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The Impact of Currency Regulation Policy on the Country's Export Potential: The Case of Armenia

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ABSTRACT

The impact of currency regulation on the country's export potential has been the focus of scientific research and discussion among economists for years. Currency regulation is a backbone element to maintain the competitiveness of the country's economy, macroeconomic stability, and to stimulate economic growth. **The aim** of this research is to analyse the impact of the exchange rate of the Armenian national currency (dram) on the country's export potential, as well as the choice of a currency regulation policy stimulating export expansion and economic growth in Armenia. The study employed **the methods** of statistical and comparative analysis, as well as the construction of logistic assumptions. The authors conducted a statistical analysis of the dynamics and structure of Armenia's exports by product groups and countries. They revealed that, with the exception of exports to Russia, Armenia's exports to other countries has a high ratio of raw materials. As known, the exchange rate has the greatest impact on the price competitiveness of finished products in foreign markets. The authors evaluated the impact of currency regulation policy implemented in Armenia on the export potential and competitiveness of Armenian goods, especially in the EAEU markets. **The results** show that Armenia is not able to maximize its export opportunities due to the uncompetitive exchange rate of the national currency. **The key conclusion** of the research is the thesis that Armenia should abandon the non-market mechanisms for ensuring exchange rate stability, the Central Bank should immediately shift to a policy of free-floating national currency and non-intervention, which will significantly expand the presence of Armenian finished products in foreign markets, especially in the Russian Federation.

Keywords: export potential; currency regulation policy; exchange rate; economic growth

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INTRODUCTION

The impact of currency regulation on the country's export potential has been the focus of scientific research and discussion among economists for years. Currency regulation is a backbone element to maintain the competitiveness of the country's economy, macroeconomic stability, and to stimulate economic growth.

The most important achievement of macroeconomic regulation is long-term sustainable economic growth. However, developing countries often prefer targeting short-term problems at the expense of long-term outcomes, which typically harms the country's standard of living and quality of life. At the same time, the mechanisms of macroeconomic regulation presuppose a long-term strategy of economic development, including in the area of monetary policy. From this point of view, currency regulation policy

plays an important role in ensuring sustainable rates of economic growth.

On the other hand, sustainable long-term economic growth requires a stable commodity and foreign exchange markets to ensure a stable currency system and favourable conditions for external trade.

In developing countries, exchange rates of national currencies tend to be overvalued, which has a negative impact on exported goods by lowering producers' real prices. For example, real exchange rate misalignments occur in markets where nominal exchange rates are not allowed to adapt to the changes in economic fundamentals, thereby reducing incentives and profits, leading to a decline in investment and export volumes, thus having a negative impact on economic growth [1]. Countries such as Japan, Hong Kong, Singapore, North Korea, Taiwan, and China, among others, have successfully developed

and applied models of economic growth where the exchange rate was used as a primary tool [2].

Exchange rates and the choice of currency regulation policy are the focus for discussions by economists especially for emerging economies [3–5].

In this context, the case of Armenia is of particular interest. The main hypothesis of the study is that the currency regulation implemented over the last ten years has led to a significant reduction of Armenia's export potential and consequently a slowdown in economic growth.

LITERATURE REVIEW

The impact of the country's currency regulation on export potential has been the focus of economic debate for years. The choice of currency regulation policy is very important in the context of the country's external competitiveness, macroeconomic stability, and economic growth.

In general, there are two ways to improve the trade balance of a country. The first is an internal approach and is based on the supply-side policies that improve productivity, reduce inflation and taxes and lead to a more efficient labour market. These measures lead the growth of exports and GDP. The second way is the currency depreciation, which leads to changes in relative prices of imports and exports [6].

Preserving a fixed foreign exchange rate is a policy that can help ensure certain price stability by effectively introducing monetary confidence. This can often lead to a real appreciation of the effective exchange rate, which leads to a reduction in reserves, makes export more expensive while making import cheaper.

S. Kurtovic [7] found evidence for the J-curve while examining the relation between the exchange rate and the trade balance. The study shows a long-term cointegration between the exchange rate and the trade balance. The implication of the J-curve effect deriving from the Marshall-Lerner conditions is that the country's trade balance moves in the form of the J-curve in the event of a devaluation of the national currency. First of all, the total value of imports increases because of the higher price of imported goods and exceeds the total value of exports. This leads to a trade deficit. However, devaluation increases the demand for exports, which leads to an increase in

export volumes. In the end, the trade balance becomes positive.

On the other hand, for many years, some researchers have believed that the floating exchange rate creates additional volatility, leading to a decline in international trade. Thus, a fixed exchange rate regime would be more appropriate [8–10]. Moreover, Hericourt et al. emphasized that emerging countries should be careful when relaxing their exchange rate regime: moving to a fully floating regime without the adequate level of financial development could also prove to be very hazardous for trade performance [11].

Later, economists found that floating rates did not diminish foreign trade, but had a positive effect on exports. M. Feldstein [12] argued that the flexible exchange rate regime was more desirable for foreign trade than the fixed one. Similarly, according to D. Rodrik [13] and S. Bhala [14], an overvalued exchange rate may impede export, thereby economic growth, when an undervalued national currency may stimulate the tradable sector.

Competitive and even undervalued currencies have been used by many countries to achieve export-led growth, especially by economies in emerging Asian markets. The cornerstone of such a model is the maintenance of external price competitiveness to promote export and economic growth. C.-W. Hooy, S.N. Law and T.H. Chan [15] studied the impact of renminbi on the exports to China. They found a significant positive impact of real exchange rate depreciation on exports of high-technology and medium-technology final and intermediate goods. In another research, K. Wondemu and D. Potts [16] studied the impact of real exchange rate changes on the export performances of Ethiopia and Tanzania. They suggested that while overvaluation is harmful to exports, undervaluation of the real exchange rate boosts export supply as well as export diversification. They have found out that a high rate of growth in exports is associated with periods of undervalued currencies. Moreover, comparing the two countries, they concluded that Tanzania has better export performance since it maintained an undervalued real exchange rate.

IMF provides a thorough analysis about the influence of exchange rate on commodity prices and trade volumes. Their findings support some earlier evidence

of a positive association between the terms of trade and the real exchange rate of commodity exporters. Thus, the exchange rate depreciation leads to lower export prices and higher import prices, which in turn leads to growth of exports and reduction of imports¹.

The literature review and the empirical experience of countries show that it is very important to maintain exchange rate competitiveness, but is unnecessary to have an undervalued exchange rate.

The export-led model requires the economy to maintain stable and predictable external price competitiveness. This may preclude the application of the *de facto* floating exchange rate regime. Economies with emerging markets in Asia usually link their currency to other currencies. Even in countries where the *de jure* floating exchange rate regime was implemented, countries often took measures to stabilize or depreciate the nominal exchange rate, with the ultimate goal of keeping the real exchange rate relatively undervalued. This policy is politically ambiguous, and many insist that some Asian countries engage in currency manipulations [17].

However, the policy of keeping the real exchange rate relatively devalued can cause inflationary pressures in the economy. Therefore, it is accompanied by a trade-off between external competitiveness and domestic price stability². It is assumed that the export-led model can be effectively implemented in countries where domestic inflationary pressures can be contained by means other than the currency regulation. Countries with low and manageable inflation rates may gradually pay more attention to enhancing external competitiveness. In any case, developing and transition economies may seek to use the exchange rate as a tool to create favourable and predictable conditions for the tradable sector of the economy.

As long as productivity in the tradable sector is high, countries are encouraged to maintain a relatively high level of external competitiveness for trad-

able goods to make the resource allocation to the tradable sector attractive. The works by D. McLeod and E. Mileva [18], J. Aizenman and J. Lee [19], G. Benigno et al. [20] have the “learning by doing” effect, exogenous for certain firms operating in the tradable sector of the economy; therefore, a weak real exchange rate is necessary to support the tradable sector. In these models, underestimating the currency acts as a subsidy for export.

Based on the empirical analysis of several countries, D. Rodrik [21] confirms that competitive and undervalued exchange rates are more likely to contribute to export growth and differentiation than overvalued ones. Rodrick provided a more detailed explanation in another work [22]. The depreciation of the real exchange rate is, by definition, an increase in the relative prices for tradable goods, compared to the non-tradable sector; he argues that an undervalued currency may enhance the relative profitability of the tradable sector and causes it to expand (at the expense of the nontradable sector).

Some empirical studies confirm the link between foreign exchange rates, export growth and differentiation (e.g., R. Nourira et al. [23]). Exchange rate adjustments partially offset financial losses from safeguard measures applied to the tradable sector.

B. Balassa [24] argues that the devaluation of the national currency is equivalent to the simultaneous application of import duties and export subsidies at the same rates. Therefore, the transition to free trade and simultaneous currency depreciation can be seen as a replacement of existing safeguards with a united customs duty and subsidy, which will keep the trade balance unchanged. However, such a belief is based on the assumption that there is no market distortion or, even if there are market distortions, they affect all segments equally. However, D. Rodrick [25] argues that the impact of internal institutional weaknesses and market distortions on the tradable sector is greater than the impact on the non-tradable sector. In such a situation, a deliberate devaluation of the real exchange rate may be a “second best” solution to partially improve the situation. Such a policy measure promotes structural changes, increases export volumes, and improves economic growth by altering internal trade conditions in favour of the tradable sector.

¹ International Monetary Fund. 2015. World Economic Outlook: Adjusting to Lower Commodity Prices. Washington (October). URL: <https://www.imf.org/en/Publications/WEO/Issues/2016/12/31/World-Economic-Outlook-October-2015-Adjusting-to-Lower-Commodity-Prices-43229> (accessed on 11.02.2020).

² Does currency depreciation necessarily result in positive trade balance? New evidence from Norway Haris Dzanan and Mansur Masih. MPRA Paper No. 82103, 2017. URL: <https://mpra.ub.uni-muenchen.de/82103/> (accessed on 11.02.2020).

Sustainable development of the Armenian economy against the growing competition in both foreign and domestic markets is only possible if the competitiveness of the national economy and its entities is radically increased. Moreover, our research shows that implementing a floating exchange rate and export-led model can accelerate the economic growth of Armenia [26]. The relevance and practical significance of the issue necessitates the analysis of the role of currency regulation for the competitiveness of the national economy.

THE IMPACT OF FOREIGN EXCHANGE RATE ON THE EXPORT POTENTIAL IN ARMENIA

According to the results of the literature review, the exchange rate has a significant impact on export volumes and potential. Now we will proceed to the analysis of the impact that the Central Bank of Armenia's exchange rate regulation has on the country's export potential.

As we have shown in our research papers (e.g., [27]), despite the declared floating exchange rate policy, the CBA nonetheless de facto conducts a managed, sometimes even fixed exchange rate regime. Among the factors directly influencing the exchange rate of the Armenian dram we can distinguish market channels, as well as non-market mechanisms applied by the monetary authorities. The two main instruments used by the Central Bank of Armenia to manage the exchange rate are direct interventions in the foreign exchange market and reserve requirement doubled in December 2014 to stop the devaluation of the Armenian dram.

It is known that the foreign exchange rate mainly affects the external competitiveness of consumer products. Meanwhile, the export volumes of raw materials, generally, are influenced by their quantity in a particular country and the international demand.

First, let us look at the dynamics of Armenia's export structure by product groups. *Fig. 1* shows that until 2014, 75–80% of Armenia's exports concentrated in the four main product groups: minerals, gemstones, metals, alcoholic and non-alcoholic beverages. Since 2013–2014, the cigarette export has increased significantly; in 2018, it already was 11.1% of Armenia's total export (267.6 million US dollars) and occupied the 4th place (*Fig. 1*).

We should highlight that the significant increase in cigarette export volumes is due to the sharp increase in demand for Armenian cigarettes in the UAE, Iraq and Syria (*Fig. 2*). Over the past five years, exports of this product to Iraq have increased by more than three times, to Syria — by 19 times, to the UAE — by 15 times, to Georgia — by almost 4 times. The dynamics of the export to Russia shows no significant growth.

50–67 — Textile and footwear (*Fig. 3*) is another new sector in Armenian exports that has sustainable growth rates. The products of this group are almost entirely exported to Russia, Italy and Germany. At the same time, the increase in exports was observed in all three countries during the period under review. However, the most significant growth was recorded in 2015, and was due to the sharp increase in exports to Russia. It might be caused by the tense political situation in Russia, since during that period the embargo policy led to supply shortages in some Russian commodity markets.

Here are 15 largest export partners of Armenia according to the data of 2018, as well as the dynamics of the exports structure by country during 16 years (*Fig. 4*).

By statistics, Armenian export to some countries has significantly increased in 2018 against 2013, which was the pre-crisis year (to Russia — by 2 times, to Switzerland — by 13 times, to Iraq — by 3 times, to the UAE — by nearly 8 times, to Syria — by 19 times, to the Netherlands — by 2 times, to Italy — by 2 times). As mentioned above, exports to Syria, to the UAE and to Iraq were driven by increased demand for Armenian cigarettes in these countries.

On the other hand, exports to the US, Belgium and Canada decreased more than by two times.

To find out what caused this significant change in Armenia's export structure, let us consider the export structure by country and commodity, with commodity exports of at least 500 thousand US dollars by country during the last 9 years (*Fig. 5*).

The decrease in exports to the United States was mainly driven by a 60% decrease in the exports of metals. On the other hand, the sharp decline in exports to Belgium is due to a decrease in diamond exports by almost 40%, as well as the cessation of metal exports, which amounted to \$81 million in 2014. In the case of Canada, the reason was the ces-

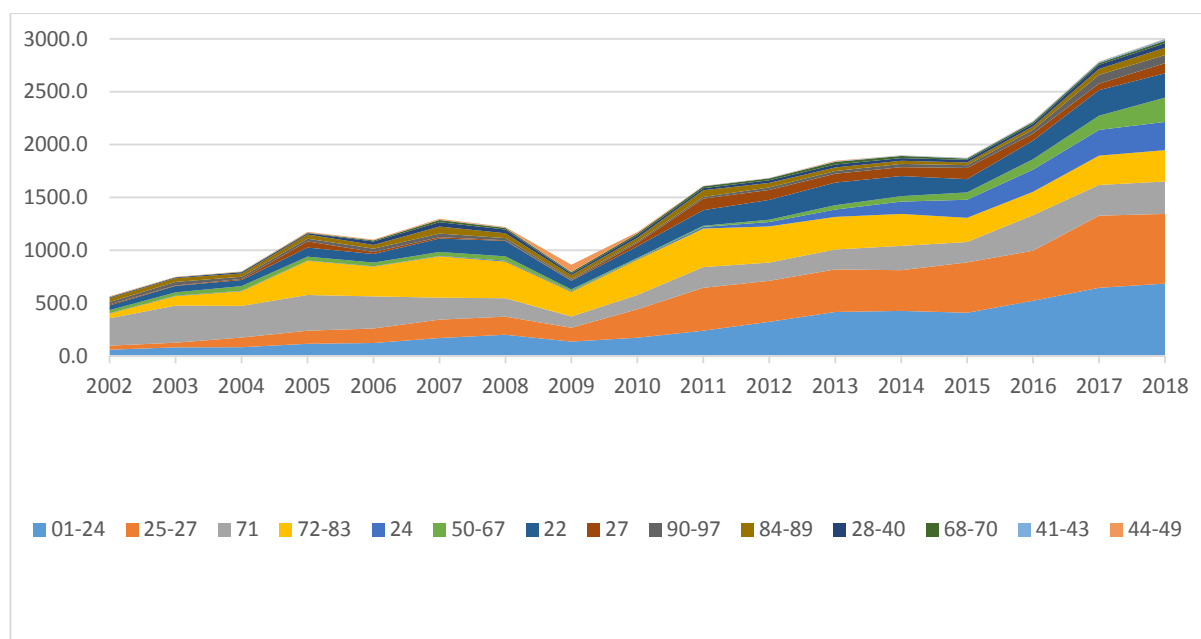


Fig. 1. Armenia's export volumes by major product groups, million US dollars, 2002–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 13.11.2019).

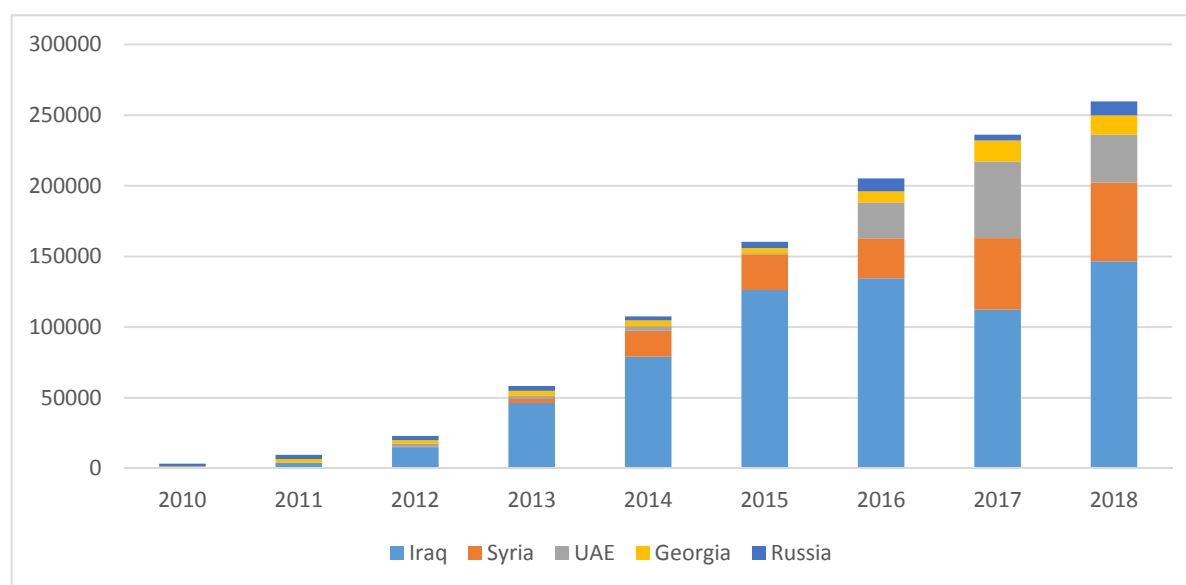


Fig. 2. 24 – Cigarette export from Armenia by partner countries, thousands US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 15.11.2019).

sation of gold exports, which in 2016 amounted to 131 million US dollars.

The sharp increase in exports to Switzerland during recent years was mainly due to a tenfold increase in the exports of minerals (copper, precious metals), as well as a 6-fold increase in watches and its parts. At the same time, in 2014, gold exports to Switzerland almost stopped, falling from 136 million US dollars to 321 thousand US dollars, and restored its previous

volumes in 2017. The increase in exports to Italy, as already mentioned, was due to the increase in exports of textile products. In the case of the Netherlands, the increase was due to the export of metals.

Thus, with the exception of exports to Russia, the structure of Armenian export by product in the case of other countries is mainly concentrated in the field of raw materials. As already mentioned, the factors affecting the export of raw materials are mainly ex-

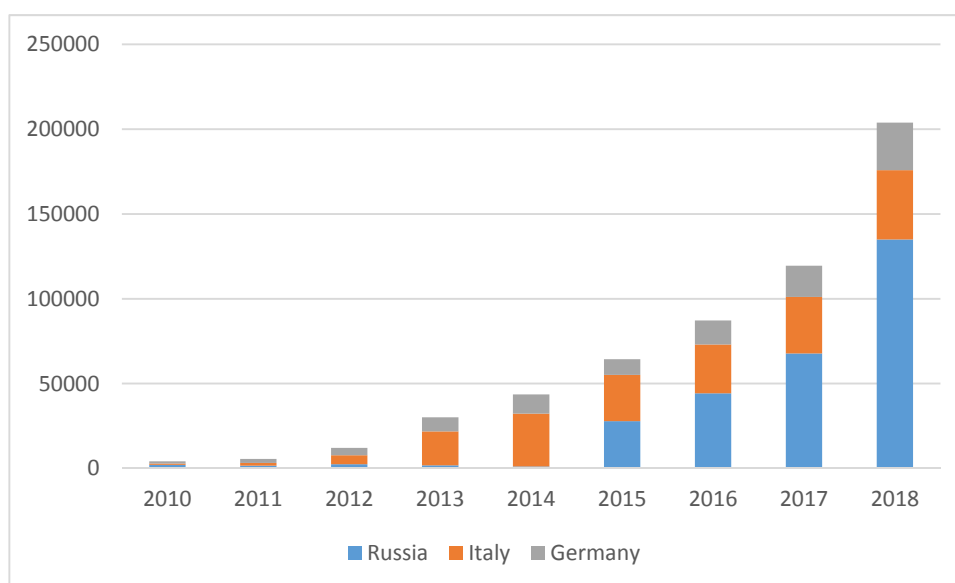


Fig. 3. 50–67 – “Textile, Footwear” exports from Armenia by partner countries, thousands US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 15.11.2019).

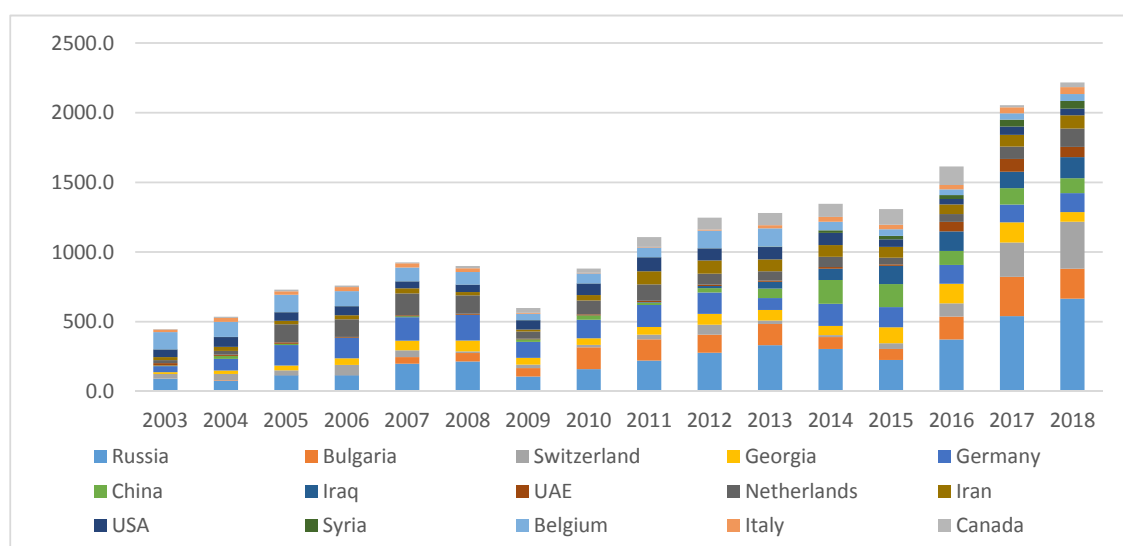


Fig. 4. Export structure of Armenia by country, million US dollars, 2003–2018

Source: World Integrated Trade Solution. URL: <https://wits.worldbank.org/> (accessed on 15.11.2019).

ogenous. We can say that foreign exchange rates have almost no impact on their export potential.

Given Armenia has been a member of the EAEU since 2015, it can be concluded that competitiveness of the tradable sector of the economy in the markets of Russia, Belarus, Kazakhstan and Kyrgyzstan is of primary importance for Armenia. As discussed in the literature review, the foreign exchange rate of the country has a significant impact on the external trade competitiveness, and in this respect, maintaining a competitive exchange rate against the overvalued currency is at the forefront.

From this point of view, it is important to study the dynamics of both nominal and real exchange rates of the EAEU member states during 2014–2018.

As we can see from Table 1, in the EAEU, the nominal exchange rates of the national currencies of Belarus and Kazakhstan have depreciated at a higher rate than Russian rouble; the opposite is observed in the cases of Kyrgyzstan and Armenia in 2018. Moreover, the Armenian dram has remained relatively stable compared to the national currencies of the other countries. Although the devaluation process in the other EAEU member countries was accompanied

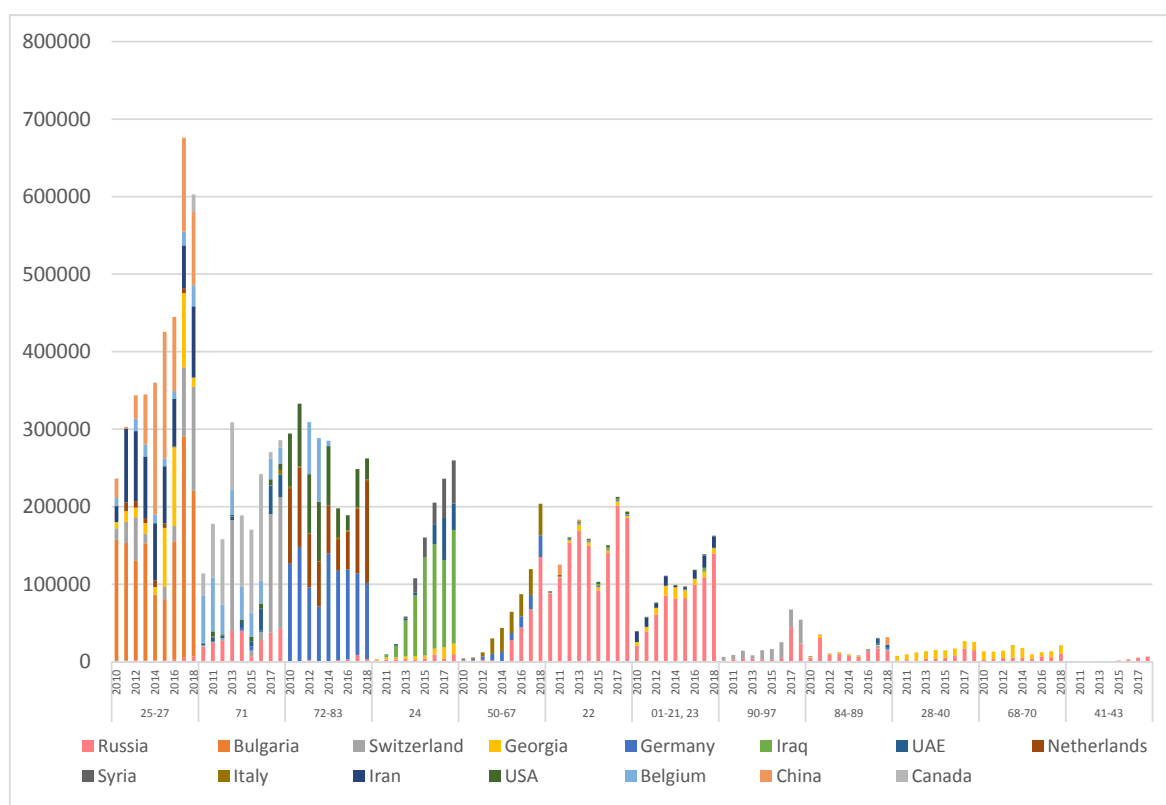


Fig. 5. Export structure of Armenia by products and countries, thousands US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 16.11.2019).

Note: 01–24 – Food, agricultural products; 25–27 – Minerals; 71 – Precious stones, metals; 72–83 – Metals and products; 24 – Cigarettes; 50–67 – Textile, footwear; 22 – Alcoholic, non-alcoholic beverages; 27 – Fuels; 90–97 – Other products; 84–89 – Vehicles, equipment; 28–40 – Chemicals, rubber; 68–70 – Ceramics, glass, products made of stone, gypsum; 41–43 – Fur, leather, products.

by higher inflation rates than in Armenia, it did not result in the neutralization of the devaluation results, evidenced by the dynamics of the real effective exchange rate (*Table 2*).

The real exchange rate is very important for the country's external competitiveness. *Table 2* clearly shows that given the real exchange rate devaluation in the economy of Kazakhstan, Belarus and Russia, accompanied by a real appreciation in Armenia, the tradable sector of the Armenian economy has somewhat lost its competitiveness in the EAEU, particularly in the Russian market. All of this significantly limits Armenia's export potential in the EAEU markets. Meanwhile, the membership to the EAEU significantly increases export opportunities for Armenia, especially given the size of the Russian economy.

Therefore, it is necessary to consider the export structure of Armenia to Russia and its dynamics. *Fig. 6* represents the structure of the Armenian exports

to the Russian Federation by major product groups during the last 9 years.

Until 2014, the traditional major export groups to Russia were alcoholic and non-alcoholic beverages, food and agricultural products, which accounted for 60–65% of total exports. However, by 2018, their constituted about 50%. At the same time, since 2014, a new, dynamically developing group of textiles and footwear has emerged in the export structure. In 2018, it already accounted for 23.7% of exports to Russia (150 million US dollars).

It is obvious that about 80% of Armenian exports to Russia are consumer goods affected by the foreign exchange rate.

Let us now consider the dynamics of the structure of the three major product groups presented. *Fig. 7* shows products with exports exceeding 3 million US dollars, which are included in the group of food, agricultural products. The export structure of this product group has quite interesting

Table 1

Dynamics of the nominal exchange rates of the EAEU member countries to the US Dollar, 2014–2018

Country / Year	2014	2015	2016	2017	2018	Devaluation, 2018/2014, %
Armenia	416	478	480	483	483	16.06
Belarus	1.02	1.59	1.99	1.93	2.04	100.00
Kazakhstan	179	222	342	326	345	92.73
Kyrgyzstan	54	64	70	69	69	28.35
Russia	38	61	67	58	63	65.72

Source: The World Bank database. URL: <https://data.worldbank.org/> (accessed on 18.11.2019).

Table 2

Dynamics of the real effective exchange rate of the EAEU member countries (2010=100), 2014–2018

Country / Year	2014	2015	2016	2017	2018	Change, 2018/2014, %
Armenia	102.5	108.4	107.6	104.0	104.5	2.0
Belarus	95.8	92.4	84.7	80.7	81.2	–14.6
Kazakhstan	97.9	102.7	76.4	81.9	80.2	–17.7
Kyrgyzstan	110	115.1	113.2	113.3	114.5	4.5
Russia	99.4	82.9	82.6	95.7	88.3	–11.1

Source: Eurasian Economic Commission. URL: <http://www.eurasiancommission.org> (accessed on 18.11.2019).

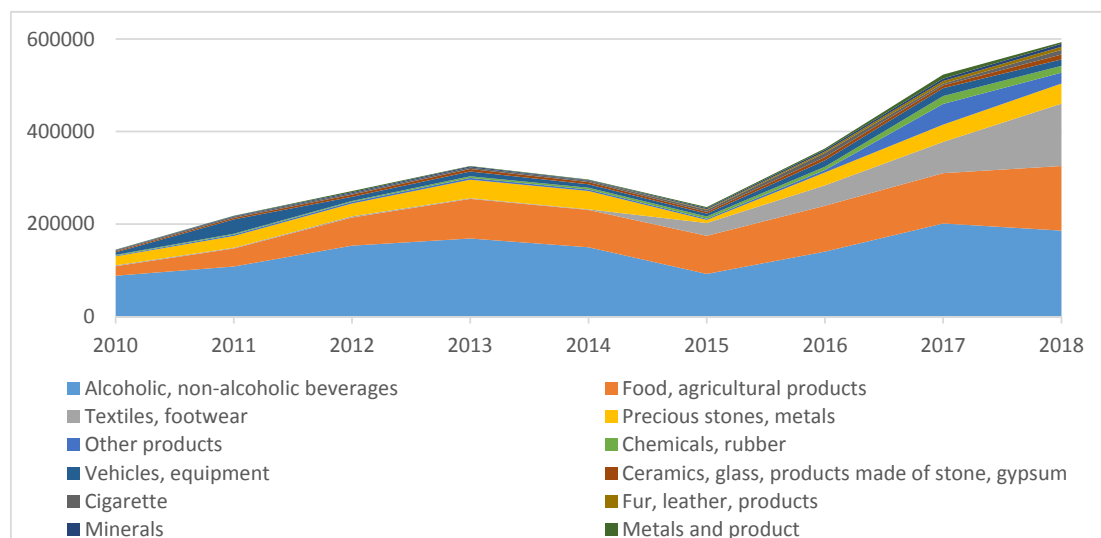


Fig. 6. The structure of Armenian export to Russia by major product groups, thousands US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 19.11.2019).

dynamics. In the pre-crisis year of 2013, the largest share in this product group belonged to the following products: fish, fresh fruits (apricots, cherries, peaches, etc.), crayfish and canned fruits. Together they accounted for 70–75% of export of the whole product group. However, in 2018, the first place by

its share in exports went to the tomato exports — 23 million US dollars against 270 thousand US dollars in 2013. We should also mention that such an increase in exports was due to the tense political situation in Russia. Moreover, a large part of tomato exports from Armenia is a re-export. The

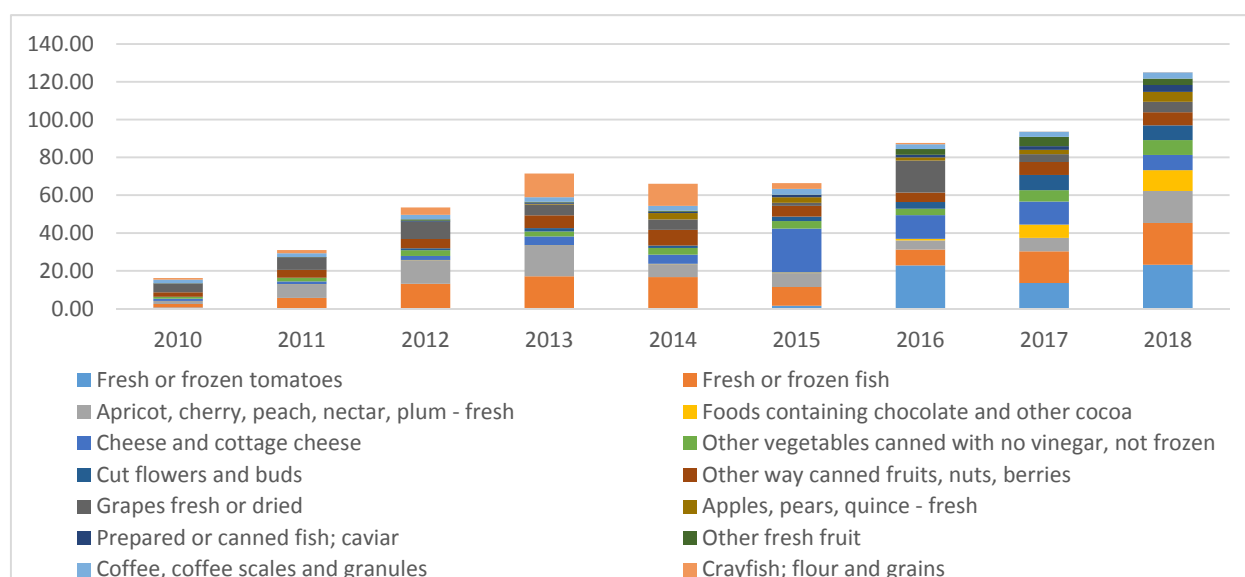


Fig. 7. “Food, agricultural products” export structure to Russia, million US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 19.11.2019).

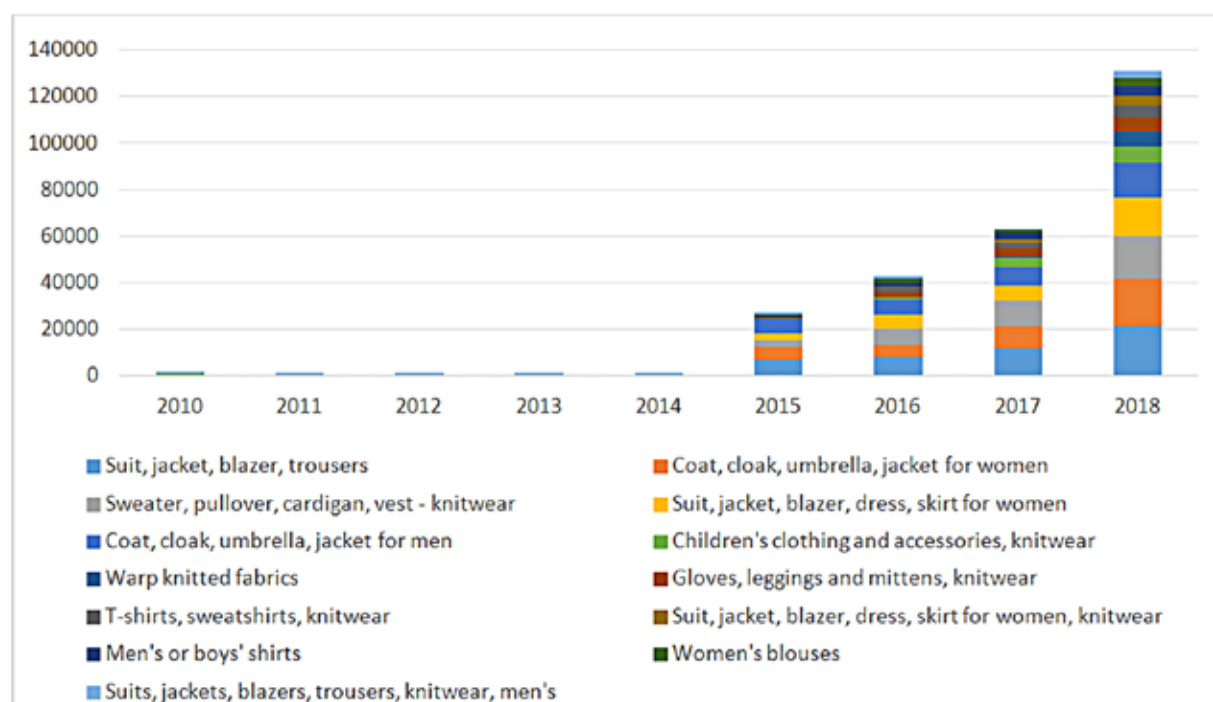


Fig. 8. “Textile and footwear” export structure to Russia, thousand US dollars, 2010–2018

Source: Customs Service of the Republic of Armenia. URL: <http://www.petekamutner.am/> (accessed on 19.11.2019).

result of the embargo policy in Russia is also, for example, a five-fold increase in cheese exports in 2015, which has been halved, although it remains at a high level. At the same time, there has been a sharp increase in the number of individual products over the years, which has not been maintained (e.g. grapes, potatoes, cabbage, etc.).

The next major traditional export product group is alcoholic and non-alcoholic beverages. The volumes of exports of this group are in stagnation (Fig. 6). Compared to 2013, the growth in 2018 was only 10% not considering inflation. The situation in this traditional export sector again indicates a certain loss of competitiveness of Armenian products in the Russian

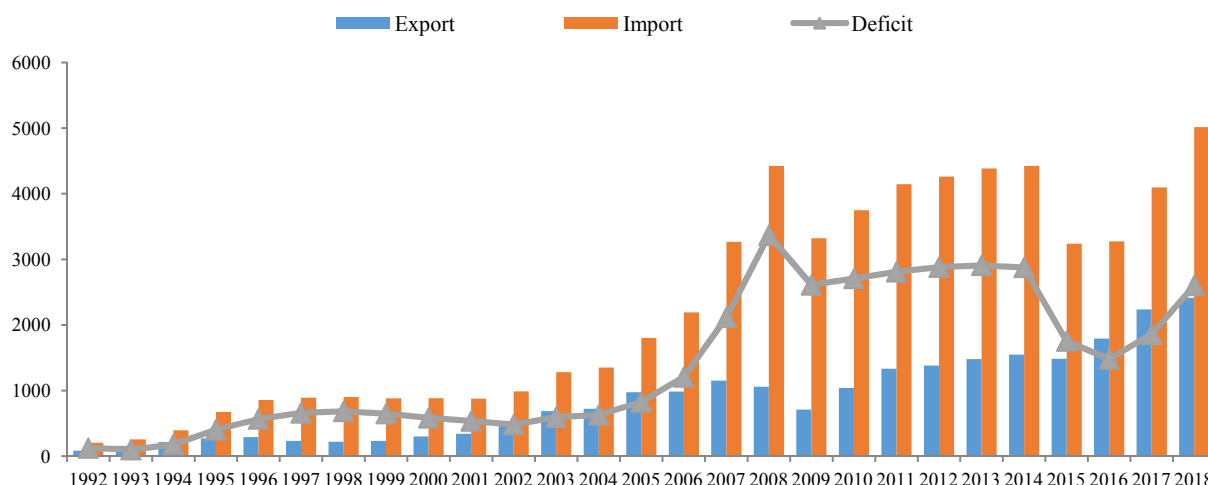


Fig. 9. Trade balance of Armenia, million US dollars, 2003–2018

Source: National statistical service of Armenia. URL: <http://www.armstat.am/> (accessed on 19.11.2019).

markets. Finally, there is the third-largest group — textiles and footwear — that started growing during the regional crisis (Fig. 8).

As we can see, textiles are the only sector that shows steady growth rates, again linked to Russia's embargo policy as well as the tense political environment with Turkey.

Since 2014–2015, due to the tense political relations between Russia, the US, the EU, the sanctions against Russia, as well as Russia's embargo policy, there was a shortage of supply in some Russian product markets.

At the same time, Armenia's membership in the EAEU since 2015, it has opened wide export opportunities for Armenian products. However, according to the analysis, the impact of the exchange rate on exports in Armenia is not determined. The contradictory results are primarily due to the structure of exports, which changed at different times due to factors not determined by market forces (e.g. political factors). As discussed above, the increase in Armenian exports to Russia is mainly due to the political reasons, which created supply shortage in some commodity markets. At the same time, Armenia fails to make the most of the available opportunities, taking open segments in the Russian markets, due to a non-competitive exchange rate. Among the EAEU member countries, Armenia and Kyrgyzstan are the only countries where the real effective exchange rate has even

appreciated. According to the literature and empirical review, the real exchange rate appreciation harms exports performance and it is important to maintain competitive exchange rates. The loss of competitiveness of the tradable sector of the Armenian economy on Russian commodity markets limits Armenian export potential, preventing it from showing higher and sustainable growth rates. What are the channels of such restriction?

As production costs in the national market are in Armenian drams, the overvalued exchange rate leads to a decrease in incentives for export growth in the tradable sector, while at the same time reducing the competitiveness of exporters in foreign markets. On the other hand, the overvalued exchange rate artificially lowers imports value, making it difficult for domestic producers to compete with foreign producers. This is evidenced by the growing deficit of trade balance despite the steady export growth rates (Fig. 9). Thus, the trade balance deficit is growing rapidly due to non-competitive exchange rate of Armenian dram, while imports grow faster due to low prices.

CONCLUSION

Since Armenia joined the EAEU, it has lost the ability to protect domestic producers from imports of economic union member countries using tariff or non-tariff methods, the only tool to protect domestic production is the exchange rate. A competitive

exchange rate can serve as a tool for import restriction (by price increase) and export subsidization (by price reduction).

Thus, only a competitive exchange rate can increase the competitiveness of the tradable sector of the Armenian economy in foreign, particularly Russian, markets, while serving as a tool to promote exports and protect domestic producers. Competitive exchange rates will create incentives for production

growth in the tradable sector of the economy due to high profitability.

Overall, Armenia should abandon the non-market mechanisms of ensuring exchange rate stability; the Central Bank should immediately shift to a free-floating exchange rate and non-intervention policy, which will significantly expand the presence of Armenian finished products in foreign markets, especially in the Russian Federation.

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