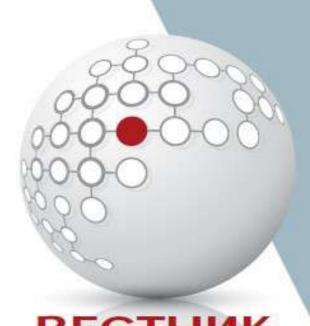


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АРМЯНСКОГО ГОСУДАРСТВЕННОГО

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# ANALYSIS OF THE COMPETITIVENESS SITUATION AT THE INTERNATIONAL AND REGIONAL LEVELS

International competitiveness is a key precondition for ensuring the economic development of countries in the modern world. An in-depth analysis of the economic situation in competitive countries provides an opportunity to assess and understand the factors and conditions that have created a "healthy" economic environment in those countries, ensured a high standard of living and quality of life. On the other hand, a comparative analysis of Global Competitiveness Index of Armenia with regional countries is of key importance. The paper addresses the important issues of increasing the competitiveness of the Armenian economy in the current situation.

**Keyword:** International competitiveness, comparative analysis, Global Competitiveness Index, Human Development Index, The Global Innovation Index

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**Introduction:** One of the central concepts used in modern economics in relation to the world market is international competitiveness. The global economy faces significant and interrelated challenges characterized by economic uncertainty. All countries should correctly identify their real sources of competitiveness and minimize negative consequences for economic development in specific contexts.

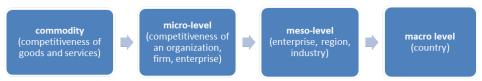
Competitiveness is a more fundamental criterion than many other economic criteria (including economic growth). It is impossible to achieve competitiveness

with uncoordinated and short-term interventions. To increase the competitiveness of the country, there is a need for a special and at the same time balanced approach. It is very vital to emphasize the main sources of national competitiveness and define the principles by which the country should compete. All this makes comprehensive analysis of competitiveness a key object of study for this paper.

Literature review: Competitiveness is a complex concept that does not have a single definition, despite numerous studies in various disciplines and approaches. In both theoretical and empirical terms, the concept of competitiveness of national economies does not have an unambiguous interpretation. Changes in the composition of the factors of the formation of competitiveness lead to the emergence of new aspects of it. Therefore, the problem of competitiveness continues to be actively considered in scientific literature.

In the last quarter of the twentieth century, when the term began to gain popularity in the scientific economic environment, competitiveness at the state level began to be associated with a country's ability to innovate and modify its technological base, create and quickly put into practice new knowledge.

The theoretical origin of the concept of competitiveness is connected with the economy of foreign trade and its role in national and international economic well-being <sup>1</sup>. Competitiveness is formed at least at four independent but interrelated levels. The four-level scheme includes <sup>2</sup>:



Summing up, the most influential and outstanding developing concepts and theories of competitiveness are the following:

- Adam Smith's concept of the "Invisible hand",
- David Ricardo's concept of comparative advantage,
- Schumpeter's theory of entrepreneur and innovation,
- Porter's theory of competitiveness,
- Krugman's concept (critique) of competitiveness.

The first two explain the international trading system based on the principle of (absolute and comparative) advantages. Schumpeter's main focus is on innovation as the key factor determining competitiveness. Krugman made his contribution to the theory of competitiveness by demonstrating the relevance of productivity to the competitive advantages of countries in international trade and improving the standard of living of the population. Porter's theory of

<sup>&</sup>lt;sup>1</sup> **Гиляровская С.В.**, Оценка конкурентоспособности российского бизнеса в рамках ВТО // Вестник КГУ им. Н.А. Некрасова, № 3, 2014. https://cyberleninka.ru/article/n/otsenka-konkurentosposobnosti-rossiyskogobiznesa-v-ramkah-vto

<sup>&</sup>lt;sup>2</sup> **Долгих Е.А., Гудошникова Н.А.,** Анализ положения стран БРИКС в рейтинге глобальной конкурентоспособности // Международный научный журнал / Инновационная наука. № 2, 2016. https://cyberleninka.ru/article/n/analiz-polozheniya-stran-briks-v-reytinge-globalnoykonkurentosposobnosti/

competitiveness is called the diamond model. It is often used by researchers and a four-factor model of countries' competitive advantage<sup>3</sup>.

There are many theories discussing competitiveness, with different assumptions and consequences<sup>4</sup>. Each of the theories has an important impact on the concept of competitiveness at the international, regional, national level<sup>5</sup>.

- 1) The classical theories of the concept of competitiveness are the following:
- Each nation plays a role in the division of labor based on absolute advantage (Smith) and later comparative advantage (Riccardo).
- The division of labor allows technological differences between countries.
- In addition, the factors of production (labor) in countries are completely mobile in all sectors.
- 2) Neoclassical theory. The main assumptions of the neoclassical theory is based on the Heckscher-Ohlin (HO) model, also called the "factor proportions model". The consequences of neoclassical economic theories for the concept of competitiveness are the following:
  - each nation has its own role in the division of labor, based on the relative ratio of factors of production. If the proportion is the same, then trade will be useless;
  - equalization of the prices of factors of production implies a certain degree of convergence of income received from capital and labor.
- 3) In conditions of perfect competition, the concept of competitiveness is not sustainable in the long term. While classical economists viewed capital and labor as two independent factors of production, Keynesian theory argues that they complement each other.

The following are the consequences of Keynesian theory for the concept of competitiveness:

- the state can successfully intervene every time;
- imperfect markets allow the existence of regional differences;
- regional convergence can be achieved through economic policy;
- the intensity of capital flows leads to economic growth and productivity growth.

Theories of development economics were the subject of endless contradictory discussions. The most important topics are the effectiveness of state aid, trade liberalization, and foreign direct investments. Some of the concepts originated from the development economics are very important for the competitiveness of the region. The implications of development economics theories for the concept of competitiveness are followings:

<sup>&</sup>lt;sup>3</sup> **Tyson L.,** Who's Bashing Whom? Trade Conflicts in High-Technology Industries // Washington, DC: Institute for International Economics. 1992. Pp. 1-37.

https://econpapers.repec.org/RePEc:eee:inecon:v:35:y:1993:i:1-2:p:185-191

<sup>&</sup>lt;sup>4</sup> **Stanickov Michaela**, Classifying the EU Competitiveness Factors using Multivariate Statistical Methods, Procedia Economics and Finance, 23, 2015. Pp. 313–320. http://creativecommons.org/licenses/by-ncnd/4.0/

<sup>&</sup>lt;sup>5</sup> Paas Tiiu, Evaluating the Competitiveness of The Countries in the Baltic Sea Region // Modelling the Economies of the Baltic Sea Region / Tartu, 2004. P. 19-53. https://ideas.repec.org/h/mtk/fechap/17- 01.html/

- central regions with a productive advantage will retain their positions ahead of peripheral regions;
- economic policy should take into account the state of development of each region;
- economic policy should contribute to the "multiplication effect" of FDIs.

The main aspect developed by the theory of endogenous growth is that the accumulation of knowledge leads to an increase in income. It is also important to state that knowledge and know-how do not spread instantly; they must be obtained.

- 4) The implications of new trade theories for the concept of competitiveness are thr following:
  - specialization of labor is necessary;
  - investments enhance the scale effect of economies.

The last few years growing academic and political debates about the best ways to conceptualize and measure competitiveness has been becoming more and more actual. The development of these debates has traditionally revolved around four ideas: division of labor and specialization, market share, costs/prices and productivity.

The classical theory of comparative advantages has long been considered to be dominated perceptions of international trade. But now it is recognized as an incomplete explanation of the competitive advantages of firms in the modern business environment. Advances in technology and innovation, as well as resource constraints, have created both new opportunities and limitations in obtaining, maintaining and improving competitiveness compared to competitors in an increasingly complex, globalized economy. Technological and innovational progress, as well as environmental issues and scarcity of resources have created both opportunities and limitations for rising competitiveness of countries and overall global economy.

The deepening of the openness of the economy affects the macroeconomic processes taking place inside the country and the rational use of existing resources. According to V. Bostanjyan and A. Mkrtumyan, all this has huge impact on the competitiveness of the national economy <sup>6</sup>. National competitiveness can increase due to the innovations, the expansion of investment opportunities, the acquisition of the latest technologies, the increase of productivity, the expansion of exports, the growth of jobs, the production of high-quality products with high added value. Productivity, which determines the efficiency of resource use, is the cornerstone of a country's competitiveness. Productivity growth must be accompanied by economic growth, otherwise it can lead to a reduction in employment<sup>7</sup>.

Human Development Index is an index used to measure how well human

<sup>&</sup>lt;sup>6</sup> **Բոստանջյան Վ., Մկրտումյան Ա.,** Տնտեսության մրցունակության էությունը և տեսական հիմքերը, «Այլընտրանք» գիտական հանդես, http://alternative.am/%D5%A1%D5%B5%D5%AC%D5% A8%D5%B6%D5%BF%D6%80%D5%A1%D5%B6%D6%84%D5%A3%D5%AB%D5%BF%D5%A1%D5% AF%D5%A1%D5%B6-%D5%B0%D5%A1%D5% B6%D5%A4%D5%A5%D5%BD-4/

<sup>&</sup>lt;sup>7</sup> **Գևորգյան Դ.,** ՀՀ ազգային մրցունակության վրա ազդող գործոնների ուսումնասիրություն, Գիտելիք, նորաստեղծություն և զարգացում, ՀՊՏՀ 25-րդ գիտաժողովի նյութեր, II, էջ 87։

development has taken place in a country<sup>8</sup>. Research on the level of global competitiveness is still not a done deal. Much of the literature is a form of review of phase to global competitiveness, such as E-Governance Development (2010), review the phases of global competitiveness.

The concept of a country's competitiveness still does not have a clear and straightforward meaning and remains ambiguous. Different economists stress various aspects of the concept and use a number of different methods to evaluate how competitive a country is<sup>9</sup>. Annually, the World Economic Forum<sup>10</sup> introduces the global competitiveness rankings through the global competitiveness index (GCI) as the most extended tool for a country's competitiveness assessment. Many empirical researches are devoted to the analysis of an overall score of the GCI, to the evaluation of individual factors and indicators of economic growth, in order to detect the most influential variables and to provide specific recommendations to improve the actual level of a country's competitive position.

However, several studies examine relationships between the Human Development Index and global competitiveness. Studies by Anand & Sen<sup>11</sup>, Cahill<sup>12</sup>, Khodabakhshi<sup>13</sup>, show how the real sector of the economy, including global competitiveness, influence the Human Development Index. The study that focuses on the behavior of competitiveness as a dependent variable is nearly absent. Theoretically, human development will affect competitiveness. This is because humans are the main factor determining global competitiveness. The transmission goes the following. The qualified human resources will generate positive and significant economic growth, which, in turn, enhances the global competitiveness.

Research methodology: The theoretical, informational and methodological basis for the paper are the works of Armenian and foreign economists, classical and modern economic theories about international competitiveness, international conventions regulating the sphere of international competitiveness, the Global Competitiveness report published annually by the World Economic Forum, decisions, reports and strategic programs of Armenian state bodies, as well as reports of state and private organizations. Sources of information collection were the Statistical Committee of the Republic of Armenia, publications of international organizations such as the World Bank, Eurostat, The International Labor Organization, etc.

<sup>&</sup>lt;sup>8</sup> **Martinez R.,** Inequality and the New Human Development Index. Applied Economics Letter Journal, 19, 2012, pp. 533-535.

<sup>&</sup>lt;sup>9</sup> Petryle V., Does the Global Competitiveness Index Demonstrate the Resilience of Countries to Economic Crisis? Ekonomika 2016, 95, pp. 28–36

<sup>&</sup>lt;sup>10</sup> Schwab K., The Global Competitiveness Report; World Economic Forum, 2018, pp. 1–671. Available online:

http://www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitiveness Report2018.pdf (accessed on 14 January 2019)

<sup>&</sup>lt;sup>11</sup> **Anand S., & Sen A.,** The Income Component of the Human Development Index. Journal of Human Development and Capabilities, 1, 2000, pp. 83-106.

<sup>&</sup>lt;sup>12</sup> **Cahill M. B.,** Diminishing Returns to GDP and the Human Development Index. Applied Economics Letters, 9, 2002, 885-887

<sup>&</sup>lt;sup>13</sup> **Khodabakhshi A.,** Relationship between GDP and Human Development Indices in India. International Journal of Trade, Economics and Finance, 2011, 251-254.

In this paper, the author used two research methodologies: quantitative and qualitative. Also, for comprehensive understanding of issue the author used the methods of statistical, mathematical (graphic), comparative and structural analysis in the framework of this research. With quantitative methods the author did statistical analysis to answer their research questions. As well as, the main situational analysis was carried out using quantitative methods. With qualitative methods author made observations and content analysis. Specific assessments and approaches to both existing and current situation were given according to the qualitative methodological composition of the article. There are two methods used by economic theory: the hypothetical-deductive method used principally by neoclassical economists, and the historical-deductive method adopted by classical and Keynesian economists. Both are legitimate, but, since economics is a substantive, not a methodological science, whose object is the economic system, the later method is more adequate. The hypothetical-deductive permits that the economist, starting from some basic assumptions - principally the maximizing agent, deduces a consistent and mathematical theory, but at the cost of realism and relevance. So in this article, the author also used the main idea of the hypothetical-deductive method.

Findings, analysis: The World Economic Forum highlights two sides of international competitiveness. Firstly, the ability of the economy to achieve economic growth based on the determinant of the complex process of economic development. Secondly, the development of factors contributing to the productivity and production of the company at the micro level. In modern economic conditions, it is impossible to limit the concept of international competitiveness only to the success of a country's trade transactions in foreign markets or the productivity growth of national companies. These components are undoubtedly important and have a great impact on the competitiveness of countries. Based on the above analyses, national competitiveness can be determined as a combination of factors, institutions and instruments of targeted policy, which determines not only the growth of productivity in the country, but also allows to maintain and increase the real incomes of the population.

Thus, complexity and versatility of competitiveness makes it one of those unique indicators that is able to assess economic development prospects of a country, which is certainly important for forecasting and developing a national strategy. This feature of competitiveness makes the indicator more interesting and allows to continue work on improving the methodology.

The World Economic Forum (WEF) has annual report on global competitiveness, exploring and presenting the main factors that strengthen national competitiveness. The World Economic Forum defined competitiveness as a set of institutions, policies and factors that determine productivity of a country<sup>14</sup>. The Global Competitiveness Report series has since its first edition

2016-2017\_FINAL.pdf

The Global Competitiveness Report 2016–2017 is published by the World Economic Forum within the framework of the Global Competitiveness and Risks Team http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport

aimed to prompt policy-makers beyond short term growth and to aim for long-run prosperity. The 2020 special edition<sup>15</sup> is dedicated to elaborating on the priorities for recovery and revival, and considering the building blocks of a transformation towards new economic systems that combine "productivity", "people" and "planet" targets. The report looks at priorities for economies across three timeframes: those of the last decade as revealed by timeseries data on factors of competitiveness, those that are critical for economic revival as revealed by the crisis and those that could help embed a transformation that may lead to better outcomes for productivity, shared prosperity and sustainability. The 2020 special edition of The Global Competitiveness Report (GCR) series comes out at a very difficult and uncertain historical moment<sup>16</sup>.



Chart 1. The 10 most competitive countries in the world, The Global Competitiveness Report, 2019 17

The recent 2019 edition of Global Competitiveness Report assesses 141 economies. The report is made up of 98 variables, from a combination of data from international organizations as well as from the World Economic Forum's Executive Opinion Survey. The variables are organized into twelve pillars with the most important including: institutions; infrastructure; ICT adoption; macroeconomic stability; health; skills; product market; labour market; financial system; market size; business dynamism; and innovation capability. The GCI varies between 1 and 100, higher average score means higher degree of competitiveness. With the 2019 edition, the World Economic Forum introduced a

<sup>&</sup>lt;sup>15</sup> The Global Competitiveness Report, special edition 2020, How Countries are Performing on the Road to Recovery, Klaus Schwab, Saadia Zahidi, World Economic Forum, p. 2 https://www.weforum.org/reports/the-global-competitiveness-report-2020

<sup>&</sup>lt;sup>16</sup> The Global Competitiveness Report, special edition 2020, How Countries are Performing on the Road to Recovery, Klaus Schwab, Saadia Zahidi, World Economic Forum, p. 5 https://www.weforum.org/reports/the-global-competitiveness-report-2020

World Competitiveness Report 2019 http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

new methodology, aiming to integrate the notion of the 4th Industrial Revolution into the definition of competitiveness. It emphasizes the role of human capital, innovation, resilience and agility, as not only drivers but also defining features of economic success in the 4th Industrial Revolution. According to the World Competitiveness Report 2019<sup>18</sup>, Singapore ranks first in the list of the most competitive 141 countries. Singapore is followed by the United States, which is followed by Hong Kong.

Chart 1 shows that the most competitive countries are the ones with developed economies, have an efficient infrastructure, a stable macroeconomic environment, a well-developed financial system and mechanisms for the productive allocation of resources.

The deeper analysis of 12 pillars characterizing international competitiveness shows that Singapore ranked as 27th in the pillar of the Market Size, which can be explained by a small number of population (5.6 million people<sup>20</sup>). At the same time, it should be noted that Singapore is the leader in the world in terms of GDP per capita (65,640 US dollars 21). In mMcro-economic stability pillar Singapore is 38th. Because of the fact that despite the stable inflation rate (in the first place in the world), Singapore has a problem of debt dynamics. An improvement of 1.3 points in its overall score, combined with the United States' lower performance, allows Singapore (84.8) to overtake the United States (83.7) at the top of the GCI 4.0 rankings. Singapore improves from an already high base on 10 of the 12 pillars, and its score on every pillar is between 4 and 19 points higher than the OECD average. The country ranks first on the Infrastructure pillar (95.4), where it also ranks first for road quality infrastructure, efficiency of seaport and airport services, and sea transport connectivity. It also tops the Health (100), Labour market (81.2) and Financial system pillars (+2.0 points, 91.3), and achieves a nearly perfect score for Macroeconomic stability (+7.1, 99.7, 38th). Performance in terms of market efficiency (81.2, 2nd behind Hong Kong SAR) is driven by the fact that Singapore is the most open economy in the world. Singapore ranks 2nd (80.4) for the quality of public institutions, behind Finland, but its performance is undermined by limited checks and balances (65.9, 23rd)-Singapore notably ranks 124th on the Freedom of the Press Index-and lack of commitment to sustainability (63.5, 66th). Going forward, in order to become a global innovation hub, Singapore will need to promote entrepreneurship and further improve its skills base, albeit from a relatively high base (78.8, 19th).

The USA, having stayed at the top of the rating for a year, dropped to the second line. One of the reasons for this was tax reform<sup>22</sup> which was implemented

<sup>&</sup>lt;sup>18</sup> World Competitiveness Report 2019

http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

<sup>&</sup>lt;sup>19</sup> World Competitiveness Report 2019

http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

<sup>&</sup>lt;sup>20</sup> The World Bank Data https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SG

<sup>&</sup>lt;sup>21</sup> The World Bank Data https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=SG

<sup>&</sup>lt;sup>22</sup>The U.S. deficit hit \$984 billion in 2019, soaring during Trump era,

https://www.washingtonpost.com/business/2019/10/25/us-deficit-hit-billion-marking-nearly-percent-increase-during-trump-era/

by Donald Tramp. Although the United States holds the first place in the world in terms of infrastructure efficiency and macroeconomic indicators, competitiveness of the American economy has suffered because of rising fuel prices, weakening high-tech exports and fluctuations in the dollar. The United States ranks 2nd this year, dropping one place. The IMF forecast for next year is 1.87%, decelerating from the previous assessment, but still higher than those of many other advanced economies. Uncertainty among business leaders affects the performance of nine of the GCI's 12 pillars this year, yet some areas register a more noticeable drop compared to others. In particular, within the Product market pillar, domestic competition is six points lower than in 2018 and trade openness is more than four points lower. With respect to Human Capital, the Health conditions (55th) pillar lost 3.5 points and Skills (9th) lost 3.8 points in score since last edition. Although the skillsets of American graduates remain strong (71.2, 5th), business leaders consider them less adequate to meet their needs (the indicator score is about 10% lower than last year, dropping three places in the rank). Further, within the Labour market pillar (4th), business leaders rate re-skilling programs as less effective (12.2 points lower) and regulations on hiring foreign labour more restrictive 31st (-7.8 points). Despite an overall weaker performance this year, the United States remains one of the most competitive economies in the world. It is still an innovation powerhouse, ranking 2nd on the Innovation capability pillar and 1st in terms of Business dynamism, boasting the second-largest market, and home to one of the most dynamic financial systems in the world (score 91.0, 3rd).

As Chart 1 shows, during 2019, six out of the ten most competitive countries were European countries (The Netherlands 4<sup>th</sup> place, Switzerland 5<sup>th</sup> place, Germany, Sweden, United Kingdom and Denmark accordingly 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> places).

According to the analysis of some of the pillars (Chart 2), it becomes clear that macroeconomic stability is one of the main reasons for success of competitiveness of European countries (all rated the maximum hundred points). It can be explained by the fiscal policy of some European states. The framework of the policy is stimulation of state budgets, which makes it possible to invest significant funds in infrastructure projects. On the other hand, the weakness of competitiveness in European countries is mostly because of the pillar of market size. To explain less competitiveness of Market size pillar in European countries, it should be noted that there are many technical restrictions on import of goods and services to enter the European market. On the one hand, it provides European market with goods and services with a high quality. However, the opposite side of this is that it affects the size of the market.

Hong Kong SAR ranks third overall, behind Singapore and the United States, thanks to a 0.8 point improvement to its overall score (83.1). Hong Kong features in the top 10 of eight pillars—a record—and outperforms the OECD benchmark on every pillar. Hong Kong ranks first on four pillars—the most of any economy—in which it is at, or near the frontier score of 100: Macroeconomic stability (100), Health (100), Financial system (91.4) and Product market (81.6). Furthermore, it ranks 3rd on the Infrastructure (94.0) and ICT

adoption (89.4) pillars. Hong Kong's biggest weakness is undoubtedly its limited capability to innovate. With a score of 63.4 (26th), it lags behind Singapore (13th) by 12 points. Another differentiating factor between the two economies is the labour market. Here (75.8, 7th) Hong Kong is penalized for the lack of worker rights' protection (10, 116th), whereas Singapore's workers protection score is 89 (18th).

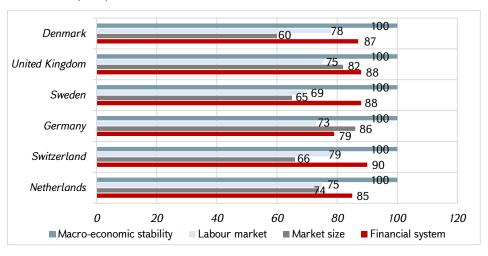


Chart 2. Comparison of four pillars of CGI for some European countries, The Global Competitiveness Report, 2019 23

Japan ranks sixth overall, down one notch over 2018. Despite the small drop in overall score (82.3, -0.2 points), performance across the 12 pillars is almost unchanged. Small gains on some pillars are offset by small declines on others. Japan ranks third in the East Asia and the Pacific region, behind Singapore and Hong Kong SAR. It features in the top 10 of six pillars, scoring above 90 on Infrastructure (93.2, 5th), Macroeconomic stability (94.9, 42nd) and Health (100, 1st). Japan is one of the most technology-savvy nations in the world (86.2, 6th) and its financial sector is large, deep and stable (85.9, 12th). The country also benefits from the large size of its market (86.9, 4th, when combining the domestic and export markets). Japan delivers a consistent and very solid performance on the other pillars, with no score below 70. Nonetheless, in each of the categories, there are specific aspects that systematically undermine the general performance. On the Skills pillar (73.3, 28th), for example, while mean years of schooling among the workforce is among the highest in the world (12.8 years, 14th), inadequate teaching methods (e.g. 87th for critical thinking in teaching) help to fuel the skills gap (56.7, 54th). Japan's labour market (71.5, 16th) is undermined by various rigidities (e.g. 104th for hiring and firing flexibility) and a low female participation (76 female workers for 100 male workers, 62nd).

World Competitiveness Report 2019 http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

Japan's economic competitiveness was specifically affected by the "Japanese miracle", due to which Japan has turned into one of the largest economy's in the world. One of the most important factors of Japan's competitiveness at the global level is the presence of acute internal competition. As a rule, the saturation of the domestic market with certain goods causes an increase in their exports. At the same time, the rapid saturation of the market encourages competing companies to introduce new types of products and increase productivity. Thus, the presence of well-developed internal competition in the country was one of the factors of its competitiveness in the world market. At the same time, it is very important to note that the driving factor of Japanese domestic competition has become favorable conditions for high domestic demand, among the main motives of which is the homogeneity of the culture of the population, including the education of buyers and their demands for good quality goods.

Meanwhile, it is noteworthy for country's economy competitiveness to consider the technological and human development aspects of any economy. The impact of technological development on the competitiveness of the country should not be underestimated. Technology is the locomotive of the economy of any country, which leads to an increase in the level of development of science and education. Therefore, technological development is important for the overall competitiveness of the country. Along with this, it is also important to consider the human development index.

The ranks of the top 10 competitive countries<sup>24</sup>, for The Global Innovation Index,<sup>25</sup> and The Human Development Index, 26 2019

Countries	Global Competitiveness Report	Global Innovation Index	Human Development Index
Singapore	1	8	11
United States	2	3	17
Hong Kong SAR	3	13	4
Netherlands	4	4	8
Switzerland	5	1	2
Japan	6	15	19
Germany	7	9	6
Sweden	8	2	7
United Kingdom	9	5	13
Denmark	10	7	10

According to Table 1, it can be clarified that countries with high international competitiveness also have significant positions in Human Development Index and Global Innovation Index. So, the analysis of the Global

http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

<sup>&</sup>lt;sup>24</sup> World Competitiveness Report 2019,

<sup>&</sup>lt;sup>25</sup> World Intellectual Property Organization: Global Innovation Index 2019, https://www.wipo.int/publications/en/details.jsp?id=4434

<sup>&</sup>lt;sup>26</sup> United Nations Development Programme: Human Development Index (HDI) Ranking 2019, http://hdr.undp.org/en/content/latest-human-development-index-ranking?utm\_source=EN&utm\_ medium=GSR&utm\_content=US\_UNDP\_PaidSearch\_Brand\_English&utm\_campaign=CENTRAL&c\_ src=CENTRAL&c src2=GSR&gclid=Cj0KCQiA4b2MBhD2ARIsAIrcB-

TBONYoolSWVzEboZduCsPFw0rXF9mcSENmtagaipgJKmPqU7gO-MaAombEALw wcB

Innovation Report shows that 8 out of 10 competitive countries in the Global Innovation Index coincide with the top 10 most competitive countries. For example, Singapore, which is considered the most competitive country, ranks the 8th in the Global Innovation Index. On the other hand, Switzerland, which ranks first in the world on the Global Innovation Index, ranks the 5th on the Global Competitiveness Index. And according to the Human Development Index, Switzerland ranks the second in the world.

Competitiveness is one of the main challenges facing the private and public sectors of the Armenian economy. Armenia's stable and harmonious economic growth depends on the level of competitiveness. Based on the country's competitiveness agenda, it is important to study the position of the Armenia's competitiveness in the world, identify the weaknesses and strengths of Armenia's competitiveness and to discover the ways to improve the competitive position. Global Competitiveness Index of Armenia ranked the 69th among 141 countries. At the same time, a comparative analysis shows that Armenia is behind Azerbaijan (58th) and Turkey (61st) in the region. While, Armenia has advantageous positions in the region comparing to Georgia and Iran, which are in the 74th and 99th places, respectively. For a more comprehensive analysis, it should be noted that, for example, Turkey is quite competitive in terms of Market size (13th among 141 countries), which we cannot say about Armenia and Georgia, which are respectively in the 118th and 104th places among 141 countries. On the other hand, Armenia occupies a fairly good position among regional countries in the Labor Market pillar (32nd), second only to Azerbaijan, which took the 21st place. At the same time, Turkey (109th) and Iran (140th) recorded poor indicators in the region for this pillar. It should also be stated that with such an important pillar as macroeconomic stability, Armenia had the best position among the countries of the region, taking the 64th place. The next place after Armenia among the countries of the region is ranked Georgia (87th) place, Azerbaijan, Turkey and Iran took respectively the 103<sup>rd</sup>, 129<sup>th</sup> and 134<sup>th</sup> places.

Table 2
The ranks of Caucasian region countries for The Global Competitiveness Index<sup>27</sup>,
The Global Innovation Index<sup>28</sup> and The Human Development Index, 2019<sup>29</sup>

Caucasian region countries	The Global Competitiveness Index 2019	Global Innovation Index 2019	Human Development Index 2019
Turkey	61	49	54
Armenia	69	64	61
Georgia	74	48	70
Iran	99	61	81
Azerbaijan	58	84	88

<sup>&</sup>lt;sup>27</sup> World Competitiveness Report 2019,

http://www3.weforum.org/docs/WEF\_TheGlobalCompetitivenessReport2019.pdf

<sup>&</sup>lt;sup>28</sup> World Intellectual Property Organization: Global Innovation Index 2019, https://www.wipo.int/publications/en/details.jsp?id=4434

<sup>&</sup>lt;sup>29</sup> United Nations Development Programme: Human Development Index (HDI) Ranking 2019, http://hdr.undp.org/en/content/latest-human-development-index-ranking?utm\_source=EN&utm\_medium=GSR&utm\_content= US\_UNDP\_PaidSearch\_Brand\_English&utm\_campaign= CENTRAL&c\_src=CENTRAL&c\_src2=GSR&gclid=Cj0KCQiA4b2MBhD2ARIsAIrcB-TBONYoolSWVzEboZduCsPFw0rXF9mcSENmtagaipgJKmPqU7g0 -MaAombEALw wcB

As it can be noted from Table 2, Armenia has stable ranks in all important reports. So, unlike other regional countries, there are not many fluctuations in the case of Armenia. In addition, Armenia ranked second in the region according to the Human Development Index, being left behind only by Turkey and taking 61<sup>st</sup> place. However, on the other hand, taking into account Armenia's goals to become an innovative country, we are still quite far behind in the region countries according to the Global Innovation Index (64<sup>th</sup>).

In the economic structure, due to the priority of areas with low productivity, Armenia finds itself at a disadvantage among the countries of the region. Innovative nature of Armenian economy will be finally resolved by acquiring new markets, forming new partners, and increasing the innovative activity of enterprises in the field of new technologies. The problems related to two neighboring states - Turkey and Azerbaijan - makes increasing competitiveness of Armenian economy rather difficult. Moreover, part of the pillars presented in the report directly relates to the problem of the economic blockade of Armenia by Turkey and Azerbaijan which has a significant impact on the ranking of the global competitiveness of Armenia.

Conclusions: International experience shows that the intensity of innovation is crucial for the formation of an effective competitive environment that provides equal opportunities to market participants. Competition is the main incentive for innovation carried out at enterprises. Competitiveness is a multifaceted concept that includes interrelated concepts, the key idea of which is the ability of a nation to create systems or environments thanks to which the existing and potential capabilities of the country will be effectively used. In the current era of globalization and internationalization of production, the main criterion for the efficiency of the economy and the demand for products and services is competitiveness. The competitiveness of the country is the main indicator of the stable development of the economy. The higher the level of competitiveness of a country is, the more the degree of stability.

Globalization and the development of competition create problems for commodity producers. In particular, constant innovation, unprecedented growth of the most competitive industries and sectors in developed and newly industrialized countries are due to domestic and international competitiveness. Comparative assessments of competitiveness make it possible to identify the weaknesses and strengths of national economic entities in the global economy, to clarify the guidelines for economic development.

Competitiveness as the basis of economic development is mainly related to and calculated by the country's productivity and is considered an essential factor in improving living standards. With high and growing productivity, a country can maintain a strong currency, high return on capital and a high level of wages, which leads to the enrichment of the generation and an increase in living standards.

The World Economic Forum has "Global Competitiveness Report" which annually presents the main factors that strengthen national competitiveness. The recent 2019 edition of Global Competitiveness Report assesses 141 economies.

Singapore ranks first in the list of the most competitive 141 countries, then followed by the United States and Hong Kong. It is important to mention that during 2019, six out of the ten most competitive countries were European countries (The Netherlands  $4^{th}$  place, Switzerland  $5^{th}$  place, Germany, Sweden, United Kingdom and Denmark accordingly  $7^{th}$ ,  $8^{th}$ ,  $9^{th}$  and  $10^{th}$  places). Japan's economic competitiveness, which is the  $6^{th}$  in the world, is specifically affected by the "Japanese miracle", due to which Japan has turned into one of the largest economy's in the world. The main reason for this is also acute internal competition of the economy of Japan.

If compering Human Development Index, Global Innovation Index and Global Competitiveness Index, it can be implied that countries with high international competitiveness also have significant positions in Human Development Index and Global Innovation Index. Thus, 8 out of 10 competitive countries in the Global Innovation Index coincide with the top 10 most competitive countries. The same picture can be concluded if analyzing Human Development report, which shows that among the top 10 countries, six coincided with the most competitive top 10 countries.

The analysis of 12 pillars of competition of Global Competitiveness Index explained the strengths and weaknesses of Armenia, the main limitations and opportunities, especially serious shortcomings and problems were identified in a number of areas. Especially at the micro level, they significantly reduce Armenia's competitive position in the world and threaten the stability of economic development. They include poor quality of the business environment, lack of independence of the judicial system, unfair local competition, sponsorship and bias in government decisions, customs and tax burdensome procedures (despite significant reforms in this area), unavailability of alternative forms of financing, weakness of higher education and retraining systems, low level of public and private spending on research and development and uneven territorial development. In order to eliminate the monopoly practice existing in Armenia and improve the effectiveness of the competition protection policy, it is necessary to clarify the mechanisms for identifying monopoly positions, in particular, in the direction of disclosure of interrelated companies and secret agreements, tightening punitive mechanisms by increasing the fines applied and temporary termination of activities. One of the tools to increase Armenia's competitiveness is to improve the availability of digital technologies and, in particular, the Internet. Also, it is necessary to intensify the development of retraining programs with state support and cooperation with private and higher educational institutions.

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### ՏԻԳՐԱՆ ՄԻՔԱՅԵԼՅԱՆ

<ՊՏ< միջազգային փնտեսական հարաբերությունների ամբիոնի ասպիրանտ

Մրցունակության իրավիճակի վերլուծությունը միջազգային և պարածաշրջանային մակարդակներում.— Միջազգային մրցունակությունը ժամանակակից աշխարհում երկրների տնտեսական զարգացման ապահովման կարևորագույն նախապայման է։ Մրցունակ երկրներում առկա տնտեսական իրավիճակի խորքային վերլուծությունը հնարավորություն է

տալիս գնահատելու և հասկանալու այն գործոններն ու պայմանները, որոնք այդ երկրներում ձևավորել են առողջ տնտեսական միջավայր, ապահովել են բնակչության բարձր կենսամակարդակ և կյանքի որակ։ Մյուս կողմից՝ առանցքային նշանակություն ունի տարածաշրջանային երկրների հետ Հայաստանի մրցունակության դիրքի համեմատական վերլուծությունը։ Հայաստանի տնտեսության մրցունակության բարձրացման հիմնահարցերը հատկապես ընթացիկ իրավիճակում օրակարգային ու կարևոր են, ինչին ևս անդրադարձել է հեղինակը հոդվածի շրջանակներում։

Հիմնաբառեր. միջազգային մրցունակություն, համեմափական վերլուծություն, Գլոբալ մրցունակության ինդեքս, Մարդկային զարգացման ինդեքս, Գլոբալ նորարարության ինդեքս։

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### ТИГРАН МИКАЕЛЯН

Аспирант кафедры международных экономических отношений АГЭУ

Анализ конкурентоспособности на международном и региональном уровнях.— Международная конкурентоспособность является ключевой предпосылкой для обеспечения экономического развития стран в современном мире. Глубокий анализ экономической ситуации в конкурентоспособных странах дает возможность оценить и понять факторы и условия, которые создали «здоровую» экономическую среду в этих странах, обеспечили высокий уровень и качество жизни. С другой стороны, ключевое значение имеет сравнительный анализ индекса глобальной конкурентоспособности Армении со странами региона. В рамках данной статьи обсуждаются также вопросы повышения конкурентоспособности экономики Армении, являющиеся актуальными и чрезвычайно важными в нынешней ситуации.

**Ключевые слова:** международная конкурентоспособность, сравнительный анализ, индекс глобальной конкурентоспособности, индекс человеческого развития, глобальный индекс инноваций.

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