B. D. Khusainov^{a)}, A. G. Shelomentsev^{b)}, S. V. Doroshenko^{b)}

^{a)} Institute of Economics of the Ministry of Education of the Republic of Kazakhstan ^{b)} Institute of Economics, Ural Branch of the RAS

MODERN INTEGRATED ASSOCIATIONS: COMPARATIVE ANALYSIS OF ECONOMIC GROWTH FACTORS¹

The article presents the results of a research aimed at the explanation and evaluation of the factors of economic growth of regional integrated associations and the national economies of their member countries. The authors determine that these factors are foreign trade, mutual balance of trade and domestic demand. The novelty of the methodology used by the authors is that, unlike the traditional method where the assessment of the growth factors of integrative associations and their member states is based on the comparison of two components: external and domestic demand, this method breaks external demand into two components: first part is net exports (the difference between export and import, which is the component of aggregate demand) of goods within the integrative association, i.e., net exports of mutual trade; the second is net exports of foreign trade beyond the integrative association. The target of the research included seven most famous regional integrative associations that emerged at different times and are currently undergoing different stages in their development: the European Union, the North American Free Trade Area, the Association of Southeast Asian Nations, the South American Common Market, Asia-Pacific Economic *Cooperation, as well as members of Eurasian integration — the Customs Union and the Common Economic* Space, which on January 1, 2015 transformed into the Eurasian Economic Union. The authors come to the conclusion that integration develops successfully only in the context of the growth of the national economies of the member countries. The economies undergoing a crisis have to invest more efforts into dealing with domestic problems than in solving the issues related to integration.

Keywords: globalization, regionalization, integration associations, economic growth, external and domestic demand, net exports of mutual and foreign trade

Introduction

In today's world, the relationship between globalization and regional integration becomes one of the topical issues. Globalization, representing the diverse development of the world economy, acts as a catalyst for the establishment of new integrative unions and associations. At the same time, regional integration is a complex phenomenon, which largely depends on the characteristics of the member states; there are no universal rules that determine the policy, so the policy is actually based on international agreements.

The contradictory nature of the interaction between globalization and integration processes shows that the establishment of integrative structures is, on the one hand, a natural reaction to the negative effects of globalization, which are significantly more severe in the context of the instability of the global economic system, and, on the other hand, represent the manifestation of the dominant trend of the creation of global partnership institutions.

In addition, the history of development of the Western Europe countries clearly shows that integration enhances the competitiveness of national economies. In this case, the creation of integrative associations helps developing countries to preserve their sovereignty in their opposition to major multinational and national economic structures (for more information, see [16, 12–19; p. 80–109]). Thus, it is an indisputable that the forms of economic integration provide special means of resolving the contradictions of globalization in the context of a fierce struggle for world markets, sources of raw materials and energy, new technologies, investments, etc.

It is common knowledge that at the turn of the 1980 and 1990s, globalization caused two interrelated phenomena: the decline of the role of the nation-state and simultaneous emergence of

¹ The translation has been made from the Russian version of the Journal of Economy of Region, No 1, 2015, with the consent of the authors.

Original Russian Text © Khusainov B. D., Shelomentsev A. G., Doroshenko S. V. © The Journal "Economy of Region", 2015.

regional associations (unions). In fact, today's world is a complex of regional blocs. In Western Europe, North and South America, Southeast Asia, the former Soviet Union and Africa, there are large regional associations that cooperate due to their common economic and geopolitical interests. They were established for different reasons and with different goals, but in the context of the world economy's globalization they are all aimed at the protection of the national interests of the group of nation states that they represent. And this is the source of their strength, which is incomparably more significant than that of a single country.

In this context, the prosperity of the state, its role and place to a certain extent depend on the ability to engage in regional integrative associations and interact effectively, while at the same time defending national interests, which is an extremely sophisticated task.

In the context of the mentioned above, it is important to evaluate the factors of economic growth of the integrative associations and national economies of the participating countries. There is a fairly wide range of studies aimed at identifying the effects of the participation of individual countries in interstate associations. However, there are hardly any research works that evaluate the role of such factors of economic growth as foreign and mutual trade and domestic demand, and these issues have become the topic of the present research.

Methodology and Information Base of the Research

Economic growth is one of the crucial issues in economic theory and practice, and it is a subject of ongoing discussion. This is evidenced by numerous foreign studies, including the famous Cambridge debate on theory of capital, which in fact covered a much wider range of issues of both methodological and applied, economic/mathematical nature. This debate, "having started in the 1950s and continuing for a quarter of a century, drew into its orbit many scientists and economists, including the most prominent, and went far beyond the limits of the discussion of the problem of capital, which has, however, remained central to them" [13, p. 29]. Without going into details of the discussion (that would be beyond the scope of this study), we can mention that it was carried out by two groups of scientists, one of the British Cambridge, represented by the works of J. Robinson, D. Champernowne, P. Sraffa, N. Kaldor, J. Harcourt, L. Pasinetti and several other theorists, as well as by the American Cambridge University, including Nobel laureates Paul Samuelson, R. Solow, F. Modigliani, J. Stiglitz and other scholars.

It is also especially important to explain the reasons for the growth of real output in the long run, analyze various scenarios and identify the key factors that affect the growth. The solution of these problems will allow us to explain the reasons for the differences in living standards between countries and identify ways to bridge the gaps. Chronologically, modern growth theories first emerged in the work by F. Ramsey [22], which, according to Robert Barro, "was several decades ahead of its time" [19, p. 10]. F. Ramsey's analysis of the problem of intertemporal optimization of households after some time gave impact not only to the theory of economic growth, but also to the theory of cycles in business, consumption and prices. However, the most complete form of the neoclassical growth model is found in the works of R. Solow [10, 23, 24] and T. Swan [25] (hereinafter the Solow model). A considerable part of modern growth theories is aimed at endogenization of the determinants that are set exogenously in the Solow model of economic growth, and these theories represent one of the most promising trends in the development of economic science. It should be noted that Russian researchers focus their examination on the role of technological progress as one of the growth factors, as it can be seen by the emergence of a number of concepts for long-term economic development and forecasting developed in Russia. They are based on different theoretical assumptions: first, this is the methodology of multivariate analysis of the dynamics of scientific and technical progress (STP) as a long-term development level of social technologies (Lvov DS [7]) developed as early as the 1980s; secondly, the proposed sequence of the stages of STP (A. A. Anchishkin [1]); third, the concept of technological waves (S. Yu. Glaziyev [4, 5]); fourthly, the provisions of evolutionary economic theory [6, 8, 17].

However, at this stage of the research the contribution of the growth factors is usually estimated without the use of complex economic and mathematical tools. The impact of the factors of economic growth has been traditionally assessed based on the comparison of external and domestic demand.²

² Note: external demand is the demand from foreign markets, i.e., foreign trade; domestic demand includes the consumption of private and public sector and the gross investments.

The novelty of our methodology is that, unlike the traditional method of growth factors assessment in respect of integrative associations and their member states, this method breaks external demand into two components:

a) net exports (the difference between exports and imports, which is a component of aggregate demand) of goods within the integrative association, i.e., net exports of mutual trade;

b) net export of foreign trade in goods to the countries beyond the integrated association.

Thus, the authors assessed the contribution of these two factors into the economic growth of seven integration structures, including the Customs Union and the Common Economic Space (CU / CES), as well as their member states. This evaluation was performed with the use of the method which essentially consists of the following [26, p. 74]: The contribution of net exports of mutual and foreign trade (net of mutual trade) to the real gross domestic product (GDP) is calculated as the average of the changes in net exports of mutual and foreign trade over a definite period divided by the value of the real GDP in the initial year of such period. The contribution of domestic demand to the growth rate of the real GDP is calculated as the difference between the annual average real GDP growth and the contribution of real net exports.

For the purposes of accuracy of comparative analysis for the period of 2002–2013, the values of all the parameters were translated into comparable prices of 2005 in dollar equivalent. Moreover, the value of the net exports of goods is adjusted in the way that it is compatible with the purchasing power indices of exports. Moreover, all the parameters used in this study were taken from the same source: UNCTAD statistics database, the statistics database of the United Nations Conference on Trade and Development (www.unctad.org)³.

Comparative Analysis of Integrated Associations Development

There are currently over 200 integrated associations. They have economic relationships of different strength, as well as different levels of integration of the markets of capital, goods, services and labor. Also, many countries are members of several regional and international organizations at the same time. Admittedly, the most famous integrative associations formations are the European Union (EU), the North American Free Trade Agreement (NAFTA), the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC), the Southern Common Market (Mercosur). These also include the Customs Union and the Common Economic Space (CU / CES), which on January 1, 2015 were transformed into the Eurasian Economic Community. These regional integrative associations emerged at different times and are undergoing different stages of their development.

It is obvious that the EU is currently the most successful and advanced form of regionalism, which is reflected in the strengthening of internal connections not only in the economic sphere, but also in respect of institutions and policies. However, there have been a number of serious problems in the activity of the EU in recent years, and not all EU initiatives have been effective. Suffice it to mention the failure of the Lisbon strategy of the EU development for 2000–2010, which, among other purposes, "provided for technological breakthrough of the EU countries on the world stage, the desire to turn it into the most competitive and dynamic "knowledge-based economic area in the world"". However, this did not happen. At the same time, today's challenges, in particular, the lingering crisis, are well known, and there is no need to list them here [see 2, 3, 18].

It is remarkable that in Asia and Europe the establishment of integrative associations was preceded by a crisis in the system of international economic relations or a shock experienced by this system. Thus, the implementation of the idea of a united Europe began after the Second World War. The end of the Cold War in the late 1980s of the twentieth century contributed to the emergence of the APEC Forum and the ASEAN Regional Forum. The breakup of the Soviet Union in 1991 led to the establishment of the CIS. The Eurasian Economic Community emerged after the financial crisis in Asia and in Russia in 1998. The armed conflict between Georgia and South Ossetia in August 2008 accelerated the establishment of the Customs Union between Belarus, Kazakhstan and Russia. The establishment of the Common Economic Space also proceeded rapidly after the global financial and

³ The defined database is based on the information from the following sources: Sources: UNCTAD secretariat calculations, based on UN DESA Statistics Division, Yearbook of International Trade Statistics; UN DESA Statistics Division, Monthly Bulletin of Statistics; UN DESA Statistics Division, UN COMTRADE; IMF, International Financial Statistics; IMF, Direction of Trade Statistics; IMF, Balance of Payments Statistics; WTO, Statistics Database; Eurostat, Comext; World Bank, World Development Indicators; OECD, OECD.Stat Extracts; OPEC, Annual Statistical Bulletin; Economist Intelligence Unit, Country Data; regional and national sources.

Regional integrated Associations in Figures, 2015											
	Regional Integrative Associations										
Indicators	EU (28)*	Mercosur (6)	NAFTA (3)	ASEAN (10)	Customs Union/ Common Economic Space (3)						
Population, mln people	501,701	293,094	481,360	617,660	168,632						
GDP, in constant prices of 2005, USD bn	14,628.2	1,701.3	16,944.5	1,393.0	798.4						
GDP per capita, in constant dollars, 2005	28,587	5,805	35,201	2,255	5,886						
Openness of the foreign trade in respect of export of goods, %	33.5	13.9	12.2	52.8	38.2						
Openness of the foreign trade in respect of import of goods, %	32.9	12.3	15.7	48.0	32.2						

Regional Integrated Associations in Figures, 2013

Source: compiled by the authors on the basis of the data of the UNCTAD statistics database (www.unctad.org).

Note: * The number in brackets indicates the quantity of countries included in the regional association as of 2013.

economic crisis of 2008–2009. These historical facts, in their chronological order, do not mean that these associations have emerged by mere accident. On the contrary, in almost all the cases, from the establishment of the foundations of united Europe to the creation of the CU with the participation of Belarus, Kazakhstan and Russia, the integration process began much earlier, as it can be evidenced by the corresponding events. The formation of regional integrative associations is not related directly to the above crises and shock phenomena, but there is undoubtedly an implied causal relationship between them [see 9, 12, 14, 15].

It is certainly challenging to compare integrative associations due to the very different range of their economies, as well as to significant differences and asymmetries in the levels of development of the member countries. Nevertheless, it seems that the comparative analysis of the key macroeconomic parameters of integrative associations allows us to identify the main trends of their development in the global economy, as well as to understand how the integration contributes to the development of trade and economic growth, especially those of the member states.

Among the five selected regional entities (Table 1), the most representative in terms of population is ASEAN, which is home to 8.6 % of the world's population. These are the countries where about 2.5 % of the global GDP is generated (in constant 2005 prices).

The countries of EU-28, which account for 7.3 % of the world's population, in 2013 produced 27.1 % of the gross world product (GWP). It is noteworthy that in 1990 the 27 countries that are now member states of the EU produced one-third (33.1 %) of the global gross domestic product. EU was legally established by the Maastricht Treaty in 1992, but even then the EU's share, which included 15 countries, the IMP (in constant dollars. 2005) was only slightly lower than the current value. It seems paradoxical at first sight: the number of EU member states has more than doubled, while EU's share in the global production has declined. In fact, it is easy to explain this situation: over the past twenty years, a significant share of the IMP has shifted to developing countries, whose share has increased by more than a half during this period, from 17.3 % to 30.2 %.

On the size of economy, the leader among the five regional associations is definitely NAFTA, where 30.2 % of the GWP is generated (in 1990, the value was 29.8 %), and which is home to 6.7 % of the world's population. Over the recent period of nearly a quarter of a century Mercosur, which emerged in its current membership of six countries (Argentina, Bolivia, Brazil, Venezuela, Paraguay and Uruguay) in 1990, increased its share in the GWP from 2.4 to 3.0 percent. At the same time, in respect of population this is the smallest regional association among the five analyzed here (4.0 % of the world population). The highest average value of gross domestic product (GDP) per capita is observed in the NAFTA countries. These are followed by EU-28, Customs Union/Common Economic Space, Mercosur and ASEAN

Evaluation of the contribution of the regional entities growth factors

First of all, let's make a comment about the impact of foreign trade on economic growth. As a rule, foreign trade stimulates economic growth and ultimately boosts public welfare and, consequently, reduces the level of poverty. Economic studies (see, for instance, [17]) have proved that,

Table 1

theoretically, the role of trade for the growth of welfare has to be positive in the absence of market failures and any distortions caused by the economic policy. If failures and distortions occur, the impact of trade on the economic growth can be either positive or negative. Despite the fact that economic research has accumulated some empirical experience of model building, which is reviewed in [18, 19], there are certain conceptual and technical difficulties that prevent the establishment of the links between trade and economic growth. To a certain extent, this is caused by the exceptions to the general rules [21].

First, participation in foreign trade is associated with certain costs. In particular, it makes the country vulnerable to the economic situation in the global markets and the impact of the protectionist measures taken by its trade partners. And this vulnerability is particularly acute when the export and / or import of the country mostly consists of raw materials, as the raw materials prices are more volatile than those for manufactured goods. Remarkable examples are the economy of Kazakhstan, Russia, and a number of Latin American countries, including the members of Mercosur.

Secondly, in the case of market failures or distortions caused by the economic policy, trade can make a negative impact on economic growth, which will ultimately affect the public welfare. For example, if trade between the two economies is caused by an artificial specialization and conducted without due consideration for the comparative advantages of these countries, it can slow down the economic growth in both countries. It is also detrimental when export volume is increased by lowering export prices, which could lead to "impoverishing growth", which means that the expansion of production is accompanied by a decline in social welfare. A good example is the export from the former Soviet republics, such as export of copper from Kazakhstan, which was managed from the so-called Center, i.e., the All-Union Ministry of Nonferrous Metallurgy. In particular, copper, which in 1990 accounted for a quarter of the export potential of the country (which amounted to USD 3.2 bn), was exported for the very low domestic prices and sold abroad at world prices, which were significantly higher than the domestic prices. As a result, the export of copper from Kazakhstan did not have a positive impact on the economic growth and the growth of social welfare in the country. Another example is cotton export from Uzbekistan. And it is possible to list a lot of examples of such experiments.

Table 2

o													
Indicators	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012			
	2003	APEC											
GDP	2.02	2.87	3.78	4.05	3.88	3.83	2.51	-0.19	1.39	3.73			
Net Export of Mutual Trade	4.97 ¹	4.40	3.97	5.36	6.79	7.02	7.27	7.46	7.75	8.19			
Net export to the rest of the world ²	-0.48	-0.49	-0.46	-0.60	-0.59	-0.17	-0.06	0.10	0.30	-0.13			
Domestic Demand	-2.47	-1.05	0.27	-0.71	-2.33	-3.02	-4.71	-7.76	-6.66	-4.33			
					EC	-27							
GDP	1.66	1.38	2.03	2.39	2.77	3.28	1.76	-2.12	-1.29	1.86			
Net Export of Mutual Trade	5.33	5.96	6.64	7.62	8.32	9.06	9.97	9.68	8.59	7.98			
Net export to the rest of the world	-0.73	-0.68	-0.87	-1.50	-2.42	-2.73	-3.19	-3.02	-2.39	-2.51			
Domestic Demand	-2.94	-3.90	-3.74	-3.73	-3.13	-3.06	-5.01	-8.78	-7.48	-3.62			

The contribution of net exports of mutual and foreign trade and domestic demand to the average annual real GDP growth in APEC and EU-27, 2002–2012, %

Source: calculated and compiled by the authors on the basis of the data of the UNCTAD statistical database (www.unctad.org). Note: 1) the values in bold italics show the positive factors of economic growth of APEC and the EU-27; 2) in January 2015, the data on the mutual trade in the integrative associations for 2013 has not been published.

Third, in order to engage in foreign trade and benefit from it, a state must have clear and sound economic policies, as well as appropriate institutions and infrastructure aimed at its development and support. However, the establishment of institutions and infrastructure required for foreign trade takes a long time.

The analysis of the results of calculations shows that the economic growth in APEC and EU is due to net exports of mutual trade (Table 2). This is due to the fact that the share of mutual trade in these integrative formations is very high. In particular, during the period of 2002–2012, the share of mutual trade in the export for APEC countries was on average 69.0 %, and in the import, the share was 68.7 %. In the EU-27, the average share of the mutual trade in the exports amounted to 66.4 %, and 60.7 % in the imports⁴.

It is remarkable that net exports beyond the APEC and the EU-27 is negative, i.e., net exports outside the EU and APEC are a deterrent to their economic growth. The same is true for the contribution of domestic demand to the average annual economic growth of APEC and the EU-27. And the more negative the impact of domestic demand is, the lower the growth rate of real GDP becomes. For example, during the peak of the global financial and economic crisis (2008–2009) negative contribution of domestic demand exacerbated the decline of the real GDP growth (Table 2).

Table 3

Indicators	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012			
	ASEAN												
GDP	3.83	5.32	6.06	6.21	5.96	6.33	5.39	2.84	4.71	6.27			
Net Export of Mutual Trade	-24.56	-19.27	-16.36	-23.93	-30.79	-31.78	-37.22	-38.13	-34.36	-38.29			
Net export to the rest of the world	3.72	3.73	3.50	3.71	5.47	6.22	4.24	4.49	5.89	4.72			
Domestic Demand	24.68	20.86	18.92	26.43	31.28	31.89	38.36	36.48	33.17	39.84			
					Euro	zone							
GDP	1.48	0.85	1.49	1.98	2.50	3.13	1.68	-2.08	-1.30	1.80			
Net Export of Mutual Trade	0.29	0.62	0.84	0.50	-0.30	-0.63	-1.28	-1.49	-1.60	-2.87			
Net export to the rest of the world	0.13	0.20	0.04	-0.39	-1.02	-1.12	-1.51	-1.53	-1.16	-1.37			
Domestic Demand	1.06	0.03	0.60	1.87	3.82	4.89	4.47	0.94	1.47	6.04			
					Merc	cosur							
GDP	-0.07	0.21	4.25	6.13	5.09	6.06	6.13	2.46	3.07	5.34			
Net Export of Mutual Trade	-4.51	-3.19	-2.74	-4.62	-6.78	-8.23	-10.70	-11.41	-10.84	-11.63			
Net export to the rest of the world	2.28	3.19	2.97	5.02	6.69	5.63	5.09	4.75	3.74	3.47			
Domestic Demand	2.16	0.21	4.02	5.73	5.19	8.66	11.74	9.11	10.17	13.51			
	NAFTA												
GDP	1.34	2.20	3.19	3.51	3.03	2.32	0.88	-1.50	-0.13	2.37			
Net Export of Mutual Trade	-2.69	-2.94	-3.20	-3.89	-4.53	-4.78	-5.30	-5.31	-7.51	-7.67			
Net export to the rest of the world	-3.69	-3.97	-4.16	-4.93	-5.48	-5.31	-5.38	-5.01	-4.44	-4.68			
Domestic Demand	7.72	9.11	10.55	12.33	13.04	12.41	11.57	8.82	11.82	14.72			

The contribution of net exports of mutual and foreign trade and domestic demand to the average annual values of
real GDP growth of integrative associations for 2002–2012, %

Source: calculated and compiled by the authors on the basis of the data of the UNCTAD statistical database (www.unctad.org). Note: the values in bold italics are those that constitute a positive factor for the economic growth of integrative associations.

The paradoxical situation with the negative impact of domestic demand and net exports beyond the APEC and EU-27 was, in our opinion, due to the fact that the member countries of these integrative associations have very different levels of development, including such value as foreign

⁴ Source: calculated by the authors on the basis of the data of the UNCTAD statistics database (www.unctad.org).

trade performance. For instance, the leading economies of the EU-27 are Germany and France, while such countries as Greece are dead weight (and it should be openly acknowledged) for the integrative association. The countries worsen the development of the EU-27, should also include individual states of Central and Eastern Europe that are the new members of the EU-27.

The situation observed in ASEAN, Mercosur, NAFTA and the euro region is quite opposite. Thus, the economic growth in ASEAN is driven by two factors: domestic demand and net exports of the foreign trade to countries outside the regional association. This uneven / asymmetric (in terms of the level of economic development) integrative association is characterized by quite a significant negative role of net exports of mutual trade (Table 3).

The latter circumstance is due to the fact that the share of mutual trade in ASEAN during the 2002–2012 was on average about 25 % of the total foreign trade of the regional association. We should add that the significant asymmetry in the association is due to the fact that member states of ASEAN have very different levels of development, including their foreign trade figures. For example, Singapore (the most developed economy in this association) has the highest level of transparency in terms of foreign trade indicators and the stable value of net exports. In Cambodia, one of the least developed countries of the world, these figures are much worse.

The situation in Mercosur is almost similar to that in ASEAN, with positive contribution of domestic demand and net exports to countries beyond the integrative association (Table 3). This is caused by the fact that, over the past decade, this indicator has been positive. In contrast, net exports of mutual trade within Mercosur is consistently negative, making the contribution of this factor to the growth of the real GDP negative, i.e., it hinders growth.

In NAFTA, the contribution of net exports of mutual and foreign trade to economic growth has been negative throughout the decade under analysis (Table 3). This situation is caused by the fact that during the period under consideration, the United States, being the largest economy of the regional association, had a negative value of net exports. The United States is known to be struggling a chronic foreign trade deficit for over four decades. The foreign trade in Mexico during the analyzed period is also characterized by negative values of net exports. From 2002 to 2008, Canada had a trade surplus, whereas from 2009 to 2013, this index was in the negative range. In general, the US trade deficit is dragging down the economy not only of the US itself, but throughout the free trade zone, and its economic growth relies mainly on the domestic demand. Moreover, the negative contribution of net exports to the economic growth of Mercosur has actually increased since the establishment of the association.

During the recent decade, the factor of the NAFTA's aggregate economic growth that remains consistently stable has been the contribution of the domestic demand (Table 3).

The analysis of the calculations proves that in the euro zone all the three factors play a positive part for some time and a negative part for the rest of the time (Table 3). Thus, over the period 2002–2005 the contribution of net exports of mutual trade in the euro region was positive, but in 2006–2013 the impact of this factor on the real GDP growth was negative. This is due to the fact that the balance of mutual trade in the euro region was consistently in the negative range over this period. An almost identical situation can be observed if we analyze the contribution of net exports to the countries beyond the euro region. The contribution of domestic demand to economic growth of the euro region, with the exception of 2002–2003 and 2008–2009, is positive.

The evaluation of the factors contributing to the growth of the real GDP of the Customs Union and the Eurasian Economic Community and the member states

Recently, many international organizations, including the World Bank, Eurasian Development Bank, as well as research institutions of the member countries of CU / CES, have been carrying out research aimed at the assessment of the effects of the countries' participation in associations. The results of our study based on the above method are presented below.

The analysis conducted by the authors brought them to the following conclusions. First of all, the main contribution to the growth of the real aggregate GDP of TC / Common Economic Space is made by the net export of foreign trade (net of mutual trade) to the countries beyond the integrative association. At the same time, the contribution of this factor to the economic growth has fallen significantly since the beginning of the global financial and economic crisis, and its negative trend continues (Table 4).

The contribution of net exports of mutual and foreign trade and domestic demand to the average annual real
growth of the total GDP of the CU/ CES, 2003-2013, %

Table 4

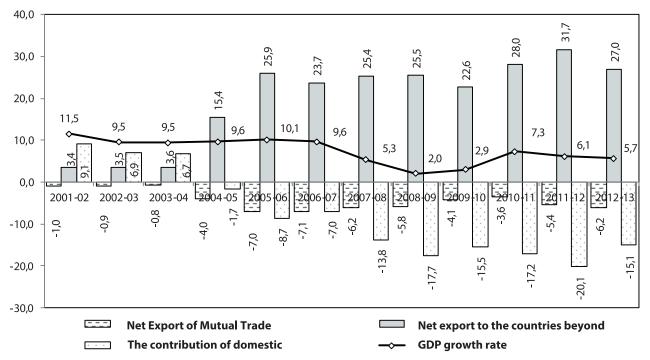
	The Customs Union and the Common Economic Space											
Indicators	2003-	2004-	2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-		
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
GDP	7.44	7.09	7.54	8.47	6.91	-1.00	-1.22	4.70	4.03	2.70		
Net Export of Mutual	0.30	0.28	0.26	0.24	0.23	0.21	0.23	0.22	0.21	0.20		
Trade	0.30	0.28	0.20	0.24	0.23	0.21	0.23	0.22	0.21	0.20		
Net export trade to												
the countries beyond												
the Customs Union/	4.95	4.60	4.31	3.98	3.67	3.48	3.74	3.57	3.41	3.30		
Common Economic												
Space												
Domestic Demand	2.19	2.20	2.96	4.24	3.02	-4.69	-5.19	0.92	0.41	-0.80		

Source: calculated and compiled by the authors on the basis of the data of the Eurasian Economic Commission (2011–2013), UNCTAD statistical database (www.unctad.org) (2003–2010).

Note: the values in bold italics are those that constitute a positive factor for the economic growth of these integrative associations.

We believe that this is caused by two factors. First, the factor of net exports beyond the CU / CES plays a key role in two major economies of this integrative association, namely, in Russia and Kazakhstan, as the bulk of Kazakh and Russian exports of raw materials is sent to the far abroad countries. Secondly, export to world markets also plays an important role for Belarus, especially to the markets of EU member states. Thus, if at the beginning of the 2000s the supply of Belarusian goods to the Russian market accounted for more than a half of total exports, in 2005–2012 the share of exports to the Russian market fell down to 35 %. In 2013, the share of the Russian market in the total volume of Belarusian exports amounted to 45 %. In addition, more than half of products imported to Belarus were made in Russia.

The contribution of net exports of the mutual trade in CU/CES over the past decade has consistently remained in the positive range. The total domestic demand of the integrative association also makes a positive contribution. The exception is the years of the most severe crisis, 2008–2010, when the negative value of this component was the highest (-4.7 % and -5.2 %, respectively), which impaired the growth of the real aggregate GDP of the CU/CES. It is obvious that the main obstacle was the 5 %



Source: calculated and compiled by the authors on the basis of the data of the UNCTAD statistical database (www.unctad.org). **Fig. 1.** The contribution of net exports of foreign and mutual trade and domestic demand to the average annual real GDP growth in Kazakhstan, 2002–2013, %

decline in Russia's real GDP in 2009, whereas in Kazakhstan and Belarus this value grew, albeit slightly. In addition, the total domestic demand had a negative impact on the dynamics of economic growth in 2011–2013, which was also due to the ongoing crisis phenomena and, as a consequence, the slowdown in real GDP growth, mainly in the Russian economy.

Overall, except for some periods, the contribution of all the three components to the dynamics of growth of aggregate real GDP of CU / CES has been in the positive range. However, on the basis of the results obtained it is not possible to make an decisive conclusion about the positive effects from the establishment of the integrative association. For this purpose, the contribution of the three factors was additionally assessed in respect of each member state of the CU / CES.

The analysis of the results of the evaluation for Kazakhstan

The appropriate analysis of the estimates (Fig. 1) leads to the following conclusions.

Firstly, the main factor of the growth of real GDP in Kazakhstan is the net exports of foreign trade to the countries beyond the CU/ CES (net of the amount of mutual trade). This situation is typical for the whole period under consideration (2001-2013). But the contribution of this factor in the economic growth of Kazakhstan has been growing since 2004-2005 (i.e., the trend started before the establishment of the CU / CES).

Secondly, the structure of mutual trade between the three countries is unfavorable for Kazakhstan, which is especially noticeable in 2004–2005. Starting from that period, a negative value of net exports of Kazakhstan products to the market of the common customs territory increased annually, reaching its peak in 2013 (USD - 12.7 bn). Obviously, this was due to the increasing value and physical volume of Russian and Belarusian exports to the Kazakhstan market. In other words, Kazakhstan's negative balance of mutual trade with Russia and Belarus has continued its upward trend after the establishment of the CU / CES. Thus, the balance of mutual trade between Kazakhstan with the Member States of the CU / CES in 2010 decreased by 52.7 %, compared to 2009. However, as early as in 2011, this figure went up 3.3 times compared to 2010, which was triggered by the sharp increase in imports of Russian and Belarusian products to the market of Kazakhstan, i.e., after the establishment of the Customs Union. In 2013, compared to 2011, the growth dynamics of the mutual trade balance between Kazakhstan and its partners in the CU / CES amounted to 44.4 %. Taking into account the current geopolitical situation caused by the effects of sanctions against Russia, its response (embargo) against the imports of foods and other goods, as well as, to some extent, the artificially provoked currency crisis in the Russian economy, in 2015 and in the subsequent years we may see the worsening of the situation, with the negative dynamics of Kazakhstan's mutual trade with the member states of CU / CES.

Thirdly, starting from 2004–2005, the contribution of domestic demand to the dynamics of the real GDP growth in Kazakhstan has been negative. Moreover, since 2007, when the financial bubble burst in Kazakhstan, and the housing bubble collapsed, the negative contribution of this factor to the dynamics of the growth of the real GDP has markedly increased. We believe this is caused by two major reasons.

The first reason is, a significant part of the goods that Kazakhstan consumes is imported, and this is one of the two major components of domestic demand in the national economy. Considering the situation in the Russian economics, this factor of economic growth, at least in 2015, will play an increasingly negative role. The second reason is insufficient effectiveness of gross investment, which is the second component of domestic demand. This issue, however, requires more research that goes beyond the scope of this article.

Thus, major improvement of the growth rate of net exports of mutual trade cannot be expected in Kazakhstan before the significant progress in the competitive position of the country's export. This makes it necessary to develop adequate trade policy, including the national export program aimed at the solving the problem of Kazakhstan's deformed structure of exports where raw materials currently prevail. The national export program should provide the Kazakh companies with opportunities to start using new technologies and enter new consumer markets. It should also include, in the most natural way, the national import program, which has to reflect the real needs of the economy and reduce the dependence on import of products that can be produced in Kazakhstan.

The analysis of the results of the evaluation for Russia and Belarus

In Russia, as well as in Kazakhstan, the main contribution to real GDP growth is made by net exports beyond the member countries of the Customs Union / Common Economic Space. However, unlike in

Table 5

GDT growth in Russia and Dear as, 2005 2015, 75											
Indicators	2003-	2004-	2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-	
mulcators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
	Russia										
GDP	7.24	6.78	7.26	8.34	6.88	-1.50	-1.85	4.40	3.87	2.47	
Net Export of Mutual Trade	0.24	0.66	1.17	1.32	1.35	1.42	1.40	1.19	1.27	1.19	
Net export to the rest of the world	4.39	11.54	17.10	13.89	11.83	11.34	12.36	12.25	11.65	11.23	
Domestic Demand	2.61	-5.43	-11.01	-6.86	-6.29	-14.26	-15.61	-9.04	-9.06	-9.95	
					Bela	arus					
GDP	8.94	10.39	9.72	9.26	9.37	1.26	1.09	6.55	2.85	1.80	
Net Export of Mutual Trade	-6.63	-11.15	-16.03	-17.92	-21.85	-23.03	-19.79	-15.39	-13.62	-10.26	
Net export to the rest of the world	2.77	7.87	10.97	9.12	10.09	8.36	1.29	2.89	10.45	5.81	
Domestic Demand	12.80	13.67	14.77	18.05	21.13	15.93	19.60	19.05	6.03	6.25	

The contribution of net export of mutual and foreign trade and the domestic demand in the average annual real GDP growth in Russia and Belarus, 2003–2013, %

Source: compiled by the author on the basis of the data of the Eurasian Economic Commission (2011–2013), UNCTAD statistical database (www.unctad.org) (2003–2010). Note: the values in bold italics are those that constitute a positive factor for the economic growth of these integrative associations.

Kazakhstan and Belarus, net exports of mutual trade within the boundaries of the common customs territory also has a positive impact on the dynamics of the real GDP growth in Russia. Moreover, during the last decade, the contribution of this factor to the economic growth was the highest in the crisis years of 2008–2009, as well as immediately after the establishment of the TC / CES. The contribution of domestic demand to the real GDP growth is negative due to essentially the same reasons as in Kazakhstan (Table 5).

The situation is different in Belarus. Here the main factor of growth of the national economy is domestic demand, and its contribution has gone down dramatically over the last two years (Table 5). But this is due to the increased positive contribution of net exports from Belarus to the countries outside the customs territory. It is noteworthy that the foreign trade to the countries outside the CU / CES, which is the second most important factor in the growth of the national economy throughout the analyzed period, has had a positive impact on real GDP growth of this country. In Belarus, as well as in Kazakhstan, net exports of mutual trade make a negative contribution to economic growth. This is due to a chronic deficit of bilateral trade with Russia.

In general, to increase economic growth and, consequently, the competitiveness of the Eurasian Economic Union, it is necessary to increase the volume of mutual trade of the participating countries of this integrative association. However, we should establish certain limits to the growth of mutual trade, as the member states of the Eurasian Economic Union vary considerably in size, economic potential and volume of foreign trade. Besides, it is necessary to develop a balanced coherent economic policy for the Eurasian Economic Union, which has to be adequate to the modern geopolitical challenges and threats of globalization, as otherwise the development of the national economies of the integrated entity will not be efficient enough, and the member states will not have any opportunities to solve their problems.

Conclusion

An important condition for the effectiveness of the integration process is the absence of significant gaps between the level of economic development of the member countries of the regional association. This condition is desirable, although the existing regional integration structures are actually characterized by different level of economic development of their member countries. As international experience shows, countries with lower levels of economic development need a lot of time before they can participate in the integration processes on equal terms with other countries. But the most important factor is the longing of a member state to develop on its own, instead of hoping that integration alone can solve all the problems. Integration can only be successful when the national economies participating in the regional associations are on the rise. The economies that are

undergoing a crisis, have to invest more efforts into dealing with internal problems (this includes the development and adoption of anti-crisis programs, as well as other measures of regulatory nature, etc.) than into integration-related issues.

It should be remembered that regional integration as a set of measures that include the establishment of a free trade zone, then a Customs Union, and later a common economic space, etc., is a gradual process, which goes from lower to higher forms, and at each stage, the interests of all the participants are to be taken into consideration in the decision making process.

An important condition is the stable macroeconomic and socio-political situation in the member countries, which is a condition for the establishment of trust (including trust to the state) of the private sector and foreign investors. At the same time, integration process has to be naturally compatible with other reforms (structural changes, privatization, etc.). One of the factors of the success of regional integration is the availability of highly developed infrastructure, which should be used effectively in the integration processes is played by cultural and psychological factors, and ignoring these factors can provoke the phenomena of disintegration.

Increased integration in the 1990s, the impact of the global financial and economic crisis, the problems within the European Union lead to the need to find new approaches to the establishment of integrative associations and their future development.

Acknowledgement

The article has been prepared within the project «Eurasian integration: asymmetries and efficiency» with financial support of the grant № 1275/GF4 of the Ministry of Education and Science of the Republic of Kazakhstan».

References

1. Anchishkin, A. I. (1989). Nauka. Tekhnika. Ekonomika [Science. Technics. Economics]. Moscow.

2. Baxarenko, T. (2014). Yevropa gosudarstv — Yevropa regionov. K voprosu o budushchem Yevropeyskogo soyuza [Europe of states — Europe of regions. To a question of the future of the European Union]. *Mezhdunarodnaya ekonomika* [The international economy], 4, 76-79.

3. Glazyev, S. Yu., Lvov, D. S. & Fetisov, G. G. (1992). Evolyutsiya tekhniko-ekonomicheskikh sistem: vozmozhnosti i granitsy tsentralizovannogo regulirovaniya [Evolution of technical and economic systems: opportunities and borders of the centralized regulation]. Moscow, Nauka, 417.

4. Glazyev, S. Yu. (1993). Teoriya dolgosrochnogo tekhniko-ekonomicheskogo razvitiya [Theory of a long-term technical and economic development]. Moscow, VlaDar Publ., 310.

5. Inshakov, O. V. (2004). Potentsial evolyutsionnogo podkhoda v ekonomicheskoy nauke sovremennoy Rossii [Potential of evolutionary approach in economic science of modern Russia]. *Ekonomicheskaya nauka sovremennoy Rossii [Economic science of modern Russia]*, 4, 42-52.

6. Lvov, D. S. (Ed.) (2002). Ekonomicheskaya teoriya nauchno-tekhnicheskogo progressa [Economic theory of scientific and technical progress]. Moscow, Nauka, 255.

7. Mayevskiy, V. O (2003). O vzaimootnosheniyakh evolyutsionnoy teorii i ortodoksii [On the relations of the evolutionary theory and orthodoxy]. Voprosy ekonomiki [Questions of economy], 11, 4-11.

8. Rakhayev, B., Kalabekova, K. & Gazayeva, M. (2014). Strategicheskie tseli novykh form integratsii na postsovetskom prostranstve [Strategic targets of new integration forms at the former Soviet Union]. *Obshchestvo i ekonomika* [Society and economics], 10, 5-31.

9. Solou, R. (1996). Perspektivy teorii rosta [Prospects of the growth theory]. Mirovaya ekonomika i mezhdunarodnyye otnosheniya [World economy and international relations], 8, 69-77.

10. Stiglits, J. (2007). Spravedlivaya torgovlya dlya vsekh. Kak torgovlya mozhet sodeystvovat razvitiyu [Fair trade for everyone. How trade can promote development]. Moscow, Ves Mir Publ., 280.

11. Suleymanov, T. (2013). Vzaimodeystvie gosudarstv Tamozhennogo soyuza i Yedinogo ekonomicheskogo prostranstva v ekonomicheskoy i finansovoy sferakh — vazhneyshiy faktor ikh ustoychivosti razvitiya [Interaction of the states of the Customs Union and Common Free Market Zone in economic and financial spheres — the most important factor of their stability of development]. *Ekonomicheskie strategii [Economic strategy]*, 8, 6-14.

12. Dzarasova, S. S. (2004). Teotirya kapitala i ekonomicheskogo rosta [Theory of the capital and economic growth]. Moscow, Lomonosov Moscow State University Publ., 400.

13. Vinokurov, Ye., Kulik, S., Spartak, A. & Yurges, I. (2014). Analiticheskiy doklad [The dead end of the fight of integration in Europe. Analytical report]. *Voprosy ekonomiki [Questions of economy]*, 8, 4-25.

14. Furman, K. (2013). Perspektivy yevraziyskoy integratsii. Otnoshenie rossiyskogo soobshchestva [Prospects of the Euroasian integration. Relation of the Russian expert community]. *Mir peremen [World of changes]*, 4, 147-161.

15. Kheyfets, B. O. (2014). O zone svobodnykh investitsiy Yevraziyskogo ekonomicheskogo soyuza [About a zone of free investments of the Eurasian Economic Union]. *Voprsoy ekonomiki [Questions of economy]*, 8, 26-40.

16. Khusainov, B. D. (2012). *Globalizatisya, transnatsionalizatsiya, integratsiya [Globalization, transnationalization, integration]*. Almaty, Edelveys Publ., 312.

17. Abalkina, L. I., Makarov, V. L. (Eds.) (1995). Evolyutsionnyy podkhod i problemy perekhodnoy ekonomiki [Evolutionary approach and issues of the transitional economy]. Moscow, IE RAN [Insitute of Economics, RAS], 273.

18. Yakovleva, M. A. (2914). Ekonomicheskie i politicheskie predposylki sozdaniya bankovskogo soyuza YeS [Economic and political background of development of banking association of the EU]. *Ekonomika i upravleniya [Economics and management]*, 10(108), 51-55.

19. Barro, R. J. (1994). *Economic Growth and Convergence*. San Francisco, California: ICS Press, International Center for Economic Growth Publication, 201.

20. Berg, A. & Krueger, A. (2003). Trade, Growth and Poverty: a Selective Survey. IMF Working Paper WP/03/30. Washington D.C., IMF, 306.

21. Central Asia: Increasing Gains from Trade Through Regional Cooperation in Trade Policy, Transport and Customs Transit (2006). Manila, Philippines, Asia Development Bank, 106.

22. Ramsey, F. P. (1928). A Mathematical Theory of Saving. The Economic Journal, 38, 549-559.

23. Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. The Quarterly Journal of Economics, 70, 65-94.

24. Solow, R. M. (2000). Growth Theory: an exposition. New York Oxford. Oxford University Press, 101.

25. Swan, T. W. (1956). Economic Growth and Capital Accumulation. *Economic Record*, 55, 334-361.

26. Transition Report 2010. Recovery and Reform. (2010). European Bank for Reconstruction and Development. Paris, 152.

27. Winters, A. (2004). Trade Liberalization and Economic Performance: an Overview. The Economic Journal (vol. 114 (493), F4-F21.

Information about the authors

Khusainov Bulat Doskalievich (Almaty, Kazakhstan) — Doctor of Economics, Pro-fessor, Principal Research Investigator, Institute of Economics of the Ministry of Education and Science (29, Kurmangazy St., Almaty, Republic of Kazakhstan, 050010, e-mail: bkhu-sainov@gmail.com).

Shelomentsev Andrey Gennadyevich (Yekaterinburg, Russia) — Doctor of Economics, Professor, Head of the Research Department of Regional Socio-Economic Systems, Institute of Economics, the Ural Branch of the Russian Academy of Sciences, Professor at the Vladivostok State University of Economics and Service (29, Moskovskaya St., Yekaterinburg, 620014, Russia, e-mail: chel61@mail.ru).

Doroshenko Svetlana Viktorovna (Yekaterinburg, Russia) — Doctor of Economics, Associate Professor, Leading Researcher at the Research Department of Regional Socio-Economic Systems, Institute of Economics, the Ural Branch of the Russian Academy of Sci-ences (29, Moskovskaya St., Yekaterinburg, 620014, Russia, e-mail: doroshenkos@mail.ru).