evaluation of global trends, analysis of regional markets, possibilities for import substitution and bolstering exports, prospects to ensure spillover to other industries, assessment of local base raw materials, prospects of investment return, prospects of annual income, and other financial indicators.

Activities carried out by the Industrial Development Group are based on three main principles: establishment of a diversified economy, diversification of production, and export markets. The approach of the Industrial Development Group is based on theoretical model that is empirically proven, and according to which the sector concentration curve has U-type form on the axes of diversification and GDP per capita.

Figure 4, Diversification of economy, JEAN IMBS AND ROMAIN WACZIARG, Stages of Diversification, http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/downloads/stages.pdf



³⁴ Information on Georgian Industrial Development Group http://www.economy.ge/uploads/proeqtebi/industrial_development_group/investment_projects_presentation_-_FINAL_DRAFT.pdf

The Industrial Development Group is not oriented towards supporting specific sectors. Conversely, it carries out research and develops concrete business projects which are offered to local entrepreneurs and industrialists. This institution is mainly concentrated on modern technologies, relatively high technological production, and elaboration of projects oriented towards high quality production. The Industrial Development Group has effective forms of working that are based on modern economic models. For example, projects elaborated by this institution were developed according to 9 indicators: diversification index (RCA index), sophistication, implementation risk, spillover effects, export potential, employment potential, environmental sustainability, and time-frame of implementation. As well as development of business plans, the Industrial Development Group aims to act as a state coordinating body between institutions such as the Partnership Fund, Entrepreneurship Development Agency and Export Assistance Agency (which is also functions on the basis of the Partnership Fund).

Representatives of the Industrial Development Group state that there is significant interest from both local and international investors, but because the organisation has been operating for only one year, at this stage no investment has been made in its projects.

Representatives of the Industrial Development Group mentioned some important problems during the interview that create obstacles to the industrial development of Georgia, and their activities. The main problem, according to them, is a lack of coordination between the governmental bodies responsible for industrial policy, insufficient flexibility of state apparatus in general, and bureaucratic isolationism and opportunism. To illustrate this problem a case was used involving problems obtaining public information from the Ministry of Environment and Natural Resources Protection. This complicated process created unnecessary barriers and slowed down work on a ceramic production project. Representatives of the Industrial Development Group also consider the absence of a single coordinating institution to resolve problems with industrial policy problematic, as well as problems existing in coordination between institutions of the Ministry of Economy and the Partnership Fund. In addition to this, representatives of the Industrial Development Group highlighted additional problems such as ineffective quality control and licensing mechanisms, or their complete absence in some cases. These problems directly influence development of local manufacturing because the state does not have mechanisms to protect its interests with regard to implementing industrial policy.

GEORGIA'S INNOVATION AND TECHNOLOGY AGENCY (GITA)³⁵

One more state institution that is somehow related to industrial policy is Georgia's Innovation and Technology Agency. Its main function is to play act as coordinator and mediator with regards to development of innovations and technologies. The other main directions of the agency's activities are: commercialisation of research results, innovations and knowledge absorption by private and state sectors, commercialisation of innovation entrepreneurship, and implementation of unified state policy necessary for the formation of an information society.³⁶ State funding for the agency was 6.3 million GEL in 2015.

The Agency implements concrete projects for total 'internetisation' of Georgia. Besides that, 'FABLABS' (laboratories equipped with advanced technologies) have been set up in leading universities, which are supposed to spur development of innovation in local academia. The representative of the Agency said during an interview that they hired researchers from the Massachusetts Institute of Technology in an effort to reveal potentially innovative projects existing in Georgian research institutions which have high commercialisation prospects. According to the agency's representative, up to 900 projects were studied, among which only 12 have highly innovative characteristics and high potential for commercialisation. According to the opinion of representative of the agency, there are several impeding factors creating obstacles to the fast innovative development of the country. First of all, is the scientific backwardness of Georgian research and scientific centres:

'Technologies that were created 30 years ago cannot be considered innovative today. [The] sphere of innovation is one of the most rapidly developing spheres and requires constant reproduction of knowledge. Our research and scientific centres do not have [the] necessary financing that can become a prerequisite for development'. Along with 'Obsolescence of knowledge', the agency's representative underlined shortcomings in legislation:

'There is [a] huge gap between universities and business. On one hand, business believes that knowledge in local universities is obsolete, and they are not able to prepare innovations needed for local business activities. On the other hand, universities and scientific institutes are not authorised, according to legislation, to commercialise their innovative products, which potentially would bring significant financial resources to the universities and facilitate development of reproduction of new knowledge'. It should be noted that universities acknowledge the existence of the problem. For example, representatives of the Georgian Technical University stated in an interview with us that:

'... There are three main problems in this regard: [the] first problem is that Georgia is spending very little money on education and science. This makes impossible [the] constant reproduction of knowledge. Secondly, public universities and research institutes are prohibited to carry out commercial activities, and due to this they do not have [the] opportunity to create additional resource[s] for innovative research. Thirdly, universities do not have good quality (highly-paid) commercial structures that could sell their products on the market...'

³⁵ Georgia's Innovation and Technology Agency, <http://gita.gov.ge/ge/>

³⁶ Description of GITA's activities, <http://gita.gov.ge/ge/agency/about-gita>

It should be noted that the Georgian Innovation and Technology Agency is currently working on a technological park where the newest laboratories will be situated. According to the opinion of the Agency's representatives, this will create a unique possibility for scientists, start-ups and existing businesses to work in a common space. In turn, this will naturally cause spillover of skills and knowledge and establishment of new innovative mini-infrastructure. One of the offices of the agency will be situated in this park.

Georgia's Innovation and Technology Agency has a special programme for accessing funds. As part of this programme, small grants are issued. The aim of the grant competition is to support the development of market-oriented technological projects and products. In 2015, 750 000 GEL was allocated for small grants. In the same year, 17 innovative projects were funded (in the fields of IT, biotechnology and renewable energy).

In total, the agency has the following three grant programmes: 1) Innovation infrastructure development grant programme (innovative fabrication laboratories – FabLabs); 2) Mini-grants' programme (commercialisation of innovations and technologies); 3) Innovation laboratories' grant programme. In 2014, total allocated funds for all three granting programmes was 1 816 000 GEL.³⁷

It should be noted that, according to research carried out by Ilia State University on commercialisation of research, several problems hinder development of innovative potential in the Georgian scientific space, and its further commercialisation. The research covered commercialisation of research results and technology transfer problems in the sphere of biology and biotechnology. However, it is possible to extrapolate conclusions from this research to other spheres based on similar opinions expressed by respondents from scientific institutes and GITA surveyed by us. According to this research, there are three main problems:

- 1) Lack of cooperation between scientific clusters and institutes, interdisciplinary projects and the business sector;
- 2) Current legislation creating obstacles to the commercialisation of research, deficit of important competencies and lack of supportive infrastructure (intermediate organs);
- 3) Absence of legal systems and procedures for profit distribution;
- 4) Problems in terms of financing, especially with regard to long-term scientific projects.³⁸

RESEARCH AND DEVELOPMENT

According to conventional wisdom, a key pre-condition for conducting successful industrial policy is large public investments in education and research. After the collapse of the Soviet Union, a deep and long-term economic recession unfolded, with a negative impact on education and scientific spheres. In addition to poor financing, in 2003-2012 new problems emerged in the form of radical neoliberal reforms. Moreover, during this period a majority of institutes suffered from a decrease in financing. Some were completely abolished, or incorporated within other scientific institutions, including in local universities. Since 2005 up to 70 institutes were removed from the Academy of Science and initially were brought under the control of the Ministry of Education, while others were incorporated into universities.³⁹

Georgia's scientific sphere faced existential problems caused, on the one hand, by decreased financing and, on the other hand, by constant structural changes in an attempt at optimisation. Looking into the general distribution of budgetary funds, unfortunately, the sphere of education remains a lesser priority. Funds spent on education are less than figures for other high-priority areas. Below, several tables are given from the research, *Strategic development of higher education and science in Georgia*, in which financial problems related to the development of science are clearly analysed.

³⁷ Another initiative to support innovations, EPRC, 2014 <http://www.eprc.ge/index.php?a=main&pid=739&lang=geo>

³⁸ Counter-reform: Academia seeks to get back the institutes, 2013 <http://m.amerikiskhema.com/a/georgia-new-president-of-the-georgian-academy-of-sciences/1689407.html>

³⁹ Ibid.

Table 2⁴⁰

Dynamics of financing a high-priority state directions

	2006	2007	2008	2009	2010	2011	2012	2013
Expenses on public services	17,1	12,3	21,1	22,9	28,3	27,4	29,4	25,4
social security	17,9	16,1	17,8	21,1	19,6	20,8	19,9	21,9
economy	13,9	11,1	8,9	12,9	12,4	12,3	14,3	15,3
security and order	12,5	14,2	15,3	13,6	12,1	12,0	10,9	11,2
Defence	20,3	31,0	24,0	13,7	10,1	9,9	9,03	7,54
Education	9,9	7,9	6,5	7,9	8,4	8,3	8,7	8,6
Healthcare	5,9	4,9	4,4	5,4	6,5	6,4	5,3	8,0
Culture, sport, religion	2,1	2,0	1,6	1,8	1,8	1,6	2,2	1,7
environment	0,6	0,6	0,3	0,4	0,3	0,3	0,2	0,3

Source: Ministry of Finances of Georgia, 2008, 2009, 2010, 2011, 2012, 2013

The situation in relation to research financing during Saakashvili's administration was especially disastrous. In 2005-2011, research financing as a percentage of GDP decreased by almost half.⁴¹ See table below for this dynamics:

Table 3

Dynamics of education and research state financing

	2005	2006	2007	2008	2009	2010	2011	2012	2013
GDP	11621000	13789900	16998600	19736700	17986000	20743400	24344000	26167300	27009200
Higher education	21702.7	33510	39690.1	47154.7	62967.6	61,731.9	60880.9	88332.9	81100
Research	20117.7	17361.2	22136.4	31495	27790.2	28,428.9	20,442.30	27793	35732
Total	41820.4	50871.2	61826.5	78649.7	90757.8	90160.8	81323.2	116125.9	116832
Share of financing on Higher education in GDP %	0.19%	0.24%	0.23%	0.24%	0.35%	0.30%	0.25%	0.34%	0.30%
Research financing in GDP %	0.17%	0.13%	0.13%	0.16%	0.15%	0.14%	0.08%	0.11%	0.13%
Total financing percentage in GDP	0.36%	0.37%	0.36%	0.40%	0.51%	0.44%	0.33%	0.44%	0.43%

Source: Ministry of Finances of Georgia, 2008, 2009, 2010, 2011, 2012, 2013

Using a comparative model, it is clear that Georgia spends significantly less on higher education and science in comparison to developed countries, as in relative as well as absolute terms. According to the figures from 2010, on average, developed countries spend 1.4% of GDP and 3.1% of their budgets on higher education and research. However, in 2012 Georgia spent only 0.5% of GDP and 1.8% of the budget in these directions. If one takes into account that infrastructure in higher education and research has been disrupted in Georgia, knowledge in scientific

⁴⁰ The graph is taken from the paper, Strategic Development of Higher Education and Science of Georgia, <http://erasmusplus.org.ge/files/publications/Strategic%20Development%20of%20HE%20and%20Science%20in%20Georgia%20-%20ge.pdf>

⁴¹ Strategic Development of Higher Education and Science of Georgia <http://erasmusplus.org.ge/files/publications/Strategic%20Development%20of%20HE%20and%20Science%20in%20Georgia%20-%20ge.pdf>

institutes is obsolete and, in fact, instruments of knowledge reproduction should be newly created, such low spending will cause constant obsolescence for these spheres, and endangers prospects for the country's development.

Table 4

State financing in higher education and researches carried out by institutions of higher education

Countries	% of state budget	% of GDP
Chile	3.9	0.9
Czech Republic	2.2	1.0
Denmark	4.2	2.4
Estonia	3.0	1.2
Finland	3.9	2.2
France	2.3	1.3
Korea	2.6	0.8
Netherlands	3.3	1.7
Poland	2.6	1.2
Slovakia	2.1	0.8
Slovenia	2.7	1.4
Spain	2.5	1.2
Sweden	3.9	2.0
UK	2.0	1.0
US	3.3	1.4
Russia	2.5	1.0
OECD (average)	3.1	1.4
EU (average)	2.7	1.4
Georgia	1.8	0.5

Source: OECD, 2009; Ministry of Finances of Georgia. 2012

In a document created by Ministry of Education and Science of Georgia that envisages strategic directions for development of education and science, the main problems with regard to development of science in Georgia are determined as follows:

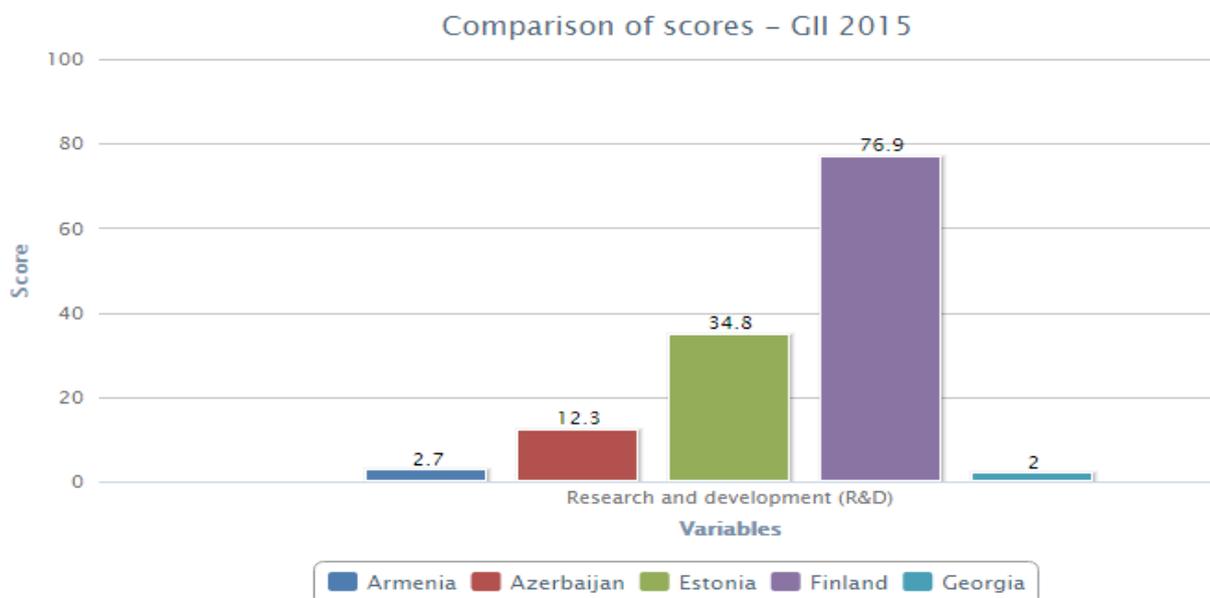
- Absence of a unified development policy of science in the country that makes it difficult to define scientific priorities and plan the scientific sphere in general.
- A problematic model of science financing; it cannot ensure creation of long-term research clusters and sustainable innovative development. The main sources of financing for scientific institutions today are research grants which are provided by the government via the Georgian Research and Development Foundation;
 - Lack of new faces in science that hinders dynamic development of science and transfer of knowledge;
 - Low level of commercialisation of scientific products and innovations;
 - Low level of integration of national scientific potential in international scientific circles;
 - Low level of integration of scientific institutes and institutions of higher education that cannot ensure spillover of knowledge (disruption of the principle of teaching and research unity).⁴²

In global indexes regarding supporting research and development, Georgia significantly lags not only developed countries, but other countries in the post-soviet space with similar levels of economic development. The chart below shows data from the Global Innovation Index with regard to research and development. Three independent variables determine this figure: researchers, total spending on research, and development and ranking of universities (three best universities). As is shown from the chart, Georgia is significantly behind Estonia's figures. Also, Georgia is an outsider even in the South Caucasus. It should be noted that according to the same index, Georgia holds the 129th rank according to spending on education.⁴³

⁴² Strategic directions of education and science system development (version that is to be discussed), <http://www.mes.gov.ge/uploads/strategia.pdf>

⁴³ Global Innovation Index, www.globalinnovationindex.org/

Figure 5



With regards to research and development, Georgia cannot ensure development of new industrial sectors or already existing sectors. It is necessary to create a new policy of development for science and higher education systems that will be ensured with necessary budgetary resources. Models of science and education financing should be significantly changed. The grants system should be retained but models of direct financing should be elaborated and refined. At the same time, the share of science and education financing in GDP should be at least equal to the figures of developed countries. Also, it is necessary to create a strategy for supporting spillover of innovations which emerge from the scientific sphere that will allow local producers and scientific institutes to benefit from cooperation with local enterprises and receive additional resources for development.

TRADE POLICY OF GEORGIA

After gaining independence, Georgia adopted a policy of market liberalisation. This policy has been implemented for the last 25 years, with different scales and pace. In terms of market liberalisation, especially significant steps were taken after 2004, when the United National Movement under the leadership of Mikhail Saakashvili came to power. This team had a concrete vision of a thorough implementation of the Washington Consensus. The course of maximal liberalisation of trade still continues. There is a statement on the web-page of the Ministry of Economy and Sustainable Development of Georgia according to which “Liberal foreign trade policy is one of the main principles of Georgian economic policy”.⁴⁴ During the governance of the United National Movement, reform of technical regulations of tariff systems and customs relations was carried out, as a result of which trade regimes were simplified, and customs procedures and mechanisms of non-tariff regulations were weakened. Since 2006 “acting 16 import tariffs were reduced to three rates, and tariffs on almost 85% of imported goods were completely abolished”.⁴⁵ Besides this, the number of permissions for import and export operations was reduced from 14 main groups to 8.⁴⁶ There are no more seasonal tariffs and the certification process has been simplified. As for indirect taxes, VAT and excise taxes on local and imported production are the same.⁴⁷ In regard to export stimulation it should be noted that according to Georgian legislation, export and re-export are free from taxation (there is no export tax, and VAT is not paid for exports).⁴⁸ Below is a table from a research paper in which trade policies of relatively poor neighbours of the EU are evaluated, in particular, average tariffs in agriculture and manufacturing sectors. The average applied tariff on manufactured goods in Georgia is the lowest among all of the EU’s neighbours.⁴⁹

⁴⁴ The Ministry of Economy and Sustainable Development, trade sectors <http://www.economy.ge/ge/economic-sectors/trade&type=print>

⁴⁵ Iasha (Iakob) Meskhia, Main landmarks of foreign economic policy of Georgia, 2014 2014 http://dspace.nplg.gov.ge/bitstream/1234/36367/1/Kartuli_Politika_2014_N2.pdf

⁴⁶ Foreign trade of Georgia, Makharadze G., Chkhikvadze S. at al., 2009, p. 3

⁴⁷ The Ministry of Economy and Sustainable Development, trade sectors, <http://www.economy.ge/ge/economic-sectors/trade&type=print>

⁴⁸ Ibid.

⁴⁹ Trade Policy in the EU’s Neighbourhood, DREYER., I, http://www.institutdelors.eu/media/i.dreyer_tradepolicyineuneighbourhood_nemay2012.pdf?pdf=ok

Table 5⁵⁰

TRADE POLICY PROFILE - NON PREFERENTIAL (MFN) - THE EU'S POOREST NEIGHBOURS

COUNTRY	AVERAGE APPLIED TARIFF (PER CENT, 2010)		TOTAL NUMBER OF SERVICES SECTORS WITH GATS COMMITMENTS IN WTO
	AGRICULTURE	MANUFACTURING	
EU 27	13.5	4	115
ARMENIA	6.8	2.2	106
GEORGIA	7.7	0.3	125
MOLDOVA	10.7	3.7	n/a
EGYPT	70.7	9.2	44
MOROCCO	42.1	14.4	45
SOURCE	WTO	WTO	WTO

Georgia is a member of the WTO and therefore all preferences and regulations are valid for it that are valid for a majority of members of this organisation.⁵¹ The majority of Georgia's trade partners are also members of the WTO. Therefore, foreign trade relations with these countries are carried out on the basis of a 'Most Favoured Nation' (MFN) regime.⁵²

Georgia has a free trade regime with CIS countries and Turkey. However, certain goods are excluded from the free trade regime with Russia and Turkey. For example in Turkey's case, on certain agricultural products customs taxes are retained from both sides.⁵³ Since 2014, agreement on establishment of the Deep and Comprehensive Free Trade Area (DCFTA) was activated with the EU. Unlike with other countries, Georgia and the EU have a different approach with regards to tariff liberalisation. All products produced in Georgia, if they meet food security conditions and standards, enter the EU market with zero tariffs.⁵⁴

Starting in 2005, the volume of Georgia's foreign trade has significantly increased, but this has occurred mainly due to an increase of imports. Abolition of trade barriers from Georgia's side caused a significant decrease in production, especially in agriculture. From 2005 until today, a constantly increasing trade deficit is apparent. Only in 2012 was there a slight decrease in the trade deficit, caused by the normalisation process with Russia and an increase in Georgian exports to the Russian market. According to data from 2014, Georgia's trade deficit is USD 5.4 billion, which is an extremely high figure considering the scale and structure of the economy.⁵⁵

⁵⁰ The graph is taken from the Trade Policy in the EU's Neighbourhood, DREYER., I, http://www.institutdelors.eu/media/i.dreyer_tradepolicyineighbourhood_ne_may2012.pdf?pdf=ok

⁵¹ In the WTO there are special rules for least developed countries; Georgia is not included in this list. https://www.wto.org/english/tratop_e/develop/dev_special_differential_provisions_e.htm

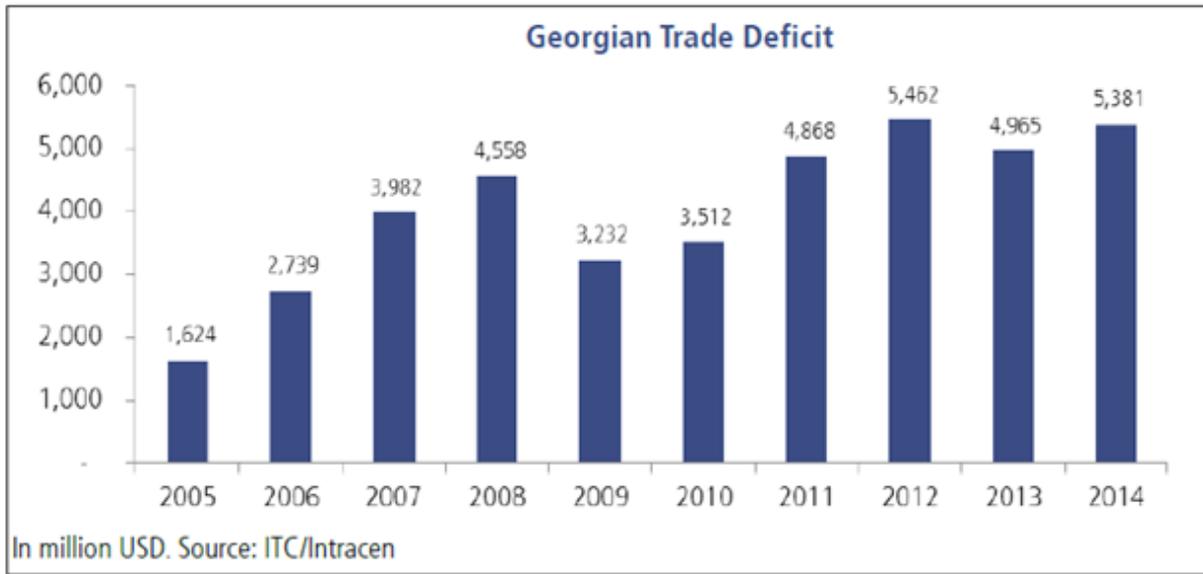
⁵² <http://www.economy.ge/ge/economic-sectors/trade&type=print>

⁵³ Foreign trade of Georgia, Makharadze G., Chkhikvadze S. at al., 2009, p. 3

⁵⁴ The Ministry of Economy and Sustainable Development, <http://www.economy.ge/ge/dcfta>

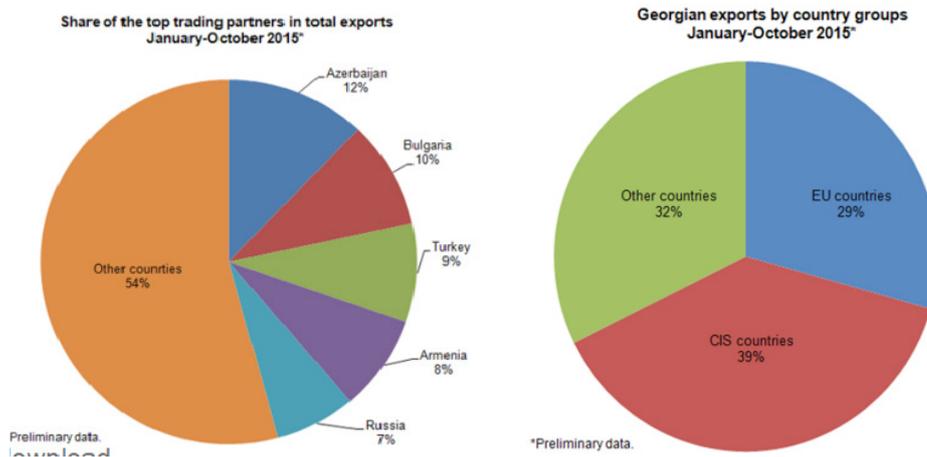
⁵⁵ Georgian Promotional Institution, Feasibility Study, Frankfurt School of Finance & Management 2015

Figure 6, Georgia's Trade Balance⁵⁶



After the collapse of the Soviet Union, Georgia was not able to diversify its exports. Despite the existence of the DCFTA agreement with the EU, CIS countries are still the main trade partners for Georgia. Taking preliminary figures from 2015 in terms of percentages, Georgian exports to CIS countries account for 38% of the total, while exports to EU countries are only 29%. It should be noted that these figures are stable and have not changed significantly since joining the above mentioned trade regime. Moreover, compared to data from 2013, trade with CIS countries has increased by 3%.⁵⁷ Looking at a breakdown by country, two CIS countries feature prominently on the list of Georgia's largest trade partners (from the five largest trade partners three are CIS countries) which includes: Azerbaijan with 12%, Bulgaria with 10%, Armenia with 9%, Turkey with 9% and Russia with 7%.⁵⁸

Figure 7



Preliminary data from 2015, National Statistical Office of Georgia

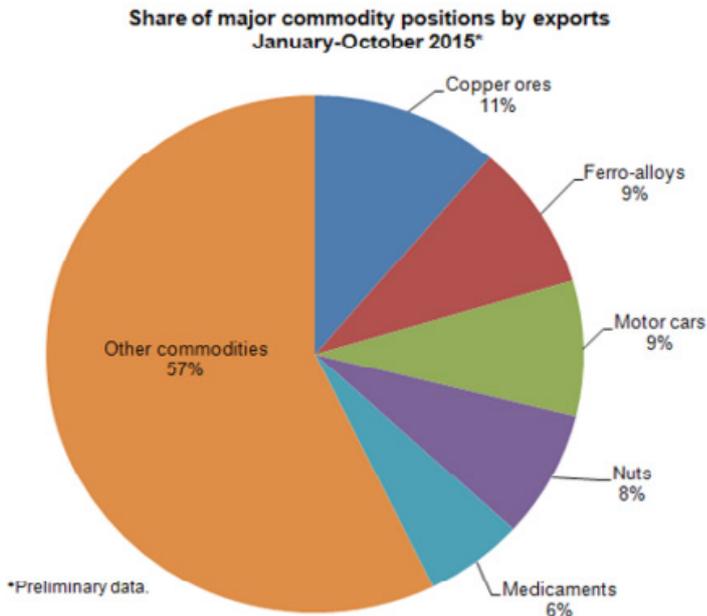
⁵⁶ The graph is taken from the Georgian Promotional Institution, Feasibility Study, Frankfurt School of Finance & Management 2015

⁵⁷ National Statistical Office of Georgia, http://geostat.ge/?action=page&p_id=136&lang=geo

⁵⁸ Ibid.

It should be noted that along with diversification of the export market, diversification of export production is also a problem. Georgia has traditionally exported one and the same manufacturing goods, and there is not any significant change in the categories of export production for the last decade. Traditionally, exports of non-ferrous metals, ferroalloys, and (re-exports of) cars are leading in the export structure of Georgia. In recent years exports of hazelnuts (mainly to EU countries) and pharmaceuticals were added to this category.

Figure 8⁵⁹



EXPORT SOPHISTICATION

One more challenge that industrial development of Georgia faces is related to the sophistication of exported manufactured goods. According to development economists, the quality of exported production and innovation are important prerequisites for economic development and economic growth.⁶⁰ In a UNIDO report from 2013 it is noted that middle income countries should implement industrial policy aimed at development of high-tech and skill-intensive industries, because these cause spillover effects in the economy.⁶¹

In the World Bank report (Georgia: TRADE COMPETITIVENESS DIAGNOSTIC) it is noted that the export basket of Georgian export production was quite stable over the last 10 years. Compared with countries that have similar levels of GDP per capita, for example, Ukraine, Georgia lags behind in terms of sophistication of exported goods. According to the same report, even countries poorer than Georgia, such as Moldova, have a much better situation in terms of export sophistication, which is measured by the expy indicator.⁶² In the table below, data for neighbouring countries with similar GDP per capita as well as developed countries is given according to their expy for the last decade. This diagram clearly reveals less sophistication in Georgian exports, and that little has changed over the last 10 years.

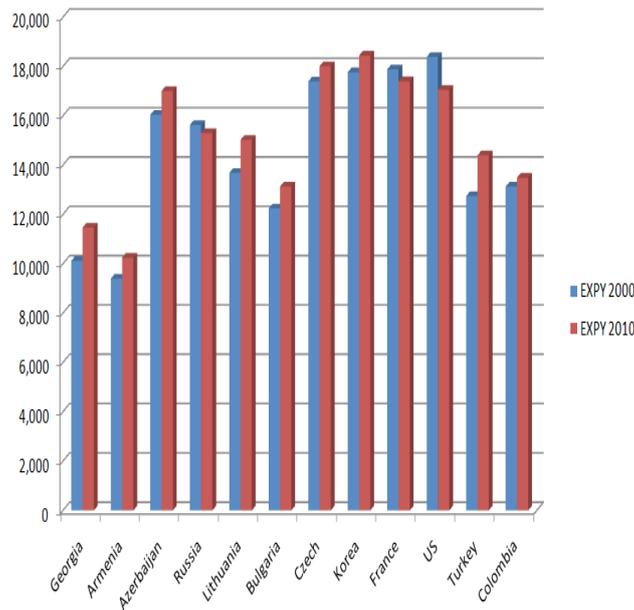
⁵⁹ GEOSTAT, 2015

⁶⁰ Hausmann, R., J. Hwang & D. Rodrik (2006), "What you export matters".

⁶¹ Industrial Development Report 2013, https://www.unido.org/fileadmin/user_media/Research_and_Statistics/UNIDO_IDR_2013_main_report.pdf

⁶² The World Bank, GEORGIA: TRADE COMPETITIVENESS DIAGNOSTIC, Jose Guilherme Reis, et al, 2013

Figure 9



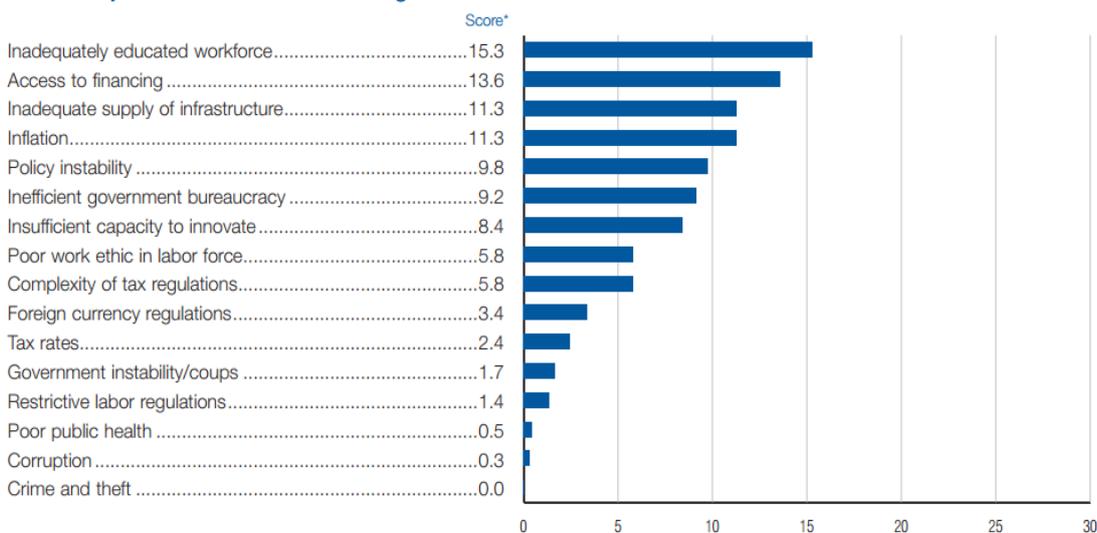
ACCESS TO FINANCES AS MARKET FAILURE

Low levels of access to financial resources are a serious failure, among other market failures, such as information and coordination failures. In order to eliminate this process, states use special instruments to expand financial accessibility for small and medium-sized enterprises. Additionally, states create development banks or strong financial institutions, which help firms finance ‘new products ... entering new markets or new technologies’.⁶³

Financial accessibility is also in a deplorable condition in Georgia. According to data from the 2014 Global Competitiveness Index, one of the major hindering factors in business-making is low levels of financial accessibility.

Figure 10 Global Competitiveness Index, Georgia

The most problematic factors for doing business



* From the list of factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

⁶³ Industrial Development Report 2013, p. 133, https://www.unido.org/fileadmin/user_media/Research_and_Statistics/UNIDO_IDR_2013_main_report.pdf

It needs to be mentioned that Georgia has the most developed banking sector in the region. There are 21 commercial banks represented in the Georgian market with 87% involvement of non-resident owners with the ultimate ownership in banking assets, and 84% in capital stock.⁶⁴ Capital markets are in a very poor condition. The state does not have strong financial instruments. There are no state pension funds. The banking sector makes up 93% of the whole financial sector. According to data from the National Bank of Georgia, the retail loan segment grew most during the last 2 years. Retail loans make up 37% of total loans. *As the National Bank claims, from the total amount of money loaned last year, production's share was only 1.2%*. In contrast, this figure in the trade sector was 13%, in management and construction companies 7.9%, in energy 3.2%, in agriculture 4.6%, and in tourism and hotels 3.5%.

MAIN FINDINGS

- The Georgian Government has neither a strategy nor a vision for industrial development. It is the cause of several intertwined problems. In particular, intervention from the state is fragmented and does not serve any concrete or general purpose. There are several governmental bodies working for industrial development, however, the level of coordination between them is quite low and this complicates the capability of the state to intervene. Dani Rodrik, Professor at Harvard University thinks that for effective organisation of industrial policy, some high level official, for example, an important member of government i.e. the Prime Minister or Deputy Prime Minister, should be directly responsible for execution of industrial policy. This level of engagement from current Georgian officials is not visible in terms of developing strong industrial policy.

- Georgia does not have powerful instruments to tackle coordination and information failures. There are no institutions, either at a central or regional level which could be utilised by the government to retrieve information about bounding constraints for economic development.

- Instruments utilised by the Georgian Government are not oriented towards supporting 'new activities'.⁶⁵ Despite the fact that the programme, *Produce in Georgia*, has as one of its main conditions that project proposals should establish new businesses, it still does not support qualitatively new activities for Georgia. The Partnership Fund also cannot assist in diversifying Georgian production, due to the fact that its main criteria are for commercial profitability of projects, and not innovation or far-reaching spillover effects. As for the Georgian Industrial Development Group, it conducts research and forms new activities. But this institution does not have access to financial instruments and can find resources necessary for these projects only via the Partnership Fund and the Entrepreneurship Development Agency. Due to the abovementioned problems regarding a lack of unified strategy or strong coordinating institution, the efficiency of the Industrial Development Group is limited.

- For the Partnership Fund, which is one of the main components of industrial policy, until September 2015 (appointment of new director in the Fund), the commercial value of business ideas was the main criterion for funding. Criteria such as high added value, support to employment, innovation, orientation on export, or import substitution were not a high priority for the fund. The fund has often helped initiatives and sectors that already have high potential for attracting investments from other sources. For example, projects in the energy sector and construction of hotels have played an important role in the fund's activities. For the Partnership Fund, and the programme, *Produce in Georgia*, positive spillover effects were also not the priority.

- Only a small number of enterprises from the soviet period were able to survive. There are up to 10 large companies, mainly in heavy industries, which managed to survive after the collapse of the Soviet Union, and diversify their markets. However, most of their production is exported to post-soviet countries.

- With regards to development of industry, there are significant problems in the sense of access to finance. According to the Global Competitive Index, financial accessibility is the second biggest challenge in Georgia in regard to doing of business. Only 1.2% of total loans go to the manufacturing sector. Financial markets are in an embryonic situation. The state doesn't have powerful financial instrument whereby it could eliminate this market failure. Access to finance is relatively low for Georgian companies, especially for start-ups. The banking sector is not able to tackle this failure. Existing state institutions are also incapable of minimising problems caused by this failure.

- Georgia has a liberal trade regime with CIS states as well as with EU states and other neighbours. At present, Georgia is also working on setting up a free trade regime with China. Georgia has a giant trade deficit the worst in the region. According to data from 2014, this amounts to USD 5.4 billion. Unfortunately, there is no research about how the existence of free trade regimes supports implementation of industrial policy, or development of manufacturing and export diversification in Georgia. Discussion with regards to supporting infant industries is not underway or about use of selective protectionist instruments. It should be noted that in the rhetoric of politicians responsible for carrying out economic policy, the discourse of market liberalisation dominates.

⁶⁴ Where Georgia's banking system leads the economy http://commersant.ge/?m=5&news_id=23033&cat_id=8

⁶⁵ According to Dani Rodrik, under the "new activities" not new business is meant but such activities that are new for economy. See: INDUSTRIAL POLICY FOR THE TWENTY-FIRST CENTURY, <https://www.sss.ias.edu/files/pdfs/Rodrik/Research/industrial-policy-twenty-first-century.pdf>

- The figure for export sophistication of Georgian exports is very low compared with countries with a similar GDP per capita, and this figure did not significantly increase over the last ten years (expy index).
- Networks of innovation development and infrastructure are in a bad shape and are not working. Problems are apparent in this regard, both in terms of supply and demand. Connection between science and business is relatively weak. There is no policy to support adaptation of innovations to the local market. Technologies developed in universities are not able to transform into business products. There is no respective legislative basis for universities that would allow them to sell their created technologies. Also, no such institution exists that would connect businesses and universities with each other. The Government has still not approved a law on innovative development. At present, there is no state strategy in this direction.
- Public research institutions that could analyse industrial policy and development do not exist. Without such institutions it would be impossible to conduct industrial policy based on in-depth analyses. This will also complicate the possibility to evaluate the efficiency of potential future policies.
- The government does not have firm mechanisms for ensuring transparency in existing industrial policy instruments. For example, the Industrial Development Group, Innovation Development Agency, Partnership Fund and Entrepreneurship Development Agency do not publish protocols of distribution of financial resources (grants, subsidies, etc.). To both avoid corruption, and avoid discrediting industrial policy, it is important to clearly define criteria of intervention, implement mechanisms of civil control, and plan a communication strategy with broader society. To ensure transparency and improve accountability it is also important that institutions responsible for industrial policy prepare annual financial and narrative reports that will be public and will be discussed, including at a legislative level.
- Without strong support for education and science, the Government of Georgia will have difficulties in conducting industrial policy. Without modern research institutions it is impossible to adapt technologies existing abroad as well as create innovations. In global indexes, in terms of stimulating research and development, Georgia is way behind not only developed countries but other post-soviet states with similar-sized economies as well. Georgia's educational expenditure as a share of GDP is ranked 129th by the Global Innovation Index. Therefore, financing models of science and education need serious changes. The Grants system should be sustained, but in addition, models of direct financing should be either designed or improved. Furthermore, the share of science and higher education expenditure as a percentage of GDP and in the state budget need to at least be equalised with the average indicators for developed countries. Besides this, it is necessary to develop a strategy for stimulating the spill-over of innovations from the scientific sphere, giving a chance to local manufacturers and science institutions to benefit from cooperation and receive additional resources for development.
- In general, public discourse about industrial policy is also an issue. Opinion makers associate development of a country to the liberalisation of financial market and capital and the deregulation and privatisation of public resources. In the mainstream media, the absence of state intervention is translated as dogma. This situation will complicate the possibility of conducting strong industrial policy.

GEORGIA'S INDUSTRIAL POLICY RECOMMENDATIONS AT THE INITIAL STAGE

Under the conditions of modern free trade regimes, the market alone can never create a high value-added manufacturing industry, without which there is no economic growth. Thus we believe that:

- The state must develop an industrial policy, which will be planned in time and will be designed with a broad consensual basis with the participation of all actors who will engage in it.
- The Ministry of Economy, whose main job will be the development of industrial policy, should take a central role in this policy. This should aim at the total diversification of the economy including completion of industrial development. Therefore, the Ministry of Economy should be at the centre of developing this policy. It may, or may not be reflected in a change in name, but a large department with material, financial and human resources and with high level leadership on the level of deputy ministers must be provided.
- Additionally, priorities of embryonic institutions (the Georgian Entrepreneurship Development Agency, Georgia's Innovation and Technology Agency, the Partnership Fund) in terms of industrial policy need to be reconsidered, and as mentioned above, a new structure should be designed under the Ministry of Economy, which will partially combine or coordinate these institutions.
- Furthermore, it is necessary to design mechanisms oriented at import substitution, including in the spheres of state procurement, with priorities given to local products.
- It will be important for the tax system to include incentive mechanisms for local production. As one possible model, we can use an income tax exemption for the manufacturing industry, as long as profits are reinvested in production development.
- At the same time, subdivisions of these departments must ensure tight communication with: immediate economic actors; state institutions as well as with firms created by the involvement of the Partnership Fund; companies from various sectors; and educational and research institutions.

Necessary measures for subdivisions of the Ministry of Economy include:

- Improving research institutions' networks and actively participating in the research planning of these institutions;
- Active participation in short and long-term oriented trainings of higher and secondary technical personnel and participation in boosting efficiency of existing systems improving vocational skills;
- Formation of industrial priorities in terms of export orientation on the basis of Georgia's resources, while taking global markets into account and participating in supporting the establishment of proper enterprises;
- Elaborating measures for finding and attracting investments and additional financial resources and their arrangements.
- Transforming the content of small and medium-sized businesses; they must become export-oriented smart enterprises.

These measures should be implemented with the active participation of foreign specialists who have particular experience in the fields of development, including industrial development and planning. Using international experiences is important in the making of institutional mechanisms for industrial policy as well as in the assessment of particular industrial sectors or the potential of actions.

At the same time, in the Prime Minister's administration, and under his direct supervision, a development subdivision, bureau, agency or department must be created, which will be directly responsible for general planning, selecting planning methodology and improving it constantly, coordinating agencies and different sectors of the economy, etc.

It must guarantee tight communication between society, state agencies, the private sector, and government. The economy must become the main focus of their activity. Taking these steps should secure structural changes in the economy, which means successfully going through all phases of industrial development.

Assessment of Georgia's participation in industrial development under the principles of UNIDO report.

State as a regulator when it uses tariffs and subsidies	State as a financier when it introduces new rules in the credit market	State as a manufacturer when it establishes state companies	State as a consumer when it makes state procurements
Over the past decade none of the Georgian governments have subsidised the industrial sector	The Georgian Government uses the <i>Produce in Georgia</i> programme for credit co-financing, however the sum of money allocated for this project is very small, and credit is given by banks, which lowers the chance of stimulating activities oriented on economic structure.	Over the past 25 years, no Georgian government has had the vision of how to turn state-owned assets into successful profitable companies. Policies of Georgian governments have focused on fast privatisation of state-owned assets, even without strong state institutions to control this process. Between 2013-2015 alone, shares of state-owned enterprises fell from 1129 to 373	Over the past decade, initiatives of Georgian governments have focused mainly on the transparency and simplicity of state procurement. Georgian governments have never had a systematic approach towards prioritising local products.
Georgia has the most liberal tariff system in the region	There is the Partnership Fund, which is based on state-owned assets and whose aim is to eliminate the failure of financial inaccessibility. Nevertheless, this institution has two major problems: a) The share of the fund's investments in the manufacturing sector is small; b) Indicators such as production diversification and innovation, producing high added value, high potential of employment, export orientation, and import substitution are of secondary importance for the fund.	As stated in the report of the State Audit Office of Georgia, all state-important and financially well-structured enterprises are in the hands of the Partnership Fund. According to data from 2014, out of all state-owned enterprises, only 10 belong to the industrial sector, and only one of them is functional. ¹	There is only one case, when in 2015 Georgia's Ministry of Defence proposed giving priority to local production. However, it was only about food products made in Georgia. ²

¹ Governance and Disposal of State Owned Enterprises, pg. 80, 2015 <http://sao.ge/files/auditi/efeqtianobis-angarishi/2015/sacarmota-martva.pdf>

² With the initiative coming from the minister of defence, local products will be purchased to feed the Georgian army http://pia.ge/show_news.php?id=52486&lang=geo