

# Structural transformation, trade and development: Georgia in comparative perspective

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## Abstract

The goal of the present paper is to analyze changes in the compositional structures of Georgia's economy, explore the related qualitative transformations and explain implications for trade and development. By comparing the evidence of several European countries, we put Georgia's structural changes within a broader regional-level context. We rely on two key measures of structural transformation: sector employment shares in total employment and sector value-added shares disaggregated at the industry level. To explain trade implications, structural transformation indicators across exporting sectors are evaluated. The existing divides between structural transformation of Georgia and that of the Eastern European economies reveal those structural risks that can negatively affect regional positions of Georgia and its long-term economic development.

*Keywords:* structural transformation, trade, economic development, Georgia, transition economies, Eastern European economies

### Introduction

Structural transformation is an essential element of economic growth and development. Sectorspecific nature of growth is shown by economic scholars like Nurkse (1953), Lewis (1954), Prebisch (1949), Chenery (1960, 1979), etc. They characterized the development process as an increase in the industry's share in GDP. Although industry and manufacturing continue to remain important sectors, contemporary development patterns exhibit an increasing share of services both in terms of GDP and employment. The idea behind sectorial changes and structural transformation, which is key to the development process, lies in the shifts of production factors from lower- to higher-productivity activities (Tregenna, 2015). As concluded by Duarte and Restuccia (2010), any lag in structural transformation is systematically related to the level of development of the country.

Just like in the developed countries, the share of the broad economic sectors (agriculture, manufacturing, and services) in value-added and employment has undergone a significant

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transformation in the post-socialist economies (Eastern European economies and post-Soviet economies). These countries represent a specific group from a development studies perspective. Due to their former planned economic system and fundamental structural reforms undertaken by them, they are characterized by specific development paths and scenarios. Despite this, as mentioned by Gevorkyan (2018), countries of Eastern Europe and Post-Soviet economies are "great unknowns" to contemporary economic development studies. Therefore, the analysis of their structural transformation patterns can be an important aspect of understanding their economic development processes.

Studies that explore structural transformation issues in transition economies involve Landesmann's (2000) analysis of structural change in transition economies in 1898-1999. Libman (2008) has done research on the structural transformation of Kazakhstan and in the case of Moldova. Havlik, Leitner, and Stehrer (2012) analyze the interrelationships of growth and structural change in East European countries. Cerovic *et al.* (2014) show that the most important change in transitional countries concerns the share of industrial output in GDP, which is found to be one of the most important factors of growth after the initial phase of reforms. Comunale and Felice (2019) assess trade-related determinants of structural change covering several East European transition economies. Havlik (2015) conducted a shift-share analysis of CEECs' economies for the period from 1995 to 2011 and revealed a distinct North-South pattern of growth: manufacturing and trade have driven growth in the North, while there has been much less structural change in the South. Stojcic *et al.* (2019) investigated the determinants of structural and productive transformation and showed a decline in manufacturing employment with a simultaneous increase in the value-added share of manufacturing, which indicates productive transformation towards high-technology-intensive activities.

The goal of the present paper is to provide a comparative analysis of structural transformation in Georgia and selected East European economies. Justifications for such an analysis are as follows: for one thing, these countries have a common experience of planned economies and they all have made huge economic, political, and institutional reforms to build functioning market economic systems. Understanding the compositional structures of their economies can show to what extent those reforms have contributed to improved resource allocation from low to high productivity activities; another reason is that East European countries have had significant progress in catching up with the advanced economies and understanding their experience as well as lessons learned can be valuable for the understanding of Georgia's catching up with pairs in the region, on the one hand, and with more advanced countries on the other. Last but not least is the need to understand the implications of the structural transformation patterns that are being formed in Eastern Europe and the related economic development issues (such as middle-income traps, technological and structural traps, etc.) which are emphasized by recent studies.

The paper is organized as follows: the first part gives an analysis of the sectorial composition of the economies of Georgia and selected Eastern European economies based on employment shares and value-added shares of the sectors. The second part discusses structural transformation issues from a trade integration perspective. The exporting and importing sector performance indicators and global value chain participation indicators are analyzed. The final part of the paper gives the main findings, conclusions, and questions for future research.

# **1.** Sectorial composition and implications for development: Georgia and the Eastern European economies

In Post-Soviet period, during the early transition towards market economy Georgia experienced a large-scale deindustrialization and reliance on agriculture as a source of employment and production. The responsive measures involved structural reforms, economic deregulation and liberalization, including openness to foreign trade and investments. As a result, the macroeconomic conditions improved and there was a progress in welfare level. From 2011 to 2020 the country maintained stable economic growth, which accounted for 4% average annually. After the COVID-19 pandemic, Georgia managed to recover quickly and demonstrated 10.4% growth rate in 2021. The benefits of growth have been translated into improved welfare indicators. GNI per capita has been increasing each year, reaching 5,620 US dollars in 2022. According to the World Bank estimations, the poverty rate measured by the international upper-middle-income line (US\$5.50 per capita per day, 2011 purchasing power parity) declined from 59% in 2011 to 42% in 2021. The absolute poverty rate also decreased by 1.9% and equaled to 15.6% in 2022.

Georgia is highly dependent on external trade. Trade openness and increased integration into regional markets has been supportive to its export growth. However structural constraints of the economy have been displayed in trade patterns. The prevalence of primary products in exports and manufactured goods in imports indicates that lack of diversification of the economy is a persistent issue. Georgia's policy is also open and supportive to foreign direct investments (FDI), but the overall effectiveness of the inward FDI in terms of export orientation, productivity growth and job creation raises doubts, because mostly they are directed to non-tradable sectors. Services play a significant role in exports and it makes a positive contribution to growth. Travel and transport take 90% of total services export. Telecommunications and financial services are also dynamic sectors of the economy.

Georgia's current structural reforms are predominantly determined by its aspirations to get EU candidacy status.

The Eastern European member states of the EU have been one of the best-performing parts of the global economy for the past 20 years, and they achieved impressive catch-up with developed Europe. This was supported by structural reforms as part of the EU accession process, and a deep integration into global value chains (GVCs). The Czech Republic and Slovenia now even surpass several pre-2004 EU member states in their GDP per capita levels (Grieveson *et al.*, 2021).

Country	Agriculture	Industry	Finance and Business Services	Trade, Transport, Hospitality and communication services		
Bulgaria	5.0	20.0	22.5	30.9		
Czech Republic	2.0	27.7	20.8	24.8		
Estonia	2.3	19.7	24.8	28.1		
Georgia	7.4	17.0	18.5	28.6		
Latvia	4.8	17.2	22.5	29.2		
Lithuania	3.7	21.1	17.1	33.2		
Moldova	12.3	14.7	15.0	29.8		
Poland	2.6	25.9	18.3	28.9		
Romania	5.0	22.7	19.3	27.6		
Slovak Republic	2.0	27.0	23.1	22.5		
Slovenia	1.9	26.2	21.0	24.3		

Table 1. Economic structure, Eastern European countries, 2021 (sector contribution to GDPgrowth, %)

Source: UN Economic Commission for Europe

The data in Table 1 shows the difference in the economic structures of the EU member and nonmember Eastern European states. During the transition process the EU members have reduced their structural divide with the advanced economies by increasing the shares of industry and services and reducing the share of agriculture in GDP. Unlike them, non-EU countries, such as Georgia and Moldova are to a larger extent dependent on agriculture as a contributor to GDP. Georgia's industry contribution to GDP was also lower compared to other EE countries in 2021, while services give more promising picture in terms of sector contribution to GDP and employment. It is noteworthy that in Georgia services are very dynamic, but the output is concentrated in less skill and technologyintensive activities, such as trade, internal transport, and hotels. According to the official statistics of Georgia, in 2022 wholesale and retail trade and repair services created the largest output in absolute terms - 15,499.9 million GEL at current prices, the second largest sub-sector was transportation and storage with the output of 8161.09 million GEL. As a rule, economic development course implies a declining share of employment in agriculture, a hump-shaped share in manufacturing, and a rising share in services. EE countries follow the same path. In Georgia, such a development-oriented pattern of structural transformation emerged in the middle of the 2000s. Figures 1 and 2 represent industry and services employment shares in Georgia and selected Eastern European (EE) economies in comparison to their GDP per capita levels in 2019. As shown, Georgia represents an outlier with its lowest industry employment indicator mixed with the lowest per capita GDP.

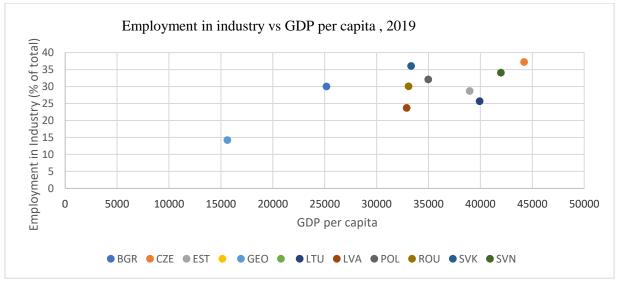


Figure 1. Industry employment shares in Eastern European countries, 2019

The employment share of agriculture has been on a downward trend since 2005. According to World Bank World Development Indicators it fell by 14%, from the level of 55% to 41% of total employment in 2021. Agricultural employment is disproportionally high compared to the sector contribution to total output, which was around 7% of the GDP. Among other EE countries, Romania has a relatively high 19% share of agricultural employment. It is followed by Poland with 10% share, while Slovakia, Czech Republic and Estonia have the lowest shares around 3% of total employment. In EE countries the declining trend of agriculture emerged earlier than in Georgia (back in the 1990s). Market-oriented transition together with the EU membership perspective helped them accelerate agricultural reforms (Csaki and Nucifora, 2005). As a result, EE countries managed to reduce dependence on more labor-intensive agricultural technologies and attracted foreign capital, which contributed to upgrading and better performance of their agricultural sectors.

Source: World Bank Development Indicators

In Georgia the industry employment share as a percent of total employment fell from 11% to its minimum level of 8% during 1995-2002. Beginning from 2004 there was a slight improvement, it reached 9% in 2004. Later in 2010 it equaled to its 1995 level \_ 11%. Although since then it has been on an upward trend, its growth rate has been modest. In 2019 it reached around 14% of total employment. The same level was maintained in 202 and 2021.

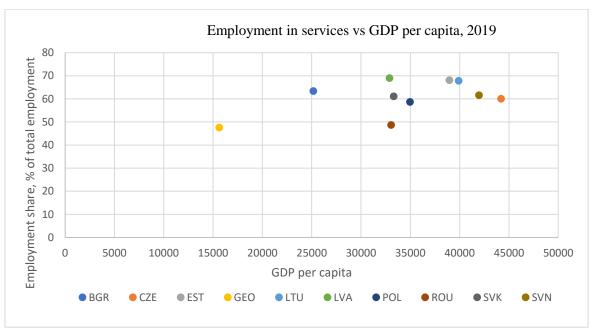


Figure 2. Services employment shares in Eastern European countries, 2019

Source: Source: World Bank Development Indicators

In the period of 2006-2020 the percentage decrease in the agricultural labor force accounted for 31%, while the percentage increase in services was 33%. Georgia's employment in services as a share of total employment was reported at 41% in 1998. In the subsequent years it maintained a downward trend and reached 36% in 2006. Since 2006 we are witnessing an ever-increasing trend in services employment, which exceeded 48% in 2019. At the beginning of the transition period the EE countries under review had similar employment indicators varying between 41% (in the case of Bulgaria) and 47% (in the case of Latvia). The exception was Romania with 25% share of service employment. Later on, labor transfer from the real sectors of the economy to the tertiary sector went at a faster pace in EE countries than in Georgia. Generally, EE countries lag behind more advanced economies by service employment shares. Simultaneously Georgia shows almost the same indicators as EE countries have, thus services employment gap between them and Georgia is considerably smaller than the gap in industrial sectors. Currently, services employ 62% of the workforce in Georgia, while

comparable indicators are 59% in Bulgaria, 60% in Poland, 61% in the Czech Republic, and 69% in Estonia.

Except for the sector employment shares, sector value-added is a widely accepted indicator to analyze structural transformation. It enables us to capture additional values created at each production stage and characterize the level of sophistication and the progress in sector upgrading, if analyzed in dynamics.

During 1998-2021 Georgia's agriculture value added share to GDP has been steadily falling from, 33% to 6.5%. Manufacturing value added was also falling, from 17% of GDP to around 10% in 2021, while services value added was rising from 41% to 59%. Such a mode of transformation corresponds with the typical development-oriented path that has been common to advanced economies. However, a more detailed sub-sector analysis reveals some structural and productivity-related problems. The decline in manufacturing employment was not associated with the changes in favor of more technology and skill-intensive and less labor-intensive sub-sectors of manufacturing. The declining share of employment in manufacturing accompanied by a decreasing manufacturing share of GDP indicates the deterioration of the overall performance of manufacturing sub-sectors. As the data on Figure 3 shows, there was a significant fall in value-added shares to GDP in industrial sectors against the background of increased employment in industry.

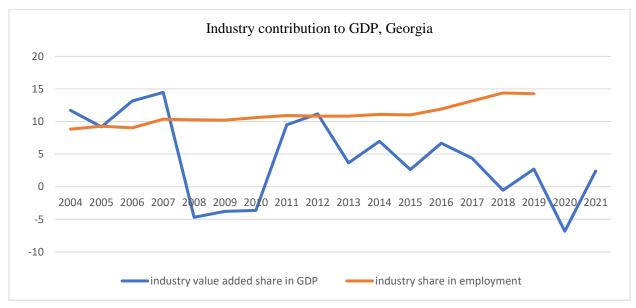


Figure 3. Employment and Value Added in Georgia's Industry

Georgia lags behind its peers in the EE region by industrial labor productivity and services labor productivity. Its industry value-added per capita accounted for 453 (constant 2010 US dollars) in

Source: Georgia's Statistics Office, www.geostat.ge

2022, which is the lowest among all the above EE countries. According to the World Bank data, Georgia's industry value added per worker accounted for 13 649 constant 2015 US dollars in 2019. It is less than 2016 level of 14 934 dollars, which represents the highest value since 2004. Thus, the indicator shows a decline. Bulgaria is close to Georgia with 13 208 dollars, while with all other EE economies under review there is a significant divide in industrial productivity. Slovenia and the Czech Republic have leading positions in terms of valued added per employer, equal to 44 538 and 35 938 dollars, respectively, as well as in terms of per capita value added, which accounted for 5964 dollars and 5062 dollars, respectively.

The reasons behind the above gap are related to ineffective resource allocation, technological backwardness, and low competitiveness of industrial sectors in Georgia. The proportion of medium and high-tech industry value added in total value added shows a deteriorating trend. There was a decline from 17% in 2010 to 12.4% in 2020. Georgia lags not only the EU member countries, but also Moldova, which showed medium and high-tech industry value-added share almost twice as high as that of Georgia in 2020. The increase from 8.9% in 2010 to 23% clearly indicates to Moldova's improved capabilities and technological upgrading.

Bah and Brada (2009) emphasize low productivity and significantly lower total factor productivity compared to advanced economies as a general feature of transition economies' service sector and that remains especially challenging for Georgia, where services are main contributors to GDP growth. An in-depth analysis of value-added per employer across various sub-sectors reveals limited technological intensity. The highest value added per employer is created in leisure and entertainment, ITC, and real estate-related services.

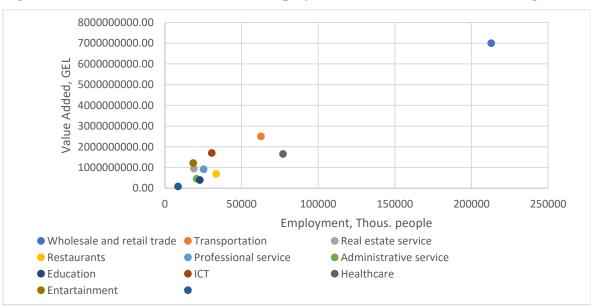


Figure 4. Value added and number of employers in services sub-sectors, Georgia, 2021

Source: Georgia's Statistics Office, www. geostat.ge

Thus, as Figure 4 shows, in absolute terms the largest part of the services labor force is concentrated in relatively low-productivity sub-sectors, such as trade, healthcare, and transportation. A positive correlation between a sub-sector value added and the number of employees indicates to labor-intensive, rather than skill or technology-intensive nature of services

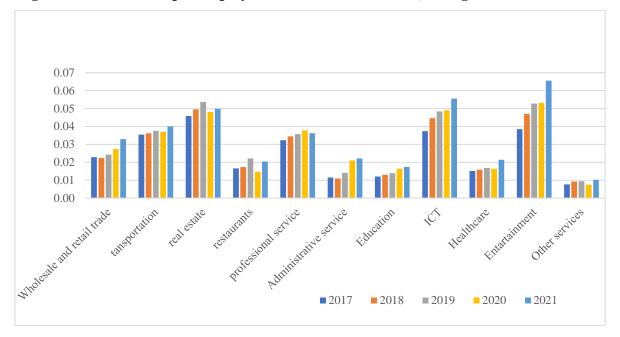


Figure 5. Value added per employer in services sub-sectors, Georgia

Source: own calculations based on World Bank Development Indicators and the data by the Statistics Office of Georgia, www.geostat.ge

Although services value added per employer has been on a rising trend since 2003, Georgia, with approximately 14.2 thousand US dollars value added per worker, lags behind all other EE economies discussed above. Slovenia, Czech Republic, and Estonia have the highest value added per employer. It accounted for around 45.9 thousand, 36.9 thousand, and 36 thousand constant 2015 US dollars respectively in 2019, according to the World Bank data. These three countries are followed by Latvia, Romania and Bulgaria, with 31.1 thousand, 28.8 thousand and 15.9 thousand constant 2015 US dollars respectively.

The above analysis of changes in sector shares in GDP, sectorial allocation of labor force and sectorial value-added indicators confirms labor movement from agriculture to services, but the labor force has been absorbed by low-productivity sub-sectors in services. Such a type of labor transfer raises questions regarding development and welfare enhancing nature of structural transformation. As we can see from the above data, employment in agriculture is still much higher and in services is much lower compared to EE economies and accordingly, to more advanced economies' respective indicators. This is the sign of insufficient pace and depth of structural transformation in Georgia

(Lekashvili and Jamagidze, 2022). Simultaneously, the existing gaps in value adding capabilities and productivity with the EE countries uncover several development risk, such as middle-income traps, described by Tregenna (2020) and structural under-development, described by Sen (2019). Furthermore, the existing pattern of resource allocation can potentially lead to greater income inequalities within country and enhance growth and development disparities at the regional level.

## 2. Trade and structural transformation

In open economies, international trade is a powerful factor that affects structural transformation. According to standard trade models, comparative advantages induce specialization and hence, transform sector compositions of the trading economies. These comparative advantages may come from either relative difference in productivity (in Ricardian models) or relative factor abundance (Heckscher-Ohlin models). Contemporary trade is significantly determined by the development of global value chains (GVCs). Through GVCs countries engage in global trade by specializing in one or a few stages of production of a certain product. Such a mode of specialization can potentially transform production structures. Tasks in which countries specialize define the share of the value that they add, and consequently, the income generated through those tasks. Hence, whether a country supplies critical high-tech components or is responsible for assembly makes a huge difference in structural transformation and development (UNCTAD, 2015).

Export patterns and complexity is a widely accepted indicator to characterize economic structure in an open economy setting. Georgia ranks 68<sup>th</sup> by the *Atlas of Economic Complexity*. It lags behind all the EE countries under review. Significant structural reforms and institutional changes facilitated by the Eastern Enlargement of the EU played a decisive role in the increased complexity and diversification of the EE countries. The EU membership eliminated barriers for foreign investors, keen to take advantage of the EE's relatively cheap and skilled labor force. There was an influx of foreign direct investment (FDI), most notably in the production of complex manufacturing sectors (wiiw, 2023). As a result, they increased their integration into regional and global value chains (GVCs).

The OEC's economic complexity index ranks Czech Republic, Slovenia and Slovakia in the top most knowledge-intensive product exporters in the world. In 2021 they took 7<sup>th</sup>, 12<sup>th</sup> and 16<sup>th</sup> positions, respectively, while Georgia had 64<sup>th</sup> rank. According to the methodology developed by UNIDO, the Czech Republic, Slovakia, and Slovenia belong to the top 30 most competitive manufacturing exporters in the world. Slovakia is outstanding among EE countries by its successful structural transformation revealed in the development high-productivity sectors, such as vehicles and

machinery that are designed for the global market. Czech Republic has similar positions, it increases specialization in complex manufacturing sectors, such as vehicles, machinery and electronics. These industries are the most dynamic in terms of growth of the country's global market share. Export has grown by an annual average of 7.2% over the past five years. Services industries also play an important role in Czech exports. In Slovenia's case high complexity industries are main contributors to export growth. Its global market share in chemicals and namely, pharmaceuticals has been the most dynamic recently. In contrast to the above, Georgia's economic complexity indicators have been worsening through the 1995-2010 period and Some positive shifts have been observed since 2010, as the country managed to increase its economic complexity mainly by diversifying its exports. The number of exported products as well as export destinations have increased, but in export composition of both manufacturing and services, relatively unsophisticated and low value-added categories prevail.

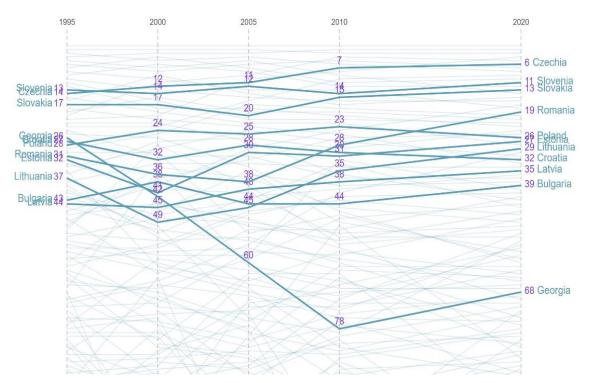


Figure 6. Economic Complexity in Eastern European Countries (rankings)

Source: Growth Lab, https://atlas.cid.harvard.edu/countries/82

In 2020, Georgia exported a total of \$3.92 billion, making it the number 124 exporter in the world. During the last five years, the exports of Georgia have changed by \$1.15 billion (from \$2.77 billion in 2015 to \$3.92 billion in 2020). In 2022, copper ores and concentrates reclaimed the first place in the list of top export items, equaling 18.4% of total exports. The share of motor cars (re-

export) in the total exports amounted to 14.4 %. The Ferro-alloys exports occupied the third place, constituting 10.5% of the total exports. These commodity groups are followed by nitrogenous fertilizers at 5.1% and wine of fresh grapes at 4.2%.

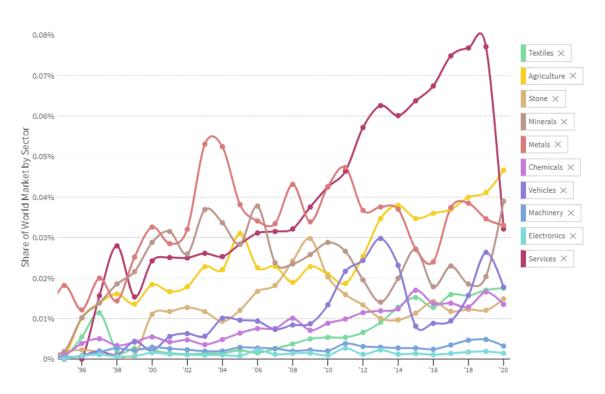


Figure 7. Georgia's export patterns, evolution of the global market share

Source: Atlas of Economic Complexity

The manufacturing sub-sectors, where Georgia increased its global market share are agricultural products and minerals. Its position in technologically more complex industries such as machinery and electronics is extremely weak and it has not changed significantly through the last decades. Chemicals, vehicles, and other medium technology-based industries are represented with lower market shares in the global market compared to services. In absolute terms, transportation and travel are leading export categories followed by other business services and ICT services. After the sharp fall caused by the COVID-19 pandemic, in 2021, services exports increased again. It amounted to 2.5 billion USD, which is 61.2% higher than in 2020. The positive trade balance was 724 million USD. In 2021 travel reclaimed first place in the list of top export types of services in Georgia, amounting to USD 1.2 billion (48.9% of total exports). Travel is followed by transport services, totaling USD 822.6 million (32.3%); and telecommunications which totaled 215.9 million US dollars (8.5%).

A more detailed observation on the composition of both manufacturing and services exports indicate very limited progress in terms of shifts towards more technology-intensive and knowledge-intensive sectors. Manufacturing export is dominated by primary products and low-skill manufacturing. Technologically export reveals dependence on resource-based manufacturing. In comparison with peers in Eastern Europe, Georgia shows one of the lowest shares of high-tech exports in total manufacturing exports. High-technology exports account for about 4% of total export, while EE countries that had similar characteristics at the beginning of their transition now reach around 13% share in high-tech exports.

Although currently services play a major role in positive export dynamics and contribute to positive revenues, its structure is particularly non-resilient. In the 2000s, services took a significant jump, reaching to above 40% of the total exports, which further increased and exceeded 50% in 2015. It had been maintained higher than in any of the sample countries until the sharp fall in 2020 as a result of the COVID-19 pandemic. In 2020, the three leading services export categories were other transport, personal travel, and business travel. Under the crises and uncertainties travel and tourism flows do not ensure long-term resilience of growth because of their highly volatile characteristics.

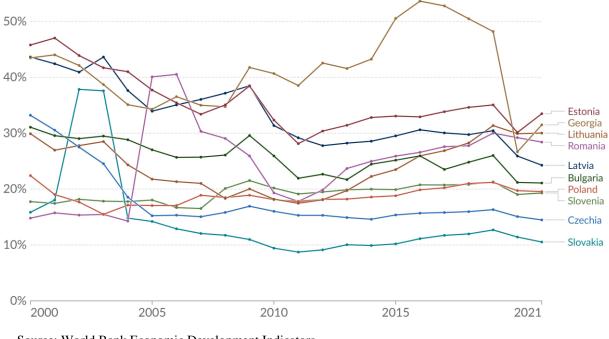


Figure 8. Services export shares to total exports (%) in Eastern European countries

Source: World Bank Economic Development Indicators

Participation in global value chains is one of the basic criterion to assess the movement of an economy to more complex or technologically sophisticated economic activities. GVCs enable

companies and economies to improve productivity through gaining access to the international markets, and new technology sources. EE countries involvement in GVC related trade was almost twice as high as that of Georgia in 2015 (table 2). Lack of the latest data for Georgia makes comparisons complicated, but the analysis of the past data shows its low intensity of engagement in GVC related exports compared to its counterparts in Eastern Europe.

Exporter	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	53.23	51.68	51.16	53.18	55.22	52.71	50.96	55.39
Czech Republic	62.90	63.08	62.73	63.41	60.86	57.90	56.70	61.27
Estonia	59.05	60.55	61.65	62.91	57.98	59.33	59.69	60.44
Georgia	35.66	33.87	-	-	-	-	-	-
Latvia	49.88	49.62	46.88	48.05	50.01	47.94	47.93	53.40
Lithuania	53.59	56.73	50.66	51.44	53.90	53.17	48.43	56.24
Poland	52.30	53.08	51.32	51.95	51.62	50.44	51.06	57.68
Romania	49.19	50.13	45.30	46.73	49.16	47.92	45.95	51.29
Slovakia	66.34	68.69	65.66	67.27	65.03	64.16	63.09	65.91
Slovenia	58.10	58.35	53.82	55.91	57.43	56.85	55.71	62.61

Table 2. GVC-related trade, percent of gross trade

Source: World Integrated Trade Solutions, GVC Trade Table

A recent study by Hagemejer and Muck (2019) finds out that exports account for at least 50% of the overall value-added growth in most EE countries since 1990s. In Bulgaria, Czech Republic, and Slovakia more than 70% of GDP growth has been determined by exports of intermediate inputs.

An integrated GVC participation indicator is calculated based on backward and forward linkages. Backward linkages measure foreign value added in exports, while forward participation involves domestic value added used in the intermediary exports to other countries. GVC participation indicator as a sum of foreign value added embodied in a country's exports and domestic value added of a particular country embodied in the exports of other countries, shows the extent to which a country is involved in a vertically fragmented international production process. The development of the integrated GVC participation indicator through the last decades is represented on figure 9.

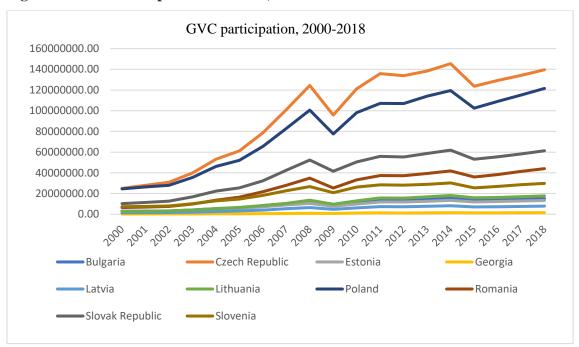


Figure 9. GVC Participation indicator, 2000-2018

Source: UNCTAD Eora Global Value Chain Database

EE countries are competitive exporters and well represented in GVCs, but the degree of their integration in GVCs varies. Those with relatively strong manufacturing sectors and diversified economies (such as the Czech Republic, Poland and Slovakia) are better represented in GVCs. As shown in Figure 9 Georgia's GVC participation has been stagnant, with little progress in reducing disparities with other countries in the EE region. Further analysis of the decomposed GVC Participation indicator of Georgia reveals that domestic value-added growth exceeded foreign value-added growth in exports from 2010 through 2018. Obviously, it is due to the following economic and structural characteristics: because of its small market size and low share of manufacturing in GDP, it develops forward linkages more intensively. Proximity with Europe as one of the large manufacturing hubs of the world is a significant advantage to intensify GVC participation, which is currently underused. As a middle-income country, Georgia will have to consider the experience of many other middle-income countries that face the difficulties of moving into more technologically sophisticated segments of GVCs. The specialization patterns that imply an insufficient pace of resource allocation towards more sophisticated and technologically complex sub-sectors in manufacturing as well as in services can potentially undermine long-term economic development.

### Conclusions

The present study shows significant gaps in structural transformation of Georgia and Eastern European (EE) countries, which had similar experiences of planned economic systems in the past, but saw huge progress in catching up with the advanced economies.

Georgia has the lowest industry employment indicator mixed with the lowest per capita GDP among EE countries. The declining share of manufacturing employment accompanied by a decreasing manufacturing share of GDP is an indication of the deteriorated performance of manufacturing subsectors. Although Georgia's structural transformation has been marked with labor movement from agriculture to services, currently employment in agriculture is still much higher and in services is much lower compared to EE economies and accordingly, to more advanced economies' respective indicators. Furthermore, the labor force has been absorbed by low-productivity sub-sectors in services. Such a type of labor transfer raises questions regarding development and welfare enhancing nature of structural transformation. Large part of labor force retained in low productivity sub-sectors of the economy can potentially lead to greater income inequalities within country and enhance growth and development disparities at the regional level.

The exports dependence on low-productivity and low-tech intensive manufacturing and lowvalue-added services further emphasizes the existing divide between Georgia and EE countries. The latter is represented with more technologically advanced export industries and greater GVC related trade. Closing Georgia's structural gaps with the European countries requires faster pace of structural transformation. There is a need for the rapid growth of productivity per worker and industry upgrading. Georgia should take advantage of its proximity with Europe as one of the large manufacturing hubs of the world to intensify GVC participation.

The emergence of new knowledge-intensive and technology-intensive sub-sectors in the region and globally will undoubtedly exert additional pressures on the economy of Georgia in terms of adopting them and transforming its economic structures towards more productive activities.

Although Georgia and EE countries faced similar challenges on their way to functioning market economies, the evidence is that the majority of EE countries has experienced development-enhancing structural transformation, while in Georgia the process is still incomplete. It is noteworthy that along with the economic and technological advancements, the meaning of transition concept is changing itself, new qualities, such as inclusiveness, greenness, resilience and integration are attributed to it, together with competitiveness of a country. Therefore, one of the topics for future studies should be the evaluation of Georgia's structural transformation against the criteria of more inclusive, green and resilient economy.

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