# DOES TURKEY SUFFER FROM MIDDLE INCOME TRAP OR IS IT STUCK IN PERMANENT LOW GROWTH? \*

# TÜRKİYE ORTA GELİR TUZAĞINDA MI YOKSA SÜREKLİ DÜŞÜK BÜYÜMENİN KISKACINDA MI?

Fatma DOĞRUEL\*\*
A. Suut DOĞRUEL\*\*\*

#### **Abstract**

Explaining the disparities in growth rates across both developing and developed countries is one of the vital questions in the theory of economic growth. As an answer to this question the term middle-income trap was introduced about a decade ago and it quickly became popular in politics, media and academics. The aim of the paper is to seek to what extent this term is capable to explain the growth performance of the Turkish economy. Following a brief discussion on middle-income trap, the paper focuses on the Turkish economic growth. It is concluded that the major problem of Turkey is persistent slow long-run growth rather than the growth slowdown following fast growth as suggested by the literature.

**Keywords:** Growth Slowdown, Middle Income Trap, Turkey.

JEL Classification: O11, 040, 047

#### Öz

Ekonomik büyüme teorisindeki temel sorulardan biri hem gelişmiş hem de gelişmekte olan ülkeler arasındaki büyüme oranlarındaki farklılıkların açıklanmasına dönüktür. Yaklaşık on yıl önce bu sorunun yanıtlanmasında, orta gelir tuzağı kavramı ortaya çıkarılmıştır ve siyaset biliminde, medyada ve akademide hızlı bir şekilde popülerlik kazanmıştır. Bu çalışmanın amacı, bu kavramın ne ölçüde Türkiye ekonomisinin büyüme performansını açıklayabildiğinin araştırılmasıdır. Orta gelir tuzağı üzerine kısa bir tartışmanın yürütülmesinin ardından çalışma, Türkiye'nin ekonomik büyümesi üzerine odaklamaktadır. Çalışmada ulaşılan temel sonuç, Türkiye'nin ilgili literatürün savunduğu hızlı büyümeyi takiben yavaşladığı görüşünden daha çok sürekli olarak yavaş seyreden bir uzun dönem büyümesine sahip olduğuna yöneliktir.

<sup>\*</sup> The authors would like to thank the anonymous reviewers for their evaluations. The authors would also like to thank the Marmara University Scientific Research Committee for its financial support (Project No: SOS-D-120.514.0195).

<sup>\*\*</sup> Marmara University, E-mail: fatma.dogruel@marmara.edu.tr, Orcid: 0000-0003-1113-4621

<sup>\*\*\*</sup> Marmara University, E-mail: suut.dogruel@marmara.edu.tr

Anahtar Kelimeler: Büyümedeki Yavaşlama, Orta Gelir Tuzağı, Türkiye.

JEL Sınıflandırması: O11, 040, 047

#### I.Introduction

The disparities in growth rates across both developing and developed countries are one of the vital questions in the theory of economic growth. The cross-country empirical growth studies constitute a vast literature on this issue. However, as Elhanan Helpman states "... the mystery of economic growth has not been solved" (Helpman, 2004: 2). The term of middle-income trap raised under this circumstance and became popular among politicians, academia, and media. Then Indermit S. Gill and Homi Kharas wrote a review paper on the literature developed over ten years and they assert that "... these papers do not use a common definition. Instead, the term has been loosely used to describe situations where a growth slow-down results from bad policies in middle-income countries that prove difficult to change in the short-run (hence, "trap")" (Gill and Kharas, 2015: 6). <sup>1</sup>

Although Indermit S. Gill and Homi Kharas emphasize the fuzziness of the term, an empirical literature rapidly developed. Growth slowdown in the middle-income countries is the main issue in these studies. Based on these debates, the main question of this paper is to ask whether Turkey holds the dynamics of middle-income trap or has a persistent low growth rate. The paper examines the growth path of Turkey starting from the beginning of the Republican Period and checks whether there is a growth slowdown by adopting the conditions of Eichengreen et al. (2012; 2014). The long-term growth path displays a very close movement to a linear trend. In contrast to China and South Korea there was no high growth rates during the period that we observe. Therefore, we cannot say that Turkish economy suffered from middle income trap. The reason behind staying 50 years in the lower middle-income group is low growth rate and it seems that Turkey will wait long time in the upper middle-income group to enter into high-income group.

This paper is organized in the following sections: Section 2 describes the term of middle-income trap. Section 3 investigates the growth performance of Turkey. The last section concludes the paper.

### 2.Middle-Income Trap: The Fuzziness of the Term

This section seeks to clarify the term by briefly reviewing the literature around middle-income trap. The term of middle-income trap was first used in a World Bank publication which was prepared by a World Bank team (Gill and Kharas, 2007: xiii). The geographic focus of the book was East Asia. The book has discussed the remarkable growth successes and export performances of this region countries. The authors called these developments as "an economic renaissance" (Gill and Kharas, 2007: 2). Later the term is widely adopted in the development literature and by

<sup>1</sup> Gill and Kharas (2015: 6) also state that "Academics also became interested in the subject. By May 2015, a search of Google Scholar returned over 3,000 articles including the term "middle-income trap" and close to 300 articles with the term in the title".

politicians and media as well. The term is still used to explain growth and development problems facing middle-income countries. Although a vast literature followed the contribution of Gill and Kharas (2007) more than a decade, there are skeptical remarks on the term. For example, Felipe et al. (2012: 44) state that "The problem with the debate of what prevents these [middle-income] countries from becoming high-income economies is that it is not clear what the trap refers to, as there is no accepted definition." And, Han and Wei (2017) pose a question "Is this a bubble, or is it a conceptual breakthrough?" By considering this fuzziness first, we discuss how Gill and Kharas (2007) introduced the term. Then we discuss the growth slowdown and the transition from one income group to another.

Gill and Kharas (2007) did not define a term as the middle-income trap. Instead, they focused on the growth of East Asian Countries based on the fundamentals of modern growth theory. They defined what should be the transformation of these countries while they are middleincome countries. The transformation that they define was related to a suitable growth strategy. Their approach shows how a trap may arise and whether it could be inevitable. Kharas and Kohli (2011) take one step forward and try to define a transition strategy for middle-income countries on how they may avoid from middle income trap: they highlight first, the importance of transition from diversification to specialization in production structure; second, the role of education and innovation in total factor-productivity growth; and third, decentralization in the economic decision mechanism. However, the strategy does not correspond to an exact definition. These highlights recall some fundamentals from growth theory. We should remember what Helpman (2004) says on economic growth: He emphasizes accumulation of physical and human capital, total factor productivity, and economic and political institutions as the factors on the growth performance of a country. The debates on middle-income trap are also linked economic development theory. For example, productivity changes are related well-known literature on structural change in development economics. The origin of the productivity and growth nexus is based on sectoral shifts in an economy during economic development. Sectoral shifts represent structural change a la Kuznets: As an economy develops first the share of agriculture decreases in favor of manufacturing and then the share of industry declines and the share of service increases (Kuznets Facts). <sup>2</sup> Therefore, Gill and Kharas (2007) lead a new discussion on growth problems of middle income countries rather than provide an empirical definition for middle-income trap.<sup>3</sup>

The literature predominantly deals with the empirical side of this issue rather than theoretical side. The debates widely arise from empirical studies in which the observations mainly focus on growth slowdown. The growth slowdown was not only experienced in 2000s. Ben-David and Patell (1998) state that there were growth slowdowns in major continental countries and Japan in the

<sup>2 &</sup>quot;Characteristics of modern economic growth, Item 4" (Kuznets, 1966: 492). See also Kongsamut et al. (2001).

<sup>3</sup> After ten years, in their review paper they state that:

<sup>&</sup>quot;We introduced the term "middle-income trap" while writing a report to assess economic developments in East Asia since the crisis of the 1990s. We did so with modesty, because we had not rigorously established its prevalence. (...) To our surprise, the phrase "middle-income trap" immediately became popular among policy makers and development specialists (...) As government leaders repeatedly referred to the term, first academics and then the mainstream media started to adopt the term" (Gill and Kharas, 2015: 5).

early 1970s while the US, Canada and the UK were exceptions. <sup>4</sup> Besides, it is a phenomenon not only in developed countries, but also developing countries have experienced growth slowdowns. Ben-David and Patell (1998) indicate the years 1978 through 1983 for growth slowdown for developing countries. We may also mention about Eichengreen et al. (2012; 2014) for the growth slowdown issue. Growth slowdown is matter for fast growing countries. Eichengreen et al. (2012) focus on the timing of the slowdown in fast-growing economies and the effects of characteristics and conditions of countries on timing: They consider fast-growing countries and exclude low income ones, and the data starts from 1957 to the current year available. In Eichengreen et al. (2012: 46) growth slowdown was determined by the following conditions:

"The first condition requires that the 7-year average growth rate of per capita GDP is 3.5 percent or greater prior to the slowdown (earlier growth was fast). The second one identifies a growth slowdown with a decline in the 7-year average growth rate of per capital GDP by at least by 2 percentage points (the slowdown is nonnegligible). The third condition limits slowdowns to cases in which per capita GDP is greater than US\$ 10,000 in 2005 constant international PPP prices."

As a condition, they also add that the reduction in the growth slowdown should be continuous for seven years (Eichengreen et al., 2014). The empirical analyses reveal that growth slowdown may typically appear in two different income level: the first is 10,000-11,000 and the second is around 15,000-16,000 (Eichengreen et al., 2014).

Aiyar et al. (2018) is another empirical study which focus on growth slowdown. Although Aiyar et al. (2018: 2) is an empirical study, the authors are critical about the earlier contributions on this topic and say that "[they] propose a clear identification procedure for growth slowdowns, one that takes theory seriously rather than simply relying on structural breaks in the time series patterns of economic growth." By emphasizing the fundamentals of growth theory, Aiyar et al. (2018) present institutions, demographic structure (high dependency ratio), macroeconomic environment and policies, economic structure (sectoral composition and sectoral shifts), trade structure, and other factors like wars and civil conflicts as key factors of continuous growth slowdown. Similar factors (as independent variables) also take place in the empirical analyses of (Eichengreen et al., 2012 and 2014) with some variations. Thus, it is possible to say the leading empirical studies rest, in general, on the existing growth theory. However, their frameworks/approach is restricted with the existing discourse of globalization. The variables employed to explain growth slowdown are related to the old paradigm (Washington Consensus).

The growth slowdown is an important fact to discuss existence of middle-income trap. As we discussed above, empirical studies meticulously investigate the patterns of growth slowdown for developed and developing countries. Their methods help to identify the countries in the

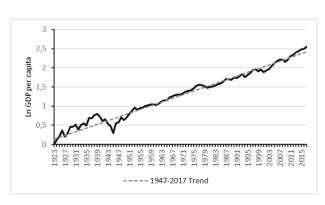
<sup>4</sup> They indicate the following European countries: France, Germany, and Italy (Ben-David and Patell, 1998).

Income levels are defined in terms of constant 2005 PPP \$. Although they identified two different income level, in their first analysis there exists only one income level around \$15,000–16,000 at which growth slowdowns typically happen (their data source for the first and second analyses respectively are Penn World Tables 6.3 and Penn World Tables 7.1) (Eichengreen et al., 2012; 2014).

trap with few exceptions. However, there is another approach to identify the countries which are capturing or escaping middle income trap. This approach classifies countries by per capita income and investigate the pattern of transition from one income group to another. Felipe et al. (2012), first classify countries by their GDP per capita income in 1990 PPP dollars (the time span is 1950-2010). The middle-income countries are classified in two groups: between \$2,000 and \$7,250 lower-middle-income and \$7,250 and \$11,750 upper-middle-income countries. One of the important contributions of Felipe et al. (2012) is calculation of "threshold number of years for a country to be in the middle-income trap". Im and Rosenblatt (2013) use transition matrices to identify the countries in middle-income trap and the transition of countries from one income group to another. Bulman et al. (2014) again use income classification for their analyses. Although most of the studies do not include Turkey in the analyses, Bulman et al. (2014) focus on Turkey as a counterpart of non-escapees which are Mexico, Malaysia, and Brazil: these countries displayed relative stagnation in their growth path for the entire period considered. The data they use is taken from Pen Word Table 7.

## 3.Do Growth Slowdown and Middle-Income Trap Exist in Turkey?

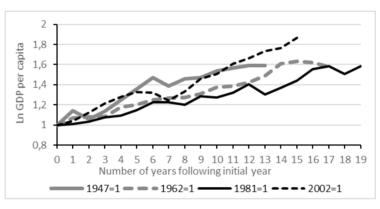
Considering the discussions presented above the main question to answer is "Is there any growth slowdown in Turkey in the long-run?" Figure-1 displays log of GDP per capita during 1923-2017 setting the 1923 value as equals to one in Turkey. Excluding the turbulent years following the foundation of the Republic and the Second World War, log of CDP per capita moves around a linear trend line during 1947-2017. Downward deviations from the long-run trend correspond to the major economic crises such as 1977-1980, 2001 and 2008-2009. Following 1or 2-year recovery period, Turkish economy turned to its long-rung growth trend. Persistent stay above the long-run trend correspond to the years where comprehensive development planning was implemented and the years after 2008-2009 crisis.



**Figure 1:** GDP per capita in Turkey (Ln, 1923-2017)

**Source:** TURKSTAT database.

To separate the post war period into the sub-periods may provide a closer look at the Turkish economic growth. The period following 1947 can be defined as the entrance to the Western Block of divided world economy. 1963-1979 is the comprehensive development planning period. 1981-2000 is transition from inward looking to export orientation and liberalization period. The period starting 2002 following 2001 crisis can be marked as the intensification of the integration of the Turkish economy with the global financial markets. GDP growth for each sub-period displayed in Figure-2, by setting initial year's GDP per capita is equal to 1. Although the growth performances slightly vary across sub-periods, there is no significant downward or upward breaks in the longrun growth trend.



**Figure 2:** GDP per capita in Turkey by Periods (Ln)

Source: TURKSTAT database.

These observations reveal that the Turkish economy did not experienced permanent growth slowdown during last 70-year period. Variations across sub-period partly can be explained by the internal factors related with the economic growth. However, growth performance of an economy cannot be isolated from performance of the world economy. Turkey raised from lower middle-income group to upper middle-income group in 2005 (Table-2). Table-1 compares the Turkish average annual GDP per capita growth rates with lower middle-income group average for the period before the year 2005 and with upper middle-income group average for the period after that year. Both inward looking and outward oriented development periods (1961-1976 and 1981-2004), Turkish average growth rates are more than one point above the average of the lower middle-income group. Despite this relative success of Turkey stayed 50 years in the lower middle-income group. Two success stories in economic growth (China and South Korea) stayed much shorter period in lower middle-income stage (Table-2). Considering the high growth rate score of these countries and quite stable growth trend of Turkey it is possible to conclude that the long stay of Turkey in lower middle-income stage is the result of its relatively low growth rate rather than lower middle-income trap.

**Table 1:** Average Annual Per capita Growth in Turkey and Income Groups

	Turkey	Lower middle income	Upper middle income
1961-1976	3.36	2.09	
1981-2004	2.61	1.70	
2005-2017	4.35		4.75

**Source:** The World Bank, World Development Indicators database.

**Table 2:** From Lower Middle Income to Upper Middle Income

	Year country turned Lower	Year country turned Upper	Number of years as Lower
Country	Middle Income	Middle Income	Middle Income
China	1992	2009	17
South Korea	1969	1988	19
Turkey	1953 and 1955	2005	50

**Source**: Felipe, Abdon and Kumar (2012, Table 3).

Growth slowdown following a fast growth epoch is shown as the main indicator of the middle-income trap. Using the conditions defined by Eichengreen et al. (2012: 46) for growth slowdown, 7-year average growth rate and the average growth rates difference between two successive 7-year period are displayed in Figure-3. 7-year average annual per capita GDP growth rate exceeds 3.5 percent level (upper horizontal dashed line) only in the decade following the Second World War and last two decades. In the first half of the 1970's, 7-year average growth rate touched to 3.5 percent level. During the first decade following the War and the first half of the 1970's second condition is satisfied: average growth rates difference between two successive 7-year period is above 2 percent level (lower horizontal dashed line). However, in these periods PPP GDP per capita was not above US\$ 10,000. These results show that three conditions did not simultaneously satisfied after the War. Therefore, it is not possible to conclude that the Turkish economy suffered from middle income trap. Considering the comparative growth rates presented in Table-1 and linear long rung growth trend, we may expect that Turkey will wait long time in the upper middle-income group to enter into high-income group.

Figure 3: Growth Slow-Down Measure

**Source:** TURKSTAT database.

#### 4.Conclusion

The term of middle-income trap became popular during the last decade. Politicians, academia and media enthusiastically embraced the term. The term became a buzzword to explain the development problems that middle-income countries faced. However, the story of the first appearance and spreading of the term displays awkwardness. Indermit S. Gill and Homi Kharas are the pioneer of this term and it was first used in Gill and Kharas (2007). The authors explain their aim as just to prepare a report on East Asia to assess the economic developments of the period afterwards of 1990s economic crisis (Gill and Kharas, 2015). Although there was no clear definition for middle-income trap, a vast literature emerged on this famous term. The empirical literature developed by two ways: the first focuses on the growth slowdown after a high growth period. The second focuses on the classification on income groups and the transition pattern from one income group to another. Low income countries are excluded, and emphasis is given on middle-income countries.

The paper examines Turkey as a case. The empirical analysis on Turkey suggests a slow but steady growth. We observe that Turkey is stuck in the middle-income in a very long time due to slow growth on a flat linear trend rather than slowing after a rapid growth. Therefore, this is not a middle-income trap that literature suggested. It is a smooth slow growth performance. This may be explained partly as a unique growth pattern. However, Filipe et al. (2012) display many countries who are stuck in low-income or middle-income levels.

#### References

- Aiyar, S., Duval, R., Puy, D., Wu, Y, and Zhang, L. (2018). Growth slowdowns and the middle-income trap. *Japan and the World Economy*, 48 (December): 22-37.
- Ben-David, D. and Papell, D. (1998). Slowdowns and Meltdowns: Postwar Growth Evidence from 74 Countries. *Review of Economics and Statistics*, 80: 561–571.
- Bulman, D., Eden, M. and Nguyen. H. (2014). Transitioning from Low-Income Growth to High-Income Growth: Is there a Middle-income Trap? *WB Policy Research Working Paper* No. 7104. World Bank. Washington, DC.
- Eichengreen, B., Park, D. and Shin, K. (2012). When Fast-Growing Economies Slow Down: International Evidence and Implications for China. *Asian Economic Papers*, 11(1): 42-87.
- Eichengreen, B., Park, D. and Shin, K. (2014). Growth slowdowns redux. *Japan and the World Economy*, 32(November): 65-84.
- Felipe, J, Abdon, A. and Kumar, U. (2012) Tracking the Middle-income Trap: What Is It, Who Is in It, and Why? *The Levy Economics Institute Working Paper*.
- Gill, I. and Kharas, H. with Deepak Bhattasali et al. (2007). *An East Asian Renaissance: Ideas for Economic Growth*. World Bank, Washington, DC.
- Gill, I. S., and Kharas. H. (2015). The Middle-Income Trap Turns Ten. *Policy Research Working Paper* 7403. World Bank, Washington, DC.
- Han, X. and Wei, S-J. (2017). Re-examining the Middle-Income Trap Hypothesis (MITH): What to Reject and What to Revive? *NBER Working Paper* No. 23126, February.

- $Helpman, E.~(2004). \label{eq:conomic Growth} \ Belknap~Press~of~Harvard~University~Press, Cambridge. \\ Im,~F.,~and~Rosenblatt,~D.~(2013).~Middle-income~traps:~A~conceptual~and~empirical~survey.~World~Bank~Press~of~A~conceptual~and~empirical~survey.$
- Policy Research Working Paper No. 6594, World Bank, Washington, DC.

  Kharas, H., and 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.
- Kongsamut, P., Rebelo, S. and Xie, D. (2001). Beyond Balanced Growth. *The Review of Economic Studies*, 68(4): 869-882.
- Kuznets, S. (1966). Modern economic growth: rate, structure and spread, Yale University Press, London.