An Empirical Analysis of Turkey's Foreign Trade Trends: 2015 – 2024

Esmer Aliyeva ⓘD

Purpose. This article analyzes the trade balance of the Republic of Türkiye for 2015–2024, examining import–export dynamics over a ten-year interval and identifying the main drivers of the persistent deficit. **Design / Methodology / Approach**. The study draws on data from Trade Map, international trade statistics for business development, TURKSTAT, and open-data releases from other organizations; annual trade values and year-over-year growth rates were compared using descriptive statistics and time-series comparisons to assess trends and bilateral flows. **Findings**. Throughout the period, import values consistently exceeded export values, generating a sustained trade deficit. Although exports grew steadily, the faster rate of import growth resulted in a widening gap, indicating that Türkiye purchased more goods and services abroad than it sold. **Theoretical Implications**. The results underscore the value of empirical statistical analysis for understanding structural trade imbalances and support refinement of theoretical models addressing trade deficits in emerging economies. **Practical Implications**. Strategic imports — particularly energy products and industrial raw materials — have driven the deficit, with substantial volumes sourced from Russia and China; these insights can inform targeted import-substitution policies and measures to strengthen domestic production. **Originality / Value**. The research synthesizes multiple data sources to present updated empirical insights into Türkiye's principal export markets (Germany, the USA, the UK) and largest import partners (China, Russia), and highlights diversification toward Asian and Caucasus nations over the study period. **Research Limitations / Future Research**. Future research should employ mathematical modeling techniques to test causality and explore counterfactual policy scenarios. **Paper Type**. Applied, Empirical article.

Keywords:

Turkish economy, trade balance, export, import, foreign trade, trade deficit

Мета. Ця стаття аналізує торговельний баланс Республіки Туреччина за 2015–2024 роки, досліджуючи динаміку імпорту та експорту протягом десятирічного періоду та визначаючи основні чинники стійкого дефіциту. **Дизайн / Метод / Підхід**. Дослідження базується на даних Trade Map, міжнародної торговельної статистики для розвитку бізнесу, даних Турецького статистичного інституту (TURKSTAT) та відкритих джерел інших організацій; порівняння річних обсягів торгівлі та темпів зростання «рік до року» здійснювалося за допомогою описової статистики та часових рядів для оцінки тенденцій і двосторонніх торговельних потоків. **Результати**. Протягом усього періоду імпортні показники незмінно перевищували експортні, що призвело до стійкого торговельного дефіциту; хоча обсяги експорту зростали стабільно, швидші темпи зростання імпорту розширювали розрив і свідчили про те, що Туреччина купувала за кордоном більше товарів і послуг, ніж продавала. **Теоретичне значення**. Отримані результати підкреслюють значущість емпіричного статистичного аналізу для розуміння структурних дисбалансів у торгівлі та підтверджують необхідність удосконалення теоретичних моделей, що стосуються торговельного дефіциту в економіках, що розвиваються. **Практичне значення**. Стратегічний імпорт — насамперед енергетичних продуктів і промислової сировини — став головним драйвером дефіциту, при цьому значні обсяги імпорту з РФ і Китаю додатково впливали на негативний баланс; ці висновки можуть слугувати основою для розробки імпортозамінних заходів та посилення внутрішнього виробництва. **Оригінальність / Цінність**. Дослідження синтезує кілька високодеталізованих джерел даних, щоб надати оновлені емпіричні відомості про основні експортні ринки Туреччини (Німеччина, США, Великобританія) і провідних імпортних партнерів (Китай, Росія), а також висвітлити тенденції диверсифікації торгівельних зв'язків із країнами Азії та Кавказу протягом періоду. **Обмеження дослідження / Майбутні дослідження**. У майбутніх дослідженнях слід використовувати математичні моделі для перевірки причинно-наслідкових зв'язків і моделювання альтернативних торговельних політик. **Тип статті**. Прикладна, емпірична стаття.

Ключові слова:

економіка Туреччини, торговельний баланс, експорт, імпорт, зовнішня торгівля, торговельний дефіцит

Contributor Details:

Esmer Khurban Aliyeva, Lead. Res., PhD in Econ., Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan: Baku, AZ, esmer.manafova81@gmail.com

Against the backdrop of dynamic changes in the global trade system and the acceleration of economic integration, the Turkish economy has achieved significant progress in foreign trade over the past decade. Between 2015 and 2024, export-oriented strategies led to a 54% increase in exports, which represents a crucial achievement in terms of enhancing production capacity and expanding access to new markets. However, despite these positive developments, the persistent surplus of imports over exports during the same period has resulted in a structural trade deficit, posing challenges to the country's economic stability and resilience. A particularly critical issue has been Turkey's high dependence on imports in strategic sectors such as energy, machinery, and electronics. While the need to import raw materials and technology-based components is essential for industrial production, this dependence has simultaneously increased financial risks and external borrowing.

Various perspectives exist in economic literature regarding trade deficits. Nobel laureate Paul Krugman argues that a trade deficit does not necessarily indicate economic weakness, as it can sometimes reflect strong consumption or investment demand (Krugman et al., 2018). However, Jagdish Bhagwati warns that unless trade deficits are offset by foreign capital inflows, they can lead to rising debt levels and external imbalances (Bhagwati, 1988). Similarly, Nouriel Roubini and Robert E. Lucas highlight that a persistent excess of imports over exports reflects structural weaknesses in the economy and may limit long-term growth potential (Roubini & Mihm, 2010; Lucas, 1988).

On the other hand, economists Dani Rodrik and Joseph Stiglitz emphasize the importance of the quality composition of exports and technological advancement. They argue that an economy relying primarily on the export of raw materials and low-value-added products lacks long-term sustainability (Rodrik, 2007; Stiglitz, 2002). According to their perspective, ensuring economic stability and addressing trade imbalances requires prioritizing the production and export of high-value-added and technology-intensive goods.

In this context, while Turkey's foreign trade strategy has yielded positive results, further structural reforms are necessary to reduce import dependence, promote technological development, and enhance the quality of export composition. This study aims to analyze these challenges and explore potential solutions to strengthen Turkey's trade balance and long-term economic resilience.

Methodology

This research adopts a quantitative and descriptive methodology based on the analysis of secondary statistical data. The primary sources include trade databases such as the International Trade Centre's Trade Map, the Turkish Statistical Institute (TURKSTAT), and other publicly accessible datasets from international economic organizations. The data covers the period from 2015 to 2024, providing a comprehensive view of Turkey's export and import activities over the last decade. Time-series data was collected and analyzed to identify trends in Turkey's trade performance, particularly focusing on export and import volumes, trade partners, and strategic product categories such as energy and industrial raw materials. Excel software was used for data processing. The research includes a comparative analysis of top trade partners and key product groups to understand the dynamics driving the trade imbalance.

Charts and tables generated from Trade Map were used to visually present the findings, showing both the annual progression of exports and imports and the distribution of trade across major partner countries. No primary data collection or survey methods were employed; instead, the study is entirely grounded in statistical review and synthesis of existing economic records. This approach allows for objective interpretation of the trade patterns and supports the identification of key factors influencing the persistent trade deficit. The methodology lays the groundwork for future studies to incorporate mathematical models and forecasting tools to simulate the potential outcomes of trade policy adjustments and market diversification strategies.

Analysis of Turkey's Foreign Trade (2015–2024)

Over the past decade, Turkey has significantly expanded its export and import activities in the global market. Based on data from 2015 to 2024, Turkey has exported goods to many countries and imported products from various nations. However, during this period, the difference between exports and imports — i.e., the trade balance — has been negative. Firstly, as shown in Table 1, the countries to which Turkey exports the most include Germany, the United States, the United Kingdom, and Iraq. Notably, in 2024, exports to Germany and the U.S. exceeded 20 billion USD. Overall, a stable and continuous increase in exports has been observed. On the other hand, Turkey's main import partners are China, the Russian Federation, and Germany. In 2022, trade volume with Russia sharply increased, reaching approximately 60 billion USD. China remained one of Turkey's most important suppliers in 2024 as well, and imports from China continued at a high level. During this period, the value of imports was significantly higher than that of exports. Despite the positive growth trend in exports, the faster increase in imports resulted in a trade deficit for Turkey. In other words, Turkey spent more money on goods and services purchased from abroad than it earned from exports. "A trade deficit is not necessarily a sign of economic weakness. It can be the result of strong investment demand or consumption exceeding production." (Krugman et al., 2018, p. 456). The import of strategic products such as energy and industrial raw materials particularly contributed to the growing trade deficit. High-value trade with Russia and China has been one of the main reasons for this negative balance.

Global Exports Overview: In 2020, Turkey's exports amounted to 169,657,940 thousand USD. This figure rose to 225,264,314 thousand USD in 2021, 254,171,899 thousand USD in 2022, 255,627,429 thousand USD in 2023, and reached 261,801,501 thousand USD in 2024. From 2020 to 2024, there was approximately a **54% increase** in exports. Between 2022 and 2024, the growth rate slowed but remained steady. This indicates that Turkey's export-oriented economic strategy is yielding **positive results**. **Top Export Markets** – Germany: 20.4 billion USD, USA: 16.3 billion USD, United Kingdom: 15.2 billion USD, Iraq: 13 billion USD, Italy: 12.9 billion USD. Countries like **France, Spain, and Russia** are also among the **top ten**. The strengthening of trade relations with these countries can be attributed to the rising demand for industrial products and the competitive pricing of Turkish goods in the market (Figure 1).

Germany: Export has increased each year, reaching nearly 20 billion USD in 2024.

United States of America: Remained consistently high. Peaked in 2021 and 2022, then slightly declined.

United Kingdom: Rapid increase from 2015 to 2024, with significant jumps in 2023 and 2024.

Iraq: Some fluctuations, but overall increase; growth resumed in 2024.

Italy, France, Spain, Netherlands: Stable and positive export trends.

Russia: Fluctuating export values; peaked in 2022 and 2023, then declined.

United Arab Emirates: Volatile trend; peaked in 2022 but decreased afterward.

Between 2015 and 2024, Turkey increased its exports to many countries. The top destinations were Germany and the United States. Despite fluctuations with some countries, the overall trend in exports was upward.

– Between **2020 and 2022**, imports increased by **65.7%** (~$144 billion).

– The peak was in 2022 at **$363.7 billion**.

– Decline began in 2023 and continued in 2024 with a **$18 billion decrease**.

– This drop could be due to **economic slowdown**, **foreign currency scarcity**, or **import substitution policies**.

Among the product groups with the largest negative trade balance for Turkey by HS codes, the largest deficit was recorded under HS 99 (mainly hidden categories, including gold). This highlights the country's high economic dependence on energy, electronics, machinery, and precious metals. "Persistent trade deficits can indicate a structural reliance on foreign goods, pointing to weaknesses in domestic production capacity" (Krugman & Obstfeld (2018), p. 459). Product groups such as HS 99 – Unspecified Commodities, HS 71 – Precious Metals and Stones (gold, diamonds, coins), HS 84 & 85 – Machinery and Electronics, HS 27 – Mineral Fuels and Oils, HS 30 & 90 – Pharmaceuticals and Medical Devices, HS 29 – Organic

Chemicals, etc., were included. The countries with the largest negative trade balance were Russia (energy – oil, gas; chemicals), China (electronics, machinery, industrial goods), Germany (machinery, automobile parts), and Italy (machinery, chemical products). Turkey's largest trade deficits are with China and Russia. In these sectors, foreign dependency is high, which causes the country to import more than it exports.

– Imports from **Russia and China nearly doubled**, mainly energy (gas, oil) and machinery/electronics (Figure 2).
– Germany remains a key supplier with moderate growth.
– Strong increases also from **Italy and the USA**, especially in **industrial and technological goods**.
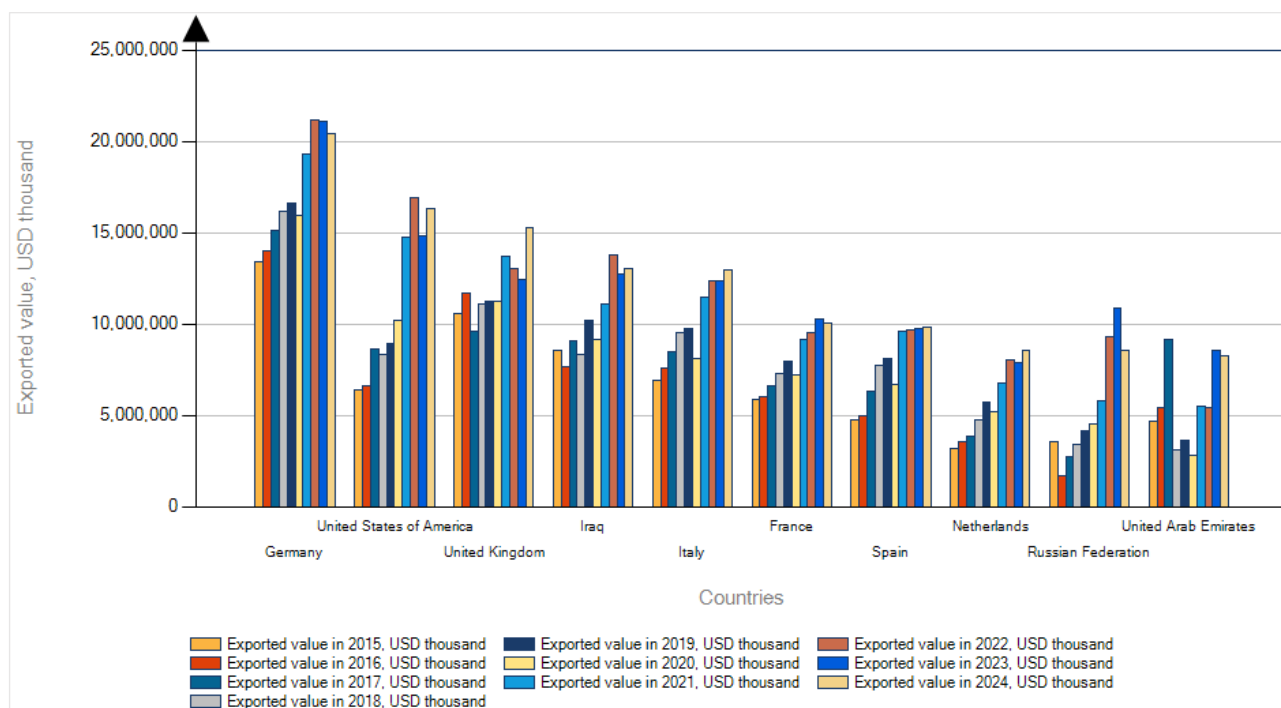

Figure 1 – List of importing markets for a product exported by Türkiye. Product: TOTAL All products (International Trade Centre, 2025a)

Exports to Azerbaijan have also shown a steady upward trend. In 2020, exports to (Figure 3) Azerbaijan stood at 2.08 billion USD and increased to 3.08 billion USD in 2024, marking a **48% growth**. Azerbaijan's trust in Turkish products, along with strong political and economic cooperation between the two countries, has played a significant role in achieving this result. Turkey's export markets continue to expand. Alongside traditional European countries, trade relations with **Middle Eastern and Caucasus countries** are also strengthening. This demonstrates that Turkey is gaining a **more strategic position** on the global trade map. Imports from Azerbaijan increased 4.4 times, likely due to energy and raw materials. Trade with Asian markets (Malaysia, Vietnam, India) is expanding rapidly, indicating Turkey's diversification strategy.

China: Always Turkey's largest supplier. Steady growth from 2015 to 2022, slight decrease in 2023 and 2024.

Russia: Sharp increase in 2022 — imports approached 60 billion USD! Slight decrease in 2023 and 2024 (Figure 4).

Germany: A strong supplier throughout; minor increase in 2024.

Italy and the United States: Key in both exports and imports. U.S. imports increased sharply in 2023 but decreased in 2024.

Area NES (Not Elsewhere Specified): Spikes in 2022 and 2023.

France and Switzerland: Stable imports from France; sharp rise from Switzerland in 2023.

Spain and South Korea: Smaller shares but increasing trend over the years.
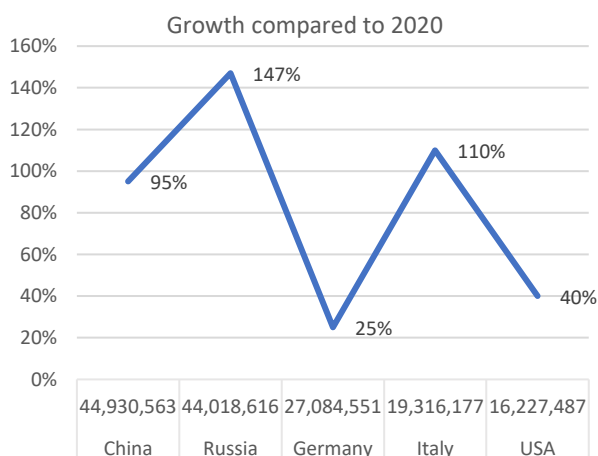

Figure 2 – Top 5 Import Partners, 2024
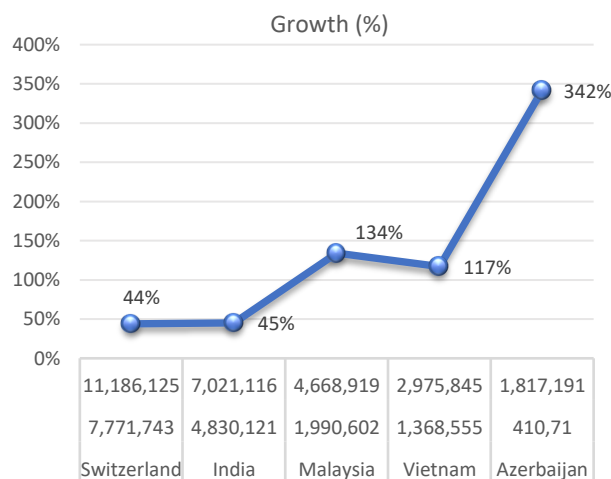**(World Trade Organization, 2025)**

Figure 3 – Countries Showing Strong Growth
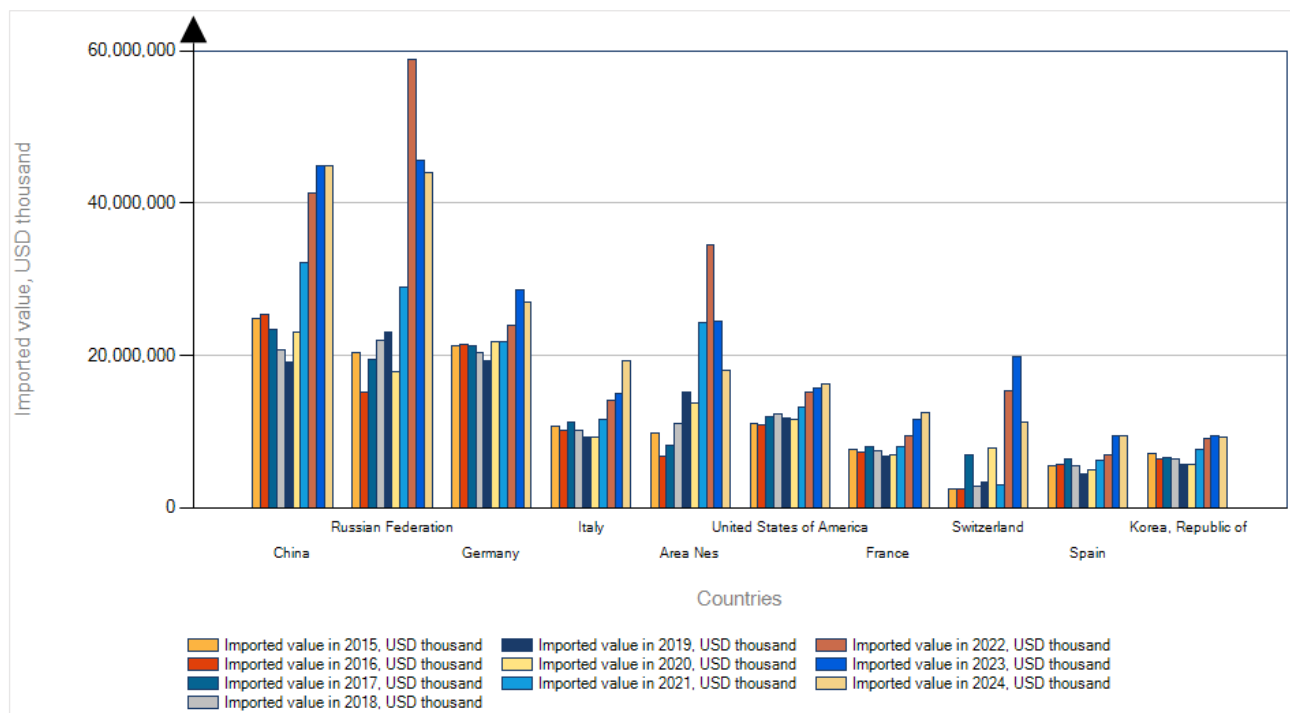**(World Trade Organization, 2025)**

Figure 4 – List of suppling markets for a product exported by Türkiye. Product: TOTAL All products (International Trade Centre, 2025b)

Research results show that over the past 10 years, Turkey's foreign trade indicators have undergone significant changes, and these changes are closely connected to regional and global economic dynamics. The Russia–Ukraine conflict, especially since the launch of full-scale military operations in 2022, has significantly affected the region's economic relations and trade routes. Turkey, both geographically and economically, is one of the key actors within the sphere of influence of this confrontation. On one hand, the conflict has led to instability in the logistics and energy routes of the Black Sea, which temporarily complicated Turkey's trade with regional countries. On the other hand, an intensification of economic relations with Russia has been observed. For instance, in 2022, trade volume between Turkey and Russia reached a record high of 60 billion USD. This increase was mainly driven by imports of energy products (oil and natural gas), deepening the negative balance in Turkey's trade.

At the same time, in the context of Western sanctions imposed on Russia, Turkey has become an alternative trade platform for many Western and Russian companies. This has positively contributed to the diversification of Turkey's trade, yet it has also increased its foreign economic dependency. Alongside energy resources, the high-level import of industrial and technological products from countries like Russia and China has not only weakened the structural trade balance but also highlighted the limitations of domestic production capacity (Krugman et al., 2018, p. 459).

The Russia–Ukraine conflict has directly impacted Turkey not only on the security and diplomatic levels but also in terms of its foreign trade structure, energy dependency, and regional economic strategies. These developments show that Turkey needs to further diversify its trade policy, strengthen domestic production, and deepen regional cooperation in the future. Over the past decade, Turkey has faced a number of regional and global challenges. Particularly since the intensification of the Russia–Ukraine conflict after 2014, fluctuations in energy prices and a policy of diversification of trade partners have significantly affected the structure of its foreign trade (Türkiye İstatistik Kurumu, 2025). Turkey's location in the Black Sea basin makes it an important transit and economic connection point for access to both European and Asian markets. Since 2014, especially due to sanctions imposed on Russia and the resulting formation of new regional trade directions, Turkey's export strategies have been influenced, and the importance of alternative markets – including Central Asian countries – has increased. At the same time, cooperation with China within the framework of the "Belt and Road Initiative" and the development of the East–West

trade corridor through Azerbaijan has brought new dynamics to Turkey's import and export geography.

Conclusion

In the period between 2015 and 2024, Turkey achieved notable progress in expanding its foreign trade and strengthening its export performance through an export-oriented economic strategy. The substantial growth in exports, particularly the 54% increase in export volume from 2020 to 2024, demonstrates the effectiveness of these policies and underscores the importance of exports as a driver of economic growth (Krugman et al., 2018). Turkey's increasing trade with key partners such as Germany, the United States, and Azerbaijan also reflects its growing integration into global trade networks and its ability to build strategic economic relationships.

However, despite these achievements, the persistent rise in imports — driven largely by dependency on energy and industrial raw materials — has led to a continued negative trade balance. This structural imbalance highlights Turkey's ongoing vulnerability due to high import dependence in strategic sectors. As Bhagwati (1988) cautioned, unless trade deficits are offset by sufficient capital inflows, they may lead to increased borrowing and growing external imbalances. The significant trade volumes with countries such as China and Russia further contributed to the widening trade deficit, even as Turkey attempted to diversify its trade portfolio through partnerships with emerging Asian markets.

Moreover, Roubini and Mihm (2010) emphasized that a persistent trade deficit can be symptomatic of deeper economic weaknesses, such as low savings rates and overreliance on foreign products. Similarly, Lucas (1988) noted that while a high level of imports might boost current consumption, it may weaken a country's long-term economic growth potential.

Overall, while Turkey's export-led growth strategy has yielded positive economic outcomes, it has not yet fully resolved the challenges associated with trade imbalances. Going forward, Turkey must implement deeper structural reforms aimed at reducing external dependence, particularly in energy and technology-intensive sectors. As Rodrik (2007) and Stiglitz (2002) argued, promoting high-value, technology-based production and increasing the share of such goods in exports is essential for improving trade balance sustainability and ensuring long-term economic resilience. Without such measures, the gains achieved through increased exports may be undermined by vulnerabilities arising from excessive import reliance.

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