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# HOW HAVE THE COMPARATIVE ADVANTAGES OF EAEU MEMBER STATES CHANGED IN THE SERVICE SECTOR?

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**Keywords:** *comparative advantages, NRCA index, services, exports, EAEU*

*The more developed the country's economy, the larger the share of services in the structure of GDP, which speaks of the importance of this sector from the point of view of economic development. To foster the development of the service sector, it is important to understand the directions in which the country has potential.*

*The paper explores the competitiveness of services exports among EAEU member states, based on the evaluation of comparative advantages. The dynamics of comparative advantages before and after the formation of EAEU were observed. The analysis revealed that EAEU member states possess comparative advantages in traditional services, such as transport services, construction, and travel. The comparative advantages changed slightly during the five years of the Union's existence, but underwent more significant changes against the backdrop of the 2022 Russian-Ukrainian war. In particular, Russia's comparative advantages have decreased in transport services. At the same time, Russia's comparative disadvantages in contemporary services decreased. Belarus and Armenia have gained significant comparative advantages in the field of telecommunications, computer and information services, with the latter also excelling in travel services.*

**INTRODUCTION:** The service sector, also known as the tertiary sector of the economy<sup>1</sup>, revolves around the production of intangible assets. Services


<sup>1</sup> Schafran, A., McDonald, C., Lopez Morales, E., Akyelken, N., & Acuto, M. (2018). Replacing the services sector and three-sector theory: urbanization and control as economic sectors. *Regional Studies*, 1-12, DOI: <https://doi.org/10.1080/00343404.2018.1464136>



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include various activities, such as transport of goods and people, financial intermediation, distribution, hotels and restaurants, education, health care, construction, and accounting<sup>2</sup>. Along with the economic development, there is a shift from primary sectors of the economy to tertiary ones. In other words, in developed post-industrial economies the service sector dominates. The share of services in the economy of high-income countries is 70%, whereas it is 53% in upper-middle income economies, 49.1% in lower-middle income countries and 33.8% in low-income countries<sup>3</sup>. Hence, the service sector not only holds a significant role in the advancement of national economies, but also serves as an indicator of the level of development of the economy.

In the era of digitization and the development of an innovative economy, services are gradually acquiring a more pivotal role in the global economy. Over the past twenty years, international trade in services has been growing at a faster pace than the merchandise trade. In 2022, compared to the previous year, world exports of goods increased by 11.4%, while the growth of world exports of services was 14.8%<sup>4</sup>. At the same time, developing countries are gradually playing an important role in the world services trade<sup>5</sup>.

Current research on EAEU (Eurasian Economic Union) trade is predominantly focused on merchandise trade, with limited attention given to studies on trade in services. Meanwhile, in order to ensure the maximum benefit from the integration processes, it is necessary to understand the competitive

advantages of member states and their potential for services export. According to a study of the trade complementarity index of the EAEU countries, conducted by the Trade Policy Institute, the level of complementarity of trade in services of member states has increased significantly in the context of integration processes<sup>6</sup>. During this period, a sufficient normative basis for EAEU single market of services has been created. Within the EAEU in certain sectors of the economy there is a single market of services, currently uniting more than 50 areas: hotel and public catering services, travel, construction, transport, consulting, computer services, etc.<sup>7</sup>. However, cooperation of the EAEU member states in foreign trade of services is relatively low<sup>8</sup>.

The research aims to understand in which areas of service trade the EAEU countries have competitive advantages and how these advantages have changed since the creation of the Union. Our study is based on the theory of comparative advantages. Academic studies on comparative advantage in the economic literature are mostly limited to trade in goods, although this principle is applicable to both goods and services<sup>9</sup>.

The Ricardian theory of international trade states that countries specialize in producing goods and services for which they have a comparative advantage. The concept of comparative advantage refers to a country's ability to produce a product or service with higher productivity and more differentiated characteristics (quality, brand, after-sales service) than trading partners<sup>10</sup>. One of the first attempts at an empirical study of comparative advantage was made by B.

<sup>2</sup> World Bank. Trade in Services: Using Openness to Grow, in *Global Economic Prospects and the Developing Countries*, 2002

<sup>3</sup> World Bank databases, <https://data.worldbank.org/indicator/NV.SRV.TOTL.ZS>

<sup>4</sup> WTO stats, <https://stats.wto.org/>

<sup>5</sup> WTO publications, [https://www.wto.org/english/thewto\\_e/20y\\_e/services\\_brochure2015\\_e.pdf](https://www.wto.org/english/thewto_e/20y_e/services_brochure2015_e.pdf)

<sup>6</sup> Глазатова М. К. (рук. авт. кол.), Агаджанян С. С., Амирбекова А.С. и др.; Оценка интеграционных процессов ЕАЭС в сфере торговли: 2022. Краткая версия [Текст]: междунар. докл. к XXIII Ясинской (Апрельской) междунар. науч. конф. по проблемам развития экономики и общества, Москва, 2022 г. / Нац. исслед. ун-т «Высшая школа экономики». М. : Изд. дом Высшей школы экономики, 2022. <https://conf.hse.ru/mirror/pubs/share/633949409>

<sup>7</sup> Ibid

<sup>8</sup> O. V. Biryukova (2017). Trade Integration in Services in the Eurasian Economic Union: Between Myth and Reality. *Trade policy*, (4 (12)), 25-41.

<sup>9</sup> Cunha N, Forte R (2017) The comparative advantages in the services sector of developing economies. *Global Econ J* 17(4):63. <https://doi.org/10.1515/gej-2017-0063>

<sup>10</sup> Stellan, Rémi & Danna-Buitrago, Jenny Paola, 2022. "Which revealed comparative advantage index to choose? Theoretical and empirical considerations," *CEPAL Review* N° 138.

Balassa, who introduced the index of Revealed Comparative Advantage<sup>11</sup>. Despite certain shortcomings, it is the most popular and widely accepted method of evaluating a country's ability to produce goods and services. Subsequently, a number of modifications to the comparative advantage index have emerged, correcting certain shortcomings of the Balassa index.

To evaluate the comparative advantages of the services exports of EAEU countries the Normalized Revealed Comparative Advantage Index (NRCA index)<sup>12</sup> is used in the paper. The latter is the most recent and improved index and is comparable by products, countries and time, and is calculated by the following formula:

$$NRCA_{ij} = (E_j^i / E) - (E_j E^i / EE)$$

$NRCA_{ij}$  represents the Normalized Revealed Comparative Advantage of country  $i$  in exporting commodity  $j$ .  $E_j^i$  denotes the volume of country  $i$ 's exports of commodity  $j$ ,  $E$  represents world exports,  $E_j$  denotes global exports of commodity  $j$ , and  $E^i$  is the exports of country  $i$ .

It is relevant to note that a country's comparative advantages may change over time due to changes in supply and demand in domestic and international markets<sup>13</sup>. Hence, the data of the years 2014, 2021 and 2022 were analyzed, enabling the observation of the dynamics of the comparative advantages of the countries in the context of the development of integration unit and geopolitical changes.

The study is based on the analysis of ITC's Trade Map and the World Bank databases.

**DISCUSSION:** Chart 1 shows the share of services in the GDP of EAEU countries. The service sector accounts for about half of the GDP of the member countries, which shows the importance of this sector in the structure of the economy. However, when we compare the sector's share in the GDP of each country to the average of their income groups, it becomes evident that the share of services in the economies of Armenia<sup>14</sup>, Russia, and Kyrgyzstan surpasses that of their income group, while the shares for Belarus and Kazakhstan are lower than the average for their income group.

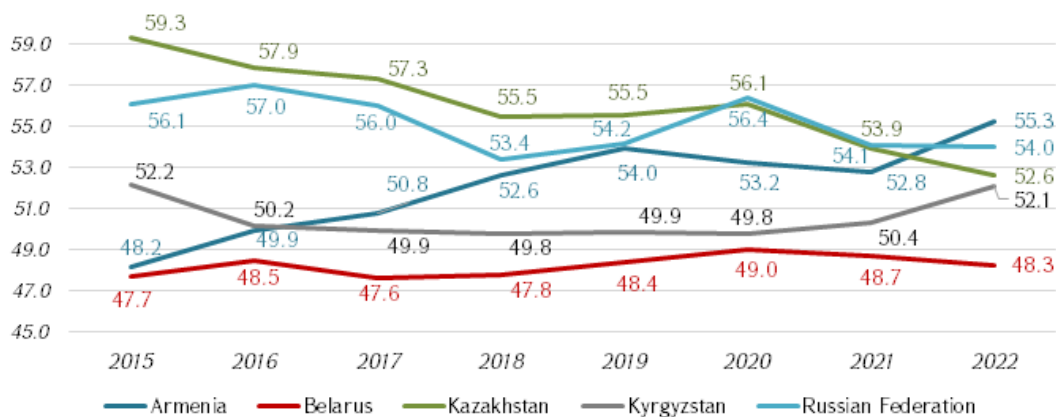


CHART 1

The share of the service sector in the GDP of EAEU countries, 2015-2022<sup>15</sup>

<sup>11</sup> Balassa, B., 1965, Trade Liberalisation and "Revealed" Comparative Advantage, <https://doi.org/10.1111/j.1467-9957.1965.tb00050.x>

<sup>12</sup> Yu, R., Cai, J. & Leung, P. The normalized revealed comparative advantage index. *Ann Reg Sci* 43, 267-282 (2009). <https://doi.org/10.1007/s00168-008-0213-3>

<sup>13</sup> Widodo, T. (2009). Comparative Advantage: Theory, Empirical Measures and Case Studies. *Review of Economic and Business Studies*, 57-82. <https://core.ac.uk/download/pdf/6605435.pdf>

<sup>14</sup> Kyrgyzstan is a lower-middle income country, while the others are considered upper-middle income countries

<sup>15</sup> Source: World Bank database

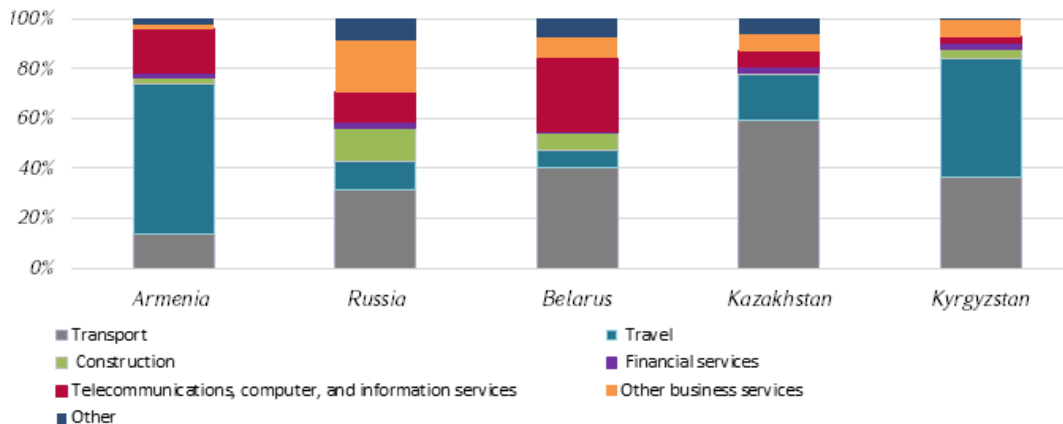


CHART 2

**The structure of services exports of EAEU countries, 2022<sup>16</sup>**

The main types of services exported by the EAEU member states are in traditional sectors: transport, tourism and construction services. Moreover, the export structure of Armenia and Kyrgyzstan exhibits a high share of travel services (58% and 44% respectively). In the case of Kazakhstan, Belarus and Russia, transport services dominate (59%, 40% and 32%, respectively). The export of services from Russia and Belarus is the most diversified. As for the contemporary sectors of services, “telecommunications, computer and information services” have a significant weight in the exports of Armenia and Belarus (17 % and 29 % respectively), while “other business services” hold a notable share in Russian service exports (21%).

Chart 3 shows the comparative advantages of the export of services of the EAEU member states by types of services in 2014, 2021 and 2022. Prior to the formation of the union in 2014, the biggest comparative advantages were in the export of transport services, construction and other business services. Russia stands out among other member states with a relatively high NRCA index in transport, construction and other business services, as well as notable disadvantages in three types of services: financial services, travel and charges for the use of intellectual property. Kazakhstan and Belarus also have

significant advantages in terms of transport services. In the case of construction services, only Kazakhstan has a disadvantage. In terms of travel services, Armenia, Kazakhstan and Kyrgyzstan have comparative advantages, while Russia and Belarus have rather large disadvantages. The latter countries have a positive NRCA index for “manufacturing services on physical inputs owned by others” and for “maintenance and repair services n.i.e”. Belarus has advantages in “telecommunications, computer, and information services”, while Kyrgyz Republic in “personal, cultural, and recreational services”.

In 2021 NRCA indices for transport services in Russia, Kazakhstan and Belarus decreased to a certain extent, while Kyrgyzstan achieved success in this sector, turning its previous disadvantage into a small advantage. NRCA index of construction services of all member states of the Eurasian Economic Union was positive, as Kazakhstan gained competitive advantages as well. Russia and Belarus significantly reduced their comparative disadvantage in the field of travel services. During this period, Belarus lost its comparative advantages in the field of telecommunications, computer and information services, instead, Armenia gained an advantage here. Russia has lost its

<sup>16</sup> Author’s calculations on the base of ITC’s Trade Map databases.

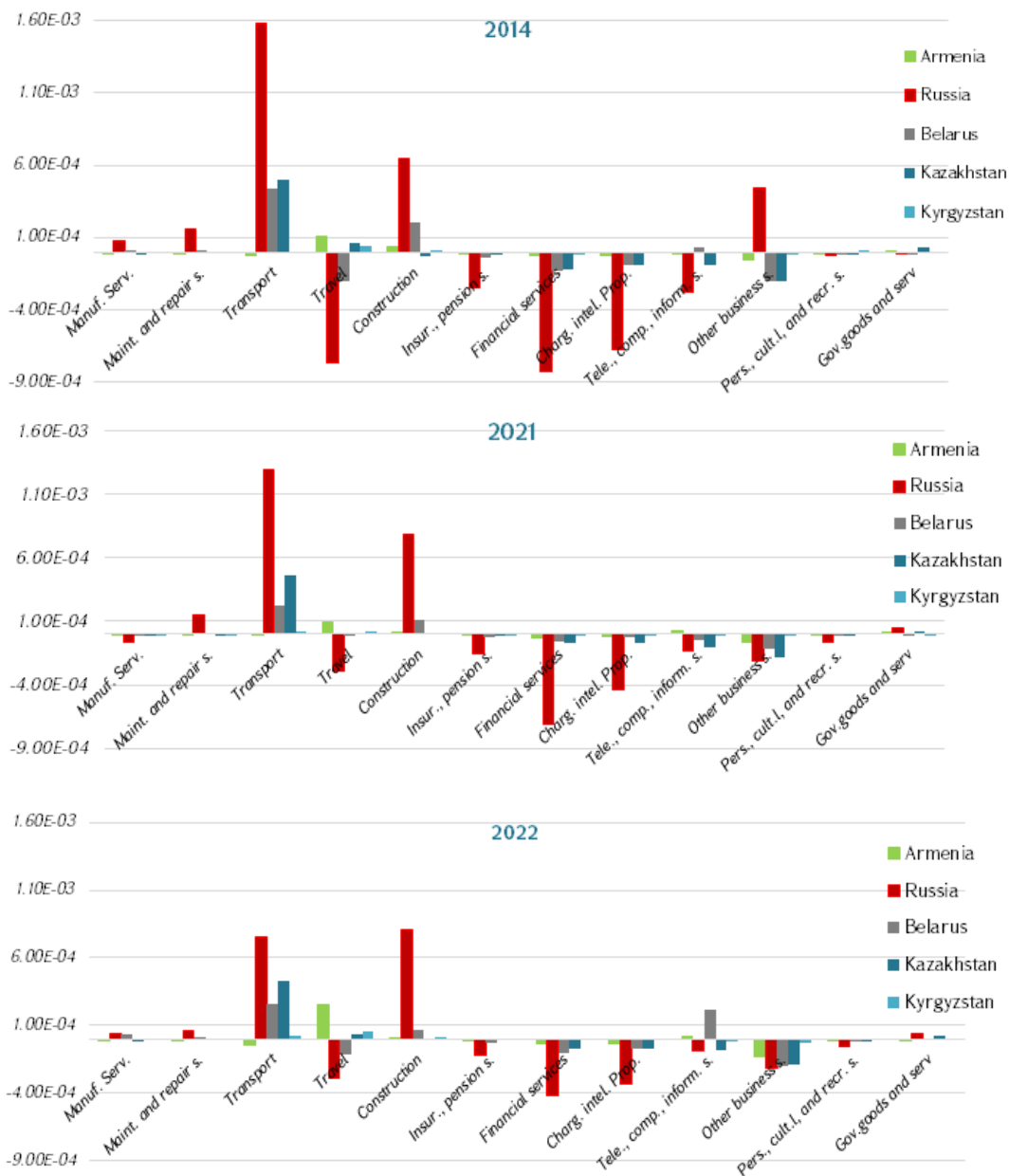


CHART 3

**NRCA index of EAEU member states in the services exports categories, 2014, 2021 and 2022<sup>17</sup>**

large comparative advantages in the field of “other business services”.

The year 2022 was a particularly difficult for EAEU. The economic sanctions imposed by the developed world on Russia, following the Russian-Ukrainian war, had a significant

impact not only on Russia's external economic relations, but also on other member states of the EAEU.

In 2022, compared to the previous year, Russia has maintained its competitive advantages in the field of construction

<sup>17</sup> Author's calculations on the base of ITC's Trade Map databases.

services, while its competitive advantages in the field of transport services have decreased. It is a positive phenomenon that the comparative disadvantage of the country in the field of financial services and charges for the use of intellectual property has been reduced dramatically.

In 2022, Armenia's competitiveness has significantly increased in the field of travel services. Belarus has gained competitive advantages in the field of telecommunications.

**CONCLUSIONS:** Thus, the competitive sectors for the export of services from EAEU member states still remain the traditional directions: transport, construction and travel. In contemporary sectors, such as financial services, insurance, charges for the use of intellectual property and other business services, EAEU countries are not competitive in the world. Among contemporary services, the union has comparative advantages only in the field of telecommunications, computer, and information services.

Despite the efforts made through normative measures to develop a single market for various services and promote growth in the services sector within the

EAEU, there have been minor changes and in some areas, even negative changes, in the global competitive advantages of the member states.

Instead, during the Russian-Ukrainian war, there were visible shifts. Armenia gained an advantage in terms of travel services, while Belarus obtained significant comparative advantages in the field of telecommunications, computer and information services. The NRCA index of Russia's comparative advantages in the field of transport has decreased. However, the reduction of Russia's disadvantage in financial services and charges for the use of intellectual property can be considered a positive development, which may be a sign of successful adaptation to difficult situations.

In summary, it is worth noting that a country's competitive advantages generally change rather slowly over time. However, the formation of a single market within the framework of the EAEU and the unification of legislations can contribute to the development of this sector. At the same time, it is necessary to emphasize the imperative for the development of contemporary services.

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**Շուշան ՄՈՎՍԻՍՅԱՆ**

*ՀՊՏՀ «Ամբերդ» հեղափոխական կենտրոնի փորձագետ*

ՀԱՅԱՍՏԱՆԻ ԵՎ ԱՇԽԱՐՀ

**ԻՆՉՊԵՍ ԵՆ ՓՈԽՎԵԼ ԵՍՄ ԵՐԿՐՆԵՐԻ ՀԱՄԵՄԱՏԱԿԱՆ ԱՌՎԱԵԼՈՒԹՅՈՒՆՆԵՐԸ ՇԱՌԱՅՈՒԹՅՈՒՆՆԵՐԻ ՈԼՈՐՏՈՒՄ**

Որքան զարգացած է երկրի տնտեսությունը, այնքան ավելի մեծ մասնաբաժին ունեն ՀՆԱ կառուցվածքում ծառայությունները, ինչը խոսում է այս հատվածի տնտեսական զարգացման տեսանկյունից կարևոր նշանակության մասին: Ծառայությունների ոլորտի զարգացման համար կարևոր է հասկանալ, թե որ ուղղություններում հատկապես երկիրն ունի ներուժ:

Հոդվածում ուսումնասիրվել է ԵԱՏՄ անդամ երկրների ծառայությունների արտահանման մրցունակությունը՝ հիմնվելով համեմատական առավելությունների գնահատման վրա: Դիտարկվել է համեմատական առավելությունների դինամիկան ԵԱՏՄ կազմավորումից առաջ և հետո: Վերլուծությունը ցույց է տվել, որ ԵԱՏՄ երկրները համեմատական առավելություններ ունեն ավանդական ծառայությունների արտահանման ոլորտում՝ տրանսպորտ, շինարարություն և ճամփորդություններ: Դրանք աննշան են փոխվել կառույցի գոյության 5 տարիների ընթացքում, բայց ավելի նշանակալի փոփոխությունների ենթարկվել 2022 թ. ռուս-ուկրաինական պատերազմի համապատկերում: Մասնավորապես, Ռուսաստանի համեմատական առավելությունները նվազել են տրանսպորտային ծառայությունների արտահանման ոլորտում: Միաժամանակ, ժամանակակից ծառայությունների ուղղություններում փոքրացել են Ռուսաստանի համեմատական առավելությունների բացասական ցուցանիշները: Իսկ Բելառուսը ու Հայաստանը նշանակալի համեմատական առավելություններ են ձեռք բերել հեռահաղորդակցության, վերջինս նաև ճամփորդական ծառայությունների արտահանման ոլորտում:

**Հիմնաբառեր.** *համեմատական առավելություններ, ՆԲՀԱ ցուցանիշ, ծառայություններ, արտահանում, ԵԱՏՄ*

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ARMENIA И МИР

**КАК ИЗМЕНИЛИСЬ СРАВНИТЕЛЬНЫЕ ПРЕИМУЩЕСТВА СТРАН ЕАЭС В СФЕРЕ УСЛУГ?**

Чем развита экономика страны, тем больше доля услуг в структуре ВВП, что подчеркивает важность этого сектора с точки зрения экономического развития. Для содействия развитию сфере услуг важно понимать направления, в которых страна имеет потенциал.

В статье исследуется конкурентоспособность экспорта услуг среди государств-членов ЕАЭС на основе оценки сравнительных преимуществ. Проведен анализ динамики сравнительных преимуществ до и после формирования ЕАЭС. Анализ показал, что государства-члены ЕАЭС обладают сравнительными преимуществами в экспорте традиционных услуг, таких как транспорт, строительство и туризм. За пять лет существования Союза они изменились незначительно, но более существенные изменения претерпели на фоне российско-украинской войны 2022 года. В частности, сравнительные преимущества России снизились в сфере транспортных услуг. В то же время уменьшились сравнительные недостатки России в сфере современных услуг. Беларусь и Армения получили значительные сравнительные преимущества в сфере телекоммуникаций, компьютерных и информационных услуг, причем последняя также получила преимущество в сфере туристических услуг.

**Ключевые слова:** *сравнительные преимущества, индекс НВСП, услуги, экспорт, ЕАЭС*