

MOLDOVA'S EXPORTS: BETWEEN REGIONAL INSTABILITY AND THE CHALLENGES OF THE GLOBAL ECONOMY

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Abstract: The article analyzes how Moldova's exports have been affected by the regional instability caused by the conflict in Ukraine. As well as the macroeconomic challenges of the global economy, the volatility of international prices, the fragmentation of supply chains and inflationary pressures, (focus on the year 2020-2024). This study pursued three directions: the analysis of the value and structural development of exports, changes in the geographical structure and the assessment of the economy's ability to adapt to external impacts.

The research comprises both quantitative and qualitative evaluation indicators, such as the Export Diversification Index – to determine structural change in exports, the Herfindahl-Hirschman Index (HHI) – to measure export market concentration and systemic vulnerability external shocks (logistical bottlenecks, fluctuations in global demand). Data sources such as the National Bureau of Statistics, UNCTADstat, the World Bank and Trade Map were used.

The result shows a dependence on traditional markets and low value-added products. The situation increases the vulnerability of exports to external shocks. However, some progress has been seen in recent years – notably in diversifying the processed agri-food sector and expanding trade. Even so, the low level of the diversification index and the high values of HHI show that structural imbalances remain strong. That is why we need trade policies that are resilient and much more flexible. In the new global context, Moldova has only to gain if it rethinks its export promotion model. A focus on smarter integration into international value chains, better resilience to disruption and diversification could turn exports into an engine of sustainable growth.

Keywords: International Trade, International Diversification, Economic Vulnerability, Export Diversification, Regional Integration

JEL Classification: F10, F15, F43

Introduction

In recent years, due to major external events and global macroeconomic challenges, Moldova has been facing a number of difficulties. Geopolitical instability in the region, particularly due to the Ukrainian war, has had direct effects on trade. Added to all this was a world economy weakened by inflationary pressures, fragmentation in supply chains and unstable international prices.

The present research starts from the analysis of these factors and their impact on foreign trade in the period 2020-2024. We focused on how Moldova's exports managed to adapt in a time of crisis and uncertainty. By assessing key indicators such as the structure of exported products, the degree of diversification and the concentration of markets – we can better perceive economic developments in the short and medium term. This picture helps us identify vulnerabilities and outline steps that can increase economic resilience in the face of global challenges in the coming years.

Objective of the research

The research aims to analyze how the structure and competitiveness of Moldova's exports have evolved in the last five years. To this end, we analyzed economic indicators such as the Herfindahl-Hirschman index (to measure the concentration of export markets), the diversification index (determined by structural change in exports) and the number of exported products (EQUiP, 2015). We have also taken into account the impact of external factors - from geopolitical tensions

and logistical bottlenecks, to inflationary pressures. Based on the results, certain policy recommendations are proposed to support trade resilience and stimulate sustainable diversification, both of markets and of exported products.

Methodology and data sources

In order to better understand the evolution of Moldova's exports, we have combined quantitative methods with qualitative analyses. Several relevant indicators were taken into account in the research: the export diversification index, which reflects structural changes; the Herfindahl-Hirschman index, used to measure the degree of concentration on export markets; as well as indicators of systemic vulnerability, linked to logistical constraints and geopolitical tensions.

The data used come from official and reliable sources, such as the National Bureau of Statistics of Moldova (NBS), UNCTADstat, the World Bank and Trade Map, which allowed a rigorous analysis. The analyzed period, 2020–2024, was chosen to capture more clearly the effects of the global and regional context on Moldovan exports.

Results and discussions

1. Value and structural evolution of exports, 2020-2024

Moldova's exports have gone through a period full of challenges in recent years, influenced by both global dynamics and domestic factors. The beginning of the pandemic in 2020, strongly influenced economic activity and led to a temporary decrease in international trade. After this period, the following year, due to a good agricultural harvest and high demand in traditional markets, exports increased significantly.

The situation became complicated again in 2023 and 2024. Moldova's exports have been increasingly influenced by geopolitical instability, due to the Ukrainian conflict. Traditional supply chains have been disrupted, and the country has gradually lost its role of functioning as a regional hub.

As a result, total exports fell to about USD 3.56 billion for 2024, which shows a decrease of 12% compared to the previous year (figure 1). Part of the decrease observed comes from the reduction in re-exports, which fell by more than 28% (National Bureau of Statistics, 2025). At the same time, deliveries to several important markets have also decreased. Due to the instability, trade with regions such as Ukraine, Romania and Germany, but also with CIS states, visible losses have been observed. A clear example is Russia, where Moldova's share of exports decreased from 9% in 2020 to only 3.3% in 2024 (Trading Economics, 2024).

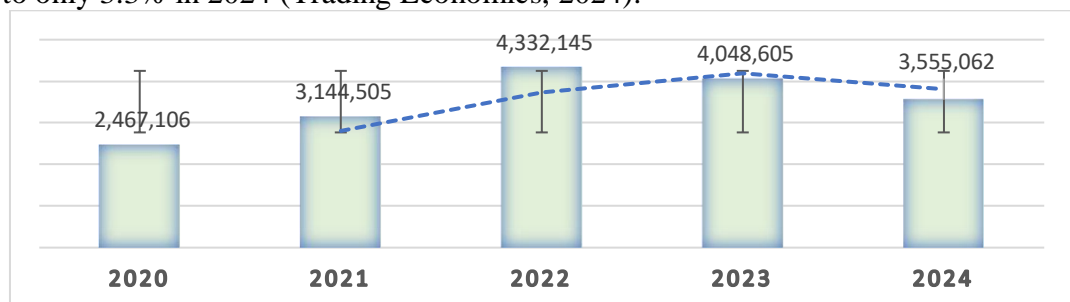


Figure 1. Dynamics of Moldova's Foreign Trade (US\$, thousands), 2020-2024

Source: Elaborated by the Author based on data from the National Bureau of Statistics (NBS, 2025)

Moldova's exports are largely based on agricultural products, and for this reason the agri-food sector has been the most driven to change by the recent external disturbances. The dependency relationship shows how fragile the economy is in the face of this kind of challenges. In addition, the export structure remains dominated by low value-added products such as wheat, maize, oilseeds and unprocessed fruits (Figure 2). However, we also have reason to be optimistic, because in recent years some sectors with higher added value, such as the production of electrical equipment and the processed agri-food industry, have also started to stand out (Trading Economics, 2024).

In 2024, machinery and electrical appliances became the most valuable segment of foreign trade, with a share of almost 16% of total exports. At the same time, grain exports fell to just 9.1%, a drop that raises questions. In contrast, oilseeds and oleaginous fruits had a positive evolution, reaching around 10.2% of the total export (Figure 2).

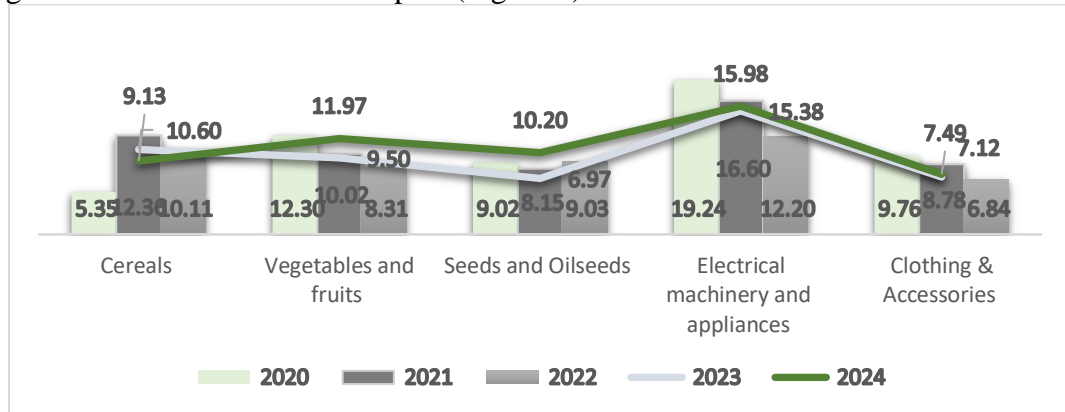


Figure 2. Share of Major Product Groups in Export Value %, 2020-2024

Source: Elaborated by the Author based on data from the National Bureau of Statistics (NBS, 2025)

The situation confirms that Moldova's economy is still heavily dependent on the export of raw materials and semi-processed products, which remain vulnerable to price fluctuations on international markets. However, the growth of exports of processed agri-food products and those in the electrical equipment industry shows a promising direction, more added value and a stronger export base.

One conclusion is that the decrease in Moldova's exports was driven by several factors. Firstly, external demand has decreased, and export potential has become more limited. To this were added lower prices on global markets and a decrease in re-exports. Logistical problems with supply chain disruptions and increased transport costs also played an important role. All these difficulties have strongly impacted trade performance, reducing both the volume and the value of exports. In the end, Moldova lost competitiveness on international markets and received lower revenues from exports.

2. Changes in the geographical architecture of exports

Geographically, Moldova remains strongly oriented especially towards the European market, which in 2024 absorbed over 67.3% of total exports (Trade Map, 2024). At the top is Romania, the country's main trading partner, due to its geographical proximity, close economic relations and the country's integration process into the EU. It alone concentrated for nearly a third of Moldovan exports – 32.6%, the equivalent of 1.16 billion US dollars (Trade Map, 2024).

Other important markets for Moldova are Ukraine, with a share of 9.3% and exports of 329.1 million US dollars, Italy with 6.7% and the Czech Republic with 6.1%. At the same time, Turkey (6.0%), Germany (4.8%) and Poland (4.3%) remain significant markets (Trade Map, 2024).

In the period 2020-2024, Moldova's exports to Ukraine increased by about 64% (Trade Map, 2024). A sign that trade relations between the two countries have expanded rapidly following recent geopolitical and economic changes. The evolution was mainly driven by exports of agricultural products and raw materials. In the context in which Ukraine needs resources for reconstruction and securing supplies. In the same period, exports to Romania rose by 16%. Although a slight decrease was observed in 2024 compared to the previous year, the overall trend remains positive and confirms the strengthening of bilateral ties, but also Moldova's integration into European value chains.

Also, notable developments were recorded: the Czech Republic with +31%, Bulgaria with +15% and Poland with +9%. Surprisingly, the United States has become a more visible partner,

with a 37% increase, mainly due to exports of food and alcoholic beverages (Trade Map, 2024). This shows not only a diversification of export destinations, but also an important proximity to a global economy.

In contrast, exports to Germany and Turkey fell by around 6% and 4% respectively. Those to Russia saw a sharper decline of 17% (Trade Map, 2024). Confirming the loss of interest in that market, as a result of geopolitical tensions and international sanctions.

Overall, Moldova's exports show a two-way trend. On the one hand, trade ties with existing partners, especially Romania, are strengthened. On the other hand, there are openings to new markets, such as Ukraine, the Czech Republic or Poland. However, these changes are still in their infancy, and the impact of diversification remains modest.

In order for Moldova's economy to become more sustainable and resilient, it is essential to focus on diversifying trading partners and reducing dependence on a single market. This can be achieved by opening up to new markets, such as Asia, the Middle East, or North America. In parallel, making more effective use of existing agreements with the European Union can create a solid basis for diversification. On this basis, strengthening existing partnerships and investing in higher value-added products could accelerate Moldova's integration into global value chains.

3. Assessment of the economy's adaptive capacity

The capacity of Moldova's exports to withstand external shocks can be seen through several indicators: the diversification index, the Herfindahl-Hirschman index and the total number of exported products. These indicators, taken together, show how varied the structure of exports is and how vulnerable the economy becomes when it depends too much on certain markets or products (EQuIP, 2015).

The Concentration Index (HHI) ranged between 0.174 and 0.195 between 2020–2024, indicating a moderate dependence on certain key markets and products (Figure 3). In 2021, its value decreased by almost 11% compared to the previous year, a positive sign, which shows a slight diversification. The trend was supported by both a good agricultural harvest and modest attempts to access new markets.

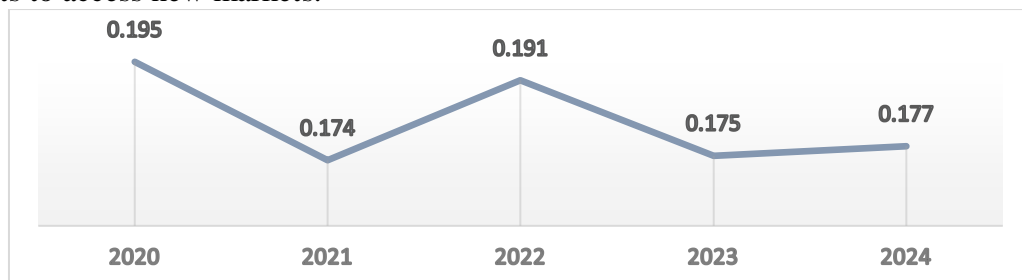


Figure 3. Dynamic Index of HHI, 2020-2024

Source: Prepared by the Author based on data from UNCTAD, n.d.

In the following years, especially in 2022, the index recorded an upward trend, a sign that exports were once again concentrated in a certain number of markets. In 2023-2024, it decreased slightly, registering 0.175-0.177 (figure 3). The oscillations show that Moldova have made some efforts to diversify, but for the most part, exports have remained dependent on traditional markets and products.

This is not surprising, if we think about the situation in the region (the Ukrainian war, large price fluctuations on international markets and problems in global supply chains). All this has led many companies to stay in previously identified markets - such as Romania, Ukraine, Italy or the Czech Republic, instead of venturing into new markets (The Observatory of Economic Complexity, 2025).

Although, there were increases in some new categories, such as machinery and electrical appliances, live animals or food products and preparations, they were unable to compensate for

decreases in other areas. In addition, increase in manufacturing costs and volatile of raw material prices have led exporters to take a more cautious approach, limiting openness to emerging markets.

In other words, the economy tries to remain competitive with changes in the global market, but relies too much on classic relationships and products. To ensure solid growth in the long term, it is clear that we need to continue and even accelerate diversification efforts in order to reduce dependence on a few products and markets.

As for **the Diversification Index**, the analyzed period marked a slight decrease, from 0.697 in 2020 to 0.669 in 2024 (figure 4). The difference of 3.9% indicates the same strong orientation towards traditional products with low added value.

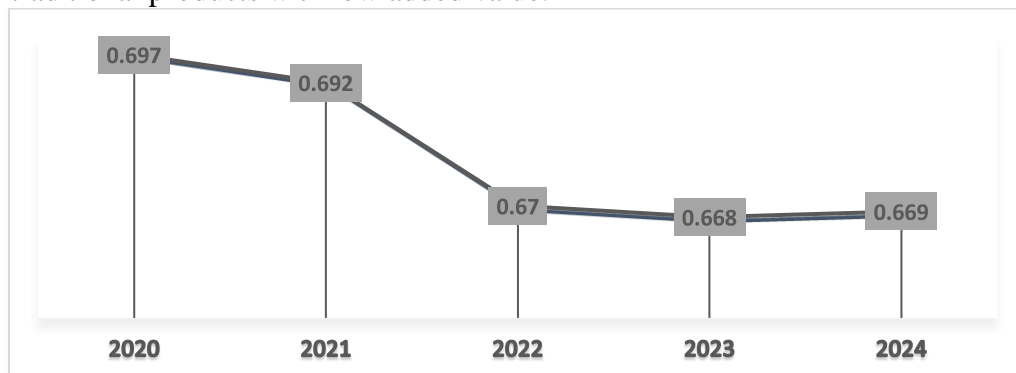


Figure 4. Dynamics of the Diversification Index, 2020-2024

Source: Prepared by the Author based on data from UNCTAD, n.d.

The decrease in diversification can affect the country's ability to capitalize on new opportunities in more competitive markets and to protect itself from external impacts. Data for 2024 shows that exports were largely based on a narrow group of products. Machinery and electrical appliances accounted for 16% of the total, vegetables and fruits 12%, oilseeds 10%, cereals 9%, clothing 7.5% - accumulating a significant part in the total exports, about 55% (Figure 2).

On the other hand, positive signals have also appeared in 2024. The diversification index showed a small rebound, fueled by increases in sectors such as machinery, industrial products, pharmaceuticals, minerals and alcoholic beverages (National Bureau of Statistics, 2025). These developments show that there is real potential for the expansion of the export basket in the coming years.

If we look at these trends in parallel with the Herfindahl-Hirschman Index, we can clearly see a connection: when diversification decreases, the concentration of exports increases. Basically, this confirms once again how difficult it is for Moldova to maintain a sufficiently varied and balanced export portfolio.

These results show the importance of adopting well-thought-out and consistent economic policies that support export diversification. This means opening up to new markets, stimulating sectors with growth potential, investing in innovation and technology and, last but not least, concrete support for small and medium-sized exporters. Such measures can ensure stable economic growth and make it more resilient to external challenges.

In this context of the analysis, we cannot to take into account the **number of exported products** (at the three-digit SITC level), which has undergone interesting variations between 2020 and 2024. Probably as a consequence of economic dynamics and the international environment. In 2020, 172 distinct products were registered, and in 2022 this number increased significantly to 198 (Figure 5). This growth denotes an effort to diversify the offer, trying to penetrate new market segments and expand the portfolio of exported products.

In the following years, 2023 and 2024, the number of exported products decreased slightly, reaching 191 and 187 respectively (Figure 5). This decrease shows that exports have been more focused on already traditional products and markets, likely influenced by regional and global instabilities.

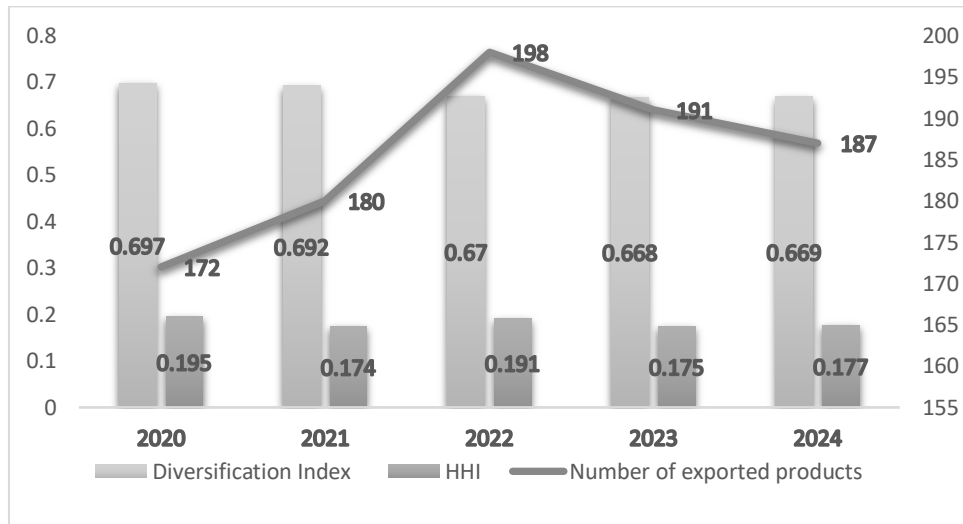


Figure 5. Dynamics of the Diversification Index, HHI and number of products, 2020-2024

Source: Prepared by the Author based on data from UNCTAD, n.d.

The trajectory is clearly reflected in the data on the Diversification Index and HHI. The HHI index shows a moderate to high level of concentration, with a maximum in 2020 and 2022, while the diversification index decreases slightly, from 0.697 in 2020 to 0.669 in 2024 (figure 5). Basically, although in 2022 there was a temporary diversification of Moldova's export portfolio, they remained focused on a few main products and markets. Consequently, even if new products appeared, they were not enough to diminish the existing dependence.

The situation highlights a structural vulnerability of economy. We tend to rely on products with tradition and previously identified markets, so it makes us more exposed to external changes. To increase resilience, it is essential to continue and intensify diversification policies, both geographically and productively.

Efforts to increase the number of products must be supported by investments in innovation and competitiveness. Direct support for small and medium-sized companies is crucial, as they can introduce the latest merchandise into the export portfolio.

Systemic Challenges in Moldova's Economy

In recent years, the world economy has entered a phase of visible slowdown. Estimates show that the global growth rate, which was 3.3% in 2024, will fall to just 2.9% in 2025 and 2026 (OECD, 2025). The reduction reflects the effects of growing uncertainty, trade barriers and geopolitical instability. The impact was felt especially in small and open economies, such as the Republic of Moldova. Between 2020 and 2024, the country faced serious systemic vulnerabilities, which limited its ability to face with external and internal unexpected events.

One of the main factors was **the logistical bottleneck**, which severely affected the country's ability to maintain its trade flows, especially in the agri-food sector. The situation was most clearly seen in the case of sunflower oil. In 2024–2025, exports collapsed by more than 90%, due to a poor harvest and logistical problems (AgroExpert, 2025). In just one year, Moldova went from exporter to importer status and came to depend largely on Ukraine.

Globally, **the pandemic and geopolitical tensions** have accentuated demand fluctuations and destabilized traditional export markets. The conflict in Ukraine has further amplified economic uncertainty for local companies (World Bank, 2024). The blockade of Black Sea ports disrupted the

Annual International Scientific Conference
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September 26-27, 2025
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usual trade routes, which made it necessary to extend the road transport agreement between Moldova and Europe in 2024. The adopted measure led to a 57% increase in the volume of road exports to the EU in the quarter. III and contributed to the maintenance of trade flows. At the same time, supporting the solidarity corridors for Ukraine in the context of the conflict (Trans.info, 2024).

Another significant vulnerability is the **concentration of exports** on a small number of products. In particular oilseeds and cereals and in several major markets, such as the EU and Ukraine (National Bureau of Statistics, 2025). The existing dependency raises the risk of systemic shock. Any disruption in these segments can have a rapid and powerful impact on the entire economy.

Moldova's constant trade deficit and dependence on imports of energy and raw materials make it more vulnerable to external disruptions (Expert-Grup, 2025). Any increase in resource prices or bottlenecks in the supply chain directly hits the economy and reduces our country's ability to maintain stability. In parallel, rising costs have impacted export competitiveness and led to a decrease in export volumes (Ministry of Economic Development and Digitalization, 2025).

These systemic challenges clearly highlight the need for deep reforms and more coherent policies. An integrated strategy should combine economic modernization, diversification and infrastructure development. The focus must be on innovation, competitiveness and institutions that are better prepared to manage risks. In such a way that current vulnerabilities are transformed into future opportunities.

Conclusions

The analysis highlighted the underlying vulnerabilities of Moldova's economy, strongly marked by structural imbalances and excessive dependencies. Exports are concentrated in certain traditional products and markets, and to these are added the trade deficit and logistical bottlenecks, which have limited the prospects for sustainable economic growth. Fluctuations in global demand and geopolitical tensions in the region, especially the war in Ukraine, have amplified instability and revealed the limits of the current export model.

Although small steps have been taken towards diversification, Moldova's exports are mainly based on low value-added products. Existing dependence on traditional markets remains a major obstacle to sustainable development. The analyzed indicators show a fragile balance. The maintenance of traditional positions has provided a certain degree of stability, but the lack of consistent diversification has reduced the ability to adapt to rapid changes in the external environment.

Under these conditions, Moldova needs a strategic repositioning of its export model. The solution depends on deeper integration into the global economy and more flexible trade policies geared towards resilience and sustainability. In the coming years, the way these vulnerabilities will be managed will matter decisively for the country's economic trajectory.

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