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Middle Income Trap and Exit Recommendatıons from The Middle Income Trap: The Case of Turkey

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ABSTRACT

The Middle Income Trap has been one of the most debated issues in economic literature in recent years. The Middle Income Trap (MIT) is widely studied, although it is still a new issue when it is considered within the context of economic growth and development. The situation in which the countries which have difficulty in raising the per capita national income level above a certain level and who are stuck at this income level is caught is called the middle income trap. Especially in recent years, it is known that many developing countries have difficulty in increasing the income level to developed countries. One of the countries are forced to exit the middle income trap, in this context it is also Turkey. Middle income trap suggestions from the location of the output in terms of Turkey's economy and middle-income trap are the subject of this study.

That it is determined to be in the middle-income trap to Turkey to escape from this income group; measures such as increasing national saving rates, increasing the share of R & D investments in GDP and innovation capacity, increasing investments in education and increasing women's labor force participation rates and economic efficiency. Turkey also create new spaces created in the services sector, increase the share of value-added GDP and university-based technology with state technologic cooperation will be necessary.

Keywords: Middle Income Trap, Growth, Economic Policy, Structural Problems

Introduction

Recently, Middle Income Trap has been one of the most debated issues in the economic literature. The Middle Income Trap (MIT) is widely studied, although it is still a new issue when it is considered within the context of economic growth and development. In general, this concept has been tried to be concretized by considering the economic structures of the countries. However, despite its widespread use, MIT could not find a specific dictionary meaning in its definition (Felipe et al., 2012: 7). As a concept, MIT was first included in a World Bank report titled "An East Asian Renaissance Ideas for Economic Growth 2007". MIT has become more important. According to this report; "Middle-income countries will have a slower growth performance compared to rich countries, because they cannot keep up with economic diversity in the 21st century world. In other words, the countries caught in the middle income trap are low-wage, poor countries competitiveness in the production of standard manufacturing industry products weakened; On the other hand, it is difficult to keep up with the rich countries that grow on the basis of innovation. The factor stated in the report points out that middle income countries are countries that are trapped between low-income countries and high-income countries and cannot improve their growth performance (Bozkurt et al., 2014: 24).

Technological advances in the world and industrial developments in the last 200 years have led the world's richest countries to increase their income continuously. At this point, it was an important need to divide countries into low, middle and high income groups. Such a need necessitated a dynamic structure and therefore it was accepted as a generally accepted approach to compare the income level of the countries according to the income level of the United States (USA) which has assumed the economic leadership of the world since 1920 (Alçın and Güner, 2015).

Global economies; It is evaluated by the World Bank in three groups according to the per capita income. In the 2014 ranking, countries with a per capita income of less than $ 1,035 are considered low-income countries, with per capita income in the range of $ 1,036 - $ 4,085, low-middle-income countries, and lastly between $ 4,086 and $ 12,615 countries are also considered as upper middle income countries. Countries with a per capita income of more than $ 12,616 are referred to as high-income countries (World Bank, 2015).

Table 1. World Bank Classification of Country Groups

Global Economies	Average Annual Income Per Capita
Low Income Economies	below 1.035 $
Lower Income Economies	between 1.036 – 4.085 $
Middle Income Economies	between 1.036 – 12.615 $
Upper-Middle Income Economies	between 4.086 – 12.615 $
High Income Economies	above 12.616 $

Source: Prepared by the Author Using World Bank Data.

The middle income trap (MIT) is defined as the fact that a global economy, which has reached the middle income level, has remained at this level for a long time as a result of the slowdown in per capita income growth and cannot move into the category of high-income countries. At this point, countries trying to move from low-income group to middle-income group have the opportunity to compete with other countries in production due to low labor and capital productivity, thanks to simple technology and cheap labor costs. However, the advantage of cheap labor costs in the agricultural sector, which has been achieved through the increased income level of the countries that have reached middle income level, is gradually decreasing. As a result, these countries, which cannot increase the amount of production based on innovation and technology, are entering the middle income trap (Öz, 2012).

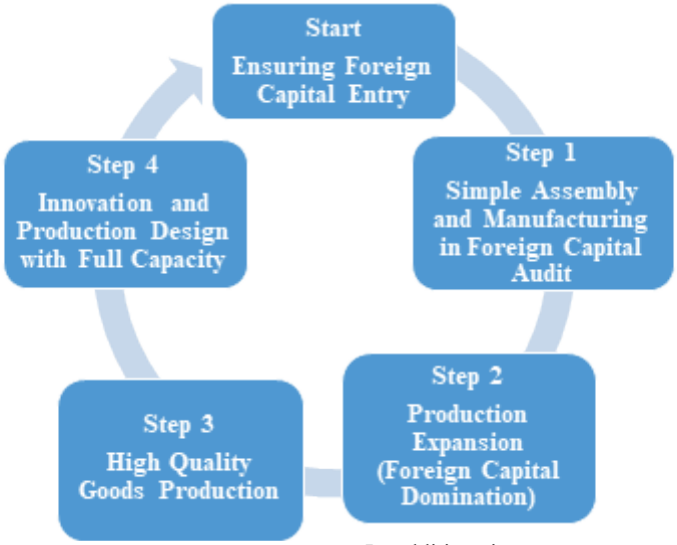
Economists also began to study Turkey›s economy is falling into the middle-income trap. Gürsel et al. (2016), before the global crisis (2002-2008), together with the increase in labor productivity of Turkey's economy has reached the conclusion that high growth rates and high catch rates of income per person. If the period of crisis aside, in order to reduce macroeconomic imbalances in Turkey in 2012, the balanced growth policies implemented, per capita income decreased by 2-4 percent. On the other hand, the reduction in labor productivity in recent years in Turkey, was effective in the decrease in per capita income. Awake (2015), in a study to evaluate the middle-income trap in terms of Turkey's position in Turkey he has reached the conclusion that the middle-income trap. Moreover, Turkey's rapidly away from this income group for drug, cosmetic, it has been found that the determination must take innovative steps towards sectors such as seeds and new materials. Yasar and Gezer (2014), low income for 45 years from 1960, Turkey's economy and an emphasis situated in the lower middle income group of countries, Turkey has found the middle-income trap a determination to be counted among the high-income countries from falling. Yasar and Gezer (2014) according to complete the necessary structural transformation in pursuit of Turkey's economy in 2023, higher income can provide a 5 percent increase in the average annual income per person will be able to rise to the position of a country.

Since 2010, Turkey's per capita income level of $ 10,000 has already been fitted with the main source of this research. On the one hand, the per capita income growth rates stuck between 0.7 percent and 2.7 percent in fixed prices in the 2012-2015 period, while significant depreciation of the Turkish Lira during this period became stagnant after a rapid increase in per capita income. It has played an important role in the development (Gürsel et al., 2016). This is really the main objective of this study was to investigate the trap of middle-income Based on the latest situation in Turkey. For this purpose, the first part of the study describes how the middle income trap is defined in the literature. In the second part, the economies of China and Brazil are examined as examples of countries caught in the middle income trap. In the third and fourth sections have discussed whether it comes in the middle income trap of Turkey's economy and emphasis on a number of policy recommendations for the implementation of necessary policies have been developed out of the group.

I. Middle Income Trap and Development Stages

Ohno (2009) evaluates the middle income trap at four different stages. In the first stage, clothes, shoes, food, etc. processing or assembly of products that can be exported easily. At this stage, many elements such as design, technology, production and marketing are driven by foreign capital. Therefore, the basic inputs have to be imported from foreign countries. The contribution of this country to production in this part is only through unqualified labor and natural resources. In the second stage, the income and job opportunities of the country increase and as a result, the increase in foreign capital inflows is realized. In the third stage, as a result of the contribution of human capital to knowledge and skills, it is considered to reduce the dependence on foreign capital and to realize production through local firms. In this way, it is aimed to make the country more competitive and to export high quality products. In the fourth stage, the country will become a country capable of producing new products and having a say in global markets. Figure 1 shows that middle-income countries are caught in the middle income trap which they cannot pass to the third step (Şahin at al., 2015).

Figure 1. Development Stages and Middle Income Trap



II. Examples Of Countries That Is Caughted The Middle Income Trap: Brazil and China

Brazilian

Rubber production is also an important export item in the Brazilian economy, whose main livelihood is agriculture. With the increase in rubber production in South Asian countries in the 19th century, Brazil experienced a major collapse in this sector and turned to coffee production. The increase in coffee production accounted for 71% of the country's export revenues. On the other hand, the share of coffee exports in the GNP was 10% (Akyol, 2013: 94).

In the Brazilian economy, which experienced high inflation after the Second World War, imports declined due to devaluations, and coffee exports declined considerably. In addition, import quotas, exchange controls, taxes, etc., which are applied in order to develop and increase the demand in the industrial field. In 1939, the implementation of these policies managed to increase the share of industry in production to 43%. Between 1955 and 1973, significant growth figures and moderate inflation rates were achieved in the economy. Particularly in the country where growth was made in the period between 1950-1970, investments were given importance in automotive, iron-steel and petro-chemical sectors. In the period between 1970 and 1980, the Brazilian economy was under the influence of large external borrowing. In addition, the import substitution policy was abandoned in this period and the open economy policy was reflected positively on exports. Exports, which were

2.7 billion dollars in 1970, increased more than 15 times in 1980 and exceeded 30 billion dollars (Akyol, 2013: 95). On the other hand, in the 1980s, the Brazilian economy and its investments, which had difficulty in obtaining loans from international markets, experienced serious declines. Due to such a credit shrinkage and the economic crisis, financial collapse occurred in Brazil and the Brazilian economy went through a recession in 1980-1990 (Ceviz, 2016: 60-61).

In the 1990s, Brazil made a number of regulations on tax policies. With the privatization policies implemented, the public sector was restructured. Some arrangements were made in the banking system and this sector was tried to be disciplined. At the same time, mechanisms such as tariffs and tax rates, which are hindering foreign trade, have been stretched to increase international trade. With all these developments and economic policies implemented, the increasing fever of inflation has been prevented. However, due to difficulties in outsourcing financing, exchange rate adjustments were made. With these preferred practices and improvements, foreign capital inflows into the country have increased slightly (Ceviz, 2016: 60-61).

For the Brazilian economy, the 2000s are seen as periods of increasing political uncertainties. Political uncertainty was also seen as economic instability and Brazil had to make IMF agreements during this period. When the increase in public expenditures and the decrease in investments in this period were added to the global crises of Asia and Russia, it became difficult to maintain financial control in the country. For this reason, economic staff and politicians sought to provide the Financial Control with priority for the Brazilian economy. Although positive developments were observed in the Brazilian economy in 2004, there was a strong increase in exports and a revival in domestic demand. Thus, the current account balance yielded a surplus of 11.7 billion $ and inflation started to decline in 2004. As a result of the depreciated Real and the rise in oil and public prices, consumer prices were 5.5% above the government's targets. The Brazilian economy experienced improvements until the first half of 2007, and there was a significant increase in the formation of fixed capital. Taken together, these factors have played a role in reducing imbalances on the supply and demand side of production, together with increased imports. After the recession in Brazil in late 2008 and early 2009, an expansion cycle began. In addition, due to the expansion in domestic demand, GDP started to increase (Erdem, 2011: 27).

If we examine the Middle Income Trap in which Brazilian Economy was caught in this process; Looking at the data of the Brazilian economy between 2001 and 2002, it is seen that it is in the low middle income countries and this situation continues until 2005. The political crises of the country in the early 2000s, the IMF agreements and the negative effects of the economy on the economy were determinant in this case. On the other hand, the effect of the economic recovery experienced in 2004 was also reflected in the Income Per Capita. In this way, the Brazilian Economy has been able to move out of the low-middle-income group since 2006 and become a member of the upper-middle-income group. The country's per capita income in 2011, 2012 and 2013 approached the level of $ 12,616 where high-income economies were valued and went above $ 10,000 (see table 2).

Table 2. Per Capita Income Comparison of Brazilian and US Economies ($)

Years	Brazilian	US
2001	2.648,2	32.070,8
2002	2.361,2	32.662,2
2003	2.571,6	33.837,2
2004	3.022,8	35.785,0
2005	3.970,1	37.619,9
2006	4.890,4	39.790,8
2007	6.112,7	40.672,6
2008	7.246,1	40.434,2
2009	7.271,0	39.399,2
2010	9.337,1	40.911,9
2011	10.986,6	42.551,1
2012	10.327,3	44.822,1
2013	10.414,8	45.734,8
2014	10.186,7	47.837,5
2015	7.447,2	49.173,4
2016	7.405,9	49.478,6
2017	8.397,1	51.484,9

Source: Prepared by the Author Using World Bank Data.

Finally, as shown in Table 2, the per capita income of the Brazilian economy has never exceeded the level of $ 12,616 in the last 15 years. Particularly with the global crisis experienced in 2009, the Brazilian economy also deteriorated and according to the percentage increase between 2000 and 2009, there was a decline between 2009 and 2015. It can be stated here that the Brazilian economy has been caught in the Middle Income Trap in the last 15 years.

China

It was established on October 1, 1949 under Mao leadership and with the support of Russia in accordance with the socialist model. The People's Republic of China, one of the most populated countries in the world, is seen as a highly developed country in transportation economy due to its rich resources in terms of underground mines and the geopolitical advantages provided by its geographical location. In addition, thanks to its historical and rich culture, it has become a country where the tourism economy develops. In terms of defense and arms industry, China is one of the leading countries of the highly developed world (Ablikim, 2007: 4).

The Chinese economy, which adopted external policies until Mao's death in 1976, decided to adopt an open economy after Deng Xiaoping came to power in late 1978 and started to make reforms and policies in this direction (Ablikim, 2007: 5).

As a result of these outward reforms carried out by the Chinese economy, modernization has started in the fields of agriculture, industry, science and technology. While the practices have transformed the country in all areas, the Chinese economy has achieved high rates of growth between 1977 and 2010 without any break. While the year of 1984 reached the highest level of the reform period, the value of China in Asia increased with these policies. In China, which became a member of the WTO in 2001, the impact of reform policies was also seen in growth figures. Particularly in the Asian crisis and the US-originated 2007 crisis, many of the world's economies contracted, while the growth of the Chinese economy is remarkable. This growth

and policies have had a positive impact on unemployment. Unemployment rates in China are on a good track compared to developed economies. After the decision to open up in 1978, the foreign trade volume of the Chinese economy increased continuously except 2009 (Ceviz, 2016: 82).

If we examine whether the Chinese economy was caught in the Middle Income Trap in this process; In 2001, the Chinese economy was included in the low-income countries with a per capita income of $ 1,010.0. After this date, it is seen that the Chinese economy was in the low middle income countries group until 2005 and after 2005 it was transferred to the Low income countries group. In addition to the economic and political advantages of the WTO membership in the economic recovery that took place between these dates, the greatest contribution was undoubtedly made by the reform movements introduced in 1977- 2010. The country which remained in the lower income group until the 2008 crisis in which the world has lived has been transferred to the upper middle income countries with per capita income of USD 4,300.0 starting from 2010, and the Chinese economy has not been able to move out of this group since 2010 (see table 3).

Table 3. Per Capita Income Comparison of China and US Economies ($)

Years	China	US
2001	867.5	32.070,8
2002	958.0	32.662,2
2003	1.070,1	33.837,2
2004	1.229,4	35.785,0
2005	1.408,8	37.619,9
2006	1.678,5	39.790,8
2007	2.131,7	40.672,6
2008	2.652,3	40.434,2
2009	3.012,4	39.399,2
2010	3.459,1	40.911,9
2011	4.124,1	42.551,14
2012	4.770,8	44.822,16
2013	5.262,9	45.734,88
2014	5.754,2	47.837,57
2015	6.091,6	49.173,45
2016	6.163,9	49.478,67
2017	6.567,9	51.484,94

Source: Prepared by the Author Using World Bank Data.

Finally, as shown in Table 3, it is seen that the Chinese economy lags far behind the US economy in terms of per capita income. The per capita income of the US economy is almost nine times that of the Chinese economy. In the last 15-year period, China's per capita income has never been higher than the World Bank's 12,616 dollar level. Therefore, it will not be wrong to say that the Chinese economy has been in the middle income trap for the last 15 years.

III. Middle Income Trap And Turkey

Turkey's economy in the years 1955-2005 data shows that Turkey is located in the lower middle income group of countries examined. Since 2005, Turkey has managed to rise to yük¬sek middle-income group of countries. When the world economies analyzed in the group of middle income countries, Turkey's economy has attracted our attention as one of the longest remaining three countries. Therefore, Turkey has to take place in the middle-income group of countries, also on Turkey's economy in recent years has been effective in MIT's become one of the most debated topics (Alçın and Guner, 2015: 34).

Table 4. Transition Periods and Growth Rates of These Countries in the Lower Middle Income Level and the Upper Middle Income Level after 1950.

Country	The Year That is Reached Low-Middle Income	the year that is reached High-Middle Income	The Time That is Passed Low-Middle Income	Average Growth Rate in Transition Period
Turkey	1955	2005	50	2,6
Malaysia	1969	1996	27	5,1
Taiwan	1967	1986	19	7,0
Thailand	1976	2004	28	4,7
Bulgaria	1953	2006	53	2,5
Costa Rica	1952	2006	54	2,4
China	1992	2009	17	7,5
Korea	1969	1988	19	7,2
Oman	1968	2001	33	2,7

Source: Felipe, Abdon ve Kumar. Tracking the Middle Income Trap: What Is It, Who Is In It and Why. Levy Economics Institute Working Paper. No:715. 2012.

As it is shown in Table 4, while lower middle-income Chinese a full 17 years, Bulgaria, and time spent in Turkey was longer and lower middle-income level was 53 years and 50 years respectively. This 50-year period with Turkey, Costa Rica and the lower middle income after Bulgaria has been one of the longest countries.

According to Robertson and Ye (2013), the countries in the Middle Income Trap have 8% - 36% of the US per capita income and 46 out of 189 countries are in this middle income trap. Turkey's per capita GDP and 10 611 dollars (as per capita income corresponds to approximately 25% of the US) Turkey also considers in this group. Similarly, Woo (2012), the GDP per capita of the United States with approximately indicate that about 25 per% Middle Income Trap is located in Turkey. Yeldan (2012) in the study to evaluate the regional aspects of Turkey's middle income trap, differences in the level of human capital of each region is compared to the level of technology. Turkey's fully indicates that this region is located in the middle-income trap in groups.

Table 5. Per Capita GDP Comparison of Turkey and the US ($)

Years	Turkey	US	Turkey / US x 100
2001	2.479,9	32.070,8	7,7
2002	3.004,0	32.662,2	9,1
2003	3.933,7	33.837,2	11,6
2004	5.076,7	35.785,0	14,1
2005	6.266,7	37.619,9	16,6
2006	6.804,2	39.790,8	17,1
2007	8.198,8	40.672,6	20,1
2008	9.081,5	40.434,2	22,4
2009	7.450,6	39.399,2	18,9
2010	8.954,7	40.911,9	21,8
2011	9.573,2	42.551,14	22,5
2012	9.883,2	44.822,16	22
2013	10.611	45.734,88	23,2
2014	10.206	47.837,57	21,4
2015	9.199,8	49.173,45	18,7
2016	9.032,7	49.478,67	18,2
2017	8.651,9	51.484,94	16,8

Source: Prepared by the Author Using World Bank Data.

In table 5, we look at Turkey and the United States GDP per capita; Turkey is seen as a great deal compared to the US left behind. Last fifteen years time Turkey / USA x 100 ratio is realized as at least about 10% each year. Roberts and Ye (2013) in his analysis of the movement of Turkey is seen to be between 8% and 36% in the last decade is always worth it. Hence Turkey's will not be wrong to say that the Middle Income Trap.

IV. Exit Strategies from Turkey's Middle Income Trap

Analyzing economic growth and sources of growth; it is seen that these facts are not well explained by economists. According to the generally accepted comments made by countries, the first stages of economic growth are overcome relatively quickly and easily. On the other hand, the transition from traditional agriculture to light consumer goods industries is relatively rapid. In this process, it is seen that the excess labor force in the rural economy provides a great transfer of resources to the urban economy. On the other hand, high profits in the city economy encourage capital accumulation; The growth rate increases as the capital density increases (Yeldan, 2012: 26).

As economies move towards "middle income", labor transfer from agriculture to the city is gradually decreasing. This diminishes the stimulant power of "easy" growth sources based on high profit rates through capital investments: over time, technologies are increasingly becoming obsolete. In addition, as the profitability ratio of the capital decreases; labor and natural resources are increasingly exploited, and ultimately the amount of primitive capital accumulation decreases. In this case, since the effect of new capital investments on growth has diminished considerably, growth has to come through productivity and productivity. Productivity and productivity increase; the improvement of the human capital ratio is achieved through increasing investments in education, research and development (R&D) and institutional reforms (Yeldan, 2012: 26).

There is need to implement the priorities of Turkey's economic growth to achieve the 2023 targets, that is, it is important to move rapidly from the middle income region to the region with high income economies. In order to achieve this, and in particular to achieve the $ 25,000 per capita income target, which is among the 2023 targets, it is necessary to rapidly adopt and implement the following policies and reforms.

Today, progress in science and technology has brought about improvements in the field of innovation, of course, the development in innovation and innovation has been the main driving force of economic growth. Innovation and innovation processes are one of the issues that are handled very much in economic growth models and practical studies. On the other hand, if we consider R&D expenditures as investment in knowledge, higher R&D expenditures cause higher growth rates. In general, there is a positive and significant relationship between R&D expenditures and productivity increase (Ertekin, 2005). Eventually, in the middle-income trap countries and Turkey's, as the firstly, to give priority to R & D spending will contribute to capturing the higher growth rates of these countries.

Table 6. Share of R&D Expenditures in GDP (% of GDP)

Countries /Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Turkey	0,7	0,8	0,8	0,8	0,9	0,9	1,0	0,8	0,9	0,9
OECD	2,2	2,3	2,2	2,3	2,3	2,3	2,3	2,3	2,3	2,3
AB(28)	1,7	1,8	1,8	1,8	1,9	1,9	1,9	1,9	1,9	2,0
Japan	3,3	3,2	3,1	3,2	3,2	3,3	3,4	3,2	3,1	3,2
US	2,7	2,8	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7
Sweden	3,4	3,4	3,2	3,2	3,3	3,1	3,1	3,2	3,2	3,3
Finland	3,5	3,7	3,7	3,6	3,4	3,2	3,1	2,8	2,7	2,7
Denmark	2,7	3,0	2,9	2,9	3,0	3,0	3,0	3,0	3,1	3,0
Germany	2,5	2,7	2,7	2,7	2,8	2,8	2,8	2,9	2,9	3,0
Israel	4,3	4,1	3,9	4,0	4,1	4,0	4,1	4,2	4,3	4,5
S.Korea	3,1	3,2	3,4	3,7	4,0	4,1	4,2	4,2	4,2	4,5

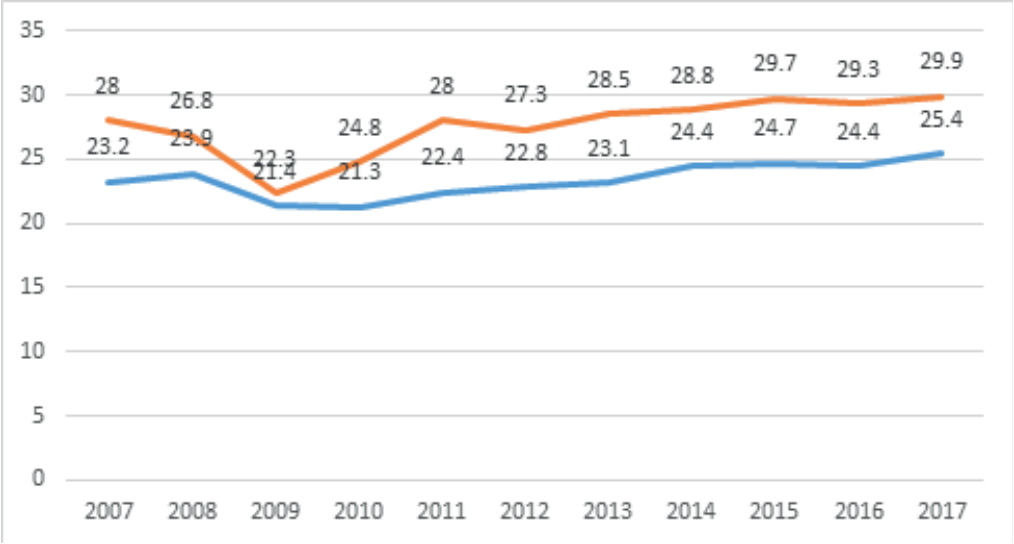
Source: Prepared by the author using OECD data.

Table 6 shows the share of R&D Expenditures in GDP. As can be seen from Table 6, it is seen that countries such as Israel, Japan and South Korea, as well as countries such as Sweden, Finland and Denmark, allocate a significant share from their economies to R&D expenditures and lead the sector. When the data of the last 10 years are examined; While the share allocated by Israel and South Korea to R&D expenditures exceeds 4%, the share of R&D Expenditures in GDP has always been close to 3% and above 3% in economies such as Sweden and Finland. The share of R&D Expenditures in EU countries has reached to 2% in recent years. Its share in OECD countries has always been above 2% in the last decade. The share of GDP of Turkey's R&D spending in the past decade have always remained below 1% in 2014 to 1% it is available yet. Turkey is seen as economically as separate R & D share of the EU and is way below the average of OECD countries.

Hence the Middle Income Trap located in Turkey to increase the importance and should give priority to R&D to increase the share of R&D expenditure in the economy. Considering that countries such as Japan, Singapore, Taiwan, South Korea and Israel capture technology accumulation and move from Middle Income Trap to high income countries, Turkey will be highly capable of producing human capital accumulation and industrialization based on the accumulation of technological capabilities come from the Middle Income Trap will need to accelerate its R&D activities.

Although it is known that the low savings rate, the difference between savings and investment ratios is growing in Turkey (see Fig 2). In Turkey, domestic savings rates are not sufficient to meet the investment. Therefore, Turkey should develop policies to rapidly increase their savings rate and creating domestic financing of the investment to be made, in this way must be fulfilled one of the requirements out of the Middle Income Trap.

Figure 2. GDP Share of Savings and Investment in Turkey



As shown in Figure 2 the share of GDP domestic savings in Turkey it is seen to be 22%. With this savings rate, Turkey is lagging behind in the high-income group of countries. Hence the source of Turkey's growth rate should increase domestic savings instead of hot money seeking. It will also be necessary to convert these increased saving rates into production. In terms of increasing savings, it is important to increase the practices such as private pension which was recently implemented. When the developed economies are examined, the ratio of design areas that will create high added value such as software and IT increases within the service sector, while the basis of the service sector in underdeveloped and developing countries; logistics, security, education, health and banking activities (Alçın and Güner, 2015: 39). In order to get to the level of developed economies, Turkey is first necessary to increase the share of services sector in GDP. It should give priority to IT and software sectors and accelerate R&D activities in the sub-sectors of these fields.

OECD's International Student Performance Assessment system PİSA evaluates the countries' international education systems every three years. In the PİSA 2016 report, which was evaluated in the fields of Mathematics, Reading and Science; Singaporean students have been the most successful students with the highest grades in mathematics, science and reading. On the other hand, Japan, Estonia, Finland and Canada are the most successful countries among the 35 OECD countries. PISA report on Turkey's which remain far behind between these countries is known.

In the OECD's 2016 PISA report, Turkey ranked 52. in science, 50. in reading, 49. in mathematics among 70 countries. Human resources should be trained in the best way as to take place in Turkey's economically high-income countries as a group. For the education system to be focussed on innovation and technology, quality, and make reforms to improve the enrollment rate in Turkey's immediate field of education will be important.

It is known that increasing women's participation in social and economic life has an important contribution to GDP as well as increasing employment. Women's labor force participation rate aims to boost up to 38% in Turkey by 2023. According to TEPAV's research, it is assumed that male labor force participation rate will maintain its current level and female labor force participation rate will gradually increase to 38 percent by 2023. According to these calculations by TEPAV, such an increase in female labor force participation is expected to increase real GDP per capita by 5.6 percent. If the participation rate gradually increases to 50 percent, real GDP per capita is expected to increase by 12 percent, and per capita real GDP will increase by 17.5 percent if the participation rate reaches OECD averages (www.sivilsayfalar.org). As TEPAV's analysis shows, the increase in female labor force participation rate has a positive effect on GDP.

Table 7. Female Labor Force Participation Rate (%)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AB	40,9	40,5	39,8	39,5	39,4	39,3	38,9	38,9	39,0	39,2
OECD	44,5	43,9	43,1	43,0	43,0	43,0	42,8	43,0	43,2	43,3
US	56,4	55,2	53,5	53,2	53,9	53,4	53,5	53,7	53,7	54,2
Turkey	24,3	24,9	25,5	26,1	25,2	26,7	27,6	29,5	30,3	30,9
England	58,1	57,1	55,9	55,6	56,2	56,3	56,0	57,0	57,5	56,8
France	34,7	36,1	35,1	34,5	33,9	33,9	33,1	33,8	34,0	33,4
Japan	44,8	44,9	44	43,2	42,1	43,3	43,4	43,1	44,9	44,9
Russian	37,4	38,3	36,7	36,8	35,1	35,4	34,3	33,7	33,2	31,3

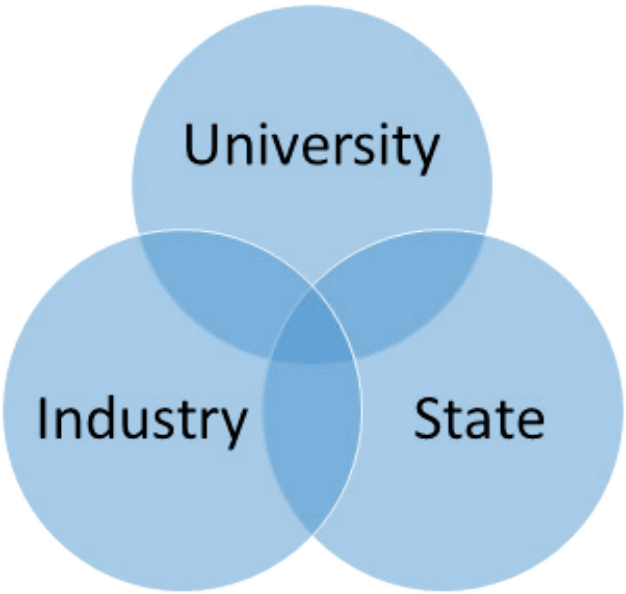
Source: Prepared by the author using OECD data.

Table 7 women's labor force participation rates in the G8, the EU has tried to be compared through the OECD and Turkey. When we look at developed economies, OECD and EU, it is seen that this ratio is over 40% in the last ten years. Turkey has remained behind in these countries and realized about 28% on average this rate. This difference of closing to take place in Turkey's high-income group of countries will contribute to economic growth.

It is seen that developed countries are very advanced in terms of women's employment. Turkey also needs to take measures that may arise to the level of the country. At this point, it is necessary to increase the conferences and symposiums to be held by public institutions in order to raise the awareness of the companies. On the other hand, it would be beneficial for the state to increase incentives for women's employment and to increase the amount of support for the projects. Again, the returns of NGOs to prioritize programs that will increase women's entrepreneurship will be positive.

When the countries that survived the middle income trap are analyzed, it is seen that university-industry cooperation is provided in these countries in a good way. Transferring high rates of technology from universities to industrial sector in these countries is considered as an important factor that increases the competitiveness of these countries in the global market. The knowledge and technology produced through universities, combined with the experience and financing power of the industrial sector, is transformed into an economic value. As a matter of fact, the increase in the number of projects and patents realized in universities and technoparks, and the transformation of these patents into high value added products accelerate economic growth. On the other hand, university-industry cooperation has contributed greatly to the transition of many countries to knowledge-based economy. Turkey's needed to escape from the middle income trap to go to rapidly knowledge-based economy and should produce high value-added products. To this end, Turkey, taking into account the huge impact it creates in university-industry collaboration and transformation of the national economy, it is necessary to increase the importance given to university-industry collaboration (Atik, 2015: 172).

Figure 3. Trilateral Model of University-State-Industry Cooperation



V. Result

In this study, which describes the Middle Income Trap, primarily the Middle Income Trap what is considered as conceptual and Turkey have attempted to explain in private. In other parts of the study; Brazil and Chinese economy is reported to be in the middle income trap, Turkey is in the middle income trap and measures to be taken from this income group to pass to high income countries are emphasized.

In this working, Turkey's Middle Income Trap has been identified as one of the longest countries. It has also been determined that Turkey's per capita GDP in terms of the reference figures for the US and other countries located in high-income group falls well short of the country.

Among the Turkey's 2023 targets is very important the top 10 economies and $ 25,000 per person to GDP. In order to achieve these goals, Turkey's rapidly get rid of from middle-income trap and must be able to enter high-income

the country category. Therefore, it was recommended to include policies to Turkey's application.

Turkey's priorities to increase their R & D investments and allocating more of these investments from the economy, should be a country producing technology and added value. The difference between savings and investment in Turkey is growing steadily. Turkey's increasing domestic savings rates will reflect positively on economic growth. Beside, Turkey's policies towards increasing female employment and increasing the triple helix model based on university-industry-government cooperation will be important to implement. Turkey also should improve quality in this field by making radical changes in the educational system and investments in human capital will need to make the best of it.

As a result, a number of structural measures to escape the middle income trap that Turkey is located immediately to the application and thereby pass the high-income category of countries reaching high growth rates as well as economic, political and social power will also bring.

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