Analysis of integration groups’ trade globalization
(the Russian Federation and Eurasian Economic Union countries as an example)

Abstract — The post-Soviet space has already accumulated some experience of integration cooperation, which made the basis of the Eurasian Economic Union. The accession of Armenia and Kyrgyzstan led not only to the territorial expansion of the EEU, but also changed the system of economic relations, which could not but affect the positioning of the integration group in the system of the world economy as an integral economic entity. The Eurasian Economic Union is quite differentiated by the level of its member states. There is a sharp difference between the group from Kyrgyzstan, Armenia and Belarus and the Russia-Kazakhstan pair. The analysis confirms that Russia and Kazakhstan are still not only the engines of integration, but also its core, demonstrating trends similar to developed countries. This paper analyzes the EEC trade globalization in order to determine the status of its member countries in terms of foreign trade relations.

Keywords — integration groups, Eurasian Economic Union (EEU), trade globalization, foreign trade, trade turnover, trade balance

I. INTRODUCTION

Trade globalization, as part of the overall globalization process, has historically been the first manifestation of globalization, although it has not become its trigger.

In recent years, the Russian economic science has become interested in the analysis of integration processes, which are increasingly developing as the Eurasian Economic Union expands and the data are accumulated for such studies.

II. MATERIALS AND METHODS (MODEL)

The trade globalization is considered by us through indicators of total exports’ share in GDP, the share of trade in GDP, the average volume of exports and imports in GDP, the share of the balance of goods and services in GDP and the degree of import penetration to meet the domestic total demand.

The share of exports in GDP (export quota; propensity to export ratio) determines the domestic producers’ dependence on foreign markets and the orientation of domestic producers to the external or internal market of the country (integration group).

The share of trade turnover in GDP reflects the degree of foreign trade influence on the economy in the integration group, interpreted in the economic science and as the openness of the economy.

The share of the balance of goods and services in GDP, showing the contribution of exports to the development of the economic potential of countries, allows us to analyze the dynamics of exports and imports, its impact on the economic potential of the country or the integration group.

The import penetration rate to meet domestic total demand shows the degree of satisfaction of domestic demand with imported goods.
III. RESULTS AND DISCUSSION

A. Analysis of the trade flows in EEU countries

During the analyzed period, Belarus (+2.82%), Kazakhstan (-2.87%) and Russia (-0.55%) demonstrate the highest intensity of trade. The lowest export quota was observed in Armenia (+4.33%) and Kyrgyzstan (-4.33%).

TABLE 1. Share of EEU countries' exports in GDP, 2013-2017, %

| EEU Country | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|------|------|------|------|------|
| Armenia     | 10.16| 10.51| 11.69| 13.31| 14.49|
| Belarus     | 25.89| 25.35| 28.31| 25.59| 28.71|
| Kazakhstan  | 33.00| 32.66| 22.15| 23.89| 27.13|
| Kyrgyzstan  | 20.06| 16.62| 16.01| 16.56| 16.09|
| Russia      | 21.16| 22.10| 22.92| 20.25| 20.61|

Fig.1. Share of EEC countries’ exports in GDP, %

In general, the Eurasian Economic Union saw a slight decrease in the share of exports in GDP by 0.94%. The lowest value was observed in 2016 (20.69%), the highest – in 2014 (23.10%). The decline is due to falling exports in Russia and Kazakhstan. In Russia, this was a consequence of the ruble devaluation (the dollar rose to 78 rubles/USD) and the fall in oil prices as a result of the increase in shale oil production in the United States and a decrease in demand from China, despite the increase in exports of oil and petroleum products in real terms.

The value of the indicator in the range of 21-22% is typical for most major developed countries, where the relative ratio of external markets to domestic demand is lower [1].

World experience shows that the integration of countries with a small territory is higher on average than that of large countries.

TABLE 2. Share of trade turnover of the EEU countries in GDP, 2013-2017, %

| EEU Country | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|------|------|------|------|------|
| Armenia     | 40.06| 38.86| 32.82| 33.92| 38.69|
| Belarus     | 52.65| 48.55| 51.98| 51.35| 55.42|
| Kazakhstan  | 45.99| 44.55| 32.64| 35.19| 37.84|
| Kyrgyzstan  | 65.56| 57.79| 47.19| 51.48| 50.71|
| Russia      | 33.98| 34.88| 35.20| 33.36| 33.93|

Fig.2. Share of EEC trade turnover in GDP, in %

In EEU, the lowest value of the indicator was in 2016 (34.19%), the highest – in 2014 (36.31). As in the case of the share of exports, the decline is largely due to the fall in exports in Russia and Kazakhstan.

The average volume of exports and imports in GDP shows the weight of total foreign trade in the country's GDP.

TABLE 3. EEU average exports and imports in GDP, in %

| EEU Country | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|------|------|------|------|------|
| Armenia     | 20.03| 19.43| 16.41| 16.96| 19.35|
| Belarus     | 26.32| 24.27| 25.99| 25.67| 27.71|
| Kazakhstan  | 22.80| 22.28| 16.32| 17.60| 18.92|
| Kyrgyzstan  | 32.78| 28.90| 23.59| 25.74| 25.35|
| Russia      | 16.99| 17.44| 17.60| 16.68| 16.97|

As in the case of the country’s share of trade turnover in GDP, for large countries with a capacious domestic market, the value of the indicator in the world practice is in the range of up to 20% (for example, for OECD countries).
In EEU, the calculations show that the index is in the range of 17-18%, in line with global trends.

**TABLE 4. The weight of the balance of goods in the EEU countries' GDP, %**

| Country | 2013 | 2014 | 2015 | 2016 | 2017 |
|---------|------|------|------|------|------|
| Armenia | -20  | -18  | -9   | -7   | -10  |
| Belarus | -1   | 2    | 5    | 0    | 2    |
| Kazakhstan | 20  | 21   | 12   | 13   | 16   |
| Kyrgyzstan | -25 | -25  | -15  | -18  | -19  |
| Russia  | 8    | 9    | 11   | 7    | 7    |

The table shows that the negative balance is stable during the period 2013-2017. It is observed in two EEU countries – Armenia, Kyrgyzstan. Belarus showed such a figure in 2013, and was on the border in 2016. In Russia and Kazakhstan, as well as in EEC as a whole (Fig. 4), the trade balance remains positive, mainly due to the structure and volume of exports, which were undoubtedly influenced by the situation on the world commodity markets.

**B. Analysis of the trade balance**

The indicator of normalized trade balance of goods characterizes the country's trade transactions with foreign partners, adjusted in accordance with its own trade. "Propensity", "attraction" of the country to export brings the value of this indicator to +1, and the predominant tendency to import – to -1.

**TABLE 5. The "normalized" trade balance on goods in the EEC countries**

| EEC Country | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------|------|------|------|------|------|
| Armenia     | -0.49| -0.46| -0.29| -0.22| -0.25|
| Belarus     | -0.02| 0.044| 0.09 | 0    | 0.04 |
| Kazakhstan  | 0.45 | 0.47 | 0.36 | 0.36 | 0.43 |
| Kyrgyzstan  | -0.39| -0.43| -0.32| -0.36| -0.37|
| Russia      | 0.25 | 0.26 | 0.30 | 0.21 | 0.22 |

Traditional importers to EEU include Armenia and Kyrgyzstan, traditional exporters include Russia and Kazakhstan. Belarus has increased exports since 2014, since the initiation of sanctions against the Russian economy, and brought this figure to the level of positive values (with the exception for 2016).

**Fig.4. Share of the balance of EEU goods in GDP, in %**

**Fig.5. The normalized trade balance of EEU goods**

The indicators of the Eurasian Economic Union are in the range of 0.10 (2015) – 0.27 (2014), which corresponds to the level of developed economies.

**TABLE 6. The degree of import penetration into the EEU, %**

| EEC Country | 2013   | 2014   | 2015   | 2016   | 2017   |
|-------------|--------|--------|--------|--------|--------|
| Armenia     | 24.97% | 24.06% | 19.31% | 19.20% | 22.06% |
| Belarus     | 26.53% | 23.71% | 24.82% | 25.71% | 27.25% |
| Kazakhstan  | 15.81% | 15.01% | 11.88% | 12.93% | 12.82% |
| Kyrgyzstan  | 36.27% | 33.06% | 27.07% | 29.50% | 29.21% |
| Russia      | 13.99% | 14.09% | 13.74% | 14.12% | 14.37% |

As it follows from the calculations, the highest import penetration rate is observed in Kyrgyzstan (up to 36 units of imports per 100 units of domestic final demand in 2013), in Belarus (up to 27 units of imports per 100 units of domestic final demand in 2017) and Armenia (up to 25 units of imports per 100 units of domestic final demand in 2013). However, in Kyrgyzstan and Armenia there is a tendency to reduce dependence on imports; domestic demand begins to be satisfied by national goods.

Russia and Kazakhstan are less dependent on imports of goods, and Kazakhstan is also seeing a gradual decline in the share of imported goods (from 16% in 2013 to 13% in 2017).

**Fig.6. The degree of import penetration into the EEU, %**
In general, the maximum value of the indicator for the EEU is observed in 2017 (14.8%), the minimum – in 2015 (14.05%), which also corresponds to the level of developed countries.

IV. CONCLUSION

Thus, the analysis of a number of foreign trade indicators made it possible to identify several important trends for the assessment of prospects for the integration relations’ development. The EEU is a fairly differentiated group in terms of foreign trade relations’ development. There is a sharp difference between the group from Kyrgyzstan, Armenia and Belarus and the Russia-Kazakhstan pair. The analysis confirms that Russia and Kazakhstan are still not only the engines of integration, but also its core, demonstrating trends similar to developed countries.

However, the EEU is a relatively young integration formation, and the available data is not enough to draw conclusions about divergence or convergence of economic development. This analysis should be supplemented, first of all, by the study of mutual trade, as well as by consideration of the investment flows’ structure.

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