# THE ROLE OF TOURISM IN ESCAPING "THE MIDDLE-INCOME TRAP"

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During the last 50 years, many countries have struggled the middle income trap. The purpose of article is the analysis of tourism as factor in the state's recovery from "the middle-income trap". The economic development of Thailand, Turkey and Mexico, which are stuck in the trap and where the tourism sector occupies significant positions in GDP growth, is analyzed. Using the least-squares method (2SLS), it has been empirically confirmed that tourism development in Turkey can drive the economy out of "the trap", while in Thailand and Mexico, the manufacturing sector plays a significant role in economic growth, despite significant tourism revenues.

*Key words: GDP, investment, output, tourism, "trap". JEL Codes: F60; F63; Z32.* 

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### 1. Introduction

Over the past ten years, foreign publications have been actively discussing the concept of a middle-income trap, which is attributed to countries that quickly reached an average income level, but failed in catching up with highly advanced countries in terms of development. At present, this issue is being debated a lot at foreign economic forums, various conferences and symposia, since practical ways to recover from the trap are not yet known. According to World Bank studies, the main conditions for escaping the middle-income trap involve introduction of innovations, investments in the educational sector or the development of industries a country has significant competitive advantages in. For most countries, tourism is the industry that is capable of developing economic growth and bringing the economy out of the trap, therefore this issue is of particular relevance in modern conditions.

During the last decade term "middle-income trap" (MIT) has become a popular theme in the literature and among scientists. MIT connected with countries that have experienced rapid growth and reached the status of a middle-income country, but have not been able to move up to become high-income economies (Makohin, 2020, p. 126).

The phenomenon of the middle-income trap started appearing in discussions in our native literature quite recently. It is fragmentarily described in the work of Yeshchenko, where the author calls this phenomenon a trap of inertial development model (Yeshchenko, 2013). Ozturk, on the other hand, describes this phenomenon under the name of the middle prosperity trap (Ozturk, 2016). In foreign literature, the economists Gill and Kharas were the ones to start using the concept of the middle-income trap back in 2007 in a study of the economic development of East Asia and Latin America (Gill, Kharas, 2007).

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The authors found that the rapid growth of these countries from low to middle income was provided by cheap labor, catching up with technological growth and the redistribution of labor and capital from sectors with low productivity (traditional agriculture) to export-oriented, highproductivity production. However, when the number of people employed in agriculture decreases and wages increase, the factors that once provided rapid economic growth lose their strength and the country falls into the middle-income trap. When in the trap, the country is no longer able to compete with either low-wage states that dominate in mature industries or countries that are leaders in innovative, high-tech industries.

Konya, Karaçor, Yardimci claim, that the concept of "middle income trap" was used historically for the first time in the report of the World Bank named East Asian Renaissance in 1960. In the report is mentioned, that in the 20th century, middle and low income countries, where middle and low income countries, which were able to innovate quickly and economically with each other, were influencing each other but were not able to follow these developments, remained at the income level and the convergence hypothesis was not valid. In other words, it is expressed that the middle income is the convergence of the countries. The "middle income trap" is, in its simplest terms, defined as the income level of the countries in which economic growth is financed by the accumulation of physical factors and which has not shown a structural change towards labor and capital markets, which increases productivity (Konya et al., 2017, p. 271).

Burlai also highlights such concepts as "Poverty trap" (is created when an economic system requires a significant amount of capital in order to earn enough to escape poverty), "non-convergence trap" (the situation in which real income and technology convergence stalls) and "divergence trap" (refers to a increase in the dispersion of levels of income across economies). Country may increase the difference in socio-economic indicators in comparing with developed countries ("divergence trap") or tries to achieve a high level of socio-economic development. But reach the peak of its development (exhausting its resources) country falls into a "middle-income trap" (Burlai, 2018, p. 102), to escape from it country should implement the latest technologies in manufacturing processes and attracting highly skilled workers.

Many theories have been put forward in order to explain the phenomenon of the middleincome trap. Most scientists, including Eichengreen, Park and Shin, are inclined to believe that the reasons why a country is getting trapped include: return to traditional means of production, depletion of cheap labor, insufficient development of human resources, insufficient protection of intellectual property, inadequate motivation of talented people, lack of access to infrastructure and insufficiently developed financial sector (Eichengreen, Park, Shin, 2013).

A more thorough confirmation of the existence of the middle-income trap based on the results of empirical analysis was also carried out by such researchers as Felipe, Abdon and Kumar (Felipe, Abdon, Kumar, 2012); Jimenez, Nguyen, Patrinos (Jimenez, Nguyen, Patrinos, 2012) and others. For example, Aiyar, Duval, Puy, Wu and Zhang investigated factor influence on Asian countries falling into the trap in their work Growth Slowdowns and the Middle-Income Trap (Aiyar, Duval, Puy, Wu, Zhang, 2013). Among the main ones, the authors distinguish the following factors: institutional, demographic, infrastructural, political and macroeconomic, production structure, trade, and other factors (trade and military conflicts). Authors Im and Rosenblatt prove the existence of the middle-income trap by setting benchmarks for economic development – the US and OECD countries, equating other countries to their growth and analyze dynamic results (Im, Rosenblatt, 2013). However, despite the undeniable achievements of domestic and foreign scientists, the issue of the role of tourism in the country's escape from the middle-income trap remains unresolved.

Objective of the article is to analyze tourism development in Thailand and Mexico and Turkey as an important factor in the state's recovery from "the middle-income trap".

The methodological basis of this research is analyzing different analytical approaches to the concept of "middle-income trap" that made it possible to find ways for helping governments escape the "trap". Also different research methods were used by authors: comparative and statistical analysis, correlation and regression analysis methods (by using the Two-Stage least squares (2SLS) in

the EViews package) and time series analysis method. The annual data for regression analysis were collected for the period 2000 - 2018 (in billion U.S. dollars) from the World Bank. All indicators for the study were logarized.

# 2. Research results and discussion

According to World Bank studies, most developing countries and countries with economies in transition are in the middle-income trap. Publications by foreign authors (Pritchett, Summers, 2014) boil down to the fact that Thailand, Turkey, Mexico and many other countries where the tourism sector plays an important role in economic development are trapped. Therefore, based on research, let's try and explore whether these countries can overcome the middle-income trap by developing the tourism sector.

In Thailand tourism ranks second among the sectors of the economy, which are contributing to the budget. Almost 6 million people are employed in Thai tourism and areas directly related to the travel industry (2018). In 2018, the country was visited by a record number of tourists – 38,27 million people, which is 7.5 % more than last year (Thailand, 2019). Direct tourism revenues account for about 12 % of Thailand's GDP, and the indirect income equals to 21.6 % (Haupt, 2019). Such statistics indicate a significant benefit from international tourism for Thailand, since the country ranked fourth in the world after the United States, Spain and France in 2018 in terms of tourism revenues (Fig. 1).

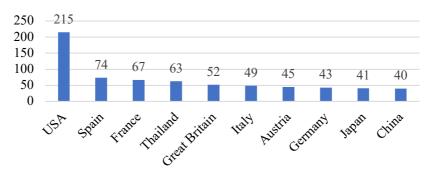


Figure 1. Top-10 countries that made the most money from tourism in 2018, billion US dollars

Thai authorities held a company in 2018 called "Discovering New Shades of Thailand" due to the uneven distribution of tourist flow across the country. The main goal of the new campaign was to increase foreign tourist flow to a number of central and northern provinces in the wake of the growing interest in Thai gastronomy, cultural values and beach holidays. As a result, the number of foreign tourists visiting the provinces of Chiang Rai, Chiang Mai and Sukhothai increased by 50 % in the first quarter of 2018 compared to the corresponding period of the previous year.

Such an unusual type of tourism as medical tourism is also undergoing dynamic development. Together with the Ministry of Tourism, the Thai Ministry of Health has begun developing a program to promote the country in the field of medical tourism. Currently Thailand is one of the leading Asian countries in the field of medicine. The flow of tourists coming to the Kingdom for treatment has been growing since the beginning of the 2000s. The main factors are the low cost of medical treatment and the high quality of services in private clinics (Kotsan, Mazurets and Solianyy, 2018). In addition, revenues from international tourism are growing annually (The World Bank, 2019) (Fig. 2), which indicates the prospects of the industry.

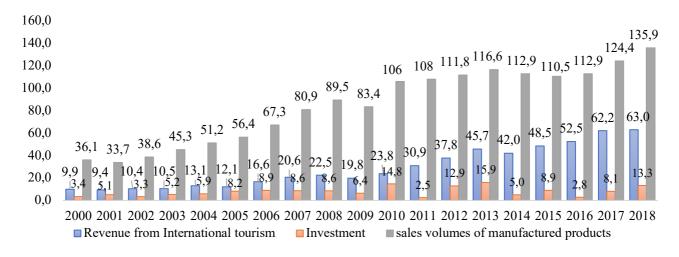


Figure 2. Macroeconomic indicators (selected) of Thailand, billion US dollars

However, it is advisable to check whether tourism can become a catalyst for the country's escape from the middle-income trap through regression research with the use of the least-squares method with instrumental variables (2SLS) (equation 1). The annual data were collected from 2000 to 2018 (in billion U.S. dollars) from the World Bank. All indicators for the study were logarized.

$$gdp = \begin{array}{cccc} 3.55 & +0.04 * inv + 1.52 * output_{t-1} & +0.35 * tour & -1.02 * gdp_{t-1} \\ (3.64^*) & (1.57^{***}) & (3.23^{**}) & (2.91^{**}) & (-1.74^{***}) & (1) \\ R^2 = 0.98 & DW = 2.14 \end{array}$$

Note: In parentheses are given p-criteria and statistical reliability (\* - 1%, \*\* - 5%, \*\*\* 10%),

where (here and in regards to other subsequent regression equations) gdp is the country's GDP, billion US dollars; inv – foreign direct investment in the country, billion US dollars; output – sales volumes of manufactured products, billion US dollars; tour – revenue from international tourism, billion US dollars. Correlation coefficient ( $R^2 = 0.98$ ) indicates that there is a strong positive relationship between variables.

Studies have shown that revenues from international tourism lead to more growth in Thai GDP than investment. A 1 % increase in tourism income accompanies the country's GDP growth by 0.35 %, while investments only by 0.04 %. Without a doubt, the largest volume of economic growth is created by the manufacturing sector in Thailand (GDP growth by 1.52 %, but only in the medium term with a 1-year lag).

For comparison, let us also analyze another country with a significant share of tourism in the economy –Turkey, which in 2018 received revenues from tourism activities in the amount of 29.5 billion US dollars. Turkey was visited by 45.6 million tourists, which is 18.1 % more than in the previous year (Turkey's tourism, 2019). Unfortunately, Turkey has fallen into a debt hole in recent years and the country also has not been able to break out of a state that economists call the middle-income trap for almost 40 years. Although the economy grew at an average rate of 6 % per year, imports threatened to exceed exports until the 2008 global crisis. In 2009, Turkey showed the largest decline among European economies along with Ukraine, Estonia and Latvia. It turned out that the country is too dependent on external financing and needs structural reforms that would allow it to break out of the middle-income trap for further growth and reduce dependence on external debt. Turkey's main problem is the lack of a unique innovative offer due to a lag in the level of education and the relatively unstable environment: issues with court independence and the lack of fundamental freedoms (Erdogan, 2018).

Research will help analyze what factors can lead the country out of the trap and whether the tourism industry, which is characterized by a pronounced seasonality, plays a significant role. Study period – annual data from 2000 to 2018 (Fig. 3).

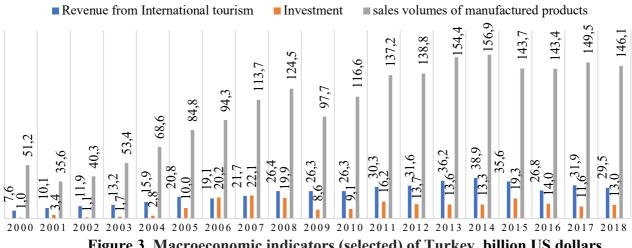


Figure 3. Macroeconomic indicators (selected) of Turkey, billion US dollars

Results of an empirical analysis indicate (equation 2) that the tourism industry in Turkey is highly effective, since it contributes to GDP growth even more than the manufacturing and investment sectors. A 1 % increase in tourism revenue contributes to a 0.54 % increase in GDP and a 0.49 % increase with 1-year lag when it comes to the manufacturing sector.

$$gdp = 3.16 +0.04 * inv_{t-2} +0.49 * output_{t-1} +0.54 * tour -0.12 * gdp_{t-2}$$
(5.86\*) (0.84) (1.99\*\*\*) (2.03\*\*\*) (-0.72) (2),
$$R^2 = 0.95 \qquad DW = 1.97$$

Economists also single out Mexico as one of the countries in the middle-income trap, since the share of people employed in the tourism sector among the able-bodied population is 17.8 %, and revenues from tourism in 2018 amounted to 22,51 billion US dollars (8.7 % of the country's GDP). Mexico is among the ten most visited countries in the world, ranking 6<sup>th</sup>.

Although Mexico is the most developed country in Latin America, the level of social inequality and poverty of the population inhibits its economic growth and forces the country's government to look for ways out of the middle-income trap. The first steps towards the improvement of economic growth were made back in the 1990s, when Mexico significantly changed the export product structure -industrial goods began to dominate over oil and gas exports (due to a sharp drop in their prices). However, the country's government chose the wrong strategy – attracting large external loans and inefficient investment in export enterprises, which ultimately led to another crisis in 1994.

To date, the main exports of the country are vehicles (except for railway and trams), electric cars and appliances, as well as equipment and mechanical devices. These three product lines account for 60 % of Mexico's exports. The country remains an export-oriented economy, which is too dependent from macroeconomic shocks and seeks to integrate into the world community by reforming the national economy.

Reforms also affected the tourism sector, where a new advertising campaign by the Mexican Tourism Secretariat in North America is now playing a significant role in managing the country's tourism. It is aimed at Hispanics living in the USA, since 2/3 of Hispanics in this country come from Mexico. The campaign is held under the slogan — The best way to return to Mexico is to come here on vacation. One of the leading ideas for promoting tourism in Mexico is to present the country as a destination where tourists can not only witness national holidays, but also become part of them. The budget for this campaign is estimated at 8.2 million US dollars, which are directed at television, print and online advertising (Kiptenko, Verkhoturova, 2012, p. 77).

Empirical studies will help identify the development of which area is able to lead the country out of the middle-income trap and ensure stable economic growth. Fig. 4 shows the selected indicators of Mexico's development from 2000 to 2018 from the World Bank website on the basis of which an empirical analysis will be carried out.

Revenue from International tourism Investment sales volumes of manufactured products

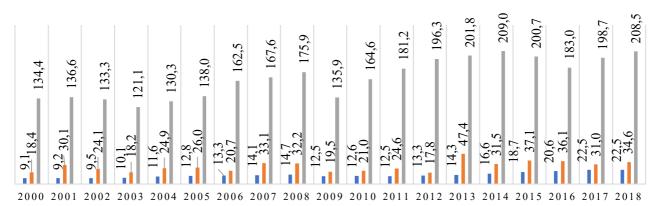


Figure 4. Macroeconomic indicators (selected) of Mexico, billion US dollars

The results of empirical analysis are as follows (equation 3):

 $\begin{array}{rll} gdp = & 2.23 & +0.11*inv_{t-2} + 0.72*output_t & +0.11*tour_{t-3} & +0.15*gdp_{t-1} \\ (6.33^*) & (3.54^{**}) & (7.81^*) & (1.79^{***}) & (1.82^{***}) & (3), \\ R^2 = 0.97 & DW = 1.58 \end{array}$ 

Studies have shown that tourism and investment increase Mexico's GDP only in the medium term with lags of 3 and 2 years respectively (with an increase in investment and income from the tourism sector by 1 % the GDP grows by 0.11 % in both cases). However, the manufacturing sector contributes to economic growth immediately and much more significantly (with an increase in sales of manufactured products by 1 % the GDP grows as much as 0.72 %). That is, the manufacturing sector is the factor that is able to lead the country out of the middle-income trap. Thus, different analytical approaches and analysis of the concept of "middle-income trap" made it possible to find ways for escaping the "trap" (Fig. 5).

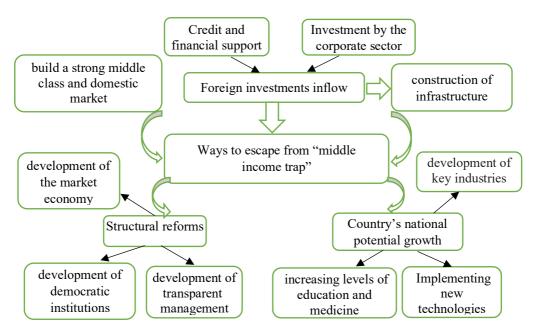


Figure 5. Ways to escape from "middle income trap"

Figure 5 shows that country's potential growth can be observed by increasing technology (creating startups or introduction of new technologies in the production process to ensure competitiveness on foreign markets).

## 3. Conclusions

Economic growth depends on the development of key industries, for some countries it is a tourist area, for others it's manufacturing and production, other may provide banking and financial services. A no less important factor in escaping from "middle income trap" is attracting investments, for example, German, Japanese and Korean "economic miracles" were based on American investments and low interest loans. In addition, structural reforms are also an important factor, based on the development of the market economy, democratic institutions and transparent management. The implementation of these elements will not only contribute to escaping from "trap", but will be a driving factor for further economic growth.

Thus, the authors conducted a study for three countries — Thailand, Turkey and Mexico, which, according to World Bank experts, are among the countries that are in "the middle-income trap". The choice of these countries was determined by their place in the global tourism market. The aim of our article was to explore whether the tourism industry can become an anchor that can pull these countries out of the middle-income trap.

An empirical analysis showed that the development of the tourism sector in Turkey can lead the economy out of "the trap", since the revenue from tourism contributes to the country's economic growth even more than the manufacturing and investment sectors. With regard to Thailand and Mexico, the manufacturing sector plays an important role in economic growth of both countries despite the significant revenues from the tourism sector. Therefore, it is necessary to introduce innovative technologies and improve the skills of personnel in this area for these countries to escape the middle-income trap. Analysis of the role of the tourism industry for other countries that have faced the problem of slowing economic growth and which are in the "middle-income trap are prospects for further research by the authors.

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