

## Economic Integration of Northeast Asia

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**Abstract:** This article examines challenges of economic integration of North-East Asia. This article presents preliminary results of an examination of the gravity model that we constructed using examples of countries of North-East Asia and Association of Southeast Asian Nations. We made some conclusions about the importance of particular factors: a variable that depicts participation of countries in a formation, a variable that depicts distance between two countries, cumulative GDP of a country's partner and share of the secondary sector in cumulative GDP of a country and combined volume of mutual trade. We made the conclusion that differences and similarities in sectoral structure of GDP do not influence increase in volume of mutual trade between countries of ASEAN and their partners. The empirical analysis of ASEAN countries reveals that, in this case, formation of trade coalition itself does not result in an increase of volume of mutual trade flows.

**Key words:** Integration • Unique features of integration • Gravity model • ASEAN • Economic factors  
• Future of North-East Asia • Trade • Tariffs • Liberalization of internal markets • Sub-regional  
formations

### INTRODUCTION

The economy of Northeast Asia (NEA) creates a barrier for the global integration processes. There is the domination of the earlier established type of bilateral relations, burdened by the legacy of hostility and deep political differences. Nevertheless, a new style of mutual cooperation is gradually formed among the countries. This style is characterized by the development of economic relations that overcome ideological barriers.

However, this issue is not univocal and that's why discussed by many authors. Some authors write that the East Asian community doesn't act in the interests of a corporate East Asian identity but pursue objectives of individual countries (Martin Jones D., Smith M.L.R. 2007) [1]. During various periods of time authors noted a low level of economic integration in Northeast Asia, because of the lack of strong developed regional institutionalization processes. Asia-Pacific Economic Cooperation (APEC) is noted to be the most successful among various regional groupings (Higgott 1998; Aggarwal and Ippai Yamazawa 2000; Ravenhill 2002) [2-4].

However, it is clear for many observers of East Asian regionalism that the such integration is inefficient. The possibility of replacing the formal institutionalization processes by regional economic integration (Ernst 1997; Encarnation 1999) [5; 6], both inside and outside of the region (Dent 2003) [7] is considered.

The history of the institutionalization of the integration processes shows that significant efforts were made to build strong institutional environment for the development of regional economic relations in postwar East Asia, but these efforts were not successful (Calder and Ye, 2004) [8]. The idea of establishing the Institute for Regional Cooperation under the name "The Council of the North-East Asia Regional Economic Cooperation (CNAEC)" was first published by Lee (2000) [9].

The fact that integration in Northeast Asia will lead to the increase of the potential benefits to countries due to economies of scale through the expansion of the export industries (Milner 1997; Chase 2003; Pempel 2008) [10-12], reduction of the transaction costs between the contracting parties and diminution of the

importance of political negotiations (Aggarwal and Ravenhill 2001) [13] is the subject of many economic discussions.

The ambiguity of interpretations of the integration processes in Northeast Asia was the impetus leading to the necessity to assess the potential and the actual state of the integration processes in this region.

### **Expositions of the Research and Their Groundings:**

The starting point of our analysis is the identification of the integration features in Northeast Asia.

It is necessary to formulate distinctive features of Northeast Asia in order to estimate the processes of integration occurring in Northeast Asia and define perspectives of the given region.

First, this region distinguishes sharp jerk in economic growth for the short period of time. It determines non-developed contour of partner relations.

Second, on a background of non-developed contour of partner relations often changes of integration processes are observed - growth of rates of saturation of regional space by new partner agreements. The region becomes more and more "integration-intensive".

The third feature-distinction or similarities in branch structure of gross national product do not render influence on an increase of volume of mutual trade between countries-partners. The fact of joint participation of the countries of Northeast Asia (NEA) in one trading block is not reflected in any way in volume of trade between these countries. It proves that the neighboring countries will not inevitably have the considerable volume of mutual trade.

It argues that many trading blocks are results of the political decision, but not objective economic process. That defines the fourth feature of integration processes in the region. Especially brightly it can be looked after on an example of Tumen River Project, which declared as the political decision, without the proved economic preconditions.

For sustainable integration processes are necessary, so-called initial factors,-historically formed trade relations, the sizes of the countries, purchasing power on the basis of which strong trade unions can be build up.

Today in NEA we observe the countries, which actively compete among themselves in the international market and do not consider each other as strategically important partners. Cooperation in the solving of problems of peace and security, preservation of the environment in a region does not necessarily demand

integration groupings, in particular, trading preferences. The peace and security in the region depends on the intensity of economic ties.

The fifth feature-asymmetry of partners in integration of Northeast Asia. The size of their markets and a level of technology are not balanced. It is impossible to attribute to a category of the symmetric countries, for example, Russia, China, Japan and Republic of Korea. The intensification of regional integration has strengthened amplitude of deviations of subjects of integration on their weight categories. Economic asymmetry of partners has considerably increased because of an integration policy of China, which, having entered in WTO in 2001, actively began to develop regional trade. Reached the appropriate agreement with Hong Kong, China is aimed to establish three foreign agreements with Japan and Korea and negotiates for the similar agreement with ASEAN.

Integration changes the model of international division of factors and, first of all, natural resources. Relative advantages of possession of natural resources are replaced by advantages of those who can get and use them. It is known that the countries with rich natural resources lag behind in rates of economic growth. In that case, there is a question: whether it is necessary for Russia to be guided by an integration vector if the structure of export will cause delay of rates of economic development.

The regional future of Russia becomes more predicted and less arbitrary, not only geographically, but also economically.

We estimate statistically the factors influencing on volume of export and import on the example of countries-participants ASEAN 5 and NEA (China, Korea, Japan). The basis of analysis is the gravity model (trade between two countries depends on their size (GNP, population, territory, etc.) and operational costs (distance between the countries, cultural similarity etc.).

Being based on preliminary results of test of the gravity model it is possible to draw some conclusions on the importance of some factors.

First of all, it is necessary to pay attention that the variable reflecting participation of the countries in ASEAN appeared insignificant, i.e. the fact of joint participation of ASEAN countries in one trading block is not reflected in any way in volume of trade between these countries. The same conclusion can be made as to variable reflecting distance between two countries that supports the conclusion that the neighboring countries do not necessarily have the significant volume

Table 1: Results of the gravity model estimation

Regression (1)			Regression (2)		
Variables	Estimated coefficient (bn)	Criteria Student's t	Variables	Estimated coefficient (bn)	criteria Student's t
GDP country A	20,07	3,272***	GDP country A	20,41	3,761***
GDP country B	-24,59	-4,476	GDP country B	-15,46	-3,087
Distance between countries	0,24E+11	0,477	Distance between countries	0,32E+11	0,577
GDP per capita in country A	-18,75	-3,053***	GDP per capita in country A	-19,36	-3,562***
GDP per capita in country B	25,23	4,600***	GDP per capita in country B	16,08	3,219***
Share of import of A from B in total import of A	0,95	43,995***	Share of import of A from B in total import of A	0,90	31,969***
Share of primary sector in GDP of A	-0,01	-0,276	Share of primary sector in GDP of A	-0,19	-3,135***
Share of primary sector in GDP of B	0,33	4,760***	Share of primary sector in GDP of B	0,28	4,509***
Share of secondary sector in GDP of A	-0,27	-1,831	Share of secondary sector in GDP of A	0,03	0,198
Share of secondary sector in GDP of B	-0,55	-2,997***	Share of secondary sector in GDP of B	-0,52	-3,114***
Participation of countries in one block	0,45E+10	0,094	Participation of countries in one block	-0,35E+11	-0,657
Number of observation	712		Number of observation	712	
Index of determination (R2)	0,9869		Index of determination (R2)	0,9867	
Fisher's criteria (F)	49,613		Fisher's criteria (F)	51,972	

1-Meaning of coefficient when  $\alpha = 0,01$  marked \*\*\*, when  $\alpha = 0,05$  marked \*\*.

of mutual trade. Gross national product of the partner and a share of a secondary sector in gross national product of the country do not influence significantly on volume of import. In other words, distinctions or similarity in branch structure of gross national product do not render influence on the increase of volume of mutual trade between countries ASEAN 5 and NEA and their partners.

#### Estimated Functions Looks as Follows:

$$\ln IMP = +\beta_1 \ln GDP^H + \beta_2 \ln GDP^P + \beta_3 \ln PGDP^H + \beta_4 \ln PGDP^P + \beta_5 \ln SHAREIMP + \beta_6 \ln PS^H + \beta_7 \ln PS^P + \beta_8 \ln SS^H + \beta_9 \ln SS^P + \beta_{10} \ln DIST + \beta_{11} \ln D + \epsilon, \quad (1)$$

$$\ln TTRADE = \alpha + \beta_1 \ln GDP^H + \beta_2 \ln GDP^P + \beta_3 \ln PGDP^H + \beta_4 \ln PGDP^P + \beta_5 \ln SHARETTRADE + \beta_6 \ln PS^H + \beta_7 \ln PS^P + \beta_8 \ln SS^H + \beta_9 \ln SS^P + \beta_{10} \ln DIST + \beta_{11} \ln D + \epsilon, \quad (2)$$

Where  $\alpha$ -a constant (a constant variable) and  $\epsilon$ -regression balance.

As explaining variables, the following variables were chosen:

- $GDP^H$  – GDP of country A,
- $GDP^P$  – GDP of country B,
- $DIST$  – distance between A and B,
- $PGDP^H$  – GDP per capita in A,
- $PGDP^P$  – GDP per capita in B.

$SHAREIMP$  ( $SHARETTRADE$ ) - a share of import (or the sums of export and import) the countries A from the country B in a total volume of import (or the sums of export and import) the countries A,

- $PS^H$  - a share of initial sector in cumulative gross national product of the country A,
- $PS^P$  - a share of initial sector in cumulative gross national product of the country B,
- $SS^H$  - a share of a secondary sector in cumulative gross national product of the country A,
- $SS^P$  - a share of a secondary sector in cumulative gross national product of the country B,
- $D$  - the fictitious variable reflecting participation of both countries in one trading block (the variable accepts value "1" if both countries are ASEAN participants and value "0" otherwise).

Besides standard variables (i.e. GDP and distance), directly reflecting the size and transport costs, we chose parameters GDP per capita (1) reflecting the general level of economic development, level of wages in the country (2); indexes of a share of primary and secondary sectors in GDP (3), showing a level of industrial development of the country; and a qualitative variable of participation of the countries in the uniform trading block (3).

Results of an estimation of above-mentioned regressions are submitted in table 1.

The empirical analysis of countries ASEAN 5 and NEA has confirmed that formation of the trading block does not increase the volume of mutual trade. Membership in one trading union is the secondary factor in development of mutual trade which can be amplified with a number of initial factors, such as historically formed trade relations (in our regression it is reflected by a variable « a share of import of the country A from the country B in total volume of import of the country A), the sizes of the countries (a variable «gross national product»), purchasing power (a variable «GDP per capita»).

These variables reflect the scale of country market and the market of the partner and share of income spend for import.

## **CONCLUSION**

What is it necessary for Association to turn into economically significant? It is impossible to answer this question shortly and unequivocally. It is obvious that principle of "laissez-faire" will not solve the problem. We need active participation of the governments of all countries in regulation of private and public sectors. Despite all the efforts of ASEAN participants to decrease tariffs and liberalize markets for foreign business since 1995, there is a plenty of non-tariff barriers. Therefore for the given countries the most logical will be development of cooperation in the field of unification of customs rules and the other acts regulating trading activity.

It is necessary to move aside multilateral, instead of regional integration. A position of authors-it is more effective to be included in the integration process not on the basis of bilateral agreements, especially with the country surpassing on the sizes of the market and a level of technologies, but on a basis the Pan-Asian zone of free trade.

Besides economic obstacles for the creation of the Northeast Asian trading block in the near future there are political reasons, in particular, in relations between Japan and China. However, according to calculations of some experts, creation of the Northeast Asian zone of free trade with participation of Japan, South Korea and China will be favorable to all countries. Certainly, Japan and South Korea will win from this union considerably, but for China the positive effect will be significant.

Serious work on unification and liberalization of domestic markets is required otherwise the unions will be extremely political and will not bring any economic benefit.

However, Japan does not hasten with the creation of the similar union and its fears are quite understandable. The agrarian sector of this country till now is strictly protected from the import goods. Accordingly, creation of a zone of free trade with the countries, which are exporters of agricultural production in region, demands from Japan a serious political step on a cancellation of a protectionist policy in the given sector. At present, Japan is not ready to such step yet and authorities do not hide it. The government has openly declared that the principal cause of a choice of Singapore as the partner for the preferential trading agreement is practically absence of

an agricultural production in this country. Also, Japan tries to exclude agrarian sector from negotiations with South Korea about a zone of free trade and does not include this sector in discussions of the preferential agreement with China.

It is necessary to take into account possible time lag of political and economic interests. Political benefits can suppress material considerations, which determine economic policy (we mentioned it earlier).

Example of the organization, which was initially formed with protective-restrictive function and then began to give more attention to integration processes, is the Association of Southeast Asian Nations (ASEAN). Created in 1967 with the purpose of assistance to political, economic, social and technological rapprochement of the countries of Southeast Asia, the organization put the opposition of Japan, Chinese People's Republic and USA as the main purpose and directed primary activity on achievement of securities in the region. However, with the end of "cold" war, necessity for protection against external political threats has decreased and necessity for protection from external economic risks, connected with a growing competition in APR has increased. Therefore, gradually, countries-members of ASEAN began to aspire not to the opposition but to rapprochement with the countries of Pacific regions to stimulate investment in the sub region and economic growth due to expansion of trade. The policy directed to cooperation has appreciably strengthened the external economic dependence between South-east Asian countries and has pushed participants of ASEAN to strengthen interstate relations. Therefore, bilateral agreements with the European Economic Community in 1972, Australia in 1974, New Zealand in 1975, Japan, Canada and USA in 1977 were signed. These relations were directed to cooperation in such branches as agriculture, the fish and wood industry, transport and communication, technologies and many others. The noticeable achievements of ASEAN became meetings of countries-participants leaders and settlement or, at least, discussion of bilateral contradictions. The role of association in settlement of the Cambodian conflict, expansion of a circle of discussed problems and opening of new prospects of cooperation through the conferences accompanying meetings of Ministers for Foreign Affairs (Post-Ministerial Conferences) is essential.

Northeast Asia is away from the integration process. In this sub region bilateral type of relations burdened with a heritage of animosities and deep political distinctions dominates. Nevertheless, new style of mutual economic

cooperation between the countries is gradually formed. The formation of such style began with the leading role of a private sector of Japan and then were South Korea and Taiwan and then other countries of the sub region have followed.

From the existing trade groups, the oldest one is ANZCERTA (CER), which was organized in 1983. NAFTA is the most powerful group, which holds 54% of total GNP of APEC countries. The start for the formation of AFTA was given in 1992. This integrating grouping will be unique-leaderless. This is its advantage because AFTA is free from monopolism in decisions making. At the same time, it is a disadvantage because of absence of the economic and financial locomotive, capable to pull behind all countries of the Southeast Asian region. Such a weakness, most likely, will force ASEAN to search for new variant of the expansion through joining to more powerful sub regional structure. Therefore, the countries of ASEAN actively cooperate with three states of Northeast Asia, Japan, South Korea and China, in frameworks ASEAN + 3 with the purpose of expansion of already existing block. Also, it is possible to unite all AFTA agreements and ANZCERTA into one free trade area and create the new union in Northeast Asia between China, Japan and South Korea. On the basis of these mainstreams, the integration processes of development of new additional configurations can be formed.

The potential union between China, Japan and South Korea will be economically and politically significant with its share in world GNP about 20%. The index of trading complementarity (ITC), which reflects electiveness of trade between the certain countries in comparison with world trade, proves this conclusion. ITC for NEA countries exceeds the level of world trade; that is why regional trade will promote regional integration, considering the fact that the NEA countries do not participate in other sub regional agreements. The potential union of China, Japan and South Korea will cover about their half of the trade, which is carried out by these countries so the preferential agreement on trade will bring to the countries essential benefit. However, it should be taken into consideration that the trade volume of Japan with USA exceeds the total amount of trade of Japan with its potential partners. China with South Korea has also the significant volume of trade with USA: totally 23,8% of import and 15% of export. Therefore, at a deepening of cooperation in the framework of NEA, it is necessary for participants to take into account American factor.

Certainly, there is a question on a role of Russia in NEA. Here again, it is necessary to note the following braking factors for equal rights integration. First, the

sectoral structure of the economy of Russia is absolutely various. Japan, China and USA have practically symmetric advanced economies (shares of industry, constructions, an agriculture etc.) that certainly is the criterion of a close level of development of these countries.

Hence, thirdly, the model of the Russian economy today is characterized by export - raw orientation, excessive pressure of import in conditions of fast expansion of openness of economy, high differentiation of the population in incomes and consumption, the insignificant size of investments, the naturalization of economic ties with deformed system of economic motivation, backwardness of used technological modes.

Major factors of economic growth: accumulation of the capital (it began to be leveled to 2000r.); development of innovational type of economic growth (lag behind for 20-30 years); the volume of high technology production is only 2 %; there are no even elements of a normal competition since substantial technological distinction between industries.

Even such parameter as index of viability of the population of Russia equals to 1,4. We shall remind, that the highest point-5, no country was awarded, 4 points estimation of Holland, Belgium, Denmark. The given parameter testifies skills to keep a level of intellectual development while realization of the state social and economic policy.

Hence, now the Russian economy is precisely subdivided into two sectors: one is included in the world economy. It is export-oriented branches. Other sector is internal. Its interaction with an external world is minimal. The financial position of these sectors is significantly different. The difference leads to disproportional economic development of the country.

For a long period of time neoclassic models abstracted from features of the institutional environment. They assumed that transaction costs were zero the property rights were precisely determined and reliably protected, that concluded contracts are full (take into account any remote events) and are subject to strict performance. Actually, it immersed the economic analysis in an institutional vacuum, transformed institutes into the neutral factor which not worthy for economists.

Starting from the fact proved by Nort-durability of inefficient institutes and vitality of stagnant forms of economy the research of the Russian state interests and powerful groups in the preservation of inefficient institutes should be undertaken. The institutional trajectory based on new, more effective "rules of the game" with significant initial capital investments should be determined.

The institutional organization of Russian economic space should be based on endogenous and exogenous components including regional connected with participation in processes of integration in NEA. For the time being Russia is on the periphery of these processes. To change the situation two conditions should be formed. The first and the main one depends on Russia and implies successful reforms, above all institutional conversion. The second means possible institutional formation economic ties in NEA as Northeast Asian Economic Community.

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