



Research

GEORGIA

MACRO OVERVIEW

Issue 5

November 2023

## **Main Findings**

### **Economic Growth**

Performance In 9M of 2023

Estimates Of Key Macroeconomic Indicators

### **Economic and Business Climate**

BAG Index: Georgian Business Climate Index

Ifo Index: Georgian Economic Climate Index

### **Key Macroeconomic Indicators**

Inflation

Reserves & Monetary Policy

### **Labor Market**

Employment

Salaries

Vacancies

Beveridge Curve

### **External Sector**

Trade

Export

Import

Tourism

Migration

Foreign Direct Investments

Money Transfers

### **Global Economic Trends**

Slowdown



## MAIN FINDINGS

- **Economic growth slowed down.** Following double-digit growth in 2021 and 2022, Georgia's economy continues on an upward trajectory this year, albeit at a slower pace than the previous two years.

### The following factors contribute to **growth slowing down**:

- **The diminishing of some one-off factors connected to Russia.** Money transfers from Russia began to decrease starting from April 2023, and the growth of trade with Russia has significantly declined in the first 9M of 2023.
- **Weaker performance was observed in specific sectors during the first half of 2023.** Several major sectors experienced a decline annually, while certain sectors exhibited slower growth rates than the first 6M of 2022.
- **Demand for Georgia's top exported goods decreased.** Global demand for copper ores and ferro-alloys has lowered, negatively affecting Georgian exports.

- The following factors present **positive developments**:

- **Declining rate of inflation.** Both headline and core inflation decelerated considerably in the first 9M of 2023.
- **Further recovery in tourism.** In the first 9M of 2023, both the number of tourists and the income from international travel increased significantly.
- **Strong flows of FDI.** Georgia experienced a record high of foreign direct investment (FDI) in the first 6M of 2023 compared to the first 6M of any previous year.

- **Record high money transfers.** Georgia experienced a record-high inflow of money transfers in the first 9M of 2023 compared to the first 9M of any previous year.
- **Positive business and economic climates.** Throughout 2023 so far, both the business and economic climates have been positive, with higher than pre-pandemic expectations for the future.

- The following factors present **challenges**:

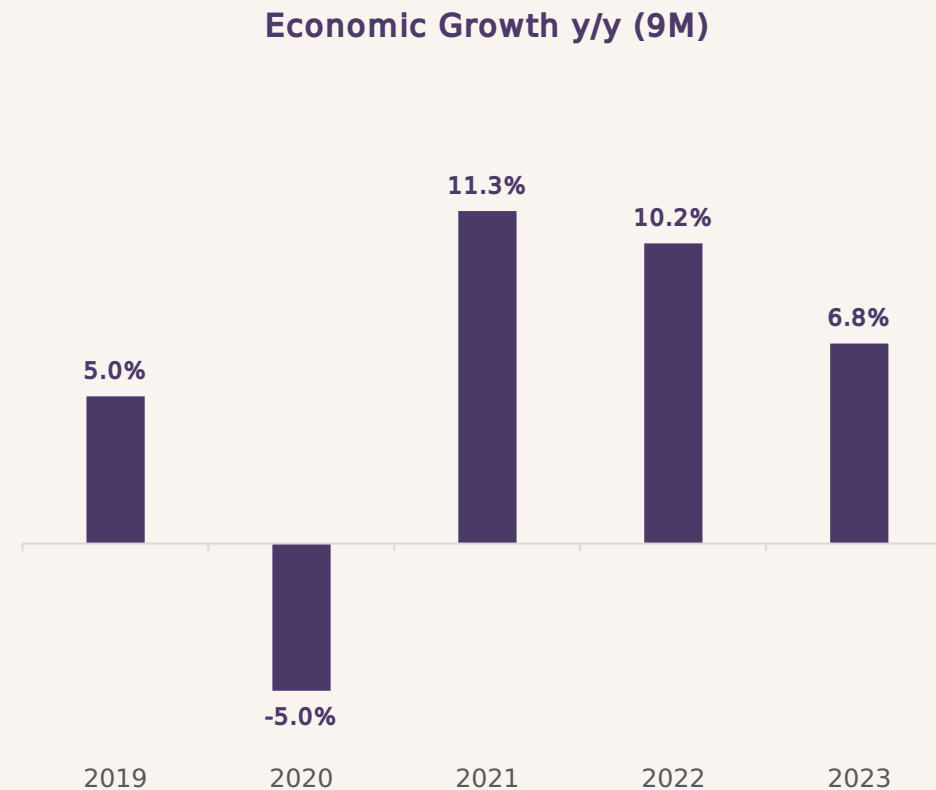
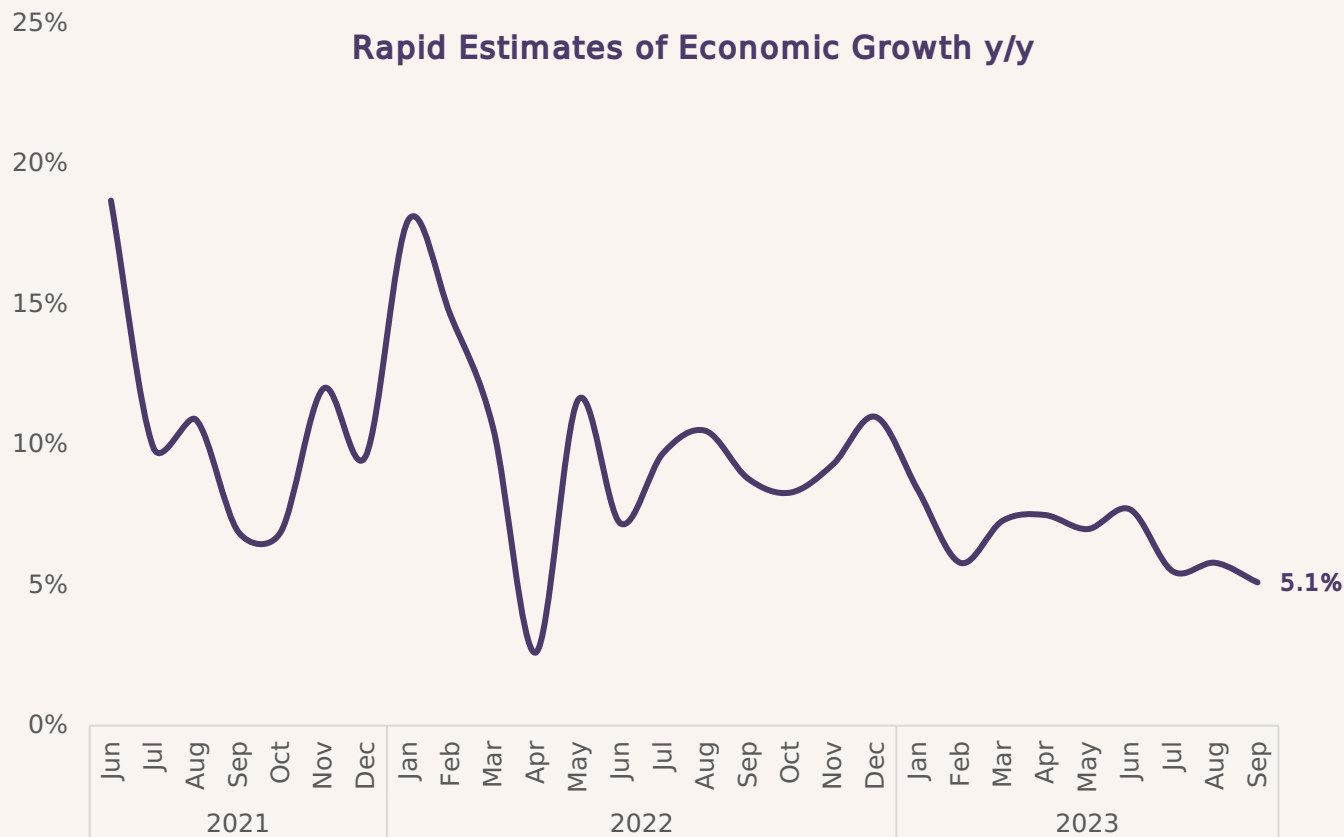
- **Labor market challenges.** While the unemployment rate has decreased, a labor shortage and a lack of specialists remain the most significant hindering factors for businesses in Georgia.
- **Emigration remains persistent.** The rate of emigration from Georgia has reached an unprecedented high, based on the latest available data. Meanwhile, the population aged 15 years and over in Georgia remains below 3 million.
- **Rising concerns regarding financial stability.** Recent actions of the National Bank of Georgia have heightened concerns about its independence and raised questions about future financial stability.\*

- **Outlook for 2024: high pessimism and uncertainty.** There is a growing sense of pessimism and uncertainty for the Georgian and global economy in 2024. The economy is reverting to its traditional pattern of slow growth, aligning more closely with the global economic outlook.

\* IMF on the NBG's decision regarding imposing sanctions.



# ECONOMIC GROWTH: PERFORMANCE IN 9M OF 2023



- Georgia's economy has experienced a **notable slowdown** in growth in the first 9M of 2023, marking the end of its double-digit growth trajectory. However, despite the deceleration, the economy still maintains substantial growth numbers – the **average growth** in the first 9M of 2023 amounted to 6.8%.

- The **growth rate** was higher in the initial months of 2023 and has **gradually decreased** over the course of the first 9M of the year. The highest y/y growth rate was recorded in January (8.4%), followed by the lowest in July (5.5%).



Selected sectors	Nominal GDP 6M, 2023*	Real GDP Growth	
		6M 2023* / 6M 2022*	6M 2023* / 6M 2019
Administrative and support service activities	388.2	37.5%	8.5%
Information and communication	1606.5	31.3%	127.2%
Other service activities	315.5	19.2%	55.5%
Construction	2234.3	19.0%	2.3%
Accommodation and food service activities	1075.4	11.8%	-1.0%
Arts, entertainment and recreation	1401.6	9.6%	67.5%
Real estate activities	3506.5	1.2%	5.3%
Human health and social work activities	1270.9	-6.3%	26.5%

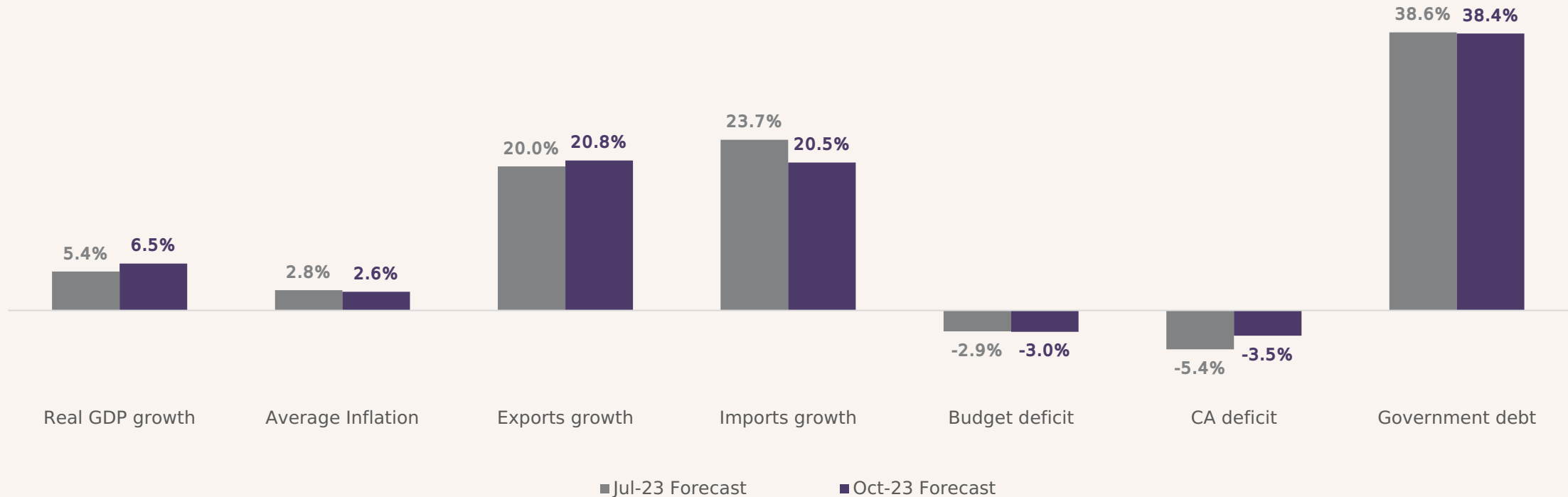
- In the first half of 2023, a number of sectors reported considerable y/y growth. **Information and communication** has shown strong growth in 6M of 2023, compared to 6M of 2022 (+31.3%), marking the second consecutive year of high growth in the ICT sector in Georgia, in line with the sector boom in the country.

- **Administrative and support service activities** demonstrated the strongest y/y growth compared to the 6M of 2022 (+37.5%), highlighting the recovery of the tourism sector with other tourism-related sectors.

\* Preliminary data



## MoF - Estimates of Key Macroeconomic Indicators for 2023



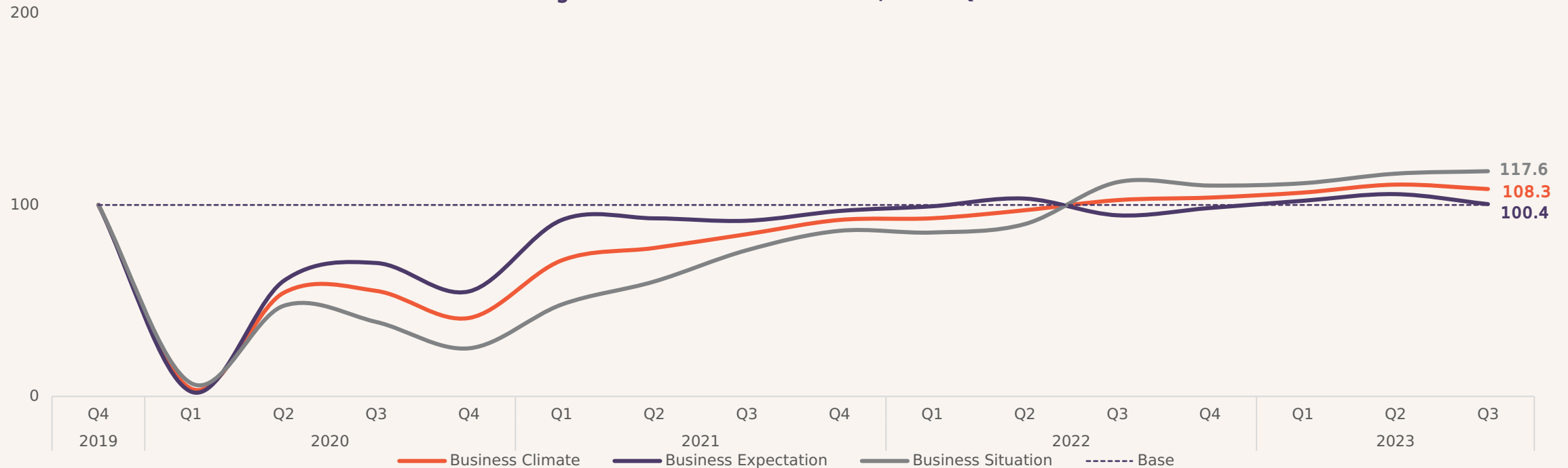
- The Ministry of Finance of Georgia (MoF) has updated its **estimates of key macroeconomic indicators** with higher real GDP growth rate, lower inflation, and lower import growth. Notably, the MoF increased the forecasts for real GDP growth to 6.5% (+0.9pp) while the forecast for average inflation reduced from 2.8% to 2.6%, and the forecasts for import

- growth declined (-3.2pp), causing the forecast for CA deficit to decrease (-1.9pp).
- It should be noted that there have been **no substantial changes** in the estimates of the budget deficit or government debt.



# ECONOMIC AND BUSINESS CLIMATE: BAG INDEX

Georgian Business Climate Index, 2019 Q4=100\*



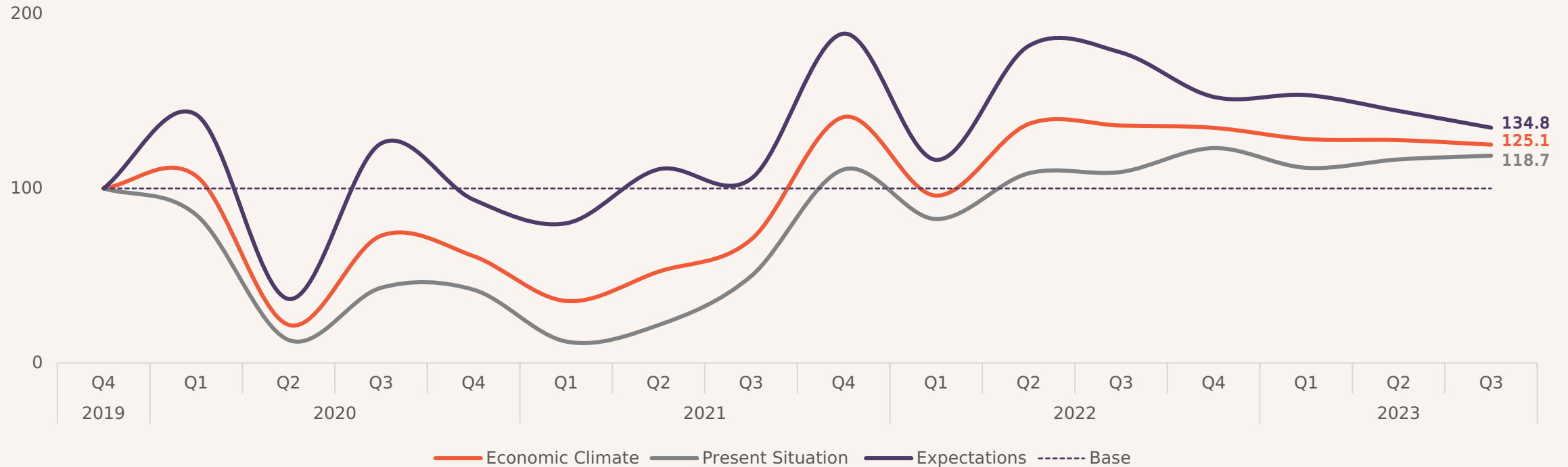
- Georgian businesses assess the business climate to be more favorable than that of the pre-pandemic period. In Q3 of 2023, compared to the pre-pandemic period (Q4 of 2019), the **BAG Business Climate Index** (Q4 of 2019=100) increased by 8.3 points. Additionally, during this period, the assessment of the present business **situation** (+17.6) and business **expectations** (+0.4) improved compared to the pre-pandemic levels.

- During and after the pandemic, business situation and expectations worsened significantly. However, with the **Russo-Ukraine war**, the business situation and expectations improved markedly, signaling a positive shift from the pandemic's challenges.

\* The presented index, derived from the business climate, sets the Q4 of 2019 as the base at 100. It is important to note that values above 100 in the graph indicate that the current climate/present situation/expectations are higher than the assessment based on the reference period of Q4 of 2019, rather than the positive value of the actual index. Conversely, values below 100 suggest a relative decline. This index serves as a standardized tool for evaluating changes in the business environment over time. For the actual climate values, see the [BAG Index](#).



Georgian Economic Climate Index, 2019 Q4=100\*



• Georgian economists assess the economic climate to be more favorable than that of the pre-pandemic period. In Q3 of 2023, compared to the pre-pandemic period (Q4 of 2019), the **Georgian Economic Climate Index** (Q4 of 2019=100) increased by 25.1 points. Additionally, during this period, the assessment of the present economic **situation** (+18.7) and **expectations** (+34.8) improved compared to the pre-pandemic levels.

• After the initial pandemic impact, economist assessments of the present situation and expectations were uncertain and volatile, mostly below pre-pandemic levels. A positive rebound following the 2021 economy reopening was offset by the **Russo-Ukraine war**. Nevertheless, the repercussions of the war were more favorable than initially anticipated by economists, leading to enhanced assessments of the present situation and expectations.

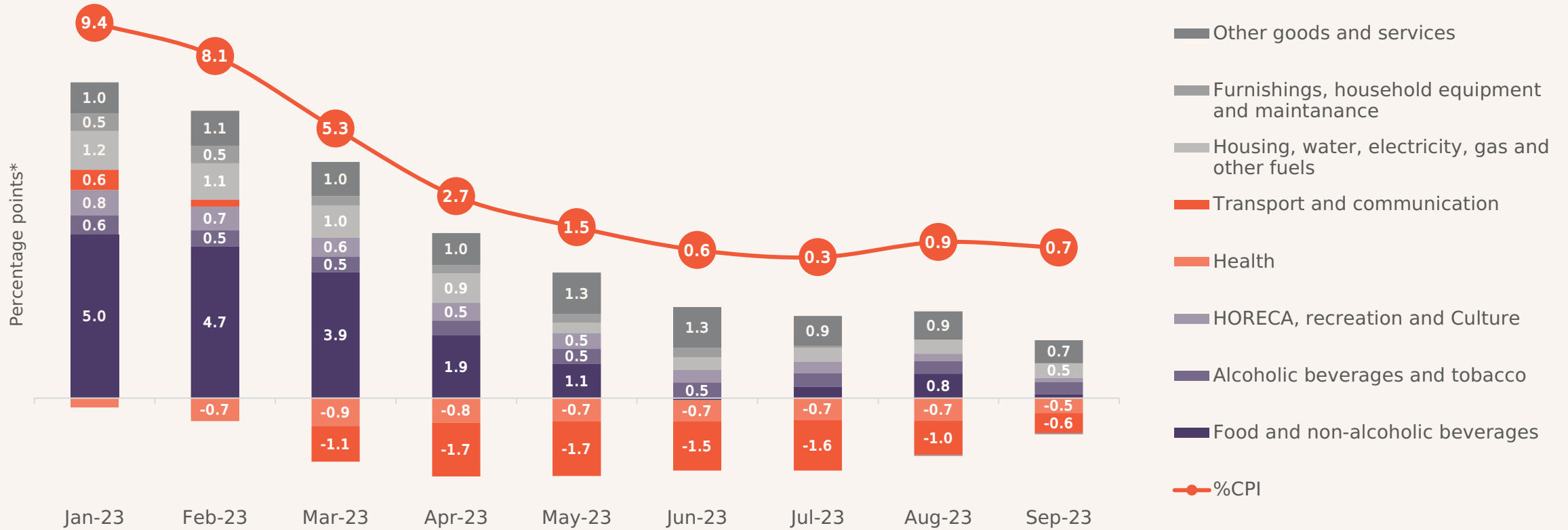
\* The presented index, derived from the economic climate, sets the Q4 of 2019 as the base at 100. It is important to note that values above 100 in the graph indicate that the current climate/present situation/expectations are higher than the assessment based on the reference period of Q4 of 2019, rather than the positive value of the actual index. Conversely, values below 100 suggest a relative decline. This index serves as a standardized tool for evaluating changes in the economic environment over time. For the actual climate values, see [Georgian Economic Climate](#).





# KEY MACROECONOMIC INDICATORS: INFLATION

## Contributions of Different Spending Categories to the Monthly YoY Inflation, pp



• Inflation has a declining trend in 2023. Inflation has shown a significant slowdown from January to September of 2023, coming down to 0.7 percentage points (pp) from 9.4 pp.

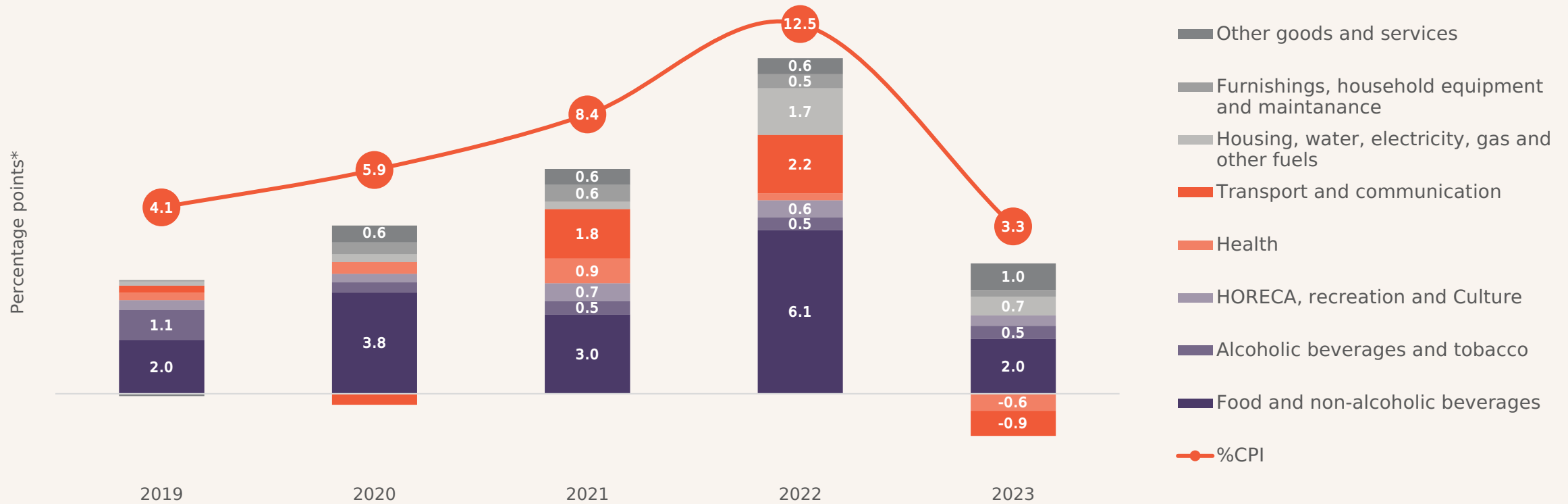
• The primary factors contributing to this reduction in inflation during the first 9M of 2023 are the lower inflation rates in food and non-alcoholic beverages, as well as deflation in transport & communication and health.

\* The absolute values below 0.5 are not labeled on the graph.



# KEY MACROECONOMIC INDICATORS: INFLATION

Contributions of Different Spending Categories to the Average y/y Monthly Inflation of the Given Year (9M)



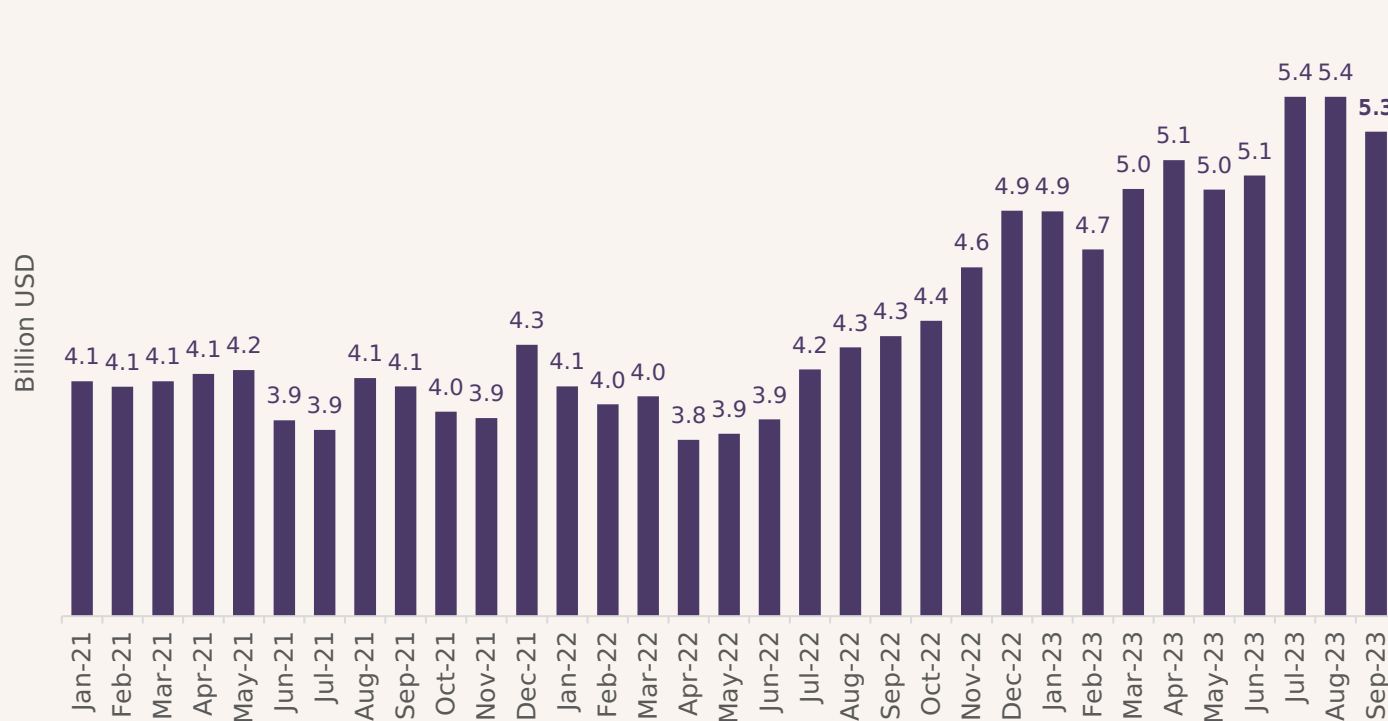
- Inflation** is set to stabilize around **target levels** (3%). According to the National Bank of Georgia (NBG) forecast, headline inflation will remain below its target, followed by a temporary overshoot (the base effect), before stabilizing around 3% in the medium term.

- Core inflation** followed a decreasing trend in the 9M of 2023, compared to 9M of 2022. The average core inflation was 4.5% in 9M of 2023, 1.5 pp lower than 9M of 2022, indicating a potentially more stable price environment.

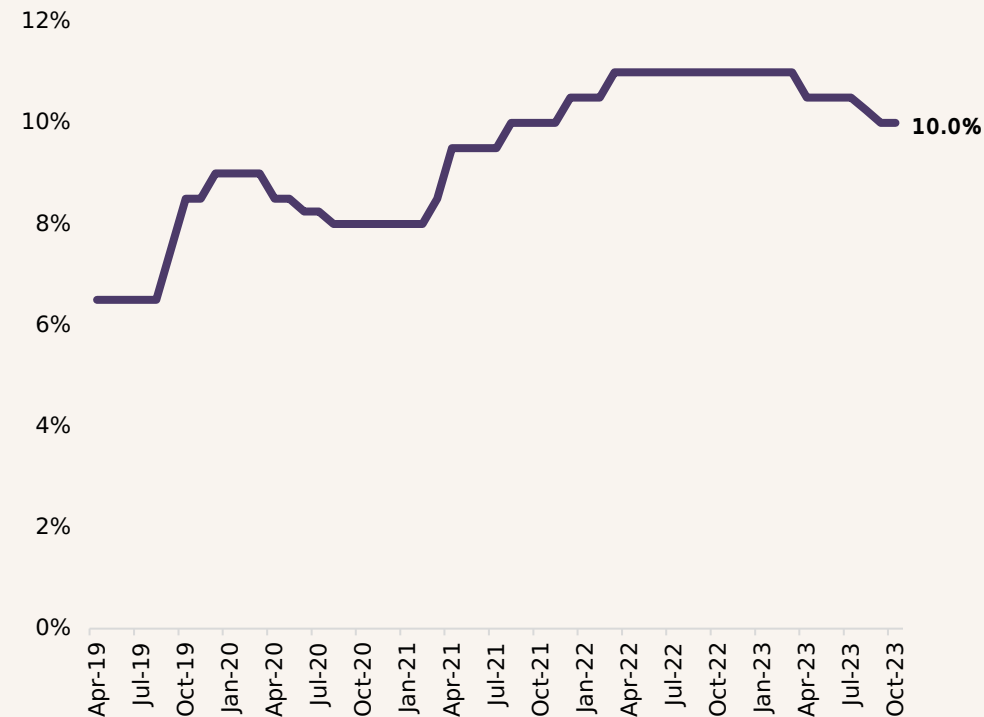
\* The absolute values below 0.5 are not labeled on the graph.



## Official Reserve Assets



## Monetary Policy Interest Rate



- The recent activities of the NBG have raised concerns about the institution's independence and overall **financial instability** in the long term in Georgia and necessitated the NBG's intervention in the market to stabilize the situation.
- In Aug 2023, the **official reserve assets** reached an all-time high of US\$5.4 billion. However, the activities of the NBG led

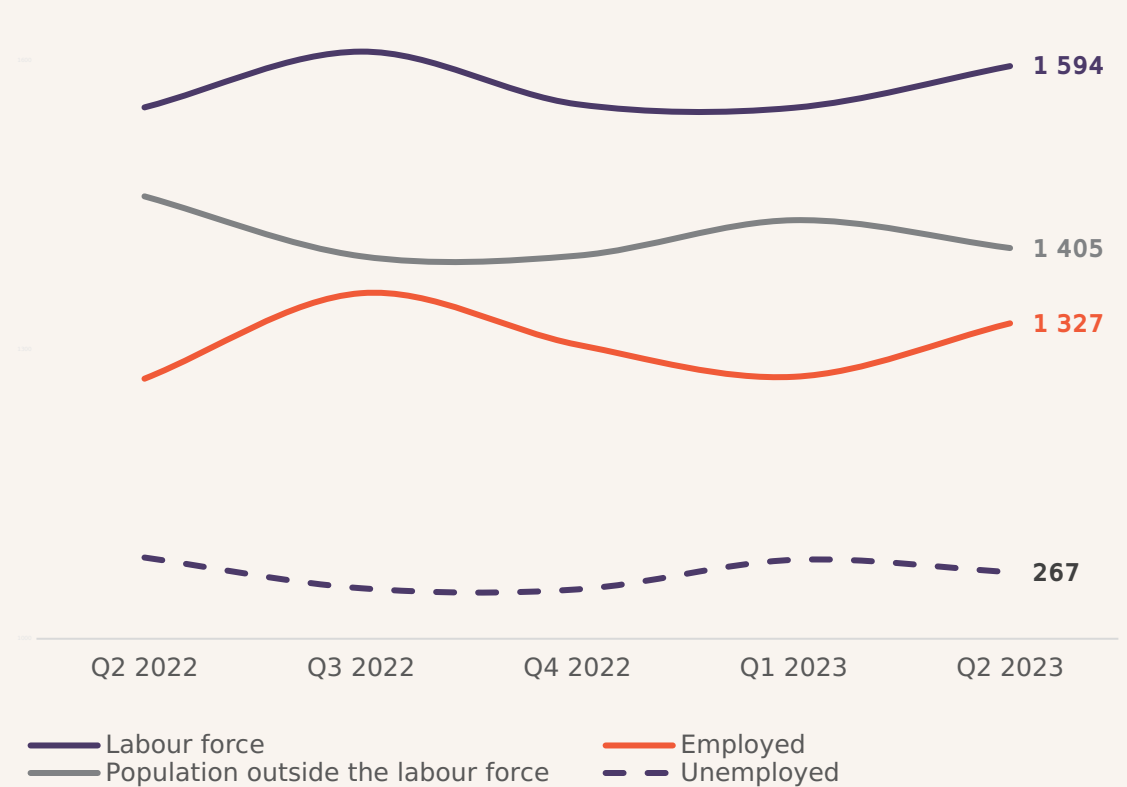
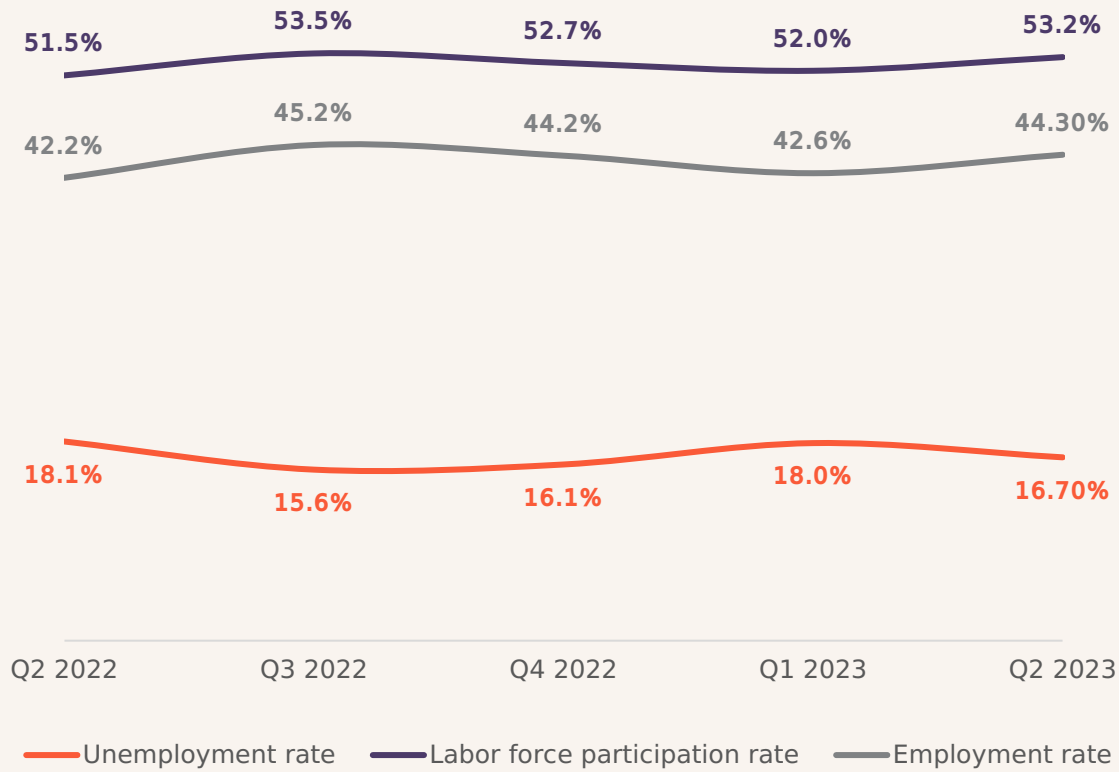
to exchange rate fluctuations, requiring the purchase of Lari to stabilize the exchange rate. Consequently, the official reserve assets decreased by US\$164 million, amounting to US\$5.3 billion as of Sep 2023.

- In October 2023, the NBG has maintained the **monetary policy** at 10.0%.



# LABOR MARKET: EMPLOYMENT

### Labor market indicators

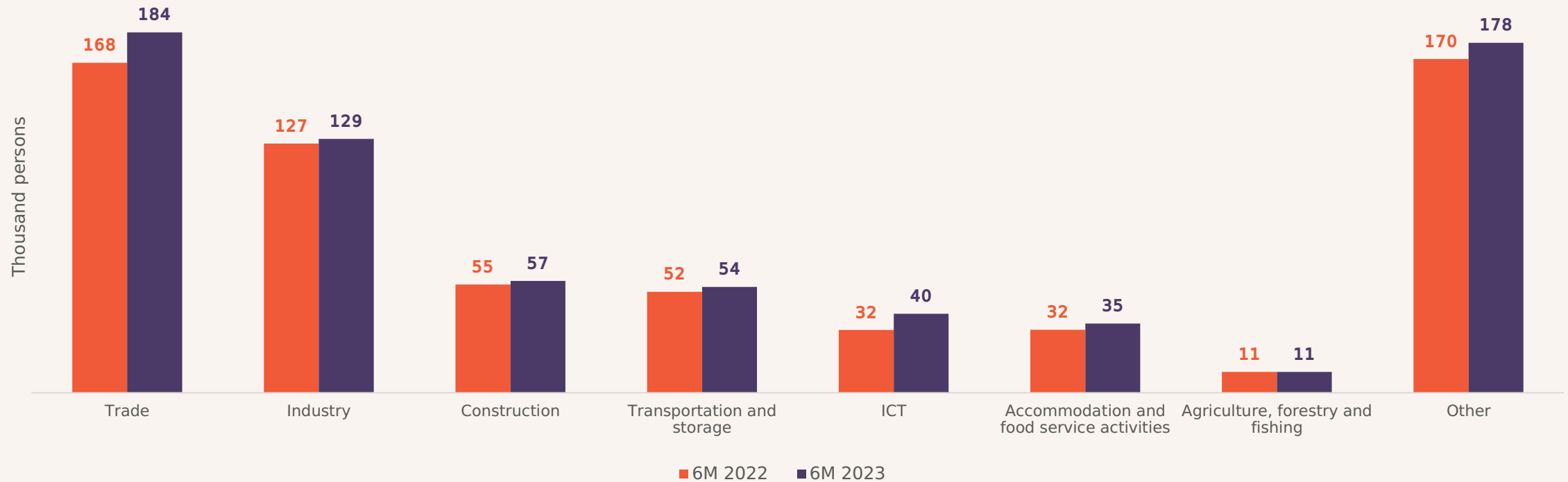


- Labor market indicators are showing slow improvements. In Q2 of 2023, compared to Q2 of 2022, the **labor force** increased by 2.8%, and the **population outside the labor force** decreased by 3.7%.

- The total population aged 15 and above in Georgia remains below 3 million, having fallen below this threshold for the first time in 2022, raising concerns about the stability of the future workforce.



## Number Of Employees By Kind Of Economic Activity



- The number of **employees in the business sectors** in Georgia is increasing. In 6M of 2023, compared to 6M of 2022, the number of employees in the business sector in Georgia increased by 6.5%, amounting to more than 689 thousand persons.
- Most of the employees in the business sector in 6M of 2023 in

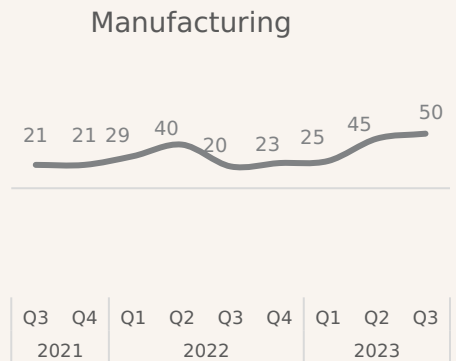
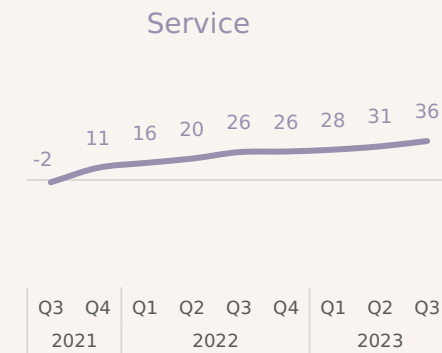
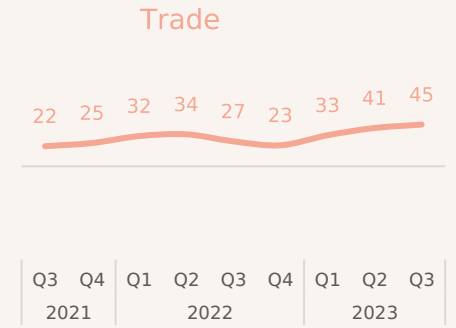
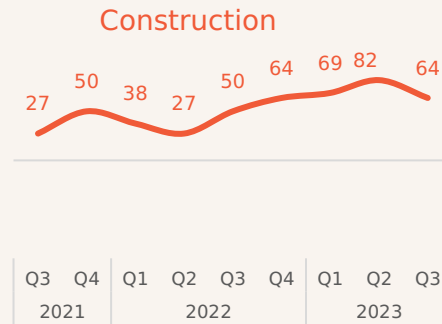
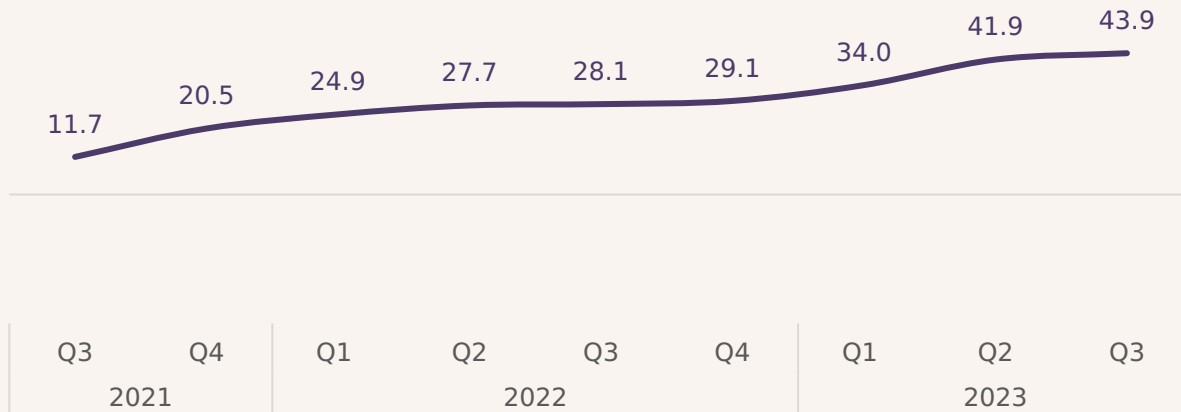
Georgia were employed in the **trade** sector, accounting for more than 180 thousand persons.

- As the **ICT** sector in Georgia is witnessing a significant boom, the highest employee increase was recorded. In 6M of 2023, the y/y growth in the ICT business sector workforce amounted to 26.1%.



# LABOR MARKET: EMPLOYMENT

## BAG Employment Barometer



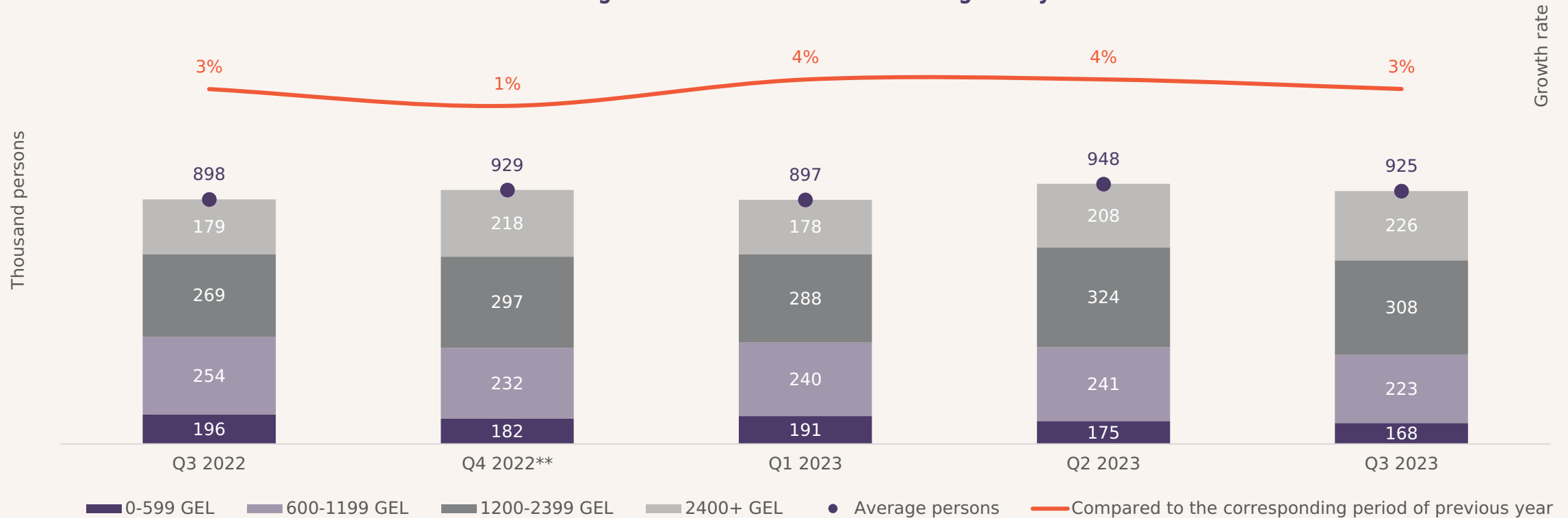
- Employment outlook in business in Georgia is positive on the rise. In the first 9M of 2023, on average, the **BAG Employment barometer\*** amounted to 39.9 points, 3.0 points higher than the 9M of 2022, implying higher expectations regarding employment in the next three months.

- In the first 9M of 2023, the **highest** average score in this barometer was recorded in the **construction** sector (71.4), and the **lowest** was reported in the **service** sector (31.6).

\*The BAG Employment Barometer reflects companies' expectations regarding changes in employment in the next three months. Respondents could describe their plans regarding the number of employees for the next three months as "increasing," "stable," or "decreasing." The balance value of these plans is the difference in the percentage shares of the "increasing" and "decreasing" responses. The BAG Employment Barometer is a weighted mean of the balances in different sectors. The BAG Employment Barometer can be between -100 and +100. -100 means all surveyed businesses expect employment to decrease in the next three months, while +100 means all surveyed businesses expect employment to increase in the next three months.



## Average Number of Persons Receiving Salary



- In Q3 of 2023, the number of persons receiving a monthly salary increased by 3.0% compared to the corresponding period of 2022.
- According to the [BAG Index](#), 35% of companies raised their employees' salaries in Q3 of 2023, which could be attributed to a **lack of specialists** and a labor shortage in Georgia.

- Despite the rise in salaries, the likelihood of a **wage-price spiral** remains significantly low. According to the [NBG's assessment](#), companies have recently raised salaries by reducing their profit growth. As a result, it's highly improbable that there is a wage-price spiral in Georgia.

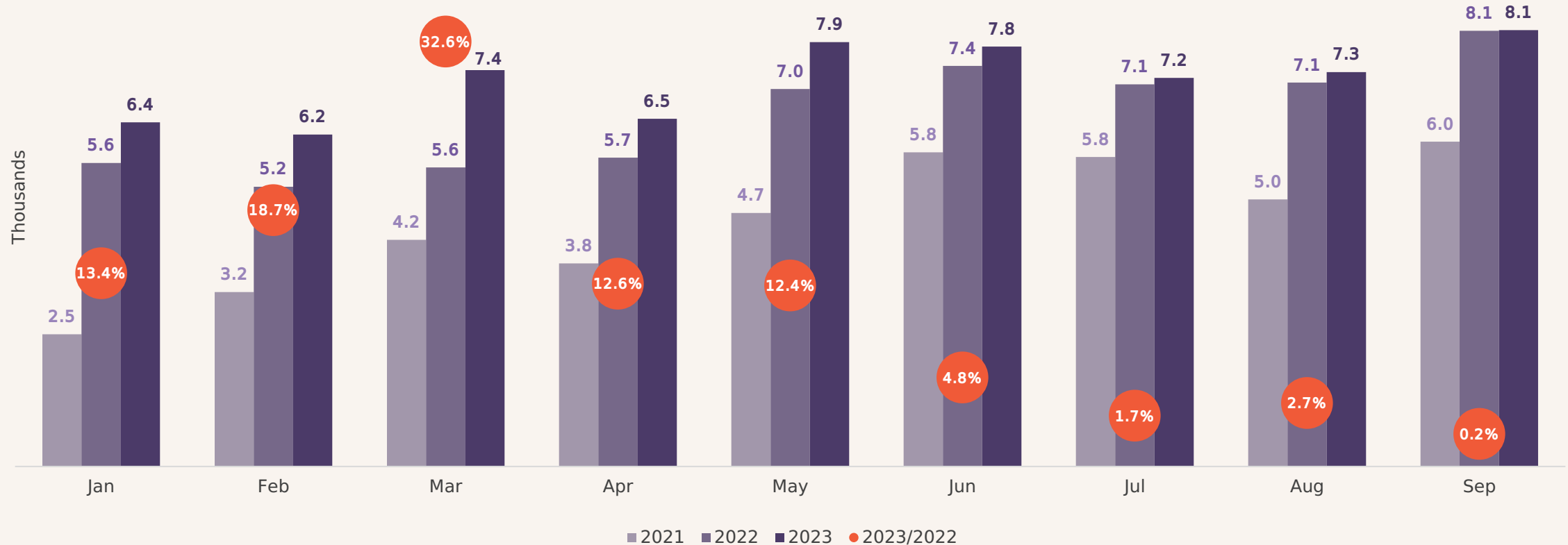
\*The data provided by Revenue Service is not final and might slightly increase. (Last viewed on 20.10.2023). The data represents gross salaries.

\*\*The decrease of the share of 0-599 GEL and 600-1199 GEL categories in the Q4 of 2022 was largely due to a notable number of people receiving the 13th salary in December.



# LABOR MARKET: VACANCIES

Number of Published Vacancies on Jobs.ge



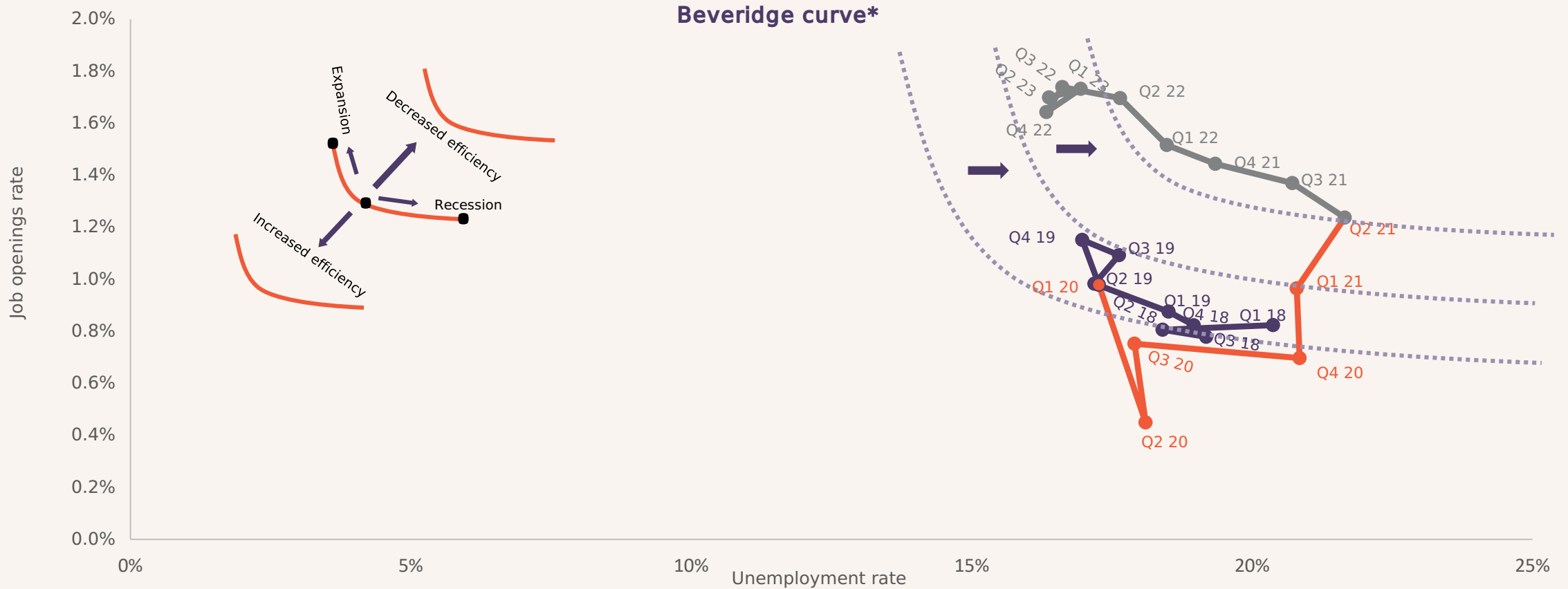
- The number of **vacancies** is increasing. In the 9M of 2023, vacancies increased by 9.9% on jobs.ge compared to the 9M of 2022.
- Though, it must be noted that the y/y **growth** of the number

of vacancies in the 9M of 2023 has been significantly lower compared to the y/y growth in the first 9M of 2022 (43.8%). The decline in y/y growth of published vacancies is more evident in Q3 of 2023.





# LABOR MARKET: BEVERIDGE CURVE



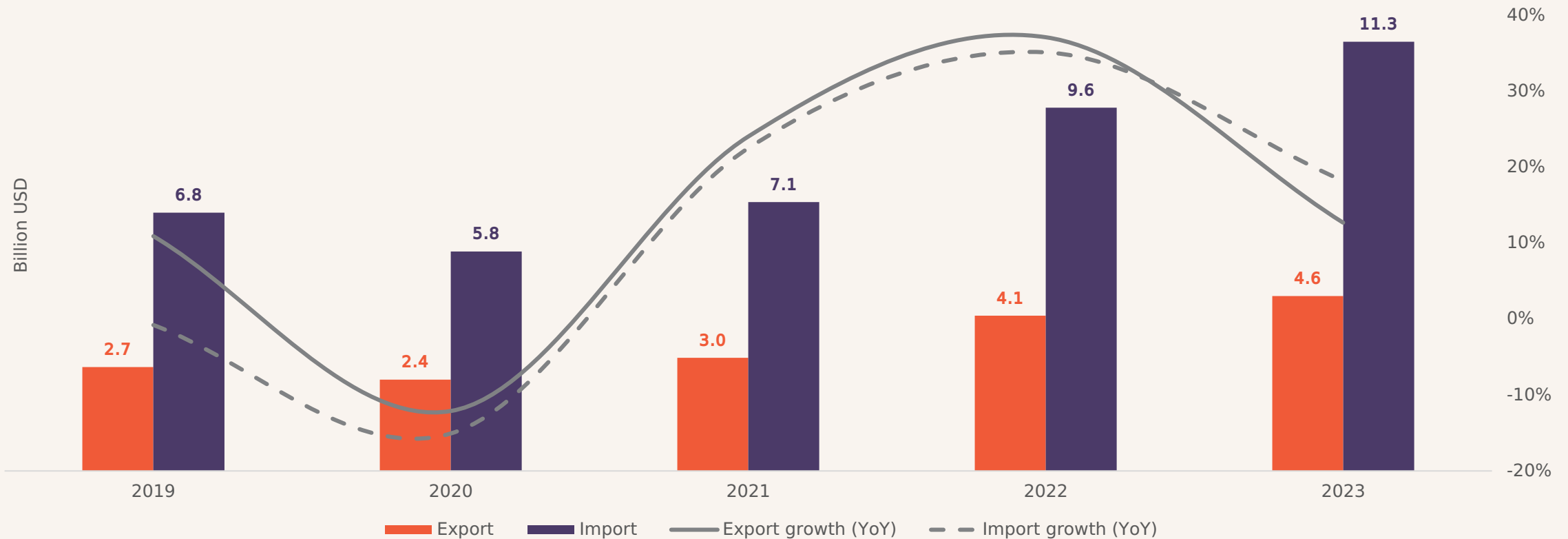
- According to the seasonally adjusted **Beveridge curve**, in Q2 2023, the efficiency of the labor market increased, compared to Q1 2023, as the unemployment rate decreased, and the job openings rate fell, indicating further movement toward the pre-pandemic efficiency level.

- The **labor market efficiency** is still lagging **behind** its pre-pandemic level, which could be attributed to different factors, including the flow of personnel to adjacent sectors due to changes in the country's economic structure, labor force migration, and increased wage expectations of job-seekers.

\* The Beveridge curve - Employment Tracker



## Georgia's Imports and Exports and Growth Rates y/y (9M)

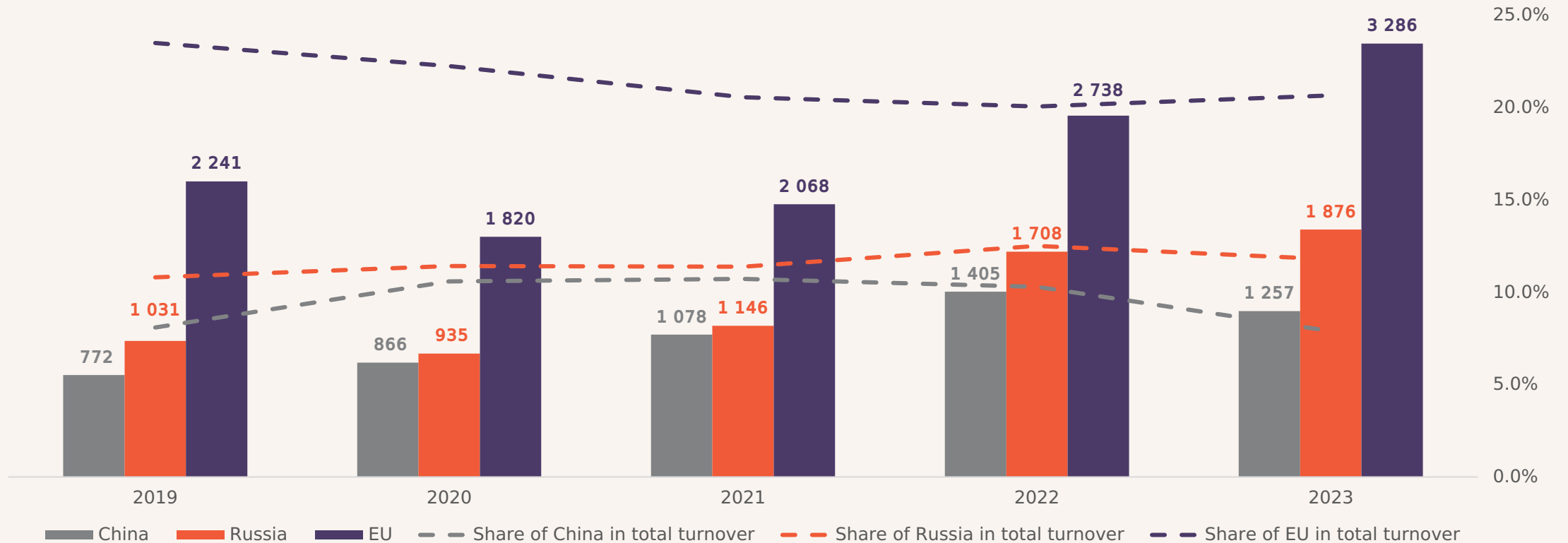


- In the first 9M of 2023, **external trade turnover** in Georgia amounted to US\$15.9 billion, which is **16.5% higher** than in 9M of 2022.
- Georgian **exports** amounted to US\$4.6 billion in the first 9M of 2023, **12.7%** more than the 9M of 2022. Meanwhile,

- Georgian **imports** reached US\$11.3 bln in the first 9M of 2023, **18.2%** higher than the first 9M of 2022.
- In the first 9M of 2023, the **trade deficit** in Georgia increased by US\$1.2 billion, **22.3%** higher than the first 9M of 2022.



## Georgia's External Trade Turnover With China, Russia, and the EU (9M)

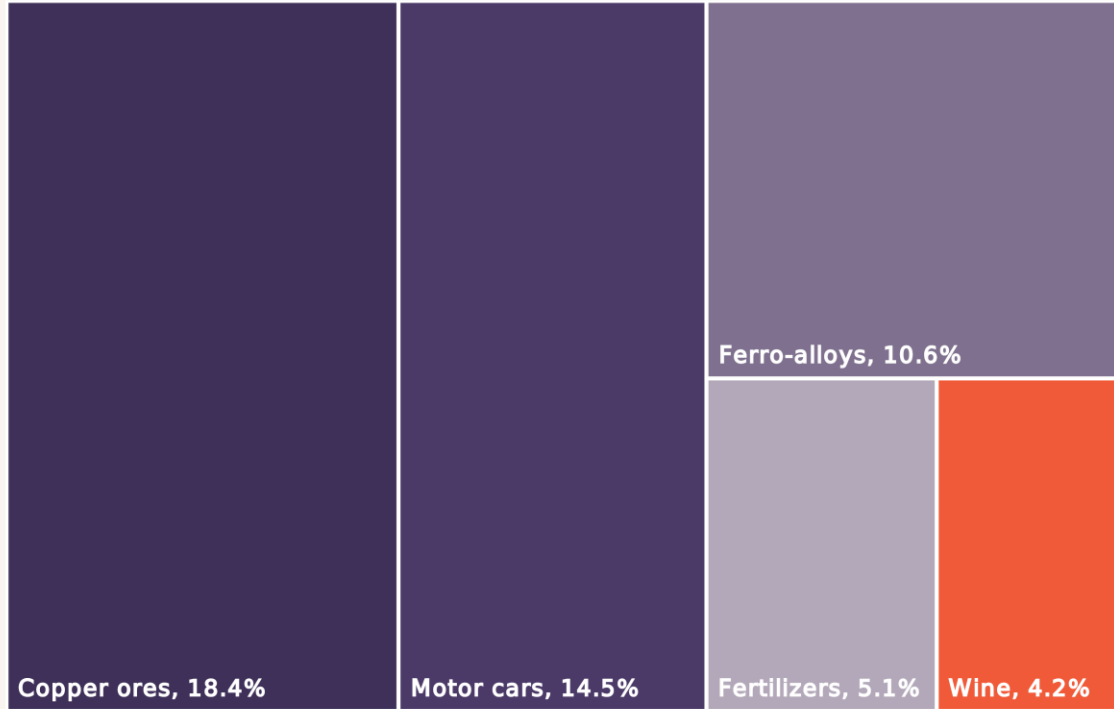


- In the first 9M of 2023, compared to the 9M of 2022, Georgia's **trade turnover** increased with the EU (+20.0%, y/y), and Russia (+9.9%, y/y), and decreased with China (-10.5%, y/y).
- The share of the EU in **international trade** has increased by

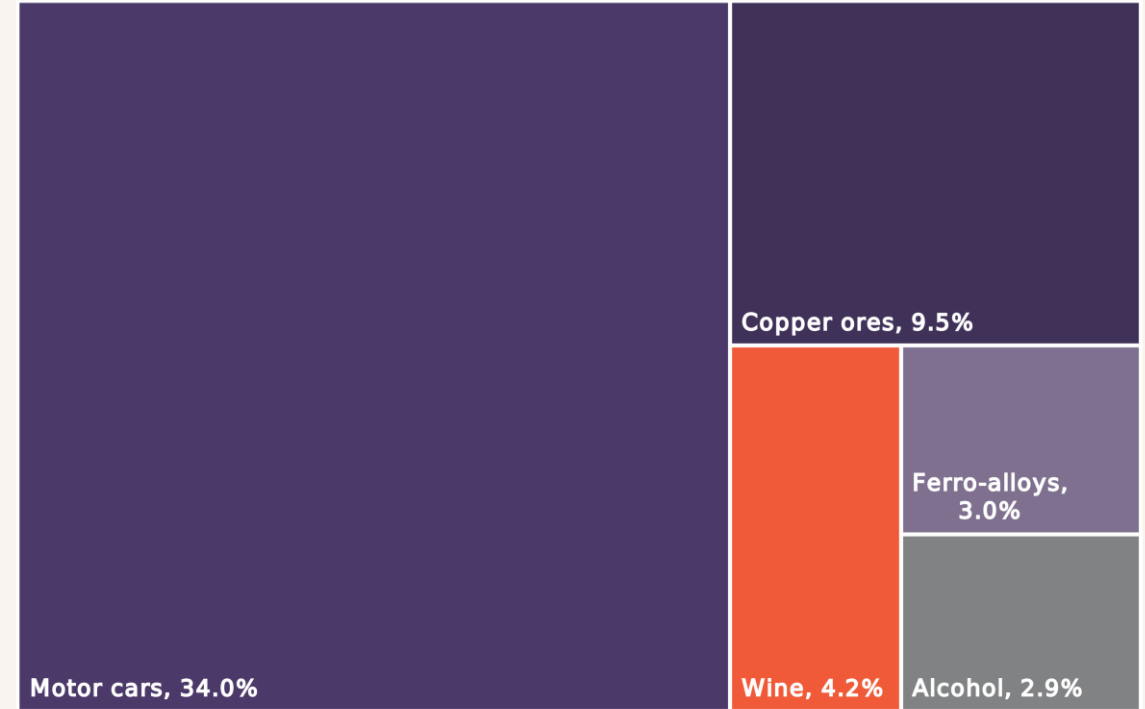
0.6 pp in the first 9M of 2023 compared to 9M of 2022. However, the share of Russia in international trade has decreased slightly (-0.7 pp, y/y), and the share of China has experienced a significant decrease (-2.4 pp, y/y) on the exports side, bringing it back to its 2019 level of under 8%.



### Share of Major Commodity Positions by Exports (9M 2022)



### Share of Major Commodity Positions by Exports (9M 2023)

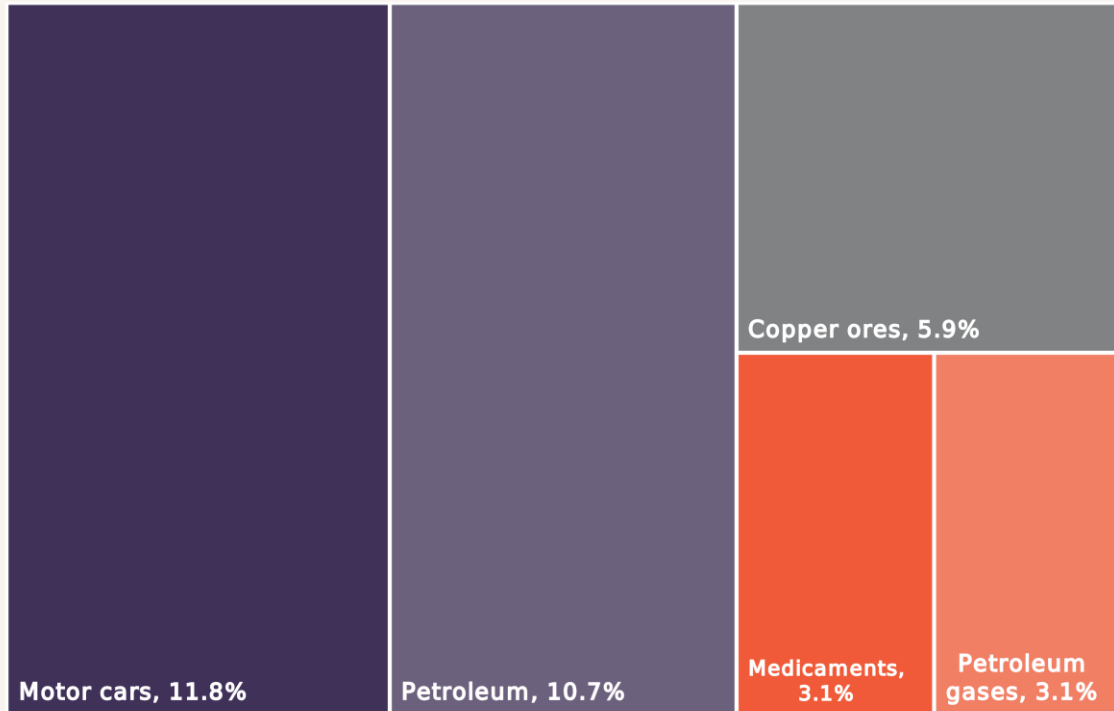


- In the first 9M of 2023, compared to the 9M of 2022, there was a significant shift in the composition of **primary commodity exports**. Motor cars took the lead, having a share of 34.0% (+19.5 pp, y/y) in exports from Georgia. The share of copper ores (-8.9 pp, y/y) and Ferro-alloys (-7.6 pp, y/y) decreased drastically, aligning with reduced global demand and declining market price of the commodities.

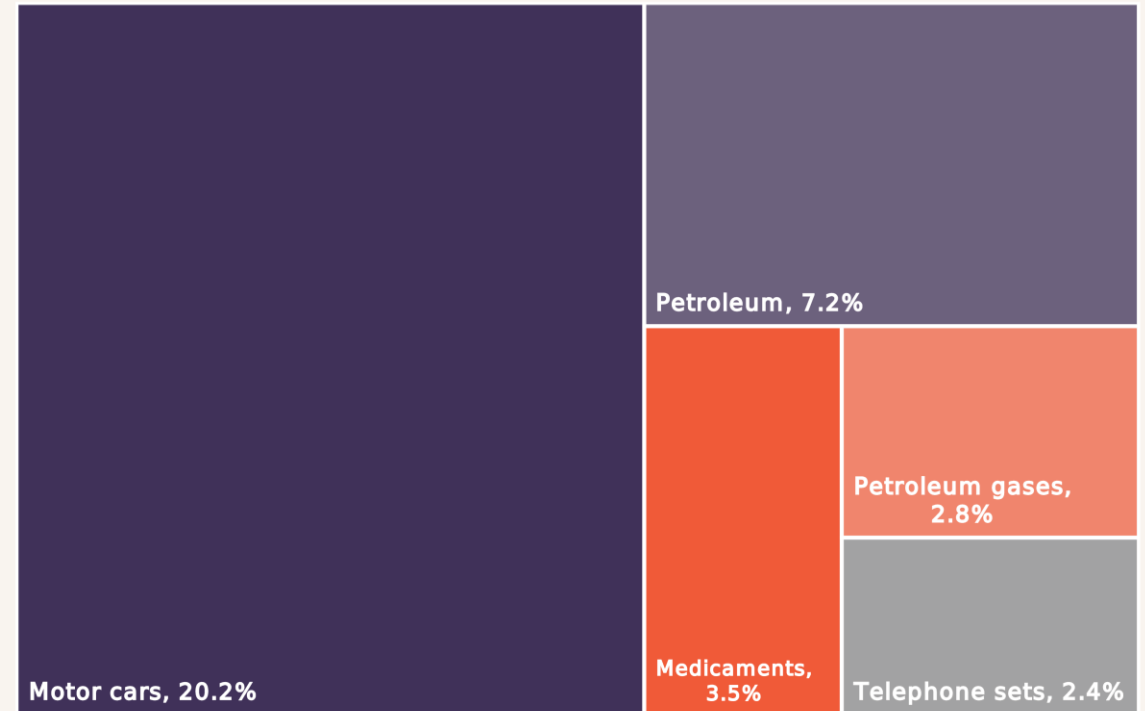
- Georgia has joined an additional set of **sanctions** directed toward Russia in 2023. The limitations have been placed on the export of imported automobiles from the United States to Russia and Belarus (activated on August 1<sup>st</sup>). These restrictions also encompass vehicles imported from Europe (activated on September 26<sup>th</sup>).



### Share of Major Commodity Positions by Imports (9M 2022)



### Share of Major Commodity Positions by Imports (9M 2023)

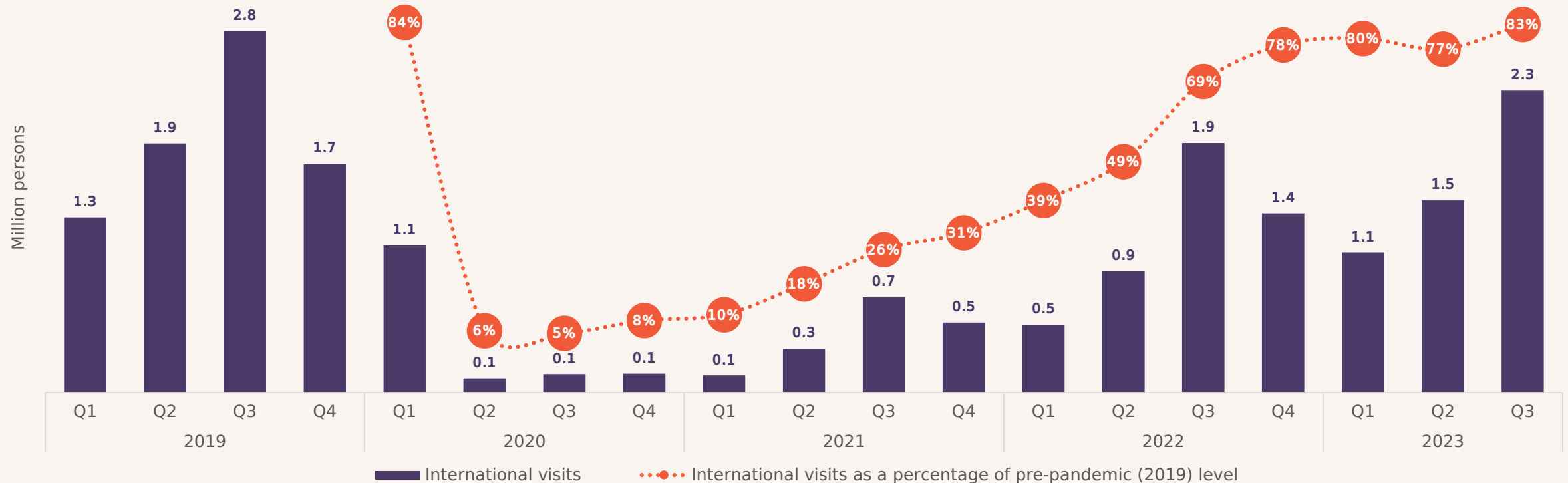


- In the first 9M of 2023, compared to the 9M of 2022, there were some changes in the composition of **primary commodity imports**. Notably, the share of motor cars in imports nearly doubled (+8.4 pp, y/y) amounting to 20.2% of the total imports in the 9M of 2023.

- Likewise with exports, the share of copper ores in the total imports has fallen significantly (-4.0 pp, y/y) in 9M of 2023. Therefore, in the first 9M of 2023, copper ores no longer held a position within the primary commodity imports.



## Total Number of International Visitors and Those Visits as a Percentage of Corresponding Figure in 2019



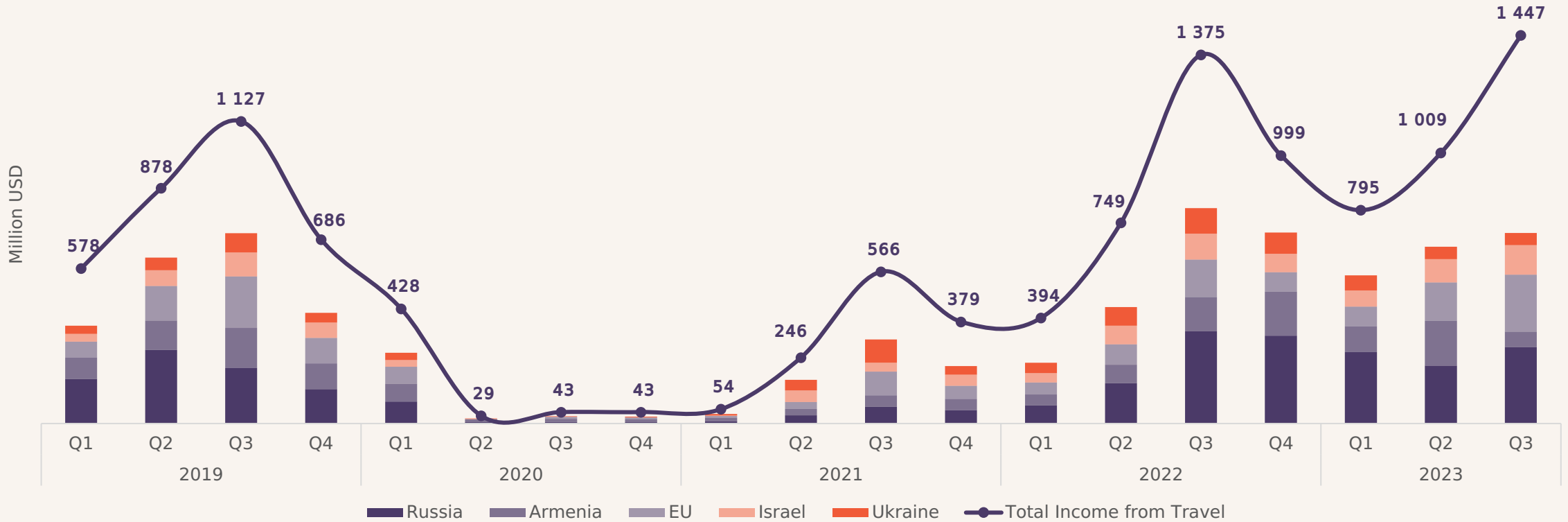
• In the first 9M of 2023, the number of **international visits\*** to Georgia has reached 81% of the level recorded in to the first 9M of 2019.

• In Q4 of 2023, tourism recovery might be negatively affected by decreased number of Israeli tourists, as Israel is one of the top markets for Georgian tourism.

\* Individuals who have not yet left Georgia are not included in the statistics.



## Total income from international travel by countries



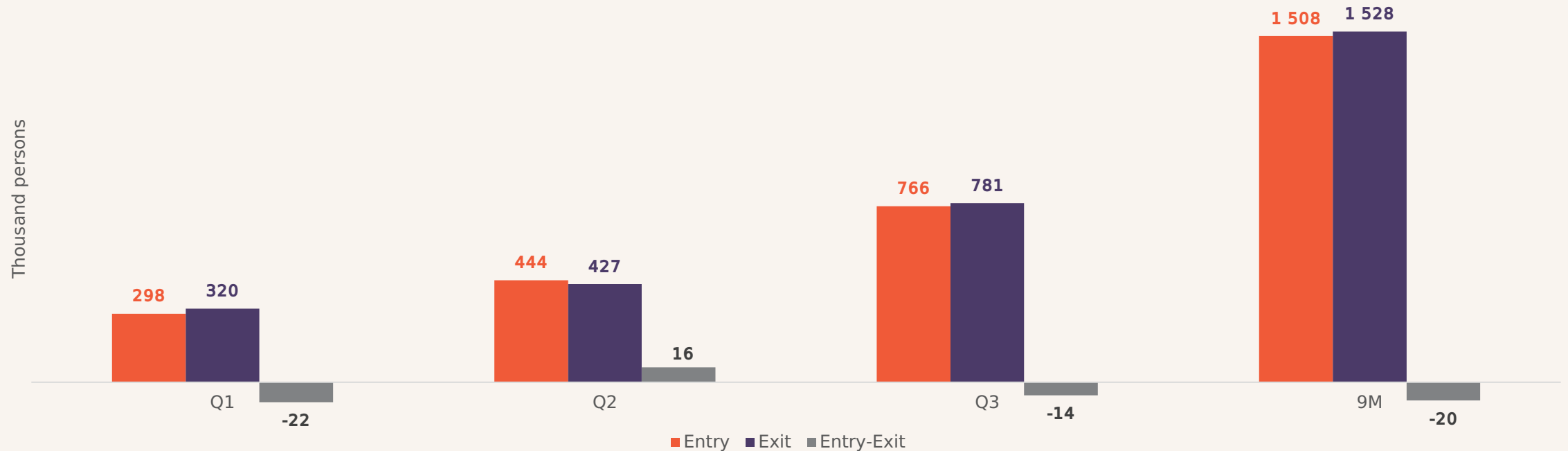
- In the first 9M of 2023, the total **income from international travel**\* amounted to US\$3.3 billion, marking an increase of 29.2% compared to the 9M of 2022 and 25.9% compared to the 9M of 2019.
- Throughout the 9M of 2023, the average shares of income

from visitors from **Russia** amounted to 23.6% (+1.2 pp, y/y), while it was 13.2% for visitors from the **EU** (+2.8pp, y/y) and 9.9% for visitors from **Armenia** (+0.5pp, y/y). Additionally, the share of income from visitors from Saudi Arabia dropped notably to 2.7% (-3.2pp, y/y).

\* Individuals projected to reside in Georgia for a duration of 1 year or longer, or who have the intention to stay beyond 1 year, are not categorized as visitors. Consequently, expenditure of 28.0% of Ukrainian, 38.4% of Russian and 34.9% of Belarusian citizens residing in Georgia is not included in travel income.



## Entries and Exits of Russian Citizens in 9M of 2023



- In 2022, following the outbreak of the Russian war in Ukraine, a number of Russian citizens fled to Georgia. The **influx of Russians** has had significant economic effects, both positive and negative. As a result, closely monitoring the entries and exits of Russian citizens in Georgia is crucial.
- In the first 9 months of 2023, more than 1.5 million Russian citizens have entered the **Georgian border**, while an additional 20 thousand have exited, indicating an initial step

in the outflow of Russians from Georgia. Consequently, the impact of Russian citizens on the Georgian economy is expected to decrease gradually in the following months.

- However, it is essential to highlight that a considerable number of Russians still reside in Georgia. According to PMC RC's calculations, at least **40 thousand Russians** have remained **in Georgia**, having arrived in 2022-2023.\*

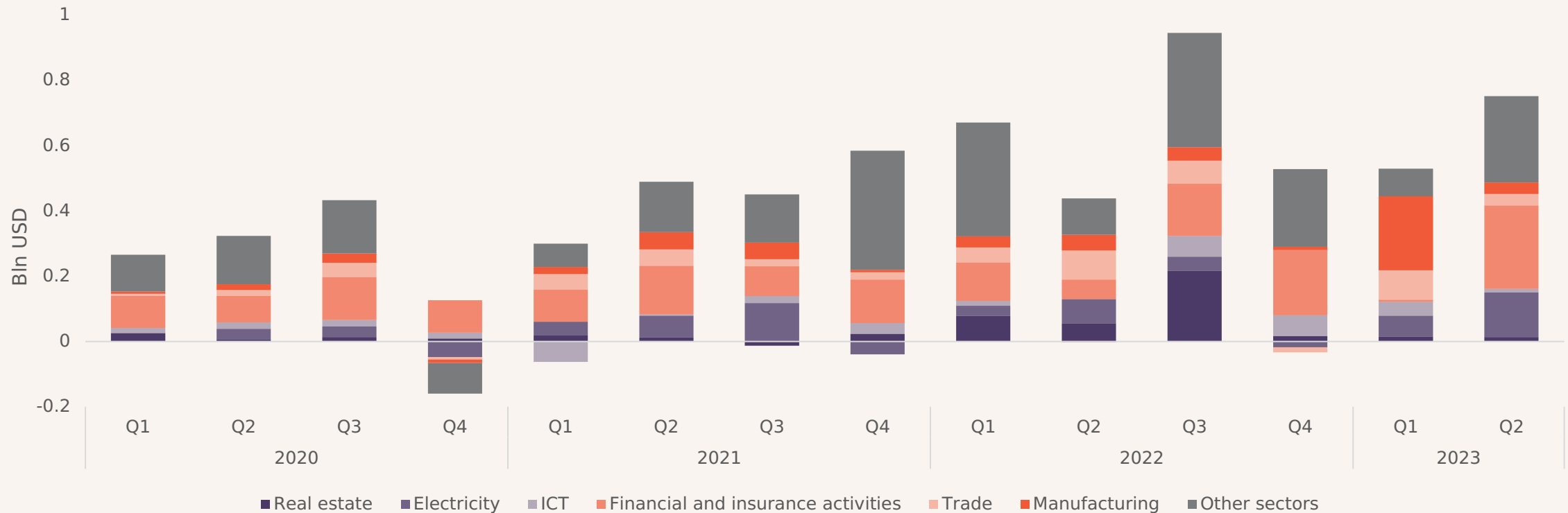
\* In 2022, 60 thousand Russian citizens entered (Macro Overview – Issue 3, page 20), with 20 thousand exiting in 2023.





# EXTERNAL SECTOR: FOREIGN DIRECT INVESTMENTS

## Net FDI inflows into Georgia and The Shares of Different Sectors



- In the first 6M of 2023, **net FDI inflows** into Georgia reached US\$1.1 billion. Most FDI went to the **manufacturing sector** (US\$262.3 million)\*, closely followed by the **financial sector** (US\$261.7 million). The top investor countries in 6M of 2023 were the Netherlands (US\$327.8 million) and Turkey (US\$143 million).

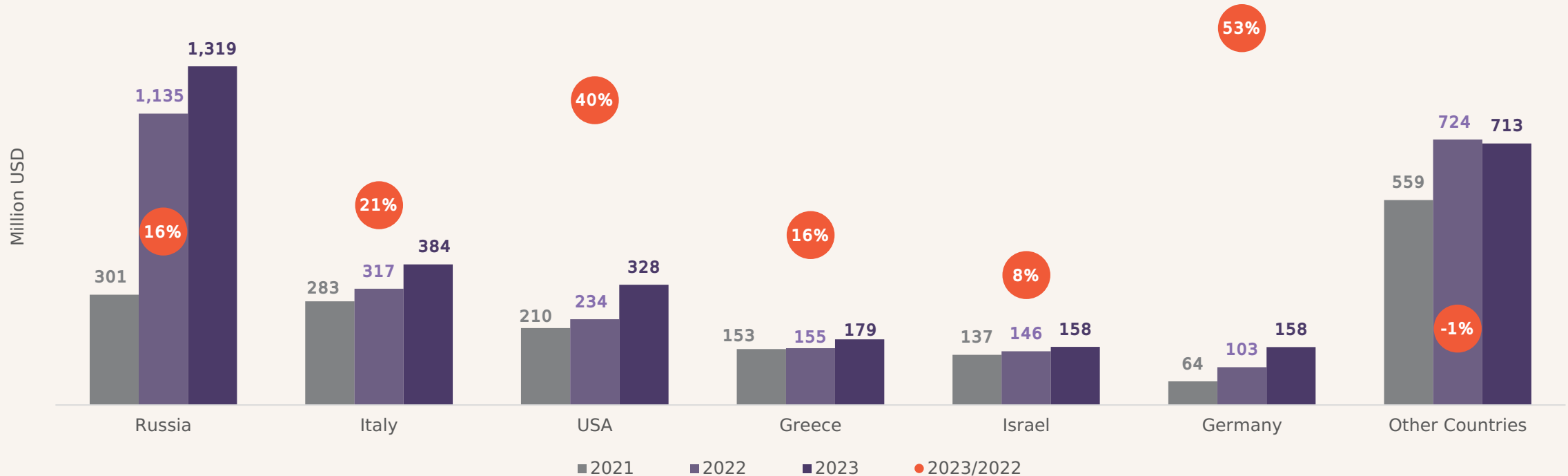
- In Q2 of 2023, net FDI inflows into Georgia amounted to US\$506 million. Half of the total FDI (US\$256 million) went to the **financial sector**, followed by the **energy sector** (27.1%). The UK was the top investor country in Q2 of 2023, amounting to 33.3% of the total FDI (US\$168 million), followed by Turkey with 14.0% (US\$ 71 million).\*\*

\* In Q1 of 2023, 45.6% of the total FDI inflows (US\$226 million) went to the manufacturing sector, which is largely attributable to the investment made by Dutch company Indorama Holdings B.V which acquired Rustavi Azot - the largest chemical company in the South Caucasus.

\*\* The UK mostly invested in the financial sector, while Turkey mostly invested in the energy sector. Additionally, it must be noted that a significant portion of FDI in the financial sector is derived from refinancing.



## Money Transfers into Georgia by Countries (9M)

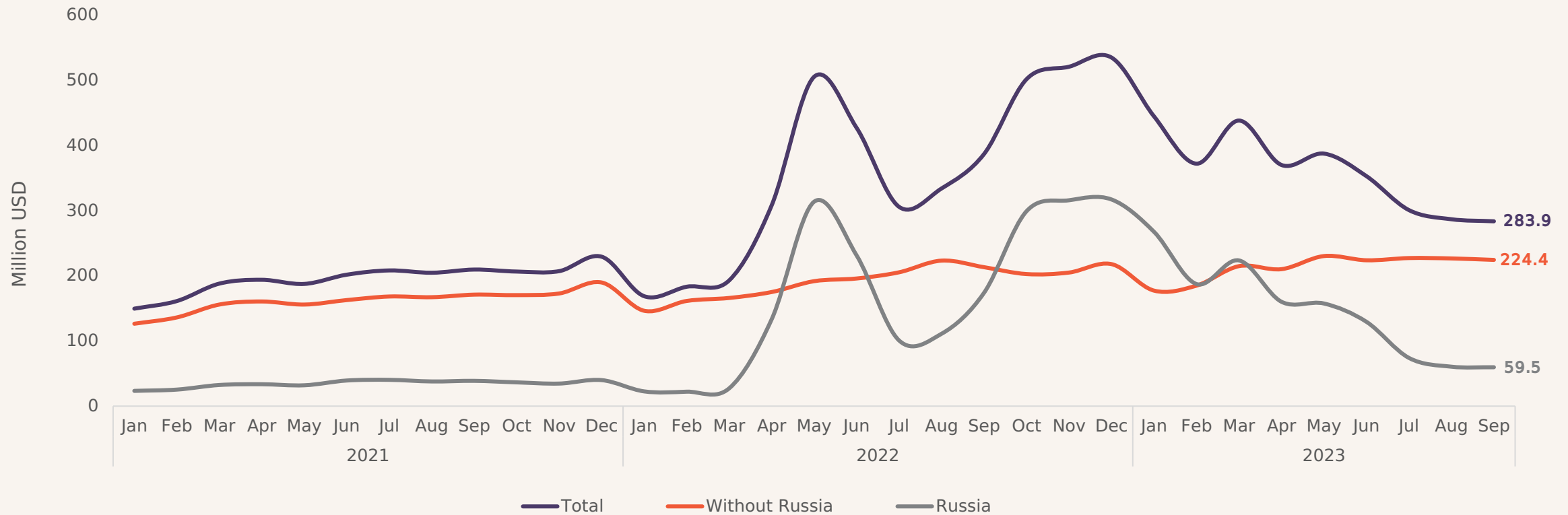


- In the first 9M of 2023, **total money transfers** amounted to US\$3.2 billion. Money inflows have increased by 15.5% compared to the 9M of 2022, even with a record-high base from the previous year.
- In the first 9M of 2023, the highest annual growth in money transfers was recorded from Germany (+53.2%), followed by the USA (+40.1%) and Italy (+21.0%).

- Despite the robust growth, the **diversity** of countries in the money transfers **decreased** compared to previous years, as the share of other countries decreased to 22.0% of total money transfers (-3.7pp, 23/22; -10.7pp, 23/21).



## Money Transfers to Georgia



- Diversity in money transfers decreased mainly due to Russia's increased share, as following Russia's invasion of Ukraine, money transfers from Russia increased significantly, which continued until around Mar 2023. Starting in Apr 2023, money transfers from Russia have gradually reverted to pre-war levels and started a decreasing trend, narrowing the gap

between the total money transfers and the amount excluding Russia's contributions.

- It is essential to highlight that the **decreasing trend** of money transfers from Russia is expected to continue in the near future, driven by the high base effect and the departure of some Russians from Georgia.



## GLOBAL ECONOMIC TRENDS: GLOBAL ECONOMY IS LIMPING ALONG

- **The global economy is limping along with growing differences.** The global economy is gradually recovering from the impacts of the COVID-19 pandemic, Russia's war on Ukraine, and the cost-of-living crisis. Despite challenges such as disrupted energy and food markets and tightened global monetary conditions to manage high inflation, the recovery remains slow and uneven, reflecting restrained rather than robust growth.
- **Growth forecast decreased slightly.** According to the IMF's World Economic Outlook in October, the growth forecast for 2023 is 3.0%, below the historical average of 3.8% (2000-2019).
- **The global forces in slowdown:**
  - **The recovery in services is nearly complete.** In 2023 so far, strong demand for services has boosted service-oriented economies. Moreover, fervent demand for labor-intensive services has tightened labor markets and increased the persistence of service inflation.
  - **The results of the tighter monetary policy.** The consequences of the necessary tightening of monetary policy to combat inflation are becoming evident, although the impacts vary among countries.
- **The following factors carry downside risks:**
  - **China's deepening real estate crisis raises global financial concerns.** The possibility of a further deepening of the real

estate crisis in China poses a significant risk to the global economy and potential financial instability.

- **Rising commodity price volatility poses global economic risks.** There is potential for increased volatility in commodity prices due to renewed geopolitical tensions and disturbances related to climate change.
- **Fiscal buffers have eroded.** Fiscal reserves have declined in many countries, with elevated debt levels, rising funding costs slowing growth, and an increasing mismatch between the growing demands on the state and available fiscal resources.

### Global outlook for 2024

- **Further slowdown expected.** The World Economic Outlook anticipates a continued deceleration in 2024, with the global economy to grow by 2.9%.
- **Gradual decline in inflation.** Global inflation is forecasted to decrease steadily to 5.8% in 2024. Looking further ahead, it is not anticipated that inflation will return to the target rate until 2025 in most cases.
- **Rising uncertainty.** Amidst geoeconomic fragmentation, escalating geopolitical tensions, and an active political year expected in 2024, uncertainty is expected to increase.



## DISCLAIMER

The PUBLICATIONS presented on the website are prepared by PMC Research Center only for informational and/or marketing purposes. Nothing in the PUBLICATIONS constitute, or is meant to constitute, advice of any kind, and the reader is responsible for their interpretation of all content and acknowledges that any reliance thereupon shall be entirely at their risk. PMC Research Center cannot be held liable for any claims arising as a result of the reader's use of the materials.

The PUBLICATION is presented "as is" without any representations or warranties, expressed or implied.

Without prejudice to the general message of the first paragraph above, PMC Research Center does not guarantee that:

- the PUBLICATION will be constantly available; or
- the information contained in the PUBLICATION is complete, true, accurate, or non-misleading.

PMC Research Center reserves the right to modify the contents of PUBLICATIONS from time to time as it deems appropriate.

PMC Research Center absolves itself of any liability of violations of other parties' rights, or any damage incurred as a consequence of using and applying any of the contents of PMC Research Center's PUBLICATIONS. PMC Research Center will not be liable to the reader (whether under contract law, tort law, or otherwise) in relation to the contents of, use of, or other form of connection with, the PUBLICATION.

The reader accepts that, as a limited liability entity, PMC Research Center has an interest in limiting the personal liability of its officers and employees. The reader agrees that they will not bring any claim personally against PMC Research Center's officers or employees with respect to any losses suffered by the reader in connection with the PUBLICATION.

The reader agrees that the limitations of guarantees and liabilities set out in the PUBLICATION disclaimer protect PMC Research Center's researchers, officers, employees, agents, subsidiaries, successors, assignees, and sub-contractors as well as PMC Research Center itself.

If any provision of this disclaimer is, or is found to be, unenforceable under applicable law, that will not affect the enforceability of the other provisions of the PUBLICATION disclaimer.

### **Giorgi Khishtovani**

Research Director

[g.khishtovani@pmcginternational.com](mailto:g.khishtovani@pmcginternational.com)

### **Nika Kapanadze**

Researcher

[n.kapanadze@pmcginternational.com](mailto:n.kapanadze@pmcginternational.com)

### **Shota Matcharashvili**

Junior Researcher

[sh.matcharashvili@pmcginternational.com](mailto:sh.matcharashvili@pmcginternational.com)

### **Gugula Tsukhishvili**

Research Assistant

[g.tsukhishvili@pmcginternational.com](mailto:g.tsukhishvili@pmcginternational.com)

---

Address: 61 Aghmashenebeli Avenue,  
3rd floor, Tbilisi 0102, Georgia.

Tel: (+995 32) 2921171, 2921181

Email: [research@pmcginternational.com](mailto:research@pmcginternational.com)

Website: [pmcresearch.org](http://pmcresearch.org)