THE EVOLUTION OF THE WORLD'S LARGEST ECONOMIES IN THE PERIOD 2017-2020

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Abstract: In the age of risk and uncertainty, countries and companies are competing in a turbulent global environment. In this respect, they have to face a plethora of different challenges, such as the CO-VID-19 pandemic, disruptive technologies, demographic explosion, or climate change. A highly interconnected global economy imposes countries to compete not only for resources and markets but also to seek to hold a better place in this huge world economic network. The aim of the paper is to present the evolution of the world's largest economies in the period 2017-2020 by taking into account their gross domestic product. The methodology was based on a quantitative research method. Starting from a comprehensive literature review, it demonstrates that the hierarchy of the world's ten biggest economies by GDP was dominated by two countries, the United States of America and China.

Keywords: economy, gross domestic product, country, purchasing power parity

JEL Classification: E01, F00



1. Introduction

Since the fall of the Berlin Wall, the globalization process has rapidly expanded all over the world (Crafts, 2000). Numerous and considerable flows of money, people, information, goods and services have dramatically spread at a record pace in recent decades (Sharma, 2017) and led to the emergence of a new globalized world economy in which it has become "increasingly difficult to use old formulas and paradigms to predict what's going to happen in the future" (Epping, 2020, p.3).

In the age of risk and uncertainty, countries and companies are competing in a turbulent global environment (Toma and Marinescu, 2013; Toma and Marinescu, 2015). In this respect, they have to face a plethora of different challenges, such as the COVID-19 pandemic, disruptive technologies, demographic explosion, or climate change (Catană et al., 2020). On the one hand, a highly interconnected global economy imposes countries to compete not only for resources (e.g., oil, water, natural gas) and markets (Garelli, 2006) but also to seek to hold a better place in this huge world economic network. This is why every country should design and implement its own strategy for economic development and growth. It is said that this strategy has to fit "each country's context- the national and international conditions in which the country operates" (Vietor, 2007, p.7). On the other hand, business organizations seek to identify and implement successful business models and strategies in the current Fourth Industrial Revolution, characterized by innovation, Internet of Things, digitalization, and robotization (Tohanean et al., 2018). Consequently, various methods and techniques from management, leadership, marketing, quality management, or strategy (e.g., lean management, marketing mix) have been used by managers to obtain better performances (Săseanu et al., 2014; Grădinaru et al., 2016; Catană and Toma, 2021).

The aim of the paper is to present the evolution of the world's largest economies in the period 2017-2020 by taking into account their gross domestic product (GDP). The paper is structured as follows: the literature review is displayed in the second section. The research methodology is presented in the third section of the paper. The fourth section shows the results of the research. The paper ends with conclusions.

2. Literature review

There are many definitions of the key concepts used in our research- economy and GDP- in the literature. Without an agreed-upon definition, economy represents:

- "the distribution of wealth in a society and the means by which that wealth is produced and consumed" (The Chartered Management Institute, 2004, p.147).
- "the financial state of a country, or the way in which a country makes and uses its money" (Collin, 2007, p.132).
- "the system for organizing the money and industry of the world, a country, or local government" (Brookes, 2011, p.164).

On its turn, the GDP:

 is "a measure of the total flow of goods and services produced by the economy over a particular time period, normally a year" (Bannock, Baxter and Rees, 1977, p.187).



- "includes activities carried on in the country by foreign-owned companies, and excludes activities of firms owned by residents but carried on abroad" (Black, 1997, p.204).
- "is the traditional measure of the total output of goods and services per year" (Epping, 2020, p.27).

Most economists and statisticians use the GDP, either at its nominal value or at the purchasing power parity (PPP), as a key indicator in measuring the performance of economies worldwide. The PPP considers that "the exchange rate between two currencies is in equilibrium when the purchasing power of currency is the same in each country" (The Chartered Management Institute, 2004, p.349).

3. Research methodology

In order to attain the aim of the paper, the authors employed a methodology based on a quantitative research method. They collected, synthesized, and analysed numerous information from different secondary sources of data through desk research. On this line, the authors identified and gathered information from a plethora of articles and books found in various electronic databases and libraries.

4. Results and discussion

In the period 2017-2020, the world's ten biggest economies by GDP at its nominal value were pretty the same (Tables 1, 2, 3 and 4). The only newcomer was South Korea who replaced Canada in the 2020 top. By obtaining a GDP that surpassed \$18 trillion in 2017, and \$19 trillion in 2018, 2019 and 2020, the United States of America (USA) clearly dominated the hierarchy being followed by the People's Republic of China.

No. Country GDP (\$ trillion) 1. **USA** 18.983 2. China 12.640 3. 4.553 Japan 4. 3.523 Germany 5. United Kingdom 3.088 6. 2.521 France 7. India 2.432 8. Italy 1.891 9. Brazil 1.766 10. 1.620 Canada

Table 1: The world's ten largest economies by GDP (nominal) in 2017 (constant 2015 US\$)

Source: World Bank, 2021



Table 2: The world's ten largest economies by GDP (nominal) in 2018 (constant 2015 US\$)

No.	Country	GDP (\$ trillion)
1.	USA	19.552
2.	China	13.493
3.	Japan	4.579
4.	Germany	3.561
5.	United Kingdom	3.139
6.	India	2.591
7.	France	2.568
8.	Italy	1.908
9.	Brazil	1.798
10.	Canada	1.659

Source: World Bank, 2021

Table 3: The world's ten largest economies by GDP (nominal) in 2019 (constant 2015 US\$)

No.	Country	GDP (\$ trillion)
1.	USA	19.975
2.	China	14.296
3.	Japan	4.591
4.	Germany	3.599
5.	United Kingdom	3.191
6.	India	2.696
7.	France	2.616
8.	Italy	1.916
9.	Brazil	1.823
10.	Canada	1.690

Source: World Bank, 2021

Table 4: The world's ten largest economies by GDP (nominal) in 2020 (constant 2015 US\$)

No.	Country	GDP (\$ trillion)
1.	USA	19.247
2.	China	14.632
3.	Japan	4.381
4.	Germany	3.434
5.	United Kingdom	2.882
6.	India	2.500
7.	France	2.410
8.	Brazil	1.749



9.	Italy	1.745
10.	South Korea	1.624

Source: World Bank, 2021

By measuring the GDP at the PPP, the hierarchy of the the world's ten largest economies changed dramatically. Thus, the Chinese economy

succeeded in overcoming the American economy in the same period of time (Tables 5, 6, 7, and 8).

Table 5: The world's ten largest economies by GDP (at PPP) in 2017 (constant 2017 US\$)

No.	Country	GDP (\$ trillion)
1.	USA	19.247
2.	China	14.632
3.	Japan	4.381
4.	Germany	3.434
5.	United Kingdom	2.882
6.	India	2.500
7.	France	2.410
8.	Brazil	1.749
9.	Italy	1.745
10.	South Korea	1.624

Source: World Bank, 2021

Table 6: The world's ten largest economies by GDP (at PPP) in 2018 (constant 2017 US\$)

No.	Country	GDP (\$ trillion)
1.	China	21.229
2.	USA	20.129
3.	India	8.818
4.	Japan	5.292
5.	Germany	4.434
6.	Russia	3.914
7.	United Kingdom	3.114
8.	Brazil	3.073
9.	Indonesia	3.044
10.	France	3.039

Source: World Bank, 2021



Table 7: The world's ten largest economies by GDP (at PPP) in 2019 (constant 2017 US\$)

No.	Country	GDP (\$ trillion)
1.	China	22.492
2.	USA	20.564
3.	India	9.174
4.	Japan	5.306
5.	Germany	4.481
6.	Russia	3.994
7.	Indonesia	3.197
8.	United Kingdom	3.166
9.	Brazil	3.116
10.	France	3.095

Source: World Bank, 2021

Table 8: The world's ten largest economies by GDP (at PPP) in 2020 (constant 2017 US\$)

No.	Country	GDP (\$ trillion)
1.	China	23.020
2.	USA	19.815
3.	India	8.509
4.	Japan	5.063
5.	Germany	4.276
6.	Russia	3.876
7.	Indonesia	3.130
8.	Brazil	2.989
9.	United Kingdom	2.859
10.	France	2.852

Source: World Bank, 2021

The above results reveal several issues during the period 2017-2020. In this respect, some of the most important of them can be outlined as follows:

- USA and China were the two main economic actors and superpowers within the world economy. They are competing head-to-head in order to achieve the global economic supremacy.
- USA dominated the hierarchy of the world's ten biggest economies by GDP at its nominal value.
- China dominated the hierarchy of the world's ten biggest economies by GDP at the PPP. In the last decades, China has made huge efforts to become an economic superpower and heavily invested in the New Silk Road or the Belt and Road Initiative.
- The appearance and worldwide spread of the COVID-19 pandemic profoundly influenced the economic performance of all economies.

• The so-called "BRIC Group" (Brazil, Russia, India, China) held top positions in the hierarchy of the world's ten biggest economies.

Conclusions

The topic of the world's largest economies has constituted a subject of interest for researchers worlwide in the past decades. Consequently, there was an expansion of the literature associated with this interesting and challenging topic.

The paper briefly presents the concepts of economy and GDP. Starting from a comprehensive literature review, it demonstrates that the hierarchy of the world's ten biggest economies by GDP was dominated by two countries, the USA and China. Further researches may take into account other indicators and, therefore, deepen the analysis of the largest economies of the world.

REFERENCES:

- 1. Bannock, G., Baxter, R. E. and Rees, R., 1977. The Penguin Dictionary of Economics. Middlesex: Penguin Books.
- Black, J., 1997. A Dictionary of Economics. Oxford: Oxford University Press.
- 3. Brookes, I., ed., 2011. International Business English Dictionary. Glasgow: HarperCollins Publishers.
- 4. Catană, Ş.-A., Toma, S.-G. and Grădinaru, C., 2020. The economic and social impact of COVID-19 pandemic: Evidence from Romania. "Ovidius" University Annals- Economic Sciences,XX(2), pp.273-277. [online] Available at: https://stec.univ-ovidius.ro/html/anale/RO/wp-content/uploads/2021/03/Section%203/13.pdf [Accessed 29 November 2021].
- 5. Catană, S.-A. and Toma, S.-G., 2021. Marketing mix and corporate social responsibility in automotive industry- case study: Mazda Motor Corporation. Annals of 'Constantin Brancusi' University of Targu Jiu- Economy Series, 1, pp.205-209.
- 6. Collin, P. H., 2007. Dictionary of Business. 4th ed. London: A&C Black.
- 7. Crafts, N., 2000. Globalization and growth in the twentieth century. IMF Working Paper, WP00/44, pp.1-76. [online] Available at: https://www.imf.org/external/pubs/ft/wp/2000/wp0044.pdf [Accessed 28 November 2021].
- 8. Epping, R.C., 2020. The New World Economy: A Beginner's Guide. New York, NY: Vintage Books.
- 9. Garelli, S., 2006. Top Class Competitors: How Nations, Firms and Individuals Succeed in the New
- 10. World of Competitiveness. Chichester: John Wiley & Sons.
- 11. Grădinaru, C., Toma, S.-G. and Marinescu, P., 2016. Marketing mix in services. "Ovidius" University Annals- Economic Sciences, XVI(1), pp.311-314. [online] Available at: https://stec.univ-ovidius.ro/html/anale/ENG/2016/2016-I-full/Section-IV/10.GRADINARU_Catalin.pdf [Accessed 29 November 2021].
- 12. Săseanu, A.-S., Toma, S.-G. and Marinescu, P., 2014. Feminine leadership and organisational culture. Manager, 19(1), pp.144-150.



- 13. Sharma, R., 2017. The Rise and Fall of Nations: Ten Rules of Change in the Post-Crisis World. London: Penguin Books.
- 14. The Chartered Management Institute, 2004. Dictionary of Business and Management. London: Bloomsbury Publishing.
- 15. Tohănean, D., Toma, S.-G. and Dumitru, I., 2018. Organizational performance and digitalization in industry 4.0. Journal of Emerging Trends in Marketing and Management, 1(1), pp.282-293. [online] Available at: http://www.etimm.ase.ro/RePEc/aes/jetimm/2018/ETIMM_V01_2018_87.pdf [Accessed 30 November 2021].
- 16. Toma, S.-G. and Marinescu, P., 2013. Global strategy: the case of Nissan Motor Company. Procedia Economics and Finance, 6, pp.418-423. [online] Available at: < https://www.sciencedirect.com/science/ article/pii/S2212567113001573> [Accessed 2 December 2021].
- 17. Toma, S.-G. and Marinescu, P., 2015. Strategy and change. Manager, 21(1), pp.145-150. [online] Available at: http://manager.faa.ro/en/article/Strategy-and-Change~818.html> [Accessed 1 December 2021].
- 18. Vietor, R. H. K., 2007. How Countries Compete: Strategy, Structure, and the Government in the
- 19. Global Economy. Boston, MA: Harvard Business School Press.
- 20. World Bank, 2021. World Development Indicators, 2017-2020. [online] Available at: http://databank. worldbank.org/data.> [Accessed 7 December 2021].