

Study on the Presence of Middle Income Trap in E7 and Fragile Five Countries

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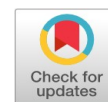
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Abstract: This study aims to investigate whether E7 and Fragile Five countries are in the middle-income trap or not by using various methods and comparison techniques. The study is based on the classification created by Felipe, Abdon and Kumar using the middle-income trap threshold values approach by obtaining growth rates, income transitions and times over historical data of countries. This study first focuses on the approaches that lay down the theoretical basis of the middle-income trap. In the following sections, in order to explain the middle-income trap in the context of quantitative indicators, various approaches such as the threshold approach. Furthermore, the overall assessment is made after comparing the GDP per capita of those countries with the average world middle income GDP per capita. In the light of the middle-income trap definition of being stuck at 20% of per capita GDP of the USA, the per capita GDP of respective countries are compared against the per capita GDP of the USA. In addition, in line with the approach that takes the world average per capita income as the basis for middle income, the per capita GDPs are compared against the world average per capita GDP values, and relevant assessments are made.

Keywords: Middle-income trap, Middle-income countries, E7, Fragile five countries

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INTRODUCTION

The importance of emerging countries in the global economy is gradually increasing. The E7 countries, namely China, Russia, Turkey, Brazil, Indonesia, Mexico and India, are the countries that constitute a significant part of the production rates of emerging countries, can give an upward direction to commodity markets and thanks to their strong economic and market connections they have established together with other emerging countries, they not only affect the growth rates of emerging countries but also of the global economy. It would not be wrong to state that the effects of these countries on global economic growth rates are considerable compared to that of developed countries.

Emerging economies also benefit from external financing sources to sustain their growth targets. However, continuous demand for external financing sources may put countries into a vicious circle dependent on foreign capital movements and cause countries to follow a fragile growth pattern in the long term. Hence, the definition of Fragile Five has started to be used in order to show the level of foreign capital dependency of the countries. This definition was first used in 2013 by a financial analyst from Morgan Stanley. The first grouping of countries including Brazil, India, Indonesia, South Africa and Turkey was revised in 2016 to include Colombia, Indonesia, Mexico, South Africa and Turkey. While creating these groups, countries were scored based on foreign trade balance, the ratio of foreign currency reserves to foreign debt, government bonds held by foreigners, US dollar debt, inflation and real exchange rate differences. The grouping of Fragile Five was revised in 2017 by S&P Global due to the negative impact of increasing interest rates on countries to include Turkey, Argentina, Pakistan, Egypt and Qatar.

Referred to as E7 countries among emerging countries, the fact that these strong economies, are included in the Fragile Five classification revised in various years may cause risks in both national and global economy context. Approaches such as sustainability of growth targets of these countries, feasibility

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of growth created through local economy parameters or how much is achieved and the effects of the level of foreign dependency in the economy on growth make the research on the middle income trap positions of these countries important.

RESEARCH METHODOLOGY

This study first focuses on the approaches that lays down the theoretical basis of the middle income trap. In the following sections, in order to explain the middle income trap in the context of quantitative indicators, various approaches such as the threshold approach by [Felipe, Abdon, and Kumar \(2012\)](#), being stuck at 20% of per capita income of the USA and world average per capita income level are used for assessment purposes. The study particularly focuses on the details of the countries that are probably in the middle income trap and which may be at a risky position in the middle income trap. The conclusion focuses on a comparison of results obtained through different approaches.

MIDDLE INCOME TRAP THEORETICAL FRAMEWORK

Middle income trap is frequently defined as insufficiency of income per capita or continuity of weak or stagnant growth of emerging economies when compared against developed economies. No clear and agreed definition has been made to date. This definition generally explains why middle income countries fail to move up to high income countries category due to many errors made in the sustainable economic growth process. The middle income trap was first stated in a book called *An East Asian Renaissance: Ideas for Economic Growth* written by the World Bank specialists ([Gill & Kharas, 2007](#)).

It is possible to classify approaches according to the causes of middle income trap. The first one is the approach that emphasizes structuralist solutions and takes productivity as the basis in long-term economic growth. In this approach, there is the situation of being caught in the middle income trap due to failure to realize structural change in creating high value added economic activities in international competition. By establishing a direct relationship between structural change and economic growth, it is advocated that the increase in productivity caused by structural change is essential in ensuring sustainable growth and increasing living standards ([Lovitos, 2019; Paus, 2014](#)).

[Lin and Treichel \(2012\)](#), [Ohno \(2009\)](#) and [Paus \(2012\)](#) explain this situation as the failure of the insufficient structural transformation and labor intensive production to compete in internationally standardized markets [due to relatively high wages] and high value-added production activities [due to low productivity] and thus, as the prominent cause of the middle income trap. Similarly, views such as transition from cheap labor and capital-based growth targets to factor productivity-based growth strategies, from diversification of production to specialization in production and the decentralized understanding of economic management by [Kharas and Kohli \(2011\)](#), special emphasis put on education and human capital and the need to establish a high-quality education system in order to improve the innovation-based structure and make technological advances and direct impact of the relationship between education and national development on economic growth strategy by [Kanchoochat and Intarakumnerd \(2014\)](#) appear to be the reason for the middle income trap in productivity-based growth approach.

Similarly, the strong connection between economic growth and the level of how sophisticated the export structures of middle income countries are and their distinctive performance characteristics by [Hausmann, Hwang, and Rodrik \(2007\)](#), the failure of low income economies whose manufacturing industry is based on low wages in competing against innovative developed economies based on high skills in exports by [Zeng and Fang \(2014\)](#) and the conclusion by [Cimoli, Porcile, and Rovira \(2010\)](#) that export demand is higher in income elasticity than low-tech products for high-tech products could also be taken into consideration within the framework of structural transformation of middle income trap.

Another approach that is frequently addressed for the causes of middle income trap is the stagnation and slowdown in economic growth, and the lack of convergence to developed countries, in other words, the sustainability of economic growth. Studies on this approach focus mostly on determining empirically whether or countries are in the middle income trap.

In this context, the studies by [Jankowska, Nagengast, and Perea \(2012\)](#) on the per capita income of a country not exceeding the income level for many years after reaching a certain level, by [Egilmez \(2012\)](#)

on being stuck at 20% of US per capita GDP, and by [Egilmez \(2017\)](#) on being stuck at the world average per capita income level are important. In the light of the same approach, [Felipe et al. \(2012\)](#) group countries according to their historical data and growth rates, their threshold values based on income transition and durations, and their GDPs. In this approach, the studies that determine whether countries are in the middle income trap by using the number of years they stay in these income groups and the annual average per capita income increase rate are prominent.

Similarly, in a study on the decline in economic growth, [Eichengreen, Park, and Shin \(2012\)](#) focused on three conditions to determine whether or not countries are in the middle income trap. These conditions are: average growth rate being 3.5% and more in the seven-year period before the slowdown in growth, a decrease of at least two points in the average growth rate in the seven-year period after the slowdown in growth and per capita income being higher than 10,000 USD according to purchasing power parity and 2005 prices. Another approach based on growth slowdown is the Catch-Up Index (CUI) study by [Woo \(2012\)](#). This index is derived from the ratio of income levels of countries to the income level of the USA. Countries with an index value above 50% are grouped as high, countries between 55% and 20% are grouped as middle, and countries with less than 20% are grouped as low income countries. [Robertson and Ye \(2013\)](#) use econometric analysis in the context of convergence analyses to demonstrate whether countries are in the middle income trap over the lack of convergence to developed countries.

Apart from these, the study in which [Ohno \(2009\)](#) puts forward the relationship between the middle income trap and foreign direct investments with a phased industrialization approach is very important. Referred to as glass ceiling, evolution from simple production activities utilizing foreign investment towards the production of technology and management information with its internal values and less import dependency is demonstrated as descriptive.

Among the studies that focus on gradually increasing middle income trap, one of the most important topics that has been put forward recently is the income distribution inequality. [Egawa \(2013\)](#) and [Islam \(2014\)](#) reveal that income distribution inequality in emerging countries reduces growth rates or leads to inequality traps, which is an important reason for the middle income trap.

Threshold Value Approach of Felipe, Abdon and Kumar

In their study, [Felipe et al. \(2012\)](#) classify countries according to their income groups. [Felipe et al. \(2012\)](#) primarily used Maddison's data, which includes the period 1950-2010. GDP values per person over the purchasing power parity were adjusted by accepting 1990 as the base year and the threshold values were then calculated. 124 countries were classified according to the calculated threshold values. The following income groups are created based on the correlation analysis made after classification.

Table 1: Income groups classification

Group	Income
Low Income Group	\leq \$2000
Low Middle Income Group	\$2000 - \$7250
Upper Middle income Group	\$7250 - \$11750
High Income Group	$>$ \$11750

[Felipe et al. \(2012\)](#) calculate the threshold values approach over the number of years in the middle income group. In these approaches, the idea of benefiting from historical experiences lies behind determining the middle income trap position of the countries. In addition, two low middle income trap approaches stand out, low and high. Accordingly, annual income growth per capita in countries in the lower-middle income group is at least 4.7% and the longest time in the group is calculated as 28 years. In the upper-middle income group, the threshold values of the countries in order not to be caught in the middle income trap are obtained as at least 3.5% as the annual rate of income growth per capita and 14 years as the longest time in the group. As stated above, the study was carried out in 124 countries. Here, only the E7 and the Fragile Five between these countries are summarized below.

Table 2: Income classification

Country	WB Class 2010	GDPpc 2010	Our Class 2010	No.of years (1950-2010)				Status
				L	LM	UM	H	
Brazil	UM*	6.737	LM	8	53			LMIT
China	UM	8019	UM	42	17	2		
India	LM	3407	LM	52	9			
Indonesia	LM	4790	LM	36	25			
Russia	UM	8828	UM		13	8		
Mexico	UM	7763	UM		53	8		
Turkey	UM	8123	LM	4	51	8		
South Africa	UM*	4725	LM		61			LMIT
Colombia	UM*	6542	LM		61			LMIT
Argentina	UM*	11872	H		28	32	1	
Qatar	H	18632	H		4	16	41	
Egypt	LM	3936	LM	30	31			LMIT
Pakistan	LM	2344	LM	55	6			

WB class: World Bank income classification GDPpc: GDP per capita (is measured in 1990 PPP dollars)

LM: Lower middle Income UM:Upper middle Income H: High Income LMIT: Lower Middle Income Trap

*Countries for which the World Bank Classification differs from [Felipe et al. \(2012\)](#) ([The World Bank, n.d.-a](#))

The most significant point here is that while Brazil, which is in the E7 and the first Fragile Five grouping of the World Bank classification, is in the middle income group and trap in the study by [Felipe et al. \(2012\)](#), South Africa, which is included in the first and second Fragile Five and Colombia, which is in the 2nd Fragile Five, are in the upper middle income group in the World Bank classification, while they are included in the lower middle income and trap in this study. Argentina, on the other hand, is in the higher middle income group in the World Bank classification whereas it is classified as high income country in this study and Egypt is classified as a country in the lower middle income trap.

Being trapped in 20 percent of the US GDP

When the middle income trap approach first appeared, 20 percent of the per capita income of the USA was considered to be a middle income country and the income stuck at this level was seen as the quantitative indicator of the middle income trap. In this study, the World Bank GNI per capita Atlas Method is used to obtain data. Atlas method is frequently used especially in recent studies. In the Atlas method, per capita GNP values are based on the average exchange rate for the last three years and international inflation values. Thus, the effects of the periodic changes in national and international inflation and exchange rates on per capita GDP values are somehow reduced in the country comparisons. The World Bank conducts income grouping studies between countries using the Atlas Method every year. According to the latest study, income groups are formed as follows.

Table 3: Latest income groups classification

Group	Income
Low Income Group	<= \$1025
Low Middle Income Group	\$1026 - \$3995
High Middle Income Group	\$3996 - \$12375
High Income Group	> \$12375

Source: [The World Bank \(n.d.-b\)](#)

However, the classification of E7 and Fragile Five by income groups in the last 20 years is as follows. The colored cells correspond to the years when countries changed the income group.

Comparison of per capita income of E7 and Fragile Five with 20% of per capita income of the USA is given in the chart below.

Table 4: Historical World Bank income Classification

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Argentina	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	H	UM	UM	H	UM	
Brazil	UM	UM	UM	UM	LM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
China	L	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
Colombia	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
Egypt, Arab Rep.	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM
India	L	L	L	L	L	L	L	L	L	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM
Indonesia	L	L	L	L	L	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM
Mexico	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
Pakistan	L	L	L	L	L	L	L	L	L	L	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM	LM
Qatar	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
Russian Federation	LM	LM	LM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	H	H	H	UM	UM	UM	UM	UM
South Africa	LM	UM	UM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
Turkey	UM	LM	UM	LM	LM	LM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM	UM
United States	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H

Source: The World Bank (n.d.-a)

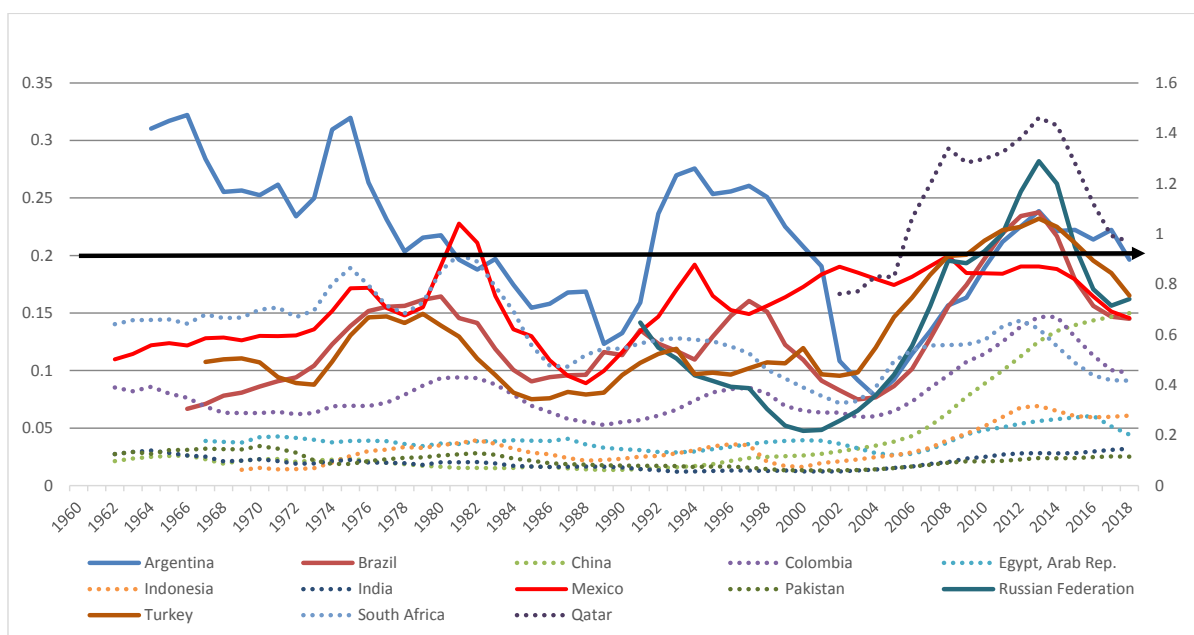


Figure 1. GNI per capita (as a percentage of U.S. GNI per capita Atlas method US\$)

In this comparison, the World Bank Atlas Method data is used, which reduces exchange rate and inflation differences between countries. The countries that capture the 20% band are South Africa, Argentina, Brazil, Mexico, Turkey and Russia. Other countries do not converge to this 20% level and are located below. Only the per capita income level of Qatar is above that of the USA. Historical data of Qatar is shown on the secondary axis in the graph. Among the countries that have achieved the convergence of 20%, South Africa seems to have reached the 20% band in 1981, but continued to progress in the 10-15% band by going down in the following years. Argentina, Brazil, Mexico, Turkey and Russia are close to 20% in the band and are shown by clear lines in the graph.

Country specific graphs are given below to examine the situation in more detail.

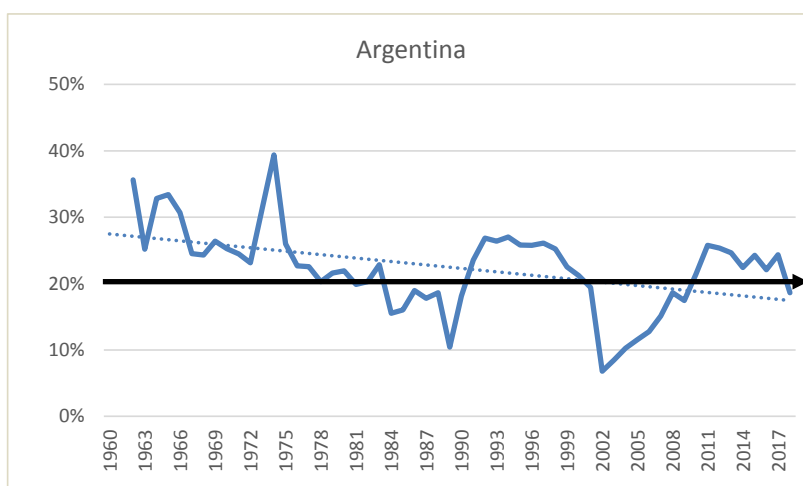


Figure 2. Graph for Argentina

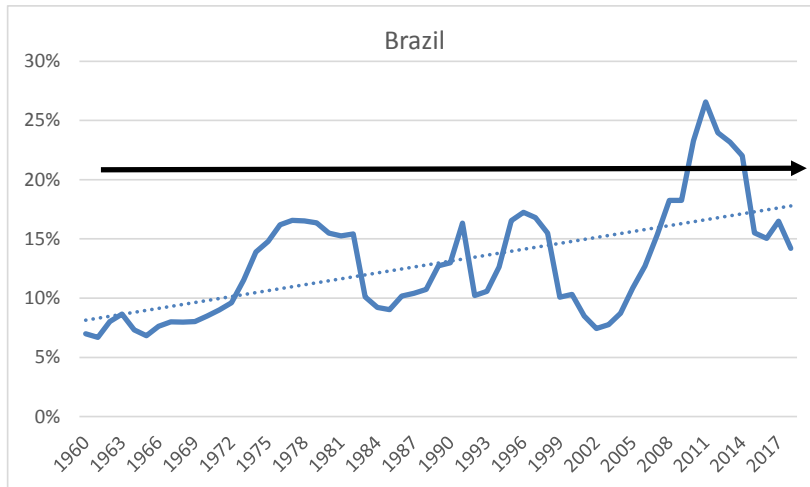


Figure 3. Graph for Brazil

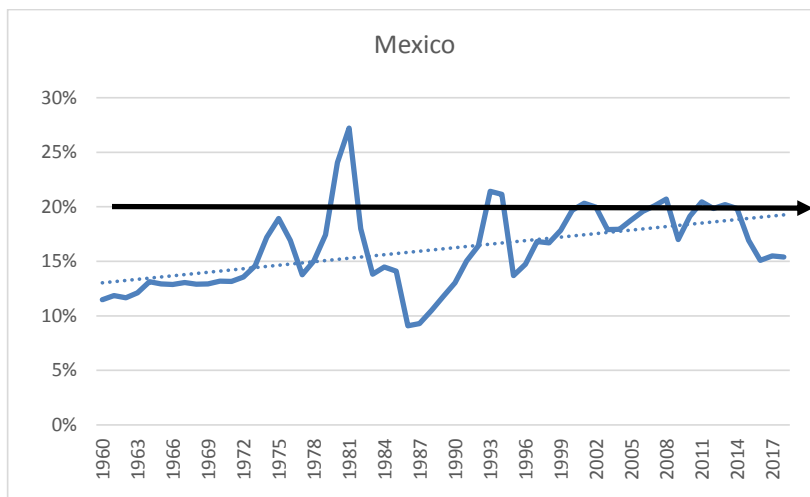


Figure 4. Graph for Mexico

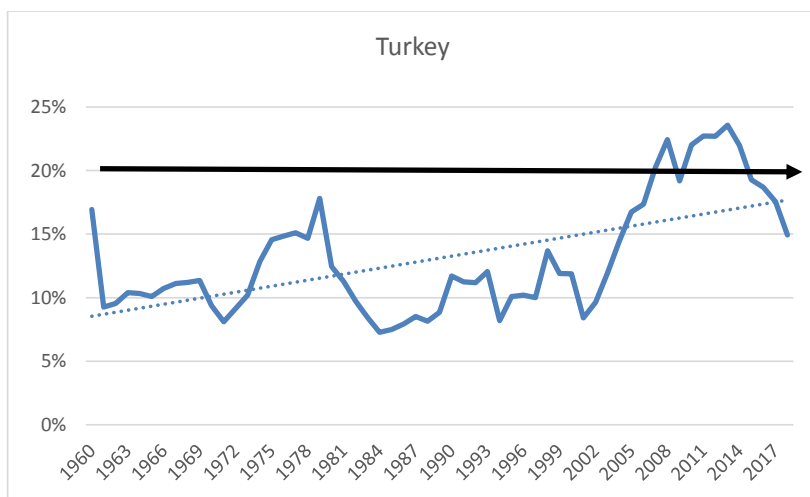


Figure 5. Graph for Turkey

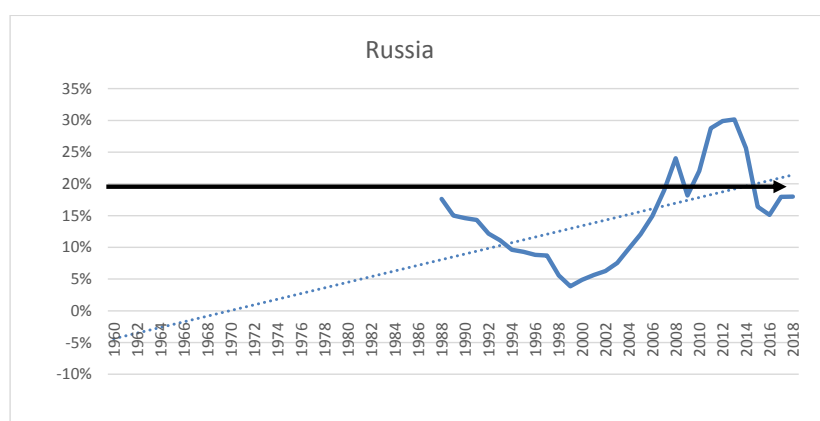


Figure 6. Graph for Russia

The most important common trend in the graphs of the related five countries is that the years in which the 20% ratio was caught and the fact that the decline of capital flows in emerging countries after the global crisis corresponding to 2008 and later years were replaced by the years in which the monetary expansion took place. It is also observed that in 2014 and in the following period, after monetary expansion came to an end and interest rates started to increase, respective rates started to go down and the years when all these happen correspond in the graphs. Out of these five countries, Argentina and Mexico surpass the 20% ratio several times which is not the case for Turkey, Brazil and Russia. It is observed that especially Argentina can go up to 40%, but it also decreases down to 10%. In this irregularly fluctuating structure, as can be seen from the World Bank income grouping especially in the first section, Argentina has been in the group of high income countries for several times, but it has been among the upper middle income group countries for many years. Similarly, Mexico has been only in the upper middle income group for many years, and although it displays a fluctuation closer to 20 percent, it displays a fluctuating performance that exceeds and/or decreases this ratio in certain periods. Graphs show that Argentina and Mexico bring about irregular increases and decreases, but they are progressing around 20% ratio. This is likely to be interpreted as strong signs in the context of the middle income trap.

Apart from these two countries, Turkey, Brazil and Russia were able to catch and surpass the 20% ratio in 2008 and the period after. Although progress after the related period continues with decreases, there is still a movement close to 20% ratio. In the World Bank income grouping, these countries, which were in the lower middle income group in the early 2000s, appear to have increased to the upper middle income group in the following years. There are even years when Russia was grouped among high-income countries. Since these countries are close to the 20% ratio, it is very important for them to be able to show leaps in the years to come, not to be caught in the middle income trap.

Comparison against world average per capita income

There are indicative studies in the form of being stuck in the 20% of the US per capita income as a measure of middle income, as well as studies that make comparisons over the average per capita income and set out the middle income trap as a quantitative indicator. If the country's per capita income is around the world average per capita income, the country is a middle income country. If the per capita income of the country shows continuity around the world average per capita income, the country is accepted to be in the middle income trap (Bernardelli, Chniak, & Witkowski, 2019; Egilmez, 2017).

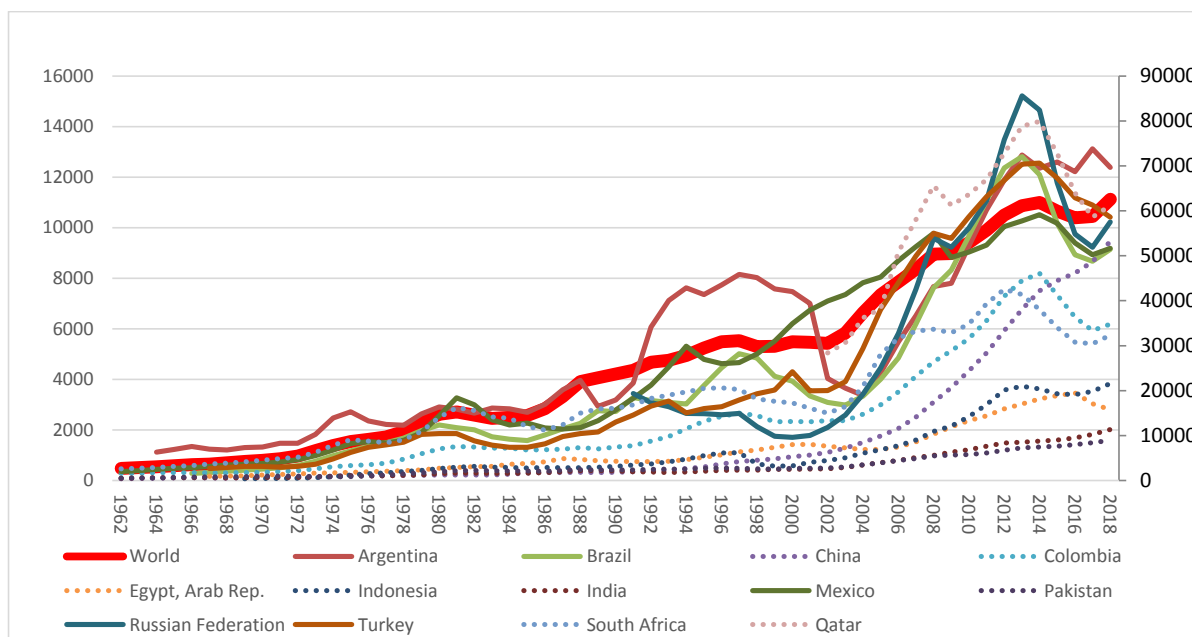


Figure 7. Comparison against World average per capita income (GNI per capita Atlas Method US\$). Source: [The World Bank \(2019\)](#)

Qatar’s per capita income, which is quite above the world average per capita income, is shown separately on the secondary axis. South Africa, which has been moving close to the world average income level until the middle of the 1980s and progressing with serious decreases in the following years and Colombia, Egypt, Pakistan, Indonesia, China and India which are far from the world average per capita income level, are shown with dashed lines on the chart. However, the movements of Argentina, Brazil, Mexico, Turkey and Russia which are close to the world average per capita income levels are compared against the world average per capita income in the following country specific graphs.

Argentina displays movements which are above the world average per capita income level and which fall also under the high-income country classification. However, it can also show a distribution that progresses below the world average income level. Over a long period of time, Argentina has been following the world average income level in the form of irregular fluctuations. The country cannot maintain its sustainable per capita income level increase in the high-income group. This repetitive distribution puts Argentina in a problematic structure in the middle income trap.

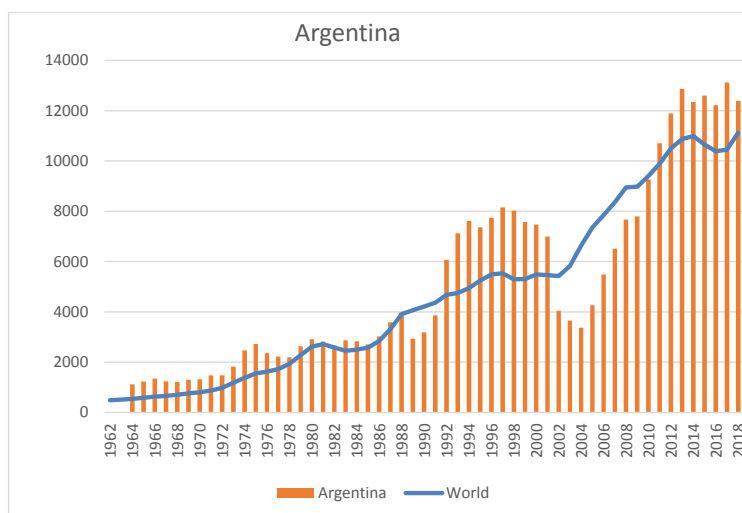


Figure 8. Per capita income level of Argentina

In contrast to its movement which was above the world average per capita income level between 2010 and 2015, Brazil displayed a course below and close to the world average income level for many years. The country has also been classified in the upper middle income group for many years. In order not to get caught in the middle income trap, it is important to ensure the sustainability of its economic performance, which exceeds the world average income level so that the country does not fall into a risky situation.

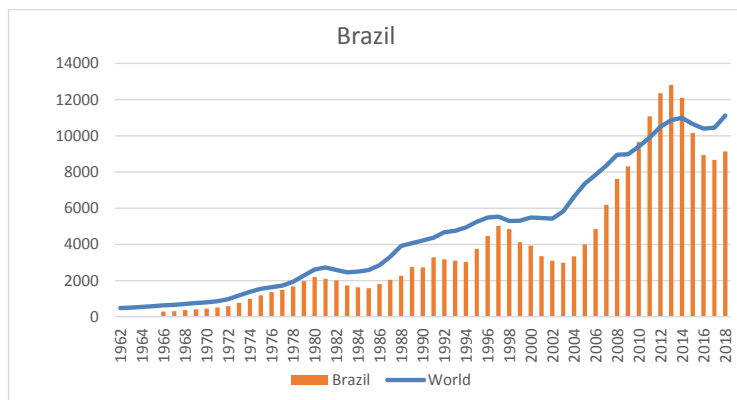


Figure 9. Per capita income level of Brazil

Mexico has been in the upper middle income group for many years. As can be seen in the chart above, its performance has been very close to the world average per capita income for many years. The fact that the country has been in the upper middle income group for many years and that it has been displaying performance close to the world average per capita income level for years makes Mexico a possible country in the middle income trap.

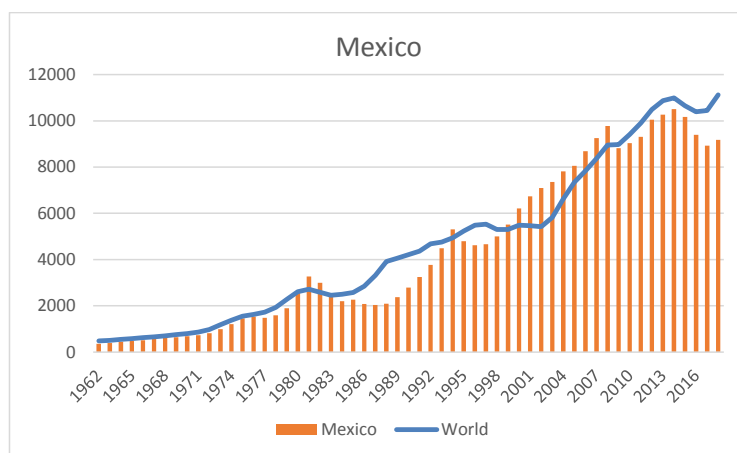


Figure 10. Per capita income level of Mexico

Turkey's per capita income seems to have caught the world average per capita income at 7800 USD in 2006. This income level is in the upper middle income level according to the world income group classification. After this level, it continues its movement above the world average per capita level, but at a close course. In order not to fall into a risky position in the middle income trap, the increase should be continued above the world average per capita income level and by getting farther from it.

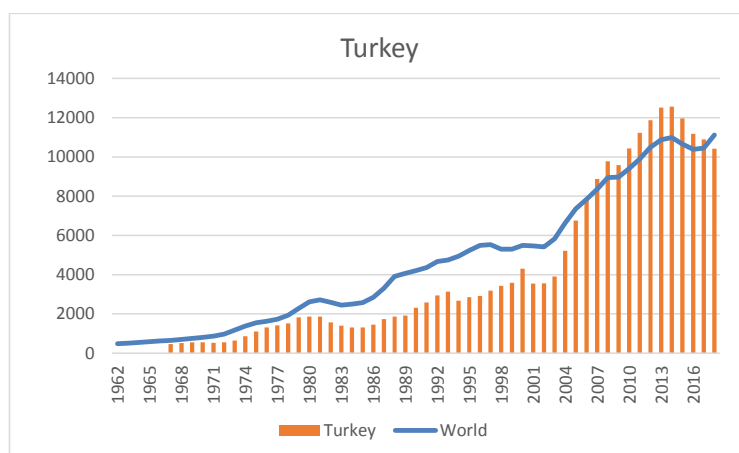


Figure 11. Per capita income level of Turkey

The data obtained for Russia correspond to the period after 1992. The level of income per capita, which reached the world average income level in 2008, has been included under the lower middle income, upper middle income, high income country groupings since the end of the 90s. It is important to ensure that it is above the world average per capita income level and that its economic performance among the high income country groupings is sustained.

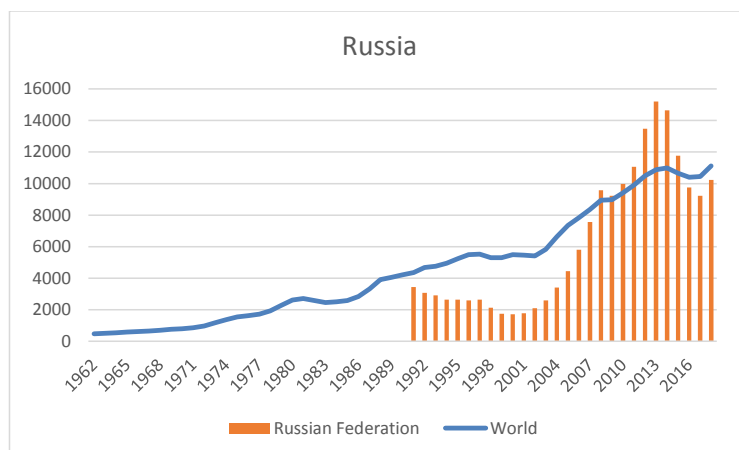


Figure 12. Per capita income level of Russia

CONCLUSION AND RECOMMENDATIONS

Although the approach of Felipe et al. (2012) covering the years between 1950 and 2010 is different from the income grouping of the World Bank, this approach includes Brazil, which is among E7 countries, and South Africa, Colombia and Egypt, which are among the Fragile Five, under the lower middle income trap.

However, both technical approaches, i.e., being stuck at the 20 percent of the per capita income of the USA based on the data obtained from the World Bank Atlas Method and accepted as the quantitative indicator of the middle income trap and following the world average per capita income level reveal parallel results. In both approaches, Argentina, Mexico, Brazil, Turkey and Russia display increasing and decreasing convergence to both 20% of the US per capita income and to the world average per capita income levels. In addition, they are evaluated in the context of middle income trap due to the fact that these countries are included in the upper middle income group.

As stated in the study, it is observed that Argentina and Mexico maintain similar convergences over a wider period of time, even though these countries caught 20 percent of the US per capita income in the years coinciding with the dates when monetary expansion was implemented and increased further.

The fact that the per capita income levels of both Argentina and Mexico have been in the upper middle income group for many years and have also shown convergence to the world average per capita income level over a long period of time make a dangerous structure possible in the context of the middle income trap. However, in the process covering the period after 2008, Brazil, Turkey and Russia, which have surpassed and advanced 20 percent of the US per capita income, classified within the upper middle income group and close to the world average per capita income level, should bring forward urgently economic policy practices that would make the relevant increase sustainable in order not to fall in a risky situation in the middle income trap.

REFERENCES

- Bernardelli, M., Chniak, M. P., & Witkowski, B. (2019). Towards the similarity of the countries in terms of business cycle synchronization and income level equalization empirical analysis. *Journal of Administrative and Business Studies*, 5(5), 291-302. doi:<https://doi.org/10.20474/jabs-5.5.4>
- Cimoli, M., Porcile, G., & Rovira, S. (2010). Structural change and the BOP-constraint: Why did Latin America fail to converge? *Cambridge Journal of Economics*, 34(2), 389-411.
- Egawa, A. (2013). *Will income inequality cause a middle-income trap in Asia?* (Vol. 797). Brussels, Belgium: Bruegel.
- Egilmez, M. (2012). *Middle income trap and Turkey*, Mahfi Egilmez articles blog. Retrieved from <https://bit.ly/37hBchn>
- Egilmez, M. (2017). *Latest situation in the middle income trap*. Retrieved from <https://bit.ly/3o8E8ma>
- Eichengreen, B., Park, D., & Shin, K. (2012). When fast-growing economies slow down: International evidence and implications for China. *Asian Economic Papers*, 11(1), 42-87.
- Felipe, J., Abdon, A., & Kumar, U. (2012). *Tracking the middle-income trap: What is it, who is in it, and why?* (Working paper no. 715). New York, NY: Levy Economics Institute.
- Gill, I. S., & Kharas, H. (2007). *An east asian renaissance: Ideas for economic growth*. Washington, DC, WA: The World Bank.
- Hausmann, R., Hwang, J., & Rodrik, D. (2007). What you export matters. *Journal of economic growth*, 12(1), 1-25. doi:<https://doi.org/10.1007/s10887-006-9009-4>
- Islam, N. (2014). Will inequality lead China to the middle income trap? *Frontiers of Economics in China*, 9(3), 398-437.
- Jankowska, A., Nagengast, A., & Perea, J. R. (2012). *The middle-income trap: comparing asian and latin american experiences* (Working paper 311). OECD Development Centre.
- Kanchoochat, V., & Intarakumnerd, P. (2014). *Tigers trapped: Tracing the middle-income trap through the East and Southeast Asian experience* (Vol. 4; Working paper no. 04/2014). Competence Centre on Money, Trade, Finance and Development, Berlin, Germany.
- Kharas, H., & Kohli, H. (2011). What is the middle income trap, why do countries fall into it, and how can it be avoided? *Global Journal of Emerging Market Economies*, 3(3), 281-289. doi:<https://doi.org/10.1177/097491011100300302>
- Lin, J. Y., & Treichel, V. (2012). *Learning from china's rise to escape the middle-income trap: A new structural economics approach to Latin America*. Washington, DC, WA: The World Bank.
- Lovitos, A. H. R. (2019). Quality living conditions and the boarding preferences of UM college students. *International Journal of Humanities, Arts and Social Sciences*, 5(2), 54-62. doi:<https://dx.doi.org/10.20469/ijhss.5.10002-2>
- Ohno, K. (2009). Avoiding the middle-income trap: renovating industrial policy formulation in vietnam. *ASEAN Economic Bulletin*, 26(1), 25-43.
- Paus, E. (2012). Confronting the middle income trap: Insights from small latecomers. *Studies in Comparative International Development*, 47(2), 115-138. doi:<https://doi.org/10.1007/s12116-012-9110-y>
- Paus, E. (2014). *Latin America and the middle income trap* [Financing for Development Series No. 250]. Retrieved from <https://bit.ly/37mpGkU>

- Robertson, P. E., & Ye, L. (2013). *On the existence of a middle income trap*. Retrieved from <https://bit.ly/3j6ui08>
- The World Bank. (n.d.-a). *How does the world bank classify countries?* Retrieved from <https://bit.ly/37PCWyw>
- The World Bank. (n.d.-b). *World Bank country and lending groups*. Retrieved from <https://bit.ly/2HWQUuN>
- The World Bank. (2019). *GNI per capita, Atlas method (current US\$)*. Retrieved from <https://bit.ly/3kNV7bA>
- Woo, W. T. (2012). China meets the middle-income trap: The large potholes in the road to catching-up. *Journal of Chinese Economic and Business Studies*, 10(4), 313–336. doi:<https://doi.org/10.1080/14765284.2012.724980>
- Zeng, J., & Fang, Y. (2014). Between poverty and prosperity: Chinas dependent development and the middle-income trap. *Third World Quarterly*, 35(6), 1014-1031.