

THE RUSSIA-UKRAINE WAR AND ITS IMPACT ON THE ECONOMY OF RA

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Key words: Russia-Ukraine war, tourism, trade, gold market, IT sector, financial flows

Introduction

The Russian-Ukrainian war, which began on 24 February 2022, had a significant impact not only on regional but also global economic processes. Armenia, as a country with close economic and political ties with Russia, also recorded significant changes in various sectors, including trade, tourism, the IT sector, and financial flows. The aim of this study is to analyze the impact of the war on the Armenian economy and to examine the changes in key macroeconomic indicators. The main research questions are: to what extent did the war affect Armenia's imports, exports, and financial flows? What are the growth trends in the IT sector and can these developments be sustained in the long term? What opportunities and risks have been created for the Armenian economy, taking into account this global shock? This article examines the impact of the war on the Armenian economy, taking into account changes in key macroeconomic indicators. The analysis examines import and export dynamics, financial flows, the gold market, as well as growth trends in the IT sector and services, and how resilient the Armenian economy is in the face of such global shocks and what challenges and opportunities arise in the future.

Methodology

This study used both qualitative and quantitative research methods, providing a multifaceted analysis. The main methodological approaches include:

- Documentary analysis – international and local reports were studied, including data from IMF, the World Bank, the RA Statistical Service, the CBA and other institutions.
- Statistical analysis -methods of studying changes in the macroeconomic indicators of the economy, including the dynamics of exports, imports, and FDI were applied.
- Comparative analysis – the economic situation of Armenia was discussed in comparison with neighboring countries to show regional trends.
- Historical-logical method – economic processes are discussed in the context of historical developments in order to understand their cause-and-effect relationships.
- Econometric Modeling – as an additional tool, Constitutive General Equilibrium (CGE) models and Agent-Based Modeling (ABM) were used.

Through the combination of these methods, an attempt was made to ensure the objectivity of the research and the comparability of the data analysis.

Literature review

The economic impact of the Russian-Ukrainian war has become the subject of numerous international and domestic studies. A number of international organizations, including the

IMF, the World Bank, and the OECD, have published reports analyzing the consequences of the war on the economies of various countries. The IMF's 2023 report notes that sanctions imposed on Russia have led to a restructuring of trade regimes, which in turn has led to economic growth in some countries, including Armenia, due to increased re-exports and financial inflows (IMF, 2023). World Bank studies highlight that countries in the Caucasus region, especially Armenia and Georgia, have received significant economic incentives due to the inflow of Russian capital and high-tech specialists (World Bank, 2023). Local studies conducted in Armenia highlight the impact of the war on various sectors, in particular, the growth of exports and imports to and from Russia, as well as the unprecedented development of the IT sector. According to a 2023 study by the Armenian Center for Economic Research (ACER), the growth of the economy of RA as a result of the war is determined not only by inflows, but also by re-export transactions mediated by Armenia (ACER, 2023). According to the study of this research, the main factors of the growth of the RA economy were:

1. Increase in re-exports – exports of goods from Russia to third countries have increased significantly, particularly in the high-tech, automobile, mobile phone and gold markets.
2. IT immigration – the influx of IT specialists created a short-term growth, but in 2024 a 13% decline was already observed due to the outflow of specialists.
3. Increase in financial flows – bank transfers and foreign deposits from Russia to Armenia increased sharply in 2022-2023, but they are mainly short-term.

These studies emphasize that although the war had a positive impact on Armenia's economy, this impact is temporary and depends on future geopolitical developments. As a novelty, the analysis focus of the restructuring of the gold market, examining in detail how Armenia has become an important hub for the re-export of Russian gold. Also, an impact assessment of the IT sector immigration is conducted, analyzing the short-term economic benefits of the influx of Russian IT specialists and its possible long-term risks. These conclusions are important for the strategic planning of Armenia's economic policy.

Analysis

Let us consider the dynamics of tourist visits in 2016-2023. Before considering, let's note that according to the methodology of the UN World Tourism Organization (UNWTO), an international tourist is any person who travels from his or her place of residence to another place for rest, medical treatment, visiting relatives, business, religious or other purposes for a period of not less than 24 hours and not more than 1 consecutive year. Let's consider the first chart [The chart was compiled by the author based on NSS reports]. The analysis of the dynamics of tourist visits in 2016-2024 shows that the dynamics of visits to Armenia has had a positive growth. The number of tourist visits decreased sharply in 2020. The decrease in visits, in our opinion, was due to a number of reasons: the coronavirus epidemic, the 44-day war, etc. In 2023 alone, the number of tourists visiting Armenia increased to 2.3 million, which is an absolute record for the country [Annual summary, 2024, 30].

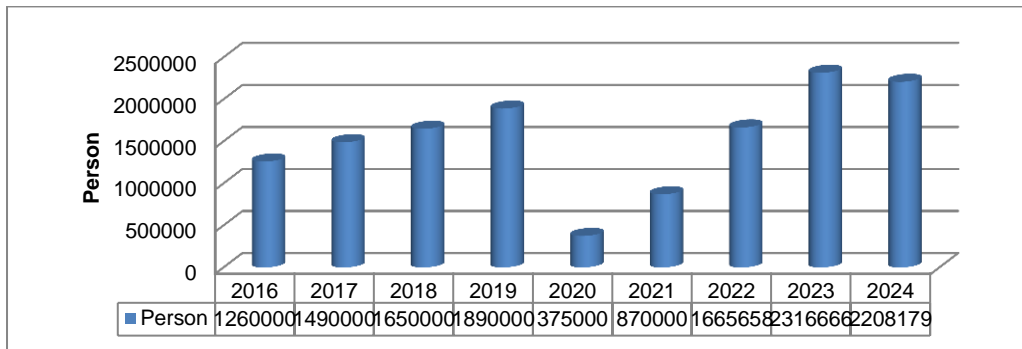


Figure 1. Tourist visits by year

In 2022, 47.5% of foreigners visiting Armenia were from Russia, which amounted to 790,397 people, and in 2023 this number amounted to 1,139,853 people, which constituted 49.2% of tourists. Meanwhile, in 2016, the number of tourists arriving from Russia constituted only 21.7%. In 2024, the number of tourists from Russia amounted to 937,823 people, which constituted 42.5% of the total number of tourists. Although there was a certain decline in 2024, this is an indicator that as a result of the Russian-Ukrainian war, the flow of Russian citizens to Armenia has sharply increased. The significant increase in the number of migrants from the Russian Federation is due to the increase in apartment rental payments, up to 50% in the center of Yerevan. Visa restrictions from EU countries may become an additional incentive to increase tourist flows to the Republic of Armenia. Also attention should be paid to the situation in which the Republic of Armenia will find itself after the end of the Russian-Ukrainian war, what will happen after that positive shock subsides. [Harutyunyan, 2024]. To study the trade turnover with Russia in more detail, we consider the import and export volumes for 2019-2024.

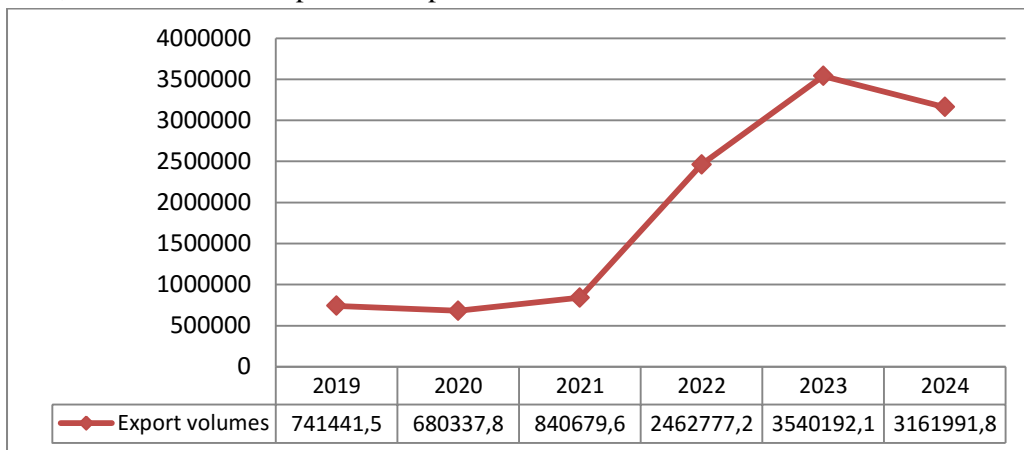


Figure 2. Volumes of exports to the Russian Federation for 2019-2024 (thousand dollars)

Source: armstat.am/am 10.11.24 22:00

From the chart, we can see that compared to 2019, export volumes have decreased to some extent, which was due to the pandemic and the 44-day war. However, export volumes in 2022 have tripled, which was due to the Russo-Ukrainian war and the application of sanctions against Russia by various countries. After the start of the war, Russian export volumes have been increasing sharply. According to monthly data, in March 2022 export volumes to Russia amounted to 37929.4 thousand US dollars, and in April this figure amounted to 95774.8 thousand US dollars, and in November this figure already reaches 350688.5 thousand US dollars. It is interesting that in trade turnover, especially the export indicator has increased sharply. In 2022, it accounted for about 42% of the total volume, compared to 28% in 2021 and 26% in 2020. Import volumes also increased, but exports recorded a slight decline in 2024.

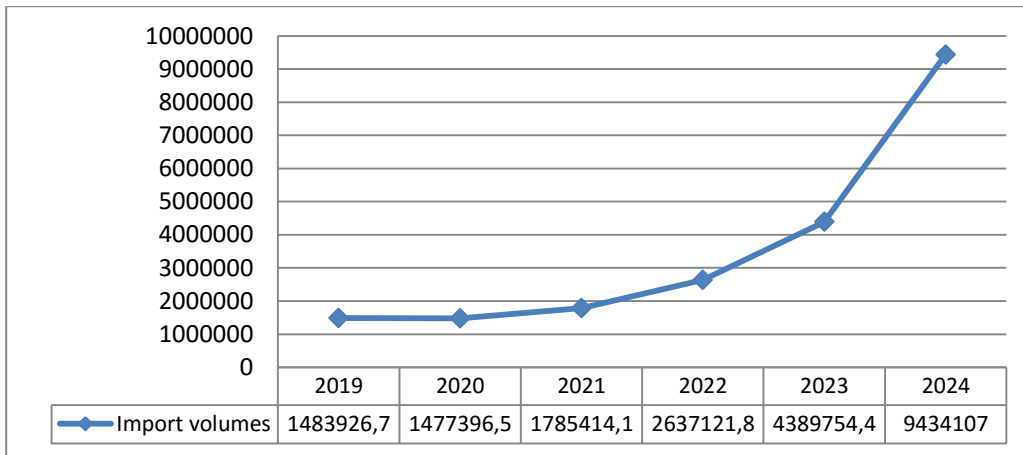


Figure 3. Import volumes from the Russian Federation (by country of origin) 2019-2024 (thousand dollars)

Source: RA National Statistical Service, 10.11.24 23:25

Import volumes fluctuated very little before the war, and after the war in 2022, they increased sharply. If we consider the total volume of exports from RA, compared to 2021, it increased by 5536000 (thousands) US dollars in 2023. And the increase in the export and import figures of the Russian Federation alone over the same years amounted to 5,303,853 (thousand) US dollars. It also increased by the same proportion in 2022. If the total volume of exports from Armenia increased by 2604340 (thousand) US dollars in 2022 compared to 2021, then the increase in the number of exports and imports to Russia over the same years together amounts to 2473804.5 thousand) US dollars. From this we can assume that Armenia has started re-exporting due to sanctions against Russia. That is, on the one hand, it imports from Russia and exports to other countries, and on the other hand, it imports from other countries and exports to Russia. The main product groups are cars, their parts, computers, mobile phones, etc. In 2022, computers and their parts worth 70 million dollars were exported from Armenia to Russia, while in 2021 this figure was

1.6 million dollars. The export of mobile phones and their parts amounted to 251 million dollars, while in 2021 it was only 188 thousand dollars. Of particular interest is the organization of car import and export. Cars were imported for an average of 15,230 US dollars and exported for 22,007 US dollars [Chervyakov et al., 2023]. This was the very reason that some companies were subject to US sanctions and these organizations were prohibited from organizing imports. This may be short-term, but it has a positive impact on the Armenian economy. In 2024 alone, imports amounted to 153.1% compared to the corresponding period of the previous year. Along with all this, special attention also deserves the transformations observed in the gold market, which is largely due to the war. For clarity, we consider data on Table 1. Armenia, having been a member of the EAEU since January 2, 2015, has faced new challenges in foreign trade management in the context of the Russian-Ukrainian conflict. Due to the bans (sanctions) on the import of various goods to the Russian market, an opportunity has arisen to supply a number of goods to the Russian market, considering other EAEU member states as transit countries, taking into account the free circulation of goods within the EAEU territory. [Khachatryan et al., 2023].

Table 1. Export volumes of raw or semi-processed gold and dust from the Russia for 2019-2023, US dollars

	2019	2020	2021	2022	2023	2024
Armenia	954 893	152 370	56 349 684	209 498 541	1 337 658 789	-
The United Kingdom	5 332 817 505	16 944 458 489	15 392 947 839	263 041 422	-	-
Hong Kong	-	11 326 782	84 570 652	578 547 301	5 211 977 730	-
Kazakhstan	27 0195 582	429 356 762	365 732 808	249 070 594	152 520 790	-
Switzerland	133 473 064	625 925 305	417 576 671	3 721 748 538	3 906 753 383	718 769 779
Germany	1 067	2 284 724	319 018 564	526 341 750	-	-
Turkey	-	377 235 791	119 878 223	376 809 585	87 346 625	-
UAE	289 488 930	905 546	341 805 313	5 362 053 965	2 520 985 522	-
Russia	-	-	-	-	-	5 895 893 934

As it can be seen from the table, the main country for the export of gold (FEACN code 7108: unwrought or semi-wrought gold, powder) for the Russia was the United Kingdom, which fluctuated in the range of 90% in different years. However, after the Russian-Ukrainian war, it stopped importing gold. We note that due to this circumstance, Germany also blocked the import of gold. Meanwhile, some countries took advantage of this opportunity and increased the volume of gold imports from the Russia. For example, Hong Kong increased it by about 600 times, but international structures do not apply pressure. The absence of international pressure on Hong Kong is due to a number of factors: first of all, the protection of China's domestic policy and economic interests, as well as Hong Kong's important position in the international economic system. The UAE increased its import volumes by about 10 times. Armenia is also among these countries, which inc-

reased its gold imports by about 4 times in 2022 after the start of the war, and by 24 times in 2023. Analysis of official data shows that of the approximately 8.9 tons of gold exported from Armenia in 2022, only about 4.3 tons (4,278,566 grams of dore alloy) were produced in Armenia [NSS RA and Geopromining Gold reports]. However, about 8.9 tons of gold were exported from Armenia. In other words, Russian gold was re-exported to other countries, including UAE and India. As we noted in the study, import volumes from Russia in 2023 increased by about 1,752,632,200 US dollars. In this part of the study, it already becomes clear that these figures were mainly due to the re-export of gold. In the context of current geopolitical developments, many experts believe that the Russian-Ukrainian conflict will reach its conclusion in 2025, and after the end of sanctions, a sharp decrease in volumes is possible, which will have negative consequences for the Armenian economy. The difference between the annual and December indicators shows that 2025 may contain serious challenges. The cessation of gold re-exports will continue to affect industrial indicators; the trade balance may deteriorate as a result of the elimination of artificial export incentives, the dominance of the services sector increases the economy's vulnerability to external shocks [Tavadyan, 2025, 4]. Actually, after onset of Russian-Ukrainian war, in 2022 and also in 2023 period, the macroeconomic environment of RA was mainly characterized by positive development trends. During these years, economic activity was maintained at a fairly high level, the main macroeconomic indicators characterizing the state of the economy have registered a positive trajectory in both in 2022 and 2023 years, mainly due to external demand, which in turn was stimulated by the increase in the inflow of non-residents from Russia, Belarus and Ukraine, soaring remittances, funds, labor and exports [Sargsyan, 2024]. Thousands of representatives of the IT sector have moved to RA. Organizations such as Yandex, Tinkoff, My Warehouse, Avito, Beeline, TeamWork, which is a subsidiary of the famous Miro, DevSoft.am, NVIDIA, which is an American organization and moved to Armenia after sanctions against Russia, have moved. After the war, about 70,000 IT industry representatives have moved to Armenia. About 800 Russian-rooted IT organizations and 350 private enterprises have been opened. Companies have been opened that are registered in the top 10 leading IT taxpayers. According to the 2023 Activity Report of the Ministry of High-Tech Industry the number of companies operating in the information technology sector in Armenia has doubled in 2023 compared to 2022. The number of employees in the sector has increased by 30 percent. Last year, 82 percent of the companies' products were exported, and this year that number has reached 92 percent [2023 Activity Report] However, mechanisms must be provided that will guarantee the permanent location of these organizations in Armenia. The steps in this direction are still not enough and that is why in the first half of 2024 the IT sector has already shrunk by about 13%, which have moved to neighboring Georgia and other countries. If the infrastructure is not developed, this number will increase and the positive shock in the IT sector can quickly turn into a

blow to the development prospects of this sector. The Russian-Ukrainian war has also had a positive impact on the services sector.

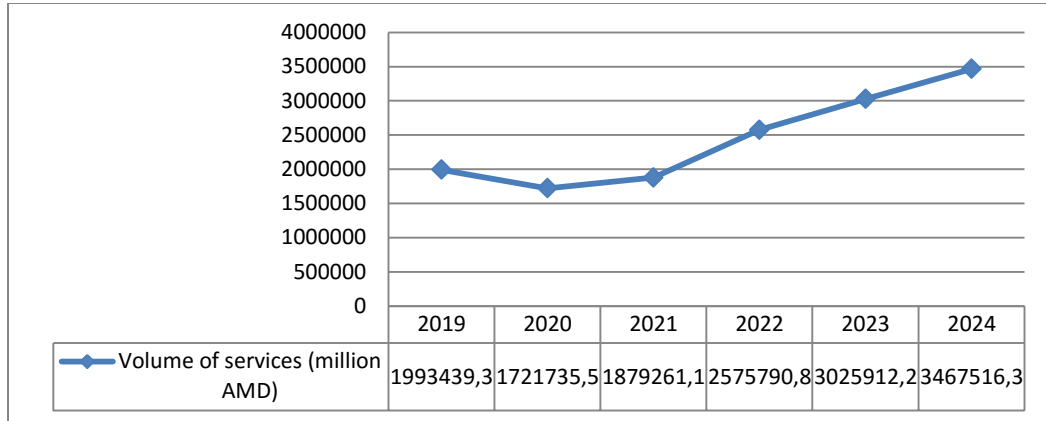


Figure 4. Volume of services in the Republic of Armenia for 2019-2023 (million AMD).

The decrease in the volume of services in 2020 was due to the pandemic and the war. Meanwhile, in 2019 and 2021, this number did not undergo significant changes, and in 2022 it increased by about 696529 (million) drams, which is again due to the war. In 2023, this number increased again and is currently showing an upward trend. Due to the visit of a large number of people, it led to an increase in accommodation, public catering, real estate rental and other services. As a result of all this, the GDP of Armenia grew by 12.6% in 2022, which was the first double-digit growth since 2007, and in 2023, GDP grew by 8.3%. These numbers are impressive, but after the war ends, it is possible that many people will return, as according to a survey conducted, only 27% of Russian citizens said they were going to stay in Armenia [Chervyakov & Giucci, 2023, 24]. The export of services, the significant inflow of private transfers, as well as the large income from tourism, appreciated the dram against the dollar. As a result, in 2022 the dram appreciated by 16.4% against the US dollar, and in 2023 it also appreciated from 435.7 to 392.5 [NSS RA]. The appreciation has not only increased nominal GDP in US dollars, but also played an important role in keeping inflation under control. However, it has caused certain problems for IT companies that have been located in Armenia and exported their services to other countries. And the companies pay their employees' salaries in local currency. Monthly remittances from Russia to Armenia have increased significantly since the Russian-Ukrainian war. For clarity, we consider data on Figure 4. From the chart, it can be noticed that until 2022 the inflow fluctuates slightly, and in 2022 it increased 4.1 times. And when looking at the monthly breakdown, it is obvious that this increase begins right after February, when many Russians move to Armenia. We also observe this same phenomenon in terms of the volume of deposits attracted from non-residents to the banking system of the Republic of Armenia.

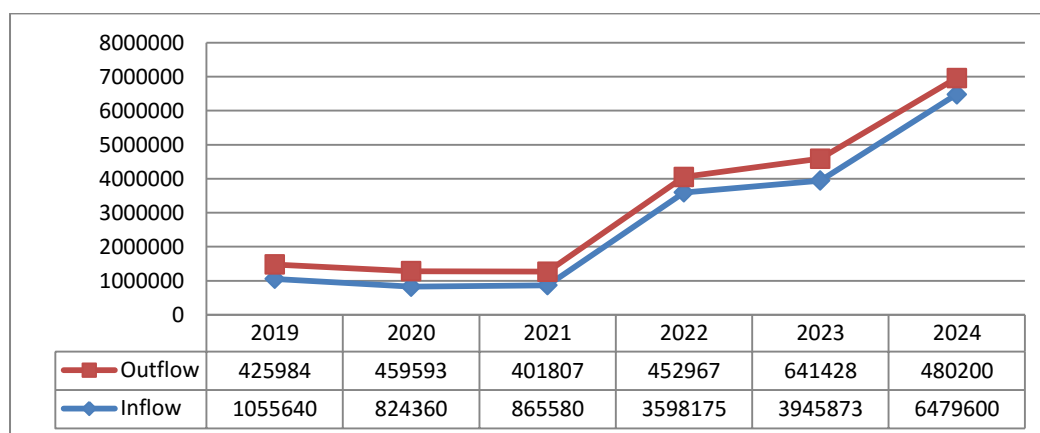


Figure 5. Flows received from the Russian Federation through RA banks in the name of individuals for 2019-2023 (thous. dollars)

Conclusions

The impact of the war on the Armenian economy is manifold: trade, financial flows, the IT sector, tourism, and the gold market. The following main conclusions can be drawn:

1. Short-term economic growth – After the war, Armenia’s GDP grew significantly, driven by the influx of Russian capital, IT specialists, and the expansion of re-exports. However, this effect is gradually diminishing.
2. Re-export effect – Sharp increase in exports and imports of Armenia was largely driven by sanctions against Russia, which Armenia used as a trade intermediary. However, this trend may decline if international regulations change.
3. Dynamic changes in the IT sector – The IT sector has developed due to the influx of Russian companies, but their long-term establishment in Armenia is still an open question. In mid-2024, a 13% growth in the sector is observed, with the outflow of experts.
4. Changes in the real estate and services market – The influx of Russian migrants increased rental prices and demand, but this is a short-term trend, as many leave Armenia.
5. Monetary impact – The increase in financial flows and remittances from Russia contributed to the appreciation of the Armenian dram, which had a positive impact on controlling inflation, but also created some difficulties for exporters and IT companies.
6. The overall positive impact of the Russian-Ukrainian conflict on the economy of the Republic of Armenia was present, but it should be noted that this is a short-term effect.
7. Such studies, by their nature, from the point of view of long-term forecasts of consequences, contain applications of certain tools of economic and mathematical modeling. In particular, the assessment of the impact of external shocks on individual sectors of the economy. It is possible to use Computable general equilibrium (CGE) models.
8. It will be necessary to apply the ABM model, which will allow us to study the behavior of economic agents in changing conditions.

Thus, the war had a short-term positive impact on the Armenian economy, but in the long term many uncertainties remain. Armenia should adopt a strategic approach so that these changes become a source of sustainable economic growth, and not a temporary opportunity.

References

1. United Nations World Tourism Organization (UNWTO). (2010). International Recommendations for Tourism Statistics 2008, Compilation Guide. Madrid.
2. Statistical Committee of the RA. (2016-2024). Dynamics of tourist visits to Armenia.
3. International Monetary Fund (IMF). (2022-2024). The impact of the Russian-Ukrainian war on the economies of the CIS countries.
4. Central Bank of the Republic of Armenia. (2019-2023). Analysis of deposits attracted from non-residents in the banking system of the Republic of Armenia.
5. Ministry of Finance of the Republic of Armenia. (2023). Economic consequences of the Russian-Ukrainian war on the financial system of the Republic of Armenia.
6. Armenian Center for Economic Research (ACER). (2023). Impact of the Russian-Ukrainian war on the trade dynamics of the Republic of Armenia.
7. Ministry of High-Tech Industry of the Republic of Armenia. (2023). Development trends in the IT sector in the context of the influx of Russian companies in the Republic of Armenia.
8. Central Bank of the Republic of Armenia. (2022-2024). Assessment of the main factors of the appreciation of the Armenian dram.
9. Ministry of Economy of the Republic of Armenia. (2023). Changes in the Macroeconomic Indicators of the RA Economy in 2022-2023.
10. Annual Summary Event of the Tourism Committee of the RA Ministry of Economy <https://mineconomy.am/news/3160> Viewed: 10. 10. 24
11. Dmitry Chervyakov, Haykaz Fanyan, Armine Petrosyan- The Armenian vehicle re-export business: role for the economy and outlook .No 04| DEC 2023 . www.german-economic-team.com
12. Geopromining gold reports - Chervyakov J. D., Giucci R. "Relocation of Russian citizens leads to remarkable economic growth" NL 09/ Jan. – Feb. 2023 www.german-economic-team.com

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The Russo-Ukrainian war, which began in 2022, had a significant impact on the economy of Armenia. This article examines the economic changes caused by the war, including trade, tourism, the IT sector, the gold market, and financial flows. As a result of the war, Armenia has become a trade intermediary, re-exporting goods, especially high-tech and gold. The IT sector experienced a short-term growth due to the influx of Russian companies, but in the first half of 2024 a 13% decline was observed due to the outflow of companies and specialists. The arrival of a large number of citizens immigrating from Russia has increased real estate prices, and a significant increase has been recorded in the service sector. The increase in financial flows has strengthened the Armenian dram, but it has also created problems for exporters. The conclusion shows that the Armenian economy has enjoyed short-term gains as a result of the war, but in the long term there are challenges that require a strategic approach and measures to ensure sustainable development.