



Regional Payment Systems of Asia, Africa, Latin America as a Tool for Regional Integration. Prospects for the Eurasian Economic Union

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Abstract

The article considers the mutual payment systems of regional associations in Asia, Africa and Latin America in line with the global trend to reduce the share of the US dollar in settlements among countries belonging to trade, regional or integration blocs. We took for the research the Regional Payment System SML (Sistema de Pagamentos em Moeda Local) of the MERCOSUR countries, the Regional Mutual Settlement System SUCRE (Sistema Único de Compensación Regional) of the ALBA countries, the Regional Clearing and Settlement System REPSS (Regional Payment and Settlement System) of the COMESA, Settlement system of the Asian Clearing Union.

It reveals features of these mutual payment systems, analyzes their contribution to the servicing of mutual trade turnover (noted such a feature of existing systems as their centric organization). The role of these systems in stimulating the use of national currencies by economic entities has been determined.

It is indicated that the dedollarisation processes are closely related to the development of cross-border payments and the achievement of certain agreements on the development of a common payment space among countries of the same region that have economic ties, first of all active mutual trade.

Based on the model and data on mutual trade turnover and the currency structure of settlements of the Eurasian Economic Union countries given Latin American, African and Asian experience, it forecasts an increase in the share of their national currencies in the servicing of mutual trade in goods and services.

Keywords: payments, cross-border settlements, common payment space, Eurasian Economic Union (EAEU), dedollarisation, national currencies

JEL: E42, G15, G23

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INTRODUCTION

The development of a common payment space and the reduction of the share of the US dollar in settlements between the countries of the Eurasian Economic Union (EAEU) are among the important objectives of this integration union.

In order to determine the prospects, we believe it would be useful to consider the experience of regional unions in Asia, Africa and Latin America. In these regions, their settlement systems exist and function with varying degrees of success between countries, including the use of common payment units.

The following regional settlement systems between countries and regional unions were chosen as the object of the study:

1. Regional Payment System SML (Sistema de Pagamentos em Moeda Local, SML) of MERCOSUR.
2. SUCRE (Sistema Único de Compensación Regional, Regional Unified Compensation System) of ALBA.
3. The Regional Payment and Settlement System (REPSS) of COMESA.
4. Asian Clearing Union settlement system.

The development of intra-regional payment systems by various integration groupings is based, firstly, on their desire to establish efficient settlement mechanisms to service cross-border financial flows between the member states of these groupings. Secondly, such payment systems often serve the purpose of promoting mutual trade between countries by providing economic agents with reliable means of making payments and settlements. Thirdly, the existence of common payment systems encourages the use of national currencies in settlements instead of third-country currencies.

Cross-border payments are by definition more complex than domestic payments. They involve more participants, time zones, jurisdictions and rules. The analysis of settlement systems in Asia, Africa and Latin America applied a systemic multi-factor approach to identify the relationships between the availability of payment infrastructure, mutual trade and the processes of increasing the share of national currencies between the states of these regions.

LITERATURE REVIEW

The organization of cross-border settlements is in the focus of experts from international financial organizations, central (national) banks and academia.

There is a large number of works that empirically assess the impact of existing regional payment associations and unions on the development of trade of their member countries, including the consequences of settlements in national currencies.

For example, J. Viner [Viner, 1950] already 70 years ago proposed to consider such an impact in the light of the concept of “trade creation and trade diversion”, in order to be able to assess the impact of increased trade between countries of the payment union and their settlements in national currencies on the welfare of partner countries. This concept was a little later supplemented by R.G. Lipsey [Lipsey, 1960].

In modern terms, it can be described as: “The creation of trade is the replacement of more expensive domestic production with cheaper imports from the partner country, and the diversion of trade is the replacement of cheaper imports from the outside world with more expensive imports from the partner” [Auguste, 1997, p. 53].

The most interesting model is the model of international settlements, built in the work of B.G. Auguste [Auguste, 1997], in which the author studied the impact of alternative payment mechanisms on trade and international reserves. One of his most interesting ideas is that, in payment unions, savings on lowering foreign exchange restrictions on intraregional trade have a positive “trade creation” effect, biased towards trade between soft currency

countries. Thus, it is recognized that the formation of a payments union between such countries can improve their economic situation by increasing the purchasing power of the member countries, which contributes to the fact that such a union leads to an increase in foreign trade for the union as a whole [Auguste, 1997, pp. 70–78].

The G20 has prioritized the expansion of cross-border payments. According to Bank for International Settlements (BIS) experts, faster, cheaper, more transparent and inclusive cross-border payment services bring broad benefits to citizens and economies around the world, supporting economic growth, international trade, global development and financial inclusion [BIS, 2020a, p. 1].

The task of developing cross-border payments in regional unions is closely linked to the task of reducing the dominant global settlement currency, the US dollar. IMF experts have noted a gradual dedollarisation in emerging markets, especially in Latin America, since the early 2000s [Catão et al., 2016, p. 49; García-Escribano et al., 2011]. Based on the point of view that regional payment mechanisms can be demanded by both market participants and states, at some point central banks start negotiating and preparing agreements to establish relations for cross-border payments [Deos et al., 2013].

There is an ongoing debate about the balance between reducing the share of the dollar and maintaining its use in a number of “high-dollarised” African economies. They are based on the characteristics of the region – a long period of colonialism and independence struggles, subsequent political and macroeconomic instability, lack of financial resources, etc. [Mecagni et al., 2015].

For a number of transition countries in Asia, experts point to underdeveloped banking systems, large inflows of foreign currency notes at an early stage of dollarization, and restrictions on convertibility of currencies as reasons for significant dollar use. When a foreign currency (the US dollar) is widely used as a means of exchange and unit of account, dollarisation can become sustainable [Kubo, 2017; Menon, 2007]. At the same time, the processes currently taking place in the financial and economic life of Asia and the rest of the world are largely related to the trade war that has been going on between the US and China for the past few years and threatens to spill over into finance, including settlements. The euro, Japanese yen and Chinese yuan are gradually replacing the dollar. More and more payment mechanisms independent of the US are emerging [Kadomtsev, 2019; Shvandar et al., 2018].

About 50% of world trade and about 40% of international payments are conducted in US dollars [BIS, 2020b]. However, instability and the pandemic are leading to significant shifts in various spheres of life, including international payments. “Trade shocks, pandemic-induced recession and political disharmony have renewed pressure to reduce the share of international payments in dollars” – that is how Bloomberg justified the fact that the euro has overtaken the dollar for the first time since February 2013 in the ranking of the most commonly used currencies for international payments. In October 2020, around 37.8% of monetary settlements worldwide were made in euros, down from 31.8% a year earlier. The US dollar’s share of international payments fell from 42% in December 2019 to 37.6% of all global transactions in October 2020.

On the other hand, the share of national currencies of the EAEU countries in mutual settlements for exports and imports is a respectable 73.9% (for 2019). At the same time, 72.4% of them are payments in Russian rubles. But this figure reflects, in fact, only Russia’s settlements with its EAEU partners. Settlements in other national currencies of EAEU countries are no more than 1–2% [Krasavina et al., 2019, p. 25]. According to the Eurasian Economic Commission, the US dollar dominates in the currency structure of payments between the EAEU countries (taking into account mutual settlements) and all countries of the world – 60.6% in export settlements and 36.5% in import settlements.

INTERNATIONAL EXPERIENCE

Payment systems are the oldest mechanism for financial cooperation in Latin America and the first step towards further monetary interaction [CEPAL, 2012].

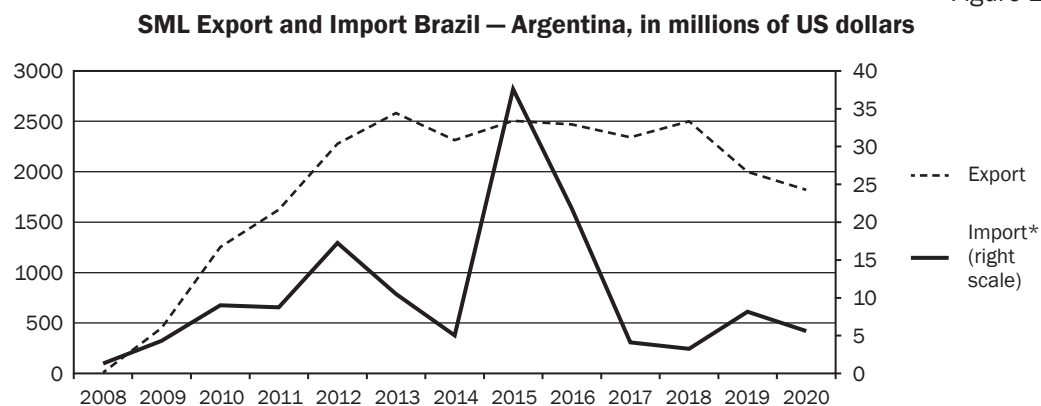
Brazil embarked on a plan to increase the use of its currency by creating a regional payment system (Sistema de Pagamentos em Moeda Local, SML) in 2009. It is an international payment system run by the Central Bank of Brazil in partnership with the central banks of Argentina, Uruguay and Paraguay. It allows payments to be made directly in national currencies without the need for an intermediate currency, the US dollar, and without the need for a foreign exchange contract. The use of this method of settlement solves the problems of servicing intra-regional trade in times of lack of liquidity due to limited access to foreign currency by participating countries [Schimanski et al., 2019]. However, its functioning is constrained by persisting currency restrictions and incomplete convertibility of member countries' currencies. Despite the small share of payments made under the system in total bilateral trade, Argentina and Brazil continue to use the SML. Uruguay joined the SML in 2015 and Paraguay in 2018, thus underlining the importance of promoting intraregional trade and the use of national currencies to reduce risks from external and macroeconomic shocks caused by the use of the US dollar [Lima et al., 2017, p. 8].

In practice, the SML operates as a bilateral settlement and clearing system whose main objectives are to reduce hard currency transfers; to enhance financial integration by increasing direct transactions; and to reduce the financial transaction costs of importers and exporters by eliminating foreign exchange transactions. The advantage of the system is that, for both importers and exporters, the payment amount is calculated in their own national currencies. According to Brazil's Central Bank, the SML lowers settlement barriers, allowing small and medium-sized enterprises to participate more actively in the region's export-import operations. The features of this settlement system are as follows. The SML is based on countries' existing central bank-run gross settlement systems, which have made it possible not to change their usual methods of settlement. Financial transactions through an SML may include payments for exports or imports, payments for transactions of various kinds, including social (e.g. pensions) and financial transfers (current transfers). The scope of transactions allowed in the SML is set by bilateral agreements between the countries participating in the system. The use of the system is not mandatory for foreign economic transactions and is left to the discretion of the parties involved in those transactions. Experts recommend considering this method of payment system integration as an example for the EAEU [Khmelevskaya, 2014, p. 15].

However, it is important to highlight the imbalance in the use of the SML in transactions between Brazil and other countries: in 2017, Brazil's exports to Argentina paid through the SML amounted to BRL 2.3 billion, imports from Argentina BRL 4.1 million (in 2019 – 2 billion and 8 million respectively), exports to Uruguay BRL 65.7 million and imports from Uruguay BRL 34.4 million (in 2019 – 159.3 million and 146.6 million respectively). Exports to Paraguay BRL 118.1 million and imports from Paraguay BRL 76.8 million (in 2019) [Kaltenbrunner et al., 2020, pp. 9–11]. This is due to the fact that Brazil has a trade surplus and using the SML receives a positive difference in settlements with partner countries without the need to use the dollar as a currency of settlement (Figure 1). At the same time, statistics also show an increase in the participation of other countries.

In 2009, the member countries of the ALBA bloc established the SUCRE (Sistema Único de Compensación Regional) regional clearing system. The SUCRE system consists of four components – the Regional Monetary Council, the Central Clearing House, the Reserve and Commercial Convergence Fund and a notional unit for non-cash settlement called the “sucre”. This is a payment mechanism for trade transactions that are sent by participants in foreign trade activities in national currencies and settled by the central banks in the common unit of account, the sucre.

Figure 1



* The value of imports is the sum of SML transactions, which is set in Argentinean pesos, converted to BRL using the SML rate¹.

Source: Brazilian Central Bank. Available at: <https://www.bcb.gov.br/estabilidadefinanceira/arsinfos>.

The decision to introduce the sucre was prompted by the need to deal with the aftermath of the 2008 financial crisis and the rejection of the dollar in payments between countries of the ALBA bloc. The sucre is determined on the basis of a basket of currencies of ALBA member countries, depending on the size of their economies. The regional currency board sets a ceiling on the issuance of the sucre for the year, based on requests from member countries, whose exchange or redemption for liquid negotiable assets is carried out at a rate adjusted by a common factor, taking into account the GDP dynamics, price index (consumer and producer) etc. of all member countries [Khmelevskaya, 2015, p. 96; Mishina et al., 2020].

Similar to the previous example of the SML settlement system, payments through SUCRE are also unequal. This is due to an imbalance in mutual trade between the countries: more than 83% of all transactions are between Ecuador² and Venezuela, about 10% are between Bolivia and Venezuela, and just over 5% are between Ecuador and Cuba. Thus the ALBA bloc countries have insufficient economic grounds in the form of mutual trade and economic relations to abandon the use of the dollar in their transactions and switch to a common unit of account in the sucre.

In addition, the SUCRE system has a number of vulnerabilities and risks associated with the issuance mechanism of the sucre, which made it open to misuse and diversion of funds through sham schemes by Ecuadorian and Venezuelan companies. Companies in Ecuador sent invoices to Venezuelan importers in U.S. dollars (Ecuador's national currency). The Venezuelan firms would then send the invoices to the Venezuelan central bank and transfer the bolivars (Venezuela's national currency). The Central Bank of Venezuela converted the bolivars into sucre and transferred the sucre to the Central Bank of Ecuador. The Central Bank of Ecuador converted the sucre into US dollars (Ecuador's national currency) and exporters received payments in dollars [Alvaro et al., 2014]. In 2014, the Ecuadorian and Venezuelan

¹ The SML rate is the value at which the fixed values of transactions processed in SML are converted into the currency of the party issuing the payment order. Two SML rates are published: Brazilian Central Bank Real/Peso (BCB); and peso/real from the Central Bank of the Argentine Republic (BCRA). The SML Real/Peso rate is the rate for converting Argentine pesos into reals used between the national authorized institutions and the Central Bank of Brazil, relating to Brazilian imports processed in the payment system. Similarly, the Peso/Real SML rate is the rate for transactions registered in Argentina.

² Ecuador exited ALBA in 2018. It is mentioned in the present article due to its share in trade and active position in the cross-country payments within ALBA.

authorities launched a joint investigation into abusive transactions in SUCRE, shell firms and money laundering.

Proper management of systemic risks through a comprehensive understanding of the threats faced by a virtual currency such as the sucre, and the implementation of a clear infrastructure to control vulnerabilities, would likely prevent such breaches. However, widespread use of the sucre as a single currency in ALBA is unlikely, as the transition to a single currency area requires a high level of integration, stable economic and financial condition, and a single economic policy [Osmolovets, 2018, p. 54].

Africa has a low share in world trade. Intraregional trade between countries on the African continent also remains lower than in other regions such as Asia, Europe, North America and others. As part of the continent's strategy to address this deficit, efforts to promote trade, de-dollarize and build confidence in local currencies have taken centre stage with the creation of regional economic communities [Mecagni et al., 2015]. The Common Market for Eastern and Southern Africa (COMESA) is one of them. To consolidate regional trade between these countries, COMESA has established a payment system called the Regional Payment and Settlement System (REPSS).

REPSS is a multilateral netting system with end-of-day settlement that provides central banks in COMESA member countries with a single gateway for payments in the region in a multi-currency environment. Importers and exporters can pay and receive payment for goods and services through a common platform, increasing intra-regional trade.

The central bank of each member state plays the role of a direct participant, which carries out financial transactions on behalf of commercial banks in its country. Central banks play the role of correspondent banks and also facilitate the transfer of funds between member states.

The regional clearing and settlement system REPSS uses euros and US dollars as clearing currencies in the COMESA clearing house. The main feature of the REPSS clearing and settlement system is that the conversion of national currencies into clearing currencies (dollars and euros) is not centralized at the system's clearing house, but by each member central bank at its own rates. The central banks are also responsible for the liquidity management arrangements in the system.

Despite the benefits of REPSS, its use remains low due to technological failures, stagnant economic growth, and technological features that have contributed to the proliferation of "illicit" cross-border retail payment systems [Ssonko, 2016]. The disadvantages of this system also include political and currency risks (settlement takes place one day after clearing) in the participating countries, as well as the absence of a common fund acting as a guarantor for the settlement transaction in case one of the central counterparty banks is short [Shchegoleva, 2017]. The establishment of the Asian Clearing Union (ACU) was initiated by the UN Economic and Social Commission for Asia and the Pacific (ESCAP) back in 1974, when countries in the region were facing economic difficulties. This union brought together the central banks of India, Iran, Nepal, Pakistan and Sri Lanka. Later, the banks of Bangladesh and Myanmar, Bhutan and Maldives joined the agreement.

ACU is a payment agreement in which participants settle intra-regional transactions between participating central banks on a net multilateral basis. Its main objectives are to facilitate payments between member countries, thereby saving on the use of foreign exchange reserves and transfer costs, and to promote trade and banking relationships between member countries.

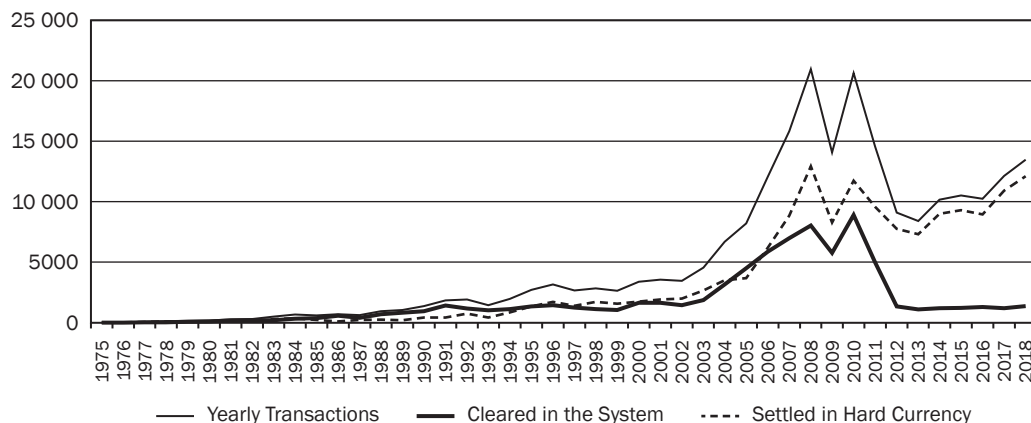
The main objectives of the creation and existence of the ACU were stated to be the expansion of exports and imports between members of the union, achieving greater trade liberalization between them, increasing the international competitiveness of member countries, and achieving a more balanced current account and creating the conditions for the

future convertibility of each of the member countries' currencies. In addition, it was believed that an increase in mutual settlements would facilitate closer regional economic co-operation, including monetary and financial co-operation.

The development of settlement within the ACU can be recognized as relatively successful. Over the life of the union, the annual volume of transactions (one-way plus accrued interest) has increased from \$0.44 million in 1975 to \$13,466.62 million in 2018 (Figure 2).

Figure 2

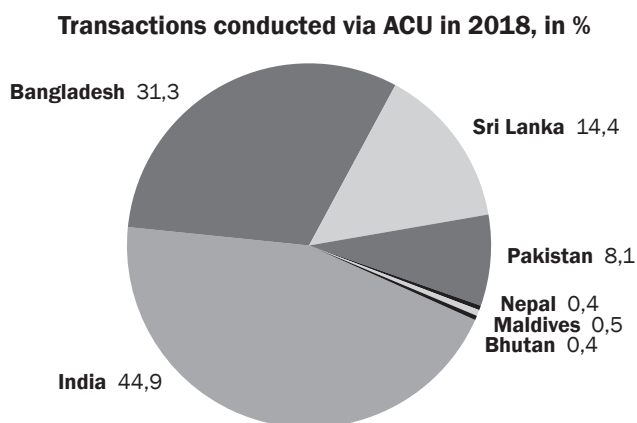
**Asian Clearing Union, transactions.
Disbursed through Mechanism F, in millions of US dollars**



Note: data indicate unilateral transactions and accrued interest. Data for 1975–1995 are converted from SDRs to US dollars. Data for 2009–2016 include transactions in ACU US dollars and ACU euro.
Source: ACU data. Available at: <https://www.asianclearingunion.org/Portals/0/Annual-Report/Annual%20Report%202018.pdf?ver=2020-01-15-122144-050>.

In 2018, total transactions routed through the ACU payment mechanism amounted to USD 26.9 trillion, an increase of USD 2.7 billion from a year earlier. The main transactions are conducted by only four countries, of which India is the leader, Bangladesh, Sri Lanka and Pakistan have relatively large shares, the shares of the remaining countries are insignificant (Figure 3).

Figure 3



Source: ACU data. Available at: <https://www.asianclearingunion.org/Portals/0/Annual-Report/Annual%20Report%202018.pdf?ver=2020-01-15-122144-050>.

The settlement rules are among the benefits of the ACU. Thus, member countries must pay their contributions in convertible currency within 4 working days of receipt of the notification of payment. It should be noted that since the existence of the ACU, there has not been a single default in meeting its obligations to settle the net position on time.

In addition, the ACU has introduced a multi-currency settlement system. Thus, at the 37th meeting in Myanmar (June 2008), ACU accounts were opened in “Asian monetary units”, consisting of ACU euros and dollars. Since then, participants have been authorized to settle transactions in euros or US dollars in the ACU mechanism. From 1 January 2020, the Japanese yen, equivalent in value to one yen, has been included as the third currency of the ACU.

The experience of payment and settlement systems in various regions of the world that we have studied shows that they are created to serve mutual trade and to increase the share of their own national currencies in the settlement of these transactions. The EAEU countries face similar challenges.

Forecast of national currencies share of the EAEU countries

Based on the data on payments and mutual trade turnover of the EAEU countries (Table 1), it is possible to forecast the dynamics of the share of their national currencies.

Table 1

Structure of mutual payments for exports and imports of goods and services of EAEU member states, in shares for the year

Currency	2015	2016	2017	2018	2019
in Armenian drams	0.000997	0.000868	0.001093	0.001211	0.000816
in Belarusian rubles	0.004643	0.003535	0.003984	0.002615	0.002919
In Kazakhstani tenges	0.010826	0.007336	0.009359	0.007081	0.010372
in Kyrgyz soms	0.000086	0.000300	0.000396	0.000545	0.000522
In Russian rubles	0.680042	0.741314	0.748869	0.727319	0.723771
In US dollars, euros	0.303403	0.246670	0.236270	0.261230	0.261598

Source: statistical tables. The official website of the Eurasian Economic Commission. Available at: http://www.eurasiancommission.org/ru/act/integr_i_makroec/dep_stat/fin_stat/stat_tables/Pages/default.aspx.

On the basis of these data, it is possible to construct a model showing the dynamics of increasing settlement in national currencies as a function of their mutual trade.

For the calculations for each country and for each year, data on this country’s exports to other EAEU countries are taken. For example, for the Republic of Belarus data on exports to the Republic of Armenia, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation are taken.

Let us assume that exports from Belarus are the weighted sum of exports to other EAEU countries. That is, if we assume that exports from the Republic of Belarus to the Republic of Belarus are zero:

$$export_{bel} = w_{arm} * exp_{arm} + w_{rus} * exp_{rus} + w_{kyr} * exp_{kyr} + w_{bel} * exp_{bel} + w_{kaz} * exp_{kaz}$$

$$w_{arm} + w_{rus} + w_{kyr} + w_{bel} + w_{kaz} = 1 \tag{1}$$

Calculate for each country the weighted sum of exports to other countries. We get v_{export} . A vector v_{import} is similarly defined.

Let’s determine a vector with the rate of mutual trade for each quarter (v_{q_i}) overall rate of growth of mutual trade compared to the previous year (v_{common}).

The model is then constructed as follows.

$$z = \alpha_1 * v_{export} + \alpha_2 * v_{import} + \sum_{i=1}^4 \alpha_i * v_{q_i} + \alpha_7 * v_{common} + v_{bias} \tag{2}$$

The parameters α_i and v_{bias} are configurable and are searched using the gradient descent method.

A multivariate logistic regression function was used to calculate the share of currencies.

$$\begin{cases} d_1 = \frac{e^{z_1}}{\sum_{i=1}^N e^{z_i}} \\ \dots \\ d_j = \frac{e^{z_j}}{\sum_{i=1}^N e^{z_i}} \\ \dots \\ d_6 = \frac{e^{z_6}}{\sum_{i=1}^N e^{z_i}} \end{cases} \tag{3}$$

Where d_j is the share of the j currency.

We use l2 as the loss function.

$$loss = \sum_{i=1}^N (d_i - d'_i)^2 \tag{4}$$

The optimal parameters were found by gradient descent for 2015–2019 data. In model l2 loss = 4.938341135130031e-06.

Applying the above data, we obtain the following figures (Table 2).

Table 2

**Forecast of increase in the share of national currencies
and decrease in the share of US dollar and euro
in mutual export and import settlements of the EAEU member states**

Currency	Share for 2019	Model prediction
Armenian Dram	0.000816	0.002399
Belarusian ruble	0.002919	0.001048
Kazakhstan tenge	0.010372	0.000006
Kyrgyz som	0.000522	0.008926
Russian ruble	0.723771	0.751115
The dollar and the euro	0.261598	0.23647

Note: the predicted decrease in the share of Kazakhstani tenge is due to some decrease in the volume of settlements in this currency in previous years.

Source: calculated by the authors.

The data in Table 2 indicate some potential to increase the share of national currencies of the EAEU countries in mutual settlements for exports and imports. At the same time, the main progress may be reached mainly by the Russian ruble (from 72 to 75%), which currently holds the leading position in such settlements.

To facilitate integration processes and increase the share of national currencies in settlements, the EAEU countries aim to develop a common payment space. As the experience of the regional associations studied by the authors of this paper shows, the existence of common payment and settlement mechanisms is a stimulating factor for increasing the use of national currencies.

It is worth noting that dedollarisation and increased use of national currencies in settlements in the EAEU countries are impossible without integration of their payment systems [Khomyakova, 2006]. Positive steps in this direction have been made by the Working Group on Coordination of Development of National Payment Systems, whose participants are representatives of central (national) banks of the EAEU countries. The main objective of the Working Group is to develop the EAEU payment space using new technologies and services in areas including financial technologies, fast payment systems, financial messages and settlements. Currently, the EAEU countries are moving towards splicing or organizing the interaction of individual payment segments (payment card systems, financial information transmission systems, etc.). However, the goal of creating a common payment system has not yet been declared by the governing bodies of the EAEU countries.

CONCLUSIONS

1. Analysis of the experience of payment systems in Asia, Africa and Latin America shows that they are sufficiently effective in servicing the activities of economic agents of these regional associations and in the development of mutual trade. Certain elements can be applied to the Eurasian space.

2. At the same time, the negative experiences and risks that have been identified in the functioning of the payment systems of regional unions in Asia, Africa and Latin America need to be taken into account. In particular, these are currency risks, risks of late settlement completion and risks associated with capital outflows.

3. The share of national currencies in the settlements of mutual trade between the EAEU countries is significant (over 70%). However, Russian rubles account for most of the share. The process of increasing the share of national currencies of the EAEU countries in mutual settlements is moving slowly. To a large extent, as practice and the authors' calculations show, it depends on the state of mutual trade of these countries.

4. Dedollarisation and the growth of payments in national currencies could be facilitated by an agreement between the central (national) banks of the EAEU countries, similar to the agreements concluded in the reviewed regional associations. Such an agreement should provide for the development of cross-country payments within the EAEU.

References

- Alvaro M., Lewis J.T. (2014). Who Needs Bitcoin? Venezuela Has Its 'Sucre'. *The Wall Street Journal*, Jan. 2. Available at: <https://www.wsj.com/articles/who-needs-bitcoin- venezuela-has-its-8216sucre8217-1388704841>.
- Auguste B.G. (1997). *The Economics of International Payments Unions and Clearing Houses. Theory and Measurement*. New York: Palgrave Macmillan.
- BIS (2020a). Enhancing cross-border payments: building blocks of a roadmap. Stage 2 report to G20, July. Available at: <https://www.bis.org/cpmi/publ/d193.pdf>.
- BIS (2020b). US dollar funding: an international perspective, June 2020. CGFS Papers No. 65. Available at: <https://www.bis.org/publ/cgfs65.pdf>.
- Catão Luis A.V., Terrones Marco E. (2016). Dollar Dependence. *Finance & Development*, vol. 53, no. 3.
- CEPAL (2012). *Economic Survey of Latin America and the Caribbean 2012: Policies in the face of international economic adversity*. Ed. by ECLAC, United Nations.
- Deos S.S., Mendonça A.R.R. et al. (2013). Financial cooperation in Mercosur and the financing of investment. *Nova Economia. Belo Horizonte*, vol. 23, no. 1, pp. 155–184, January-April. Available at: <https://www.scielo.br/pdf/neco/v23n1/06.pdf>.
- García-Escribano M., Sosa S. (2011). What is Driving Financial De-Dollarization in Latin America? IMF Working Paper No. 11/10. January.
- Kadomtsev A. (2019). Will Asia pioneer the “de-dollarization” process? *Modern diplomacy*. December, 17. Available at: <https://modern diplomacy.eu/2019/12/17/will-asia-pioneer-the-de-dollarization-process>.

Kaltenbrunner A. et al. (2020). Research Document on the Barriers to an Extension of the SML and Potential Research and Policy Agenda. Available at: https://business.leeds.ac.uk/downloads/download/232/research_and_policy_report_on_sml_barriers.

Khmelevskaya N.G. (2014). Integration Vector of Economic Policy: the Experience of MERCOSUR and the Pacific Alliance. *Rossiiskii vneshneekonomicheskij vestnik – Russian Foreign Economic Bulletin*, no. 10, pp. 11–20 (In Russ.).

Khmelevskaya N.G. (2015). Joint Mechanisms of Resistance to External Shocks of Latin America: Alternatives and Innovations. *Iberoamerikanskije tetradi – Iberoamerican Papers*, no. 3 (9), pp. 91–97. (In Russ.).

Khomyakova L.I. (2006). Unified Payment System of the Countries of the European Union. Brjansk: Lodomir Publ. 140 p. (In Russ.).

Krasavina L.N., Khomyakova L.I. (2019). Mutual Settlements in National Currencies of the Countries of the Eurasian Economic Union (EAEU) as a Factor in Enhancing Economic Interaction of National Economies. *Bankovskoe delo – Banking Business*, no. 10, pp. 24–29. (In Russ.).

Kubo K. (2017). Dollarization and De-dollarization in Transitional Economies of Southeast Asia: An Overview. In *Dollarization and De-dollarization in Transitional Economies of Southeast Asia*. IDE-JETRO Series. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-319-57768-5_1.

Lima U.M. et al. (2017). Use of National Currencies in International Settlements. Experience of the BRICS Countries. Joint Research Paper. Moscow: RISS.

Lipsey R.G. (1960). The Theory of Customs Unions: A General Survey. *The Economic Journal*, vol. 70, no. 279, pp. 496–513. DOI: <https://doi.org/10.2307/2228805>.

Mecagni M. et al. (2015). Dollarization in Sub-Saharan Africa: Experience and Lessons. Washington: International Monetary Fund, April.

Menon J. (2007). Dealing with Dollarization: What Options for the Transitional Economies of Southeast Asia? ADB Institute Discussion Paper no. 63, March.

Mishina V.Yu., Khomyakova L.I. (2020). Dedollarization and Settlements in National Currencies: Eurasian and Latin American Experience. *Voprosy ekonomiki*, no. 9, pp. 61–79 (In Russ.). DOI: <https://doi.org/10.32609/0042-8736-2020-9-61-79>.

Osmolovets S.S. (2018). Instruments for Ensuring Financial Stability in Regional Economic Unions (the case of Latin American countries). *Permskiy finansovyi zhurnal – Perm Financial Journal*, no. 2, pp. 47–58 (In Russ.).

Shchegoleva N.G. (2017). Retrospective of Payment Systems of Regional Unions of African and Latin American Countries: Experience for the EAEU. In *Russia: Trends and Development Prospects*. Yearbook. Resp. ed. V.I. Gerasimov. Moscow (In Russ.).

Schimanski S., Cardoso B.R. (2019). Regional Economic Integration: the contribution of the Local Currency Payment System (LPCS) to the deepening of Mercosur. XVII International Congress. 25–27 Setembro.

Shvandar K.V., Anisimova A.A., Yakovleva I.I. (2018). The Future of Monetary Integration in the EEU. *Digest Finance*, vol. 23, iss. 3, pp. 297–307. DOI: <https://doi.org/10.24891/df.23.3.297>.

Ssonko G.W. (2016). Lowering the cost of doing business in Africa: Leveraging the COMESA Regional Payments and Settlement System (REPSS). *Journal of Payments Strategy & Systems*, vol. 10, no. 2, pp. 205–214.

Viner J. (1950). The Customs Union Issue. New York: Carnegie Endowment for International Peace. 221 p.

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Региональные платежные системы Азии, Африки, Латинской Америки как инструмент региональной интеграции. Перспективы Евразийского экономического союза

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Аннотация

В статье рассматривается опыт использования систем взаиморасчетов региональных объединений Азии, Африки и Латинской Америки в русле общемировой тенденции снижения доли доллара США в расчетах между странами, входящими в торговые, региональные или интеграционные блоки. Примерами для исследования послужили Региональная платежная система SML (Sistema de Pagamentos em Moeda Local) стран МЕРКОСУР, Региональная система взаиморасчетов SUCRE (Sistema Único de Compensación Regional) стран блока АЛБА, Региональная клирингово-расчетная система REPSS (Regional Payment and Settlement System) группировки COMESA, Система расчетов Азиатского клирингового союза (Asian Clearing Union).

Выявлены особенности функционирования указанных систем взаиморасчетов, проанализирован их вклад в обслуживание взаимного товарооборота. Определена роль этих систем в стимулировании использования национальных валют субъектами хозяйствования.

Указано, что процессы дедолларизации тесно связаны с развитием трансграничных платежей и достижением определенных договоренностей по развитию платежного пространства между странами одного региона, имеющими экономические связи, прежде всего активную взаимную торговлю.

Для оценки перспектив дедолларизации и одновременного увеличения использования национальных валют стран ЕАЭС с учетом накопленного латиноамериканского, африканского и азиатского опыта авторами предложена модель, позволяющая на основе данных по взаимному товарообороту и валютной структуре расчетов стран ЕАЭС сделать прогноз доли их национальных валют в расчетах по взаимной торговле товарами и услугами.

Ключевые слова: платежи, платежная система, трансграничные расчеты, общее платежное пространство, Евразийский экономический союз (ЕАЭС), дедолларизация, национальные валюты

JEL: E42, G15, G23

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