Theoretical foundations of regional monetary integration and the practice of forming its prerequisites in the EAEU

The article discusses the historical, political and fundamental economic prerequisites for the transition to monetary integration within the framework of the EAEU at the present stage of its development. The purpose of the study is to identify the readiness degree of the EAEU member countries transition to integration in the monetary sphere in modern conditions. The study makes it possible to substantiate the idea that a currency union in the framework of regional economic integration should be viewed as a natural result of significant volumes of goods, services and investments movement between member countries. The necessity and possibility of creating a currency union are determined and evaluated from the standpoint of the trade intensity and investment flows between the member countries of the Eurasian Economic Union. The methodology of the study is based on the key ideas of the “optimum currency areas” theory. The statistical data on foreign investments in the EAEU countries, on the share of gross volumes of mutual trade in the total volume of foreign trade in the EAEU as a whole and in the EAEU member states, are given. Analysis of mutual trade and investment indicators showed an insufficient level of economic convergence in the EAEU, assessed from the standpoint of the mutual trade intensity and mutual foreign direct investment intensity. At the moment, the volumes and dynamics of trade and investment flow between the EAEU member states do not cause an objective need for a transition to monetary cooperation at the level of a currency union. This research allows us to consider the problem of transition to monetary integration between the countries participating in the EAEU from the importance standpoint of economic prerequisites. The practical significance of the work lies in the substantiation of the objective prerequisites for the formation and creation of a monetary union in the course of regional integration processes development.

**Key words:** Currency union, optimal currency area, mutual trade intensity, mutual investment intensity, customs union.
В статье рассматриваются историко-политические и основополагающие экономические предпосылки перехода к валютной интеграции в рамках ЕАЭС на современном этапе его развития. Цель проведенного исследования – выявление степени готовности перехода стран-членов ЕАЭС к интеграции в валютной сфере в современных условиях. Проведенное в статье исследование позволяет обосновать идею о том, что валютный союз в рамках региональной экономической интеграции должен рассматриваться как закономерный результат значительных объемов перемещения между странами-участниками товаров, услуг и инвестиций. Необходимость и возможность создания валютного союза оценивается с позиций интенсивности товарных и инвестиционных потоков между странами-участниками Евразийского Союза. Методология проведенного исследования основана на ключевых идеях авторов теории оптимальных валютных зон. Приведены статистические данные об иностранных инвестициях, поступивших в страны ЕАЭС, об удельном весе валовых объемов взаимной торговли в общем объеме внешней торговли по ЕАЭС в целом и по государствам-членам ЕАЭС. Анализ показателей взаимной торговли и инвестиций показал недостаточный уровень экономического сближения стран-участниц ЕАЭС, оцениваемого с позиций интенсивности взаимной торговли и взаимных прямых иностранных инвестиций. На данный момент объёмы и динамика товарных и инвестиционных потоков между государствами-участниками ЕАЭС не вызывают объективной потребности к переходу к валютному союзу. Проведенное исследование позволяет рассмотреть проблему перехода к валютной интеграции между странами-участниками ЕАЭС с позиций значимости экономических предпосылок. Практическое значение работы заключается в обосновании объективных предпосылок формирования и создания валютного союза в ходе развития региональных интеграционных процессов.

Ключевые слова: Валютный союз, оптимальная валютная зона, интенсивность взаимной торговли, интенсивность взаимных инвестиций, таможенный союз.
dates for the transition to a new integration level, the hasty adoption of the most important economic decisions may become factors of a new systemic risk for economies EEU countries.

**Literature review.** The works of R. Mandell served as the basis for numerous studies in the field of monetary integration by representatives of various economic schools. Scientists have identified the most significant criteria, compliance with which is considered mandatory to maintain stability in the economies of the currency area countries. R. McKinnon as a necessary condition determined the mutual openness of the economies of the allied states (McKinnon, 1963: 717-725). P. Kenen added diversification of national economies. The scientist considered fiscal integration to be another measure of the readiness of national economies to join the optimal currency area (Kenen, 1969: 41-60). J.M. Fleming came to the conclusion that in the countries of the optimal currency area prices should be similar (Fleming, 1971: 467-488). J. Ingram as a prerequisite for the optimality of the currency area considered the integration of financial markets (Ingram, 1969: 95-100). According to R. Vobel, the important conditions for the formation of the currency area are the volatility of real exchange rates and the correlation of economic shocks (Vaubel, 1976: 429-470). The need for institutional and political integration within the framework of the monetary zone was substantiated in the research of M. Mussay (Mussa, 1997: 217–221), I. Ishiyama (Ishiyama, 1975: 344–383) and R. McKinnon (McKinnon, 1997: 227–229).

**Material and Methods.** This research aims to identify the objective economic prerequisites for monetary integration in the framework of the EAEU. The general methodological basis of the thesis is the general scientific methods of knowledge used for the theoretical analysis of economic phenomena.

The authors use the general scientific principles of universalism, comprehensiveness, system, communication, development, as well as the fundamental principles of economic science in the field of international economic relations at the global and regional level.

Specialized theoretical and methodological prerequisites were the conceptual provisions on international economic integration, the interaction of the Eurasian region states and the development of the Eurasian Economic Union. The study was carried out using both general theoretical and private economic methods (the unity of historical, logical and statistical methods).

The study used two complementary approaches. The first approach is analytical. It is based on identifying the contradiction between the requirements for building an optimal integration system in the Eurasian region and the emerging practice of its formation. The second approach is prognostic. It is based on the premise that overcoming this contradiction is possible due to the sustainable and progressive development of the Eurasian Economic Union, taking into account the political and economic realities of our time.

The information and empirical base of the study was compiled by materials of international and state organizations: The Statistical Service of the Eurasian Economic Commission, the Eurasian Development Bank, the central banks of the EAEU member countries, statistical bulletins and analytical reviews of the Eurasian Economic Commission, monographic literature of domestic and foreign scientists, empirical and analytical materials, hosted on the Internet.

**Results and Discussion.** The deepening of regional economic integration forms the prerequisites for the formation and development of monetary integration. At the same time, the policy of most countries, aimed at accelerating the integration processes, is due to the additional benefits from the formation of a single economic space. As it is known, R. Mandell, on the basis of the research, concluded that it is easier to withstand the “supply and demand shocks” within the framework of country associations that allow free movement of goods, labor and capital (Mundell, 1973: 114-132).

In the study of issues and problems of monetary integration within the framework of integration unions of states, the works of R. Mandell undoubtedly played an important role. He introduced the term “optimal currency area”. This term is currently used to designate a geographic region in which the single currency is used as a means of payment, or national currencies with mutual fixation of exchange rates. In this case, in relation to the currencies of third countries, the regime of joint navigation is applied.

R. Mandell insisted that a fixed exchange rate regime, which would reduce currency risks and reduce costs associated with the conversion of national currencies, is necessary to increase the mobility of production factors. At the same time, the scientist defined the unrestricted movement across the state borders of goods, labor, and financial resources as the main criterion for the formation of the currency zone (Mundell, 1961: 657-665).

The identification of the prerequisites for the integration of the EAEU countries in the monetary sphere and the possibility of its formation in the form of a monetary union is based on the theory of optimal
currency zones. In the framework of the traditional approach, the goal is to determine the economic basis, which allows to proceed to the development of monetary integration processes in the EAEU.

In our opinion, for the transition within the framework of the EAEU to the creation of mechanisms for monetary integration, it is necessary to take into account, first of all, the following two fundamental economic prerequisites:

- The intensity of mutual trade;
- The intensity of mutual investments.

The volume and intensity of mutual trade and mutual investment flows predetermine the significance of mutual monetary and financial flows, which in turn create or do not create the need for the development of monetary integration within the integration unions.

Considering the possibilities of the formation and development of integration in the monetary sphere within the EAEU, first of all it is necessary to dwell on the historical prerequisites for the creation of this integration association.

The most important historical prerequisite for economic cooperation of the Eurasian Economic Union member states is their entry into the unified national economic complex of the USSR in the past. After the collapse of the Soviet Union and the transformation of the former republics into independent states, national economies were created with their own national currencies. Each of the new states was looking for new ways to develop their economies, going far beyond the limits of the former Soviet economic space. This, accordingly, led to the rupture of the existing economic interrelations and disintegration processes.

A number of attempts by the former Soviet republics to restore economic cooperation were expressed in the emergence of various projects and agreements to create new unions and associations. Some of them remained at the level of projects, agreements or unstable groups (Central Asian Union, Customs Union of Belarus, Kazakhstan and Russia, Common Economic Space of Belarus, Kazakhstan, Russia and Ukraine). Some unions as economic associations today exist largely formally (CIS). The EurAsEC created in 2000 and quite successfully manifested itself was abolished in 2015 and was formed as Eurasian Economic Union.

The main achievement of the integration processes intensification between the post-Soviet republics was the organization of the Customs Union (CU) of Russia, Belarus and Kazakhstan in 2010. Within the CU, a number of goals set for them were achieved: customs duties and payments were abolished in the mutual trade of the participating countries, quality assessment and certification methods were unified, a single customs space was created, and a single database on some economic activity aspects was organized. Also, on the entire territory of the CU, the citizens equal rights of the participating countries were ensured in employment. The CU of the three states served as a serious economic basis for the creation of the EAEU. The agreement on its creation came into force on January 1, 2015. According to this agreement, within the territories of the EAEU member countries, freedom movement of goods, services, capital and labor, and a coordinated, unified policy in economic sectors are ensured. Within the framework of the EAEU, the Customs Union continues to be maintained, of which Armenia and Kyrgyzstan, which later joined the EAEU, are also participants. An important aspect of the Union’s activities has become the system of centralized distribution of customs duties paid when crossing the borders of the Common Economic Space. In addition, the CU has a mechanism for coordinated collection and distribution of indirect taxes.

At present, the further development of the EAEU raises many questions, the solution of which requires addressing both the theoretical foundations of the regional integration development and the practice of its implementation within the integration union. The most important problem in Union member countries is integration deepening of the national economies.

In this vein, scientists and practitioners have repeatedly raised and continue to discuss the possibilities and prospects for the integration of the Union member countries in the monetary and financial sphere. At the same time, a lot of attention is paid not only to the analysis of existing trade, financial and investment flows, but also to the use of national currencies in international settlements. A number of scientific studies, publications and statements in the media are devoted to assessing the possibilities of currency integration, the creation of a monetary union within the EAEU and the introduction of a single supranational currency.

A study of the world’s leading scientists’ publications in the regional monetary integration development, scientific works of authors from the EAEU countries, agreements and treaties between the EAEU member countries led to the conclusion that, for the creation and development of monetary integration, certain economic prerequisites are necessary. In our opinion, these include the above-indicated level of mutual trade intensity and mutual investments intensity in the EAEU. An analysis of
the current volume, the dynamics of mutual trade and investment flows development, and an assessment of the prospects for their growth allows us to draw conclusions about the possibilities for the development of monetary integration processes and the prospects for creating a currency union within the EAEU.

The intensity of mutual trade. Trade is a fundamental factor in creating and deepening economic integration. The increase in mutual trade accelerates the regional integration process of countries. Let’s analyze the volume of mutual trade of the countries participating in the EAEU (Table 1):

Table 1 – Data on the share of mutual trade gross volumes in the total volume of foreign trade for the EAEU as a whole and for the EAEU member states separately for 2011 and 2017

| State     | 2011 | 2017 |
|-----------|------|------|
|           | Share of trade with third countries | Share of mutual trade | Share of trade with third countries | Share of mutual trade |
| Armenia  | -    | -    | 70.4% | 29.6% |
| Belarus  | 53.6% | 46.4% | 47.5% | 52.5% |
| Kazakhstan | 81.8% | 18.2% | 77.2% | 22.8% |
| Kyrgyzstan | -    | -    | 61.6% | 38.4% |
| Russia   | 92.5% | 7.5%  | 91.0% | 9.0%  |
| CU / EAEU | 88.0% | 12.0% | 85.4% | 14.6% |

*Note: Compiled by the authors based on data provided in sources. (Eurasian Economic Commission, 2012: 13), (Eurasian Economic Commission, 2017: 3)

At the end of 2011, mutual trade with the member countries of the Customs Union accounted for most of the Belarus – 46.4%, for the Kazakhstan it was 18.2% and for the Russian Federation only 7.5% of foreign trade turnover. The overwhelming majority of the foreign trade of these three countries accounted for trade with third countries. So, in the total volume of the Russian Federation foreign trade, this part was 92.5%, for Kazakhstan – 81.8%, and for Belarus – 53.6%.

In 2017, compared with 2011, the share of mutual trade in the total volume of the EAEU foreign trade increased from 12.0% to 14.6%. The share of mutual trade in Belarus increased from 46.4% to 52.5%, in Kazakhstan from 18.2% to 22.8%, in the Russian Federation from 7.5% to 9%.

Consequently, according to the data for 2017, the Belarus is the most focused on the market of the Customs Union – 52.5% and Kyrgyzstan – 38.4%

In general, the share of mutual trade of the EAEU countries in 2017 amounted to 14.6%. Such a low figure is explained by the fact that Russia is the largest economy in the region, and the share of trade with third countries in this state is over 90%. The large size of the Russian economy does not allow it to direct the bulk of its foreign trade flows to the markets of its partner countries in the EAEU. The size of the other EAEU countries’ economies is many times smaller than the Russian economy. So, in 2017, Russia’s GDP, according to the Eurasian Economic Commission, amounted to 1,577.8 billion dollars US. Belarus’s GDP is 54.4 billion dollars US or 3.4% of the Russian Federation’s GDP, Kazakhstan – 159.4 billion dollars US (10.1%), Armenia – 11.5 billion dollars US (0.7%), Kyrgyzstan – 7.5 billion dollars US (0.4%) (Eurasian Economic Commission, 2018: 44).

An increase in the share of mutual trade can be called as a positive prerequisite. This result indicates that the EAEU member countries began to trade more among themselves. However, despite the growth over the past 10 years of the mutual trade indicator within the EAEU, the possibilities for its further growth in the near future are limited. The reasons for this situation lie in a huge difference in the size of the economy and markets of Russia and other Union members. Also, own trade and other economic interests of all member countries are of great importance.

As it is known, trade flows generate currency flows, financial flows and settlement operations. If mutual trade within an integration union occupies
less than 15%, as in the EEU, then, accordingly, it does not cause a strong need to regulate and facilitate monetary and financial flows and the development of monetary integration. The main part of the cash flows associated with foreign trade of the EAEU participants rushes beyond it. Transaction costs associated with their exchange of national currencies and lending of mutual trade are not so great as to seek to coordinate the exchange rates of national currencies and create a currency union.

By analyzing the structure and geography of exports and imports of the EAEU countries, we can make the following conclusions: firstly, the prevalence of raw materials is observed in foreign exports, while imports are saturated with end-use products; secondly, at present, the participating countries need markets outside the EAEU, as well as the procurement of high-tech goods, the production of which in the framework of the union is yet to be established. Dependence on external sales markets, as well as on the supply of products from third countries, not only does not contribute to the deepening of integration, but can have a restraining effect on the development of economic ties within the Eurasian Union.

The intensity of mutual investments. Let us analyze the foreign investment flows in the EAEU, including the volume of investments received in the countries from the Union member states and retired in the opposite direction, including foreign direct investment (FDI) – Table 2:

| State       | 2014    | 2015    | 2016    | 2017    |
|-------------|---------|---------|---------|---------|
| Armenia     | 403,9   | 178,3   | 338,1   | 249,8   |
| Belarus     | 1 862,0 | 618,0   | 1 246,9 | 1 276,4 |
| Kazakhstan  | 7 224,6 | 525,3   | 16 900,7| 4 654,2 |
| Kyrgyzstan  | 348,0   | 525,3   | 512,5   | 78,1    |
| Russia      | 22 031,3| 6 853,0 | 32 538,9| 28 557,5|

*Note: Compiled by the author based on the data provided in the source (Eurasian Economic Commission, 2017: 11-13).

For a more accurate study of the capital mobility within the community consider the proportion of foreign investment from the EEU countries.

From the second table data it can be seen that, as in the foreign trade of the EAEU countries, the overwhelming majority of investment flows falls on countries outside the EAEU. Mutual investment flows in their size are many times smaller than flows from other countries.

In Belarus the largest investments from non-community countries are investments from Germany, directed to the mining industry, and from France, attracted to the alcohol industry and telecommunications.

For the Kyrgyz Republic, attracting foreign investment is a priority for the country’s macroeconomic development. The main volume of investments in Kyrgyzstan comes from the EEU countries, about 45%.

The Russian Federation and the Republic of Kazakhstan have an insignificant share of foreign investments from the EEU countries. These countries are investing more in community countries than accepting.

Mutual investment flows are largely dependent on the GDP of each integration union country. Usually the volume of investment from large countries is greater. Therefore, for Russia and Kazakhstan, the significance of investments from other EAEU countries is low. These countries mainly receive investments from other countries of the world, mainly from the European Union and USA (table 3).
Table 3 – Direct investment flows by country for 2017*

| State       | FDI     | Including from EAEU | Including from CIS | Including from another countries |
|-------------|---------|---------------------|--------------------|----------------------------------|
| Kazakhstan  | 4 654,2 | 492,9               | 4,7                | 4 156,6                          |
| Russia      | 28 557,5| 91,3                | 7,1                | 28 459,1                         |

*Note: Compiled by the author on the basis of data presented in source (Eurasian Economic Commission, 2017: 11-13).

About 88-89% of investment flows go to Kazakhstan from other countries of the world, and 99% in Russia. Such high rates are explained by the fact that the economies of these countries are larger than others.

The distribution of mutual investments in the EAEU countries by industry provides an opportunity to assess the degree of interpenetration of capital within individual industries. More than 40% of mutual FDI of the studied countries falls on the fuel and energy complex. A significant share in mutual investments belongs to such industries as: non-ferrous metallurgy (about 12%), transport (approximately 9%), communications and information technology (8%). The shares of the agri-food complex and the financial sector are also significant: these industries account for 6% of the total mutual FDI.

At the same time, the sectoral focus of the EAEU countries investments differs significantly. Thus, more than 50% of Russia’s accumulated direct investment was directed to the fuel and energy complex, 13% to the non-ferrous metallurgy sector, 9% to the communications and information technologies sector. About 6% is in the financial sector, the same amount in transport.

The sectoral structure of the accumulated FDI of Belarus includes the fuel complex (more than 45%), machine building (23%), the agri-food sector (22%), transport (8%) and only slightly finance (about 1%).

The main share of external accumulated in the EAEU FDI of Kazakhstan accounts for agriculture and food (33%), transport (over 20%), tourism (approximately 17%), non-ferrous metallurgy (6%) and the chemical sector (6%).

Most of Armenia’s and Kyrgyz’s investments in the EAEU have been invested in the agro-industrial complex (Kuznetsov, Kvashnin, Sidorova, 2016: 68).

The increase in the share of mutual direct investments, as well as their sectoral structure in the EAEU member countries, confirm the interest of entrepreneurs in investing funds in certain sectors of the economy in order to expand business in the entire union. In addition, investments in the real sector stimulate economic growth, which has now acquired special significance for all EAEU countries.

An organization such as the Eurasian Development Bank (EDB) also contributes to the movement of capital on the EAEU territory. The EDB manages the funds of the Eurasian Foundation for Stabilization and Development (EFSD). Financial loans are the main form of providing resources to the fund, they are allocated only to the governments of the participating States. With the help of financial loans, anti-crisis programs are supported, the specific parameters of which are determined by the government of the borrowing country itself. Such programs should meet the goals of the EFSD and include measures to achieve macroeconomic stability, improve budget parameters, balance of payments, entrepreneurial climate, and develop financial and economic cooperation between the participating states.

The fund’s investment loans are allocated primarily to support large investment projects that are integrative in nature, for example, in the field of energy and infrastructure. Also, loans can be directed to support large national investment projects, they can be attracted both by the states themselves and by companies implementing interstate investment projects.

Conclusion

At the moment, the economic prerequisites for monetary and financial integration have not been created yet in the EAEU. There are problems in the economic integration development level of the participating countries, assessed by the intensity of mutual trade and investment flows. The share of mutual trade in the total volume of foreign trade in the EAEU is only 14.6% – this is a very low result. Also, there are no basic prerequisites for financial integration due to low rates of mutual investments. The problem is also in the direction of investments, the main investment flows are directed to the mining industry and metallurgy.
It should be noted that the EAEU has extensive programs that including international experience in solving the tasks of ensuring free movement of capital, organizing information exchange, regulating and developing the foreign exchange market, creating and implementing monetary policy, etc. But these tasks do not imply the creation of a single currency, they only contain landmarks that allow to take the first step to a currency union. Until the formation of a single financial market in 2025, the Eurasian Economic Commission does not see the point in switching to a single currency.

At the moment, the EAEU member countries should study and use the experience of using currency, settlement and payment mechanisms of other integration associations. Only after creating a reliable economic platform they can move on to the stage of forming a single currency area and the transition to a currency union.

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